<GSM Conducted Power>

1. Per KDB 447498 D01v06, the maximum output power channel is used for SAR testing and for further SAR test reduction.
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/GSM1900 is 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 ≤ ¼ dB higher than the primary mode, SAR measurement is not required for the secondary mode
4. Power reduction which is triggered in GSM850 / GSM1900 band, SAR testing EUT was set in reduced power mode and GPRS 4Tx slot due to its highest frame-average power.

GSM850	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
TX Channel	128	189	251		128	189	251	
Frequency (MHz)	824.2	836.4	848.8		824.2	836.4	848.8	
GSM 1 Tx slot	32.96	32.70	32.48	33.50	23.96	23.70	23.48	24.50
GPRS 1 Tx slot	32.98	32.70	32.50	33.50	23.98	23.70	23.50	24.50
GPRS 2 Tx slots	31.37	31.13	30.94	32.00	25.37	25.13	24.94	26.00
GPRS 3 Tx slots	30.20	29.96	29.90	31.00	25.94	25.70	25.64	26.74
GPRS 4 Tx slots	29.05	28.83	28.78	30.00	26.05	25.83	25.78	27.00
EDGE 1 Tx slot	27.15	27.11	26.84	28.00	18.15	18.11	17.84	19.00
EDGE 2 Tx slots	26.32	26.03	25.87	27.00	20.32	20.03	19.87	21.00
EDGE 3 Tx slots	26.19	25.81	25.70	27.00	21.93	21.55	21.44	22.74
EDGE 4 Tx slots	24.25	24.06	23.78	25.00	21.25	21.06	20.78	22.00

GSM1900	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
TX Channel	512	661	810		512	661	810	
Frequency (MHz)	1850.2	1880	1909.8		1850.2	1880	1909.8	
GSM 1 Tx slot	29.61	29.72	29.83	31.00	20.61	20.72	20.83	22.00
GPRS 1 Tx slot	29.63	29.72	29.84	31.00	20.63	20.72	20.84	22.00
GPRS 2 Tx slots	28.28	28.27	28.19	29.50	22.28	22.27	22.19	23.50
GPRS 3 Tx slots	27.58	27.54	27.46	29.00	23.32	23.28	23.20	24.74
GPRS 4 Tx slots	26.57	26.58	26.73	28.00	23.57	23.58	23.73	25.00
EDGE 1 Tx slot	25.84	25.67	25.66	27.00	16.84	16.67	16.66	18.00
EDGE 2 Tx slots	24.21	24.71	24.64	26.00	18.21	18.71	18.64	20.00
EDGE 3 Tx slots	23.05	23.50	23.37	25.00	18.79	19.24	19.11	20.74
EDGE 4 Tx slots	22.10	22.70	22.70	24.00	19.10	19.70	19.70	21.00

GSM850	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
TX Channel	128	189	251		128	189	251	
Frequency (MHz)	824.2	836.4	848.8		824.2	836.4	848.8	
GSM 1 Tx slot	32.28	32.35	32.19	33.50	23.28	23.35	23.19	24.50
GPRS 1 Tx slot	32.29	32.37	32.19	33.50	23.29	23.37	23.19	24.50
GPRS 2 Tx slots	31.12	30.62	30.55	32.00	25.12	24.62	24.55	26.00
GPRS 3 Tx slots	30.10	29.63	29.43	31.00	25.84	25.37	25.17	26.74
GPRS 4 Tx slots	28.89	28.40	28.15	30.00	25.89	25.40	25.15	27.00
EDGE 1 Tx slot	26.82	26.76	26.56	28.00	17.82	17.76	17.56	19.00
EDGE 2 Tx slots	25.95	25.77	25.52	27.00	19.95	19.77	19.52	21.00
EDGE 3 Tx slots	25.79	25.54	25.20	27.00	21.53	21.28	20.94	22.74
EDGE 4 Tx slots	23.93	23.67	23.40	25.00	20.93	20.67	20.40	22.00

GSM1900	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
TX Channel	512	661	810		512	661	810	
Frequency (MHz)	1850.2	1880	1909.8		1850.2	1880	1909.8	
GSM 1 Tx slot	30.09	30.07	30.30	31.00	21.09	21.07	21.30	22.00
GPRS 1 Tx slot	30.09	30.08	30.31	31.00	21.09	21.08	21.31	22.00
GPRS 2 Tx slots	28.60	28.74	28.72	29.50	22.60	22.74	22.72	23.50
GPRS 3 Tx slots	28.09	27.84	27.88	29.00	23.83	23.58	23.62	24.74
GPRS 4 Tx slots	27.24	27.12	27.09	28.00	24.24	24.12	24.09	25.00
EDGE 1 Tx slot	26.04	26.10	26.23	27.00	17.04	17.10	17.23	18.00
EDGE 2 Tx slots	25.24	25.19	25.18	26.00	19.24	19.19	19.18	20.00
EDGE 3 Tx slots	24.07	23.96	23.84	25.00	19.81	19.70	19.58	20.74
EDGE 4 Tx slots	23.06	23.11	23.23	24.00	20.06	20.11	20.23	21.00

GSM850	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
TX Channel	128	189	251		128	189	251	
Frequency (MHz)	824.2	836.4	848.8		824.2	836.4	848.8	
GSM 1 Tx slot	29.01	28.81	28.70	30.20	20.01	19.81	19.70	21.20
GPRS 1 Tx slot	29.09	28.84	28.73	30.20	20.09	19.84	19.73	21.20
GPRS 2 Tx slots	27.78	27.31	27.14	28.70	21.78	21.31	21.14	22.70
GPRS 3 Tx slots	26.57	26.49	26.05	27.70	22.31	22.23	21.79	23.44
GPRS 4 Tx slots	25.30	25.29	24.75	26.70	22.30	22.29	21.75	23.70
EDGE 1 Tx slot	23.68	23.42	23.15	24.70	14.68	14.42	14.15	15.70
EDGE 2 Tx slots	22.81	22.45	22.11	23.70	16.81	16.45	16.11	17.70
EDGE 3 Tx slots	22.36	21.99	21.55	23.20	18.10	17.73	17.29	18.94
EDGE 4 Tx slots	20.62	20.37	20.09	21.70	17.62	17.37	17.09	18.70

GSM850	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
TX Channel	128	189	251		128	189	251	
Frequency (MHz)	824.2	836.4	848.8		824.2	836.4	848.8	
GSM 1 Tx slot	32.96	32.70	32.48	33.50	23.96	23.70	23.48	24.50
GPRS 1 Tx slot	32.98	32.70	32.50	33.50	23.98	23.70	23.50	24.50
GPRS 2 Tx slots	31.37	31.13	30.94	32.00	25.37	25.13	24.94	26.00
GPRS 3 Tx slots	30.20	29.96	29.90	31.00	25.94	25.70	25.64	26.74
GPRS 4 Tx slots	29.05	28.83	28.78	30.00	26.05	25.83	25.78	27.00
EDGE 1 Tx slot	27.15	27.11	26.84	28.00	18.15	18.11	17.84	19.00
EDGE 2 Tx slots	26.32	26.03	25.87	27.00	20.32	20.03	19.87	21.00
EDGE 3 Tx slots	26.19	25.81	25.70	27.00	21.93	21.55	21.44	22.74
EDGE 4 Tx slots	24.25	24.06	23.78	25.00	21.25	21.06	20.78	22.00

GSM1900	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
TX Channel	512	661	810		512	661	810	
Frequency (MHz)	1850.2	1880	1909.8		1850.2	1880	1909.8	
GSM 1 Tx slot	29.11	29.22	29.33	30.50	20.11	20.22	20.33	21.50
GPRS 1 Tx slot	29.13	29.22	29.34	30.50	20.13	20.22	20.34	21.50
GPRS 2 Tx slots	27.78	27.77	27.69	29.00	21.78	21.77	21.69	23.00
GPRS 3 Tx slots	27.08	27.04	26.96	28.50	22.82	22.78	22.70	24.24
GPRS 4 Tx slots	26.07	26.08	26.23	27.50	23.07	23.08	23.23	24.50
EDGE 1 Tx slot	25.34	25.17	25.16	26.50	16.34	16.17	16.16	17.50
EDGE 2 Tx slots	23.71	24.21	24.14	25.50	17.71	18.21	18.14	19.50
EDGE 3 Tx slots	22.55	23.00	22.87	24.50	18.29	18.74	18.61	20.24
EDGE 4 Tx slots	21.60	22.20	22.20	23.50	18.60	19.20	19.20	20.50

GSM850	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
TX Channel	128	189	251		128	189	251	
Frequency (MHz)	824.2	836.4	848.8		824.2	836.4	848.8	
GSM 1 Tx slot	31.78	31.85	31.69	33.00	22.78	22.85	22.69	24.00
GPRS 1 Tx slot	31.79	31.87	31.69	33.00	22.79	22.87	22.69	24.00
GPRS 2 Tx slots	30.62	30.12	30.05	31.50	24.62	24.12	24.05	25.50
GPRS 3 Tx slots	29.60	29.13	28.93	30.50	25.34	24.87	24.67	26.24
GPRS 4 Tx slots	28.39	27.90	27.65	29.50	25.39	24.90	24.65	26.50
EDGE 1 Tx slot	26.32	26.26	26.06	27.50	17.32	17.26	17.06	18.50
EDGE 2 Tx slots	25.45	25.27	25.02	26.50	19.45	19.27	19.02	20.50
EDGE 3 Tx slots	25.29	25.04	24.70	26.50	21.03	20.78	20.44	22.24
EDGE 4 Tx slots	23.43	23.17	22.90	24.50	20.43	20.17	19.90	21.50

GSM1900	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
TX Channel	512	661	810		512	661	810	
Frequency (MHz)	1850.2	1880	1909.8		1850.2	1880	1909.8	
GSM 1 Tx slot	24.50	24.80	24.76	26.00	15.50	15.80	15.76	17.00
GPRS 1 Tx slot	24.51	24.89	24.77	26.00	15.51	15.89	15.77	17.00
GPRS 2 Tx slots	23.25	23.31	23.29	24.50	17.25	17.31	17.29	18.50
GPRS 3 Tx slots	22.61	22.65	22.53	24.00	18.35	18.39	18.27	19.74
GPRS 4 Tx slots	21.50	21.81	21.76	23.00	18.50	18.81	18.76	20.00
EDGE 1 Tx slot	21.02	21.06	21.01	22.50	12.02	12.06	12.01	13.50
EDGE 2 Tx slots	19.70	19.74	19.69	21.00	13.70	13.74	13.69	15.00
EDGE 3 Tx slots	18.51	18.57	18.50	20.00	14.25	14.31	14.24	15.74
EDGE 4 Tx slots	17.50	17.82	17.71	19.00	14.50	14.82	14.71	16.00

GSM850	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
TX Channel	128	189	251		128	189	251	
Frequency (MHz)	824.2	836.4	848.8		824.2	836.4	848.8	
GSM 1 Tx slot	31.70	31.39	31.28	32.50	22.70	22.39	22.28	23.50
GPRS 1 Tx slot	31.74	31.40	31.29	32.50	22.74	22.40	22.29	23.50
GPRS 2 Tx slots	30.40	30.18	29.87	31.00	24.40	24.18	23.87	25.00
GPRS 3 Tx slots	29.40	29.06	28.70	30.00	25.14	24.80	24.44	25.74
GPRS 4 Tx slots	28.22	27.88	27.74	29.00	25.22	24.88	24.74	26.00
EDGE 1 Tx slot	26.38	25.89	25.70	27.00	17.38	16.89	16.70	18.00
EDGE 2 Tx slots	25.20	24.75	24.86	26.00	19.20	18.75	18.86	20.00
EDGE 3 Tx slots	24.98	24.71	24.48	26.00	20.72	20.45	20.22	21.74
EDGE 4 Tx slots	23.20	22.94	22.36	24.00	20.20	19.94	19.36	21.00

GSM1900	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
TX Channel	512	661	810		512	661	810	
Frequency (MHz)	1850.2	1880	1909.8		1850.2	1880	1909.8	
GSM 1 Tx slot	29.15	28.93	28.88	30.00	20.15	19.93	19.88	21.00
GPRS 1 Tx slot	29.20	28.95	28.89	30.00	20.20	19.95	19.89	21.00
GPRS 2 Tx slots	27.58	27.19	27.12	28.50	21.58	21.19	21.12	22.50
GPRS 3 Tx slots	26.66	27.15	27.20	28.00	22.40	22.89	22.94	23.74
GPRS 4 Tx slots	25.33	25.88	25.88	27.00	22.33	22.88	22.88	24.00
EDGE 1 Tx slot	25.08	24.93	24.91	26.00	16.08	15.93	15.91	17.00
EDGE 2 Tx slots	23.81	23.53	23.45	25.00	17.81	17.53	17.45	19.00
EDGE 3 Tx slots	22.92	22.55	22.15	24.00	18.66	18.29	17.89	19.74
EDGE 4 Tx slots	21.58	21.10	21.07	23.00	18.58	18.10	18.07	20.00

GSM850	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
TX Channel	128	189	251		128	189	251	
Frequency (MHz)	824.2	836.4	848.8		824.2	836.4	848.8	
GSM 1 Tx slot	30.86	30.92	30.49	32.00	21.86	21.92	21.49	23.00
GPRS 1 Tx slot	30.87	30.94	30.50	32.00	21.87	21.94	21.50	23.00
GPRS 2 Tx slots	29.94	29.47	29.40	30.50	23.94	23.47	23.40	24.50
GPRS 3 Tx slots	28.90	28.26	28.17	29.50	24.64	24.00	23.91	25.24
GPRS 4 Tx slots	27.76	27.24	26.57	28.50	24.76	24.24	23.57	25.50
EDGE 1 Tx slot	25.49	25.31	24.96	26.50	16.49	16.31	15.96	17.50
EDGE 2 Tx slots	24.33	24.10	23.87	25.50	18.33	18.10	17.87	19.50
EDGE 3 Tx slots	24.18	23.96	23.54	25.50	19.92	19.70	19.28	21.24
EDGE 4 Tx slots	22.07	21.66	21.55	23.50	19.07	18.66	18.55	20.50

GSM1900	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
TX Channel	512	661	810		512	661	810	
Frequency (MHz)	1850.2	1880	1909.8		1850.2	1880	1909.8	
GSM 1 Tx slot	24.50	24.80	24.76	25.50	15.50	15.80	15.76	16.50
GPRS 1 Tx slot	24.51	24.89	24.77	25.50	15.51	15.89	15.77	16.50
GPRS 2 Tx slots	23.25	23.31	23.29	24.00	17.25	17.31	17.29	18.00
GPRS 3 Tx slots	22.61	22.65	22.53	23.50	18.35	18.39	18.27	19.24
GPRS 4 Tx slots	21.50	21.81	21.76	22.50	18.50	18.81	18.76	19.50
EDGE 1 Tx slot	21.02	21.06	21.01	22.00	12.02	12.06	12.01	13.00
EDGE 2 Tx slots	19.70	19.74	19.69	20.50	13.70	13.74	13.69	14.50
EDGE 3 Tx slots	18.51	18.57	18.50	19.50	14.25	14.31	14.24	15.24
EDGE 4 Tx slots	17.50	17.82	17.71	18.50	14.50	14.82	14.71	15.50

GSM850	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
TX Channel	128	189	251		128	189	251	
Frequency (MHz)	824.2	836.4	848.8		824.2	836.4	848.8	
GSM 1 Tx slot	28.40	28.16	27.50	29.50	19.40	19.16	18.50	20.50
GPRS 1 Tx slot	28.42	28.19	27.65	29.50	19.42	19.19	18.65	20.50
GPRS 2 Tx slots	26.78	26.32	26.14	28.00	20.78	20.32	20.14	22.00
GPRS 3 Tx slots	25.70	25.57	25.44	27.00	21.44	21.31	21.18	22.74
GPRS 4 Tx slots	24.70	24.23	24.18	26.00	21.70	21.23	21.18	23.00
EDGE 1 Tx slot	22.72	22.48	22.14	24.00	13.72	13.48	13.14	15.00
EDGE 2 Tx slots	21.48	21.15	20.63	22.50	15.48	15.15	14.63	16.50
EDGE 3 Tx slots	21.27	20.95	20.50	22.50	17.01	16.69	16.24	18.24
EDGE 4 Tx slots	19.72	19.24	19.04	21.00	15.46	16.24	16.04	18.00

GSM850	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
TX Channel	128	189	251		128	189	251	
Frequency (MHz)	824.2	836.4	848.8		824.2	836.4	848.8	
GSM 1 Tx slot	31.70	31.39	31.28	32.50	22.70	22.39	22.28	23.50
GPRS 1 Tx slot	31.74	31.40	31.29	32.50	22.74	22.40	22.29	23.50
GPRS 2 Tx slots	30.40	30.18	29.87	31.00	24.40	24.18	23.87	25.00
GPRS 3 Tx slots	29.40	29.06	28.70	30.00	25.14	24.80	24.44	25.74
GPRS 4 Tx slots	28.22	27.88	27.74	29.00	25.22	24.88	24.74	26.00
EDGE 1 Tx slot	26.38	25.89	25.70	27.00	17.38	16.89	16.70	18.00
EDGE 2 Tx slots	25.20	24.75	24.86	26.00	19.20	18.75	18.86	20.00
EDGE 3 Tx slots	24.98	24.71	24.48	26.00	20.72	20.45	20.22	21.74
EDGE 4 Tx slots	23.20	22.94	22.36	24.00	20.20	19.94	19.36	21.00

GSM1900	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
TX Channel	512	661	810		512	661	810	
Frequency (MHz)	1850.2	1880	1909.8		1850.2	1880	1909.8	
GSM 1 Tx slot	29.15	28.93	28.88	30.00	20.15	19.93	19.88	21.00
GPRS 1 Tx slot	29.20	28.95	28.89	30.00	20.20	19.95	19.89	21.00
GPRS 2 Tx slots	27.58	27.19	27.12	28.50	21.58	21.19	21.12	22.50
GPRS 3 Tx slots	26.66	27.15	27.20	28.00	22.40	22.89	22.94	23.74
GPRS 4 Tx slots	25.33	25.88	25.88	27.00	22.33	22.88	22.88	24.00
EDGE 1 Tx slot	25.08	24.93	24.91	26.00	16.08	15.93	15.91	17.00
EDGE 2 Tx slots	23.81	23.53	23.45	25.00	17.81	17.53	17.45	19.00
EDGE 3 Tx slots	22.92	22.55	22.15	24.00	18.66	18.29	17.89	19.74
EDGE 4 Tx slots	21.58	21.10	21.07	23.00	18.58	18.10	18.07	20.00

<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 sub-test mode(s)
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 power measurement.
4. Per KDB 941225 D01v03r01, for SAR testing is measured using a 12.2 kbps RMC with TPC bits configured to all "1's".
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 ≤ ¼ 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 measurement is not required for HSDPA / HSUPA / DC-HSDPA, and according to the following RF output power, the output power results of the secondary modes (HSUPA, HSDPA, DC-HSDPA) are less than ¼ dB higher than the primary modes; therefore, SAR measurement is not required for HSDPA / HSUPA / DC-HSDPA.

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} *(Note1, 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 Δ_{CQI} = 30/15 with β_{hs} = 30/15 * β_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 Δ_{NACK} = 30/15 with β_{hs} = 30/15 * β_c, and Δ_{CQI} = 24/15 with β_{hs} = 24/15 * β_c.

Note 3: CM = 1 for β_c/β_d =12/15, β_{hs}/β_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 β_c = 11/15 and β_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 the following tab
   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_{ec}	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	209/225	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_{ed}1: 47/15 β_{ed}2: 47/15	4 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 Δ_{CQI} = 30/15 with β_{hs} = 30/15 * β_c. For sub-test 5, Δ_{ACK}, Δ_{NACK} and Δ_{CQI} = 5/15 with β_{hs} = 5/15 * β_c.

Note 2: CM = 1 for β_c/β_d =12/15, β_{hs}/β_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, TF1) to β_c = 10/15 and β_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, quoted from the T
   a). Subtest 1: β_c/β_d=2/15
   b). Subtest 2: β_c/β_d=12/15
   c). Subtest 3: β_c/β_d=15/8
   d). Subtest 4: β_c/β_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.		

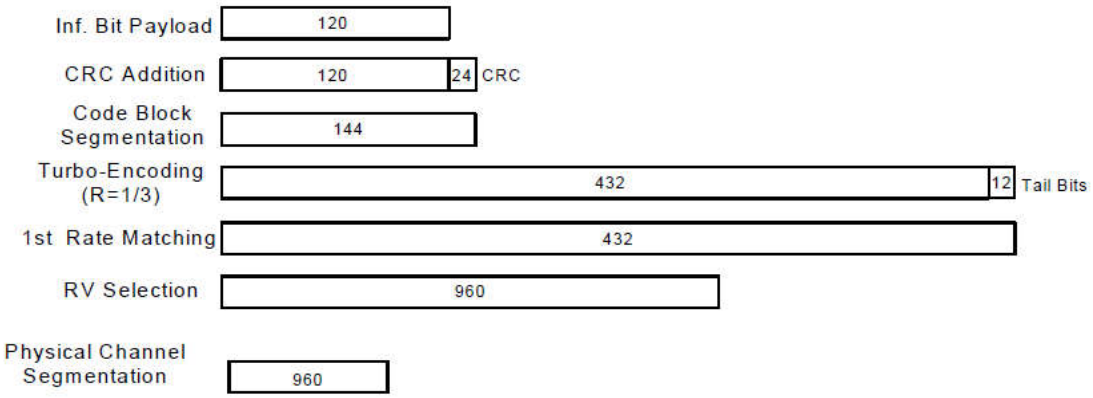


Figure C.8.19: Coding rate for Fixed reference Channel H-Set 12 (QPSK)

Setup Configuration

Band		WCDMA II			Tune-up Limit (dBm)	WCDMA IV			Tune-up Limit (dBm)	WCDMA V			Tune-up Limit (dBm)
TX Channel		9262	9400	9538		1312	1413	1513		4132	4182	4233	
Rx Channel		9662	9800	9938		1537	1638	1738		4357	4407	4458	
Frequency (MHz)		1852.4	1880	1907.6		1712.4	1732.6	1752.6		826.4	836.4	846.6	
3GPP Rel 99	AMR 12.2Kbps	24.77	24.85	25.04	25.70	24.84	24.81	24.86	25.70	25.21	25.08	25.23	25.70
3GPP Rel 99	RMC 12.2Kbps	24.78	24.85	25.05	25.70	24.85	24.83	24.87	25.70	25.21	25.09	25.25	25.70
3GPP Rel 6	HSDPA Subtest-1	23.66	23.84	23.99	24.70	23.76	23.70	23.78	24.70	24.22	24.08	24.24	24.70
3GPP Rel 6	HSDPA Subtest-2	23.69	23.84	23.99	24.70	23.76	23.77	23.79	24.70	24.25	24.12	24.26	24.70
3GPP Rel 6	HSDPA Subtest-3	23.26	23.37	23.54	24.20	23.24	23.25	23.31	24.20	23.69	23.60	23.82	24.20
3GPP Rel 6	HSDPA Subtest-4	23.26	23.32	23.53	24.20	23.22	23.26	23.25	24.20	23.71	23.61	23.85	24.20
3GPP Rel 8	DC-HSDPA Subtest-1	23.66	23.74	23.98	24.70	23.74	23.62	23.78	24.70	24.16	23.99	24.20	24.70
3GPP Rel 8	DC-HSDPA Subtest-2	23.64	23.80	23.94	24.70	23.69	23.75	23.71	24.70	24.19	24.06	24.25	24.70
3GPP Rel 8	DC-HSDPA Subtest-3	23.18	23.27	23.49	24.20	23.19	23.19	23.24	24.20	23.68	23.50	23.78	24.20
3GPP Rel 8	DC-HSDPA Subtest-4	23.19	23.27	23.47	24.20	23.18	23.22	23.24	24.20	23.70	23.51	23.75	24.20
3GPP Rel 6	HSUPA Subtest-1	23.71	23.82	23.99	24.70	23.72	23.75	23.71	24.70	24.18	24.01	24.24	24.70
3GPP Rel 6	HSUPA Subtest-2	21.73	21.80	21.97	22.70	21.64	21.70	21.72	22.70	22.17	22.02	22.26	22.70
3GPP Rel 6	HSUPA Subtest-3	22.74	22.81	23.01	23.70	22.72	22.74	22.74	23.70	23.23	23.08	23.23	23.70
3GPP Rel 6	HSUPA Subtest-4	21.66	21.80	22.01	22.70	21.71	21.73	21.78	22.70	22.23	22.06	22.21	22.70
3GPP Rel 6	HSUPA Subtest-5	23.70	23.80	24.00	24.70	23.70	23.70	23.80	24.70	24.10	24.10	24.30	24.70

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	25.15	25.03	25.17	25.70	25.15	25.14	25.13	25.70	24.84	24.74	24.85	25.70
3GPP Rel 99	RMC 12.2Kbps	25.15	25.04	25.19	25.70	25.17	25.16	25.14	25.70	24.85	24.74	24.86	25.70
3GPP Rel 6	HSDPA Subtest-1	24.13	24.06	24.23	24.70	24.20	24.16	24.14	24.70	23.90	23.74	23.85	24.70
3GPP Rel 6	HSDPA Subtest-2	24.18	24.05	24.27	24.70	24.19	24.18	24.16	24.70	23.88	23.72	23.84	24.70
3GPP Rel 6	HSDPA Subtest-3	23.68	23.60	23.75	24.20	23.71	23.67	23.66	24.20	23.40	23.23	23.43	24.20
3GPP Rel 6	HSDPA Subtest-4	23.67	23.61	23.82	24.20	23.34	23.63	23.68	24.20	23.42	23.27	23.42	24.20
3GPP Rel 8	DC-HSDPA Subtest-1	24.03	23.97	24.17	24.70	24.18	24.14	24.14	24.70	23.82	23.65	23.83	24.70
3GPP Rel 8	DC-HSDPA Subtest-2	24.13	23.98	24.23	24.70	24.15	24.14	24.15	24.70	23.78	23.66	23.76	24.70
3GPP Rel 8	DC-HSDPA Subtest-3	23.63	23.53	23.65	24.20	23.66	23.60	23.60	24.20	23.39	23.19	23.34	24.20
3GPP Rel 8	DC-HSDPA Subtest-4	23.63	23.59	23.80	24.20	23.24	23.55	23.61	24.20	23.42	23.26	23.41	24.20
3GPP Rel 6	HSUPA Subtest-1	24.17	24.08	24.25	24.70	24.17	24.14	24.16	24.70	23.91	23.73	23.86	24.70
3GPP Rel 6	HSUPA Subtest-2	22.20	22.08	22.17	22.70	22.12	22.16	22.16	22.70	21.89	21.76	21.90	22.70
3GPP Rel 6	HSUPA Subtest-3	23.12	23.08	23.24	23.70	23.15	23.13	23.15	23.70	22.85	22.71	22.87	23.70
3GPP Rel 6	HSUPA Subtest-4	22.15	22.07	22.21	22.70	22.13	22.16	22.14	22.70	21.88	21.76	21.84	22.70
3GPP Rel 6	HSUPA Subtest-5	24.20	24.10	24.30	24.70	24.20	24.20	24.20	24.70	23.90	23.70	23.80	24.70

Band		WCDMA IV				WCDMA V			
TX Channel		1312	1413	1513	Tune-up Limit (dBm)	4132	4182	4233	Tune-up Limit (dBm)
Rx Channel		1537	1638	1738		4357	4407	4458	
Frequency (MHz)		1712.4	1732.6	1752.6		826.4	836.4	846.6	
3GPP Rel 99	AMR 12.2Kbps	23.74	23.87	23.83	25.00	22.97	22.91	23.05	23.70
3GPP Rel 99	RMC 12.2Kbps	23.84	23.96	23.86	25.00	23.04	22.92	23.08	23.70
3GPP Rel 6	HSDPA Subtest-1	22.84	22.94	22.81	24.00	22.09	21.91	22.07	22.70
3GPP Rel 6	HSDPA Subtest-2	22.83	22.96	22.89	24.00	22.10	21.94	22.06	22.70
3GPP Rel 6	HSDPA Subtest-3	22.29	22.50	22.37	23.50	21.60	21.43	21.57	22.20
3GPP Rel 6	HSDPA Subtest-4	22.35	22.42	22.35	23.50	21.56	21.42	21.56	22.20
3GPP Rel 8	DC-HSDPA Subtest-1	22.78	22.93	22.72	24.00	22.06	21.83	22.05	22.70
3GPP Rel 8	DC-HSDPA Subtest-2	22.77	22.93	22.82	24.00	22.08	21.92	22.00	22.70
3GPP Rel 8	DC-HSDPA Subtest-3	22.26	22.43	22.30	23.50	21.53	21.34	21.54	22.20
3GPP Rel 8	DC-HSDPA Subtest-4	22.35	22.36	22.27	23.50	21.53	21.35	21.46	22.20
3GPP Rel 6	HSUPA Subtest-1	22.82	22.91	22.85	24.00	22.05	21.92	22.04	22.70
3GPP Rel 6	HSUPA Subtest-2	20.85	20.91	20.77	22.00	20.03	19.88	20.06	20.70
3GPP Rel 6	HSUPA Subtest-3	21.84	21.90	21.75	23.00	21.01	20.88	21.04	21.70
3GPP Rel 6	HSUPA Subtest-4	20.82	20.90	20.83	22.00	20.08	19.89	20.05	20.70
3GPP Rel 6	HSUPA Subtest-5	22.90	22.90	22.80	24.00	22.00	21.90	22.00	22.70

Band		WCDMA II			Tune-up Limit (dBm)	WCDMA IV			Tune-up Limit (dBm)
TX Channel		9262	9400	9538		1312	1413	1513	
Rx Channel		9662	9800	9938		1537	1638	1738	
Frequency (MHz)		1852.4	1880	1907.6		1712.4	1732.6	1752.6	
3GPP Rel 99	AMR 12.2Kbps	21.10	21.22	21.33	23.10	22.00	22.03	22.06	23.70
3GPP Rel 99	RMC 12.2Kbps	21.11	21.23	21.35	23.10	22.08	22.08	22.16	23.70
3GPP Rel 6	HSDPA Subtest-1	20.11	20.22	20.32	22.10	21.09	21.09	21.09	22.70
3GPP Rel 6	HSDPA Subtest-2	20.12	20.25	20.30	22.10	21.10	21.12	21.12	22.70
3GPP Rel 6	HSDPA Subtest-3	19.68	19.79	19.83	21.60	20.60	20.63	20.63	22.20
3GPP Rel 6	HSDPA Subtest-4	19.69	19.74	19.90	21.60	20.57	20.62	20.62	22.20
3GPP Rel 8	DC-HSDPA Subtest-1	20.19	20.30	20.31	22.10	21.00	21.05	21.06	22.70
3GPP Rel 8	DC-HSDPA Subtest-2	20.14	20.25	20.40	22.10	21.07	21.12	21.02	22.70
3GPP Rel 8	DC-HSDPA Subtest-3	19.74	19.80	19.82	21.60	20.53	20.60	20.63	22.20
3GPP Rel 8	DC-HSDPA Subtest-4	19.68	19.65	19.88	21.60	20.48	20.62	20.62	22.20
3GPP Rel 6	HSUPA Subtest-1	20.15	20.16	20.34	22.10	20.91	21.08	21.12	22.70
3GPP Rel 6	HSUPA Subtest-2	18.11	18.19	18.31	20.10	18.91	19.06	19.11	20.70
3GPP Rel 6	HSUPA Subtest-3	19.10	19.23	19.25	21.10	19.94	20.08	20.16	21.70
3GPP Rel 6	HSUPA Subtest-4	18.11	18.24	18.32	20.10	18.92	19.07	19.10	20.70
3GPP Rel 6	HSUPA Subtest-5	20.10	20.20	20.30	22.10	20.92	21.10	21.20	22.70

Band		WCDMA II			Tune-up Limit (dBm)	WCDMA IV			Tune-up Limit (dBm)
TX Channel		9262	9400	9538		1312	1413	1513	
Rx Channel		9662	9800	9938		1537	1638	1738	
Frequency (MHz)		1852.4	1880	1907.6		1712.4	1732.6	1752.6	
3GPP Rel 99	AMR 12.2Kbps	19.65	19.61	19.55	21.00	21.11	21.19	21.13	22.60
3GPP Rel 99	RMC 12.2Kbps	19.72	19.63	19.59	21.00	21.21	21.20	21.21	22.60
3GPP Rel 6	HSDPA Subtest-1	18.77	18.69	18.62	20.00	20.36	20.36	20.34	21.60
3GPP Rel 6	HSDPA Subtest-2	18.78	18.69	18.63	20.00	20.36	20.39	20.38	21.60
3GPP Rel 6	HSDPA Subtest-3	18.27	18.18	18.17	19.50	19.83	19.85	19.52	21.10
3GPP Rel 6	HSDPA Subtest-4	18.27	18.20	18.15	19.50	19.88	19.87	19.88	21.10
3GPP Rel 8	DC-HSDPA Subtest-1	18.75	18.65	18.56	20.00	20.34	20.35	20.24	21.60
3GPP Rel 8	DC-HSDPA Subtest-2	18.71	18.67	18.63	20.00	20.35	20.39	20.28	21.60
3GPP Rel 8	DC-HSDPA Subtest-3	18.22	18.11	18.10	19.50	19.83	19.75	19.45	21.10
3GPP Rel 8	DC-HSDPA Subtest-4	18.27	18.12	18.08	19.50	19.88	19.80	19.88	21.10
3GPP Rel 6	HSUPA Subtest-1	18.74	18.67	18.63	20.00	20.30	20.33	20.36	21.60
3GPP Rel 6	HSUPA Subtest-2	16.75	16.70	16.55	18.00	18.29	18.31	18.35	19.60
3GPP Rel 6	HSUPA Subtest-3	17.76	17.74	17.65	19.00	19.34	19.35	19.38	20.60
3GPP Rel 6	HSUPA Subtest-4	16.80	16.65	16.65	18.00	18.32	18.34	18.39	19.60
3GPP Rel 6	HSUPA Subtest-5	18.80	18.60	18.60	20.00	20.30	20.30	20.30	21.60

Band		WCDMA II			Tune-up Limit (dBm)	WCDMA IV			Tune-up Limit (dBm)
TX Channel		9262	9400	9538		1312	1413	1513	
Rx Channel		9662	9800	9938		1537	1638	1738	
Frequency (MHz)		1852.4	1880	1907.6		1712.4	1732.6	1752.6	
3GPP Rel 99	AMR 12.2Kbps	21.10	21.22	21.33	21.80	22.00	22.03	22.06	22.90
3GPP Rel 99	RMC 12.2Kbps	21.11	21.23	21.35	21.80	22.08	22.08	22.16	22.90
3GPP Rel 6	HSDPA Subtest-1	20.11	20.22	20.32	20.80	21.09	21.09	21.09	21.90
3GPP Rel 6	HSDPA Subtest-2	20.12	20.25	20.30	20.80	21.10	21.12	21.12	21.90
3GPP Rel 6	HSDPA Subtest-3	19.68	19.79	19.83	20.30	20.60	20.63	20.63	21.40
3GPP Rel 6	HSDPA Subtest-4	19.69	19.74	19.90	20.30	20.57	20.62	20.62	21.40
3GPP Rel 8	DC-HSDPA Subtest-1	20.19	20.30	20.31	20.80	21.00	21.05	21.06	21.90
3GPP Rel 8	DC-HSDPA Subtest-2	20.14	20.25	20.40	20.80	21.07	21.12	21.02	21.90
3GPP Rel 8	DC-HSDPA Subtest-3	19.74	19.80	19.82	20.30	20.53	20.60	20.63	21.40
3GPP Rel 8	DC-HSDPA Subtest-4	19.68	19.65	19.88	20.30	20.48	20.62	20.62	21.40
3GPP Rel 6	HSUPA Subtest-1	20.15	20.16	20.34	20.80	20.91	21.08	21.12	21.90
3GPP Rel 6	HSUPA Subtest-2	18.11	18.19	18.31	18.80	18.91	19.06	19.11	19.90
3GPP Rel 6	HSUPA Subtest-3	19.10	19.23	19.25	19.80	19.94	20.08	20.16	20.90
3GPP Rel 6	HSUPA Subtest-4	18.11	18.24	18.32	18.80	18.92	19.07	19.10	19.90
3GPP Rel 6	HSUPA Subtest-5	20.10	20.20	20.30	20.80	20.92	21.10	21.20	21.90

Band		WCDMA II			Tune-up Limit (dBm)	WCDMA IV			Tune-up Limit (dBm)
TX Channel		9262	9400	9538		1312	1413	1513	
Rx Channel		9662	9800	9938		1537	1638	1738	
Frequency (MHz)		1852.4	1880	1907.6		1712.4	1732.6	1752.6	
3GPP Rel 99	AMR 12.2Kbps	19.31	19.30	19.43	19.80	21.11	21.19	21.13	21.80
3GPP Rel 99	RMC 12.2Kbps	19.35	19.32	19.46	19.80	21.21	21.20	21.21	21.80
3GPP Rel 6	HSDPA Subtest-1	18.36	18.34	18.53	18.80	20.36	20.36	20.34	20.80
3GPP Rel 6	HSDPA Subtest-2	18.36	18.36	18.50	18.80	20.36	20.39	20.38	20.80
3GPP Rel 6	HSDPA Subtest-3	17.88	17.90	18.03	18.30	19.83	19.85	19.52	20.30
3GPP Rel 6	HSDPA Subtest-4	17.91	17.86	18.00	18.30	19.88	19.87	19.88	20.30
3GPP Rel 8	DC-HSDPA Subtest-1	18.43	18.31	18.57	18.80	20.34	20.35	20.24	20.80
3GPP Rel 8	DC-HSDPA Subtest-2	18.42	18.36	18.56	18.80	20.35	20.39	20.28	20.80
3GPP Rel 8	DC-HSDPA Subtest-3	17.95	17.80	18.12	18.30	19.83	19.75	19.45	20.30
3GPP Rel 8	DC-HSDPA Subtest-4	17.91	17.77	17.99	18.30	19.88	19.80	19.88	20.30
3GPP Rel 6	HSUPA Subtest-1	18.38	18.30	18.49	18.80	20.30	20.33	20.36	20.80
3GPP Rel 6	HSUPA Subtest-2	16.39	16.29	16.50	16.80	18.29	18.31	18.35	18.80
3GPP Rel 6	HSUPA Subtest-3	17.39	17.35	17.51	17.80	19.34	19.35	19.38	19.80
3GPP Rel 6	HSUPA Subtest-4	16.36	16.35	16.53	16.80	18.32	18.34	18.39	18.80
3GPP Rel 6	HSUPA Subtest-5	18.30	18.40	18.50	18.80	20.30	20.30	20.30	20.80

Band		WCDMA IV			Tune-up Limit (dBm)	WCDMA V			Tune-up Limit (dBm)
TX Channel		1312	1413	1513		4132	4182	4233	
Rx Channel		1537	1638	1738		4357	4407	4458	
Frequency (MHz)		1712.4	1732.6	1752.6		826.4	836.4	846.6	
3GPP Rel 99	AMR 12.2Kbps	23.57	23.59	23.59	24.00	21.96	21.87	22.00	22.90
3GPP Rel 99	RMC 12.2Kbps	23.60	23.62	23.61	24.00	22.03	21.91	22.02	22.90
3GPP Rel 6	HSDPA Subtest-1	22.61	22.61	22.60	23.00	21.11	21.00	21.10	21.90
3GPP Rel 6	HSDPA Subtest-2	22.61	22.65	22.64	23.00	21.13	21.02	21.15	21.90
3GPP Rel 6	HSDPA Subtest-3	22.12	22.14	22.14	22.50	20.67	20.55	20.59	21.40
3GPP Rel 6	HSDPA Subtest-4	22.17	22.20	22.15	22.50	20.62	20.49	20.60	21.40
3GPP Rel 8	DC-HSDPA Subtest-1	22.68	22.70	22.63	23.00	21.04	20.95	21.09	21.90
3GPP Rel 8	DC-HSDPA Subtest-2	22.57	22.59	22.66	23.00	21.12	21.02	21.12	21.90
3GPP Rel 8	DC-HSDPA Subtest-3	22.18	22.15	22.13	22.50	20.59	20.55	20.53	21.40
3GPP Rel 8	DC-HSDPA Subtest-4	22.24	22.11	22.24	22.50	20.62	20.41	20.59	21.40
3GPP Rel 6	HSUPA Subtest-1	22.59	22.60	22.55	23.00	21.11	20.97	21.14	21.90
3GPP Rel 6	HSUPA Subtest-2	20.52	20.61	20.63	21.00	19.14	18.95	19.13	19.90
3GPP Rel 6	HSUPA Subtest-3	21.63	21.59	21.60	22.00	20.13	20.01	20.13	20.90
3GPP Rel 6	HSUPA Subtest-4	20.59	20.61	20.60	21.00	19.10	18.98	19.13	19.90
3GPP Rel 6	HSUPA Subtest-5	22.60	22.60	22.60	23.00	21.10	21.00	21.10	21.90

Band		WCDMA II			Tune-up Limit (dBm)	WCDMA IV			Tune-up Limit (dBm)
TX Channel		9262	9400	9538		1312	1413	1513	
Rx Channel		9662	9800	9938		1537	1638	1738	
Frequency (MHz)		1852.4	1880	1907.6		1712.4	1732.6	1752.6	
3GPP Rel 99	AMR 12.2Kbps	21.10	21.22	21.33	21.80	22.00	22.03	22.06	22.90
3GPP Rel 99	RMC 12.2Kbps	21.11	21.23	21.35	21.80	22.08	22.08	22.16	22.90
3GPP Rel 6	HSDPA Subtest-1	20.11	20.22	20.32	20.80	21.09	21.09	21.09	21.90
3GPP Rel 6	HSDPA Subtest-2	20.12	20.25	20.30	20.80	21.10	21.12	21.12	21.90
3GPP Rel 6	HSDPA Subtest-3	19.68	19.79	19.83	20.30	20.60	20.63	20.63	21.40
3GPP Rel 6	HSDPA Subtest-4	19.69	19.74	19.90	20.30	20.57	20.62	20.62	21.40
3GPP Rel 8	DC-HSDPA Subtest-1	20.19	20.30	20.31	20.80	21.00	21.05	21.06	21.90
3GPP Rel 8	DC-HSDPA Subtest-2	20.14	20.25	20.40	20.80	21.07	21.12	21.02	21.90
3GPP Rel 8	DC-HSDPA Subtest-3	19.74	19.80	19.82	20.30	20.53	20.60	20.63	21.40
3GPP Rel 8	DC-HSDPA Subtest-4	19.68	19.65	19.88	20.30	20.48	20.62	20.62	21.40
3GPP Rel 6	HSUPA Subtest-1	20.15	20.16	20.34	20.80	20.91	21.08	21.12	21.90
3GPP Rel 6	HSUPA Subtest-2	18.11	18.19	18.31	18.80	18.91	19.06	19.11	19.90
3GPP Rel 6	HSUPA Subtest-3	19.10	19.23	19.25	19.80	19.94	20.08	20.16	20.90
3GPP Rel 6	HSUPA Subtest-4	18.11	18.24	18.32	18.80	18.92	19.07	19.10	19.90
3GPP Rel 6	HSUPA Subtest-5	20.10	20.20	20.30	20.80	20.92	21.10	21.20	21.90

Band		WCDMA II			Tune-up Limit (dBm)	WCDMA IV			Tune-up Limit (dBm)
TX Channel		9262	9400	9538		1312	1413	1513	
Rx Channel		9662	9800	9938		1537	1638	1738	
Frequency (MHz)		1852.4	1880	1907.6		1712.4	1732.6	1752.6	
3GPP Rel 99	AMR 12.2Kbps	19.31	19.30	19.43	19.80	21.11	21.19	21.13	21.80
3GPP Rel 99	RMC 12.2Kbps	19.35	19.32	19.46	19.80	21.21	21.20	21.21	21.80
3GPP Rel 6	HSDPA Subtest-1	18.36	18.34	18.53	18.80	20.36	20.36	20.34	20.80
3GPP Rel 6	HSDPA Subtest-2	18.36	18.36	18.50	18.80	20.36	20.39	20.38	20.80
3GPP Rel 6	HSDPA Subtest-3	17.88	17.90	18.03	18.30	19.83	19.85	19.52	20.30
3GPP Rel 6	HSDPA Subtest-4	17.91	17.86	18.00	18.30	19.88	19.87	19.88	20.30
3GPP Rel 8	DC-HSDPA Subtest-1	18.43	18.31	18.57	18.80	20.34	20.35	20.24	20.80
3GPP Rel 8	DC-HSDPA Subtest-2	18.42	18.36	18.56	18.80	20.35	20.39	20.28	20.80
3GPP Rel 8	DC-HSDPA Subtest-3	17.95	17.80	18.12	18.30	19.83	19.75	19.45	20.30
3GPP Rel 8	DC-HSDPA Subtest-4	17.91	17.77	17.99	18.30	19.88	19.80	19.88	20.30
3GPP Rel 6	HSUPA Subtest-1	18.38	18.30	18.49	18.80	20.30	20.33	20.36	20.80
3GPP Rel 6	HSUPA Subtest-2	16.39	16.29	16.50	16.80	18.29	18.31	18.35	18.80
3GPP Rel 6	HSUPA Subtest-3	17.39	17.35	17.51	17.80	19.34	19.35	19.38	19.80
3GPP Rel 6	HSUPA Subtest-4	16.36	16.35	16.53	16.80	18.32	18.34	18.39	18.80
3GPP Rel 6	HSUPA Subtest-5	18.30	18.40	18.50	18.80	20.30	20.30	20.30	20.80

<CDMA2000 Conducted Power>

General Note:

1. Per KDB 941225 D01v03r01, SAR for head exposure is measured in RC3 with the handset configured to transmit at full rate in SO55.

2. Per KDB 941225 D01v03r01, in Hotspot mode EUT is treated as data device and SAR is tested with Ev-Do Rev 0 (RTAP 153.6kbps) as the primary mode.

3. Per KDB 941225 D01v03r01, for Body-worn accessory SAR is measured in RC3 with the handset configured in TDSO/SO32 to transmit at full rate on FCH only with all other code channels disabled. The body-worn accessory procedures in KDB Publication 447498 are applied. The 3G SAR test reduction procedure is applied to the multiple code channel configuration (FCH+SCH), with FCH only as the primary mode.

Band	CDMA BC0			Tune-up Limit (dBm)	CDMA BC1			Tune-up Limit (dBm)	CDMA BC10			Tune-up Limit (dBm)
TX Channel	1013	384	777		25	600	1175		476	580	684	
Frequency (MHz)	824.7	836.52	848.31		1851.25	1880	1908.75		817.9	820.5	823.1	
RC1 SO55	24.84	24.86	24.89	25.70	24.91	24.81	24.73	25.70	24.87	24.81	24.99	25.70
RC3 SO55	24.86	24.85	24.92	25.70	24.93	24.85	24.74	25.70	24.88	24.83	25.01	25.70
RC3 SO32 (F+SCH)	24.88	24.82	24.88	25.70	24.92	24.82	24.71	25.70	24.86	24.82	25.02	25.70
RC3 SO32 (+SCH)	24.90	24.84	24.92	25.70	24.90	24.82	24.71	25.70	24.89	24.85	25.03	25.70
RTAP 153.6Kbps	24.65	24.68	24.73	25.70	24.88	24.80	24.70	25.70	24.60	24.62	24.82	25.70
RETAP 4096Bits	24.64	24.67	24.72	25.70	24.87	24.78	24.65	25.70	24.56	24.59	24.80	25.70

Band	CDMA BC0			Tune-up Limit (dBm)	CDMA BC1			Tune-up Limit (dBm)	CDMA BC10			Tune-up Limit (dBm)
TX Channel	1013	384	777		25	600	1175		476	580	684	
Frequency (MHz)	824.7	836.52	848.31		1851.25	1880	1908.75		817.9	820.5	823.1	
RC1 SO55	24.44	24.46	24.49	25.70	25.41	25.34	25.22	25.70	24.47	24.41	24.59	25.70
RC3 SO55	24.46	24.45	24.52	25.70	25.40	25.32	25.20	25.70	24.48	24.43	24.61	25.70
RC3 SO32 (F+SCH)	24.48	24.42	24.48	25.70	25.38	25.30	25.22	25.70	24.46	24.42	24.62	25.70
RC3 SO32 (+SCH)	24.50	24.44	24.52	25.70	25.38	25.31	25.21	25.70	24.49	24.45	24.63	25.70
RTAP 153.6Kbps	24.25	24.28	24.33	25.70	25.22	25.14	25.11	25.70	24.20	24.22	24.42	25.70
RETAP 4096Bits	24.24	24.27	24.32	25.70	25.20	25.13	25.06	25.70	24.16	24.19	24.40	25.70

Band	CDMA BC0			Tune-up Limit (dBm)	CDMA BC10			Tune-up Limit (dBm)
TX Channel	1013	384	777		476	580	684	
Frequency (MHz)	824.7	836.52	848.31		817.9	820.5	823.1	
RC1 SO55	22.45	22.43	22.51	23.90	22.48	22.41	22.61	23.90
RC3 SO55	22.47	22.43	22.52	23.90	22.49	22.45	22.62	23.90
RC3 SO32 (F+SCH)	22.47	22.42	22.52	23.90	22.47	22.44	22.62	23.90
RC3 SO32 (+SCH)	22.46	22.41	22.50	23.90	22.45	22.43	22.60	23.90
RTAP 153.6Kbps	22.49	22.41	22.52	23.90	22.45	22.45	22.60	23.90
RETAP 4096Bits	22.45	22.40	22.50	23.90	22.44	22.43	22.59	23.90

Band	CDMA BC0			Tune-up Limit (dBm)	CDMA BC1			Tune-up Limit (dBm)	CDMA BC10			Tune-up Limit (dBm)
TX Channel	1013	384	777		25	600	1175		476	580	684	
Frequency (MHz)	824.7	836.52	848.31		1851.25	1880	1908.75		817.9	820.5	823.1	
RC1 SO55	24.34	24.36	24.39	25.20	21.10	21.01	20.88	22.50	24.37	24.31	24.49	25.20
RC3 SO55	24.36	24.35	24.42	25.20	21.12	20.93	20.83	22.50	24.38	24.33	24.51	25.20
RC3 SO32 (F+SCH)	24.38	24.32	24.38	25.20	21.08	20.95	20.89	22.50	24.36	24.32	24.52	25.20
RC3 SO32 (+SCH)	24.40	24.34	24.42	25.20	21.17	21.15	20.93	22.50	24.39	24.35	24.53	25.20
RTAP 153.6Kbps	24.15	24.18	24.23	25.20	21.16	21.15	20.90	22.50	24.10	24.12	24.32	25.20
RETAP 4096Bits	24.14	24.17	24.22	25.20	21.08	20.94	20.86	22.50	24.06	24.09	24.30	25.20

Band	CDMA BC1			Tune-up Limit (dBm)
TX Channel	25	600	1175	
Frequency (MHz)	1851.25	1880	1908.75	
RC1 SO55	18.94	18.86	18.71	20.10
RC3 SO55	18.94	18.82	18.67	20.10
RC3 SO32 (F+SCH)	18.86	18.76	18.57	20.10
RC3 SO32 (+SCH)	18.91	18.81	18.67	20.10
RTAP 153.6Kbps	18.96	18.85	18.72	20.10
RETAP 4096Bits	18.91	18.85	18.68	20.10

Band	CDMA BC0			Tune-up Limit (dBm)	CDMA BC1			Tune-up Limit (dBm)	CDMA BC10			Tune-up Limit (dBm)
TX Channel	1013	384	777		25	600	1175		476	580	684	
Frequency (MHz)	824.7	836.52	848.31		1851.25	1880	1908.75		817.9	820.5	823.1	
RC1 SO55	24.34	24.36	24.39	25.20	21.10	21.01	20.88	22.00	24.37	24.31	24.49	25.20
RC3 SO55	24.36	24.35	24.42	25.20	21.12	20.93	20.83	22.00	24.38	24.33	24.51	25.20
RC3 SO32 (F+SCH)	24.38	24.32	24.38	25.20	21.08	20.95	20.89	22.00	24.36	24.32	24.52	25.20
RC3 SO32 (+SCH)	24.40	24.34	24.42	25.20	21.17	21.15	20.93	22.00	24.39	24.35	24.53	25.20
RTAP 153.6Kbps	24.15	24.18	24.23	25.20	21.16	21.15	20.90	22.00	24.10	24.12	24.32	25.20
RETAP 4096Bits	24.14	24.17	24.22	25.20	21.08	20.94	20.86	22.00	24.06	24.09	24.30	25.20

Band	CDMA BC1			Tune-up Limit (dBm)
TX Channel	25	600	1175	
Frequency (MHz)	1851.25	1880	1908.75	
RC1 SO55	18.94	18.86	18.71	19.30
RC3 SO55	18.94	18.82	18.67	19.30
RC3 SO32 (F+SCH)	18.86	18.76	18.57	19.30
RC3 SO32 (+SCH)	18.91	18.81	18.67	19.30
RTAP 153.6Kbps	18.96	18.85	18.72	19.30
RETAP 4096Bits	18.91	18.85	18.68	19.30

Band	CDMA BC0			Tune-up Limit (dBm)	CDMA BC10			Tune-up Limit (dBm)
TX Channel	1013	384	777		476	580	684	
Frequency (MHz)	824.7	836.52	848.31		817.9	820.5	823.1	
RC1 SO55	21.75	21.72	21.77	23.10	21.76	21.76	21.89	23.10
RC3 SO55	21.78	21.73	21.79	23.10	21.79	21.77	21.92	23.10
RC3 SO32 (F+SCH)	21.79	21.74	21.80	23.10	21.78	21.76	21.91	23.10
RC3 SO32 (+SCH)	21.77	21.72	21.78	23.10	21.76	21.75	21.88	23.10
RTAP 153.6Kbps	21.69	21.66	21.72	23.10	21.70	21.65	21.82	23.10
RETAP 4096Bits	21.68	21.65	21.70	23.10	21.69	21.64	21.80	23.10

Band	CDMA BC0			Tune-up Limit (dBm)	CDMA BC1			Tune-up Limit (dBm)	CDMA BC10			Tune-up Limit (dBm)
TX Channel	1013	384	777		25	600	1175		476	580	684	
Frequency (MHz)	824.7	836.52	848.31		1851.25	1880	1908.75		817.9	820.5	823.1	
RC1 SO55	24.34	24.36	24.39	25.20	21.10	21.01	20.88	22.00	24.37	24.31	24.49	25.20
RC3 SO55	24.36	24.35	24.42	25.20	21.12	20.93	20.83	22.00	24.38	24.33	24.51	25.20
RC3 SO32 (F+SCH)	24.38	24.32	24.38	25.20	21.08	20.95	20.89	22.00	24.36	24.32	24.52	25.20
RC3 SO32 (+SCH)	24.40	24.34	24.42	25.20	21.17	21.15	20.93	22.00	24.39	24.35	24.53	25.20
RTAP 153.6Kbps	24.15	24.18	24.23	25.20	21.16	21.15	20.90	22.00	24.10	24.12	24.32	25.20
RETAP 4096Bits	24.14	24.17	24.22	25.20	21.08	20.94	20.86	22.00	24.06	24.09	24.30	25.20

Band	CDMA BC1			Tune-up Limit (dBm)
TX Channel	25	600	1175	
Frequency (MHz)	1851.25	1880	1908.75	
RC1 SO55	18.94	18.86	18.71	19.30
RC3 SO55	18.94	18.82	18.67	19.30
RC3 SO32 (F+SCH)	18.86	18.76	18.57	19.30
RC3 SO32 (+SCH)	18.91	18.81	18.67	19.30
RTAP 153.6Kbps	18.96	18.85	18.72	19.30
RETAP 4096Bits	18.91	18.85	18.68	19.30

<LTE Conducted Power>

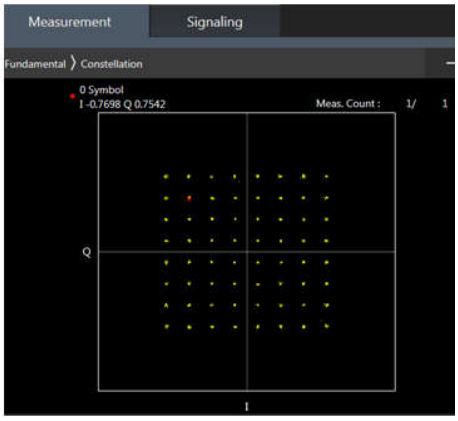
General Note:

1. Anritsu MT8821C 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 at maximum power and at different configurations which are requested to be reported to FCC, for conducted power measurement and SAR testing.
2. Per KDB 941225 D05v02r05, when a properly configured base station simulator is used for the SAR and power measurements, spectrum plots for each RB allocation and offset configuration is not required.
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 offsets at the upper edge, middle and lower edge of each required test channel.
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 highest reported SAR for 1 RB and 50% RB allocation are ≤ 0.8 W/kg. Otherwise, SAR is measured for the highest output power channel; and if the reported SAR is > 1.45 W/kg, the remaining required test channels must also be tested.
6. Per KDB 941225 D05v02r05, 16QAM output power for each RB allocation configuration is > not ½ dB higher than the same configuration in QPSK and the reported SAR for the QPSK configuration is ≤ 1.45 W/kg; Per KDB 941225 D05v02r05, 16QAM SAR testing is not required.
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 bandwidth is ≤ 1.45 W/kg; Per KDB 941225 D05v02r05, smaller bandwidth SAR testing is not required.
8. For LTE B12/B13/B14/B26/B30/71 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 configuration, the middle channel of the group of overlapping channels should be selected for testing.
9. LTE B2/B4/B5/B17/B38 SAR test was covered by B25/B66/B26/B12/B41; 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 exclusion

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 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)				1880	1880	1900	
20	QPSK	1	0	24.56	24.62	24.53	25.7
20	QPSK	1	49	24.51	24.54	24.57	
20	QPSK	1	99	24.61	24.63	24.73	
20	QPSK	50	0	23.56	23.58	23.54	24.7
20	QPSK	50	24	23.54	23.62	23.68	
20	QPSK	50	50	23.60	23.57	23.65	
20	QPSK	100	0	23.64	23.55	23.65	
20	16QAM	1	0	23.87	23.90	23.83	24.7
20	16QAM	1	49	23.82	23.83	23.92	
20	16QAM	1	99	23.90	23.93	23.95	
20	16QAM	50	0	22.66	22.66	22.60	23.7
20	16QAM	50	24	22.67	22.67	22.73	
20	16QAM	50	50	22.72	22.61	22.71	
20	16QAM	100	0	22.72	22.64	22.69	
20	64QAM	1	0	22.79	22.81	22.76	23.7
20	64QAM	1	49	22.77	22.75	22.85	
20	64QAM	1	99	22.83	22.87	22.93	
20	64QAM	50	0	21.64	21.68	21.62	22.7
20	64QAM	50	24	21.67	21.70	21.75	
20	64QAM	50	50	21.71	21.63	21.71	
20	64QAM	100	0	21.73	21.66	21.71	
Channel				18675	18900	19125	Tune-up limit (dBm)
Frequency (MHz)				1857.5	1880	1902.5	
15	QPSK	1	0	24.55	24.58	24.65	25.7
15	QPSK	1	37	24.56	24.58	24.61	
15	QPSK	1	74	24.51	24.63	24.70	
15	QPSK	36	0	23.60	23.63	23.67	24.7
15	QPSK	36	20	23.58	23.66	23.69	
15	QPSK	36	39	23.55	23.60	23.63	
15	QPSK	75	0	23.60	23.61	23.63	
15	16QAM	1	0	23.84	23.91	23.95	24.7
15	16QAM	1	37	23.87	23.87	23.94	
15	16QAM	1	74	23.81	23.93	23.99	
15	16QAM	36	0	22.63	22.68	22.73	23.7
15	16QAM	36	20	22.67	22.70	22.74	
15	16QAM	36	39	22.63	22.64	22.70	
15	16QAM	75	0	22.64	22.66	22.71	
15	64QAM	1	0	22.78	22.78	22.87	23.7
15	64QAM	1	37	22.79	22.83	22.85	
15	64QAM	1	74	22.70	22.82	22.90	
15	64QAM	36	0	21.68	21.67	21.73	22.7
15	64QAM	36	20	21.70	21.72	21.73	
15	64QAM	36	39	21.65	21.65	21.73	
15	64QAM	75	0	21.63	21.63	21.69	
Channel				18650	18900	19150	Tune-up limit (dBm)
Frequency (MHz)				1855	1880	1905	
10	QPSK	1	0	24.68	24.72	24.65	25.7
10	QPSK	1	25	24.57	24.61	24.70	
10	QPSK	1	49	24.60	24.65	24.70	
10	QPSK	25	0	23.61	23.64	23.65	24.7
10	QPSK	25	12	23.61	23.64	23.64	
10	QPSK	25	25	23.55	23.60	23.74	
10	QPSK	50	0	23.57	23.60	23.63	
10	16QAM	1	0	23.96	24.02	23.96	24.7
10	16QAM	1	25	23.92	23.94	24.03	
10	16QAM	1	49	23.94	23.95	24.02	
10	16QAM	25	0	22.70	22.71	22.73	23.7
10	16QAM	25	12	22.69	22.71	22.75	
10	16QAM	25	25	22.67	22.67	22.83	
10	16QAM	50	0	22.66	22.70	22.72	
10	64QAM	1	0	22.94	22.93	22.90	23.7
10	64QAM	1	25	22.81	22.82	22.98	
10	64QAM	1	49	22.86	22.88	22.93	
10	64QAM	25	0	21.70	21.72	21.73	22.7
10	64QAM	25	12	21.69	21.73	21.77	
10	64QAM	25	25	21.68	21.70	21.85	
10	64QAM	50	0	21.71	21.71	21.75	
Channel				18625	18900	19175	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1880	1907.5	
5	QPSK	1	0	24.57	24.61	24.72	25.7
5	QPSK	1	12	24.61	24.63	24.72	
5	QPSK	1	24	24.55	24.58	24.69	
5	QPSK	12	0	23.61	23.64	23.77	24.7
5	QPSK	12	7	23.66	23.65	23.84	
5	QPSK	12	13	23.61	23.62	23.77	
5	QPSK	25	0	23.60	23.62	23.74	
5	16QAM	1	0	23.86	23.94	24.04	24.7
5	16QAM	1	12	23.92	23.96	24.02	
5	16QAM	1	24	23.86	23.89	24.01	
5	16QAM	12	0	22.72	22.70	22.85	23.7
5	16QAM	12	7	22.71	22.72	22.87	
5	16QAM	12	13	22.70	22.70	22.84	
5	16QAM	25	0	22.68	22.67	22.81	
5	64QAM	1	0	22.83	22.82	22.97	23.7
5	64QAM	1	12	22.84	22.83	22.97	
5	64QAM	1	24	22.78	22.79	22.93	
5	64QAM	12	0	21.74	21.73	21.89	22.7
5	64QAM	12	7	21.75	21.75	21.90	
5	64QAM	12	13	21.72	21.72	21.86	
5	64QAM	25	0	21.70	21.69	21.84	
Channel				18615	18900	19185	Tune-up limit (dBm)
Frequency (MHz)				1851.5	1880	1908.5	
3	QPSK	1	0	24.56	24.60	24.70	25.7
3	QPSK	1	8	24.57	24.62	24.70	
3	QPSK	1	14	24.54	24.57	24.69	
3	QPSK	8	0	23.64	23.65	23.77	24.7
3	QPSK	8	4	23.64	23.65	23.80	
3	QPSK	8	7	23.60	23.63	23.78	
3	QPSK	15	0	23.59	23.59	23.76	
3	16QAM	1	0	23.87	23.87	24.00	24.7
3	16QAM	1	8	23.90	23.95	24.04	
3	16QAM	1	14	23.82	23.90	23.97	
3	16QAM	8	0	22.74	22.71	22.86	23.7
3	16QAM	8	4	22.75	22.75	22.93	
3	16QAM	8	7	22.75	22.72	22.87	
3	16QAM	15	0	22.69	22.68	22.84	
3	64QAM	1	0	22.82	22.81	22.95	23.7
3	64QAM	1	8	22.83	22.81	22.95	
3	64QAM	1	14	22.79	22.79	22.94	
3	64QAM	8	0	21.74	21.72	21.84	22.7
3	64QAM	8	4	21.77	21.77	21.88	
3	64QAM	8	7	21.73	21.71	21.87	
3	64QAM	15	0	21.70	21.69	21.85	
Channel				18607	18900	19193	Tune-up limit (dBm)
Frequency (MHz)				1850.7	1880	1909.3	
1.4	QPSK	1	0	24.54	24.57	24.66	25.7
1.4	QPSK	1	3	24.59	24.62	24.72	
1.4	QPSK	1	5	24.54	24.53	24.64	
1.4	QPSK	3	0	24.57	24.60	24.69	
1.4	QPSK	3	1	24.61	24.62	24.72	
1.4	QPSK	3	3	24.55	24.58	24.69	
1.4	QPSK	6	0	23.54	23.55	23.70	24.7
1.4	16QAM	1	0	23.81	23.88	23.95	24.7
1.4	16QAM	1	3	23.91	23.92	24.03	
1.4	16QAM	1	5	23.79	23.88	23.95	
1.4	16QAM	3	0	23.63	23.65	23.77	
1.4	16QAM	3	1	23.66	23.72	23.83	
1.4	16QAM	3	3	23.64	23.68	23.76	
1.4	16QAM	6	0	22.69	22.70	22.82	23.7
1.4	64QAM	1	0	22.77	22.79	22.91	23.7
1.4	64QAM	1	3	22.83	22.85	22.98	
1.4	64QAM	1	5	22.80	22.78	22.91	
1.4	64QAM	3	0	22.78	22.76	22.89	
1.4	64QAM	3	1	22.84	22.83	22.95	
1.4	64QAM	3	3	22.78	22.77	22.90	
1.4	64QAM	6	0	21.64	21.66	21.78	22.7

Band 4

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				20050	20175	20300	
Frequency (MHz)				1720	1732.5	1745	
20	QPSK	1	0	24.65	24.68	24.68	25.7
20	QPSK	1	49	24.72	24.59	24.63	
20	QPSK	1	99	24.61	24.58	24.56	
20	QPSK	50	0	23.71	23.66	23.65	24.7
20	QPSK	50	24	23.70	23.65	23.72	
20	QPSK	50	50	23.69	23.64	23.65	
20	QPSK	100	0	23.72	23.62	23.61	
20	16QAM	1	0	23.90	23.95	23.89	24.7
20	16QAM	1	49	23.97	23.86	23.93	
20	16QAM	1	99	23.87	23.90	23.86	
20	16QAM	50	0	22.84	22.73	22.72	23.7
20	16QAM	50	24	22.82	22.73	22.80	
20	16QAM	50	50	22.74	22.67	22.73	
20	16QAM	100	0	22.76	22.70	22.64	
20	64QAM	1	0	22.82	22.84	22.79	23.7
20	64QAM	1	49	22.88	22.79	22.85	
20	64QAM	1	99	22.76	22.79	22.73	
20	64QAM	50	0	21.83	21.74	21.71	22.7
20	64QAM	50	24	21.81	21.73	21.81	
20	64QAM	50	50	21.80	21.69	21.74	
20	64QAM	100	0	21.79	21.70	21.67	
Channel				20025	20175	20325	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1732.5	1747.5	
15	QPSK	1	0	24.63	24.64	24.71	25.7
15	QPSK	1	37	24.66	24.57	24.64	
15	QPSK	1	74	24.63	24.51	24.57	
15	QPSK	36	0	23.67	23.66	23.70	24.7
15	QPSK	36	20	23.75	23.70	23.71	
15	QPSK	36	39	23.72	23.63	23.66	
15	QPSK	75	0	23.72	23.66	23.71	
15	16QAM	1	0	23.97	24.00	24.03	24.7
15	16QAM	1	37	24.02	23.87	23.96	
15	16QAM	1	74	23.94	23.82	23.88	
15	16QAM	36	0	22.72	22.75	22.77	23.7
15	16QAM	36	20	22.85	22.73	22.78	
15	16QAM	36	39	22.81	22.70	22.72	
15	16QAM	75	0	22.82	22.72	22.75	
15	64QAM	1	0	22.87	22.84	22.93	23.7
15	64QAM	1	37	22.92	22.79	22.86	
15	64QAM	1	74	22.83	22.73	22.78	
15	64QAM	36	0	21.75	21.76	21.82	22.7
15	64QAM	36	20	21.84	21.76	21.81	
15	64QAM	36	39	21.80	21.72	21.74	
15	64QAM	75	0	21.80	21.71	21.75	
Channel				20000	20175	20350	Tune-up limit (dBm)
Frequency (MHz)				1715	1732.5	1750	
10	QPSK	1	0	24.67	24.68	24.71	25.7
10	QPSK	1	25	24.62	24.64	24.69	
10	QPSK	1	49	24.64	24.56	24.62	
10	QPSK	25	0	23.67	23.71	23.77	24.7
10	QPSK	25	12	23.66	23.67	23.72	
10	QPSK	25	25	23.72	23.62	23.70	
10	QPSK	50	0	23.79	23.67	23.69	
10	16QAM	1	0	23.99	23.93	24.01	24.7
10	16QAM	1	25	23.94	23.94	23.99	
10	16QAM	1	49	24.00	23.87	23.92	
10	16QAM	25	0	22.75	22.78	22.82	23.7
10	16QAM	25	12	22.76	22.75	22.83	
10	16QAM	25	25	22.82	22.72	22.74	
10	16QAM	50	0	22.88	22.73	22.77	
10	64QAM	1	0	22.85	22.86	22.91	23.7
10	64QAM	1	25	22.84	22.83	22.93	
10	64QAM	1	49	22.88	22.76	22.87	
10	64QAM	25	0	21.78	21.80	21.81	22.7
10	64QAM	25	12	21.75	21.77	21.83	
10	64QAM	25	25	21.80	21.72	21.75	
10	64QAM	50	0	21.86	21.76	21.79	
Channel				19975	20175	20375	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1732.5	1752.5	
5	QPSK	1	0	24.61	24.59	24.64	25.7
5	QPSK	1	12	24.65	24.60	24.67	
5	QPSK	1	24	24.59	24.60	24.59	
5	QPSK	12	0	23.68	23.67	23.70	24.7
5	QPSK	12	7	23.72	23.71	23.73	
5	QPSK	12	13	23.64	23.64	23.65	
5	QPSK	25	0	23.70	23.67	23.68	
5	16QAM	1	0	23.97	23.94	23.98	24.7
5	16QAM	1	12	23.99	23.93	23.99	
5	16QAM	1	24	23.93	23.86	23.93	
5	16QAM	12	0	22.78	22.73	22.78	23.7
5	16QAM	12	7	22.80	22.79	22.81	
5	16QAM	12	13	22.75	22.73	22.72	
5	16QAM	25	0	22.74	22.74	22.76	
5	64QAM	1	0	22.89	22.86	22.88	23.7
5	64QAM	1	12	22.90	22.84	22.88	
5	64QAM	1	24	22.81	22.77	22.81	
5	64QAM	12	0	21.79	21.81	21.81	22.7
5	64QAM	12	7	21.86	21.84	21.85	
5	64QAM	12	13	21.80	21.76	21.77	
5	64QAM	25	0	21.78	21.77	21.77	
Channel				19965	20175	20385	Tune-up limit (dBm)
Frequency (MHz)				1711.5	1732.5	1753.5	
3	QPSK	1	0	24.60	24.61	24.67	25.7
3	QPSK	1	8	24.62	24.62	24.64	
3	QPSK	1	14	24.58	24.58	24.60	
3	QPSK	8	0	23.68	23.70	23.71	24.7
3	QPSK	8	4	23.71	23.70	23.72	
3	QPSK	8	7	23.66	23.67	23.65	
3	QPSK	15	0	23.65	23.66	23.70	
3	16QAM	1	0	23.94	23.93	23.93	24.7
3	16QAM	1	8	23.95	23.93	23.99	
3	16QAM	1	14	23.93	23.90	23.91	
3	16QAM	8	0	22.78	22.76	22.76	23.7
3	16QAM	8	4	22.80	22.84	22.80	
3	16QAM	8	7	22.81	22.78	22.79	
3	16QAM	15	0	22.76	22.76	22.76	
3	64QAM	1	0	22.88	22.79	22.86	23.7
3	64QAM	1	8	22.87	22.85	22.88	
3	64QAM	1	14	22.87	22.79	22.82	
3	64QAM	8	0	21.78	21.78	21.77	22.7
3	64QAM	8	4	21.82	21.79	21.80	
3	64QAM	8	7	21.79	21.76	21.76	
3	64QAM	15	0	21.78	21.77	21.74	
Channel				19957	20175	20393	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1732.5	1754.3	
1.4	QPSK	1	0	24.57	24.55	24.60	25.7
1.4	QPSK	1	3	24.63	24.64	24.65	
1.4	QPSK	1	5	24.57	24.57	24.60	
1.4	QPSK	3	0	24.59	24.58	24.64	
1.4	QPSK	3	1	24.66	24.64	24.70	
1.4	QPSK	3	3	24.60	24.61	24.64	
1.4	QPSK	6	0	23.61	23.62	23.65	24.7
1.4	16QAM	1	0	23.93	23.87	23.90	24.7
1.4	16QAM	1	3	23.98	23.95	23.97	
1.4	16QAM	1	5	23.89	23.83	23.86	
1.4	16QAM	3	0	23.70	23.68	23.70	
1.4	16QAM	3	1	23.75	23.70	23.74	
1.4	16QAM	3	3	23.68	23.65	23.70	
1.4	16QAM	6	0	22.77	22.76	22.75	23.7
1.4	64QAM	1	0	22.81	22.76	22.81	23.7
1.4	64QAM	1	3	22.89	22.83	22.85	
1.4	64QAM	1	5	22.79	22.76	22.75	
1.4	64QAM	3	0	22.79	22.77	22.81	
1.4	64QAM	3	1	22.86	22.81	22.85	
1.4	64QAM	3	3	22.80	22.78	22.80	
1.4	64QAM	6	0	21.70	21.70	21.68	22.7

Band 5

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				20450	20525	20600	
Frequency (MHz)				829	836.5	844	
10	QPSK	1	0	24.84	24.89	24.79	25.7
10	QPSK	1	25	24.82	24.84	24.83	
10	QPSK	1	49	24.88	24.78	24.77	
10	QPSK	25	0	23.89	23.88	23.77	24.7
10	QPSK	25	12	23.94	23.90	23.87	
10	QPSK	25	25	23.95	23.85	23.82	
10	QPSK	50	0	23.95	23.88	23.77	
10	16QAM	1	0	24.09	24.17	24.11	24.7
10	16QAM	1	25	24.15	24.20	24.17	
10	16QAM	1	49	24.17	24.06	24.13	
10	16QAM	25	0	22.98	22.95	22.87	23.7
10	16QAM	25	12	23.02	22.96	22.98	
10	16QAM	25	25	22.99	22.90	22.90	
10	16QAM	50	0	23.03	22.96	22.84	
10	64QAM	1	0	23.09	23.08	23.04	23.7
10	64QAM	1	25	23.11	23.11	23.10	
10	64QAM	1	49	23.10	23.03	23.01	
10	64QAM	25	0	21.96	21.94	21.88	22.7
10	64QAM	25	12	22.08	21.98	21.99	
10	64QAM	25	25	21.99	21.96	21.93	
10	64QAM	50	0	22.04	21.93	21.85	
Channel				20425	20525	20625	Tune-up limit (dBm)
Frequency (MHz)				826.5	836.5	846.5	
5	QPSK	1	0	24.85	24.82	24.79	25.7
5	QPSK	1	12	24.84	24.83	24.79	
5	QPSK	1	24	24.77	24.77	24.74	
5	QPSK	12	0	23.86	23.87	23.85	24.7
5	QPSK	12	7	23.89	23.88	23.83	
5	QPSK	12	13	23.86	23.86	23.80	
5	QPSK	25	0	23.87	23.86	23.81	
5	16QAM	1	0	24.08	24.06	24.11	24.7
5	16QAM	1	12	24.16	24.20	24.06	
5	16QAM	1	24	24.13	24.12	24.08	
5	16QAM	12	0	22.95	22.95	22.91	23.7
5	16QAM	12	7	22.98	22.98	22.93	
5	16QAM	12	13	22.98	22.96	22.88	
5	16QAM	25	0	22.93	22.95	22.90	
5	64QAM	1	0	23.05	23.05	23.03	23.7
5	64QAM	1	12	23.07	23.08	23.01	
5	64QAM	1	24	23.06	23.05	22.99	
5	64QAM	12	0	22.01	21.98	21.97	22.7
5	64QAM	12	7	22.05	22.03	21.96	
5	64QAM	12	13	21.99	21.98	21.93	
5	64QAM	25	0	21.98	21.95	21.91	
Channel				20415	20525	20635	Tune-up limit (dBm)
Frequency (MHz)				825.5	836.5	847.5	
3	QPSK	1	0	24.82	24.85	24.78	25.7
3	QPSK	1	8	24.83	24.81	24.75	
3	QPSK	1	14	24.82	24.80	24.74	
3	QPSK	8	0	23.89	23.83	23.78	24.7
3	QPSK	8	4	23.87	23.86	23.81	
3	QPSK	8	7	23.85	23.81	23.77	
3	QPSK	15	0	23.86	23.84	23.79	
3	16QAM	1	0	24.09	24.15	24.06	24.7
3	16QAM	1	8	24.14	24.21	24.10	
3	16QAM	1	14	24.15	24.13	24.10	
3	16QAM	8	0	23.00	22.97	22.89	23.7
3	16QAM	8	4	23.03	23.00	22.97	
3	16QAM	8	7	22.98	22.95	22.92	
3	16QAM	15	0	22.96	22.95	22.89	
3	64QAM	1	0	23.04	23.06	23.00	23.7
3	64QAM	1	8	23.07	23.09	23.01	
3	64QAM	1	14	23.10	23.07	22.99	
3	64QAM	8	0	21.98	21.95	21.91	22.7
3	64QAM	8	4	22.03	21.98	21.95	
3	64QAM	8	7	21.99	21.94	21.91	
3	64QAM	15	0	21.97	21.97	21.90	
Channel				20407	20525	20643	Tune-up limit (dBm)
Frequency (MHz)				824.7	836.5	848.3	
1.4	QPSK	1	0	24.74	24.74	24.68	25.7
1.4	QPSK	1	3	24.83	24.82	24.76	
1.4	QPSK	1	5	24.77	24.74	24.69	
1.4	QPSK	3	0	24.82	24.81	24.73	
1.4	QPSK	3	1	24.84	24.82	24.76	
1.4	QPSK	3	3	24.82	24.79	24.74	
1.4	QPSK	6	0	23.80	23.78	23.72	24.7
1.4	16QAM	1	0	24.03	24.06	24.03	24.7
1.4	16QAM	1	3	24.10	24.17	24.09	
1.4	16QAM	1	5	24.09	24.10	24.00	
1.4	16QAM	3	0	23.86	23.88	23.83	
1.4	16QAM	3	1	23.91	23.93	23.86	
1.4	16QAM	3	3	23.85	23.89	23.82	
1.4	16QAM	6	0	22.96	22.92	22.89	23.7
1.4	64QAM	1	0	23.00	23.02	22.96	23.7
1.4	64QAM	1	3	23.07	23.08	23.02	
1.4	64QAM	1	5	23.01	23.02	22.92	
1.4	64QAM	3	0	23.00	23.01	22.95	
1.4	64QAM	3	1	23.03	23.05	22.98	
1.4	64QAM	3	3	22.99	23.01	22.93	
1.4	64QAM	6	0	21.90	21.89	21.82	22.7

Band 7							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				20650	21100	21350	
Frequency (MHz)				2510	2535	2560	
20	QPSK	1	0	23.97	23.87	23.98	25
20	QPSK	1	49	23.97	23.98	23.99	
20	QPSK	1	99	24.06	24.08	24.16	
20	QPSK	50	0	23.03	23.03	23.05	24
20	QPSK	50	24	23.06	23.06	23.09	
20	QPSK	50	50	23.07	23.11	23.13	
20	QPSK	100	0	23.07	23.03	23.12	
20	16QAM	1	0	23.31	23.20	23.31	24
20	16QAM	1	49	23.29	23.31	23.33	
20	16QAM	1	99	23.38	23.40	23.42	
20	16QAM	50	0	22.10	22.09	22.14	23
20	16QAM	50	24	22.13	22.13	22.16	
20	16QAM	50	50	22.15	22.17	22.21	
20	16QAM	100	0	22.11	22.12	22.14	
20	64QAM	1	0	22.22	22.06	22.21	23
20	64QAM	1	49	22.18	22.21	22.21	
20	64QAM	1	99	22.27	22.29	22.29	
20	64QAM	50	0	21.11	21.11	21.13	22
20	64QAM	50	24	21.15	21.14	21.18	
20	64QAM	50	50	21.15	21.16	21.18	
20	64QAM	100	0	21.12	21.14	21.14	
Channel				20825	21100	21375	Tune-up limit (dBm)
Frequency (MHz)				2507.5	2535	2562.5	
15	QPSK	1	0	24.01	24.00	24.00	25
15	QPSK	1	37	24.00	24.02	24.01	
15	QPSK	1	74	24.10	24.11	24.15	
15	QPSK	36	0	23.04	23.02	23.03	24
15	QPSK	36	20	23.08	23.06	23.08	
15	QPSK	36	39	23.11	23.06	23.09	
15	QPSK	75	0	23.07	23.06	23.09	
15	16QAM	1	0	23.32	23.33	23.28	24
15	16QAM	1	37	23.32	23.30	23.30	
15	16QAM	1	74	23.42	23.42	23.44	
15	16QAM	36	0	22.13	22.10	22.09	23
15	16QAM	36	20	22.14	22.15	22.15	
15	16QAM	36	39	22.15	22.15	22.16	
15	16QAM	75	0	22.14	22.11	22.14	
15	64QAM	1	0	22.25	22.23	22.26	23
15	64QAM	1	37	22.23	22.22	22.22	
15	64QAM	1	74	22.33	22.30	22.35	
15	64QAM	36	0	21.16	21.14	21.13	22
15	64QAM	36	20	21.18	21.16	21.17	
15	64QAM	36	39	21.16	21.18	21.16	
15	64QAM	75	0	21.12	21.12	21.14	
Channel				20800	21100	21400	Tune-up limit (dBm)
Frequency (MHz)				2505	2535	2565	
10	QPSK	1	0	24.02	24.01	23.98	25
10	QPSK	1	25	24.02	24.03	24.00	
10	QPSK	1	49	24.06	24.07	24.08	
10	QPSK	25	0	23.05	23.01	23.06	24
10	QPSK	25	12	23.09	23.04	23.05	
10	QPSK	25	25	23.06	23.08	23.07	
10	QPSK	50	0	23.06	23.05	23.06	
10	16QAM	1	0	23.34	23.35	23.29	24
10	16QAM	1	25	23.33	23.32	23.34	
10	16QAM	1	49	23.38	23.41	23.43	
10	16QAM	25	0	22.10	22.10	22.09	23
10	16QAM	25	12	22.15	22.14	22.15	
10	16QAM	25	25	22.16	22.14	22.15	
10	16QAM	50	0	22.14	22.12	22.13	
10	64QAM	1	0	22.27	22.19	22.18	23
10	64QAM	1	25	22.23	22.21	22.19	
10	64QAM	1	49	22.32	22.27	22.26	
10	64QAM	25	0	21.11	21.09	21.11	22
10	64QAM	25	12	21.16	21.13	21.13	
10	64QAM	25	25	21.15	21.15	21.15	
10	64QAM	50	0	21.14	21.11	21.13	
Channel				20775	21100	21425	Tune-up limit (dBm)
Frequency (MHz)				2502.5	2535	2567.5	
5	QPSK	1	0	24.02	24.02	23.97	25
5	QPSK	1	12	24.03	24.03	24.03	
5	QPSK	1	24	24.07	24.05	24.02	
5	QPSK	12	0	23.03	23.01	23.00	24
5	QPSK	12	7	23.10	23.10	23.07	
5	QPSK	12	13	23.10	23.05	23.04	
5	QPSK	25	0	23.07	23.05	23.06	
5	16QAM	1	0	23.32	23.31	23.31	24
5	16QAM	1	12	23.34	23.33	23.34	
5	16QAM	1	24	23.34	23.33	23.35	
5	16QAM	12	0	22.11	22.09	22.09	23
5	16QAM	12	7	22.18	22.15	22.12	
5	16QAM	12	13	22.13	22.12	22.15	
5	16QAM	25	0	22.13	22.11	22.12	
5	64QAM	1	0	22.28	22.22	22.18	23
5	64QAM	1	12	22.27	22.24	22.21	
5	64QAM	1	24	22.27	22.28	22.23	
5	64QAM	12	0	21.15	21.12	21.12	22
5	64QAM	12	7	21.19	21.18	21.18	
5	64QAM	12	13	21.18	21.17	21.16	
5	64QAM	25	0	21.14	21.12	21.11	

Band 12							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				23060	23095	23130	
Frequency (MHz)				704	707.5	711	
10	QPSK	1	0	24.54	24.58	24.65	25.7
10	QPSK	1	25	24.65	24.69	24.75	
10	QPSK	1	49	24.75	24.77	24.88	
10	QPSK	25	0	23.67	23.74	23.72	24.7
10	QPSK	25	12	23.80	23.73	23.73	
10	QPSK	25	25	23.79	23.70	23.77	
10	QPSK	50	0	23.78	23.75	23.71	
10	16QAM	1	0	23.93	23.95	24.04	24.7
10	16QAM	1	25	24.02	24.05	24.12	
10	16QAM	1	49	24.08	24.15	24.22	
10	16QAM	25	0	22.78	22.86	22.81	23.7
10	16QAM	25	12	22.88	22.81	22.82	
10	16QAM	25	25	22.83	22.82	22.91	
10	16QAM	50	0	22.89	22.83	22.81	
10	64QAM	1	0	22.78	22.83	22.92	23.7
10	64QAM	1	25	22.92	22.99	23.02	
10	64QAM	1	49	23.00	23.05	23.12	
10	64QAM	25	0	21.79	21.87	21.82	22.7
10	64QAM	25	12	21.89	21.83	21.81	
10	64QAM	25	25	21.86	21.86	21.92	
10	64QAM	50	0	21.91	21.85	21.82	
Channel				23035	23095	23155	Tune-up limit (dBm)
Frequency (MHz)				701.5	707.5	713.5	
5	QPSK	1	0	24.55	24.57	24.72	25.7
5	QPSK	1	12	24.64	24.68	24.73	
5	QPSK	1	24	24.62	24.69	24.82	
5	QPSK	12	0	23.66	23.71	23.74	24.7
5	QPSK	12	7	23.71	23.75	23.80	
5	QPSK	12	13	23.65	23.73	23.77	
5	QPSK	25	0	23.69	23.72	23.76	
5	16QAM	1	0	23.88	23.95	24.06	24.7
5	16QAM	1	12	24.03	24.05	24.11	
5	16QAM	1	24	23.99	24.01	24.14	
5	16QAM	12	0	22.81	22.82	22.86	23.7
5	16QAM	12	7	22.82	22.82	22.90	
5	16QAM	12	13	22.79	22.79	22.87	
5	16QAM	25	0	22.78	22.80	22.83	
5	64QAM	1	0	22.82	22.88	22.99	23.7
5	64QAM	1	12	22.95	22.98	23.02	
5	64QAM	1	24	22.91	22.95	23.07	
5	64QAM	12	0	21.87	21.88	21.90	22.7
5	64QAM	12	7	21.89	21.88	21.94	
5	64QAM	12	13	21.85	21.89	21.93	
5	64QAM	25	0	21.80	21.80	21.86	
Channel				23025	23095	23165	Tune-up limit (dBm)
Frequency (MHz)				700.5	707.5	714.5	
3	QPSK	1	0	24.61	24.74	24.77	25.7
3	QPSK	1	8	24.58	24.73	24.83	
3	QPSK	1	14	24.69	24.71	24.87	
3	QPSK	8	0	23.65	23.74	23.79	24.7
3	QPSK	8	4	23.68	23.81	23.95	
3	QPSK	8	7	23.71	23.78	23.94	
3	QPSK	15	0	23.76	23.74	23.78	
3	16QAM	1	0	23.99	24.08	24.09	24.7
3	16QAM	1	8	23.93	24.10	24.19	
3	16QAM	1	14	24.00	24.04	24.21	
3	16QAM	8	0	22.79	22.92	22.93	23.7
3	16QAM	8	4	22.80	22.94	23.10	
3	16QAM	8	7	22.91	22.90	23.06	
3	16QAM	15	0	22.86	22.85	22.91	
3	64QAM	1	0	22.90	23.00	23.03	23.7
3	64QAM	1	8	22.89	23.02	23.14	
3	64QAM	1	14	22.95	22.98	23.12	
3	64QAM	8	0	21.78	21.91	21.92	22.7
3	64QAM	8	4	21.81	21.92	22.08	
3	64QAM	8	7	21.88	21.89	22.06	
3	64QAM	15	0	21.84	21.90	21.87	
Channel				23017	23095	23173	Tune-up limit (dBm)
Frequency (MHz)				699.7	707.5	715.3	
1.4	QPSK	1	0	24.54	24.66	24.78	25.7
1.4	QPSK	1	3	24.61	24.71	24.85	
1.4	QPSK	1	5	24.53	24.63	24.77	
1.4	QPSK	3	0	24.58	24.69	24.81	
1.4	QPSK	3	1	24.62	24.72	24.85	
1.4	QPSK	3	3	24.60	24.68	24.81	
1.4	QPSK	6	0	23.58	23.68	23.85	24.7
1.4	16QAM	1	0	23.92	23.99	24.11	24.7
1.4	16QAM	1	3	23.99	24.07	24.18	
1.4	16QAM	1	5	23.89	24.00	24.14	
1.4	16QAM	3	0	23.68	23.79	23.91	
1.4	16QAM	3	1	23.72	23.82	23.93	
1.4	16QAM	3	3	23.68	23.79	23.90	
1.4	16QAM	6	0	22.79	22.83	23.01	23.7
1.4	64QAM	1	0	22.83	22.94	23.02	23.7
1.4	64QAM	1	3	22.89	23.00	23.13	
1.4	64QAM	1	5	22.82	22.93	23.03	
1.4	64QAM	3	0	22.82	22.92	23.04	
1.4	64QAM	3	1	22.87	22.94	23.08	
1.4	64QAM	3	3	22.78	22.92	23.03	
1.4	64QAM	6	0	21.69	21.78	21.95	22.7

Band 13							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					23230		
Frequency (MHz)					782		
10	QPSK	1	0		24.53		25.5
10	QPSK	1	25		24.73		
10	QPSK	1	49		24.66		
10	QPSK	25	0		23.68		24.5
10	QPSK	25	12		23.73		
10	QPSK	25	25		23.66		
10	QPSK	50	0		23.73		
10	16QAM	1	0		23.80		24.5
10	16QAM	1	25		24.10		
10	16QAM	1	49		24.03		
10	16QAM	25	0		22.75		23.5
10	16QAM	25	12		22.85		
10	16QAM	25	25		22.80		
10	16QAM	50	0		22.82		
10	64QAM	1	0		22.72		23.5
10	64QAM	1	25		23.00		
10	64QAM	1	49		22.97		
10	64QAM	25	0		21.78		22.5
10	64QAM	25	12		21.84		
10	64QAM	25	25		21.80		
10	64QAM	50	0		21.82		
Channel				23205	23230	23255	Tune-up limit (dBm)
Frequency (MHz)				779.5	782	784.5	
5	QPSK	1	0	24.51	24.57	24.71	25.5
5	QPSK	1	12	24.59	24.71	24.69	
5	QPSK	1	24	24.72	24.67	24.65	
5	QPSK	12	0	23.72	23.75	23.73	24.5
5	QPSK	12	7	23.69	23.77	23.71	
5	QPSK	12	13	23.73	23.71	23.71	
5	QPSK	25	0	23.66	23.69	23.70	
5	16QAM	1	0	23.80	23.97	24.07	24.5
5	16QAM	1	12	23.98	24.08	24.02	
5	16QAM	1	24	24.05	24.01	24.00	
5	16QAM	12	0	22.78	22.80	22.80	23.5
5	16QAM	12	7	22.80	22.83	22.79	
5	16QAM	12	13	22.84	22.77	22.79	
5	16QAM	25	0	22.77	22.78	22.79	
5	64QAM	1	0	22.71	22.85	22.97	23.5
5	64QAM	1	12	22.90	23.01	22.92	
5	64QAM	1	24	22.98	22.94	22.89	
5	64QAM	12	0	21.78	21.89	21.84	22.5
5	64QAM	12	7	21.81	21.91	21.84	
5	64QAM	12	13	21.89	21.86	21.83	
5	64QAM	25	0	21.75	21.83	21.80	

Band 14							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					23330		
Frequency (MHz)					793		
10	QPSK	1	0		24.88		25.7
10	QPSK	1	25		24.81		
10	QPSK	1	49		24.86		
10	QPSK	25	0		23.88		24.7
10	QPSK	25	12		23.89		
10	QPSK	25	25		23.85		
10	QPSK	50	0		23.87		
10	16QAM	1	0		24.24		24.7
10	16QAM	1	25		24.14		
10	16QAM	1	49		24.18		
10	16QAM	25	0		22.95		23.7
10	16QAM	25	12		22.98		
10	16QAM	25	25		22.91		
10	16QAM	50	0		22.95		
10	64QAM	1	0		23.09		23.7
10	64QAM	1	25		23.04		
10	64QAM	1	49		23.08		
10	64QAM	25	0		21.99		22.7
10	64QAM	25	12		21.99		
10	64QAM	25	25		21.91		
10	64QAM	50	0		21.96		
Channel				23305	23330	23355	Tune-up limit (dBm)
Frequency (MHz)				790.5	793	795.5	
5	QPSK	1	0	24.87	24.82	24.80	25.7
5	QPSK	1	12	24.84	24.81	24.87	
5	QPSK	1	24	24.81	24.87	24.84	
5	QPSK	12	0	23.89	23.87	23.85	24.7
5	QPSK	12	7	23.90	23.90	23.87	
5	QPSK	12	13	23.87	23.83	23.88	
5	QPSK	25	0	23.91	23.85	23.82	
5	16QAM	1	0	24.17	24.17	24.12	24.7
5	16QAM	1	12	24.22	24.14	24.21	
5	16QAM	1	24	24.13	24.19	24.16	
5	16QAM	12	0	22.99	22.93	22.95	23.7
5	16QAM	12	7	23.01	22.95	22.94	
5	16QAM	12	13	22.95	22.91	22.97	
5	16QAM	25	0	22.97	22.93	22.90	
5	64QAM	1	0	23.10	23.08	23.01	23.7
5	64QAM	1	12	23.08	23.04	23.11	
5	64QAM	1	24	23.02	23.05	23.06	
5	64QAM	12	0	22.02	21.99	21.96	22.7
5	64QAM	12	7	22.05	22.01	21.97	
5	64QAM	12	13	22.00	21.96	22.02	
5	64QAM	25	0	21.99	21.96	21.93	

Band 17							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				23780	23790	23800	
Frequency (MHz)				709	710	711	
10	QPSK	1	0	24.60	24.59	24.68	25.7
10	QPSK	1	25	24.73	24.69	24.71	
10	QPSK	1	49	24.71	24.71	24.69	
10	QPSK	25	0	23.78	23.76	23.71	24.7
10	QPSK	25	12	23.77	23.73	23.78	
10	QPSK	25	25	23.76	23.73	23.75	
10	QPSK	50	0	23.77	23.73	23.73	
10	16QAM	1	0	23.99	23.99	24.06	24.7
10	16QAM	1	25	24.06	24.05	24.07	
10	16QAM	1	49	24.09	24.07	24.03	
10	16QAM	25	0	22.86	22.84	22.82	23.7
10	16QAM	25	12	22.84	22.89	22.87	
10	16QAM	25	25	22.86	22.84	22.84	
10	16QAM	50	0	22.86	22.84	22.84	
10	64QAM	1	0	22.89	22.86	22.97	23.7
10	64QAM	1	25	22.97	22.96	22.96	
10	64QAM	1	49	22.98	22.97	22.95	
10	64QAM	25	0	21.87	21.82	21.84	22.7
10	64QAM	25	12	21.86	21.89	21.88	
10	64QAM	25	25	21.86	21.85	21.84	
10	64QAM	50	0	21.86	21.83	21.85	
Channel				23755	23790	23825	Tune-up limit (dBm)
Frequency (MHz)				706.5	710	713.5	
5	QPSK	1	0	24.62	24.71	24.68	25.7
5	QPSK	1	12	24.72	24.69	24.68	
5	QPSK	1	24	24.70	24.69	24.66	
5	QPSK	12	0	23.67	23.71	23.70	24.7
5	QPSK	12	7	23.78	23.74	23.75	
5	QPSK	12	13	23.78	23.72	23.72	
5	QPSK	25	0	23.79	23.75	23.71	
5	16QAM	1	0	23.98	24.02	24.03	24.7
5	16QAM	1	12	24.08	24.07	24.04	
5	16QAM	1	24	24.08	24.03	23.99	
5	16QAM	12	0	22.80	22.85	22.80	23.7
5	16QAM	12	7	22.93	22.87	22.86	
5	16QAM	12	13	22.84	22.83	22.83	
5	16QAM	25	0	22.85	22.81	22.79	
5	64QAM	1	0	22.89	22.96	22.93	23.7
5	64QAM	1	12	22.99	22.98	22.95	
5	64QAM	1	24	22.99	22.96	22.92	
5	64QAM	12	0	21.85	21.90	21.84	22.7
5	64QAM	12	7	21.95	21.91	21.88	
5	64QAM	12	13	21.94	21.88	21.86	
5	64QAM	25	0	21.88	21.84	21.82	

Band 25

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				26140	26340	26590	
Frequency (MHz)				1860	1880	1905	
20	QPSK	1	0	24.70	24.75	24.66	25.7
20	QPSK	1	49	24.65	24.67	24.68	
20	QPSK	1	99	24.72	24.77	24.83	
20	QPSK	50	0	23.70	23.74	23.69	24.7
20	QPSK	50	24	23.73	23.78	23.81	
20	QPSK	50	50	23.78	23.72	23.77	
20	QPSK	100	0	23.79	23.74	23.79	
20	16QAM	1	0	24.02	24.01	23.97	24.7
20	16QAM	1	49	24.00	23.98	24.00	
20	16QAM	1	99	24.05	24.12	24.06	
20	16QAM	50	0	22.78	22.81	22.74	23.7
20	16QAM	50	24	22.79	22.82	22.86	
20	16QAM	50	50	22.87	22.78	22.83	
20	16QAM	100	0	22.85	22.78	22.80	
20	64QAM	1	0	22.94	22.93	22.85	23.7
20	64QAM	1	49	22.88	22.85	22.88	
20	64QAM	1	99	22.98	22.96	23.00	
20	64QAM	50	0	21.79	21.83	21.75	22.7
20	64QAM	50	24	21.81	21.84	21.86	
20	64QAM	50	50	21.86	21.79	21.83	
20	64QAM	100	0	21.87	21.78	21.83	
Channel				26115	26340	26615	Tune-up limit (dBm)
Frequency (MHz)				1857.5	1880	1907.5	
15	QPSK	1	0	24.71	24.68	24.74	25.7
15	QPSK	1	37	24.69	24.69	24.72	
15	QPSK	1	74	24.64	24.65	24.78	
15	QPSK	36	0	23.74	23.74	23.76	24.7
15	QPSK	36	20	23.76	23.75	23.78	
15	QPSK	36	39	23.72	23.72	23.75	
15	QPSK	75	0	23.72	23.73	23.77	
15	16QAM	1	0	23.99	23.98	24.07	24.7
15	16QAM	1	37	23.98	23.97	24.05	
15	16QAM	1	74	23.91	23.95	24.10	
15	16QAM	36	0	22.77	22.80	22.83	23.7
15	16QAM	36	20	22.82	22.83	22.87	
15	16QAM	36	39	22.74	22.78	22.83	
15	16QAM	75	0	22.78	22.79	22.85	
15	64QAM	1	0	22.93	22.93	22.96	23.7
15	64QAM	1	37	22.96	22.88	22.93	
15	64QAM	1	74	22.85	22.88	23.02	
15	64QAM	36	0	21.82	21.83	21.83	22.7
15	64QAM	36	20	21.85	21.86	21.86	
15	64QAM	36	39	21.78	21.80	21.84	
15	64QAM	75	0	21.80	21.79	21.82	
Channel				26090	26340	26640	Tune-up limit (dBm)
Frequency (MHz)				1855	1880	1910	
10	QPSK	1	0	24.82	24.80	24.76	25.7
10	QPSK	1	25	24.71	24.73	24.81	
10	QPSK	1	49	24.74	24.76	24.81	
10	QPSK	25	0	23.76	23.77	23.79	24.7
10	QPSK	25	12	23.78	23.80	23.79	
10	QPSK	25	25	23.70	23.75	23.87	
10	QPSK	50	0	23.74	23.78	23.78	
10	16QAM	1	0	24.11	24.10	24.07	24.7
10	16QAM	1	25	24.06	24.09	24.16	
10	16QAM	1	49	24.10	24.07	24.09	
10	16QAM	25	0	22.83	22.85	22.85	23.7
10	16QAM	25	12	22.85	22.86	22.87	
10	16QAM	25	25	22.78	22.83	22.96	
10	16QAM	50	0	22.82	22.84	22.85	
10	64QAM	1	0	23.01	22.99	22.97	23.7
10	64QAM	1	25	22.91	22.92	23.06	
10	64QAM	1	49	22.94	22.95	23.05	
10	64QAM	25	0	21.84	21.87	21.87	22.7
10	64QAM	25	12	21.85	21.88	21.88	
10	64QAM	25	25	21.80	21.83	21.97	
10	64QAM	50	0	21.82	21.85	21.86	
Channel				26065	26340	26665	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1880	1912.5	
5	QPSK	1	0	24.71	24.73	24.81	25.7
5	QPSK	1	12	24.75	24.74	24.82	
5	QPSK	1	24	24.68	24.71	24.76	
5	QPSK	12	0	23.76	23.78	23.89	24.7
5	QPSK	12	7	23.82	23.81	23.91	
5	QPSK	12	13	23.74	23.76	23.92	
5	QPSK	25	0	23.74	23.75	23.90	
5	16QAM	1	0	24.02	24.00	24.13	24.7
5	16QAM	1	12	24.05	24.04	24.16	
5	16QAM	1	24	23.99	24.00	24.05	
5	16QAM	12	0	22.83	22.84	22.95	23.7
5	16QAM	12	7	22.86	22.83	22.98	
5	16QAM	12	13	22.80	22.81	22.96	
5	16QAM	25	0	22.83	22.81	22.95	
5	64QAM	1	0	22.94	22.93	23.04	23.7
5	64QAM	1	12	22.95	22.95	23.06	
5	64QAM	1	24	22.87	22.87	23.02	
5	64QAM	12	0	21.86	21.88	22.00	22.7
5	64QAM	12	7	21.90	21.90	22.01	
5	64QAM	12	13	21.84	21.86	21.98	
5	64QAM	25	0	21.84	21.84	21.95	
Channel				26055	26340	26675	Tune-up limit (dBm)
Frequency (MHz)				1851.5	1880	1913.5	
3	QPSK	1	0	24.72	24.72	24.82	25.7
3	QPSK	1	8	24.72	24.73	24.82	
3	QPSK	1	14	24.69	24.73	24.78	
3	QPSK	8	0	23.76	23.75	23.87	24.7
3	QPSK	8	4	23.79	23.81	23.92	
3	QPSK	8	7	23.74	23.76	23.91	
3	QPSK	15	0	23.73	23.76	23.88	
3	16QAM	1	0	24.04	23.99	24.09	24.7
3	16QAM	1	8	24.05	24.07	24.09	
3	16QAM	1	14	23.95	23.94	24.04	
3	16QAM	8	0	22.87	22.84	22.98	23.7
3	16QAM	8	4	22.88	22.89	23.03	
3	16QAM	8	7	22.83	22.83	23.00	
3	16QAM	15	0	22.83	22.81	22.96	
3	64QAM	1	0	22.90	22.90	23.02	23.7
3	64QAM	1	8	22.94	22.90	23.06	
3	64QAM	1	14	22.90	22.90	23.02	
3	64QAM	8	0	21.88	21.84	21.95	22.7
3	64QAM	8	4	21.88	21.89	22.00	
3	64QAM	8	7	21.85	21.86	21.99	
3	64QAM	15	0	21.82	21.83	21.93	
Channel				26047	26340	26683	Tune-up limit (dBm)
Frequency (MHz)				1850.7	1880	1914.3	
1.4	QPSK	1	0	24.68	24.67	24.76	25.7
1.4	QPSK	1	3	24.73	24.76	24.82	
1.4	QPSK	1	5	24.67	24.68	24.65	
1.4	QPSK	3	0	24.72	24.72	24.80	
1.4	QPSK	3	1	24.74	24.78	24.82	
1.4	QPSK	3	3	24.71	24.72	24.72	
1.4	QPSK	6	0	23.69	23.69	23.83	24.7
1.4	16QAM	1	0	23.98	23.99	24.04	24.7
1.4	16QAM	1	3	24.08	24.07	24.05	
1.4	16QAM	1	5	24.00	23.96	23.96	
1.4	16QAM	3	0	23.77	23.79	23.87	
1.4	16QAM	3	1	23.83	23.83	23.90	
1.4	16QAM	3	3	23.76	23.78	23.85	
1.4	16QAM	6	0	22.83	22.84	22.96	23.7
1.4	64QAM	1	0	22.90	22.89	23.01	23.7
1.4	64QAM	1	3	23.00	22.94	23.05	
1.4	64QAM	1	5	22.90	22.86	22.98	
1.4	64QAM	3	0	22.90	22.89	22.98	
1.4	64QAM	3	1	22.92	22.94	23.05	
1.4	64QAM	3	3	22.87	22.88	23.01	
1.4	64QAM	6	0	21.78	21.78	21.89	22.7

Band 26

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				26765	26865	26965	
Frequency (MHz)				821.5	831.5	841.5	
15	QPSK	1	0	24.85	24.87	24.83	25.7
15	QPSK	1	37	24.92	24.84	24.84	
15	QPSK	1	74	24.98	24.88	24.85	
15	QPSK	36	0	23.99	23.96	23.88	24.7
15	QPSK	36	20	24.01	23.97	23.90	
15	QPSK	36	39	24.00	23.91	23.86	
15	QPSK	75	0	23.99	23.96	23.83	
15	16QAM	1	0	24.18	24.22	24.14	24.7
15	16QAM	1	37	24.24	24.14	24.21	
15	16QAM	1	74	24.27	24.20	24.19	
15	16QAM	36	0	23.09	23.04	22.92	23.7
15	16QAM	36	20	23.09	23.03	22.93	
15	16QAM	36	39	23.13	22.99	22.97	
15	16QAM	75	0	23.06	23.02	22.90	
15	64QAM	1	0	23.10	23.08	23.10	23.7
15	64QAM	1	37	23.16	23.07	23.14	
15	64QAM	1	74	23.16	23.08	23.05	
15	64QAM	36	0	22.11	22.10	21.99	22.7
15	64QAM	36	20	22.11	22.08	21.97	
15	64QAM	36	39	22.17	22.02	22.00	
15	64QAM	75	0	22.05	22.03	21.91	
Channel				26740	26865	26990	Tune-up limit (dBm)
Frequency (MHz)				819	831.5	844	
10	QPSK	1	0	24.82	24.79	24.85	25.7
10	QPSK	1	25	24.91	24.87	24.80	
10	QPSK	1	49	24.88	24.81	24.77	
10	QPSK	25	0	23.98	23.93	23.87	24.7
10	QPSK	25	12	24.01	23.93	23.92	
10	QPSK	25	25	23.95	23.88	23.86	
10	QPSK	50	0	23.96	23.94	23.88	
10	16QAM	1	0	24.15	24.10	24.17	24.7
10	16QAM	1	25	24.20	24.13	24.15	
10	16QAM	1	49	24.24	24.13	24.09	
10	16QAM	25	0	23.07	23.05	22.99	23.7
10	16QAM	25	12	23.09	23.03	23.01	
10	16QAM	25	25	23.04	22.98	22.95	
10	16QAM	50	0	23.06	23.02	22.98	
10	64QAM	1	0	23.05	23.05	23.12	23.7
10	64QAM	1	25	23.14	23.07	23.07	
10	64QAM	1	49	23.15	23.06	23.04	
10	64QAM	25	0	22.09	22.07	21.97	22.7
10	64QAM	25	12	22.11	22.04	22.00	
10	64QAM	25	25	22.05	22.01	21.94	
10	64QAM	50	0	22.07	22.03	21.97	
Channel				26715	26865	27015	Tune-up limit (dBm)
Frequency (MHz)				816.5	831.5	846.5	
5	QPSK	1	0	24.82	24.85	24.77	25.7
5	QPSK	1	12	24.81	24.83	24.79	
5	QPSK	1	24	24.88	24.81	24.74	
5	QPSK	12	0	23.87	23.92	23.84	24.7
5	QPSK	12	7	23.88	23.94	23.87	
5	QPSK	12	13	24.00	23.92	23.83	
5	QPSK	25	0	24.00	23.94	23.85	
5	16QAM	1	0	24.14	24.16	24.09	24.7
5	16QAM	1	12	24.17	24.12	24.11	
5	16QAM	1	24	24.18	24.15	24.07	
5	16QAM	12	0	22.93	23.02	22.97	23.7
5	16QAM	12	7	22.96	23.03	22.95	
5	16QAM	12	13	23.07	23.00	22.89	
5	16QAM	25	0	23.07	23.01	22.93	
5	64QAM	1	0	23.09	23.08	23.06	23.7
5	64QAM	1	12	23.09	23.11	23.03	
5	64QAM	1	24	23.14	23.07	22.98	
5	64QAM	12	0	21.98	22.04	21.98	22.7
5	64QAM	12	7	22.00	22.09	21.98	
5	64QAM	12	13	22.11	22.07	21.95	
5	64QAM	25	0	22.06	22.00	21.93	
Channel				26705	26865	27025	Tune-up limit (dBm)
Frequency (MHz)				815.5	831.5	847.5	
3	QPSK	1	0	24.83	24.85	24.77	25.7
3	QPSK	1	8	24.82	24.85	24.76	
3	QPSK	1	14	24.81	24.83	24.74	
3	QPSK	8	0	23.83	23.90	23.82	24.7
3	QPSK	8	4	23.86	23.96	23.87	
3	QPSK	8	7	23.82	23.93	23.82	
3	QPSK	15	0	23.84	23.93	23.83	
3	16QAM	1	0	24.15	24.11	24.16	24.7
3	16QAM	1	8	24.18	24.10	24.17	
3	16QAM	1	14	24.15	24.15	24.04	
3	16QAM	8	0	22.94	23.06	22.97	23.7
3	16QAM	8	4	22.98	23.07	22.97	
3	16QAM	8	7	22.96	23.02	22.97	
3	16QAM	15	0	22.95	23.00	22.91	
3	64QAM	1	0	23.07	23.06	23.03	23.7
3	64QAM	1	8	23.11	23.10	23.04	
3	64QAM	1	14	23.07	23.12	23.00	
3	64QAM	8	0	21.96	22.05	21.94	22.7
3	64QAM	8	4	21.99	22.08	21.99	
3	64QAM	8	7	21.98	22.05	21.96	
3	64QAM	15	0	21.92	22.00	21.92	
Channel				26697	26865	27033	Tune-up limit (dBm)
Frequency (MHz)				814.7	831.5	848.3	
1.4	QPSK	1	0	24.75	24.76	24.68	25.7
1.4	QPSK	1	3	24.84	24.83	24.77	
1.4	QPSK	1	5	24.74	24.75	24.67	
1.4	QPSK	3	0	24.83	24.80	24.73	
1.4	QPSK	3	1	24.85	24.84	24.76	
1.4	QPSK	3	3	24.81	24.80	24.75	
1.4	QPSK	6	0	23.78	23.85	23.76	24.7
1.4	16QAM	1	0	24.09	24.05	24.05	24.7
1.4	16QAM	1	3	24.19	24.13	24.11	
1.4	16QAM	1	5	24.07	24.04	23.95	
1.4	16QAM	3	0	23.91	23.84	23.81	
1.4	16QAM	3	1	23.94	23.88	23.85	
1.4	16QAM	3	3	23.89	23.86	23.78	
1.4	16QAM	6	0	22.94	23.03	22.91	23.7
1.4	64QAM	1	0	23.02	23.03	22.92	23.7
1.4	64QAM	1	3	23.09	23.06	23.01	
1.4	64QAM	1	5	23.01	23.01	22.93	
1.4	64QAM	3	0	23.01	23.03	22.95	
1.4	64QAM	3	1	23.08	23.07	22.98	
1.4	64QAM	3	3	23.00	23.02	22.94	
1.4	64QAM	6	0	21.89	21.94	21.85	22.7

Band 30							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					27710		
Frequency (MHz)					2310		
10	QPSK	1	0		21.41		22.5
10	QPSK	1	25		21.40		
10	QPSK	1	49		21.50		
10	QPSK	25	0		20.44		21.5
10	QPSK	25	12		20.47		
10	QPSK	25	25		20.41		
10	QPSK	50	0		20.44		
10	16QAM	1	0		20.75		21.5
10	16QAM	1	25		20.74		
10	16QAM	1	49		20.84		
10	16QAM	25	0		19.49		20.5
10	16QAM	25	12		19.50		
10	16QAM	25	25		19.50		
10	16QAM	50	0		19.49		
10	64QAM	1	0		19.62		20.5
10	64QAM	1	25		19.63		
10	64QAM	1	49		19.74		
10	64QAM	25	0		18.50		19.5
10	64QAM	25	12		18.52		
10	64QAM	25	25		18.51		
10	64QAM	50	0		18.49		
Channel				27685	27710	27735	Tune-up limit (dBm)
Frequency (MHz)				2307.5	2310	2312.5	
5	QPSK	1	0	21.38	21.40	21.37	22.5
5	QPSK	1	12	21.41	21.40	21.48	
5	QPSK	1	24	21.39	21.39	21.45	
5	QPSK	12	0	20.42	20.40	20.40	21.5
5	QPSK	12	7	20.45	20.42	20.40	
5	QPSK	12	13	20.40	20.41	20.48	
5	QPSK	25	0	20.41	20.42	20.40	
5	16QAM	1	0	20.72	20.71	20.71	21.5
5	16QAM	1	12	20.74	20.74	20.81	
5	16QAM	1	24	20.72	20.70	20.81	
5	16QAM	12	0	19.47	19.45	19.45	20.5
5	16QAM	12	7	19.50	19.49	19.48	
5	16QAM	12	13	19.47	19.47	19.55	
5	16QAM	25	0	19.46	19.47	19.46	
5	64QAM	1	0	19.62	19.61	19.59	20.5
5	64QAM	1	12	19.61	19.63	19.69	
5	64QAM	1	24	19.60	19.60	19.68	
5	64QAM	12	0	18.49	18.50	18.47	19.5
5	64QAM	12	7	18.51	18.52	18.51	
5	64QAM	12	13	18.51	18.50	18.60	
5	64QAM	25	0	18.46	18.48	18.45	

Band 66

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				132072	132322	132572	
Frequency (MHz)				1720	1745	1770	
20	QPSK	1	0	24.74	24.73	24.68	25.7
20	QPSK	1	49	24.80	24.72	24.66	
20	QPSK	1	99	24.70	24.68	24.47	
20	QPSK	50	0	23.64	23.65	23.56	24.7
20	QPSK	50	24	23.61	23.60	23.50	
20	QPSK	50	50	23.72	23.64	23.46	
20	QPSK	100	0	23.72	23.68	23.53	
20	16QAM	1	0	24.10	24.02	23.97	24.7
20	16QAM	1	49	24.07	24.00	23.95	
20	16QAM	1	99	24.02	23.98	23.80	
20	16QAM	50	0	22.72	22.72	22.63	23.7
20	16QAM	50	24	22.68	22.66	22.58	
20	16QAM	50	50	22.77	22.73	22.55	
20	16QAM	100	0	22.78	22.75	22.58	
20	64QAM	1	0	22.98	22.94	22.89	23.7
20	64QAM	1	49	23.02	22.98	22.88	
20	64QAM	1	99	22.93	22.88	22.68	
20	64QAM	50	0	21.74	21.72	21.65	22.7
20	64QAM	50	24	21.70	21.67	21.59	
20	64QAM	50	50	21.78	21.76	21.55	
20	64QAM	100	0	21.79	21.76	21.59	
Channel				132047	132322	132597	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1745	1772.5	
15	QPSK	1	0	24.75	24.73	24.65	25.7
15	QPSK	1	37	24.78	24.73	24.63	
15	QPSK	1	74	24.64	24.72	24.48	
15	QPSK	36	0	23.60	23.56	23.48	24.7
15	QPSK	36	20	23.68	23.65	23.58	
15	QPSK	36	39	23.58	23.65	23.43	
15	QPSK	75	0	23.58	23.67	23.47	
15	16QAM	1	0	24.08	24.03	23.96	24.7
15	16QAM	1	37	24.13	24.08	23.92	
15	16QAM	1	74	23.95	24.05	23.81	
15	16QAM	36	0	22.67	22.63	22.54	23.7
15	16QAM	36	20	22.73	22.72	22.61	
15	16QAM	36	39	22.63	22.69	22.48	
15	16QAM	75	0	22.69	22.73	22.53	
15	64QAM	1	0	22.99	22.93	22.85	23.7
15	64QAM	1	37	23.03	22.95	22.87	
15	64QAM	1	74	22.88	22.94	22.69	
15	64QAM	36	0	21.68	21.67	21.56	22.7
15	64QAM	36	20	21.77	21.75	21.65	
15	64QAM	36	39	21.66	21.69	21.49	
15	64QAM	75	0	21.65	21.73	21.51	
Channel				132022	132322	132622	Tune-up limit (dBm)
Frequency (MHz)				1715	1745	1775	
10	QPSK	1	0	24.72	24.68	24.60	25.7
10	QPSK	1	25	24.72	24.69	24.58	
10	QPSK	1	49	24.63	24.60	24.47	
10	QPSK	25	0	23.69	23.64	23.56	24.7
10	QPSK	25	12	23.68	23.61	23.54	
10	QPSK	25	25	23.63	23.63	23.48	
10	QPSK	50	0	23.65	23.65	23.54	
10	16QAM	1	0	24.09	24.01	23.91	24.7
10	16QAM	1	25	24.07	24.02	23.89	
10	16QAM	1	49	23.98	23.94	23.78	
10	16QAM	25	0	22.74	22.72	22.61	23.7
10	16QAM	25	12	22.73	22.69	22.59	
10	16QAM	25	25	22.69	22.66	22.56	
10	16QAM	50	0	22.73	22.70	22.57	
10	64QAM	1	0	22.96	22.86	22.80	23.7
10	64QAM	1	25	22.96	22.87	22.80	
10	64QAM	1	49	22.90	22.82	22.68	
10	64QAM	25	0	21.77	21.73	21.61	22.7
10	64QAM	25	12	21.73	21.70	21.58	
10	64QAM	25	25	21.70	21.67	21.55	
10	64QAM	50	0	21.74	21.70	21.59	
Channel				131997	132322	132647	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1745	1777.5	
5	QPSK	1	0	24.58	24.52	24.41	25.7
5	QPSK	1	12	24.73	24.68	24.56	
5	QPSK	1	24	24.55	24.50	24.35	
5	QPSK	12	0	23.66	23.65	23.52	24.7
5	QPSK	12	7	23.72	23.72	23.55	
5	QPSK	12	13	23.64	23.60	23.48	
5	QPSK	25	0	23.64	23.62	23.48	
5	16QAM	1	0	23.94	23.85	23.72	24.7
5	16QAM	1	12	24.11	23.98	23.90	
5	16QAM	1	24	23.85	23.79	23.65	
5	16QAM	12	0	22.72	22.69	22.55	23.7
5	16QAM	12	7	22.80	22.74	22.62	
5	16QAM	12	13	22.71	22.66	22.52	
5	16QAM	25	0	22.71	22.69	22.54	
5	64QAM	1	0	22.83	22.72	22.61	23.7
5	64QAM	1	12	23.00	22.88	22.77	
5	64QAM	1	24	22.79	22.70	22.55	
5	64QAM	12	0	21.76	21.72	21.58	22.7
5	64QAM	12	7	21.84	21.79	21.66	
5	64QAM	12	13	21.75	21.67	21.54	
5	64QAM	25	0	21.74	21.69	21.54	
Channel				131987	132322	132657	Tune-up limit (dBm)
Frequency (MHz)				1711.5	1745	1778.5	
3	QPSK	1	0	24.62	24.57	24.43	25.7
3	QPSK	1	8	24.72	24.68	24.54	
3	QPSK	1	14	24.60	24.54	24.37	
3	QPSK	8	0	23.71	23.67	23.53	24.7
3	QPSK	8	4	23.75	23.70	23.58	
3	QPSK	8	7	23.69	23.66	23.52	
3	QPSK	15	0	23.65	23.64	23.52	
3	16QAM	1	0	23.95	23.86	23.76	24.7
3	16QAM	1	8	24.10	24.00	23.90	
3	16QAM	1	14	23.94	23.82	23.70	
3	16QAM	8	0	22.77	22.74	22.59	23.7
3	16QAM	8	4	22.86	22.81	22.66	
3	16QAM	8	7	22.79	22.74	22.60	
3	16QAM	15	0	22.76	22.74	22.57	
3	64QAM	1	0	22.86	22.77	22.63	23.7
3	64QAM	1	8	22.97	22.90	22.76	
3	64QAM	1	14	22.85	22.73	22.61	
3	64QAM	8	0	21.80	21.72	21.58	22.7
3	64QAM	8	4	21.85	21.80	21.65	
3	64QAM	8	7	21.79	21.74	21.60	
3	64QAM	15	0	21.77	21.74	21.57	
Channel				131979	132322	132665	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1745	1779.3	
1.4	QPSK	1	0	24.65	24.59	24.46	25.7
1.4	QPSK	1	3	24.75	24.69	24.57	
1.4	QPSK	1	5	24.64	24.57	24.46	
1.4	QPSK	3	0	24.68	24.66	24.51	
1.4	QPSK	3	1	24.75	24.69	24.55	
1.4	QPSK	3	3	24.71	24.65	24.52	
1.4	QPSK	6	0	23.67	23.64	23.50	24.7
1.4	16QAM	1	0	24.01	23.92	23.80	24.7
1.4	16QAM	1	3	24.09	24.01	23.86	
1.4	16QAM	1	5	23.98	23.92	23.78	
1.4	16QAM	3	0	23.77	23.72	23.61	
1.4	16QAM	3	1	23.85	23.76	23.65	
1.4	16QAM	3	3	23.76	23.71	23.58	
1.4	16QAM	6	0	22.80	22.77	22.63	23.7
1.4	64QAM	1	0	22.91	22.82	22.68	23.7
1.4	64QAM	1	3	23.01	22.89	22.79	
1.4	64QAM	1	5	22.91	22.79	22.68	
1.4	64QAM	3	0	22.88	22.81	22.67	
1.4	64QAM	3	1	22.95	22.87	22.72	
1.4	64QAM	3	3	22.89	22.82	22.71	
1.4	64QAM	6	0	21.76	21.71	21.59	22.7

Band 71							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				133222	133322	133372	
Frequency (MHz)				673	683	693	
20	QPSK	1	0	24.63	24.61	24.57	25.7
20	QPSK	1	49	24.54	24.52	24.45	
20	QPSK	1	99	24.49	24.59	24.54	
20	QPSK	50	0	23.67	23.64	23.52	24.7
20	QPSK	50	24	23.70	23.56	23.57	
20	QPSK	50	50	23.60	23.49	23.59	
20	QPSK	100	0	23.69	23.56	23.54	
20	16QAM	1	0	23.95	23.98	23.96	24.7
20	16QAM	1	49	23.90	23.90	23.85	
20	16QAM	1	99	23.83	23.90	23.95	
20	16QAM	50	0	22.77	22.71	22.60	23.7
20	16QAM	50	24	22.78	22.65	22.65	
20	16QAM	50	50	22.74	22.61	22.71	
20	16QAM	100	0	22.78	22.64	22.62	
20	64QAM	1	0	22.88	22.92	22.80	23.7
20	64QAM	1	49	22.82	22.79	22.77	
20	64QAM	1	99	22.75	22.82	22.79	
20	64QAM	50	0	21.77	21.77	21.60	22.7
20	64QAM	50	24	21.81	21.69	21.64	
20	64QAM	50	50	21.74	21.61	21.71	
20	64QAM	100	0	21.79	21.68	21.65	
Channel				133197	133297	133397	Tune-up limit (dBm)
Frequency (MHz)				670.5	680.5	690.5	
15	QPSK	1	0	24.60	24.58	24.57	25.7
15	QPSK	1	37	24.59	24.51	24.52	
15	QPSK	1	74	24.59	24.51	24.56	
15	QPSK	36	0	23.67	23.66	23.51	24.7
15	QPSK	36	20	23.65	23.57	23.51	
15	QPSK	36	39	23.69	23.49	23.58	
15	QPSK	75	0	23.62	23.56	23.48	
15	16QAM	1	0	23.97	23.91	23.92	24.7
15	16QAM	1	37	23.95	23.88	23.90	
15	16QAM	1	74	23.92	23.85	23.93	
15	16QAM	36	0	22.78	22.72	22.64	23.7
15	16QAM	36	20	22.72	22.66	22.56	
15	16QAM	36	39	22.75	22.60	22.65	
15	16QAM	75	0	22.69	22.65	22.57	
15	64QAM	1	0	22.90	22.85	22.87	23.7
15	64QAM	1	37	22.86	22.83	22.81	
15	64QAM	1	74	22.82	22.81	22.84	
15	64QAM	36	0	21.79	21.76	21.64	22.7
15	64QAM	36	20	21.77	21.71	21.59	
15	64QAM	36	39	21.76	21.60	21.70	
15	64QAM	75	0	21.71	21.68	21.56	
Channel				133172	133272	133422	Tune-up limit (dBm)
Frequency (MHz)				668	678	693	
10	QPSK	1	0	24.61	24.57	24.48	25.7
10	QPSK	1	25	24.62	24.57	24.50	
10	QPSK	1	49	24.58	24.46	24.50	
10	QPSK	25	0	23.73	23.67	23.51	24.7
10	QPSK	25	12	23.69	23.62	23.59	
10	QPSK	25	25	23.63	23.59	23.54	
10	QPSK	50	0	23.70	23.63	23.59	
10	16QAM	1	0	23.95	23.90	23.81	24.7
10	16QAM	1	25	24.01	23.95	23.86	
10	16QAM	1	49	23.93	23.83	23.89	
10	16QAM	25	0	22.83	22.72	22.59	23.7
10	16QAM	25	12	22.78	22.71	22.72	
10	16QAM	25	25	22.69	22.68	22.66	
10	16QAM	50	0	22.77	22.72	22.67	
10	64QAM	1	0	22.91	22.82	22.74	23.7
10	64QAM	1	25	22.94	22.85	22.77	
10	64QAM	1	49	22.84	22.75	22.81	
10	64QAM	25	0	21.83	21.74	21.61	22.7
10	64QAM	25	12	21.80	21.75	21.73	
10	64QAM	25	25	21.73	21.67	21.66	
10	64QAM	50	0	21.79	21.70	21.68	
Channel				133147	133247	133447	Tune-up limit (dBm)
Frequency (MHz)				665.5	675.5	695.5	
5	QPSK	1	0	24.58	24.59	24.48	25.7
5	QPSK	1	12	24.58	24.53	24.57	
5	QPSK	1	24	24.62	24.56	24.55	
5	QPSK	12	0	23.65	23.59	23.55	24.7
5	QPSK	12	7	23.66	23.66	23.59	
5	QPSK	12	13	23.70	23.63	23.61	
5	QPSK	25	0	23.71	23.66	23.57	
5	16QAM	1	0	23.98	23.88	23.85	24.7
5	16QAM	1	12	23.94	23.87	23.93	
5	16QAM	1	24	23.95	23.91	23.85	
5	16QAM	12	0	22.73	22.66	22.66	23.7
5	16QAM	12	7	22.76	22.75	22.71	
5	16QAM	12	13	22.82	22.73	22.72	
5	16QAM	25	0	22.81	22.77	22.63	
5	64QAM	1	0	22.90	22.82	22.77	23.7
5	64QAM	1	12	22.87	22.81	22.85	
5	64QAM	1	24	22.92	22.83	22.80	
5	64QAM	12	0	21.80	21.72	21.74	22.7
5	64QAM	12	7	21.80	21.82	21.72	
5	64QAM	12	13	21.88	21.79	21.80	
5	64QAM	25	0	21.84	21.75	21.65	

Band 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)				1880	1880	1900	
20	QPSK	1	0	24.79	24.79	24.20	25.7
20	QPSK	1	49	24.39	24.90	24.42	
20	QPSK	1	99	24.51	24.18	24.46	
20	QPSK	50	0	23.92	23.93	22.94	24.7
20	QPSK	50	24	23.52	23.95	23.57	
20	QPSK	50	50	23.38	23.94	23.97	
20	QPSK	100	0	23.61	23.94	23.80	
20	16QAM	1	0	24.09	24.13	23.50	24.7
20	16QAM	1	49	23.74	24.25	23.35	
20	16QAM	1	99	23.84	23.55	23.86	
20	16QAM	50	0	23.02	23.01	22.02	23.7
20	16QAM	50	24	22.63	23.06	22.62	
20	16QAM	50	50	22.44	22.99	23.07	
20	16QAM	100	0	22.68	23.00	22.86	
20	64QAM	1	0	23.05	23.02	22.30	23.7
20	64QAM	1	49	22.56	23.12	22.10	
20	64QAM	1	99	22.72	22.51	22.94	
20	64QAM	50	0	21.98	22.03	20.99	22.7
20	64QAM	50	24	21.62	22.04	21.49	
20	64QAM	50	50	21.43	22.01	22.06	
20	64QAM	100	0	21.67	22.02	21.90	
Channel				18675	18900	19125	Tune-up limit (dBm)
Frequency (MHz)				1857.5	1880	1902.5	
15	QPSK	1	0	24.79	24.92	23.75	25.7
15	QPSK	1	37	24.64	24.93	24.80	
15	QPSK	1	74	24.22	24.73	24.38	
15	QPSK	36	0	23.83	23.98	23.23	24.7
15	QPSK	36	20	23.74	24.02	24.05	
15	QPSK	36	39	23.41	23.94	23.98	
15	QPSK	75	0	23.70	23.98	23.94	
15	16QAM	1	0	24.09	24.25	23.09	24.7
15	16QAM	1	37	23.94	24.20	24.05	
15	16QAM	1	74	23.53	24.05	23.77	
15	16QAM	36	0	22.89	23.06	22.29	23.7
15	16QAM	36	20	22.85	23.07	23.10	
15	16QAM	36	39	22.51	23.00	23.08	
15	16QAM	75	0	22.76	23.04	23.01	
15	64QAM	1	0	23.04	23.17	22.01	23.7
15	64QAM	1	37	22.90	23.14	22.87	
15	64QAM	1	74	22.46	23.07	22.81	
15	64QAM	36	0	21.92	22.03	21.20	22.7
15	64QAM	36	20	21.86	22.08	22.05	
15	64QAM	36	39	21.47	22.03	22.06	
15	64QAM	75	0	21.76	22.03	21.85	
Channel				18650	18900	19150	Tune-up limit (dBm)
Frequency (MHz)				1855	1880	1905	
10	QPSK	1	0	24.91	25.04	24.32	25.7
10	QPSK	1	25	24.80	24.94	25.06	
10	QPSK	1	49	24.36	24.97	24.27	
10	QPSK	25	0	23.85	23.99	24.01	24.7
10	QPSK	25	12	23.88	24.03	24.02	
10	QPSK	25	25	23.67	23.96	24.07	
10	QPSK	50	0	23.83	23.98	23.95	
10	16QAM	1	0	24.20	24.39	23.67	24.7
10	16QAM	1	25	24.08	24.28	24.38	
10	16QAM	1	49	23.70	24.25	23.65	
10	16QAM	25	0	22.95	23.10	23.09	23.7
10	16QAM	25	12	22.95	23.08	23.09	
10	16QAM	25	25	22.83	23.04	23.14	
10	16QAM	50	0	22.94	23.08	23.09	
10	64QAM	1	0	23.15	23.31	22.56	23.7
10	64QAM	1	25	23.02	23.18	23.30	
10	64QAM	1	49	22.70	23.22	22.70	
10	64QAM	25	0	21.96	22.10	22.05	22.7
10	64QAM	25	12	21.97	22.10	22.10	
10	64QAM	25	25	21.85	22.08	22.18	
10	64QAM	50	0	21.97	22.07	22.06	
Channel				18625	18900	19175	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1880	1907.5	
5	QPSK	1	0	24.82	24.96	25.06	25.7
5	QPSK	1	12	24.84	24.97	25.05	
5	QPSK	1	24	24.78	24.91	24.21	
5	QPSK	12	0	23.89	23.98	24.12	24.7
5	QPSK	12	7	23.89	24.02	24.14	
5	QPSK	12	13	23.83	23.98	23.74	
5	QPSK	25	0	23.83	23.98	24.04	
5	16QAM	1	0	24.12	24.25	24.37	24.7
5	16QAM	1	12	24.14	24.28	24.34	
5	16QAM	1	24	24.08	24.23	23.50	
5	16QAM	12	0	22.97	23.08	23.17	23.7
5	16QAM	12	7	22.97	23.08	23.19	
5	16QAM	12	13	22.94	23.05	22.91	
5	16QAM	25	0	22.94	23.05	23.16	
5	64QAM	1	0	23.08	23.18	23.31	23.7
5	64QAM	1	12	23.10	23.19	23.30	
5	64QAM	1	24	23.02	23.11	22.56	
5	64QAM	12	0	21.98	22.09	22.20	22.7
5	64QAM	12	7	21.99	22.10	22.23	
5	64QAM	12	13	21.96	22.08	22.00	
5	64QAM	25	0	21.92	22.05	22.15	
Channel				18615	18900	19185	Tune-up limit (dBm)
Frequency (MHz)				1851.5	1880	1908.5	
3	QPSK	1	0	24.82	24.94	25.04	25.7
3	QPSK	1	8	24.83	24.96	24.59	
3	QPSK	1	14	24.79	24.92	24.15	
3	QPSK	8	0	23.90	24.00	24.08	24.7
3	QPSK	8	4	23.90	24.03	23.82	
3	QPSK	8	7	23.90	23.98	23.56	
3	QPSK	15	0	23.84	23.98	23.80	
3	16QAM	1	0	24.09	24.24	24.29	24.7
3	16QAM	1	8	24.14	24.25	23.94	
3	16QAM	1	14	24.08	24.20	23.50	
3	16QAM	8	0	23.00	23.06	23.21	23.7
3	16QAM	8	4	23.03	23.12	23.01	
3	16QAM	8	7	22.96	23.09	22.76	
3	16QAM	15	0	22.95	23.05	22.99	
3	64QAM	1	0	23.05	23.16	23.31	23.7
3	64QAM	1	8	23.07	23.18	23.00	
3	64QAM	1	14	23.04	23.14	22.57	
3	64QAM	8	0	21.97	22.09	22.18	22.7
3	64QAM	8	4	22.02	22.14	22.04	
3	64QAM	8	7	21.96	22.08	21.79	
3	64QAM	15	0	21.91	22.04	22.02	
Channel				18607	18900	19193	Tune-up limit (dBm)
Frequency (MHz)				1850.7	1880	1909.3	
1.4	QPSK	1	0	24.79	24.91	24.54	25.7
1.4	QPSK	1	3	24.83	24.96	24.37	
1.4	QPSK	1	5	24.77	24.90	24.09	
1.4	QPSK	3	0	24.80	24.94	24.45	
1.4	QPSK	3	1	24.88	24.96	24.41	
1.4	QPSK	3	3	24.84	24.92	24.19	
1.4	QPSK	6	0	23.80	23.92	23.42	24.7
1.4	16QAM	1	0	24.08	24.23	23.82	24.7
1.4	16QAM	1	3	24.13	24.30	23.61	
1.4	16QAM	1	5	24.10	24.23	23.42	
1.4	16QAM	3	0	23.90	24.00	23.59	
1.4	16QAM	3	1	23.92	24.07	23.52	
1.4	16QAM	3	3	23.89	24.01	23.36	
1.4	16QAM	6	0	22.96	23.06	22.66	23.7
1.4	64QAM	1	0	23.04	23.11	22.89	23.7
1.4	64QAM	1	3	23.08	23.18	22.67	
1.4	64QAM	1	5	23.02	23.12	22.50	
1.4	64QAM	3	0	23.01	23.11	22.85	
1.4	64QAM	3	1	23.09	23.17	22.83	
1.4	64QAM	3	3	23.01	23.13	22.60	
1.4	64QAM	6	0	21.90	22.00	21.66	22.7

Band 4

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				20050	20175	20300	
Frequency (MHz)				1720	1732.5	1745	
20	QPSK	1	0	24.97	24.89	24.94	25.7
20	QPSK	1	49	24.97	24.92	24.95	
20	QPSK	1	99	24.81	24.92	24.85	
20	QPSK	50	0	24.12	23.92	24.00	24.7
20	QPSK	50	24	24.08	24.01	24.03	
20	QPSK	50	50	23.94	23.96	23.97	
20	QPSK	100	0	24.04	23.94	23.91	
20	16QAM	1	0	24.26	24.22	24.21	24.7
20	16QAM	1	49	24.23	24.14	24.27	
20	16QAM	1	99	24.14	24.24	24.16	
20	16QAM	50	0	23.17	23.03	23.04	23.7
20	16QAM	50	24	23.17	23.09	23.13	
20	16QAM	50	50	23.04	23.02	23.07	
20	16QAM	100	0	23.12	23.02	22.98	
20	64QAM	1	0	23.23	23.17	23.14	23.7
20	64QAM	1	49	23.20	23.11	23.19	
20	64QAM	1	99	23.13	23.14	23.10	
20	64QAM	50	0	22.17	22.03	22.05	22.7
20	64QAM	50	24	22.17	22.10	22.12	
20	64QAM	50	50	22.06	22.01	22.06	
20	64QAM	100	0	22.14	22.05	22.00	
Channel				20025	20175	20325	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1732.5	1747.5	
15	QPSK	1	0	24.97	24.86	25.04	25.7
15	QPSK	1	37	25.02	24.93	24.97	
15	QPSK	1	74	24.91	24.85	24.89	
15	QPSK	36	0	23.99	23.96	24.04	24.7
15	QPSK	36	20	24.14	24.05	24.06	
15	QPSK	36	39	24.11	24.01	23.99	
15	QPSK	75	0	24.11	23.96	24.03	
15	16QAM	1	0	24.30	24.18	24.33	24.7
15	16QAM	1	37	24.29	24.17	24.30	
15	16QAM	1	74	24.22	24.15	24.21	
15	16QAM	36	0	23.07	23.04	23.13	23.7
15	16QAM	36	20	23.18	23.10	23.10	
15	16QAM	36	39	23.12	23.02	23.03	
15	16QAM	75	0	23.15	23.06	23.08	
15	64QAM	1	0	23.24	23.19	23.27	23.7
15	64QAM	1	37	23.26	23.14	23.21	
15	64QAM	1	74	23.16	23.08	23.09	
15	64QAM	36	0	22.10	22.07	22.13	22.7
15	64QAM	36	20	22.20	22.13	22.14	
15	64QAM	36	39	22.19	22.05	22.09	
15	64QAM	75	0	22.15	22.04	22.09	
Channel				20000	20175	20350	Tune-up limit (dBm)
Frequency (MHz)				1715	1732.5	1750	
10	QPSK	1	0	25.02	24.87	25.02	25.7
10	QPSK	1	25	24.97	24.89	25.00	
10	QPSK	1	49	25.02	24.90	24.92	
10	QPSK	25	0	24.05	23.97	24.04	24.7
10	QPSK	25	12	24.07	24.03	24.03	
10	QPSK	25	25	24.12	23.97	24.00	
10	QPSK	50	0	24.14	23.92	24.01	
10	16QAM	1	0	24.33	24.18	24.38	24.7
10	16QAM	1	25	24.28	24.22	24.31	
10	16QAM	1	49	24.30	24.18	24.25	
10	16QAM	25	0	23.14	23.07	23.12	23.7
10	16QAM	25	12	23.13	23.13	23.14	
10	16QAM	25	25	23.16	23.05	23.08	
10	16QAM	50	0	23.23	23.04	23.13	
10	64QAM	1	0	23.26	23.16	23.29	23.7
10	64QAM	1	25	23.19	23.15	23.22	
10	64QAM	1	49	23.26	23.12	23.14	
10	64QAM	25	0	22.15	22.08	22.16	22.7
10	64QAM	25	12	22.12	22.14	22.12	
10	64QAM	25	25	22.18	22.08	22.09	
10	64QAM	50	0	22.24	22.06	22.10	
Channel				19975	20175	20375	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1732.5	1752.5	
5	QPSK	1	0	24.99	24.89	24.98	25.7
5	QPSK	1	12	24.99	24.93	24.99	
5	QPSK	1	24	24.95	24.88	24.93	
5	QPSK	12	0	24.05	24.00	24.04	24.7
5	QPSK	12	7	24.05	24.04	24.02	
5	QPSK	12	13	24.05	24.04	23.96	
5	QPSK	25	0	24.05	23.99	24.02	
5	16QAM	1	0	24.29	24.16	24.28	24.7
5	16QAM	1	12	24.30	24.22	24.28	
5	16QAM	1	24	24.22	24.19	24.22	
5	16QAM	12	0	23.14	23.10	23.09	23.7
5	16QAM	12	7	23.15	23.12	23.13	
5	16QAM	12	13	23.07	23.05	23.06	
5	16QAM	25	0	23.08	23.09	23.07	
5	64QAM	1	0	23.24	23.17	23.20	23.7
5	64QAM	1	12	23.21	23.19	23.20	
5	64QAM	1	24	23.15	23.11	23.14	
5	64QAM	12	0	22.15	22.14	22.15	22.7
5	64QAM	12	7	22.20	22.17	22.14	
5	64QAM	12	13	22.12	22.10	22.08	
5	64QAM	25	0	22.13	22.10	22.08	
Channel				19965	20175	20385	Tune-up limit (dBm)
Frequency (MHz)				1711.5	1732.5	1753.5	
3	QPSK	1	0	24.99	24.93	24.97	25.7
3	QPSK	1	8	25.00	24.92	24.96	
3	QPSK	1	14	24.97	24.91	24.90	
3	QPSK	8	0	24.03	24.02	24.01	24.7
3	QPSK	8	4	24.10	24.05	24.02	
3	QPSK	8	7	24.04	24.04	24.00	
3	QPSK	15	0	24.06	24.01	23.99	
3	16QAM	1	0	24.29	24.20	24.23	24.7
3	16QAM	1	8	24.30	24.20	24.29	
3	16QAM	1	14	24.23	24.14	24.21	
3	16QAM	8	0	23.17	23.12	23.09	23.7
3	16QAM	8	4	23.18	23.17	23.13	
3	16QAM	8	7	23.15	23.12	23.11	
3	16QAM	15	0	23.11	23.11	23.08	
3	64QAM	1	0	23.18	23.16	23.19	23.7
3	64QAM	1	8	23.22	23.17	23.17	
3	64QAM	1	14	23.18	23.17	23.16	
3	64QAM	8	0	22.17	22.13	22.10	22.7
3	64QAM	8	4	22.17	22.18	22.10	
3	64QAM	8	7	22.16	22.11	22.07	
3	64QAM	15	0	22.13	22.10	22.07	
Channel				19957	20175	20393	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1732.5	1754.3	
1.4	QPSK	1	0	24.91	24.86	24.91	25.7
1.4	QPSK	1	3	25.00	24.93	24.95	
1.4	QPSK	1	5	24.92	24.86	24.90	
1.4	QPSK	3	0	24.96	24.91	24.93	
1.4	QPSK	3	1	25.00	24.93	24.98	
1.4	QPSK	3	3	24.98	24.90	24.94	
1.4	QPSK	6	0	23.99	23.93	23.94	24.7
1.4	16QAM	1	0	24.23	24.13	24.18	24.7
1.4	16QAM	1	3	24.31	24.18	24.25	
1.4	16QAM	1	5	24.25	24.12	24.18	
1.4	16QAM	3	0	24.04	23.95	23.99	
1.4	16QAM	3	1	24.06	24.01	24.04	
1.4	16QAM	3	3	24.02	23.94	23.97	
1.4	16QAM	6	0	23.13	23.08	23.06	23.7
1.4	64QAM	1	0	23.18	23.16	23.11	23.7
1.4	64QAM	1	3	23.23	23.17	23.17	
1.4	64QAM	1	5	23.13	23.12	23.09	
1.4	64QAM	3	0	23.16	23.13	23.13	
1.4	64QAM	3	1	23.21	23.18	23.17	
1.4	64QAM	3	3	23.16	23.11	23.11	
1.4	64QAM	6	0	22.06	22.04	22.01	22.7

Band 5							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				20450	20525	20600	
Frequency (MHz)				829	836.5	844	
10	QPSK	1	0	24.55	24.59	24.48	25.7
10	QPSK	1	25	24.54	24.53	24.49	
10	QPSK	1	49	24.60	24.45	24.42	
10	QPSK	25	0	23.58	23.59	23.45	24.7
10	QPSK	25	12	23.69	23.55	23.54	
10	QPSK	25	25	23.64	23.54	23.50	
10	QPSK	50	0	23.68	23.57	23.43	
10	16QAM	1	0	23.84	23.88	23.72	24.7
10	16QAM	1	25	23.87	23.79	23.79	
10	16QAM	1	49	23.89	23.75	23.79	
10	16QAM	25	0	22.70	22.66	22.53	23.7
10	16QAM	25	12	22.78	22.65	22.63	
10	16QAM	25	25	22.75	22.62	22.57	
10	16QAM	50	0	22.74	22.62	22.51	
10	64QAM	1	0	22.77	22.81	22.68	23.7
10	64QAM	1	25	22.76	22.75	22.71	
10	64QAM	1	49	22.82	22.71	22.66	
10	64QAM	25	0	21.67	21.66	21.56	22.7
10	64QAM	25	12	21.78	21.64	21.63	
10	64QAM	25	25	21.72	21.61	21.57	
10	64QAM	50	0	21.78	21.65	21.55	
Channel				20425	20525	20625	Tune-up limit (dBm)
Frequency (MHz)				826.5	836.5	846.5	
5	QPSK	1	0	24.55	24.57	24.48	25.7
5	QPSK	1	12	24.58	24.53	24.46	
5	QPSK	1	24	24.52	24.52	24.41	
5	QPSK	12	0	23.63	23.57	23.49	24.7
5	QPSK	12	7	23.61	23.57	23.52	
5	QPSK	12	13	23.57	23.53	23.49	
5	QPSK	25	0	23.60	23.56	23.47	
5	16QAM	1	0	23.85	23.81	23.73	24.7
5	16QAM	1	12	23.84	23.82	23.82	
5	16QAM	1	24	23.82	23.74	23.75	
5	16QAM	12	0	22.67	22.67	22.57	23.7
5	16QAM	12	7	22.73	22.65	22.60	
5	16QAM	12	13	22.65	22.65	22.59	
5	16QAM	25	0	22.69	22.62	22.57	
5	64QAM	1	0	22.78	22.76	22.70	23.7
5	64QAM	1	12	22.82	22.79	22.74	
5	64QAM	1	24	22.74	22.74	22.68	
5	64QAM	12	0	21.73	21.69	21.65	22.7
5	64QAM	12	7	21.76	21.70	21.65	
5	64QAM	12	13	21.70	21.66	21.63	
5	64QAM	25	0	21.71	21.66	21.59	
Channel				20415	20525	20635	Tune-up limit (dBm)
Frequency (MHz)				825.5	836.5	847.5	
3	QPSK	1	0	24.58	24.56	24.45	25.7
3	QPSK	1	8	24.57	24.54	24.42	
3	QPSK	1	14	24.58	24.53	24.42	
3	QPSK	8	0	23.61	23.56	23.47	24.7
3	QPSK	8	4	23.63	23.54	23.51	
3	QPSK	8	7	23.62	23.53	23.49	
3	QPSK	15	0	23.61	23.55	23.48	
3	16QAM	1	0	23.84	23.81	23.70	24.7
3	16QAM	1	8	23.83	23.84	23.78	
3	16QAM	1	14	23.84	23.75	23.76	
3	16QAM	8	0	22.74	22.68	22.60	23.7
3	16QAM	8	4	22.75	22.69	22.63	
3	16QAM	8	7	22.72	22.67	22.58	
3	16QAM	15	0	22.72	22.65	22.58	
3	64QAM	1	0	22.80	22.78	22.71	23.7
3	64QAM	1	8	22.79	22.76	22.70	
3	64QAM	1	14	22.78	22.73	22.70	
3	64QAM	8	0	21.72	21.68	21.59	22.7
3	64QAM	8	4	21.76	21.71	21.62	
3	64QAM	8	7	21.73	21.67	21.58	
3	64QAM	15	0	21.70	21.64	21.57	
Channel				20407	20525	20643	Tune-up limit (dBm)
Frequency (MHz)				824.7	836.5	848.3	
1.4	QPSK	1	0	24.53	24.48	24.38	25.7
1.4	QPSK	1	3	24.58	24.54	24.44	
1.4	QPSK	1	5	24.53	24.45	24.34	
1.4	QPSK	3	0	24.57	24.52	24.42	
1.4	QPSK	3	1	24.58	24.54	24.45	
1.4	QPSK	3	3	24.57	24.50	24.41	
1.4	QPSK	6	0	23.57	23.48	23.40	24.7
1.4	16QAM	1	0	23.80	23.72	23.72	24.7
1.4	16QAM	1	3	23.85	23.78	23.80	
1.4	16QAM	1	5	23.77	23.72	23.70	
1.4	16QAM	3	0	23.60	23.56	23.51	
1.4	16QAM	3	1	23.66	23.59	23.54	
1.4	16QAM	3	3	23.61	23.55	23.50	
1.4	16QAM	6	0	22.70	22.63	22.57	23.7
1.4	64QAM	1	0	22.78	22.69	22.63	23.7
1.4	64QAM	1	3	22.82	22.75	22.70	
1.4	64QAM	1	5	22.75	22.67	22.61	
1.4	64QAM	3	0	22.77	22.71	22.63	
1.4	64QAM	3	1	22.80	22.75	22.67	
1.4	64QAM	3	3	22.75	22.70	22.63	
1.4	64QAM	6	0	21.65	21.58	21.49	22.7

Band 7							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				20650	21100	21350	
Frequency (MHz)				2510	2535	2560	
20	QPSK	1	0	23.88	23.84	23.87	25
20	QPSK	1	49	23.88	23.95	23.89	
20	QPSK	1	99	24.01	24.08	24.00	
20	QPSK	50	0	22.95	23.00	22.94	24
20	QPSK	50	24	23.01	23.02	22.96	
20	QPSK	50	50	23.02	23.07	23.01	
20	QPSK	100	0	22.98	23.03	22.97	
20	16QAM	1	0	23.24	23.17	23.20	24
20	16QAM	1	49	23.17	23.27	23.21	
20	16QAM	1	99	23.33	23.38	23.29	
20	16QAM	50	0	22.04	22.08	22.01	23
20	16QAM	50	24	22.06	22.09	22.05	
20	16QAM	50	50	22.08	22.13	22.08	
20	16QAM	100	0	22.05	22.08	22.02	
20	64QAM	1	0	22.10	22.08	22.10	23
20	64QAM	1	49	22.07	22.16	22.15	
20	64QAM	1	99	22.22	22.26	22.20	
20	64QAM	50	0	21.02	21.07	21.01	22
20	64QAM	50	24	21.06	21.10	21.05	
20	64QAM	50	50	21.09	21.14	21.08	
20	64QAM	100	0	21.04	21.09	21.01	
Channel				20825	21100	21375	Tune-up limit (dBm)
Frequency (MHz)				2507.5	2535	2562.5	
15	QPSK	1	0	23.91	23.98	23.90	25
15	QPSK	1	37	23.91	23.97	23.89	
15	QPSK	1	74	24.06	24.07	24.05	
15	QPSK	36	0	22.95	23.00	22.92	24
15	QPSK	36	20	23.01	23.05	22.97	
15	QPSK	36	39	23.02	23.06	22.99	
15	QPSK	75	0	22.99	23.02	22.95	
15	16QAM	1	0	23.27	23.32	23.22	24
15	16QAM	1	37	23.19	23.25	23.21	
15	16QAM	1	74	23.35	23.42	23.33	
15	16QAM	36	0	22.02	22.06	22.00	23
15	16QAM	36	20	22.07	22.11	22.04	
15	16QAM	36	39	22.08	22.11	22.06	
15	16QAM	75	0	22.04	22.08	21.99	
15	64QAM	1	0	22.17	22.21	22.15	23
15	64QAM	1	37	22.13	22.19	22.12	
15	64QAM	1	74	22.24	22.30	22.24	
15	64QAM	36	0	21.04	21.09	21.03	22
15	64QAM	36	20	21.10	21.12	21.05	
15	64QAM	36	39	21.08	21.12	21.06	
15	64QAM	75	0	21.02	21.07	21.03	
Channel				20800	21100	21400	Tune-up limit (dBm)
Frequency (MHz)				2505	2535	2565	
10	QPSK	1	0	23.90	23.99	23.90	25
10	QPSK	1	25	23.92	23.98	23.93	
10	QPSK	1	49	24.01	24.04	23.97	
10	QPSK	25	0	22.94	22.99	22.94	24
10	QPSK	25	12	22.96	23.04	22.98	
10	QPSK	25	25	23.02	23.06	22.98	
10	QPSK	50	0	22.98	23.00	22.95	
10	16QAM	1	0	23.24	23.32	23.21	24
10	16QAM	1	25	23.27	23.33	23.23	
10	16QAM	1	49	23.31	23.37	23.29	
10	16QAM	25	0	22.04	22.05	22.00	23
10	16QAM	25	12	22.06	22.09	22.02	
10	16QAM	25	25	22.08	22.10	22.05	
10	16QAM	50	0	22.03	22.08	22.03	
10	64QAM	1	0	22.16	22.17	22.14	23
10	64QAM	1	25	22.16	22.24	22.11	
10	64QAM	1	49	22.21	22.25	22.20	
10	64QAM	25	0	21.03	21.07	20.98	22
10	64QAM	25	12	21.05	21.12	21.03	
10	64QAM	25	25	21.05	21.13	21.06	
10	64QAM	50	0	21.05	21.08	21.02	
Channel				20775	21100	21425	Tune-up limit (dBm)
Frequency (MHz)				2502.5	2535	2567.5	
5	QPSK	1	0	23.89	23.95	23.87	25
5	QPSK	1	12	23.94	24.00	23.91	
5	QPSK	1	24	23.96	24.01	23.92	
5	QPSK	12	0	22.96	22.98	22.89	24
5	QPSK	12	7	23.01	23.03	22.96	
5	QPSK	12	13	22.96	23.01	22.98	
5	QPSK	25	0	22.98	23.02	22.95	
5	16QAM	1	0	23.25	23.27	23.20	24
5	16QAM	1	12	23.26	23.31	23.23	
5	16QAM	1	24	23.27	23.30	23.23	
5	16QAM	12	0	22.01	22.04	21.99	23
5	16QAM	12	7	22.06	22.10	22.02	
5	16QAM	12	13	22.05	22.08	22.01	
5	16QAM	25	0	22.03	22.07	22.01	
5	64QAM	1	0	22.16	22.18	22.10	23
5	64QAM	1	12	22.16	22.20	22.10	
5	64QAM	1	24	22.17	22.21	22.17	
5	64QAM	12	0	21.06	21.10	21.01	22
5	64QAM	12	7	21.10	21.14	21.07	
5	64QAM	12	13	21.09	21.12	21.05	
5	64QAM	25	0	21.03	21.09	21.01	

Band 12						
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.
Channel				23060	23095	23130
Frequency (MHz)				704	707.5	711
10	QPSK	1	0	24.38	24.45	24.49
10	QPSK	1	25	24.48	24.53	24.59
10	QPSK	1	49	24.52	24.61	24.66
10	QPSK	25	0	23.55	23.60	23.55
10	QPSK	25	12	23.66	23.56	23.55
10	QPSK	25	25	23.56	23.55	23.61
10	QPSK	50	0	23.59	23.58	23.52
10	16QAM	1	0	23.75	23.81	23.82
10	16QAM	1	25	23.84	23.90	23.94
10	16QAM	1	49	23.90	23.97	24.01
10	16QAM	25	0	22.63	22.67	22.57
10	16QAM	25	12	22.74	22.67	22.65
10	16QAM	25	25	22.69	22.65	22.70
10	16QAM	50	0	22.71	22.68	22.64
10	64QAM	1	0	22.65	22.70	22.78
10	64QAM	1	25	22.73	22.80	22.85
10	64QAM	1	49	22.79	22.83	22.91
10	64QAM	25	0	21.62	21.67	21.66
10	64QAM	25	12	21.78	21.68	21.63
10	64QAM	25	25	21.69	21.66	21.72
10	64QAM	50	0	21.73	21.67	21.66
Channel				23035	23095	23155
Frequency (MHz)				701.5	707.5	713.5
5	QPSK	1	0	24.39	24.42	24.58
5	QPSK	1	12	24.50	24.54	24.54
5	QPSK	1	24	24.46	24.50	24.65
5	QPSK	12	0	23.54	23.55	23.58
5	QPSK	12	7	23.57	23.61	23.64
5	QPSK	12	13	23.52	23.56	23.57
5	QPSK	25	0	23.51	23.55	23.61
5	16QAM	1	0	23.76	23.79	23.90
5	16QAM	1	12	23.87	23.90	23.94
5	16QAM	1	24	23.81	23.86	23.98
5	16QAM	12	0	22.67	22.66	22.72
5	16QAM	12	7	22.68	22.69	22.72
5	16QAM	12	13	22.66	22.63	22.69
5	16QAM	25	0	22.63	22.64	22.68
5	64QAM	1	0	22.68	22.74	22.83
5	64QAM	1	12	22.80	22.82	22.83
5	64QAM	1	24	22.77	22.78	22.88
5	64QAM	12	0	21.70	21.72	21.73
5	64QAM	12	7	21.74	21.76	21.76
5	64QAM	12	13	21.71	21.72	21.72
5	64QAM	25	0	21.66	21.67	21.69
Channel				23025	23095	23165
Frequency (MHz)				700.5	707.5	714.5
3	QPSK	1	0	24.40	24.52	24.55
3	QPSK	1	8	24.42	24.53	24.64
3	QPSK	1	14	24.49	24.53	24.64
3	QPSK	8	0	23.46	23.53	23.59
3	QPSK	8	4	23.47	23.57	23.74
3	QPSK	8	7	23.57	23.54	23.73
3	QPSK	15	0	23.53	23.55	23.56
3	16QAM	1	0	23.78	23.86	23.87
3	16QAM	1	8	23.75	23.89	23.98
3	16QAM	1	14	23.82	23.85	23.97
3	16QAM	8	0	22.60	22.70	22.70
3	16QAM	8	4	22.62	22.73	22.87
3	16QAM	8	7	22.68	22.68	22.84
3	16QAM	15	0	22.63	22.65	22.68
3	64QAM	1	0	22.67	22.77	22.82
3	64QAM	1	8	22.70	22.77	22.92
3	64QAM	1	14	22.80	22.79	22.91
3	64QAM	8	0	21.59	21.70	21.72
3	64QAM	8	4	21.64	21.73	21.89
3	64QAM	8	7	21.69	21.69	21.85
3	64QAM	15	0	21.65	21.65	21.68
Channel				23017	23095	23173
Frequency (MHz)				699.7	707.5	715.3
1.4	QPSK	1	0	24.38	24.45	24.57
1.4	QPSK	1	3	24.43	24.51	24.62
1.4	QPSK	1	5	24.34	24.44	24.54
1.4	QPSK	3	0	24.40	24.48	24.57
1.4	QPSK	3	1	24.43	24.51	24.61
1.4	QPSK	3	3	24.41	24.51	24.59
1.4	QPSK	6	0	23.40	23.48	23.62
1.4	16QAM	1	0	23.71	23.82	23.91
1.4	16QAM	1	3	23.81	23.88	23.99
1.4	16QAM	1	5	23.71	23.81	23.90
1.4	16QAM	3	0	23.50	23.58	23.70
1.4	16QAM	3	1	23.54	23.61	23.74
1.4	16QAM	3	3	23.48	23.57	23.66
1.4	16QAM	6	0	22.56	22.66	22.81
1.4	64QAM	1	0	22.64	22.73	22.81
1.4	64QAM	1	3	22.70	22.81	22.89
1.4	64QAM	1	5	22.60	22.71	22.83
1.4	64QAM	3	0	22.60	22.72	22.83
1.4	64QAM	3	1	22.67	22.76	22.87
1.4	64QAM	3	3	22.61	22.72	22.82
1.4	64QAM	6	0	21.48	21.61	21.73

Band 17							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				23780	23790	23800	
Frequency (MHz)				709	710	711	
10	QPSK	1	0	24.47	24.44	24.53	25.7
10	QPSK	1	25	24.53	24.53	24.53	
10	QPSK	1	49	24.57	24.53	24.52	
10	QPSK	25	0	23.58	23.56	23.58	24.7
10	QPSK	25	12	23.60	23.58	23.61	
10	QPSK	25	25	23.58	23.56	23.56	
10	QPSK	50	0	23.58	23.57	23.57	
10	16QAM	1	0	23.79	23.80	23.84	24.7
10	16QAM	1	25	23.90	23.87	23.86	
10	16QAM	1	49	23.88	23.87	23.84	
10	16QAM	25	0	22.68	22.68	22.67	23.7
10	16QAM	25	12	22.70	22.66	22.67	
10	16QAM	25	25	22.66	22.65	22.67	
10	16QAM	50	0	22.68	22.67	22.64	
10	64QAM	1	0	22.72	22.73	22.80	23.7
10	64QAM	1	25	22.81	22.79	22.79	
10	64QAM	1	49	22.82	22.81	22.80	
10	64QAM	25	0	21.68	21.66	21.66	22.7
10	64QAM	25	12	21.71	21.68	21.69	
10	64QAM	25	25	21.67	21.65	21.66	
10	64QAM	50	0	21.66	21.67	21.66	
Channel				23755	23790	23825	Tune-up limit (dBm)
Frequency (MHz)				706.5	710	713.5	
5	QPSK	1	0	24.49	24.53	24.50	25.7
5	QPSK	1	12	24.56	24.54	24.50	
5	QPSK	1	24	24.55	24.52	24.50	
5	QPSK	12	0	23.51	23.58	23.53	24.7
5	QPSK	12	7	23.66	23.59	23.56	
5	QPSK	12	13	23.61	23.56	23.54	
5	QPSK	25	0	23.59	23.55	23.54	
5	16QAM	1	0	23.84	23.88	23.82	24.7
5	16QAM	1	12	23.93	23.91	23.89	
5	16QAM	1	24	23.90	23.88	23.83	
5	16QAM	12	0	22.65	22.67	22.64	23.7
5	16QAM	12	7	22.73	22.71	22.68	
5	16QAM	12	13	22.70	22.68	22.64	
5	16QAM	25	0	22.70	22.65	22.64	
5	64QAM	1	0	22.77	22.78	22.75	23.7
5	64QAM	1	12	22.90	22.81	22.78	
5	64QAM	1	24	22.80	22.75	22.77	
5	64QAM	12	0	21.69	21.71	21.66	22.7
5	64QAM	12	7	21.77	21.73	21.73	
5	64QAM	12	13	21.77	21.70	21.70	
5	64QAM	25	0	21.75	21.70	21.65	

Band 25

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				26140	26340	26590	
Frequency (MHz)				1860	1880	1905	
20	QPSK	1	0	25.24	25.15	24.93	25.7
20	QPSK	1	49	25.05	25.00	24.92	
20	QPSK	1	99	24.90	24.62	24.10	
20	QPSK	50	0	24.17	24.11	23.99	24.7
20	QPSK	50	24	24.10	24.13	24.03	
20	QPSK	50	50	23.97	24.06	24.02	
20	QPSK	100	0	24.14	24.06	24.01	
20	16QAM	1	0	24.41	24.36	23.45	24.7
20	16QAM	1	49	24.24	24.33	24.28	
20	16QAM	1	99	24.33	24.07	23.00	
20	16QAM	50	0	23.23	23.14	23.07	23.7
20	16QAM	50	24	23.19	23.18	23.09	
20	16QAM	50	50	22.97	23.14	23.06	
20	16QAM	100	0	23.19	23.14	23.03	
20	64QAM	1	0	23.35	23.30	22.29	23.7
20	64QAM	1	49	23.12	23.25	23.17	
20	64QAM	1	99	23.18	23.01	21.95	
20	64QAM	50	0	22.24	22.16	22.01	22.7
20	64QAM	50	24	22.15	22.20	22.10	
20	64QAM	50	50	21.99	22.14	22.08	
20	64QAM	100	0	22.17	22.14	22.05	
Channel				26115	26340	26615	Tune-up limit (dBm)
Frequency (MHz)				1857.5	1880	1907.5	
15	QPSK	1	0	25.11	25.04	24.84	25.7
15	QPSK	1	37	25.08	25.02	25.05	
15	QPSK	1	74	24.74	24.99	23.78	
15	QPSK	36	0	24.17	24.07	24.02	24.7
15	QPSK	36	20	24.23	24.10	24.02	
15	QPSK	36	39	23.96	24.07	23.56	
15	QPSK	75	0	24.14	24.09	24.03	
15	16QAM	1	0	24.41	24.36	24.21	24.7
15	16QAM	1	37	24.37	24.33	24.37	
15	16QAM	1	74	24.08	24.24	23.01	
15	16QAM	36	0	23.21	23.13	23.08	23.7
15	16QAM	36	20	23.24	23.18	23.10	
15	16QAM	36	39	23.08	23.14	22.73	
15	16QAM	75	0	23.21	23.15	23.07	
15	64QAM	1	0	23.34	23.25	23.05	23.7
15	64QAM	1	37	23.29	23.24	23.26	
15	64QAM	1	74	23.06	23.19	22.07	
15	64QAM	36	0	22.26	22.18	22.09	22.7
15	64QAM	36	20	22.28	22.18	22.11	
15	64QAM	36	39	22.01	22.15	21.70	
15	64QAM	75	0	22.21	22.12	22.05	
Channel				26090	26340	26640	Tune-up limit (dBm)
Frequency (MHz)				1855	1880	1910	
10	QPSK	1	0	25.23	25.16	25.02	25.7
10	QPSK	1	25	25.12	25.06	24.30	
10	QPSK	1	49	24.92	25.08	23.78	
10	QPSK	25	0	24.20	24.12	24.04	24.7
10	QPSK	25	12	24.21	24.11	23.78	
10	QPSK	25	25	24.16	24.10	23.05	
10	QPSK	50	0	24.15	24.11	23.84	
10	16QAM	1	0	24.51	24.52	24.29	24.7
10	16QAM	1	25	24.41	24.42	23.81	
10	16QAM	1	49	24.25	24.42	23.18	
10	16QAM	25	0	23.27	23.20	23.09	23.7
10	16QAM	25	12	23.27	23.20	22.97	
10	16QAM	25	25	23.23	23.15	22.21	
10	16QAM	50	0	23.25	23.17	22.95	
10	64QAM	1	0	23.43	23.35	23.17	23.7
10	64QAM	1	25	23.37	23.24	22.96	
10	64QAM	1	49	23.26	23.29	22.09	
10	64QAM	25	0	22.27	22.20	22.10	22.7
10	64QAM	25	12	22.31	22.21	21.98	
10	64QAM	25	25	22.25	22.17	21.14	
10	64QAM	50	0	22.27	22.19	21.91	
Channel				26065	26340	26665	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1880	1912.5	
5	QPSK	1	0	25.13	25.07	24.38	25.7
5	QPSK	1	12	25.16	25.09	23.88	
5	QPSK	1	24	25.10	25.03	23.84	
5	QPSK	12	0	24.22	24.11	23.18	24.7
5	QPSK	12	7	24.21	24.14	22.90	
5	QPSK	12	13	24.15	24.09	22.82	
5	QPSK	25	0	24.17	24.10	23.00	
5	16QAM	1	0	24.43	24.32	23.75	24.7
5	16QAM	1	12	24.45	24.35	23.06	
5	16QAM	1	24	24.36	24.32	23.16	
5	16QAM	12	0	23.27	23.17	22.32	23.7
5	16QAM	12	7	23.28	23.16	22.07	
5	16QAM	12	13	23.24	23.14	21.95	
5	16QAM	25	0	23.25	23.17	22.14	
5	64QAM	1	0	23.37	23.28	22.82	23.7
5	64QAM	1	12	23.36	23.29	22.08	
5	64QAM	1	24	23.30	23.23	22.03	
5	64QAM	12	0	22.31	22.22	21.41	22.7
5	64QAM	12	7	22.31	22.22	21.10	
5	64QAM	12	13	22.29	22.17	20.96	
5	64QAM	25	0	22.23	22.17	21.05	
Channel				26055	26340	26675	Tune-up limit (dBm)
Frequency (MHz)				1851.5	1880	1913.5	
3	QPSK	1	0	25.13	25.07	23.81	25.7
3	QPSK	1	8	25.14	25.07	23.74	
3	QPSK	1	14	25.12	25.04	23.86	
3	QPSK	8	0	24.20	24.13	22.86	24.7
3	QPSK	8	4	24.23	24.15	22.83	
3	QPSK	8	7	24.18	24.10	22.84	
3	QPSK	15	0	24.16	24.10	22.85	
3	16QAM	1	0	24.44	24.33	23.13	24.7
3	16QAM	1	8	24.42	24.37	22.93	
3	16QAM	1	14	24.39	24.31	23.17	
3	16QAM	8	0	23.31	23.19	22.00	23.7
3	16QAM	8	4	23.33	23.21	21.96	
3	16QAM	8	7	23.30	23.19	21.97	
3	16QAM	15	0	23.23	23.17	21.98	
3	64QAM	1	0	23.35	23.21	22.16	23.7
3	64QAM	1	8	23.36	23.27	21.88	
3	64QAM	1	14	23.31	23.20	22.12	
3	64QAM	8	0	22.30	22.18	20.92	22.7
3	64QAM	8	4	22.33	22.23	20.83	
3	64QAM	8	7	22.29	22.20	20.78	
3	64QAM	15	0	22.27	22.17	20.90	
Channel				26047	26340	26683	Tune-up limit (dBm)
Frequency (MHz)				1850.7	1880	1914.3	
1.4	QPSK	1	0	25.08	25.01	23.70	25.7
1.4	QPSK	1	3	25.15	25.09	23.74	
1.4	QPSK	1	5	25.08	25.01	23.75	
1.4	QPSK	3	0	25.12	25.05	23.71	
1.4	QPSK	3	1	25.16	25.10	23.82	
1.4	QPSK	3	3	25.12	25.05	23.79	
1.4	QPSK	6	0	24.12	24.07	22.73	24.7
1.4	16QAM	1	0	24.37	24.32	22.89	24.7
1.4	16QAM	1	3	24.45	24.42	22.87	
1.4	16QAM	1	5	24.36	24.28	22.99	
1.4	16QAM	3	0	24.20	24.10	22.74	
1.4	16QAM	3	1	24.22	24.18	22.81	
1.4	16QAM	3	3	24.18	24.11	22.82	
1.4	16QAM	6	0	23.26	23.18	21.97	23.7
1.4	64QAM	1	0	23.32	23.20	21.85	23.7
1.4	64QAM	1	3	23.36	23.27	21.77	
1.4	64QAM	1	5	23.29	23.17	21.92	
1.4	64QAM	3	0	23.33	23.21	21.91	
1.4	64QAM	3	1	23.37	23.26	22.00	
1.4	64QAM	3	3	23.31	23.20	22.00	
1.4	64QAM	6	0	22.21	22.12	20.74	22.7

Band 26

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				26765	26865	26965	
Frequency (MHz)				821.5	831.5	841.5	
15	QPSK	1	0	24.61	24.59	24.53	25.7
15	QPSK	1	37	24.62	24.56	24.54	
15	QPSK	1	74	24.66	24.52	24.47	
15	QPSK	36	0	23.72	23.70	23.52	24.7
15	QPSK	36	20	23.74	23.66	23.52	
15	QPSK	36	39	23.73	23.62	23.55	
15	QPSK	75	0	23.70	23.64	23.52	
15	16QAM	1	0	23.94	23.92	23.90	24.7
15	16QAM	1	37	23.97	23.89	23.87	
15	16QAM	1	74	23.97	23.88	23.81	
15	16QAM	36	0	22.79	22.75	22.61	23.7
15	16QAM	36	20	22.83	22.74	22.60	
15	16QAM	36	39	22.82	22.70	22.62	
15	16QAM	75	0	22.78	22.72	22.58	
15	64QAM	1	0	22.85	22.81	22.76	23.7
15	64QAM	1	37	22.88	22.82	22.79	
15	64QAM	1	74	22.88	22.79	22.73	
15	64QAM	36	0	21.84	21.80	21.64	22.7
15	64QAM	36	20	21.83	21.78	21.62	
15	64QAM	36	39	21.86	21.74	21.68	
15	64QAM	75	0	21.77	21.73	21.59	
Channel				26740	26865	26990	Tune-up limit (dBm)
Frequency (MHz)				819	831.5	844	
10	QPSK	1	0	24.61	24.52	24.57	25.7
10	QPSK	1	25	24.65	24.57	24.50	
10	QPSK	1	49	24.58	24.53	24.43	
10	QPSK	25	0	23.77	23.65	23.58	24.7
10	QPSK	25	12	23.77	23.66	23.61	
10	QPSK	25	25	23.71	23.60	23.55	
10	QPSK	50	0	23.75	23.66	23.57	
10	16QAM	1	0	23.96	23.87	23.90	24.7
10	16QAM	1	25	24.01	23.91	23.84	
10	16QAM	1	49	23.98	23.87	23.77	
10	16QAM	25	0	22.85	22.75	22.68	23.7
10	16QAM	25	12	22.86	22.75	22.68	
10	16QAM	25	25	22.80	22.74	22.64	
10	16QAM	50	0	22.80	22.73	22.63	
10	64QAM	1	0	22.85	22.77	22.80	23.7
10	64QAM	1	25	22.90	22.86	22.75	
10	64QAM	1	49	22.89	22.79	22.71	
10	64QAM	25	0	21.85	21.76	21.65	22.7
10	64QAM	25	12	21.86	21.78	21.67	
10	64QAM	25	25	21.78	21.74	21.64	
10	64QAM	50	0	21.82	21.74	21.66	
Channel				26715	26865	27015	Tune-up limit (dBm)
Frequency (MHz)				816.5	831.5	846.5	
5	QPSK	1	0	24.59	24.60	24.47	25.7
5	QPSK	1	12	24.58	24.58	24.47	
5	QPSK	1	24	24.64	24.56	24.42	
5	QPSK	12	0	23.63	23.70	23.55	24.7
5	QPSK	12	7	23.63	23.70	23.55	
5	QPSK	12	13	23.75	23.61	23.52	
5	QPSK	25	0	23.77	23.67	23.55	
5	16QAM	1	0	23.92	23.96	23.82	24.7
5	16QAM	1	12	23.94	23.95	23.82	
5	16QAM	1	24	23.98	23.90	23.75	
5	16QAM	12	0	22.71	22.73	22.64	23.7
5	16QAM	12	7	22.74	22.81	22.65	
5	16QAM	12	13	22.87	22.71	22.60	
5	16QAM	25	0	22.85	22.72	22.62	
5	64QAM	1	0	22.87	22.87	22.71	23.7
5	64QAM	1	12	22.85	22.87	22.75	
5	64QAM	1	24	22.91	22.79	22.67	
5	64QAM	12	0	21.76	21.78	21.68	22.7
5	64QAM	12	7	21.77	21.81	21.68	
5	64QAM	12	13	21.91	21.76	21.65	
5	64QAM	25	0	21.86	21.73	21.63	
Channel				26705	26865	27025	Tune-up limit (dBm)
Frequency (MHz)				815.5	831.5	847.5	
3	QPSK	1	0	24.60	24.59	24.44	25.7
3	QPSK	1	8	24.60	24.57	24.43	
3	QPSK	1	14	24.59	24.54	24.42	
3	QPSK	8	0	23.60	23.66	23.50	24.7
3	QPSK	8	4	23.62	23.70	23.54	
3	QPSK	8	7	23.58	23.63	23.52	
3	QPSK	15	0	23.59	23.66	23.49	
3	16QAM	1	0	23.94	23.94	23.78	24.7
3	16QAM	1	8	23.95	23.93	23.81	
3	16QAM	1	14	23.93	23.89	23.69	
3	16QAM	8	0	22.74	22.81	22.63	23.7
3	16QAM	8	4	22.77	22.79	22.65	
3	16QAM	8	7	22.71	22.76	22.62	
3	16QAM	15	0	22.70	22.77	22.61	
3	64QAM	1	0	22.87	22.82	22.68	23.7
3	64QAM	1	8	22.82	22.83	22.71	
3	64QAM	1	14	22.86	22.81	22.66	
3	64QAM	8	0	21.75	21.80	21.63	22.7
3	64QAM	8	4	21.79	21.79	21.66	
3	64QAM	8	7	21.72	21.76	21.64	
3	64QAM	15	0	21.71	21.74	21.61	
Channel				26697	26865	27033	Tune-up limit (dBm)
Frequency (MHz)				814.7	831.5	848.3	
1.4	QPSK	1	0	24.56	24.54	24.36	25.7
1.4	QPSK	1	3	24.61	24.59	24.46	
1.4	QPSK	1	5	24.54	24.51	24.34	
1.4	QPSK	3	0	24.59	24.54	24.40	
1.4	QPSK	3	1	24.61	24.60	24.44	
1.4	QPSK	3	3	24.56	24.54	24.42	
1.4	QPSK	6	0	23.56	23.58	23.42	24.7
1.4	16QAM	1	0	23.88	23.87	23.73	24.7
1.4	16QAM	1	3	23.97	23.96	23.78	
1.4	16QAM	1	5	23.87	23.88	23.72	
1.4	16QAM	3	0	23.67	23.63	23.52	
1.4	16QAM	3	1	23.71	23.68	23.52	
1.4	16QAM	3	3	23.63	23.64	23.48	
1.4	16QAM	6	0	22.72	22.74	22.58	23.7
1.4	64QAM	1	0	22.77	22.79	22.64	23.7
1.4	64QAM	1	3	22.86	22.85	22.71	
1.4	64QAM	1	5	22.79	22.76	22.61	
1.4	64QAM	3	0	22.84	22.79	22.63	
1.4	64QAM	3	1	22.83	22.80	22.64	
1.4	64QAM	3	3	22.80	22.77	22.61	
1.4	64QAM	6	0	21.65	21.66	21.52	22.7

Band 30							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					27710		
Frequency (MHz)					2310		
10	QPSK	1	0		21.58		22.5
10	QPSK	1	25		21.49		
10	QPSK	1	49		21.48		
10	QPSK	25	0		20.53		21.5
10	QPSK	25	12		20.53		
10	QPSK	25	25		20.47		
10	QPSK	50	0		20.53		
10	16QAM	1	0		20.81		21.5
10	16QAM	1	25		20.83		
10	16QAM	1	49		20.79		
10	16QAM	25	0		19.59		20.5
10	16QAM	25	12		19.63		
10	16QAM	25	25		19.58		
10	16QAM	50	0		19.58		
10	64QAM	1	0		19.76		20.5
10	64QAM	1	25		19.73		
10	64QAM	1	49		19.70		
10	64QAM	25	0		18.61		19.5
10	64QAM	25	12		18.64		
10	64QAM	25	25		18.58		
10	64QAM	50	0		18.60		
Channel				27685	27710	27735	Tune-up limit (dBm)
Frequency (MHz)				2307.5	2310	2312.5	
5	QPSK	1	0	21.48	21.57	21.54	22.5
5	QPSK	1	12	21.55	21.58	21.55	
5	QPSK	1	24	21.57	21.57	21.54	
5	QPSK	12	0	20.60	20.60	20.59	21.5
5	QPSK	12	7	20.63	20.63	20.61	
5	QPSK	12	13	20.61	20.59	20.54	
5	QPSK	25	0	20.52	20.59	20.56	
5	16QAM	1	0	20.89	20.94	20.90	21.5
5	16QAM	1	12	20.86	20.84	20.90	
5	16QAM	1	24	20.89	20.86	20.87	
5	16QAM	12	0	19.67	19.68	19.65	20.5
5	16QAM	12	7	19.71	19.68	19.67	
5	16QAM	12	13	19.66	19.67	19.64	
5	16QAM	25	0	19.67	19.66	19.64	
5	64QAM	1	0	19.83	19.82	19.80	20.5
5	64QAM	1	12	19.83	19.82	19.81	
5	64QAM	1	24	19.81	19.79	19.76	
5	64QAM	12	0	18.69	18.69	18.67	19.5
5	64QAM	12	7	18.73	18.73	18.70	
5	64QAM	12	13	18.71	18.70	18.68	
5	64QAM	25	0	18.68	18.67	18.64	

Band 66

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				132072	132322	132572	
Frequency (MHz)				1720	1745	1770	
20	QPSK	1	0	25.10	25.04	24.93	25.7
20	QPSK	1	49	25.06	25.02	24.42	
20	QPSK	1	99	25.00	24.97	24.41	
20	QPSK	50	0	23.97	23.94	23.82	24.7
20	QPSK	50	24	23.92	23.92	23.49	
20	QPSK	50	50	24.02	23.96	23.39	
20	QPSK	100	0	24.07	24.04	23.53	
20	16QAM	1	0	24.43	24.34	24.23	24.7
20	16QAM	1	49	24.37	24.38	23.62	
20	16QAM	1	99	24.27	24.29	23.71	
20	16QAM	50	0	23.07	23.04	22.90	23.7
20	16QAM	50	24	23.02	22.98	22.59	
20	16QAM	50	50	23.10	23.07	22.49	
20	16QAM	100	0	23.11	23.09	22.60	
20	64QAM	1	0	23.32	23.28	23.13	23.7
20	64QAM	1	49	23.30	23.30	22.58	
20	64QAM	1	99	23.23	23.20	22.66	
20	64QAM	50	0	22.08	22.02	21.88	22.7
20	64QAM	50	24	22.05	22.00	21.56	
20	64QAM	50	50	22.13	22.05	21.45	
20	64QAM	100	0	22.13	22.08	21.62	
Channel				132047	132322	132597	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1745	1772.5	
15	QPSK	1	0	25.09	25.01	24.64	25.7
15	QPSK	1	37	25.08	25.06	24.29	
15	QPSK	1	74	24.99	25.00	24.46	
15	QPSK	36	0	23.98	23.91	23.49	24.7
15	QPSK	36	20	24.04	24.00	23.41	
15	QPSK	36	39	23.95	23.95	23.43	
15	QPSK	75	0	23.95	23.98	23.43	
15	16QAM	1	0	24.44	24.35	24.00	24.7
15	16QAM	1	37	24.43	24.42	23.52	
15	16QAM	1	74	24.27	24.36	23.77	
15	16QAM	36	0	23.02	22.98	22.61	23.7
15	16QAM	36	20	23.09	23.04	22.49	
15	16QAM	36	39	22.98	23.01	22.51	
15	16QAM	75	0	23.02	23.05	22.51	
15	64QAM	1	0	23.37	23.24	22.96	23.7
15	64QAM	1	37	23.35	23.26	22.49	
15	64QAM	1	74	23.19	23.23	22.68	
15	64QAM	36	0	22.08	21.99	21.64	22.7
15	64QAM	36	20	22.14	22.07	21.51	
15	64QAM	36	39	22.01	22.03	21.50	
15	64QAM	75	0	22.03	22.04	21.48	
Channel				132022	132322	132622	Tune-up limit (dBm)
Frequency (MHz)				1715	1745	1775	
10	QPSK	1	0	25.08	25.00	24.31	25.7
10	QPSK	1	25	25.07	24.98	24.20	
10	QPSK	1	49	24.98	24.89	24.49	
10	QPSK	25	0	24.01	23.98	23.36	24.7
10	QPSK	25	12	24.02	23.95	23.38	
10	QPSK	25	25	24.01	23.87	23.42	
10	QPSK	50	0	24.04	23.90	23.31	
10	16QAM	1	0	24.44	24.32	23.62	24.7
10	16QAM	1	25	24.42	24.32	23.55	
10	16QAM	1	49	24.29	24.21	23.80	
10	16QAM	25	0	23.10	23.02	22.45	23.7
10	16QAM	25	12	23.09	23.00	22.48	
10	16QAM	25	25	23.08	22.98	22.51	
10	16QAM	50	0	23.09	23.01	22.43	
10	64QAM	1	0	23.34	23.24	22.61	23.7
10	64QAM	1	25	23.30	23.22	22.53	
10	64QAM	1	49	23.19	23.13	22.73	
10	64QAM	25	0	22.14	22.04	21.46	22.7
10	64QAM	25	12	22.11	22.00	21.46	
10	64QAM	25	25	22.06	21.99	21.50	
10	64QAM	50	0	22.09	22.03	21.43	
Channel				131997	132322	132647	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1745	1777.5	
5	QPSK	1	0	24.95	24.84	24.30	25.7
5	QPSK	1	12	25.09	25.01	24.34	
5	QPSK	1	24	24.89	24.78	24.51	
5	QPSK	12	0	24.00	23.94	23.42	24.7
5	QPSK	12	7	24.09	23.99	23.48	
5	QPSK	12	13	24.02	23.91	23.52	
5	QPSK	25	0	24.02	23.89	23.45	
5	16QAM	1	0	24.29	24.19	23.59	24.7
5	16QAM	1	12	24.42	24.33	23.66	
5	16QAM	1	24	24.23	24.10	23.80	
5	16QAM	12	0	23.11	22.98	22.50	23.7
5	16QAM	12	7	23.19	23.05	22.56	
5	16QAM	12	13	23.07	22.96	22.61	
5	16QAM	25	0	23.10	23.00	22.54	
5	64QAM	1	0	23.20	23.08	22.54	23.7
5	64QAM	1	12	23.31	23.22	22.58	
5	64QAM	1	24	23.10	23.00	22.73	
5	64QAM	12	0	22.15	22.03	21.52	22.7
5	64QAM	12	7	22.22	22.11	21.62	
5	64QAM	12	13	22.11	22.00	21.67	
5	64QAM	25	0	22.11	21.99	21.53	
Channel				131987	132322	132657	Tune-up limit (dBm)
Frequency (MHz)				1711.5	1745	1778.5	
3	QPSK	1	0	24.98	24.86	24.36	25.7
3	QPSK	1	8	25.09	24.98	24.42	
3	QPSK	1	14	24.96	24.84	24.55	
3	QPSK	8	0	24.05	23.96	23.49	24.7
3	QPSK	8	4	24.11	24.03	23.52	
3	QPSK	8	7	24.05	23.94	23.54	
3	QPSK	15	0	24.06	23.92	23.52	
3	16QAM	1	0	24.30	24.19	23.66	24.7
3	16QAM	1	8	24.41	24.32	23.71	
3	16QAM	1	14	24.26	24.18	23.82	
3	16QAM	8	0	23.15	23.08	22.61	23.7
3	16QAM	8	4	23.23	23.13	22.65	
3	16QAM	8	7	23.16	23.06	22.67	
3	16QAM	15	0	23.16	23.02	22.63	
3	64QAM	1	0	23.21	23.12	22.62	23.7
3	64QAM	1	8	23.33	23.20	22.69	
3	64QAM	1	14	23.18	23.07	22.81	
3	64QAM	8	0	22.18	22.06	21.57	22.7
3	64QAM	8	4	22.22	22.11	21.62	
3	64QAM	8	7	22.16	22.05	21.64	
3	64QAM	15	0	22.14	22.02	21.57	
Channel				131979	132322	132665	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1745	1779.3	
1.4	QPSK	1	0	25.02	24.89	24.41	25.7
1.4	QPSK	1	3	25.08	24.99	24.53	
1.4	QPSK	1	5	24.97	24.89	24.46	
1.4	QPSK	3	0	25.06	24.95	24.46	
1.4	QPSK	3	1	25.09	24.99	24.49	
1.4	QPSK	3	3	25.07	24.96	24.49	
1.4	QPSK	6	0	24.04	23.95	23.48	24.7
1.4	16QAM	1	0	24.35	24.22	23.69	24.7
1.4	16QAM	1	3	24.43	24.35	23.80	
1.4	16QAM	1	5	24.32	24.20	23.74	
1.4	16QAM	3	0	24.16	24.05	23.50	
1.4	16QAM	3	1	24.19	24.08	23.58	
1.4	16QAM	3	3	24.12	24.04	23.54	
1.4	16QAM	6	0	23.18	23.08	22.66	23.7
1.4	64QAM	1	0	23.27	23.13	22.65	23.7
1.4	64QAM	1	3	23.34	23.25	22.68	
1.4	64QAM	1	5	23.25	23.13	22.67	
1.4	64QAM	3	0	23.25	23.14	22.67	
1.4	64QAM	3	1	23.31	23.19	22.76	
1.4	64QAM	3	3	23.24	23.15	22.70	
1.4	64QAM	6	0	22.12	22.01	21.57	22.7

Band 71							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				133222	133322	133372	
Frequency (MHz)				673	683	693	
20	QPSK	1	0	24.48	24.43	24.41	25.7
20	QPSK	1	49	24.41	24.33	24.35	
20	QPSK	1	99	24.38	24.43	24.44	
20	QPSK	50	0	23.52	23.48	23.37	24.7
20	QPSK	50	24	23.57	23.41	23.45	
20	QPSK	50	50	23.50	23.41	23.50	
20	QPSK	100	0	23.55	23.40	23.40	
20	16QAM	1	0	23.76	23.77	23.76	24.7
20	16QAM	1	49	23.72	23.62	23.68	
20	16QAM	1	99	23.70	23.75	23.79	
20	16QAM	50	0	22.60	22.54	22.48	23.7
20	16QAM	50	24	22.64	22.47	22.53	
20	16QAM	50	50	22.56	22.50	22.59	
20	16QAM	100	0	22.62	22.47	22.49	
20	64QAM	1	0	22.68	22.66	22.66	23.7
20	64QAM	1	49	22.64	22.66	22.66	
20	64QAM	1	99	22.63	22.70	22.74	
20	64QAM	50	0	21.61	21.57	21.47	22.7
20	64QAM	50	24	21.65	21.51	21.55	
20	64QAM	50	50	21.58	21.54	21.59	
20	64QAM	100	0	21.64	21.49	21.53	
Channel				133197	133297	133397	Tune-up limit (dBm)
Frequency (MHz)				670.5	680.5	690.5	
15	QPSK	1	0	24.41	24.39	24.41	25.7
15	QPSK	1	37	24.40	24.37	24.38	
15	QPSK	1	74	24.40	24.40	24.42	
15	QPSK	36	0	23.49	23.44	23.39	24.7
15	QPSK	36	20	23.43	23.43	23.39	
15	QPSK	36	39	23.49	23.37	23.43	
15	QPSK	75	0	23.45	23.41	23.33	
15	16QAM	1	0	23.77	23.78	23.70	24.7
15	16QAM	1	37	23.78	23.75	23.76	
15	16QAM	1	74	23.77	23.75	23.76	
15	16QAM	36	0	22.54	22.53	22.46	23.7
15	16QAM	36	20	22.53	22.51	22.48	
15	16QAM	36	39	22.58	22.44	22.53	
15	16QAM	75	0	22.51	22.47	22.43	
15	64QAM	1	0	22.65	22.68	22.74	23.7
15	64QAM	1	37	22.71	22.62	22.65	
15	64QAM	1	74	22.67	22.67	22.70	
15	64QAM	36	0	21.62	21.58	21.51	22.7
15	64QAM	36	20	21.57	21.56	21.48	
15	64QAM	36	39	21.60	21.47	21.56	
15	64QAM	75	0	21.53	21.50	21.44	
Channel				133172	133272	133422	Tune-up limit (dBm)
Frequency (MHz)				668	678	693	
10	QPSK	1	0	24.42	24.39	24.34	25.7
10	QPSK	1	25	24.47	24.39	24.38	
10	QPSK	1	49	24.36	24.31	24.38	
10	QPSK	25	0	23.51	23.50	23.32	24.7
10	QPSK	25	12	23.47	23.44	23.44	
10	QPSK	25	25	23.43	23.42	23.42	
10	QPSK	50	0	23.48	23.45	23.45	
10	16QAM	1	0	23.74	23.70	23.69	24.7
10	16QAM	1	25	23.83	23.78	23.71	
10	16QAM	1	49	23.74	23.55	23.72	
10	16QAM	25	0	22.59	22.58	22.45	23.7
10	16QAM	25	12	22.48	22.57	22.59	
10	16QAM	25	25	22.53	22.47	22.51	
10	16QAM	50	0	22.57	22.55	22.54	
10	64QAM	1	0	22.66	22.63	22.56	23.7
10	64QAM	1	25	22.74	22.67	22.62	
10	64QAM	1	49	22.61	22.52	22.65	
10	64QAM	25	0	21.63	21.55	21.45	22.7
10	64QAM	25	12	21.63	21.58	21.59	
10	64QAM	25	25	21.55	21.50	21.52	
10	64QAM	50	0	21.60	21.57	21.55	
Channel				133147	133247	133447	Tune-up limit (dBm)
Frequency (MHz)				665.5	675.5	695.5	
5	QPSK	1	0	24.37	24.37	24.35	25.7
5	QPSK	1	12	24.39	24.36	24.44	
5	QPSK	1	24	24.43	24.39	24.40	
5	QPSK	12	0	23.43	23.40	23.42	24.7
5	QPSK	12	7	23.45	23.47	23.46	
5	QPSK	12	13	23.48	23.47	23.52	
5	QPSK	25	0	23.51	23.47	23.40	
5	16QAM	1	0	23.73	23.70	23.68	24.7
5	16QAM	1	12	23.75	23.69	23.80	
5	16QAM	1	24	23.79	23.74	23.73	
5	16QAM	12	0	22.52	22.50	22.56	23.7
5	16QAM	12	7	22.55	22.58	22.54	
5	16QAM	12	13	22.59	22.54	22.59	
5	16QAM	25	0	22.62	22.58	22.52	
5	64QAM	1	0	22.67	22.66	22.62	23.7
5	64QAM	1	12	22.67	22.61	22.72	
5	64QAM	1	24	22.70	22.66	22.68	
5	64QAM	12	0	21.58	21.55	21.60	22.7
5	64QAM	12	7	21.58	21.65	21.58	
5	64QAM	12	13	21.64	21.60	21.62	
5	64QAM	25	0	21.61	21.59	21.52	

Band 5							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				20450	20525	20600	
Frequency (MHz)				829	836.5	844	
10	QPSK	1	0	22.23	22.22	22.10	24.1
10	QPSK	1	25	22.18	22.18	22.16	
10	QPSK	1	49	22.21	22.10	22.10	
10	QPSK	25	0	22.26	22.25	22.14	24.1
10	QPSK	25	12	22.37	22.22	22.23	
10	QPSK	25	25	22.32	22.21	22.14	
10	QPSK	50	0	22.32	22.20	22.11	
10	16QAM	1	0	22.50	22.48	22.35	24.1
10	16QAM	1	25	22.45	22.43	22.39	
10	16QAM	1	49	22.47	22.37	22.37	
10	16QAM	25	0	22.30	22.29	22.17	23.7
10	16QAM	25	12	22.40	22.31	22.27	
10	16QAM	25	25	22.35	22.23	22.21	
10	16QAM	50	0	22.41	22.30	22.15	
10	64QAM	1	0	22.48	22.45	22.35	23.7
10	64QAM	1	25	22.41	22.41	22.40	
10	64QAM	1	49	22.43	22.32	22.31	
10	64QAM	25	0	21.73	21.70	21.61	22.7
10	64QAM	25	12	21.81	21.70	21.65	
10	64QAM	25	25	21.75	21.64	21.64	
10	64QAM	50	0	21.78	21.67	21.56	
Channel				20425	20525	20625	Tune-up limit (dBm)
Frequency (MHz)				826.5	836.5	846.5	
5	QPSK	1	0	22.21	22.19	22.14	24.1
5	QPSK	1	12	22.21	22.17	22.13	
5	QPSK	1	24	22.19	22.15	22.11	
5	QPSK	12	0	22.23	22.26	22.18	24.1
5	QPSK	12	7	22.28	22.24	22.16	
5	QPSK	12	13	22.25	22.20	22.14	
5	QPSK	25	0	22.25	22.23	22.15	
5	16QAM	1	0	22.47	22.47	22.35	24.1
5	16QAM	1	12	22.49	22.49	22.46	
5	16QAM	1	24	22.44	22.41	22.40	
5	16QAM	12	0	22.37	22.28	22.23	23.7
5	16QAM	12	7	22.36	22.30	22.25	
5	16QAM	12	13	22.32	22.27	22.18	
5	16QAM	25	0	22.30	22.27	22.22	
5	64QAM	1	0	22.47	22.45	22.39	23.7
5	64QAM	1	12	22.47	22.42	22.36	
5	64QAM	1	24	22.42	22.37	22.30	
5	64QAM	12	0	21.81	21.75	21.65	22.7
5	64QAM	12	7	21.79	21.75	21.71	
5	64QAM	12	13	21.76	21.72	21.61	
5	64QAM	25	0	21.75	21.72	21.63	
Channel				20415	20525	20635	Tune-up limit (dBm)
Frequency (MHz)				825.5	836.5	847.5	
3	QPSK	1	0	22.19	22.17	22.10	24.1
3	QPSK	1	8	22.20	22.15	22.10	
3	QPSK	1	14	22.21	22.14	22.11	
3	QPSK	8	0	22.26	22.19	22.13	24.1
3	QPSK	8	4	22.26	22.23	22.15	
3	QPSK	8	7	22.22	22.17	22.13	
3	QPSK	15	0	22.23	22.19	22.14	
3	16QAM	1	0	22.42	22.43	22.44	24.1
3	16QAM	1	8	22.49	22.38	22.40	
3	16QAM	1	14	22.48	22.38	22.31	
3	16QAM	8	0	22.38	22.28	22.22	23.7
3	16QAM	8	4	22.40	22.31	22.23	
3	16QAM	8	7	22.35	22.30	22.21	
3	16QAM	15	0	22.34	22.28	22.20	
3	64QAM	1	0	22.48	22.37	22.32	23.7
3	64QAM	1	8	22.46	22.37	22.30	
3	64QAM	1	14	22.45	22.37	22.31	
3	64QAM	8	0	21.74	21.72	21.62	22.7
3	64QAM	8	4	21.81	21.74	21.64	
3	64QAM	8	7	21.76	21.68	21.60	
3	64QAM	15	0	21.75	21.66	21.59	
Channel				20407	20525	20643	Tune-up limit (dBm)
Frequency (MHz)				824.7	836.5	848.3	
1.4	QPSK	1	0	22.15	22.11	22.12	24.1
1.4	QPSK	1	3	22.23	22.16	22.14	
1.4	QPSK	1	5	22.12	22.13	22.11	
1.4	QPSK	3	0	22.19	22.13	22.13	
1.4	QPSK	3	1	22.22	22.18	22.15	
1.4	QPSK	3	3	22.19	22.13	22.12	
1.4	QPSK	6	0	22.20	22.14	22.11	24.1
1.4	16QAM	1	0	22.42	22.36	22.32	24.1
1.4	16QAM	1	3	22.47	22.46	22.36	
1.4	16QAM	1	5	22.39	22.32	22.31	
1.4	16QAM	3	0	22.22	22.17	22.10	
1.4	16QAM	3	1	22.25	22.19	22.15	
1.4	16QAM	3	3	22.21	22.13	22.12	
1.4	16QAM	6	0	22.35	22.27	22.16	23.7
1.4	64QAM	1	0	22.36	22.34	22.21	23.7
1.4	64QAM	1	3	22.47	22.37	22.35	
1.4	64QAM	1	5	22.39	22.34	22.23	
1.4	64QAM	3	0	22.38	22.31	22.23	
1.4	64QAM	3	1	22.44	22.36	22.31	
1.4	64QAM	3	3	22.40	22.33	22.26	
1.4	64QAM	6	0	21.68	21.60	21.52	22.7

Band 7							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				20850	21100	21350	
Frequency (MHz)				2510	2535	2560	
20	QPSK	1	0	21.63	21.57	21.48	22.7
20	QPSK	1	49	21.62	21.56	21.47	
20	QPSK	1	99	21.69	21.61	21.55	
20	QPSK	50	0	21.69	21.65	21.55	22.7
20	QPSK	50	24	21.74	21.65	21.59	
20	QPSK	50	50	21.74	21.68	21.59	
20	QPSK	100	0	21.73	21.64	21.57	
20	16QAM	1	0	21.87	21.86	21.77	22.7
20	16QAM	1	49	21.93	21.84	21.81	
20	16QAM	1	99	22.00	21.89	21.83	
20	16QAM	50	0	21.77	21.68	21.59	22.7
20	16QAM	50	24	21.78	21.73	21.63	
20	16QAM	50	50	21.81	21.74	21.65	
20	16QAM	100	0	21.78	21.71	21.60	
20	64QAM	1	0	21.89	21.83	21.67	22.7
20	64QAM	1	49	21.83	21.78	21.73	
20	64QAM	1	99	21.93	21.83	21.75	
20	64QAM	50	0	21.06	21.00	20.92	22
20	64QAM	50	24	21.11	21.04	20.94	
20	64QAM	50	50	21.12	21.02	20.94	
20	64QAM	100	0	21.08	21.01	20.94	
Channel				20825	21100	21375	Tune-up limit (dBm)
Frequency (MHz)				2507.5	2535	2562.5	
15	QPSK	1	0	21.65	21.59	21.49	22.7
15	QPSK	1	37	21.64	21.57	21.46	
15	QPSK	1	74	21.72	21.63	21.58	
15	QPSK	36	0	21.73	21.64	21.54	22.7
15	QPSK	36	20	21.76	21.66	21.56	
15	QPSK	36	39	21.71	21.65	21.55	
15	QPSK	75	0	21.73	21.63	21.55	
15	16QAM	1	0	21.93	21.91	21.76	22.7
15	16QAM	1	37	21.94	21.85	21.71	
15	16QAM	1	74	22.00	21.92	21.85	
15	16QAM	36	0	21.73	21.68	21.59	22.7
15	16QAM	36	20	21.79	21.71	21.62	
15	16QAM	36	39	21.82	21.69	21.61	
15	16QAM	75	0	21.78	21.68	21.58	
15	64QAM	1	0	21.94	21.85	21.75	22.7
15	64QAM	1	37	21.86	21.78	21.70	
15	64QAM	1	74	21.97	21.86	21.78	
15	64QAM	36	0	21.07	21.00	20.90	22
15	64QAM	36	20	21.12	21.03	20.95	
15	64QAM	36	39	21.10	21.01	20.93	
15	64QAM	75	0	21.06	20.99	20.89	
Channel				20800	21100	21400	Tune-up limit (dBm)
Frequency (MHz)				2505	2535	2565	
10	QPSK	1	0	21.62	21.55	21.46	22.7
10	QPSK	1	25	21.64	21.56	21.47	
10	QPSK	1	49	21.67	21.57	21.52	
10	QPSK	25	0	21.69	21.62	21.48	22.7
10	QPSK	25	12	21.74	21.65	21.53	
10	QPSK	25	25	21.71	21.61	21.51	
10	QPSK	50	0	21.71	21.61	21.53	
10	16QAM	1	0	21.92	21.86	21.76	22.7
10	16QAM	1	25	21.94	21.81	21.79	
10	16QAM	1	49	21.97	21.88	21.84	
10	16QAM	25	0	21.75	21.65	21.55	22.7
10	16QAM	25	12	21.76	21.71	21.60	
10	16QAM	25	25	21.75	21.68	21.61	
10	16QAM	50	0	21.75	21.68	21.58	
10	64QAM	1	0	21.87	21.80	21.67	22.7
10	64QAM	1	25	21.89	21.82	21.66	
10	64QAM	1	49	21.91	21.82	21.76	
10	64QAM	25	0	21.05	20.96	20.86	22
10	64QAM	25	12	21.07	20.99	20.90	
10	64QAM	25	25	21.09	21.00	20.89	
10	64QAM	50	0	21.06	20.98	20.89	
Channel				20775	21100	21425	Tune-up limit (dBm)
Frequency (MHz)				2502.5	2535	2567.5	
5	QPSK	1	0	21.63	21.55	21.44	22.7
5	QPSK	1	12	21.63	21.55	21.44	
5	QPSK	1	24	21.65	21.58	21.47	
5	QPSK	12	0	21.65	21.61	21.46	22.7
5	QPSK	12	7	21.72	21.63	21.51	
5	QPSK	12	13	21.69	21.59	21.52	
5	QPSK	25	0	21.68	21.62	21.48	
5	16QAM	1	0	21.88	21.86	21.73	22.7
5	16QAM	1	12	21.95	21.83	21.76	
5	16QAM	1	24	21.96	21.82	21.78	
5	16QAM	12	0	21.72	21.65	21.53	22.7
5	16QAM	12	7	21.76	21.68	21.57	
5	16QAM	12	13	21.76	21.68	21.60	
5	16QAM	25	0	21.73	21.67	21.54	
5	64QAM	1	0	21.90	21.79	21.65	22.7
5	64QAM	1	12	21.87	21.78	21.66	
5	64QAM	1	24	21.89	21.81	21.68	
5	64QAM	12	0	21.06	21.00	20.86	22
5	64QAM	12	7	21.11	21.03	20.91	
5	64QAM	12	13	21.10	21.00	20.93	
5	64QAM	25	0	21.03	20.97	20.85	

Band 12							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				23060	23095	23130	
Frequency (MHz)				704	707.5	711	
10	QPSK	1	0	22.15	22.00	22.02	24
10	QPSK	1	25	22.24	22.05	22.03	
10	QPSK	1	49	22.22	22.04	22.12	
10	QPSK	25	0	22.30	22.10	22.07	24
10	QPSK	25	12	22.33	22.11	22.07	
10	QPSK	25	25	22.23	22.10	22.04	
10	QPSK	50	0	22.28	22.13	22.05	
10	16QAM	1	0	22.51	22.26	22.29	24
10	16QAM	1	25	22.49	22.34	22.37	
10	16QAM	1	49	22.55	22.44	22.47	
10	16QAM	25	0	22.34	22.25	22.14	23.2
10	16QAM	25	12	22.35	22.27	22.21	
10	16QAM	25	25	22.30	22.21	22.16	
10	16QAM	50	0	22.35	22.24	22.16	
10	64QAM	1	0	22.32	22.29	22.31	23.2
10	64QAM	1	25	22.50	22.32	22.28	
10	64QAM	1	49	22.45	22.32	22.32	
10	64QAM	25	0	21.38	21.20	21.18	22.2
10	64QAM	25	12	21.40	21.23	21.17	
10	64QAM	25	25	21.38	21.20	21.17	
10	64QAM	50	0	21.36	21.21	21.17	
Channel				23035	23095	23155	Tune-up limit (dBm)
Frequency (MHz)				701.5	707.5	713.5	
5	QPSK	1	0	22.05	22.06	22.00	24
5	QPSK	1	12	22.02	22.05	22.08	
5	QPSK	1	24	22.09	22.02	22.07	
5	QPSK	12	0	22.10	22.09	22.02	24
5	QPSK	12	7	22.11	22.10	22.18	
5	QPSK	12	13	22.17	22.07	22.13	
5	QPSK	25	0	22.17	22.09	22.01	
5	16QAM	1	0	22.41	22.36	22.32	24
5	16QAM	1	12	22.33	22.34	22.42	
5	16QAM	1	24	22.40	22.37	22.41	
5	16QAM	12	0	22.17	22.21	22.13	23.2
5	16QAM	12	7	22.20	22.24	22.28	
5	16QAM	12	13	22.30	22.21	22.24	
5	16QAM	25	0	22.27	22.21	22.12	
5	64QAM	1	0	22.30	22.32	22.22	23.2
5	64QAM	1	12	22.30	22.31	22.32	
5	64QAM	1	24	22.35	22.26	22.29	
5	64QAM	12	0	21.21	21.27	21.17	22.2
5	64QAM	12	7	21.25	21.28	21.30	
5	64QAM	12	13	21.30	21.20	21.26	
5	64QAM	25	0	21.28	21.19	21.12	
Channel				23025	23095	23165	Tune-up limit (dBm)
Frequency (MHz)				700.5	707.5	714.5	
3	QPSK	1	0	22.11	22.01	22.05	24
3	QPSK	1	8	22.11	22.02	22.05	
3	QPSK	1	14	22.08	22.02	22.05	
3	QPSK	8	0	22.17	22.05	22.10	24
3	QPSK	8	4	22.17	22.10	22.13	
3	QPSK	8	7	22.15	22.06	22.08	
3	QPSK	15	0	22.17	22.08	22.08	
3	16QAM	1	0	22.45	22.34	22.37	24
3	16QAM	1	8	22.51	22.32	22.41	
3	16QAM	1	14	22.36	22.38	22.38	
3	16QAM	8	0	22.32	22.20	22.21	23.2
3	16QAM	8	4	22.33	22.26	22.23	
3	16QAM	8	7	22.28	22.23	22.21	
3	16QAM	15	0	22.26	22.19	22.19	
3	64QAM	1	0	22.29	22.28	22.20	23.2
3	64QAM	1	8	22.24	22.24	22.26	
3	64QAM	1	14	22.29	22.20	22.25	
3	64QAM	8	0	21.12	21.22	21.16	22.2
3	64QAM	8	4	21.15	21.18	21.21	
3	64QAM	8	7	21.27	21.13	21.22	
3	64QAM	15	0	21.18	21.14	21.08	
Channel				23017	23095	23173	Tune-up limit (dBm)
Frequency (MHz)				699.7	707.5	715.3	
1.4	QPSK	1	0	22.12	22.01	22.00	24
1.4	QPSK	1	3	22.16	22.07	22.09	
1.4	QPSK	1	5	22.07	22.00	22.02	
1.4	QPSK	3	0	22.13	22.04	22.06	
1.4	QPSK	3	1	22.15	22.05	22.08	
1.4	QPSK	3	3	22.13	22.04	22.05	
1.4	QPSK	6	0	22.08	22.00	22.03	24
1.4	16QAM	1	0	22.44	22.28	22.32	24
1.4	16QAM	1	3	22.47	22.30	22.39	
1.4	16QAM	1	5	22.39	22.24	22.27	
1.4	16QAM	3	0	22.21	22.04	22.11	
1.4	16QAM	3	1	22.23	22.08	22.12	
1.4	16QAM	3	3	22.20	22.03	22.08	
1.4	16QAM	6	0	22.28	22.18	22.18	23.2
1.4	64QAM	1	0	22.33	22.22	22.23	23.2
1.4	64QAM	1	3	22.41	22.28	22.26	
1.4	64QAM	1	5	22.30	22.18	22.20	
1.4	64QAM	3	0	22.31	22.20	22.20	
1.4	64QAM	3	1	22.34	22.24	22.23	
1.4	64QAM	3	3	22.31	22.19	22.18	
1.4	64QAM	6	0	21.20	21.08	21.12	22.2

Band 17							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				23780	23790	23800	
Frequency (MHz)				709	710	711	
10	QPSK	1	0	22.05	22.01	22.03	24
10	QPSK	1	25	22.18	22.01	22.02	
10	QPSK	1	49	22.21	22.00	22.11	
10	QPSK	25	0	22.29	22.08	22.00	24
10	QPSK	25	12	22.31	22.07	22.01	
10	QPSK	25	25	22.19	22.04	22.02	
10	QPSK	50	0	22.20	22.13	22.03	
10	16QAM	1	0	22.44	22.19	22.21	24
10	16QAM	1	25	22.39	22.28	22.31	
10	16QAM	1	49	22.51	22.35	22.43	
10	16QAM	25	0	22.24	22.15	22.04	23.2
10	16QAM	25	12	22.32	22.20	22.21	
10	16QAM	25	25	22.21	22.20	22.06	
10	16QAM	50	0	22.34	22.22	22.11	
10	64QAM	1	0	22.27	22.20	22.31	23.2
10	64QAM	1	25	22.45	22.26	22.20	
10	64QAM	1	49	22.35	22.24	22.25	
10	64QAM	25	0	21.32	21.14	21.10	22.2
10	64QAM	25	12	21.39	21.21	21.16	
10	64QAM	25	25	21.38	21.19	21.14	
10	64QAM	50	0	21.28	21.17	21.08	
Channel				23755	23790	23825	Tune-up limit (dBm)
Frequency (MHz)				706.5	710	713.5	
5	QPSK	1	0	22.02	22.00	22.01	24
5	QPSK	1	12	22.03	22.01	22.00	
5	QPSK	1	24	22.02	22.01	22.05	
5	QPSK	12	0	22.09	22.03	22.01	24
5	QPSK	12	7	22.03	22.00	22.17	
5	QPSK	12	13	22.15	22.01	22.07	
5	QPSK	25	0	22.12	22.05	22.00	
5	16QAM	1	0	22.38	22.32	22.31	24
5	16QAM	1	12	22.23	22.30	22.37	
5	16QAM	1	24	22.37	22.35	22.38	
5	16QAM	12	0	22.11	22.18	22.04	23.2
5	16QAM	12	7	22.18	22.17	22.22	
5	16QAM	12	13	22.29	22.14	22.17	
5	16QAM	25	0	22.22	22.20	22.06	
5	64QAM	1	0	22.20	22.31	22.16	23.2
5	64QAM	1	12	22.28	22.29	22.25	
5	64QAM	1	24	22.29	22.23	22.20	
5	64QAM	12	0	21.15	21.21	21.10	22.2
5	64QAM	12	7	21.24	21.27	21.25	
5	64QAM	12	13	21.27	21.18	21.22	
5	64QAM	25	0	21.28	21.09	21.06	

Band 26							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				26765	26865	26965	
Frequency (MHz)				821.5	831.5	841.5	
15	QPSK	1	0	22.26	22.27	22.19	24.1
15	QPSK	1	37	22.31	22.26	22.20	
15	QPSK	1	74	22.34	22.19	22.14	
15	QPSK	36	0	22.39	22.30	22.15	24.1
15	QPSK	36	20	22.39	22.32	22.16	
15	QPSK	36	39	22.39	22.29	22.20	
15	QPSK	75	0	22.32	22.28	22.14	
15	16QAM	1	0	22.55	22.60	22.49	24.1
15	16QAM	1	37	22.60	22.58	22.55	
15	16QAM	1	74	22.64	22.55	22.39	
15	16QAM	36	0	22.40	22.38	22.20	23.7
15	16QAM	36	20	22.38	22.35	22.23	
15	16QAM	36	39	22.47	22.34	22.23	
15	16QAM	75	0	22.39	22.35	22.20	
15	64QAM	1	0	22.51	22.46	22.41	23.7
15	64QAM	1	37	22.53	22.49	22.41	
15	64QAM	1	74	22.55	22.44	22.37	
15	64QAM	36	0	21.86	21.85	21.71	22.7
15	64QAM	36	20	21.91	21.82	21.67	
15	64QAM	36	39	21.95	21.79	21.71	
15	64QAM	75	0	21.84	21.78	21.64	
Channel				26740	26865	26990	Tune-up limit (dBm)
Frequency (MHz)				819	831.5	844	
10	QPSK	1	0	22.25	22.21	22.20	24.1
10	QPSK	1	25	22.31	22.26	22.16	
10	QPSK	1	49	22.27	22.19	22.10	
10	QPSK	25	0	22.39	22.30	22.21	24.1
10	QPSK	25	12	22.39	22.29	22.23	
10	QPSK	25	25	22.32	22.26	22.13	
10	QPSK	50	0	22.34	22.26	22.21	
10	16QAM	1	0	22.54	22.49	22.55	24.1
10	16QAM	1	25	22.61	22.59	22.46	
10	16QAM	1	49	22.54	22.52	22.39	
10	16QAM	25	0	22.43	22.40	22.26	23.7
10	16QAM	25	12	22.47	22.38	22.30	
10	16QAM	25	25	22.40	22.32	22.23	
10	16QAM	50	0	22.40	22.34	22.26	
10	64QAM	1	0	22.50	22.41	22.44	23.7
10	64QAM	1	25	22.54	22.45	22.38	
10	64QAM	1	49	22.53	22.43	22.31	
10	64QAM	25	0	21.90	21.79	21.73	22.7
10	64QAM	25	12	21.90	21.81	21.70	
10	64QAM	25	25	21.83	21.75	21.67	
10	64QAM	50	0	21.86	21.82	21.68	
Channel				26715	26865	27015	Tune-up limit (dBm)
Frequency (MHz)				816.5	831.5	846.5	
5	QPSK	1	0	22.26	22.28	22.13	24.1
5	QPSK	1	12	22.24	22.27	22.12	
5	QPSK	1	24	22.30	22.18	22.11	
5	QPSK	12	0	22.34	22.33	22.20	24.1
5	QPSK	12	7	22.31	22.32	22.20	
5	QPSK	12	13	22.40	22.30	22.16	
5	QPSK	25	0	22.38	22.28	22.14	
5	16QAM	1	0	22.51	22.59	22.47	24.1
5	16QAM	1	12	22.56	22.58	22.41	
5	16QAM	1	24	22.62	22.55	22.34	
5	16QAM	12	0	22.35	22.35	22.24	23.7
5	16QAM	12	7	22.40	22.39	22.26	
5	16QAM	12	13	22.44	22.33	22.17	
5	16QAM	25	0	22.46	22.32	22.24	
5	64QAM	1	0	22.50	22.49	22.37	23.7
5	64QAM	1	12	22.50	22.47	22.35	
5	64QAM	1	24	22.56	22.44	22.28	
5	64QAM	12	0	21.78	21.86	21.69	22.7
5	64QAM	12	7	21.84	21.89	21.72	
5	64QAM	12	13	21.89	21.84	21.65	
5	64QAM	25	0	21.91	21.79	21.64	
Channel				26705	26865	27025	Tune-up limit (dBm)
Frequency (MHz)				815.5	831.5	847.5	
3	QPSK	1	0	22.24	22.24	22.11	24.1
3	QPSK	1	8	22.23	22.22	22.13	
3	QPSK	1	14	22.25	22.21	22.14	
3	QPSK	8	0	22.26	22.26	22.11	24.1
3	QPSK	8	4	22.31	22.31	22.17	
3	QPSK	8	7	22.26	22.26	22.10	
3	QPSK	15	0	22.28	22.27	22.13	
3	16QAM	1	0	22.47	22.53	22.38	24.1
3	16QAM	1	8	22.52	22.56	22.36	
3	16QAM	1	14	22.54	22.53	22.32	
3	16QAM	8	0	22.42	22.38	22.22	23.7
3	16QAM	8	4	22.41	22.41	22.25	
3	16QAM	8	7	22.40	22.34	22.23	
3	16QAM	15	0	22.35	22.36	22.18	
3	64QAM	1	0	22.50	22.43	22.31	23.7
3	64QAM	1	8	22.48	22.44	22.31	
3	64QAM	1	14	22.50	22.46	22.31	
3	64QAM	8	0	21.79	21.82	21.64	22.7
3	64QAM	8	4	21.80	21.85	21.67	
3	64QAM	8	7	21.75	21.80	21.66	
3	64QAM	15	0	21.74	21.78	21.60	
Channel				26697	26865	27033	Tune-up limit (dBm)
Frequency (MHz)				814.7	831.5	848.3	
1.4	QPSK	1	0	22.17	22.13	22.11	24.1
1.4	QPSK	1	3	22.26	22.23	22.16	
1.4	QPSK	1	5	22.18	22.14	22.12	
1.4	QPSK	3	0	22.20	22.17	22.14	
1.4	QPSK	3	1	22.25	22.24	22.15	
1.4	QPSK	3	3	22.23	22.18	22.12	
1.4	QPSK	6	0	22.22	22.22	22.13	24.1
1.4	16QAM	1	0	22.42	22.47	22.28	24.1
1.4	16QAM	1	3	22.52	22.58	22.33	
1.4	16QAM	1	5	22.45	22.49	22.24	
1.4	16QAM	3	0	22.27	22.28	22.14	
1.4	16QAM	3	1	22.31	22.32	22.13	
1.4	16QAM	3	3	22.26	22.25	22.10	
1.4	16QAM	6	0	22.34	22.33	22.18	23.7
1.4	64QAM	1	0	22.45	22.38	22.27	23.7
1.4	64QAM	1	3	22.49	22.44	22.33	
1.4	64QAM	1	5	22.43	22.36	22.23	
1.4	64QAM	3	0	22.43	22.37	22.24	
1.4	64QAM	3	1	22.48	22.42	22.27	
1.4	64QAM	3	3	22.42	22.40	22.22	
1.4	64QAM	6	0	21.67	21.73	21.60	22.7

Band 71							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				133222	133322	133372	
Frequency (MHz)				673	683	688	
20	QPSK	1	0	22.70	22.71	22.82	24.7
20	QPSK	1	49	22.73	22.72	22.83	
20	QPSK	1	99	22.86	22.72	22.84	
20	QPSK	50	0	22.84	22.83	22.82	24.7
20	QPSK	50	24	22.87	22.79	22.80	
20	QPSK	50	50	22.89	22.84	22.88	
20	QPSK	100	0	22.83	22.78	22.70	
20	16QAM	1	0	22.96	23.04	23.25	24.7
20	16QAM	1	49	23.08	23.02	23.20	
20	16QAM	1	99	23.17	23.09	23.22	
20	16QAM	50	0	22.60	22.59	22.61	23.7
20	16QAM	50	24	22.66	22.58	22.60	
20	16QAM	50	50	22.66	22.50	22.65	
20	16QAM	100	0	22.64	22.53	22.57	
20	64QAM	1	0	22.54	22.71	22.85	23.7
20	64QAM	1	49	22.68	22.68	22.80	
20	64QAM	1	99	22.76	22.65	22.80	
20	64QAM	50	0	21.59	21.64	21.67	22.7
20	64QAM	50	24	21.66	21.60	21.60	
20	64QAM	50	50	21.67	21.50	21.65	
20	64QAM	100	0	21.65	21.54	21.63	
Channel				133197	133297	133397	Tune-up limit (dBm)
Frequency (MHz)				670.5	680.5	690.5	
15	QPSK	1	0	22.71	22.70	22.71	24.7
15	QPSK	1	37	22.81	22.77	22.73	
15	QPSK	1	74	22.88	22.79	22.78	
15	QPSK	36	0	22.78	22.87	22.71	24.7
15	QPSK	36	20	22.87	22.87	22.81	
15	QPSK	36	39	22.95	22.81	22.75	
15	QPSK	75	0	22.85	22.83	22.78	
15	16QAM	1	0	23.02	23.00	22.95	24.7
15	16QAM	1	37	23.16	23.15	23.03	
15	16QAM	1	74	23.20	23.18	23.11	
15	16QAM	36	0	22.52	22.65	22.48	23.7
15	16QAM	36	20	22.65	22.62	22.60	
15	16QAM	36	39	22.73	22.55	22.53	
15	16QAM	75	0	22.60	22.57	22.56	
15	64QAM	1	0	22.67	22.62	22.66	23.7
15	64QAM	1	37	22.78	22.74	22.70	
15	64QAM	1	74	22.78	22.74	22.73	
15	64QAM	36	0	21.58	21.67	21.51	22.7
15	64QAM	36	20	21.70	21.65	21.62	
15	64QAM	36	39	21.76	21.62	21.54	
15	64QAM	75	0	21.65	21.57	21.55	
Channel				133172	133272	133422	Tune-up limit (dBm)
Frequency (MHz)				668	678	693	
10	QPSK	1	0	22.73	22.70	22.72	24.7
10	QPSK	1	25	22.77	22.72	22.70	
10	QPSK	1	49	22.81	22.75	22.75	
10	QPSK	25	0	22.84	22.82	22.80	24.7
10	QPSK	25	12	22.93	22.88	22.80	
10	QPSK	25	25	22.89	22.84	22.73	
10	QPSK	50	0	22.94	22.89	22.73	
10	16QAM	1	0	23.08	23.03	23.06	24.7
10	16QAM	1	25	23.02	23.05	23.07	
10	16QAM	1	49	23.17	23.01	23.09	
10	16QAM	25	0	22.63	22.54	22.57	23.7
10	16QAM	25	12	22.73	22.67	22.56	
10	16QAM	25	25	22.68	22.58	22.53	
10	16QAM	50	0	22.72	22.61	22.52	
10	64QAM	1	0	22.67	22.60	22.67	23.7
10	64QAM	1	25	22.78	22.72	22.66	
10	64QAM	1	49	22.77	22.72	22.68	
10	64QAM	25	0	21.62	21.59	21.59	22.7
10	64QAM	25	12	21.72	21.65	21.59	
10	64QAM	25	25	21.69	21.64	21.51	
10	64QAM	50	0	21.74	21.62	21.53	
Channel				133147	133247	133447	Tune-up limit (dBm)
Frequency (MHz)				665.5	675.5	695.5	
5	QPSK	1	0	22.72	22.71	22.78	24.7
5	QPSK	1	12	22.80	22.77	22.86	
5	QPSK	1	24	22.78	22.74	22.83	
5	QPSK	12	0	22.88	22.85	22.85	24.7
5	QPSK	12	7	22.90	22.83	22.96	
5	QPSK	12	13	22.81	22.76	22.89	
5	QPSK	25	0	22.84	22.83	22.80	
5	16QAM	1	0	23.02	23.02	23.12	24.7
5	16QAM	1	12	23.14	23.09	23.22	
5	16QAM	1	24	23.03	23.07	23.17	
5	16QAM	12	0	22.67	22.60	22.61	23.7
5	16QAM	12	7	22.68	22.59	22.76	
5	16QAM	12	13	22.61	22.55	22.69	
5	16QAM	25	0	22.63	22.57	22.59	
5	64QAM	1	0	22.66	22.64	22.73	23.7
5	64QAM	1	12	22.76	22.75	22.81	
5	64QAM	1	24	22.73	22.68	22.78	
5	64QAM	12	0	21.71	21.67	21.68	22.7
5	64QAM	12	7	21.73	21.64	21.79	
5	64QAM	12	13	21.67	21.59	21.76	
5	64QAM	25	0	21.63	21.59	21.59	

Band 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)				1880	1880	1900	
20	QPSK	1	0	21.51	21.54	21.51	23.5
20	QPSK	1	49	21.50	21.50	21.54	
20	QPSK	1	99	21.52	21.51	21.58	
20	QPSK	50	0	21.50	21.56	21.56	23.5
20	QPSK	50	24	21.52	21.56	21.63	
20	QPSK	50	50	21.54	21.53	21.59	
20	QPSK	100	0	21.57	21.50	21.62	
20	16QAM	1	0	21.90	21.89	21.88	23.5
20	16QAM	1	49	21.83	21.81	21.97	
20	16QAM	1	99	21.73	21.81	21.88	
20	16QAM	50	0	21.57	21.62	21.56	23.5
20	16QAM	50	24	21.59	21.62	21.80	
20	16QAM	50	50	21.63	21.55	21.63	
20	16QAM	100	0	21.63	21.57	21.63	
20	64QAM	1	0	21.71	21.76	21.70	23.5
20	64QAM	1	49	21.70	21.71	21.80	
20	64QAM	1	99	21.68	21.72	21.79	
20	64QAM	50	0	21.56	21.61	21.59	22.5
20	64QAM	50	24	21.60	21.62	21.68	
20	64QAM	50	50	21.61	21.56	21.61	
20	64QAM	100	0	21.65	21.60	21.66	
Channel				18675	18900	19125	Tune-up limit (dBm)
Frequency (MHz)				1857.5	1880	1902.5	
15	QPSK	1	0	21.55	21.51	21.60	23.5
15	QPSK	1	37	21.55	21.56	21.56	
15	QPSK	1	74	21.50	21.55	21.58	
15	QPSK	36	0	21.58	21.54	21.59	23.5
15	QPSK	36	20	21.53	21.52	21.61	
15	QPSK	36	39	21.53	21.57	21.55	
15	QPSK	75	0	21.57	21.50	21.59	
15	16QAM	1	0	21.78	21.80	21.81	23.5
15	16QAM	1	37	21.71	21.78	21.82	
15	16QAM	1	74	21.67	21.77	21.80	
15	16QAM	36	0	21.57	21.59	21.64	23.5
15	16QAM	36	20	21.59	21.62	21.64	
15	16QAM	36	39	21.50	21.55	21.60	
15	16QAM	75	0	21.58	21.58	21.62	
15	64QAM	1	0	21.70	21.71	21.80	23.5
15	64QAM	1	37	21.69	21.70	21.79	
15	64QAM	1	74	21.56	21.70	21.78	
15	64QAM	36	0	21.59	21.61	21.68	22.5
15	64QAM	36	20	21.60	21.64	21.68	
15	64QAM	36	39	21.51	21.56	21.64	
15	64QAM	75	0	21.53	21.56	21.61	
Channel				18650	18900	19150	Tune-up limit (dBm)
Frequency (MHz)				1855	1880	1905	
10	QPSK	1	0	21.60	21.62	21.58	23.5
10	QPSK	1	25	21.56	21.50	21.67	
10	QPSK	1	49	21.57	21.50	21.59	
10	QPSK	25	0	21.52	21.54	21.64	23.5
10	QPSK	25	12	21.53	21.57	21.60	
10	QPSK	25	25	21.56	21.59	21.69	
10	QPSK	50	0	21.50	21.51	21.60	
10	16QAM	1	0	21.88	21.82	21.88	23.5
10	16QAM	1	25	21.80	21.82	21.95	
10	16QAM	1	49	21.70	21.79	21.88	
10	16QAM	25	0	21.62	21.65	21.67	23.5
10	16QAM	25	12	21.61	21.61	21.65	
10	16QAM	25	25	21.55	21.58	21.69	
10	16QAM	50	0	21.59	21.59	21.64	
10	64QAM	1	0	21.80	21.77	21.80	23.5
10	64QAM	1	25	21.71	21.71	21.87	
10	64QAM	1	49	21.69	21.71	21.82	
10	64QAM	25	0	21.60	21.62	21.67	22.5
10	64QAM	25	12	21.59	21.63	21.67	
10	64QAM	25	25	21.55	21.59	21.73	
10	64QAM	50	0	21.59	21.60	21.63	
Channel				18625	18900	19175	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1880	1907.5	
5	QPSK	1	0	21.57	21.59	21.67	23.5
5	QPSK	1	12	21.50	21.51	21.67	
5	QPSK	1	24	21.53	21.55	21.64	
5	QPSK	12	0	21.51	21.55	21.68	23.5
5	QPSK	12	7	21.54	21.55	21.71	
5	QPSK	12	13	21.58	21.51	21.66	
5	QPSK	25	0	21.50	21.52	21.71	
5	16QAM	1	0	21.79	21.79	21.92	23.5
5	16QAM	1	12	21.83	21.80	21.92	
5	16QAM	1	24	21.75	21.74	21.89	
5	16QAM	12	0	21.60	21.60	21.72	23.5
5	16QAM	12	7	21.61	21.60	21.73	
5	16QAM	12	13	21.57	21.59	21.69	
5	16QAM	25	0	21.58	21.59	21.72	
5	64QAM	1	0	21.77	21.71	21.82	23.5
5	64QAM	1	12	21.71	21.71	21.88	
5	64QAM	1	24	21.69	21.71	21.83	
5	64QAM	12	0	21.66	21.64	21.72	22.5
5	64QAM	12	7	21.59	21.63	21.67	
5	64QAM	12	13	21.53	21.69	21.65	
5	64QAM	25	0	21.59	21.68	21.63	
Channel				18615	18900	19185	Tune-up limit (dBm)
Frequency (MHz)				1851.5	1880	1908.5	
3	QPSK	1	0	21.58	21.59	21.64	23.5
3	QPSK	1	8	21.59	21.50	21.63	
3	QPSK	1	14	21.55	21.55	21.62	
3	QPSK	8	0	21.53	21.54	21.66	23.5
3	QPSK	8	4	21.57	21.58	21.72	
3	QPSK	8	7	21.58	21.53	21.67	
3	QPSK	15	0	21.50	21.52	21.67	
3	16QAM	1	0	21.76	21.76	21.88	23.5
3	16QAM	1	8	21.82	21.79	21.91	
3	16QAM	1	14	21.74	21.71	21.85	
3	16QAM	8	0	21.64	21.61	21.72	23.5
3	16QAM	8	4	21.66	21.65	21.77	
3	16QAM	8	7	21.62	21.61	21.73	
3	16QAM	15	0	21.59	21.57	21.72	
3	64QAM	1	0	21.70	21.67	21.84	23.5
3	64QAM	1	8	21.72	21.70	21.85	
3	64QAM	1	14	21.69	21.66	21.84	
3	64QAM	8	0	21.64	21.64	21.76	22.5
3	64QAM	8	4	21.66	21.66	21.80	
3	64QAM	8	7	21.61	21.61	21.77	
3	64QAM	15	0	21.59	21.59	21.75	
Channel				18607	18900	19193	Tune-up limit (dBm)
Frequency (MHz)				1850.7	1880	1909.3	
1.4	QPSK	1	0	21.54	21.54	21.57	23.5
1.4	QPSK	1	3	21.51	21.51	21.65	
1.4	QPSK	1	5	21.51	21.50	21.55	
1.4	QPSK	3	0	21.56	21.58	21.62	
1.4	QPSK	3	1	21.52	21.51	21.66	
1.4	QPSK	3	3	21.57	21.57	21.61	
1.4	QPSK	6	0	21.56	21.57	21.62	23.5
1.4	16QAM	1	0	21.74	21.75	21.86	23.5
1.4	16QAM	1	3	21.86	21.80	21.94	
1.4	16QAM	1	5	21.73	21.74	21.84	
1.4	16QAM	3	0	21.56	21.55	21.66	
1.4	16QAM	3	1	21.62	21.59	21.69	
1.4	16QAM	3	3	21.56	21.53	21.63	
1.4	16QAM	6	0	21.62	21.61	21.71	23.5
1.4	64QAM	1	0	21.67	21.64	21.80	23.5
1.4	64QAM	1	3	21.72	21.72	21.86	
1.4	64QAM	1	5	21.66	21.62	21.78	
1.4	64QAM	3	0	21.65	21.65	21.78	
1.4	64QAM	3	1	21.70	21.69	21.82	
1.4	64QAM	3	3	21.64	21.64	21.77	
1.4	64QAM	6	0	21.54	21.53	21.67	22.5

Band 4

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				20050	20175	20300	
Frequency (MHz)				1720	1732.5	1745	
20	QPSK	1	0	21.82	21.84	21.79	23.7
20	QPSK	1	49	21.85	21.77	21.82	
20	QPSK	1	99	21.76	21.80	21.76	
20	QPSK	50	0	21.96	21.87	21.85	23.7
20	QPSK	50	24	21.92	21.87	21.94	
20	QPSK	50	50	21.87	21.80	21.89	
20	QPSK	100	0	21.90	21.85	21.79	
20	16QAM	1	0	22.14	22.18	22.11	23.7
20	16QAM	1	49	22.24	22.12	22.17	
20	16QAM	1	99	22.11	22.12	22.09	
20	16QAM	50	0	22.07	21.98	21.92	23.2
20	16QAM	50	24	22.06	21.97	22.00	
20	16QAM	50	50	21.96	21.89	21.95	
20	16QAM	100	0	22.01	21.94	21.88	
20	64QAM	1	0	22.04	22.06	21.97	23.2
20	64QAM	1	49	22.10	21.98	22.05	
20	64QAM	1	99	22.00	22.00	21.95	
20	64QAM	50	0	21.37	21.28	21.23	22.2
20	64QAM	50	24	21.32	21.26	21.30	
20	64QAM	50	50	21.30	21.21	21.23	
20	64QAM	100	0	21.29	21.22	21.17	
Channel				20025	20175	20325	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1732.5	1747.5	
15	QPSK	1	0	21.81	21.85	21.91	23.7
15	QPSK	1	37	21.89	21.80	21.84	
15	QPSK	1	74	21.81	21.73	21.78	
15	QPSK	36	0	21.84	21.84	21.90	23.7
15	QPSK	36	20	21.96	21.85	21.91	
15	QPSK	36	39	21.93	21.79	21.85	
15	QPSK	75	0	21.91	21.84	21.88	
15	16QAM	1	0	22.19	22.19	22.23	23.7
15	16QAM	1	37	22.21	22.13	22.17	
15	16QAM	1	74	22.17	22.06	22.12	
15	16QAM	36	0	21.93	21.96	21.98	23.2
15	16QAM	36	20	22.07	21.95	21.99	
15	16QAM	36	39	21.98	21.90	21.94	
15	16QAM	75	0	22.02	21.92	21.94	
15	64QAM	1	0	22.06	22.08	22.11	23.2
15	64QAM	1	37	22.13	22.02	22.06	
15	64QAM	1	74	22.02	21.89	21.99	
15	64QAM	36	0	21.27	21.25	21.30	22.2
15	64QAM	36	20	21.38	21.25	21.31	
15	64QAM	36	39	21.35	21.20	21.25	
15	64QAM	75	0	21.31	21.21	21.24	
Channel				20000	20175	20350	Tune-up limit (dBm)
Frequency (MHz)				1715	1732.5	1750	
10	QPSK	1	0	21.85	21.86	21.90	23.7
10	QPSK	1	25	21.80	21.83	21.88	
10	QPSK	1	49	21.87	21.75	21.83	
10	QPSK	25	0	21.90	21.85	21.94	23.7
10	QPSK	25	12	21.88	21.89	21.95	
10	QPSK	25	25	21.93	21.83	21.89	
10	QPSK	50	0	21.95	21.85	21.93	
10	16QAM	1	0	22.20	22.20	22.22	23.7
10	16QAM	1	25	22.20	22.16	22.23	
10	16QAM	1	49	22.23	22.11	22.15	
10	16QAM	25	0	21.95	21.98	22.02	23.2
10	16QAM	25	12	21.94	21.98	22.01	
10	16QAM	25	25	22.05	21.93	21.97	
10	16QAM	50	0	22.06	21.94	21.99	
10	64QAM	1	0	22.09	22.04	22.12	23.2
10	64QAM	1	25	22.09	22.05	22.05	
10	64QAM	1	49	22.10	21.97	22.01	
10	64QAM	25	0	21.24	21.25	21.33	22.2
10	64QAM	25	12	21.24	21.25	21.31	
10	64QAM	25	25	21.35	21.23	21.27	
10	64QAM	50	0	21.36	21.24	21.30	
Channel				19975	20175	20375	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1732.5	1752.5	
5	QPSK	1	0	21.82	21.82	21.85	23.7
5	QPSK	1	12	21.84	21.81	21.83	
5	QPSK	1	24	21.76	21.78	21.79	
5	QPSK	12	0	21.85	21.84	21.87	23.7
5	QPSK	12	7	21.88	21.87	21.89	
5	QPSK	12	13	21.87	21.80	21.88	
5	QPSK	25	0	21.84	21.83	21.87	
5	16QAM	1	0	22.14	22.13	22.16	23.7
5	16QAM	1	12	22.21	22.14	22.17	
5	16QAM	1	24	22.09	22.09	22.10	
5	16QAM	12	0	21.93	21.97	21.94	23.2
5	16QAM	12	7	21.96	21.95	21.98	
5	16QAM	12	13	21.91	21.93	21.94	
5	16QAM	25	0	21.93	21.95	21.93	
5	64QAM	1	0	22.03	22.04	22.06	23.2
5	64QAM	1	12	22.09	22.02	22.06	
5	64QAM	1	24	22.00	21.96	21.98	
5	64QAM	12	0	21.30	21.28	21.28	22.2
5	64QAM	12	7	21.31	21.29	21.31	
5	64QAM	12	13	21.25	21.26	21.27	
5	64QAM	25	0	21.24	21.21	21.24	
Channel				19965	20175	20385	Tune-up limit (dBm)
Frequency (MHz)				1711.5	1732.5	1753.5	
3	QPSK	1	0	21.79	21.77	21.81	23.7
3	QPSK	1	8	21.80	21.82	21.81	
3	QPSK	1	14	21.76	21.74	21.79	
3	QPSK	8	0	21.82	21.80	21.84	23.7
3	QPSK	8	4	21.85	21.86	21.89	
3	QPSK	8	7	21.83	21.83	21.83	
3	QPSK	15	0	21.81	21.82	21.83	
3	16QAM	1	0	22.12	22.10	22.09	23.7
3	16QAM	1	8	22.16	22.11	22.14	
3	16QAM	1	14	22.08	22.10	22.10	
3	16QAM	8	0	21.97	21.95	21.96	23.2
3	16QAM	8	4	22.02	21.98	21.99	
3	16QAM	8	7	21.95	21.94	21.96	
3	16QAM	15	0	21.97	21.93	21.94	
3	64QAM	1	0	21.98	21.96	22.01	23.2
3	64QAM	1	8	22.06	22.02	22.01	
3	64QAM	1	14	22.02	21.95	21.97	
3	64QAM	8	0	21.28	21.26	21.24	22.2
3	64QAM	8	4	21.29	21.26	21.26	
3	64QAM	8	7	21.24	21.25	21.23	
3	64QAM	15	0	21.22	21.23	21.22	
Channel				19957	20175	20393	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1732.5	1754.3	
1.4	QPSK	1	0	21.76	21.74	21.77	23.7
1.4	QPSK	1	3	21.81	21.83	21.84	
1.4	QPSK	1	5	21.71	21.73	21.74	
1.4	QPSK	3	0	21.78	21.75	21.81	
1.4	QPSK	3	1	21.83	21.81	21.85	
1.4	QPSK	3	3	21.79	21.77	21.80	
1.4	QPSK	6	0	21.77	21.78	21.78	23.7
1.4	16QAM	1	0	22.09	22.08	22.06	23.7
1.4	16QAM	1	3	22.17	22.16	22.15	
1.4	16QAM	1	5	22.09	22.08	22.05	
1.4	16QAM	3	0	21.88	21.87	21.88	
1.4	16QAM	3	1	21.93	21.91	21.93	
1.4	16QAM	3	3	21.86	21.86	21.86	
1.4	16QAM	6	0	21.94	21.95	21.95	23.2
1.4	64QAM	1	0	21.99	21.93	21.93	23.2
1.4	64QAM	1	3	22.03	22.01	22.03	
1.4	64QAM	1	5	21.97	21.89	21.92	
1.4	64QAM	3	0	21.97	21.94	21.94	
1.4	64QAM	3	1	22.03	21.99	22.01	
1.4	64QAM	3	3	21.96	21.95	21.95	
1.4	64QAM	6	0	21.18	21.15	21.17	22.2

Band 7							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				20650	21100	21350	
Frequency (MHz)				2510	2535	2560	
20	QPSK	1	0	17.60	17.52	17.59	18.7
20	QPSK	1	49	17.60	17.60	17.59	
20	QPSK	1	99	17.71	17.71	17.86	
20	QPSK	50	0	17.65	17.64	17.65	18.7
20	QPSK	50	24	17.71	17.67	17.69	
20	QPSK	50	50	17.71	17.71	17.83	
20	QPSK	100	0	17.70	17.70	17.69	
20	16QAM	1	0	17.92	17.83	17.97	18.7
20	16QAM	1	49	17.95	17.92	17.97	
20	16QAM	1	99	17.81	17.82	17.82	
20	16QAM	50	0	17.72	17.74	17.76	18.7
20	16QAM	50	24	17.75	17.80	17.80	
20	16QAM	50	50	17.78	17.82	17.81	
20	16QAM	100	0	17.76	17.75	17.77	
20	64QAM	1	0	17.83	17.73	17.83	18.7
20	64QAM	1	49	17.81	17.83	17.86	
20	64QAM	1	99	17.94	17.90	17.89	
20	64QAM	50	0	17.74	17.72	17.74	18.7
20	64QAM	50	24	17.77	17.75	17.77	
20	64QAM	50	50	17.81	17.78	17.81	
20	64QAM	100	0	17.76	17.75	17.75	
Channel				20825	21100	21375	Tune-up limit (dBm)
Frequency (MHz)				2507.5	2535	2562.5	
15	QPSK	1	0	17.63	17.62	17.61	18.7
15	QPSK	1	37	17.63	17.59	17.62	
15	QPSK	1	74	17.74	17.72	17.74	
15	QPSK	36	0	17.68	17.66	17.68	18.7
15	QPSK	36	20	17.70	17.71	17.68	
15	QPSK	36	39	17.73	17.67	17.70	
15	QPSK	75	0	17.71	17.67	17.69	
15	16QAM	1	0	17.97	17.95	17.96	18.7
15	16QAM	1	37	17.96	17.96	17.97	
15	16QAM	1	74	17.80	17.69	17.71	
15	16QAM	36	0	17.73	17.74	17.73	18.7
15	16QAM	36	20	17.78	17.78	17.80	
15	16QAM	36	39	17.77	17.79	17.78	
15	16QAM	75	0	17.75	17.75	17.78	
15	64QAM	1	0	17.88	17.84	17.89	18.7
15	64QAM	1	37	17.84	17.86	17.87	
15	64QAM	1	74	17.92	17.95	17.93	
15	64QAM	36	0	17.76	17.74	17.73	18.7
15	64QAM	36	20	17.78	17.77	17.77	
15	64QAM	36	39	17.79	17.77	17.79	
15	64QAM	75	0	17.73	17.72	17.73	
Channel				20800	21100	21400	Tune-up limit (dBm)
Frequency (MHz)				2505	2535	2565	
10	QPSK	1	0	17.62	17.60	17.58	18.7
10	QPSK	1	25	17.61	17.59	17.60	
10	QPSK	1	49	17.68	17.65	17.65	
10	QPSK	25	0	17.67	17.61	17.66	18.7
10	QPSK	25	12	17.67	17.67	17.65	
10	QPSK	25	25	17.66	17.66	17.65	
10	QPSK	50	0	17.69	17.64	17.63	
10	16QAM	1	0	17.91	17.95	17.96	18.7
10	16QAM	1	25	17.96	17.96	17.94	
10	16QAM	1	49	17.81	17.83	17.99	
10	16QAM	25	0	17.73	17.73	17.71	18.7
10	16QAM	25	12	17.74	17.77	17.76	
10	16QAM	25	25	17.77	17.74	17.75	
10	16QAM	50	0	17.73	17.73	17.74	
10	64QAM	1	0	17.80	17.80	17.82	18.7
10	64QAM	1	25	17.84	17.84	17.85	
10	64QAM	1	49	17.92	17.90	17.86	
10	64QAM	25	0	17.75	17.71	17.71	18.7
10	64QAM	25	12	17.76	17.75	17.73	
10	64QAM	25	25	17.76	17.75	17.75	
10	64QAM	50	0	17.74	17.74	17.73	
Channel				20775	21100	21425	Tune-up limit (dBm)
Frequency (MHz)				2502.5	2535	2567.5	
5	QPSK	1	0	17.62	17.58	17.57	18.7
5	QPSK	1	12	17.63	17.60	17.59	
5	QPSK	1	24	17.65	17.62	17.61	
5	QPSK	12	0	17.67	17.62	17.60	18.7
5	QPSK	12	7	17.69	17.68	17.64	
5	QPSK	12	13	17.68	17.63	17.65	
5	QPSK	25	0	17.67	17.63	17.61	
5	16QAM	1	0	17.92	17.94	17.93	18.7
5	16QAM	1	12	17.79	17.95	17.91	
5	16QAM	1	24	17.81	17.97	17.93	
5	16QAM	12	0	17.71	17.70	17.71	18.7
5	16QAM	12	7	17.76	17.76	17.75	
5	16QAM	12	13	17.74	17.72	17.73	
5	16QAM	25	0	17.74	17.72	17.71	
5	64QAM	1	0	17.84	17.82	17.78	18.7
5	64QAM	1	12	17.85	17.85	17.78	
5	64QAM	1	24	17.84	17.83	17.80	
5	64QAM	12	0	17.75	17.72	17.72	18.7
5	64QAM	12	7	17.81	17.76	17.75	
5	64QAM	12	13	17.79	17.77	17.74	
5	64QAM	25	0	17.74	17.70	17.70	

Band 25

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				26140	26340	26590	
Frequency (MHz)				1860	1880	1905	
20	QPSK	1	0	21.57	21.56	21.50	23.5
20	QPSK	1	49	21.50	21.51	21.54	
20	QPSK	1	99	21.58	21.58	21.59	
20	QPSK	50	0	21.54	21.60	21.53	23.5
20	QPSK	50	24	21.58	21.64	21.64	
20	QPSK	50	50	21.57	21.52	21.60	
20	QPSK	100	0	21.61	21.57	21.62	
20	16QAM	1	0	21.97	21.95	21.91	23.5
20	16QAM	1	49	21.94	21.88	21.98	
20	16QAM	1	99	21.92	21.96	22.12	
20	16QAM	50	0	21.71	21.74	21.67	23.5
20	16QAM	50	24	21.77	21.75	21.83	
20	16QAM	50	50	21.74	21.69	21.79	
20	16QAM	100	0	21.78	21.73	21.79	
20	64QAM	1	0	21.87	21.86	21.80	23.5
20	64QAM	1	49	21.81	21.82	21.85	
20	64QAM	1	99	21.81	21.82	21.86	
20	64QAM	50	0	21.73	21.74	21.69	22.5
20	64QAM	50	24	21.74	21.77	21.78	
20	64QAM	50	50	21.75	21.70	21.73	
20	64QAM	100	0	21.80	21.72	21.74	
Channel				26115	26340	26615	Tune-up limit (dBm)
Frequency (MHz)				1857.5	1880	1907.5	
15	QPSK	1	0	21.61	21.64	21.70	23.5
15	QPSK	1	37	21.59	21.60	21.66	
15	QPSK	1	74	21.50	21.54	21.71	
15	QPSK	36	0	21.63	21.67	21.68	23.5
15	QPSK	36	20	21.66	21.67	21.71	
15	QPSK	36	39	21.59	21.64	21.69	
15	QPSK	75	0	21.64	21.66	21.70	
15	16QAM	1	0	21.92	21.94	22.03	23.5
15	16QAM	1	37	21.91	21.88	22.00	
15	16QAM	1	74	21.84	21.85	21.98	
15	16QAM	36	0	21.71	21.72	21.82	23.5
15	16QAM	36	20	21.76	21.74	21.81	
15	16QAM	36	39	21.65	21.72	21.75	
15	16QAM	75	0	21.68	21.71	21.77	
15	64QAM	1	0	21.81	21.84	21.88	23.5
15	64QAM	1	37	21.86	21.84	21.85	
15	64QAM	1	74	21.73	21.75	21.88	
15	64QAM	36	0	21.73	21.73	21.75	22.5
15	64QAM	36	20	21.74	21.75	21.77	
15	64QAM	36	39	21.66	21.71	21.74	
15	64QAM	75	0	21.68	21.69	21.74	
Channel				26090	26340	26640	Tune-up limit (dBm)
Frequency (MHz)				1855	1880	1910	
10	QPSK	1	0	21.74	21.76	21.70	23.5
10	QPSK	1	25	21.63	21.65	21.77	
10	QPSK	1	49	21.62	21.64	21.73	
10	QPSK	25	0	21.67	21.69	21.70	23.5
10	QPSK	25	12	21.69	21.69	21.74	
10	QPSK	25	25	21.59	21.64	21.76	
10	QPSK	50	0	21.64	21.68	21.66	
10	16QAM	1	0	22.03	22.04	22.04	23.5
10	16QAM	1	25	21.95	21.99	22.11	
10	16QAM	1	49	21.94	21.96	22.01	
10	16QAM	25	0	21.75	21.77	21.83	23.5
10	16QAM	25	12	21.74	21.75	21.83	
10	16QAM	25	25	21.69	21.71	21.87	
10	16QAM	50	0	21.71	21.75	21.80	
10	64QAM	1	0	21.93	21.96	21.87	23.5
10	64QAM	1	25	21.83	21.85	21.95	
10	64QAM	1	49	21.84	21.86	21.95	
10	64QAM	25	0	21.75	21.76	21.78	22.5
10	64QAM	25	12	21.75	21.76	21.77	
10	64QAM	25	25	21.69	21.71	21.86	
10	64QAM	50	0	21.71	21.74	21.77	
Channel				26065	26340	26665	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1880	1912.5	
5	QPSK	1	0	21.64	21.65	21.74	23.5
5	QPSK	1	12	21.64	21.66	21.78	
5	QPSK	1	24	21.59	21.60	21.73	
5	QPSK	12	0	21.67	21.69	21.77	23.5
5	QPSK	12	7	21.68	21.73	21.82	
5	QPSK	12	13	21.63	21.67	21.75	
5	QPSK	25	0	21.64	21.66	21.76	
5	16QAM	1	0	21.93	21.91	22.06	23.5
5	16QAM	1	12	21.94	21.96	22.10	
5	16QAM	1	24	21.92	21.91	21.99	
5	16QAM	12	0	21.71	21.74	21.87	23.5
5	16QAM	12	7	21.75	21.76	21.88	
5	16QAM	12	13	21.70	21.74	21.83	
5	16QAM	25	0	21.73	21.74	21.86	
5	64QAM	1	0	21.86	21.82	21.66	23.5
5	64QAM	1	12	21.88	21.84	21.98	
5	64QAM	1	24	21.75	21.79	21.95	
5	64QAM	12	0	21.76	21.79	21.87	22.5
5	64QAM	12	7	21.78	21.80	21.91	
5	64QAM	12	13	21.76	21.76	21.84	
5	64QAM	25	0	21.71	21.73	21.86	
Channel				26055	26340	26675	Tune-up limit (dBm)
Frequency (MHz)				1851.5	1880	1913.5	
3	QPSK	1	0	21.63	21.62	21.73	23.5
3	QPSK	1	8	21.64	21.63	21.75	
3	QPSK	1	14	21.61	21.60	21.72	
3	QPSK	8	0	21.69	21.66	21.80	23.5
3	QPSK	8	4	21.71	21.71	21.83	
3	QPSK	8	7	21.65	21.69	21.80	
3	QPSK	15	0	21.66	21.65	21.79	
3	16QAM	1	0	21.93	21.91	22.07	23.5
3	16QAM	1	8	21.94	21.95	22.06	
3	16QAM	1	14	21.89	21.89	21.99	
3	16QAM	8	0	21.75	21.76	21.88	23.5
3	16QAM	8	4	21.77	21.80	21.91	
3	16QAM	8	7	21.73	21.77	21.88	
3	16QAM	15	0	21.72	21.72	21.88	
3	64QAM	1	0	21.82	21.83	21.94	23.5
3	64QAM	1	8	21.84	21.86	21.98	
3	64QAM	1	14	21.80	21.79	21.95	
3	64QAM	8	0	21.78	21.75	21.87	22.5
3	64QAM	8	4	21.80	21.79	21.91	
3	64QAM	8	7	21.76	21.75	21.87	
3	64QAM	15	0	21.71	21.71	21.85	
Channel				26047	26340	26683	Tune-up limit (dBm)
Frequency (MHz)				1850.7	1880	1914.3	
1.4	QPSK	1	0	21.60	21.60	21.69	23.5
1.4	QPSK	1	3	21.66	21.65	21.76	
1.4	QPSK	1	5	21.57	21.57	21.70	
1.4	QPSK	3	0	21.60	21.62	21.73	
1.4	QPSK	3	1	21.67	21.66	21.76	
1.4	QPSK	3	3	21.63	21.63	21.74	
1.4	QPSK	6	0	21.58	21.62	21.72	23.5
1.4	16QAM	1	0	21.88	21.89	21.98	23.5
1.4	16QAM	1	3	21.96	22.03	22.09	
1.4	16QAM	1	5	21.87	21.86	21.99	
1.4	16QAM	3	0	21.67	21.68	21.78	
1.4	16QAM	3	1	21.74	21.74	21.82	
1.4	16QAM	3	3	21.68	21.69	21.80	
1.4	16QAM	6	0	21.74	21.75	21.89	23.5
1.4	64QAM	1	0	21.80	21.82	21.92	23.5
1.4	64QAM	1	3	21.87	21.86	21.99	
1.4	64QAM	1	5	21.78	21.76	21.89	
1.4	64QAM	3	0	21.80	21.80	21.91	
1.4	64QAM	3	1	21.86	21.83	21.96	
1.4	64QAM	3	3	21.78	21.78	21.91	
1.4	64QAM	6	0	21.68	21.68	21.81	22

Band 30							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					27710		
Frequency (MHz)					2310		
10	QPSK	1	0		19.91		21
10	QPSK	1	25		19.93		
10	QPSK	1	49		20.00		
10	QPSK	25	0		19.96		21
10	QPSK	25	12		19.99		
10	QPSK	25	25		19.96		
10	QPSK	50	0		19.97		
10	16QAM	1	0		20.22		21
10	16QAM	1	25		20.24		
10	16QAM	1	49		20.29		
10	16QAM	25	0		19.54		20.5
10	16QAM	25	12		19.56		
10	16QAM	25	25		19.53		
10	16QAM	50	0		19.55		
10	64QAM	1	0		19.68		20.5
10	64QAM	1	25		19.65		
10	64QAM	1	49		19.78		
10	64QAM	25	0		18.53		19.5
10	64QAM	25	12		18.56		
10	64QAM	25	25		18.54		
10	64QAM	50	0		18.54		
Channel				27685	27710	27735	Tune-up limit (dBm)
Frequency (MHz)				2307.5	2310	2312.5	
5	QPSK	1	0	19.90	19.90	19.88	21
5	QPSK	1	12	19.90	19.92	19.99	
5	QPSK	1	24	19.89	19.91	19.94	
5	QPSK	12	0	19.97	19.93	19.91	21
5	QPSK	12	7	19.99	19.97	19.96	
5	QPSK	12	13	19.95	19.95	20.01	
5	QPSK	25	0	19.95	19.95	19.93	
5	16QAM	1	0	20.19	20.18	20.17	21
5	16QAM	1	12	20.19	20.22	20.14	
5	16QAM	1	24	20.17	20.19	20.28	
5	16QAM	12	0	19.50	19.52	19.49	20.5
5	16QAM	12	7	19.53	19.55	19.52	
5	16QAM	12	13	19.52	19.52	19.61	
5	16QAM	25	0	19.53	19.52	19.51	
5	64QAM	1	0	19.66	19.66	19.64	20.5
5	64QAM	1	12	19.67	19.66	19.74	
5	64QAM	1	24	19.64	19.65	19.72	
5	64QAM	12	0	18.53	18.54	18.52	19.5
5	64QAM	12	7	18.57	18.58	18.55	
5	64QAM	12	13	18.55	18.56	18.64	
5	64QAM	25	0	18.52	18.53	18.50	

Band 66

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				132072	132322	132572	
Frequency (MHz)				1720	1745	1770	
20	QPSK	1	0	21.93	21.91	21.87	23.7
20	QPSK	1	49	21.93	21.92	21.84	
20	QPSK	1	99	21.88	21.86	21.70	
20	QPSK	50	0	21.83	21.85	21.79	23.7
20	QPSK	50	24	21.82	21.83	21.75	
20	QPSK	50	50	21.89	21.89	21.71	
20	QPSK	100	0	21.94	21.93	21.75	
20	16QAM	1	0	22.23	22.23	22.16	23.7
20	16QAM	1	49	22.28	22.21	22.17	
20	16QAM	1	99	22.19	22.17	21.95	
20	16QAM	50	0	21.92	21.90	21.86	23.2
20	16QAM	50	24	21.89	21.88	21.79	
20	16QAM	50	50	21.97	21.94	21.75	
20	16QAM	100	0	21.98	21.95	21.81	
20	64QAM	1	0	22.20	22.14	22.10	23.2
20	64QAM	1	49	22.21	22.15	22.11	
20	64QAM	1	99	22.13	22.09	21.89	
20	64QAM	50	0	21.21	21.22	21.14	22.2
20	64QAM	50	24	21.19	21.18	21.09	
20	64QAM	50	50	21.30	21.23	21.07	
20	64QAM	100	0	21.29	21.26	21.10	
Channel				132047	132322	132597	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1745	1772.5	
15	QPSK	1	0	21.92	21.89	21.85	23.7
15	QPSK	1	37	21.96	21.92	21.84	
15	QPSK	1	74	21.82	21.89	21.73	
15	QPSK	36	0	21.81	21.76	21.70	23.7
15	QPSK	36	20	21.86	21.87	21.77	
15	QPSK	36	39	21.78	21.84	21.70	
15	QPSK	75	0	21.79	21.87	21.71	
15	16QAM	1	0	22.22	22.14	22.12	23.7
15	16QAM	1	37	22.27	22.23	22.09	
15	16QAM	1	74	22.12	22.16	21.95	
15	16QAM	36	0	21.86	21.83	21.74	23.2
15	16QAM	36	20	21.93	21.92	21.82	
15	16QAM	36	39	21.81	21.88	21.70	
15	16QAM	75	0	21.83	21.91	21.73	
15	64QAM	1	0	22.21	22.10	22.04	23.2
15	64QAM	1	37	22.27	22.16	22.07	
15	64QAM	1	74	22.05	22.11	21.88	
15	64QAM	36	0	21.16	21.15	21.09	22.2
15	64QAM	36	20	21.27	21.24	21.13	
15	64QAM	36	39	21.14	21.18	20.98	
15	64QAM	75	0	21.16	21.21	21.04	
Channel				132022	132322	132622	Tune-up limit (dBm)
Frequency (MHz)				1715	1745	1775	
10	QPSK	1	0	21.90	21.87	21.78	23.7
10	QPSK	1	25	21.87	21.85	21.74	
10	QPSK	1	49	21.82	21.74	21.70	
10	QPSK	25	0	21.86	21.83	21.75	23.7
10	QPSK	25	12	21.86	21.83	21.72	
10	QPSK	25	25	21.83	21.79	21.71	
10	QPSK	50	0	21.85	21.81	21.70	
10	16QAM	1	0	22.21	22.14	22.05	23.7
10	16QAM	1	25	22.22	22.20	22.04	
10	16QAM	1	49	22.17	22.07	21.97	
10	16QAM	25	0	21.93	21.91	21.82	23.2
10	16QAM	25	12	21.92	21.88	21.76	
10	16QAM	25	25	21.88	21.85	21.73	
10	16QAM	50	0	21.91	21.89	21.79	
10	64QAM	1	0	22.20	22.07	22.00	23.2
10	64QAM	1	25	22.17	22.05	21.94	
10	64QAM	1	49	22.07	21.97	21.87	
10	64QAM	25	0	21.26	21.21	21.11	22.2
10	64QAM	25	12	21.24	21.17	21.06	
10	64QAM	25	25	21.19	21.16	21.03	
10	64QAM	50	0	21.21	21.18	21.10	
Channel				131997	132322	132647	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1745	1777.5	
5	QPSK	1	0	21.75	21.71	21.70	23.7
5	QPSK	1	12	21.92	21.84	21.72	
5	QPSK	1	24	21.72	21.73	21.75	
5	QPSK	12	0	21.83	21.81	21.72	23.7
5	QPSK	12	7	21.90	21.88	21.77	
5	QPSK	12	13	21.80	21.76	21.71	
5	QPSK	25	0	21.86	21.77	21.73	
5	16QAM	1	0	22.06	21.98	21.87	23.7
5	16QAM	1	12	22.21	22.15	22.02	
5	16QAM	1	24	22.00	21.96	21.81	
5	16QAM	12	0	21.90	21.86	21.72	23.2
5	16QAM	12	7	21.97	21.94	21.81	
5	16QAM	12	13	21.88	21.83	21.72	
5	16QAM	25	0	21.92	21.85	21.72	
5	64QAM	1	0	22.00	21.94	21.78	23.2
5	64QAM	1	12	22.20	22.07	21.95	
5	64QAM	1	24	21.97	21.86	21.72	
5	64QAM	12	0	21.24	21.18	21.06	22.2
5	64QAM	12	7	21.32	21.29	21.13	
5	64QAM	12	13	21.22	21.16	21.02	
5	64QAM	25	0	21.21	21.15	21.02	
Channel				131987	132322	132657	Tune-up limit (dBm)
Frequency (MHz)				1711.5	1745	1778.5	
3	QPSK	1	0	21.76	21.71	21.70	23.7
3	QPSK	1	8	21.88	21.81	21.70	
3	QPSK	1	14	21.74	21.70	21.70	
3	QPSK	8	0	21.85	21.82	21.72	23.7
3	QPSK	8	4	21.91	21.85	21.73	
3	QPSK	8	7	21.86	21.81	21.70	
3	QPSK	15	0	21.85	21.80	21.71	
3	16QAM	1	0	22.08	22.00	21.87	23.7
3	16QAM	1	8	22.21	22.15	21.97	
3	16QAM	1	14	22.04	21.94	21.79	
3	16QAM	8	0	21.97	21.93	21.78	23.2
3	16QAM	8	4	22.03	21.97	21.83	
3	16QAM	8	7	21.94	21.90	21.75	
3	16QAM	15	0	21.92	21.89	21.75	
3	64QAM	1	0	22.04	21.92	21.80	23.2
3	64QAM	1	8	22.14	22.06	21.93	
3	64QAM	1	14	22.01	21.89	21.79	
3	64QAM	8	0	21.28	21.21	21.06	22.2
3	64QAM	8	4	21.32	21.25	21.12	
3	64QAM	8	7	21.28	21.19	21.05	
3	64QAM	15	0	21.20	21.17	21.04	
Channel				131979	132322	132665	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1745	1779.3	
1.4	QPSK	1	0	21.79	21.76	21.71	23.7
1.4	QPSK	1	3	21.89	21.86	21.72	
1.4	QPSK	1	5	21.79	21.71	21.70	
1.4	QPSK	3	0	21.85	21.80	21.73	
1.4	QPSK	3	1	21.89	21.85	21.71	
1.4	QPSK	3	3	21.81	21.80	21.74	
1.4	QPSK	6	0	21.84	21.82	21.76	23.7
1.4	16QAM	1	0	22.12	22.08	21.94	23.7
1.4	16QAM	1	3	22.26	22.19	22.06	
1.4	16QAM	1	5	22.11	22.02	21.91	
1.4	16QAM	3	0	21.92	21.87	21.75	
1.4	16QAM	3	1	22.02	21.95	21.80	
1.4	16QAM	3	3	21.95	21.86	21.74	
1.4	16QAM	6	0	21.97	21.93	21.79	23.2
1.4	64QAM	1	0	22.06	21.99	21.85	23.2
1.4	64QAM	1	3	22.19	22.05	21.95	
1.4	64QAM	1	5	22.05	21.96	21.82	
1.4	64QAM	3	0	22.08	21.96	21.87	
1.4	64QAM	3	1	22.11	22.05	21.92	
1.4	64QAM	3	3	22.05	21.99	21.85	
1.4	64QAM	6	0	21.19	21.16	21.01	22.2

Band 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	19.69	19.71	19.72	20.5
20	QPSK	1	49	19.72	19.75	19.78	
20	QPSK	1	99	19.66	19.76	19.78	
20	QPSK	50	0	19.82	19.78	19.73	20.5
20	QPSK	50	24	19.81	19.79	19.87	
20	QPSK	50	50	19.69	19.73	19.79	
20	QPSK	100	0	19.78	19.75	19.81	
20	16QAM	1	0	20.03	20.01	19.98	20.5
20	16QAM	1	49	20.01	20.10	20.08	
20	16QAM	1	99	19.96	20.04	20.22	
20	16QAM	50	0	19.88	19.86	19.79	20.5
20	16QAM	50	24	19.88	19.91	19.88	
20	16QAM	50	50	19.80	19.84	19.85	
20	16QAM	100	0	19.84	19.84	19.83	
20	64QAM	1	0	19.93	19.96	19.95	20.5
20	64QAM	1	49	19.91	20.06	20.01	
20	64QAM	1	99	19.87	19.94	20.03	
20	64QAM	50	0	19.89	19.88	19.83	20.5
20	64QAM	50	24	19.89	19.89	19.92	
20	64QAM	50	50	19.81	19.82	19.86	
20	64QAM	100	0	19.84	19.85	19.85	
Channel				18675	18900	19125	Tune-up limit (dBm)
Frequency (MHz)				1857.5	1880	1902.5	
15	QPSK	1	0	19.68	19.73	19.81	20.5
15	QPSK	1	37	19.62	19.73	19.77	
15	QPSK	1	74	19.65	19.70	19.77	
15	QPSK	36	0	19.70	19.78	19.81	20.5
15	QPSK	36	20	19.79	19.77	19.84	
15	QPSK	36	39	19.70	19.69	19.76	
15	QPSK	75	0	19.76	19.72	19.79	
15	16QAM	1	0	19.99	20.07	20.12	20.5
15	16QAM	1	37	19.90	20.06	20.09	
15	16QAM	1	74	19.90	20.07	20.09	
15	16QAM	36	0	19.74	19.84	19.87	20.5
15	16QAM	36	20	19.83	19.86	19.86	
15	16QAM	36	39	19.77	19.79	19.84	
15	16QAM	75	0	19.81	19.82	19.83	
15	64QAM	1	0	19.90	19.97	20.05	20.5
15	64QAM	1	37	19.87	19.99	20.00	
15	64QAM	1	74	19.86	19.93	19.99	
15	64QAM	36	0	19.80	19.85	19.89	20.5
15	64QAM	36	20	19.88	19.88	19.89	
15	64QAM	36	39	19.82	19.80	19.84	
15	64QAM	75	0	19.81	19.83	19.85	
Channel				18650	18900	19150	Tune-up limit (dBm)
Frequency (MHz)				1855	1880	1905	
10	QPSK	1	0	19.78	19.85	19.81	20.5
10	QPSK	1	25	19.65	19.73	19.84	
10	QPSK	1	49	19.74	19.73	19.80	
10	QPSK	25	0	19.70	19.76	19.82	20.5
10	QPSK	25	12	19.71	19.77	19.81	
10	QPSK	25	25	19.72	19.71	19.87	
10	QPSK	50	0	19.77	19.74	19.77	
10	16QAM	1	0	20.05	20.19	20.07	20.5
10	16QAM	1	25	19.98	20.10	20.21	
10	16QAM	1	49	20.02	20.06	20.08	
10	16QAM	25	0	19.76	19.87	19.86	20.5
10	16QAM	25	12	19.73	19.87	19.86	
10	16QAM	25	25	19.81	19.82	19.92	
10	16QAM	50	0	19.82	19.85	19.84	
10	64QAM	1	0	19.98	20.08	20.02	20.5
10	64QAM	1	25	19.92	19.98	20.07	
10	64QAM	1	49	19.97	19.94	20.01	
10	64QAM	25	0	19.79	19.85	19.88	20.5
10	64QAM	25	12	19.81	19.87	19.88	
10	64QAM	25	25	19.82	19.82	19.93	
10	64QAM	50	0	19.85	19.84	19.84	
Channel				18625	18900	19175	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1880	1907.5	
5	QPSK	1	0	19.65	19.71	19.81	20.5
5	QPSK	1	12	19.65	19.73	19.82	
5	QPSK	1	24	19.59	19.66	19.80	
5	QPSK	12	0	19.69	19.75	19.84	20.5
5	QPSK	12	7	19.70	19.74	19.88	
5	QPSK	12	13	19.66	19.72	19.85	
5	QPSK	25	0	19.66	19.74	19.84	
5	16QAM	1	0	19.94	20.01	20.11	20.5
5	16QAM	1	12	19.96	20.05	20.15	
5	16QAM	1	24	19.90	20.00	20.05	
5	16QAM	12	0	19.75	19.84	19.91	20.5
5	16QAM	12	7	19.74	19.85	19.96	
5	16QAM	12	13	19.71	19.82	19.88	
5	16QAM	25	0	19.71	19.83	19.94	
5	64QAM	1	0	19.89	19.96	20.01	20.5
5	64QAM	1	12	19.91	19.96	20.04	
5	64QAM	1	24	19.84	19.92	19.98	
5	64QAM	12	0	19.80	19.86	19.97	20.5
5	64QAM	12	7	19.85	19.87	19.97	
5	64QAM	12	13	19.78	19.82	19.95	
5	64QAM	25	0	19.77	19.82	19.93	
Channel				18615	18900	19185	Tune-up limit (dBm)
Frequency (MHz)				1851.5	1880	1908.5	
3	QPSK	1	0	19.64	19.69	19.80	20.5
3	QPSK	1	8	19.66	19.71	19.83	
3	QPSK	1	14	19.61	19.67	19.77	
3	QPSK	8	0	19.68	19.72	19.86	20.5
3	QPSK	8	4	19.71	19.77	19.91	
3	QPSK	8	7	19.67	19.74	19.85	
3	QPSK	15	0	19.67	19.74	19.85	
3	16QAM	1	0	19.93	20.01	20.14	20.5
3	16QAM	1	8	19.97	20.06	20.14	
3	16QAM	1	14	19.88	19.98	20.10	
3	16QAM	8	0	19.76	19.89	19.97	20.5
3	16QAM	8	4	19.82	19.89	19.98	
3	16QAM	8	7	19.79	19.88	19.93	
3	16QAM	15	0	19.75	19.85	19.93	
3	64QAM	1	0	19.86	19.94	20.01	20.5
3	64QAM	1	8	19.91	19.96	20.04	
3	64QAM	1	14	19.85	19.93	20.02	
3	64QAM	8	0	19.81	19.88	19.95	20.5
3	64QAM	8	4	19.85	19.91	19.97	
3	64QAM	8	7	19.79	19.85	19.92	
3	64QAM	15	0	19.78	19.84	19.91	
Channel				18607	18900	19193	Tune-up limit (dBm)
Frequency (MHz)				1850.7	1880	1909.3	
1.4	QPSK	1	0	19.63	19.66	19.75	20.5
1.4	QPSK	1	3	19.67	19.75	19.84	
1.4	QPSK	1	5	19.59	19.63	19.78	
1.4	QPSK	3	0	19.64	19.71	19.82	
1.4	QPSK	3	1	19.70	19.74	19.84	
1.4	QPSK	3	3	19.63	19.70	19.81	
1.4	QPSK	6	0	19.63	19.71	19.83	20.5
1.4	16QAM	1	0	19.91	20.02	20.09	20.5
1.4	16QAM	1	3	20.03	20.08	20.15	
1.4	16QAM	1	5	19.87	19.99	20.07	
1.4	16QAM	3	0	19.72	19.79	19.87	
1.4	16QAM	3	1	19.77	19.85	19.93	
1.4	16QAM	3	3	19.70	19.79	19.86	
1.4	16QAM	6	0	19.75	19.86	19.94	20.5
1.4	64QAM	1	0	19.87	19.92	19.94	20.5
1.4	64QAM	1	3	19.92	19.97	20.02	
1.4	64QAM	1	5	19.83	19.89	19.94	
1.4	64QAM	3	0	19.86	19.89	19.98	
1.4	64QAM	3	1	19.91	19.97	20.02	
1.4	64QAM	3	3	19.86	19.91	19.97	
1.4	64QAM	6	0	19.74	19.77	19.88	20.5

Band 4

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				20050	20175	20300	
Frequency (MHz)				1720	1732.5	1745	
20	QPSK	1	0	21.99	22.02	21.95	23.5
20	QPSK	1	49	22.01	21.92	21.95	
20	QPSK	1	99	21.94	21.94	21.86	
20	QPSK	50	0	22.10	22.02	21.97	23.5
20	QPSK	50	24	22.12	22.02	22.02	
20	QPSK	50	50	22.06	21.95	21.95	
20	QPSK	100	0	22.08	21.97	21.92	
20	16QAM	1	0	22.35	22.32	22.21	23.5
20	16QAM	1	49	22.31	22.23	22.29	
20	16QAM	1	99	22.21	22.25	22.20	
20	16QAM	50	0	22.18	22.07	22.01	23.5
20	16QAM	50	24	22.15	22.04	22.09	
20	16QAM	50	50	22.10	22.01	22.03	
20	16QAM	100	0	22.11	22.02	21.96	
20	64QAM	1	0	22.22	22.17	22.13	23.5
20	64QAM	1	49	22.22	22.14	22.21	
20	64QAM	1	99	22.17	22.17	22.11	
20	64QAM	50	0	22.16	22.10	22.02	22.7
20	64QAM	50	24	22.17	22.07	22.11	
20	64QAM	50	50	22.11	22.03	22.05	
20	64QAM	100	0	22.14	22.05	21.99	
Channel				20025	20175	20325	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1732.5	1747.5	
15	QPSK	1	0	22.00	22.00	21.99	23.5
15	QPSK	1	37	22.02	21.93	21.95	
15	QPSK	1	74	21.97	21.87	21.84	
15	QPSK	36	0	22.00	22.02	22.02	23.5
15	QPSK	36	20	22.14	22.01	22.01	
15	QPSK	36	39	22.04	21.95	21.97	
15	QPSK	75	0	22.09	21.99	22.01	
15	16QAM	1	0	22.32	22.31	22.32	23.5
15	16QAM	1	37	22.30	22.22	22.27	
15	16QAM	1	74	22.28	22.18	22.17	
15	16QAM	36	0	22.05	22.06	22.09	23.5
15	16QAM	36	20	22.18	22.05	22.08	
15	16QAM	36	39	22.11	22.02	22.03	
15	16QAM	75	0	22.14	22.03	22.06	
15	64QAM	1	0	22.27	22.22	22.26	23.5
15	64QAM	1	37	22.26	22.15	22.22	
15	64QAM	1	74	22.17	22.06	22.10	
15	64QAM	36	0	22.11	22.10	22.11	22.7
15	64QAM	36	20	22.21	22.07	22.12	
15	64QAM	36	39	22.13	22.04	22.08	
15	64QAM	75	0	22.15	22.04	22.06	
Channel				20000	20175	20350	Tune-up limit (dBm)
Frequency (MHz)				1715	1732.5	1750	
10	QPSK	1	0	22.02	21.97	21.99	23.5
10	QPSK	1	25	21.98	21.93	21.96	
10	QPSK	1	49	22.00	21.89	21.88	
10	QPSK	25	0	22.02	22.03	22.02	23.5
10	QPSK	25	12	22.00	21.99	21.99	
10	QPSK	25	25	22.09	21.94	21.96	
10	QPSK	50	0	22.12	21.99	21.98	
10	16QAM	1	0	22.30	22.25	22.30	23.5
10	16QAM	1	25	22.26	22.24	22.26	
10	16QAM	1	49	22.33	22.15	22.19	
10	16QAM	25	0	22.11	22.06	22.10	23.5
10	16QAM	25	12	22.06	22.06	22.08	
10	16QAM	25	25	22.14	22.02	22.04	
10	16QAM	50	0	22.13	22.04	22.04	
10	64QAM	1	0	22.24	22.22	22.24	23.5
10	64QAM	1	25	22.17	22.16	22.17	
10	64QAM	1	49	22.22	22.09	22.07	
10	64QAM	25	0	22.10	22.08	22.09	22.7
10	64QAM	25	12	22.06	22.07	22.09	
10	64QAM	25	25	22.15	22.05	22.04	
10	64QAM	50	0	22.19	22.04	22.06	
Channel				19975	20175	20375	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1732.5	1752.5	
5	QPSK	1	0	21.99	21.99	21.92	23.5
5	QPSK	1	12	22.00	21.96	21.92	
5	QPSK	1	24	21.92	21.89	21.86	
5	QPSK	12	0	22.03	21.99	21.97	23.5
5	QPSK	12	7	22.06	22.01	21.98	
5	QPSK	12	13	21.99	21.99	21.93	
5	QPSK	25	0	22.00	22.02	21.98	
5	16QAM	1	0	22.33	22.28	22.20	23.5
5	16QAM	1	12	22.29	22.26	22.25	
5	16QAM	1	24	22.20	22.18	22.14	
5	16QAM	12	0	22.07	22.03	22.04	23.5
5	16QAM	12	7	22.14	22.06	22.06	
5	16QAM	12	13	22.08	22.00	22.00	
5	16QAM	25	0	22.08	22.06	22.00	
5	64QAM	1	0	22.25	22.18	22.14	23.5
5	64QAM	1	12	22.23	22.17	22.18	
5	64QAM	1	24	22.15	22.12	22.06	
5	64QAM	12	0	22.13	22.08	22.10	22.7
5	64QAM	12	7	22.18	22.11	22.09	
5	64QAM	12	13	22.12	22.08	22.05	
5	64QAM	25	0	22.12	22.07	22.04	
Channel				19965	20175	20385	Tune-up limit (dBm)
Frequency (MHz)				1711.5	1732.5	1753.5	
3	QPSK	1	0	21.96	21.95	21.91	23.5
3	QPSK	1	8	21.98	21.95	21.92	
3	QPSK	1	14	21.96	21.92	21.88	
3	QPSK	8	0	22.00	21.99	21.94	23.5
3	QPSK	8	4	22.03	22.00	21.94	
3	QPSK	8	7	21.97	21.97	21.92	
3	QPSK	15	0	21.99	21.99	21.94	
3	16QAM	1	0	22.29	22.21	22.19	23.5
3	16QAM	1	8	22.30	22.28	22.19	
3	16QAM	1	14	22.21	22.17	22.16	
3	16QAM	8	0	22.12	22.07	22.04	23.5
3	16QAM	8	4	22.13	22.10	22.08	
3	16QAM	8	7	22.10	22.05	22.03	
3	16QAM	15	0	22.08	22.04	22.01	
3	64QAM	1	0	22.20	22.16	22.10	23.5
3	64QAM	1	8	22.20	22.15	22.12	
3	64QAM	1	14	22.17	22.13	22.08	
3	64QAM	8	0	22.12	22.06	22.05	22.7
3	64QAM	8	4	22.13	22.08	22.07	
3	64QAM	8	7	22.10	22.06	22.03	
3	64QAM	15	0	22.07	22.04	22.00	
Channel				19957	20175	20393	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1732.5	1754.3	
1.4	QPSK	1	0	21.91	21.89	21.84	23.5
1.4	QPSK	1	3	21.99	21.96	21.91	
1.4	QPSK	1	5	21.88	21.86	21.81	
1.4	QPSK	3	0	21.93	21.92	21.87	
1.4	QPSK	3	1	21.97	21.95	21.92	
1.4	QPSK	3	3	21.93	21.93	21.87	
1.4	QPSK	6	0	21.96	21.92	21.88	23.5
1.4	16QAM	1	0	22.22	22.17	22.15	23.5
1.4	16QAM	1	3	22.34	22.25	22.23	
1.4	16QAM	1	5	22.22	22.15	22.09	
1.4	16QAM	3	0	22.00	21.99	21.94	
1.4	16QAM	3	1	22.07	22.01	21.99	
1.4	16QAM	3	3	22.01	21.97	21.94	
1.4	16QAM	6	0	22.07	22.06	22.01	23.5
1.4	64QAM	1	0	22.14	22.12	22.06	23.5
1.4	64QAM	1	3	22.20	22.16	22.16	
1.4	64QAM	1	5	22.14	22.10	22.04	
1.4	64QAM	3	0	22.13	22.12	22.09	
1.4	64QAM	3	1	22.20	22.15	22.12	
1.4	64QAM	3	3	22.13	22.09	22.06	
1.4	64QAM	6	0	22.03	22.00	21.97	22.7

Band 7							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				20650	21100	21350	
Frequency (MHz)				2510	2535	2560	
20	QPSK	1	0	20.66	20.59	20.59	22
20	QPSK	1	49	20.66	20.68	20.59	
20	QPSK	1	99	20.73	20.74	20.69	
20	QPSK	50	0	20.75	20.73	20.64	22
20	QPSK	50	24	20.77	20.77	20.69	
20	QPSK	50	50	20.76	20.78	20.72	
20	QPSK	100	0	20.77	20.78	20.68	
20	16QAM	1	0	20.96	20.84	20.85	22
20	16QAM	1	49	20.92	20.96	20.92	
20	16QAM	1	99	21.00	21.02	20.91	
20	16QAM	50	0	20.80	20.88	20.81	22
20	16QAM	50	24	20.81	20.93	20.86	
20	16QAM	50	50	20.92	21.08	20.97	
20	16QAM	100	0	20.79	20.81	20.73	
20	64QAM	1	0	20.89	20.79	20.78	22
20	64QAM	1	49	20.84	20.89	20.88	
20	64QAM	1	99	20.94	20.93	20.87	
20	64QAM	50	0	20.80	20.81	20.72	22
20	64QAM	50	24	20.81	20.83	20.76	
20	64QAM	50	50	20.83	20.84	20.77	
20	64QAM	100	0	20.80	20.82	20.73	
Channel				20825	21100	21375	Tune-up limit (dBm)
Frequency (MHz)				2507.5	2535	2562.5	
15	QPSK	1	0	20.69	20.70	20.61	22
15	QPSK	1	37	20.67	20.69	20.61	
15	QPSK	1	74	20.77	20.76	20.71	
15	QPSK	36	0	20.72	20.78	20.62	22
15	QPSK	36	20	20.75	20.78	20.67	
15	QPSK	36	39	20.80	20.79	20.73	
15	QPSK	75	0	20.75	20.75	20.67	
15	16QAM	1	0	21.02	21.00	20.93	22
15	16QAM	1	37	20.94	20.98	20.89	
15	16QAM	1	74	20.99	21.07	20.95	
15	16QAM	36	0	20.79	20.83	20.71	22
15	16QAM	36	20	20.79	20.82	20.75	
15	16QAM	36	39	20.79	20.83	20.71	
15	16QAM	75	0	20.77	20.81	20.72	
15	64QAM	1	0	20.91	20.93	20.84	22
15	64QAM	1	37	20.85	20.91	20.79	
15	64QAM	1	74	20.95	20.94	20.88	
15	64QAM	36	0	20.79	20.81	20.73	22
15	64QAM	36	20	20.83	20.84	20.74	
15	64QAM	36	39	20.82	20.83	20.73	
15	64QAM	75	0	20.76	20.78	20.69	
Channel				20800	21100	21400	Tune-up limit (dBm)
Frequency (MHz)				2505	2535	2565	
10	QPSK	1	0	20.67	20.69	20.58	22
10	QPSK	1	25	20.68	20.69	20.59	
10	QPSK	1	49	20.71	20.74	20.63	
10	QPSK	25	0	20.70	20.75	20.60	22
10	QPSK	25	12	20.74	20.77	20.64	
10	QPSK	25	25	20.72	20.77	20.67	
10	QPSK	50	0	20.72	20.74	20.64	
10	16QAM	1	0	20.99	20.99	20.90	22
10	16QAM	1	25	20.99	20.98	20.90	
10	16QAM	1	49	20.96	20.95	20.92	
10	16QAM	25	0	20.76	20.80	20.68	22
10	16QAM	25	12	20.77	20.82	20.71	
10	16QAM	25	25	20.79	20.81	20.70	
10	16QAM	50	0	20.78	20.81	20.69	
10	64QAM	1	0	20.88	20.89	20.80	22
10	64QAM	1	25	20.86	20.91	20.77	
10	64QAM	1	49	20.91	20.90	20.84	
10	64QAM	25	0	20.77	20.78	20.67	22
10	64QAM	25	12	20.79	20.82	20.70	
10	64QAM	25	25	20.79	20.81	20.72	
10	64QAM	50	0	20.77	20.78	20.69	
Channel				20775	21100	21425	Tune-up limit (dBm)
Frequency (MHz)				2502.5	2535	2567.5	
5	QPSK	1	0	20.65	20.68	20.58	22
5	QPSK	1	12	20.66	20.70	20.57	
5	QPSK	1	24	20.69	20.71	20.61	
5	QPSK	12	0	20.72	20.71	20.60	22
5	QPSK	12	7	20.75	20.77	20.63	
5	QPSK	12	13	20.74	20.72	20.63	
5	QPSK	25	0	20.70	20.70	20.62	
5	16QAM	1	0	20.99	20.96	20.85	22
5	16QAM	1	12	21.02	20.96	20.81	
5	16QAM	1	24	20.99	20.95	20.88	
5	16QAM	12	0	20.78	20.77	20.65	22
5	16QAM	12	7	20.80	20.80	20.69	
5	16QAM	12	13	20.78	20.80	20.68	
5	16QAM	25	0	20.77	20.80	20.67	
5	64QAM	1	0	20.90	20.88	20.74	22
5	64QAM	1	12	20.92	20.90	20.74	
5	64QAM	1	24	20.88	20.91	20.78	
5	64QAM	12	0	20.79	20.79	20.67	22
5	64QAM	12	7	20.85	20.85	20.73	
5	64QAM	12	13	20.82	20.81	20.71	
5	64QAM	25	0	20.78	20.77	20.67	

Band 25

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				26140	26340	26590	
Frequency (MHz)				1860	1880	1905	
20	QPSK	1	0	20.00	19.92	19.80	
20	QPSK	1	49	19.94	19.87	19.74	20.5
20	QPSK	1	99	19.87	19.76	19.77	
20	QPSK	50	0	19.98	19.91	19.84	
20	QPSK	50	24	20.00	19.93	19.84	20.5
20	QPSK	50	50	19.95	19.83	19.79	
20	QPSK	100	0	19.97	19.86	19.81	
20	16QAM	1	0	20.38	20.24	20.14	
20	16QAM	1	49	20.22	20.24	20.09	20.5
20	16QAM	1	99	20.19	20.09	20.07	
20	16QAM	50	0	20.09	19.99	19.91	
20	16QAM	50	24	20.11	20.00	19.92	20.5
20	16QAM	50	50	20.03	19.91	19.86	
20	16QAM	100	0	20.04	19.94	19.84	
20	64QAM	1	0	20.25	20.14	20.05	
20	64QAM	1	49	20.19	20.17	19.97	20.5
20	64QAM	1	99	20.11	19.99	20.02	
20	64QAM	50	0	20.10	19.98	19.90	
20	64QAM	50	24	20.10	20.02	19.91	20.5
20	64QAM	50	50	20.01	19.92	19.84	
20	64QAM	100	0	20.06	19.95	19.85	
Channel				26115	26340	26615	Tune-up limit (dBm)
Frequency (MHz)				1857.5	1880	1907.5	
15	QPSK	1	0	19.96	19.86	19.77	
15	QPSK	1	37	19.92	19.84	19.82	20.5
15	QPSK	1	74	19.84	19.75	19.76	
15	QPSK	36	0	20.00	19.85	19.80	
15	QPSK	36	20	20.00	19.89	19.78	20.5
15	QPSK	36	39	19.96	19.80	19.84	
15	QPSK	75	0	19.97	19.86	19.76	
15	16QAM	1	0	20.30	20.18	20.14	
15	16QAM	1	37	20.21	20.17	20.18	20.5
15	16QAM	1	74	20.19	20.05	20.06	
15	16QAM	36	0	20.07	19.94	19.86	
15	16QAM	36	20	20.10	19.98	19.88	20.5
15	16QAM	36	39	19.99	19.90	19.94	
15	16QAM	75	0	20.02	19.93	19.86	
15	64QAM	1	0	20.21	20.10	20.02	
15	64QAM	1	37	20.12	20.08	20.11	20.5
15	64QAM	1	74	20.09	19.96	19.99	
15	64QAM	36	0	20.11	19.98	19.89	
15	64QAM	36	20	20.10	19.99	19.89	20.5
15	64QAM	36	39	20.00	19.95	19.92	
15	64QAM	75	0	20.02	19.93	19.85	
Channel				26090	26340	26640	Tune-up limit (dBm)
Frequency (MHz)				1855	1880	1910	
10	QPSK	1	0	20.08	19.96	19.75	
10	QPSK	1	25	19.94	19.84	19.84	20.5
10	QPSK	1	49	19.95	19.84	19.77	
10	QPSK	25	0	19.99	19.88	19.80	
10	QPSK	25	12	20.01	19.87	19.86	20.5
10	QPSK	25	25	19.92	19.83	19.83	
10	QPSK	50	0	19.97	19.86	19.76	
10	16QAM	1	0	20.36	20.27	20.07	
10	16QAM	1	25	20.33	20.19	20.23	20.5
10	16QAM	1	49	20.30	20.16	20.10	
10	16QAM	25	0	20.07	19.95	19.86	
10	16QAM	25	12	20.08	19.97	19.95	20.5
10	16QAM	25	25	20.01	19.92	19.93	
10	16QAM	50	0	20.07	19.94	19.85	
10	64QAM	1	0	20.32	20.15	20.01	
10	64QAM	1	25	20.21	20.08	20.07	20.5
10	64QAM	1	49	20.15	20.06	20.02	
10	64QAM	25	0	20.08	19.98	19.87	
10	64QAM	25	12	20.08	19.97	19.95	20.5
10	64QAM	25	25	20.04	19.93	19.91	
10	64QAM	50	0	20.07	19.94	19.84	
Channel				26065	26340	26665	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1880	1912.5	
5	QPSK	1	0	19.96	19.84	19.83	
5	QPSK	1	12	19.96	19.86	19.81	20.5
5	QPSK	1	24	19.91	19.77	19.79	
5	QPSK	12	0	20.00	19.87	19.84	
5	QPSK	12	7	20.02	19.87	19.88	20.5
5	QPSK	12	13	19.96	19.84	19.85	
5	QPSK	25	0	19.97	19.85	19.84	
5	16QAM	1	0	20.26	20.10	20.16	
5	16QAM	1	12	20.27	20.14	20.16	20.5
5	16QAM	1	24	20.21	20.06	20.06	
5	16QAM	12	0	20.08	19.93	19.93	
5	16QAM	12	7	20.07	19.95	19.97	20.5
5	16QAM	12	13	20.04	19.93	19.94	
5	16QAM	25	0	20.03	19.90	19.93	
5	64QAM	1	0	20.18	20.05	20.03	
5	64QAM	1	12	20.21	20.08	20.08	20.5
5	64QAM	1	24	20.11	19.99	20.01	
5	64QAM	12	0	20.09	19.97	19.97	
5	64QAM	12	7	20.13	19.99	19.99	20.5
5	64QAM	12	13	20.07	19.95	19.96	
5	64QAM	25	0	20.05	19.92	19.91	
Channel				26055	26340	26675	Tune-up limit (dBm)
Frequency (MHz)				1851.5	1880	1913.5	
3	QPSK	1	0	19.94	19.81	19.80	
3	QPSK	1	8	19.96	19.83	19.82	20.5
3	QPSK	1	14	19.90	19.80	19.80	
3	QPSK	8	0	20.01	19.86	19.85	
3	QPSK	8	4	20.02	19.90	19.87	20.5
3	QPSK	8	7	19.96	19.86	19.83	
3	QPSK	15	0	19.97	19.86	19.84	
3	16QAM	1	0	20.27	20.13	20.15	
3	16QAM	1	8	20.28	20.16	20.17	20.5
3	16QAM	1	14	20.23	20.08	20.07	
3	16QAM	8	0	20.09	19.96	19.96	
3	16QAM	8	4	20.13	20.00	20.00	20.5
3	16QAM	8	7	20.09	19.95	19.96	
3	16QAM	15	0	20.05	19.95	19.94	
3	64QAM	1	0	20.17	20.05	20.02	
3	64QAM	1	8	20.19	20.02	20.11	20.5
3	64QAM	1	14	20.15	19.99	20.03	
3	64QAM	8	0	20.13	19.99	19.97	
3	64QAM	8	4	20.16	20.00	20.01	20.5
3	64QAM	8	7	20.11	19.97	19.96	
3	64QAM	15	0	20.06	19.95	19.93	
Channel				26047	26340	26683	Tune-up limit (dBm)
Frequency (MHz)				1850.7	1880	1914.3	
1.4	QPSK	1	0	19.91	19.77	19.76	
1.4	QPSK	1	3	19.99	19.85	19.83	
1.4	QPSK	1	5	19.89	19.80	19.75	20.5
1.4	QPSK	3	0	19.97	19.83	19.81	
1.4	QPSK	3	1	19.99	19.86	19.82	
1.4	QPSK	3	3	19.94	19.82	19.81	
1.4	QPSK	6	0	19.91	19.80	19.79	20.5
1.4	16QAM	1	0	20.23	20.06	20.02	
1.4	16QAM	1	3	20.34	20.19	20.23	
1.4	16QAM	1	5	20.20	20.04	20.09	20.5
1.4	16QAM	3	0	20.02	19.90	19.88	
1.4	16QAM	3	1	20.10	19.96	19.91	
1.4	16QAM	3	3	20.04	19.88	19.93	
1.4	16QAM	6	0	20.07	19.96	19.95	20.5
1.4	64QAM	1	0	20.17	20.00	19.99	
1.4	64QAM	1	3	20.22	20.08	20.09	
1.4	64QAM	1	5	20.13	19.98	19.99	20.5
1.4	64QAM	3	0	20.14	20.01	19.99	
1.4	64QAM	3	1	20.22	20.07	20.04	
1.4	64QAM	3	3	20.14	20.02	20.00	
1.4	64QAM	6	0	20.01	19.89	19.86	19.7

Band 30							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					27710		
Frequency (MHz)					2310		
10	QPSK	1	0		18.06		19.7
10	QPSK	1	25		18.02		
10	QPSK	1	49		18.04		
10	QPSK	25	0		18.09		19.7
10	QPSK	25	12		18.10		
10	QPSK	25	25		18.09		
10	QPSK	50	0		18.09		
10	16QAM	1	0		18.34		19.7
10	16QAM	1	25		18.39		
10	16QAM	1	49		18.42		
10	16QAM	25	0		18.15		19.7
10	16QAM	25	12		18.20		
10	16QAM	25	25		18.18		
10	16QAM	50	0		18.17		
10	64QAM	1	0		18.27		19.7
10	64QAM	1	25		18.25		
10	64QAM	1	49		18.27		
10	64QAM	25	0		18.15		19.5
10	64QAM	25	12		18.16		
10	64QAM	25	25		18.14		
10	64QAM	50	0		18.15		
Channel				27685	27710	27735	Tune-up limit (dBm)
Frequency (MHz)				2307.5	2310	2312.5	
5	QPSK	1	0	18.07	18.07	18.06	19.7
5	QPSK	1	12	18.07	18.06	18.02	
5	QPSK	1	24	18.06	18.05	18.04	
5	QPSK	12	0	18.10	18.09	18.07	19.7
5	QPSK	12	7	18.14	18.13	18.12	
5	QPSK	12	13	18.12	18.12	18.10	
5	QPSK	25	0	18.09	18.08	18.08	
5	16QAM	1	0	18.32	18.36	18.38	19.7
5	16QAM	1	12	18.38	18.42	18.42	
5	16QAM	1	24	18.39	18.41	18.39	
5	16QAM	12	0	18.17	18.17	18.16	19.7
5	16QAM	12	7	18.20	18.19	18.21	
5	16QAM	12	13	18.18	18.20	18.15	
5	16QAM	25	0	18.16	18.17	18.16	
5	64QAM	1	0	18.26	18.26	18.27	19.7
5	64QAM	1	12	18.29	18.28	18.27	
5	64QAM	1	24	18.29	18.26	18.27	
5	64QAM	12	0	18.18	18.18	18.15	19.5
5	64QAM	12	7	18.22	18.19	18.20	
5	64QAM	12	13	18.20	18.19	18.18	
5	64QAM	25	0	18.15	18.15	18.13	

Band 66

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				132072	132322	132572	
Frequency (MHz)				1720	1745	1770	
20	QPSK	1	0	22.08	22.04	21.94	23.5
20	QPSK	1	49	22.05	22.02	22.00	
20	QPSK	1	99	22.04	21.95	21.81	
20	QPSK	50	0	22.02	21.96	21.85	23.5
20	QPSK	50	24	21.95	21.92	21.80	
20	QPSK	50	50	22.04	21.97	21.86	
20	QPSK	100	0	22.09	22.00	21.80	
20	16QAM	1	0	22.41	22.31	22.24	23.5
20	16QAM	1	49	22.36	22.37	22.30	
20	16QAM	1	99	22.29	22.25	22.17	
20	16QAM	50	0	22.05	22.01	21.91	23.5
20	16QAM	50	24	22.01	21.96	21.85	
20	16QAM	50	50	22.09	22.03	21.95	
20	16QAM	100	0	22.13	22.06	21.86	
20	64QAM	1	0	22.29	22.22	22.13	23.5
20	64QAM	1	49	22.27	22.27	22.19	
20	64QAM	1	99	22.21	22.21	22.02	
20	64QAM	50	0	22.09	22.00	21.94	22.7
20	64QAM	50	24	22.03	21.96	21.69	
20	64QAM	50	50	22.12	22.03	21.51	
20	64QAM	100	0	22.12	22.06	21.71	
Channel				132047	132322	132597	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1745	1772.5	
15	QPSK	1	0	22.07	22.03	21.87	23.5
15	QPSK	1	37	22.07	22.03	21.97	
15	QPSK	1	74	21.93	21.97	21.83	
15	QPSK	36	0	21.95	21.87	21.74	23.5
15	QPSK	36	20	22.00	21.95	21.83	
15	QPSK	36	39	21.90	21.91	21.82	
15	QPSK	75	0	21.92	21.96	21.72	
15	16QAM	1	0	22.39	22.30	22.20	23.5
15	16QAM	1	37	22.36	22.29	22.30	
15	16QAM	1	74	22.24	22.26	22.18	
15	16QAM	36	0	22.02	21.92	21.80	23.5
15	16QAM	36	20	22.06	22.00	21.87	
15	16QAM	36	39	21.96	21.95	21.85	
15	16QAM	75	0	21.97	22.02	21.77	
15	64QAM	1	0	22.27	22.21	22.09	23.5
15	64QAM	1	37	22.30	22.27	22.17	
15	64QAM	1	74	22.14	22.19	22.02	
15	64QAM	36	0	22.06	21.95	21.67	22.7
15	64QAM	36	20	22.11	22.03	21.55	
15	64QAM	36	39	21.98	22.01	21.50	
15	64QAM	75	0	21.99	22.02	21.52	
Channel				132022	132322	132622	Tune-up limit (dBm)
Frequency (MHz)				1715	1745	1775	
10	QPSK	1	0	22.01	21.95	21.90	23.5
10	QPSK	1	25	22.02	21.94	21.88	
10	QPSK	1	49	21.90	21.84	21.80	
10	QPSK	25	0	22.01	21.93	21.87	23.5
10	QPSK	25	12	21.97	21.88	21.87	
10	QPSK	25	25	21.95	21.88	21.79	
10	QPSK	50	0	21.95	21.89	21.83	
10	16QAM	1	0	22.35	22.24	22.27	23.5
10	16QAM	1	25	22.37	22.22	22.21	
10	16QAM	1	49	22.20	22.14	22.13	
10	16QAM	25	0	22.05	21.97	21.95	23.5
10	16QAM	25	12	22.04	21.95	21.92	
10	16QAM	25	25	22.02	21.92	21.90	
10	16QAM	50	0	22.02	21.94	21.91	
10	64QAM	1	0	22.30	22.15	22.12	23.5
10	64QAM	1	25	22.23	22.15	22.08	
10	64QAM	1	49	22.11	22.06	21.99	
10	64QAM	25	0	22.07	21.98	21.46	22.7
10	64QAM	25	12	22.05	21.96	21.46	
10	64QAM	25	25	22.03	21.94	21.49	
10	64QAM	50	0	22.04	21.93	21.43	
Channel				131997	132322	132647	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1745	1777.5	
5	QPSK	1	0	21.90	21.82	21.71	23.5
5	QPSK	1	12	22.05	21.95	21.88	
5	QPSK	1	24	21.82	21.74	21.68	
5	QPSK	12	0	21.96	21.90	21.84	23.5
5	QPSK	12	7	22.09	21.94	21.89	
5	QPSK	12	13	21.99	21.88	21.83	
5	QPSK	25	0	21.97	21.89	21.80	
5	16QAM	1	0	22.20	22.07	22.08	23.5
5	16QAM	1	12	22.33	22.21	22.21	
5	16QAM	1	24	22.15	22.00	21.99	
5	16QAM	12	0	22.05	21.95	21.93	23.5
5	16QAM	12	7	22.11	22.02	21.98	
5	16QAM	12	13	22.03	21.90	21.86	
5	16QAM	25	0	22.05	21.92	21.87	
5	64QAM	1	0	22.12	22.01	21.96	23.5
5	64QAM	1	12	22.29	22.16	22.11	
5	64QAM	1	24	22.07	21.95	21.89	
5	64QAM	12	0	22.11	21.98	21.57	22.7
5	64QAM	12	7	22.18	22.06	21.62	
5	64QAM	12	13	22.08	21.95	21.63	
5	64QAM	25	0	22.06	21.93	21.52	
Channel				131987	132322	132657	Tune-up limit (dBm)
Frequency (MHz)				1711.5	1745	1778.5	
3	QPSK	1	0	21.89	21.81	21.70	23.5
3	QPSK	1	8	22.00	21.89	21.81	
3	QPSK	1	14	21.88	21.77	21.70	
3	QPSK	8	0	22.02	21.91	21.85	23.5
3	QPSK	8	4	22.05	21.96	21.88	
3	QPSK	8	7	22.00	21.86	21.81	
3	QPSK	15	0	22.02	21.89	21.84	
3	16QAM	1	0	22.22	22.09	22.09	23.5
3	16QAM	1	8	22.34	22.22	22.19	
3	16QAM	1	14	22.15	22.04	22.02	
3	16QAM	8	0	22.10	21.97	21.96	23.5
3	16QAM	8	4	22.19	22.06	22.04	
3	16QAM	8	7	22.10	21.97	21.94	
3	16QAM	15	0	22.08	21.97	21.93	
3	64QAM	1	0	22.14	22.00	21.93	23.5
3	64QAM	1	8	22.26	22.13	22.06	
3	64QAM	1	14	22.06	21.96	21.92	
3	64QAM	8	0	22.11	21.98	21.53	22.7
3	64QAM	8	4	22.15	22.05	21.57	
3	64QAM	8	7	22.10	21.98	21.60	
3	64QAM	15	0	22.09	21.94	21.52	
Channel				131979	132322	132665	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1745	1779.3	
1.4	QPSK	1	0	21.95	21.84	21.80	23.5
1.4	QPSK	1	3	22.03	21.94	21.86	
1.4	QPSK	1	5	21.93	21.83	21.77	
1.4	QPSK	3	0	21.98	21.91	21.83	
1.4	QPSK	3	1	22.03	21.94	21.89	
1.4	QPSK	3	3	22.00	21.90	21.85	
1.4	QPSK	6	0	22.01	21.91	21.83	23.5
1.4	16QAM	1	0	22.29	22.12	22.15	23.5
1.4	16QAM	1	3	22.40	22.25	22.24	
1.4	16QAM	1	5	22.23	22.12	22.10	
1.4	16QAM	3	0	22.10	21.98	21.93	
1.4	16QAM	3	1	22.13	22.01	21.99	
1.4	16QAM	3	3	22.08	21.96	21.92	
1.4	16QAM	6	0	22.15	22.03	22.00	23.5
1.4	64QAM	1	0	22.19	22.06	22.00	23.5
1.4	64QAM	1	3	22.31	22.18	22.11	
1.4	64QAM	1	5	22.17	22.07	21.99	
1.4	64QAM	3	0	22.19	22.07	22.00	
1.4	64QAM	3	1	22.26	22.13	22.08	
1.4	64QAM	3	3	22.18	22.05	22.01	
1.4	64QAM	6	0	22.10	21.96	21.52	22.7

Band 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	21.51	21.54	21.51	22.7
20	QPSK	1	49	21.50	21.50	21.54	
20	QPSK	1	99	21.52	21.51	21.58	
20	QPSK	50	0	21.50	21.56	21.56	22.7
20	QPSK	50	24	21.52	21.56	21.63	
20	QPSK	50	50	21.54	21.53	21.59	
20	QPSK	100	0	21.57	21.50	21.62	
20	16QAM	1	0	21.90	21.89	21.88	22.7
20	16QAM	1	49	21.83	21.81	21.97	
20	16QAM	1	99	21.73	21.81	21.88	
20	16QAM	50	0	21.57	21.62	21.56	22.7
20	16QAM	50	24	21.59	21.62	21.80	
20	16QAM	50	50	21.63	21.55	21.63	
20	16QAM	100	0	21.63	21.57	21.63	
20	64QAM	1	0	21.71	21.76	21.70	22.7
20	64QAM	1	49	21.70	21.71	21.80	
20	64QAM	1	99	21.68	21.72	21.79	
20	64QAM	50	0	21.56	21.61	21.59	22.7
20	64QAM	50	24	21.60	21.62	21.68	
20	64QAM	50	50	21.61	21.56	21.61	
20	64QAM	100	0	21.65	21.60	21.66	
Channel				18675	18900	19125	Tune-up limit (dBm)
Frequency (MHz)				1857.5	1880	1902.5	
15	QPSK	1	0	21.55	21.51	21.60	22.7
15	QPSK	1	37	21.55	21.56	21.56	
15	QPSK	1	74	21.50	21.55	21.58	
15	QPSK	36	0	21.58	21.54	21.59	22.7
15	QPSK	36	20	21.53	21.52	21.61	
15	QPSK	36	39	21.53	21.57	21.55	
15	QPSK	75	0	21.57	21.50	21.59	
15	16QAM	1	0	21.78	21.80	21.81	22.7
15	16QAM	1	37	21.71	21.78	21.82	
15	16QAM	1	74	21.67	21.77	21.80	
15	16QAM	36	0	21.57	21.59	21.64	22.7
15	16QAM	36	20	21.59	21.62	21.64	
15	16QAM	36	39	21.50	21.55	21.60	
15	16QAM	75	0	21.58	21.58	21.62	
15	64QAM	1	0	21.70	21.71	21.80	22.7
15	64QAM	1	37	21.69	21.70	21.79	
15	64QAM	1	74	21.56	21.70	21.78	
15	64QAM	36	0	21.59	21.61	21.68	22.7
15	64QAM	36	20	21.60	21.64	21.68	
15	64QAM	36	39	21.51	21.56	21.64	
15	64QAM	75	0	21.53	21.56	21.61	
Channel				18650	18900	19150	Tune-up limit (dBm)
Frequency (MHz)				1855	1880	1905	
10	QPSK	1	0	21.60	21.62	21.58	22.7
10	QPSK	1	25	21.56	21.50	21.67	
10	QPSK	1	49	21.57	21.50	21.59	
10	QPSK	25	0	21.52	21.54	21.64	22.7
10	QPSK	25	12	21.53	21.57	21.60	
10	QPSK	25	25	21.56	21.59	21.69	
10	QPSK	50	0	21.50	21.51	21.60	
10	16QAM	1	0	21.88	21.82	21.88	22.7
10	16QAM	1	25	21.80	21.82	21.95	
10	16QAM	1	49	21.70	21.79	21.88	
10	16QAM	25	0	21.62	21.65	21.67	22.7
10	16QAM	25	12	21.61	21.61	21.65	
10	16QAM	25	25	21.55	21.58	21.69	
10	16QAM	50	0	21.59	21.59	21.64	
10	64QAM	1	0	21.80	21.77	21.80	22.7
10	64QAM	1	25	21.71	21.71	21.87	
10	64QAM	1	49	21.69	21.71	21.82	
10	64QAM	25	0	21.60	21.62	21.67	22.7
10	64QAM	25	12	21.59	21.63	21.67	
10	64QAM	25	25	21.55	21.59	21.73	
10	64QAM	50	0	21.59	21.60	21.63	
Channel				18625	18900	19175	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1880	1907.5	
5	QPSK	1	0	21.57	21.59	21.67	22.7
5	QPSK	1	12	21.50	21.51	21.67	
5	QPSK	1	24	21.53	21.55	21.64	
5	QPSK	12	0	21.51	21.55	21.68	22.7
5	QPSK	12	7	21.54	21.55	21.71	
5	QPSK	12	13	21.58	21.51	21.66	
5	QPSK	25	0	21.50	21.52	21.71	
5	16QAM	1	0	21.79	21.79	21.92	22.7
5	16QAM	1	12	21.83	21.80	21.92	
5	16QAM	1	24	21.75	21.74	21.89	
5	16QAM	12	0	21.60	21.60	21.72	22.7
5	16QAM	12	7	21.61	21.60	21.73	
5	16QAM	12	13	21.57	21.59	21.69	
5	16QAM	25	0	21.58	21.59	21.72	
5	64QAM	1	0	21.77	21.71	21.82	22.7
5	64QAM	1	12	21.71	21.71	21.88	
5	64QAM	1	24	21.69	21.71	21.83	
5	64QAM	12	0	21.66	21.64	21.72	22.7
5	64QAM	12	7	21.59	21.63	21.67	
5	64QAM	12	13	21.53	21.69	21.65	
5	64QAM	25	0	21.59	21.68	21.63	
Channel				18615	18900	19185	Tune-up limit (dBm)
Frequency (MHz)				1851.5	1880	1908.5	
3	QPSK	1	0	21.58	21.59	21.64	22.7
3	QPSK	1	8	21.59	21.50	21.63	
3	QPSK	1	14	21.55	21.55	21.62	
3	QPSK	8	0	21.53	21.54	21.66	22.7
3	QPSK	8	4	21.57	21.58	21.72	
3	QPSK	8	7	21.58	21.53	21.67	
3	QPSK	15	0	21.50	21.52	21.67	
3	16QAM	1	0	21.76	21.76	21.88	22.7
3	16QAM	1	8	21.82	21.79	21.91	
3	16QAM	1	14	21.74	21.71	21.85	
3	16QAM	8	0	21.64	21.61	21.72	22.7
3	16QAM	8	4	21.66	21.65	21.77	
3	16QAM	8	7	21.62	21.61	21.73	
3	16QAM	15	0	21.59	21.57	21.72	
3	64QAM	1	0	21.70	21.67	21.84	22.7
3	64QAM	1	8	21.72	21.70	21.85	
3	64QAM	1	14	21.69	21.66	21.84	
3	64QAM	8	0	21.64	21.64	21.76	22.7
3	64QAM	8	4	21.66	21.66	21.80	
3	64QAM	8	7	21.61	21.61	21.77	
3	64QAM	15	0	21.59	21.59	21.75	
Channel				18607	18900	19193	Tune-up limit (dBm)
Frequency (MHz)				1850.7	1880	1909.3	
1.4	QPSK	1	0	21.54	21.54	21.57	22.7
1.4	QPSK	1	3	21.51	21.51	21.65	
1.4	QPSK	1	5	21.51	21.50	21.55	
1.4	QPSK	3	0	21.56	21.58	21.62	
1.4	QPSK	3	1	21.52	21.51	21.66	
1.4	QPSK	3	3	21.57	21.57	21.61	
1.4	QPSK	6	0	21.56	21.57	21.62	22.7
1.4	16QAM	1	0	21.74	21.75	21.86	22.7
1.4	16QAM	1	3	21.86	21.80	21.94	
1.4	16QAM	1	5	21.73	21.74	21.84	
1.4	16QAM	3	0	21.56	21.55	21.66	
1.4	16QAM	3	1	21.62	21.59	21.69	
1.4	16QAM	3	3	21.56	21.53	21.63	
1.4	16QAM	6	0	21.62	21.61	21.71	22.7
1.4	64QAM	1	0	21.67	21.64	21.80	22.7
1.4	64QAM	1	3	21.72	21.72	21.86	
1.4	64QAM	1	5	21.66	21.62	21.78	
1.4	64QAM	3	0	21.65	21.65	21.78	
1.4	64QAM	3	1	21.70	21.69	21.82	
1.4	64QAM	3	3	21.64	21.64	21.77	
1.4	64QAM	6	0	21.54	21.53	21.67	22.7

Band 4

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				20050	20175	20300	
Frequency (MHz)				1720	1732.5	1745	
20	QPSK	1	0	21.82	21.84	21.79	22.9
20	QPSK	1	49	21.85	21.77	21.82	
20	QPSK	1	99	21.76	21.80	21.76	
20	QPSK	50	0	21.96	21.87	21.85	22.9
20	QPSK	50	24	21.92	21.87	21.94	
20	QPSK	50	50	21.87	21.80	21.89	
20	QPSK	100	0	21.90	21.85	21.79	
20	16QAM	1	0	22.14	22.18	22.11	22.9
20	16QAM	1	49	22.24	22.12	22.17	
20	16QAM	1	99	22.11	22.12	22.09	
20	16QAM	50	0	22.07	21.98	21.92	22.9
20	16QAM	50	24	22.06	21.97	22.00	
20	16QAM	50	50	21.96	21.89	21.95	
20	16QAM	100	0	22.01	21.94	21.88	
20	64QAM	1	0	22.04	22.06	21.97	22.9
20	64QAM	1	49	22.10	21.98	22.05	
20	64QAM	1	99	22.00	22.00	21.95	
20	64QAM	50	0	21.37	21.28	21.23	22.2
20	64QAM	50	24	21.32	21.26	21.30	
20	64QAM	50	50	21.30	21.21	21.23	
20	64QAM	100	0	21.29	21.22	21.17	
Channel				20025	20175	20325	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1732.5	1747.5	
15	QPSK	1	0	21.81	21.85	21.91	22.9
15	QPSK	1	37	21.89	21.80	21.84	
15	QPSK	1	74	21.81	21.73	21.78	
15	QPSK	36	0	21.84	21.84	21.90	22.9
15	QPSK	36	20	21.96	21.85	21.91	
15	QPSK	36	39	21.93	21.79	21.85	
15	QPSK	75	0	21.91	21.84	21.88	
15	16QAM	1	0	22.19	22.19	22.23	22.9
15	16QAM	1	37	22.21	22.13	22.17	
15	16QAM	1	74	22.17	22.06	22.12	
15	16QAM	36	0	21.93	21.96	21.98	22.9
15	16QAM	36	20	22.07	21.95	21.99	
15	16QAM	36	39	21.98	21.90	21.94	
15	16QAM	75	0	22.02	21.92	21.94	
15	64QAM	1	0	22.06	22.08	22.11	22.9
15	64QAM	1	37	22.13	22.02	22.06	
15	64QAM	1	74	22.02	21.89	21.99	
15	64QAM	36	0	21.27	21.25	21.30	22.2
15	64QAM	36	20	21.38	21.25	21.31	
15	64QAM	36	39	21.35	21.20	21.25	
15	64QAM	75	0	21.31	21.21	21.24	
Channel				20000	20175	20350	Tune-up limit (dBm)
Frequency (MHz)				1715	1732.5	1750	
10	QPSK	1	0	21.85	21.86	21.90	22.9
10	QPSK	1	25	21.80	21.83	21.88	
10	QPSK	1	49	21.87	21.75	21.83	
10	QPSK	25	0	21.90	21.85	21.94	22.9
10	QPSK	25	12	21.88	21.89	21.95	
10	QPSK	25	25	21.93	21.83	21.89	
10	QPSK	50	0	21.95	21.85	21.93	
10	16QAM	1	0	22.20	22.20	22.22	22.9
10	16QAM	1	25	22.20	22.16	22.23	
10	16QAM	1	49	22.23	22.11	22.15	
10	16QAM	25	0	21.95	21.98	22.02	22.9
10	16QAM	25	12	21.94	21.98	22.01	
10	16QAM	25	25	22.05	21.93	21.97	
10	16QAM	50	0	22.06	21.94	21.99	
10	64QAM	1	0	22.09	22.04	22.12	22.9
10	64QAM	1	25	22.09	22.05	22.05	
10	64QAM	1	49	22.10	21.97	22.01	
10	64QAM	25	0	21.24	21.25	21.33	22.2
10	64QAM	25	12	21.24	21.25	21.31	
10	64QAM	25	25	21.35	21.23	21.27	
10	64QAM	50	0	21.36	21.24	21.30	
Channel				19975	20175	20375	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1732.5	1752.5	
5	QPSK	1	0	21.82	21.82	21.85	22.9
5	QPSK	1	12	21.84	21.81	21.83	
5	QPSK	1	24	21.76	21.78	21.79	
5	QPSK	12	0	21.85	21.84	21.87	22.9
5	QPSK	12	7	21.88	21.87	21.89	
5	QPSK	12	13	21.87	21.80	21.88	
5	QPSK	25	0	21.84	21.83	21.87	
5	16QAM	1	0	22.14	22.13	22.16	22.9
5	16QAM	1	12	22.21	22.14	22.17	
5	16QAM	1	24	22.09	22.09	22.10	
5	16QAM	12	0	21.93	21.97	21.94	22.9
5	16QAM	12	7	21.96	21.95	21.98	
5	16QAM	12	13	21.91	21.93	21.94	
5	16QAM	25	0	21.93	21.95	21.93	
5	64QAM	1	0	22.03	22.04	22.06	22.9
5	64QAM	1	12	22.09	22.02	22.06	
5	64QAM	1	24	22.00	21.96	21.98	
5	64QAM	12	0	21.30	21.28	21.28	22.2
5	64QAM	12	7	21.31	21.29	21.31	
5	64QAM	12	13	21.25	21.26	21.27	
5	64QAM	25	0	21.24	21.21	21.24	
Channel				19965	20175	20385	Tune-up limit (dBm)
Frequency (MHz)				1711.5	1732.5	1753.5	
3	QPSK	1	0	21.79	21.77	21.81	22.9
3	QPSK	1	8	21.80	21.82	21.81	
3	QPSK	1	14	21.76	21.74	21.79	
3	QPSK	8	0	21.82	21.80	21.84	22.9
3	QPSK	8	4	21.85	21.86	21.89	
3	QPSK	8	7	21.83	21.83	21.83	
3	QPSK	15	0	21.81	21.82	21.83	
3	16QAM	1	0	22.12	22.10	22.09	22.9
3	16QAM	1	8	22.16	22.11	22.14	
3	16QAM	1	14	22.08	22.10	22.10	
3	16QAM	8	0	21.97	21.95	21.96	22.9
3	16QAM	8	4	22.02	21.98	21.99	
3	16QAM	8	7	21.95	21.94	21.96	
3	16QAM	15	0	21.97	21.93	21.94	
3	64QAM	1	0	21.98	21.96	22.01	22.9
3	64QAM	1	8	22.06	22.02	22.01	
3	64QAM	1	14	22.02	21.95	21.97	
3	64QAM	8	0	21.28	21.26	21.24	22.2
3	64QAM	8	4	21.29	21.26	21.26	
3	64QAM	8	7	21.24	21.25	21.23	
3	64QAM	15	0	21.22	21.23	21.22	
Channel				19957	20175	20393	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1732.5	1754.3	
1.4	QPSK	1	0	21.76	21.74	21.77	22.9
1.4	QPSK	1	3	21.81	21.83	21.84	
1.4	QPSK	1	5	21.71	21.73	21.74	
1.4	QPSK	3	0	21.78	21.75	21.81	
1.4	QPSK	3	1	21.83	21.81	21.85	
1.4	QPSK	3	3	21.79	21.77	21.80	
1.4	QPSK	6	0	21.77	21.78	21.78	22.9
1.4	16QAM	1	0	22.09	22.08	22.06	22.9
1.4	16QAM	1	3	22.17	22.16	22.15	
1.4	16QAM	1	5	22.09	22.08	22.05	
1.4	16QAM	3	0	21.88	21.87	21.88	
1.4	16QAM	3	1	21.93	21.91	21.93	
1.4	16QAM	3	3	21.86	21.86	21.86	
1.4	16QAM	6	0	21.94	21.95	21.95	22.9
1.4	64QAM	1	0	21.99	21.93	21.93	22.9
1.4	64QAM	1	3	22.03	22.01	22.03	
1.4	64QAM	1	5	21.97	21.89	21.92	
1.4	64QAM	3	0	21.97	21.94	21.94	
1.4	64QAM	3	1	22.03	21.99	22.01	
1.4	64QAM	3	3	21.96	21.95	21.95	
1.4	64QAM	6	0	21.18	21.15	21.17	22.2

Band 7							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				20650	21100	21350	
Frequency (MHz)				2510	2535	2560	
20	QPSK	1	0	16.44	16.40	16.52	17.5
20	QPSK	1	49	16.45	16.53	16.46	
20	QPSK	1	99	16.57	16.64	16.57	
20	QPSK	50	0	16.51	16.52	16.52	17.5
20	QPSK	50	24	16.56	16.54	16.57	
20	QPSK	50	50	16.57	16.58	16.57	
20	QPSK	100	0	16.54	16.56	16.56	
20	16QAM	1	0	16.76	16.68	16.80	17.5
20	16QAM	1	49	16.77	16.76	16.82	
20	16QAM	1	99	16.90	16.86	16.95	
20	16QAM	50	0	16.57	16.61	16.62	17.5
20	16QAM	50	24	16.62	16.66	16.68	
20	16QAM	50	50	16.63	16.67	16.70	
20	16QAM	100	0	16.61	16.64	16.64	
20	64QAM	1	0	16.67	16.58	16.72	17.5
20	64QAM	1	49	16.68	16.70	16.79	
20	64QAM	1	99	16.82	16.80	16.81	
20	64QAM	50	0	16.63	16.61	16.62	17.5
20	64QAM	50	24	16.66	16.66	16.66	
20	64QAM	50	50	16.68	16.67	16.72	
20	64QAM	100	0	16.62	16.65	16.67	
Channel				20825	21100	21375	Tune-up limit (dBm)
Frequency (MHz)				2507.5	2535	2562.5	
15	QPSK	1	0	16.46	16.56	16.47	17.5
15	QPSK	1	37	16.48	16.55	16.46	
15	QPSK	1	74	16.58	16.66	16.58	
15	QPSK	36	0	16.50	16.53	16.49	17.5
15	QPSK	36	20	16.56	16.55	16.54	
15	QPSK	36	39	16.56	16.54	16.56	
15	QPSK	75	0	16.53	16.51	16.54	
15	16QAM	1	0	16.80	16.78	16.79	17.5
15	16QAM	1	37	16.76	16.77	16.80	
15	16QAM	1	74	16.92	16.91	16.94	
15	16QAM	36	0	16.58	16.58	16.60	17.5
15	16QAM	36	20	16.61	16.62	16.65	
15	16QAM	36	39	16.62	16.63	16.66	
15	16QAM	75	0	16.60	16.62	16.63	
15	64QAM	1	0	16.71	16.71	16.70	17.5
15	64QAM	1	37	16.72	16.71	16.72	
15	64QAM	1	74	16.82	16.81	16.84	
15	64QAM	36	0	16.63	16.62	16.60	17.5
15	64QAM	36	20	16.64	16.67	16.66	
15	64QAM	36	39	16.67	16.69	16.69	
15	64QAM	75	0	16.60	16.62	16.63	
Channel				20800	21100	21400	Tune-up limit (dBm)
Frequency (MHz)				2505	2535	2565	
10	QPSK	1	0	16.44	16.46	16.43	17.5
10	QPSK	1	25	16.44	16.51	16.45	
10	QPSK	1	49	16.51	16.49	16.52	
10	QPSK	25	0	16.46	16.49	16.48	17.5
10	QPSK	25	12	16.49	16.52	16.51	
10	QPSK	25	25	16.54	16.53	16.54	
10	QPSK	50	0	16.52	16.53	16.50	
10	16QAM	1	0	16.77	16.77	16.78	17.5
10	16QAM	1	25	16.78	16.78	16.81	
10	16QAM	1	49	16.84	16.84	16.87	
10	16QAM	25	0	16.57	16.57	16.58	17.5
10	16QAM	25	12	16.59	16.62	16.60	
10	16QAM	25	25	16.59	16.61	16.62	
10	16QAM	50	0	16.59	16.59	16.61	
10	64QAM	1	0	16.71	16.69	16.69	17.5
10	64QAM	1	25	16.72	16.71	16.72	
10	64QAM	1	49	16.78	16.76	16.80	
10	64QAM	25	0	16.60	16.59	16.58	17.5
10	64QAM	25	12	16.61	16.63	16.64	
10	64QAM	25	25	16.62	16.62	16.63	
10	64QAM	50	0	16.61	16.62	16.60	
Channel				20775	21100	21425	Tune-up limit (dBm)
Frequency (MHz)				2502.5	2535	2567.5	
5	QPSK	1	0	16.43	16.44	16.41	17.5
5	QPSK	1	12	16.47	16.43	16.43	
5	QPSK	1	24	16.48	16.50	16.47	
5	QPSK	12	0	16.46	16.48	16.44	17.5
5	QPSK	12	7	16.54	16.54	16.51	
5	QPSK	12	13	16.50	16.52	16.50	
5	QPSK	25	0	16.52	16.49	16.46	
5	16QAM	1	0	16.78	16.76	16.75	17.5
5	16QAM	1	12	16.78	16.78	16.78	
5	16QAM	1	24	16.81	16.82	16.80	
5	16QAM	12	0	16.56	16.56	16.57	17.5
5	16QAM	12	7	16.61	16.60	16.59	
5	16QAM	12	13	16.59	16.59	16.62	
5	16QAM	25	0	16.59	16.58	16.57	
5	64QAM	1	0	16.71	16.69	16.67	17.5
5	64QAM	1	12	16.74	16.71	16.67	
5	64QAM	1	24	16.75	16.71	16.71	
5	64QAM	12	0	16.62	16.59	16.59	17.5
5	64QAM	12	7	16.68	16.65	16.64	
5	64QAM	12	13	16.65	16.63	16.63	
5	64QAM	25	0	16.61	16.62	16.59	

Band 25

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				26140	26340	26590	
Frequency (MHz)				1860	1880	1905	
20	QPSK	1	0	21.57	21.56	21.50	22.7
20	QPSK	1	49	21.50	21.51	21.54	
20	QPSK	1	99	21.58	21.58	21.59	
20	QPSK	50	0	21.54	21.60	21.53	22.7
20	QPSK	50	24	21.58	21.64	21.64	
20	QPSK	50	50	21.57	21.52	21.60	
20	QPSK	100	0	21.61	21.57	21.62	
20	16QAM	1	0	21.97	21.95	21.91	22.7
20	16QAM	1	49	21.94	21.88	21.98	
20	16QAM	1	99	21.92	21.96	22.12	
20	16QAM	50	0	21.71	21.74	21.67	22.7
20	16QAM	50	24	21.77	21.75	21.83	
20	16QAM	50	50	21.74	21.69	21.79	
20	16QAM	100	0	21.78	21.73	21.79	
20	64QAM	1	0	21.87	21.86	21.80	22.7
20	64QAM	1	49	21.81	21.82	21.85	
20	64QAM	1	99	21.81	21.82	21.86	
20	64QAM	50	0	21.73	21.74	21.69	22.7
20	64QAM	50	24	21.74	21.77	21.78	
20	64QAM	50	50	21.75	21.70	21.73	
20	64QAM	100	0	21.80	21.72	21.74	
Channel				26115	26340	26615	Tune-up limit (dBm)
Frequency (MHz)				1857.5	1880	1907.5	
15	QPSK	1	0	21.61	21.64	21.70	22.7
15	QPSK	1	37	21.59	21.60	21.66	
15	QPSK	1	74	21.50	21.54	21.71	
15	QPSK	36	0	21.63	21.67	21.68	22.7
15	QPSK	36	20	21.66	21.67	21.71	
15	QPSK	36	39	21.59	21.64	21.69	
15	QPSK	75	0	21.64	21.66	21.70	
15	16QAM	1	0	21.92	21.94	22.03	22.7
15	16QAM	1	37	21.91	21.88	22.00	
15	16QAM	1	74	21.84	21.85	21.98	
15	16QAM	36	0	21.71	21.72	21.82	22.7
15	16QAM	36	20	21.76	21.74	21.81	
15	16QAM	36	39	21.65	21.72	21.75	
15	16QAM	75	0	21.68	21.71	21.77	
15	64QAM	1	0	21.81	21.84	21.88	22.7
15	64QAM	1	37	21.86	21.84	21.85	
15	64QAM	1	74	21.73	21.75	21.88	
15	64QAM	36	0	21.73	21.73	21.75	22.7
15	64QAM	36	20	21.74	21.75	21.77	
15	64QAM	36	39	21.66	21.71	21.74	
15	64QAM	75	0	21.68	21.69	21.74	
Channel				26090	26340	26640	Tune-up limit (dBm)
Frequency (MHz)				1855	1880	1910	
10	QPSK	1	0	21.74	21.76	21.70	22.7
10	QPSK	1	25	21.63	21.65	21.77	
10	QPSK	1	49	21.62	21.64	21.73	
10	QPSK	25	0	21.67	21.69	21.70	22.7
10	QPSK	25	12	21.69	21.69	21.74	
10	QPSK	25	25	21.59	21.64	21.76	
10	QPSK	50	0	21.64	21.68	21.66	
10	16QAM	1	0	22.03	22.04	22.04	22.7
10	16QAM	1	25	21.95	21.99	22.11	
10	16QAM	1	49	21.94	21.96	22.01	
10	16QAM	25	0	21.75	21.77	21.83	22.7
10	16QAM	25	12	21.74	21.75	21.83	
10	16QAM	25	25	21.69	21.71	21.87	
10	16QAM	50	0	21.71	21.75	21.80	
10	64QAM	1	0	21.93	21.96	21.87	22.7
10	64QAM	1	25	21.83	21.85	21.95	
10	64QAM	1	49	21.84	21.86	21.95	
10	64QAM	25	0	21.75	21.76	21.78	22.7
10	64QAM	25	12	21.75	21.76	21.77	
10	64QAM	25	25	21.69	21.71	21.86	
10	64QAM	50	0	21.71	21.74	21.77	
Channel				26065	26340	26665	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1880	1912.5	
5	QPSK	1	0	21.64	21.65	21.74	22.7
5	QPSK	1	12	21.64	21.66	21.78	
5	QPSK	1	24	21.59	21.60	21.73	
5	QPSK	12	0	21.67	21.69	21.77	22.7
5	QPSK	12	7	21.68	21.73	21.82	
5	QPSK	12	13	21.63	21.67	21.75	
5	QPSK	25	0	21.64	21.66	21.76	
5	16QAM	1	0	21.93	21.91	22.06	22.7
5	16QAM	1	12	21.94	21.96	22.10	
5	16QAM	1	24	21.92	21.91	21.99	
5	16QAM	12	0	21.71	21.74	21.87	22.7
5	16QAM	12	7	21.75	21.76	21.88	
5	16QAM	12	13	21.70	21.74	21.83	
5	16QAM	25	0	21.73	21.74	21.86	
5	64QAM	1	0	21.86	21.82	21.66	22.7
5	64QAM	1	12	21.88	21.84	21.98	
5	64QAM	1	24	21.75	21.79	21.95	
5	64QAM	12	0	21.76	21.79	21.87	22.7
5	64QAM	12	7	21.78	21.80	21.91	
5	64QAM	12	13	21.76	21.76	21.84	
5	64QAM	25	0	21.71	21.73	21.86	
Channel				26055	26340	26675	Tune-up limit (dBm)
Frequency (MHz)				1851.5	1880	1913.5	
3	QPSK	1	0	21.63	21.62	21.73	22.7
3	QPSK	1	8	21.64	21.63	21.75	
3	QPSK	1	14	21.61	21.60	21.72	
3	QPSK	8	0	21.69	21.66	21.80	22.7
3	QPSK	8	4	21.71	21.71	21.83	
3	QPSK	8	7	21.65	21.69	21.80	
3	QPSK	15	0	21.66	21.65	21.79	
3	16QAM	1	0	21.93	21.91	22.07	22.7
3	16QAM	1	8	21.94	21.95	22.06	
3	16QAM	1	14	21.89	21.89	21.99	
3	16QAM	8	0	21.75	21.76	21.88	22.7
3	16QAM	8	4	21.77	21.80	21.91	
3	16QAM	8	7	21.73	21.77	21.88	
3	16QAM	15	0	21.72	21.72	21.88	
3	64QAM	1	0	21.82	21.83	21.94	22.7
3	64QAM	1	8	21.84	21.86	21.98	
3	64QAM	1	14	21.80	21.79	21.95	
3	64QAM	8	0	21.78	21.75	21.87	22.7
3	64QAM	8	4	21.80	21.79	21.91	
3	64QAM	8	7	21.76	21.75	21.87	
3	64QAM	15	0	21.71	21.71	21.85	
Channel				26047	26340	26683	Tune-up limit (dBm)
Frequency (MHz)				1850.7	1880	1914.3	
1.4	QPSK	1	0	21.60	21.60	21.69	22.7
1.4	QPSK	1	3	21.66	21.65	21.76	
1.4	QPSK	1	5	21.57	21.57	21.70	
1.4	QPSK	3	0	21.60	21.62	21.73	
1.4	QPSK	3	1	21.67	21.66	21.76	
1.4	QPSK	3	3	21.63	21.63	21.74	
1.4	QPSK	6	0	21.58	21.62	21.72	22.7
1.4	16QAM	1	0	21.88	21.89	21.98	22.7
1.4	16QAM	1	3	21.96	22.03	22.09	
1.4	16QAM	1	5	21.87	21.86	21.99	
1.4	16QAM	3	0	21.67	21.68	21.78	
1.4	16QAM	3	1	21.74	21.74	21.82	
1.4	16QAM	3	3	21.68	21.69	21.80	
1.4	16QAM	6	0	21.74	21.75	21.89	22.7
1.4	64QAM	1	0	21.80	21.82	21.92	22.7
1.4	64QAM	1	3	21.87	21.86	21.99	
1.4	64QAM	1	5	21.78	21.76	21.89	
1.4	64QAM	3	0	21.80	21.80	21.91	
1.4	64QAM	3	1	21.86	21.83	21.96	
1.4	64QAM	3	3	21.78	21.78	21.91	
1.4	64QAM	6	0	21.68	21.68	21.81	22

Band 30							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					27710		
Frequency (MHz)					2310		
10	QPSK	1	0		19.18		20
10	QPSK	1	25		19.16		
10	QPSK	1	49		19.28		
10	QPSK	25	0		19.17		20
10	QPSK	25	12		19.22		
10	QPSK	25	25		19.19		
10	QPSK	50	0		19.23		
10	16QAM	1	0		19.44		20
10	16QAM	1	25		19.41		
10	16QAM	1	49		19.56		
10	16QAM	25	0		19.23		20
10	16QAM	25	12		19.25		
10	16QAM	25	25		19.25		
10	16QAM	50	0		19.24		
10	64QAM	1	0		19.37		20
10	64QAM	1	25		19.37		
10	64QAM	1	49		19.50		
10	64QAM	25	0		19.26		19.5
10	64QAM	25	12		19.28		
10	64QAM	25	25		19.26		
10	64QAM	50	0		19.27		
Channel				27685	27710	27735	Tune-up limit (dBm)
Frequency (MHz)				2307.5	2310	2312.5	
5	QPSK	1	0	19.16	19.16	19.14	20
5	QPSK	1	12	19.18	19.14	19.26	
5	QPSK	1	24	19.17	19.18	19.26	
5	QPSK	12	0	19.17	19.19	19.17	20
5	QPSK	12	7	19.23	19.24	19.23	
5	QPSK	12	13	19.21	19.23	19.29	
5	QPSK	25	0	19.18	19.19	19.18	
5	16QAM	1	0	19.43	19.40	19.42	20
5	16QAM	1	12	19.44	19.45	19.55	
5	16QAM	1	24	19.44	19.42	19.51	
5	16QAM	12	0	19.25	19.23	19.24	20
5	16QAM	12	7	19.30	19.29	19.29	
5	16QAM	12	13	19.24	19.27	19.35	
5	16QAM	25	0	19.26	19.24	19.23	
5	64QAM	1	0	19.37	19.37	19.36	20
5	64QAM	1	12	19.36	19.36	19.46	
5	64QAM	1	24	19.35	19.37	19.46	
5	64QAM	12	0	19.27	19.28	19.26	19.5
5	64QAM	12	7	19.32	19.32	19.31	
5	64QAM	12	13	19.30	19.29	19.38	
5	64QAM	25	0	19.26	19.25	19.24	

Band 66

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				132072	132322	132572	
Frequency (MHz)				1720	1745	1770	
20	QPSK	1	0	21.93	21.91	21.87	22.9
20	QPSK	1	49	21.93	21.92	21.84	
20	QPSK	1	99	21.88	21.86	21.70	
20	QPSK	50	0	21.83	21.85	21.79	22.9
20	QPSK	50	24	21.82	21.83	21.75	
20	QPSK	50	50	21.89	21.89	21.71	
20	QPSK	100	0	21.94	21.93	21.75	
20	16QAM	1	0	22.23	22.23	22.16	22.9
20	16QAM	1	49	22.28	22.21	22.17	
20	16QAM	1	99	22.19	22.17	21.95	
20	16QAM	50	0	21.92	21.90	21.86	22.9
20	16QAM	50	24	21.89	21.88	21.79	
20	16QAM	50	50	21.97	21.94	21.75	
20	16QAM	100	0	21.98	21.95	21.81	
20	64QAM	1	0	22.20	22.14	22.10	22.9
20	64QAM	1	49	22.21	22.15	22.11	
20	64QAM	1	99	22.13	22.09	21.89	
20	64QAM	50	0	21.21	21.22	21.14	22.2
20	64QAM	50	24	21.19	21.18	21.09	
20	64QAM	50	50	21.30	21.23	21.07	
20	64QAM	100	0	21.29	21.26	21.10	
Channel				132047	132322	132597	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1745	1772.5	
15	QPSK	1	0	21.92	21.89	21.85	22.9
15	QPSK	1	37	21.96	21.92	21.84	
15	QPSK	1	74	21.82	21.89	21.73	
15	QPSK	36	0	21.81	21.76	21.70	22.9
15	QPSK	36	20	21.86	21.87	21.77	
15	QPSK	36	39	21.78	21.84	21.70	
15	QPSK	75	0	21.79	21.87	21.71	
15	16QAM	1	0	22.22	22.14	22.12	22.9
15	16QAM	1	37	22.27	22.23	22.09	
15	16QAM	1	74	22.12	22.16	21.95	
15	16QAM	36	0	21.86	21.83	21.74	22.9
15	16QAM	36	20	21.93	21.92	21.82	
15	16QAM	36	39	21.81	21.88	21.70	
15	16QAM	75	0	21.83	21.91	21.73	
15	64QAM	1	0	22.21	22.10	22.04	22.9
15	64QAM	1	37	22.27	22.16	22.07	
15	64QAM	1	74	22.05	22.11	21.88	
15	64QAM	36	0	21.16	21.15	21.09	22.2
15	64QAM	36	20	21.27	21.24	21.13	
15	64QAM	36	39	21.14	21.18	20.98	
15	64QAM	75	0	21.16	21.21	21.04	
Channel				132022	132322	132622	Tune-up limit (dBm)
Frequency (MHz)				1715	1745	1775	
10	QPSK	1	0	21.90	21.87	21.78	22.9
10	QPSK	1	25	21.87	21.85	21.74	
10	QPSK	1	49	21.82	21.74	21.70	
10	QPSK	25	0	21.86	21.83	21.75	22.9
10	QPSK	25	12	21.86	21.83	21.72	
10	QPSK	25	25	21.83	21.79	21.71	
10	QPSK	50	0	21.85	21.81	21.70	
10	16QAM	1	0	22.21	22.14	22.05	22.9
10	16QAM	1	25	22.22	22.20	22.04	
10	16QAM	1	49	22.17	22.07	21.97	
10	16QAM	25	0	21.93	21.91	21.82	22.9
10	16QAM	25	12	21.92	21.88	21.76	
10	16QAM	25	25	21.88	21.85	21.73	
10	16QAM	50	0	21.91	21.89	21.79	
10	64QAM	1	0	22.20	22.07	22.00	22.9
10	64QAM	1	25	22.17	22.05	21.94	
10	64QAM	1	49	22.07	21.97	21.87	
10	64QAM	25	0	21.26	21.21	21.11	22.2
10	64QAM	25	12	21.24	21.17	21.06	
10	64QAM	25	25	21.19	21.16	21.03	
10	64QAM	50	0	21.21	21.18	21.10	
Channel				131997	132322	132647	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1745	1777.5	
5	QPSK	1	0	21.75	21.71	21.70	22.9
5	QPSK	1	12	21.92	21.84	21.72	
5	QPSK	1	24	21.72	21.73	21.75	
5	QPSK	12	0	21.83	21.81	21.72	22.9
5	QPSK	12	7	21.90	21.88	21.77	
5	QPSK	12	13	21.80	21.76	21.71	
5	QPSK	25	0	21.86	21.77	21.73	
5	16QAM	1	0	22.06	21.98	21.87	22.9
5	16QAM	1	12	22.21	22.15	22.02	
5	16QAM	1	24	22.00	21.96	21.81	
5	16QAM	12	0	21.90	21.86	21.72	22.9
5	16QAM	12	7	21.97	21.94	21.81	
5	16QAM	12	13	21.88	21.83	21.72	
5	16QAM	25	0	21.92	21.85	21.72	
5	64QAM	1	0	22.00	21.94	21.78	22.9
5	64QAM	1	12	22.20	22.07	21.95	
5	64QAM	1	24	21.97	21.86	21.72	
5	64QAM	12	0	21.24	21.18	21.06	22.2
5	64QAM	12	7	21.32	21.29	21.13	
5	64QAM	12	13	21.22	21.16	21.02	
5	64QAM	25	0	21.21	21.15	21.02	
Channel				131987	132322	132657	Tune-up limit (dBm)
Frequency (MHz)				1711.5	1745	1778.5	
3	QPSK	1	0	21.76	21.71	21.70	22.9
3	QPSK	1	8	21.88	21.81	21.70	
3	QPSK	1	14	21.74	21.70	21.70	
3	QPSK	8	0	21.85	21.82	21.72	22.9
3	QPSK	8	4	21.91	21.85	21.73	
3	QPSK	8	7	21.86	21.81	21.70	
3	QPSK	15	0	21.85	21.80	21.71	
3	16QAM	1	0	22.08	22.00	21.87	22.9
3	16QAM	1	8	22.21	22.15	21.97	
3	16QAM	1	14	22.04	21.94	21.79	
3	16QAM	8	0	21.97	21.93	21.78	22.9
3	16QAM	8	4	22.03	21.97	21.83	
3	16QAM	8	7	21.94	21.90	21.75	
3	16QAM	15	0	21.92	21.89	21.75	
3	64QAM	1	0	22.04	21.92	21.80	22.9
3	64QAM	1	8	22.14	22.06	21.93	
3	64QAM	1	14	22.01	21.89	21.79	
3	64QAM	8	0	21.28	21.21	21.06	22.2
3	64QAM	8	4	21.32	21.25	21.12	
3	64QAM	8	7	21.28	21.19	21.05	
3	64QAM	15	0	21.20	21.17	21.04	
Channel				131979	132322	132665	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1745	1779.3	
1.4	QPSK	1	0	21.79	21.76	21.71	22.9
1.4	QPSK	1	3	21.89	21.86	21.72	
1.4	QPSK	1	5	21.79	21.71	21.70	
1.4	QPSK	3	0	21.85	21.80	21.73	
1.4	QPSK	3	1	21.89	21.85	21.71	
1.4	QPSK	3	3	21.81	21.80	21.74	
1.4	QPSK	6	0	21.84	21.82	21.76	22.9
1.4	16QAM	1	0	22.12	22.08	21.94	22.9
1.4	16QAM	1	3	22.26	22.19	22.06	
1.4	16QAM	1	5	22.11	22.02	21.91	
1.4	16QAM	3	0	21.92	21.87	21.75	
1.4	16QAM	3	1	22.02	21.95	21.80	
1.4	16QAM	3	3	21.95	21.86	21.74	
1.4	16QAM	6	0	21.97	21.93	21.79	22.9
1.4	64QAM	1	0	22.06	21.99	21.85	22.9
1.4	64QAM	1	3	22.19	22.05	21.95	
1.4	64QAM	1	5	22.05	21.96	21.82	
1.4	64QAM	3	0	22.08	21.96	21.87	
1.4	64QAM	3	1	22.11	22.05	21.92	
1.4	64QAM	3	3	22.05	21.99	21.85	
1.4	64QAM	6	0	21.19	21.16	21.01	22.2

Band 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	18.66	18.69	18.71	19.5
20	QPSK	1	49	18.67	18.73	18.76	
20	QPSK	1	99	18.64	18.73	18.77	
20	QPSK	50	0	18.76	18.76	18.75	19.5
20	QPSK	50	24	18.79	18.79	18.83	
20	QPSK	50	50	18.70	18.70	18.77	
20	QPSK	100	0	18.75	18.75	18.80	
20	16QAM	1	0	19.02	19.01	19.04	19.5
20	16QAM	1	49	19.02	19.09	19.09	
20	16QAM	1	99	18.95	19.07	19.21	
20	16QAM	50	0	18.88	18.86	18.79	19.5
20	16QAM	50	24	18.90	18.86	18.91	
20	16QAM	50	50	18.78	18.81	18.87	
20	16QAM	100	0	18.84	18.85	18.85	
20	64QAM	1	0	18.91	18.93	18.92	19.5
20	64QAM	1	49	18.94	19.03	18.96	
20	64QAM	1	99	18.86	18.96	19.03	
20	64QAM	50	0	18.86	18.85	18.80	19.5
20	64QAM	50	24	18.88	18.87	18.87	
20	64QAM	50	50	18.79	18.80	18.84	
20	64QAM	100	0	18.81	18.86	18.83	
Channel				18675	18900	19125	Tune-up limit (dBm)
Frequency (MHz)				1857.5	1880	1902.5	
15	QPSK	1	0	18.66	18.73	18.80	19.5
15	QPSK	1	37	18.60	18.72	18.75	
15	QPSK	1	74	18.60	18.73	18.79	
15	QPSK	36	0	18.65	18.76	18.78	19.5
15	QPSK	36	20	18.75	18.77	18.81	
15	QPSK	36	39	18.72	18.73	18.74	
15	QPSK	75	0	18.73	18.75	18.78	
15	16QAM	1	0	18.97	19.08	19.09	19.5
15	16QAM	1	37	18.92	19.03	19.09	
15	16QAM	1	74	18.94	19.03	19.08	
15	16QAM	36	0	18.74	18.87	18.87	19.5
15	16QAM	36	20	18.89	18.85	18.90	
15	16QAM	36	39	18.78	18.78	18.86	
15	16QAM	75	0	18.86	18.82	18.82	
15	64QAM	1	0	18.88	18.96	19.03	19.5
15	64QAM	1	37	18.85	19.00	19.00	
15	64QAM	1	74	18.86	18.94	19.04	
15	64QAM	36	0	18.75	18.88	18.86	19.5
15	64QAM	36	20	18.88	18.91	18.90	
15	64QAM	36	39	18.78	18.81	18.85	
15	64QAM	75	0	18.83	18.81	18.83	
Channel				18650	18900	19150	Tune-up limit (dBm)
Frequency (MHz)				1855	1880	1905	
10	QPSK	1	0	18.76	18.85	18.79	19.5
10	QPSK	1	25	18.63	18.73	18.85	
10	QPSK	1	49	18.73	18.74	18.77	
10	QPSK	25	0	18.68	18.77	18.80	19.5
10	QPSK	25	12	18.66	18.75	18.79	
10	QPSK	25	25	18.71	18.72	18.87	
10	QPSK	50	0	18.75	18.76	18.77	
10	16QAM	1	0	19.08	19.15	19.14	19.5
10	16QAM	1	25	18.99	19.04	19.20	
10	16QAM	1	49	19.05	19.07	19.09	
10	16QAM	25	0	18.79	18.86	18.89	19.5
10	16QAM	25	12	18.80	18.86	18.91	
10	16QAM	25	25	18.84	18.82	18.91	
10	16QAM	50	0	18.85	18.85	18.88	
10	64QAM	1	0	18.98	19.10	18.98	19.5
10	64QAM	1	25	18.85	18.98	19.13	
10	64QAM	1	49	19.01	19.02	18.99	
10	64QAM	25	0	18.77	18.87	18.89	19.5
10	64QAM	25	12	18.75	18.88	18.88	
10	64QAM	25	25	18.83	18.83	18.96	
10	64QAM	50	0	18.84	18.87	18.85	
Channel				18625	18900	19175	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1880	1907.5	
5	QPSK	1	0	18.64	18.73	18.81	19.5
5	QPSK	1	12	18.65	18.74	18.83	
5	QPSK	1	24	18.57	18.66	18.80	
5	QPSK	12	0	18.67	18.76	18.85	19.5
5	QPSK	12	7	18.68	18.77	18.89	
5	QPSK	12	13	18.61	18.73	18.83	
5	QPSK	25	0	18.65	18.72	18.89	
5	16QAM	1	0	18.99	19.01	19.15	19.5
5	16QAM	1	12	19.01	19.05	19.16	
5	16QAM	1	24	18.94	18.95	19.12	
5	16QAM	12	0	18.79	18.86	18.98	19.5
5	16QAM	12	7	18.77	18.85	18.96	
5	16QAM	12	13	18.74	18.82	18.91	
5	16QAM	25	0	18.78	18.83	18.96	
5	64QAM	1	0	18.88	18.94	19.04	19.5
5	64QAM	1	12	18.89	19.01	19.05	
5	64QAM	1	24	18.81	18.92	19.01	
5	64QAM	12	0	18.78	18.89	19.01	19.5
5	64QAM	12	7	18.83	18.89	19.04	
5	64QAM	12	13	18.77	18.86	18.93	
5	64QAM	25	0	18.74	18.84	18.97	
Channel				18615	18900	19185	Tune-up limit (dBm)
Frequency (MHz)				1851.5	1880	1908.5	
3	QPSK	1	0	18.63	18.70	18.81	19.5
3	QPSK	1	8	18.62	18.71	18.80	
3	QPSK	1	14	18.57	18.67	18.77	
3	QPSK	8	0	18.67	18.75	18.85	19.5
3	QPSK	8	4	18.71	18.80	18.90	
3	QPSK	8	7	18.67	18.73	18.86	
3	QPSK	15	0	18.62	18.71	18.85	
3	16QAM	1	0	18.97	18.99	19.07	19.5
3	16QAM	1	8	18.96	19.03	19.15	
3	16QAM	1	14	18.92	18.98	19.06	
3	16QAM	8	0	18.80	18.86	18.95	19.5
3	16QAM	8	4	18.86	18.91	18.98	
3	16QAM	8	7	18.81	18.86	18.97	
3	16QAM	15	0	18.75	18.82	18.97	
3	64QAM	1	0	18.85	18.96	19.03	19.5
3	64QAM	1	8	18.89	19.00	19.04	
3	64QAM	1	14	18.80	18.93	18.99	
3	64QAM	8	0	18.79	18.86	18.97	19.5
3	64QAM	8	4	18.82	18.90	18.98	
3	64QAM	8	7	18.77	18.87	18.96	
3	64QAM	15	0	18.72	18.86	18.96	
Channel				18607	18900	19193	Tune-up limit (dBm)
Frequency (MHz)				1850.7	1880	1909.3	
1.4	QPSK	1	0	18.57	18.66	18.75	19.5
1.4	QPSK	1	3	18.63	18.72	18.83	
1.4	QPSK	1	5	18.56	18.63	18.74	
1.4	QPSK	3	0	18.59	18.69	18.77	
1.4	QPSK	3	1	18.66	18.74	18.81	
1.4	QPSK	3	3	18.61	18.68	18.79	
1.4	QPSK	6	0	18.60	18.69	18.80	19.5
1.4	16QAM	1	0	18.94	18.97	19.05	19.5
1.4	16QAM	1	3	19.02	19.04	19.17	
1.4	16QAM	1	5	18.91	18.95	19.07	
1.4	16QAM	3	0	18.73	18.78	18.89	
1.4	16QAM	3	1	18.79	18.79	18.92	
1.4	16QAM	3	3	18.71	18.74	18.87	
1.4	16QAM	6	0	18.79	18.83	18.94	19.5
1.4	64QAM	1	0	18.83	18.89	18.97	19.5
1.4	64QAM	1	3	18.87	18.99	19.09	
1.4	64QAM	1	5	18.81	18.90	18.98	
1.4	64QAM	3	0	18.79	18.91	18.98	
1.4	64QAM	3	1	18.86	18.96	19.04	
1.4	64QAM	3	3	18.80	18.90	18.98	
1.4	64QAM	6	0	18.68	18.80	18.87	19.5

Band 4

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				20050	20175	20300	
Frequency (MHz)				1720	1732.5	1745	
20	QPSK	1	0	21.99	22.02	21.95	22.7
20	QPSK	1	49	22.01	21.92	21.95	
20	QPSK	1	99	21.94	21.94	21.86	
20	QPSK	50	0	22.10	22.02	21.97	22.7
20	QPSK	50	24	22.12	22.02	22.02	
20	QPSK	50	50	22.06	21.95	21.95	
20	QPSK	100	0	22.08	21.97	21.92	
20	16QAM	1	0	22.35	22.32	22.21	22.7
20	16QAM	1	49	22.31	22.23	22.29	
20	16QAM	1	99	22.21	22.25	22.20	
20	16QAM	50	0	22.18	22.07	22.01	22.7
20	16QAM	50	24	22.15	22.04	22.09	
20	16QAM	50	50	22.10	22.01	22.03	
20	16QAM	100	0	22.11	22.02	21.96	
20	64QAM	1	0	22.22	22.17	22.13	22.7
20	64QAM	1	49	22.22	22.14	22.21	
20	64QAM	1	99	22.17	22.17	22.11	
20	64QAM	50	0	22.16	22.10	22.02	22.7
20	64QAM	50	24	22.17	22.07	22.11	
20	64QAM	50	50	22.11	22.03	22.05	
20	64QAM	100	0	22.14	22.05	21.99	
Channel				20025	20175	20325	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1732.5	1747.5	
15	QPSK	1	0	22.00	22.00	21.99	22.7
15	QPSK	1	37	22.02	21.93	21.95	
15	QPSK	1	74	21.97	21.87	21.84	
15	QPSK	36	0	22.00	22.02	22.02	22.7
15	QPSK	36	20	22.14	22.01	22.01	
15	QPSK	36	39	22.04	21.95	21.97	
15	QPSK	75	0	22.09	21.99	22.01	
15	16QAM	1	0	22.32	22.31	22.32	22.7
15	16QAM	1	37	22.30	22.22	22.27	
15	16QAM	1	74	22.28	22.18	22.17	
15	16QAM	36	0	22.05	22.06	22.09	22.7
15	16QAM	36	20	22.18	22.05	22.08	
15	16QAM	36	39	22.11	22.02	22.03	
15	16QAM	75	0	22.14	22.03	22.06	
15	64QAM	1	0	22.27	22.22	22.26	22.7
15	64QAM	1	37	22.26	22.15	22.22	
15	64QAM	1	74	22.17	22.06	22.10	
15	64QAM	36	0	22.11	22.10	22.11	22.7
15	64QAM	36	20	22.21	22.07	22.12	
15	64QAM	36	39	22.13	22.04	22.08	
15	64QAM	75	0	22.15	22.04	22.06	
Channel				20000	20175	20350	Tune-up limit (dBm)
Frequency (MHz)				1715	1732.5	1750	
10	QPSK	1	0	22.02	21.97	21.99	22.7
10	QPSK	1	25	21.98	21.93	21.96	
10	QPSK	1	49	22.00	21.89	21.88	
10	QPSK	25	0	22.02	22.03	22.02	22.7
10	QPSK	25	12	22.00	21.99	21.99	
10	QPSK	25	25	22.09	21.94	21.96	
10	QPSK	50	0	22.12	21.99	21.98	
10	16QAM	1	0	22.30	22.25	22.30	22.7
10	16QAM	1	25	22.26	22.24	22.26	
10	16QAM	1	49	22.33	22.15	22.19	
10	16QAM	25	0	22.11	22.06	22.10	22.7
10	16QAM	25	12	22.06	22.06	22.08	
10	16QAM	25	25	22.14	22.02	22.04	
10	16QAM	50	0	22.13	22.04	22.04	
10	64QAM	1	0	22.24	22.22	22.24	22.7
10	64QAM	1	25	22.17	22.16	22.17	
10	64QAM	1	49	22.22	22.09	22.07	
10	64QAM	25	0	22.10	22.08	22.09	22.7
10	64QAM	25	12	22.06	22.07	22.09	
10	64QAM	25	25	22.15	22.05	22.04	
10	64QAM	50	0	22.19	22.04	22.06	
Channel				19975	20175	20375	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1732.5	1752.5	
5	QPSK	1	0	21.99	21.99	21.92	22.7
5	QPSK	1	12	22.00	21.96	21.92	
5	QPSK	1	24	21.92	21.89	21.86	
5	QPSK	12	0	22.03	21.99	21.97	22.7
5	QPSK	12	7	22.06	22.01	21.98	
5	QPSK	12	13	21.99	21.99	21.93	
5	QPSK	25	0	22.00	22.02	21.98	
5	16QAM	1	0	22.33	22.28	22.20	22.7
5	16QAM	1	12	22.29	22.26	22.25	
5	16QAM	1	24	22.20	22.18	22.14	
5	16QAM	12	0	22.07	22.03	22.04	22.7
5	16QAM	12	7	22.14	22.06	22.06	
5	16QAM	12	13	22.08	22.00	22.00	
5	16QAM	25	0	22.08	22.06	22.00	
5	64QAM	1	0	22.25	22.18	22.14	22.7
5	64QAM	1	12	22.23	22.17	22.18	
5	64QAM	1	24	22.15	22.12	22.06	
5	64QAM	12	0	22.13	22.08	22.10	22.7
5	64QAM	12	7	22.18	22.11	22.09	
5	64QAM	12	13	22.12	22.08	22.05	
5	64QAM	25	0	22.12	22.07	22.04	
Channel				19965	20175	20385	Tune-up limit (dBm)
Frequency (MHz)				1711.5	1732.5	1753.5	
3	QPSK	1	0	21.96	21.95	21.91	22.7
3	QPSK	1	8	21.98	21.95	21.92	
3	QPSK	1	14	21.96	21.92	21.88	
3	QPSK	8	0	22.00	21.99	21.94	22.7
3	QPSK	8	4	22.03	22.00	21.94	
3	QPSK	8	7	21.97	21.97	21.92	
3	QPSK	15	0	21.99	21.99	21.94	
3	16QAM	1	0	22.29	22.21	22.19	22.7
3	16QAM	1	8	22.30	22.28	22.19	
3	16QAM	1	14	22.21	22.17	22.16	
3	16QAM	8	0	22.12	22.07	22.04	22.7
3	16QAM	8	4	22.13	22.10	22.08	
3	16QAM	8	7	22.10	22.05	22.03	
3	16QAM	15	0	22.08	22.04	22.01	
3	64QAM	1	0	22.20	22.16	22.10	22.7
3	64QAM	1	8	22.20	22.15	22.12	
3	64QAM	1	14	22.17	22.13	22.08	
3	64QAM	8	0	22.12	22.06	22.05	22.7
3	64QAM	8	4	22.13	22.08	22.07	
3	64QAM	8	7	22.10	22.06	22.03	
3	64QAM	15	0	22.07	22.04	22.00	
Channel				19957	20175	20393	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1732.5	1754.3	
1.4	QPSK	1	0	21.91	21.89	21.84	22.7
1.4	QPSK	1	3	21.99	21.96	21.91	
1.4	QPSK	1	5	21.88	21.86	21.81	
1.4	QPSK	3	0	21.93	21.92	21.87	
1.4	QPSK	3	1	21.97	21.95	21.92	
1.4	QPSK	3	3	21.93	21.93	21.87	
1.4	QPSK	6	0	21.96	21.92	21.88	22.7
1.4	16QAM	1	0	22.22	22.17	22.15	22.7
1.4	16QAM	1	3	22.34	22.25	22.23	
1.4	16QAM	1	5	22.22	22.15	22.09	
1.4	16QAM	3	0	22.00	21.99	21.94	
1.4	16QAM	3	1	22.07	22.01	21.99	
1.4	16QAM	3	3	22.01	21.97	21.94	
1.4	16QAM	6	0	22.07	22.06	22.01	22.7
1.4	64QAM	1	0	22.14	22.12	22.06	22.7
1.4	64QAM	1	3	22.20	22.16	22.16	
1.4	64QAM	1	5	22.14	22.10	22.04	
1.4	64QAM	3	0	22.13	22.12	22.09	
1.4	64QAM	3	1	22.20	22.15	22.12	
1.4	64QAM	3	3	22.13	22.09	22.06	
1.4	64QAM	6	0	22.03	22.00	21.97	22.7

Band 7							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				20650	21100	21350	
Frequency (MHz)				2510	2535	2560	
20	QPSK	1	0	19.93	19.88	19.90	21
20	QPSK	1	49	19.92	20.00	19.94	
20	QPSK	1	99	20.05	20.09	20.03	
20	QPSK	50	0	20.01	20.03	19.98	21
20	QPSK	50	24	20.03	20.11	20.02	
20	QPSK	50	50	20.07	20.10	20.07	
20	QPSK	100	0	20.04	20.10	20.01	
20	16QAM	1	0	20.30	20.25	20.26	21
20	16QAM	1	49	20.20	20.32	20.31	
20	16QAM	1	99	20.37	20.42	20.38	
20	16QAM	50	0	20.10	20.13	20.08	21
20	16QAM	50	24	20.14	20.18	20.11	
20	16QAM	50	50	20.18	20.20	20.13	
20	16QAM	100	0	20.12	20.16	20.08	
20	64QAM	1	0	20.15	20.08	20.09	21
20	64QAM	1	49	20.13	20.18	20.20	
20	64QAM	1	99	20.26	20.28	20.24	
20	64QAM	50	0	20.07	20.13	20.06	21
20	64QAM	50	24	20.12	20.16	20.10	
20	64QAM	50	50	20.15	20.19	20.13	
20	64QAM	100	0	20.08	20.15	20.09	
Channel				20825	21100	21375	Tune-up limit (dBm)
Frequency (MHz)				2507.5	2535	2562.5	
15	QPSK	1	0	19.96	20.01	19.94	21
15	QPSK	1	37	19.95	20.00	19.93	
15	QPSK	1	74	20.08	20.12	20.06	
15	QPSK	36	0	20.02	20.09	19.96	21
15	QPSK	36	20	20.05	20.10	20.02	
15	QPSK	36	39	20.03	20.12	20.02	
15	QPSK	75	0	20.03	20.08	19.99	
15	16QAM	1	0	20.31	20.36	20.26	21
15	16QAM	1	37	20.26	20.32	20.26	
15	16QAM	1	74	20.41	20.40	20.37	
15	16QAM	36	0	20.09	20.15	20.08	21
15	16QAM	36	20	20.12	20.16	20.09	
15	16QAM	36	39	20.17	20.18	20.10	
15	16QAM	75	0	20.11	20.14	20.07	
15	64QAM	1	0	20.21	20.22	20.16	21
15	64QAM	1	37	20.16	20.21	20.14	
15	64QAM	1	74	20.28	20.32	20.25	
15	64QAM	36	0	20.10	20.13	20.07	21
15	64QAM	36	20	20.13	20.20	20.10	
15	64QAM	36	39	20.13	20.18	20.10	
15	64QAM	75	0	20.07	20.13	20.05	
Channel				20800	21100	21400	Tune-up limit (dBm)
Frequency (MHz)				2505	2535	2565	
10	QPSK	1	0	19.93	19.99	19.89	21
10	QPSK	1	25	19.96	19.99	19.92	
10	QPSK	1	49	20.04	20.07	19.98	
10	QPSK	25	0	19.96	20.03	19.96	21
10	QPSK	25	12	19.98	20.07	19.99	
10	QPSK	25	25	19.99	20.09	19.98	
10	QPSK	50	0	20.00	20.04	19.95	
10	16QAM	1	0	20.28	20.32	20.23	21
10	16QAM	1	25	20.29	20.34	20.22	
10	16QAM	1	49	20.29	20.38	20.31	
10	16QAM	25	0	20.08	20.12	20.01	21
10	16QAM	25	12	20.12	20.12	20.06	
10	16QAM	25	25	20.11	20.16	20.08	
10	16QAM	50	0	20.08	20.12	20.03	
10	64QAM	1	0	20.15	20.27	20.08	21
10	64QAM	1	25	20.26	20.16	20.05	
10	64QAM	1	49	20.33	20.37	20.34	
10	64QAM	25	0	20.18	20.15	20.07	21
10	64QAM	25	12	20.18	20.19	20.17	
10	64QAM	25	25	20.20	20.10	20.05	
10	64QAM	50	0	20.08	20.08	20.14	
Channel				20775	21100	21425	Tune-up limit (dBm)
Frequency (MHz)				2502.5	2535	2567.5	
5	QPSK	1	0	19.93	19.98	19.90	21
5	QPSK	1	12	19.94	20.00	19.89	
5	QPSK	1	24	19.98	20.02	19.94	
5	QPSK	12	0	19.97	20.02	19.92	21
5	QPSK	12	7	20.03	20.10	20.01	
5	QPSK	12	13	20.01	20.07	19.98	
5	QPSK	25	0	19.96	20.05	19.93	
5	16QAM	1	0	20.24	20.31	20.20	21
5	16QAM	1	12	20.32	20.32	20.16	
5	16QAM	1	24	20.31	20.34	20.25	
5	16QAM	12	0	20.06	20.13	20.01	21
5	16QAM	12	7	20.12	20.14	20.04	
5	16QAM	12	13	20.13	20.14	20.06	
5	16QAM	25	0	20.11	20.11	20.01	
5	64QAM	1	0	20.19	20.22	20.12	21
5	64QAM	1	12	20.20	20.20	20.10	
5	64QAM	1	24	20.22	20.19	20.12	
5	64QAM	12	0	20.11	20.12	20.02	21
5	64QAM	12	7	20.12	20.19	20.06	
5	64QAM	12	13	20.13	20.17	20.06	
5	64QAM	25	0	20.07	20.10	20.02	

Band 25

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				26140	26340	26590	
Frequency (MHz)				1860	1880	1905	
20	QPSK	1	0	18.96	18.89	18.81	19.5
20	QPSK	1	49	18.89	18.88	18.80	
20	QPSK	1	99	18.89	18.81	18.87	
20	QPSK	50	0	18.96	18.91	18.86	19.5
20	QPSK	50	24	18.96	18.89	18.85	
20	QPSK	50	50	18.94	18.87	18.83	
20	QPSK	100	0	18.96	18.89	18.84	
20	16QAM	1	0	19.34	19.22	19.14	19.5
20	16QAM	1	49	19.26	19.22	19.10	
20	16QAM	1	99	19.23	19.16	19.21	
20	16QAM	50	0	19.07	19.02	18.92	19.5
20	16QAM	50	24	19.09	19.04	18.94	
20	16QAM	50	50	19.01	18.98	18.90	
20	16QAM	100	0	19.03	18.97	18.90	
20	64QAM	1	0	19.19	19.16	19.04	19.5
20	64QAM	1	49	19.15	19.22	19.05	
20	64QAM	1	99	19.15	19.06	19.10	
20	64QAM	50	0	19.08	19.01	18.94	19.5
20	64QAM	50	24	19.10	19.04	18.97	
20	64QAM	50	50	19.04	18.96	18.92	
20	64QAM	100	0	19.06	18.98	18.92	
Channel				26115	26340	26615	Tune-up limit (dBm)
Frequency (MHz)				1857.5	1880	1907.5	
15	QPSK	1	0	18.89	18.84	18.80	19.5
15	QPSK	1	37	18.89	18.84	18.88	
15	QPSK	1	74	18.85	18.82	18.86	
15	QPSK	36	0	18.93	18.89	18.82	19.5
15	QPSK	36	20	18.96	18.93	18.83	
15	QPSK	36	39	18.94	18.86	18.89	
15	QPSK	75	0	18.93	18.87	18.81	
15	16QAM	1	0	19.24	19.16	19.12	19.5
15	16QAM	1	37	19.20	19.19	19.14	
15	16QAM	1	74	19.20	19.12	19.19	
15	16QAM	36	0	19.02	18.96	18.88	19.5
15	16QAM	36	20	19.09	19.02	18.92	
15	16QAM	36	39	19.00	18.94	18.98	
15	16QAM	75	0	19.04	18.98	18.91	
15	64QAM	1	0	19.17	19.09	19.07	19.5
15	64QAM	1	37	19.21	19.16	19.17	
15	64QAM	1	74	19.11	19.04	19.10	
15	64QAM	36	0	19.06	19.01	18.93	19.5
15	64QAM	36	20	19.10	19.02	18.94	
15	64QAM	36	39	19.02	18.97	19.02	
15	64QAM	75	0	19.04	18.96	18.92	
Channel				26090	26340	26640	Tune-up limit (dBm)
Frequency (MHz)				1855	1880	1910	
10	QPSK	1	0	19.04	18.96	18.80	19.5
10	QPSK	1	25	18.93	18.87	18.90	
10	QPSK	1	49	18.94	18.91	18.89	
10	QPSK	25	0	18.95	18.91	18.84	19.5
10	QPSK	25	12	18.99	18.92	18.96	
10	QPSK	25	25	18.93	18.88	18.90	
10	QPSK	50	0	18.95	18.91	18.80	
10	16QAM	1	0	19.33	19.26	19.07	19.5
10	16QAM	1	25	19.30	19.21	19.24	
10	16QAM	1	49	19.28	19.20	19.21	
10	16QAM	25	0	19.09	19.02	18.91	19.5
10	16QAM	25	12	19.09	19.05	19.00	
10	16QAM	25	25	19.03	19.01	18.98	
10	16QAM	50	0	19.06	19.03	18.93	
10	64QAM	1	0	19.27	19.20	19.02	19.5
10	64QAM	1	25	19.15	19.10	19.16	
10	64QAM	1	49	19.19	19.12	19.12	
10	64QAM	25	0	19.08	19.01	18.93	19.5
10	64QAM	25	12	19.08	19.04	19.04	
10	64QAM	25	25	19.03	18.99	19.01	
10	64QAM	50	0	19.05	19.03	18.93	
Channel				26065	26340	26665	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1880	1912.5	
5	QPSK	1	0	18.91	18.88	18.87	19.5
5	QPSK	1	12	18.93	18.87	18.89	
5	QPSK	1	24	18.89	18.82	18.86	
5	QPSK	12	0	18.96	18.92	18.93	19.5
5	QPSK	12	7	18.99	18.93	18.96	
5	QPSK	12	13	18.94	18.88	18.90	
5	QPSK	25	0	18.95	18.88	18.91	
5	16QAM	1	0	19.25	19.17	19.16	19.5
5	16QAM	1	12	19.26	19.21	19.23	
5	16QAM	1	24	19.19	19.18	19.16	
5	16QAM	12	0	19.06	19.00	18.98	19.5
5	16QAM	12	7	19.08	19.04	19.03	
5	16QAM	12	13	19.05	18.99	19.01	
5	16QAM	25	0	19.06	18.99	18.98	
5	64QAM	1	0	19.17	19.11	19.12	19.5
5	64QAM	1	12	19.21	19.10	19.16	
5	64QAM	1	24	19.11	19.04	19.11	
5	64QAM	12	0	19.10	19.06	19.04	19.5
5	64QAM	12	7	19.11	19.06	19.06	
5	64QAM	12	13	19.08	19.03	19.01	
5	64QAM	25	0	19.05	19.00	19.01	
Channel				26055	26340	26675	Tune-up limit (dBm)
Frequency (MHz)				1851.5	1880	1913.5	
3	QPSK	1	0	18.91	18.85	18.85	19.5
3	QPSK	1	8	18.95	18.86	18.86	
3	QPSK	1	14	18.89	18.83	18.86	
3	QPSK	8	0	18.95	18.90	18.90	19.5
3	QPSK	8	4	18.99	18.92	18.96	
3	QPSK	8	7	18.93	18.91	18.91	
3	QPSK	15	0	18.93	18.90	18.90	
3	16QAM	1	0	19.25	19.16	19.20	19.5
3	16QAM	1	8	19.25	19.23	19.23	
3	16QAM	1	14	19.20	19.14	19.18	
3	16QAM	8	0	19.08	19.04	19.02	19.5
3	16QAM	8	4	19.12	19.07	19.06	
3	16QAM	8	7	19.07	19.02	19.01	
3	16QAM	15	0	19.06	19.00	18.99	
3	64QAM	1	0	19.16	19.06	19.12	19.5
3	64QAM	1	8	19.17	19.10	19.13	
3	64QAM	1	14	19.11	19.07	19.10	
3	64QAM	8	0	19.08	19.01	19.01	19.5
3	64QAM	8	4	19.13	19.06	19.06	
3	64QAM	8	7	19.09	19.00	19.02	
3	64QAM	15	0	19.04	19.00	19.01	
Channel				26047	26340	26683	Tune-up limit (dBm)
Frequency (MHz)				1850.7	1880	1914.3	
1.4	QPSK	1	0	18.89	18.81	18.79	19.5
1.4	QPSK	1	3	18.94	18.87	18.88	
1.4	QPSK	1	5	18.86	18.79	18.80	
1.4	QPSK	3	0	18.89	18.83	18.85	
1.4	QPSK	3	1	18.94	18.88	18.88	
1.4	QPSK	3	3	18.89	18.85	18.85	
1.4	QPSK	6	0	18.88	18.83	18.84	19.5
1.4	16QAM	1	0	19.17	19.12	19.13	19.5
1.4	16QAM	1	3	19.30	19.22	19.23	
1.4	16QAM	1	5	19.15	19.14	19.13	
1.4	16QAM	3	0	19.01	18.93	18.94	
1.4	16QAM	3	1	19.07	18.98	18.98	
1.4	16QAM	3	3	19.02	18.94	18.94	
1.4	16QAM	6	0	19.08	19.00	18.98	19.5
1.4	64QAM	1	0	19.14	19.05	19.08	19.5
1.4	64QAM	1	3	19.18	19.10	19.15	
1.4	64QAM	1	5	19.09	19.03	19.06	
1.4	64QAM	3	0	19.12	19.06	19.05	
1.4	64QAM	3	1	19.17	19.11	19.10	
1.4	64QAM	3	3	19.10	19.04	19.07	
1.4	64QAM	6	0	19.01	18.94	18.94	19.5

Band 30							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					27710		
Frequency (MHz)					2310		
10	QPSK	1	0		18.06		18.9
10	QPSK	1	25		18.02		
10	QPSK	1	49		18.04		
10	QPSK	25	0		18.09		18.9
10	QPSK	25	12		18.10		
10	QPSK	25	25		18.09		
10	QPSK	50	0		18.09		
10	16QAM	1	0		18.34		18.9
10	16QAM	1	25		18.39		
10	16QAM	1	49		18.42		
10	16QAM	25	0		18.15		18.9
10	16QAM	25	12		18.20		
10	16QAM	25	25		18.18		
10	16QAM	50	0		18.17		
10	64QAM	1	0		18.27		18.9
10	64QAM	1	25		18.25		
10	64QAM	1	49		18.27		
10	64QAM	25	0		18.15		18.9
10	64QAM	25	12		18.16		
10	64QAM	25	25		18.14		
10	64QAM	50	0		18.15		
Channel				27685	27710	27735	Tune-up limit (dBm)
Frequency (MHz)				2307.5	2310	2312.5	
5	QPSK	1	0	18.07	18.07	18.06	18.9
5	QPSK	1	12	18.07	18.06	18.02	
5	QPSK	1	24	18.06	18.05	18.04	
5	QPSK	12	0	18.10	18.09	18.07	18.9
5	QPSK	12	7	18.14	18.13	18.12	
5	QPSK	12	13	18.12	18.12	18.10	
5	QPSK	25	0	18.09	18.08	18.08	
5	16QAM	1	0	18.32	18.36	18.38	18.9
5	16QAM	1	12	18.38	18.42	18.42	
5	16QAM	1	24	18.39	18.41	18.39	
5	16QAM	12	0	18.17	18.17	18.16	18.9
5	16QAM	12	7	18.20	18.19	18.21	
5	16QAM	12	13	18.18	18.20	18.15	
5	16QAM	25	0	18.16	18.17	18.16	
5	64QAM	1	0	18.26	18.26	18.27	18.9
5	64QAM	1	12	18.29	18.28	18.27	
5	64QAM	1	24	18.29	18.26	18.27	
5	64QAM	12	0	18.18	18.18	18.15	18.9
5	64QAM	12	7	18.22	18.19	18.20	
5	64QAM	12	13	18.20	18.19	18.18	
5	64QAM	25	0	18.15	18.15	18.13	

Band 66

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				132072	132322	132572	
Frequency (MHz)				1720	1745	1770	
20	QPSK	1	0	22.08	22.04	21.94	22.7
20	QPSK	1	49	22.05	22.02	22.00	
20	QPSK	1	99	22.04	21.95	21.81	
20	QPSK	50	0	22.02	21.96	21.85	22.7
20	QPSK	50	24	21.95	21.92	21.80	
20	QPSK	50	50	22.04	21.97	21.86	
20	QPSK	100	0	22.09	22.00	21.80	
20	16QAM	1	0	22.41	22.31	22.24	22.7
20	16QAM	1	49	22.36	22.37	22.30	
20	16QAM	1	99	22.29	22.25	22.17	
20	16QAM	50	0	22.05	22.01	21.91	22.7
20	16QAM	50	24	22.01	21.96	21.85	
20	16QAM	50	50	22.09	22.03	21.95	
20	16QAM	100	0	22.13	22.06	21.86	
20	64QAM	1	0	22.29	22.22	22.13	22.7
20	64QAM	1	49	22.27	22.27	22.19	
20	64QAM	1	99	22.21	22.21	22.02	
20	64QAM	50	0	22.09	22.00	21.94	22.7
20	64QAM	50	24	22.03	21.96	21.69	
20	64QAM	50	50	22.12	22.03	21.51	
20	64QAM	100	0	22.12	22.06	21.71	
Channel				132047	132322	132597	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1745	1772.5	
15	QPSK	1	0	22.07	22.03	21.87	22.7
15	QPSK	1	37	22.07	22.03	21.97	
15	QPSK	1	74	21.93	21.97	21.83	
15	QPSK	36	0	21.95	21.87	21.74	22.7
15	QPSK	36	20	22.00	21.95	21.83	
15	QPSK	36	39	21.90	21.91	21.82	
15	QPSK	75	0	21.92	21.96	21.72	
15	16QAM	1	0	22.39	22.30	22.20	22.7
15	16QAM	1	37	22.36	22.29	22.30	
15	16QAM	1	74	22.24	22.26	22.18	
15	16QAM	36	0	22.02	21.92	21.80	22.7
15	16QAM	36	20	22.06	22.00	21.87	
15	16QAM	36	39	21.96	21.95	21.85	
15	16QAM	75	0	21.97	22.02	21.77	
15	64QAM	1	0	22.27	22.21	22.09	22.7
15	64QAM	1	37	22.30	22.27	22.17	
15	64QAM	1	74	22.14	22.19	22.02	
15	64QAM	36	0	22.06	21.95	21.67	22.7
15	64QAM	36	20	22.11	22.03	21.55	
15	64QAM	36	39	21.98	22.01	21.50	
15	64QAM	75	0	21.99	22.02	21.52	
Channel				132022	132322	132622	Tune-up limit (dBm)
Frequency (MHz)				1715	1745	1775	
10	QPSK	1	0	22.01	21.95	21.90	22.7
10	QPSK	1	25	22.02	21.94	21.88	
10	QPSK	1	49	21.90	21.84	21.80	
10	QPSK	25	0	22.01	21.93	21.87	22.7
10	QPSK	25	12	21.97	21.88	21.87	
10	QPSK	25	25	21.95	21.88	21.79	
10	QPSK	50	0	21.95	21.89	21.83	
10	16QAM	1	0	22.35	22.24	22.27	22.7
10	16QAM	1	25	22.37	22.22	22.21	
10	16QAM	1	49	22.20	22.14	22.13	
10	16QAM	25	0	22.05	21.97	21.95	22.7
10	16QAM	25	12	22.04	21.95	21.92	
10	16QAM	25	25	22.02	21.92	21.90	
10	16QAM	50	0	22.02	21.94	21.91	
10	64QAM	1	0	22.30	22.15	22.12	22.7
10	64QAM	1	25	22.23	22.15	22.08	
10	64QAM	1	49	22.11	22.06	21.99	
10	64QAM	25	0	22.07	21.98	21.46	22.7
10	64QAM	25	12	22.05	21.96	21.46	
10	64QAM	25	25	22.03	21.94	21.49	
10	64QAM	50	0	22.04	21.93	21.43	
Channel				131997	132322	132647	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1745	1777.5	
5	QPSK	1	0	21.90	21.82	21.71	22.7
5	QPSK	1	12	22.05	21.95	21.88	
5	QPSK	1	24	21.82	21.74	21.68	
5	QPSK	12	0	21.96	21.90	21.84	22.7
5	QPSK	12	7	22.09	21.94	21.89	
5	QPSK	12	13	21.99	21.88	21.83	
5	QPSK	25	0	21.97	21.89	21.80	
5	16QAM	1	0	22.20	22.07	22.08	22.7
5	16QAM	1	12	22.33	22.21	22.21	
5	16QAM	1	24	22.15	22.00	21.99	
5	16QAM	12	0	22.05	21.95	21.93	22.7
5	16QAM	12	7	22.11	22.02	21.98	
5	16QAM	12	13	22.03	21.90	21.86	
5	16QAM	25	0	22.05	21.92	21.87	
5	64QAM	1	0	22.12	22.01	21.96	22.7
5	64QAM	1	12	22.29	22.16	22.11	
5	64QAM	1	24	22.07	21.95	21.89	
5	64QAM	12	0	22.11	21.98	21.57	22.7
5	64QAM	12	7	22.18	22.06	21.62	
5	64QAM	12	13	22.08	21.95	21.63	
5	64QAM	25	0	22.06	21.93	21.52	
Channel				131987	132322	132657	Tune-up limit (dBm)
Frequency (MHz)				1711.5	1745	1778.5	
3	QPSK	1	0	21.89	21.81	21.70	22.7
3	QPSK	1	8	22.00	21.89	21.81	
3	QPSK	1	14	21.88	21.77	21.70	
3	QPSK	8	0	22.02	21.91	21.85	22.7
3	QPSK	8	4	22.05	21.96	21.88	
3	QPSK	8	7	22.00	21.86	21.81	
3	QPSK	15	0	22.02	21.89	21.84	
3	16QAM	1	0	22.22	22.09	22.09	22.7
3	16QAM	1	8	22.34	22.22	22.19	
3	16QAM	1	14	22.15	22.04	22.02	
3	16QAM	8	0	22.10	21.97	21.96	22.7
3	16QAM	8	4	22.19	22.06	22.04	
3	16QAM	8	7	22.10	21.97	21.94	
3	16QAM	15	0	22.08	21.97	21.93	
3	64QAM	1	0	22.14	22.00	21.93	22.7
3	64QAM	1	8	22.26	22.13	22.06	
3	64QAM	1	14	22.06	21.96	21.92	
3	64QAM	8	0	22.11	21.98	21.53	22.7
3	64QAM	8	4	22.15	22.05	21.57	
3	64QAM	8	7	22.10	21.98	21.60	
3	64QAM	15	0	22.09	21.94	21.52	
Channel				131979	132322	132665	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1745	1779.3	
1.4	QPSK	1	0	21.95	21.84	21.80	22.7
1.4	QPSK	1	3	22.03	21.94	21.86	
1.4	QPSK	1	5	21.93	21.83	21.77	
1.4	QPSK	3	0	21.98	21.91	21.83	
1.4	QPSK	3	1	22.03	21.94	21.89	
1.4	QPSK	3	3	22.00	21.90	21.85	
1.4	QPSK	6	0	22.01	21.91	21.83	22.7
1.4	16QAM	1	0	22.29	22.12	22.15	22.7
1.4	16QAM	1	3	22.40	22.25	22.24	
1.4	16QAM	1	5	22.23	22.12	22.10	
1.4	16QAM	3	0	22.10	21.98	21.93	
1.4	16QAM	3	1	22.13	22.01	21.99	
1.4	16QAM	3	3	22.08	21.96	21.92	
1.4	16QAM	6	0	22.15	22.03	22.00	22.7
1.4	64QAM	1	0	22.19	22.06	22.00	22.7
1.4	64QAM	1	3	22.31	22.18	22.11	
1.4	64QAM	1	5	22.17	22.07	21.99	
1.4	64QAM	3	0	22.19	22.07	22.00	
1.4	64QAM	3	1	22.26	22.13	22.08	
1.4	64QAM	3	3	22.18	22.05	22.01	
1.4	64QAM	6	0	22.10	21.96	21.52	22.7

Band 5							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				20450	20525	20600	
Frequency (MHz)				829	836.5	844	
10	QPSK	1	0	22.23	22.22	22.10	23.3
10	QPSK	1	25	22.18	22.18	22.16	
10	QPSK	1	49	22.21	22.10	22.10	
10	QPSK	25	0	22.26	22.25	22.14	23.3
10	QPSK	25	12	22.37	22.22	22.23	
10	QPSK	25	25	22.32	22.21	22.14	
10	QPSK	50	0	22.32	22.20	22.11	
10	16QAM	1	0	22.50	22.48	22.35	23.3
10	16QAM	1	25	22.45	22.43	22.39	
10	16QAM	1	49	22.47	22.37	22.37	
10	16QAM	25	0	22.30	22.29	22.17	23.3
10	16QAM	25	12	22.40	22.31	22.27	
10	16QAM	25	25	22.35	22.23	22.21	
10	16QAM	50	0	22.41	22.30	22.15	
10	64QAM	1	0	22.48	22.45	22.35	23.3
10	64QAM	1	25	22.41	22.41	22.40	
10	64QAM	1	49	22.43	22.32	22.31	
10	64QAM	25	0	21.73	21.70	21.61	22.7
10	64QAM	25	12	21.81	21.70	21.65	
10	64QAM	25	25	21.75	21.64	21.64	
10	64QAM	50	0	21.78	21.67	21.56	
Channel				20425	20525	20625	Tune-up limit (dBm)
Frequency (MHz)				826.5	836.5	846.5	
5	QPSK	1	0	22.21	22.19	22.14	23.3
5	QPSK	1	12	22.21	22.17	22.13	
5	QPSK	1	24	22.19	22.15	22.11	
5	QPSK	12	0	22.23	22.26	22.18	23.3
5	QPSK	12	7	22.28	22.24	22.16	
5	QPSK	12	13	22.25	22.20	22.14	
5	QPSK	25	0	22.25	22.23	22.15	
5	16QAM	1	0	22.47	22.47	22.35	23.3
5	16QAM	1	12	22.49	22.49	22.46	
5	16QAM	1	24	22.44	22.41	22.40	
5	16QAM	12	0	22.37	22.28	22.23	23.3
5	16QAM	12	7	22.36	22.30	22.25	
5	16QAM	12	13	22.32	22.27	22.18	
5	16QAM	25	0	22.30	22.27	22.22	
5	64QAM	1	0	22.47	22.45	22.39	23.3
5	64QAM	1	12	22.47	22.42	22.36	
5	64QAM	1	24	22.42	22.37	22.30	
5	64QAM	12	0	21.81	21.75	21.65	22.7
5	64QAM	12	7	21.79	21.75	21.71	
5	64QAM	12	13	21.76	21.72	21.61	
5	64QAM	25	0	21.75	21.72	21.63	
Channel				20415	20525	20635	Tune-up limit (dBm)
Frequency (MHz)				825.5	836.5	847.5	
3	QPSK	1	0	22.19	22.17	22.10	23.3
3	QPSK	1	8	22.20	22.15	22.10	
3	QPSK	1	14	22.21	22.14	22.11	
3	QPSK	8	0	22.26	22.19	22.13	23.3
3	QPSK	8	4	22.26	22.23	22.15	
3	QPSK	8	7	22.22	22.17	22.13	
3	QPSK	15	0	22.23	22.19	22.14	
3	16QAM	1	0	22.42	22.43	22.44	23.3
3	16QAM	1	8	22.49	22.38	22.40	
3	16QAM	1	14	22.48	22.38	22.31	
3	16QAM	8	0	22.38	22.28	22.22	23.3
3	16QAM	8	4	22.40	22.31	22.23	
3	16QAM	8	7	22.35	22.30	22.21	
3	16QAM	15	0	22.34	22.28	22.20	
3	64QAM	1	0	22.48	22.37	22.32	23.3
3	64QAM	1	8	22.46	22.37	22.30	
3	64QAM	1	14	22.45	22.37	22.31	
3	64QAM	8	0	21.74	21.72	21.62	22.7
3	64QAM	8	4	21.81	21.74	21.64	
3	64QAM	8	7	21.76	21.68	21.60	
3	64QAM	15	0	21.75	21.66	21.59	
Channel				20407	20525	20643	Tune-up limit (dBm)
Frequency (MHz)				824.7	836.5	848.3	
1.4	QPSK	1	0	22.15	22.11	22.12	23.3
1.4	QPSK	1	3	22.23	22.16	22.14	
1.4	QPSK	1	5	22.12	22.13	22.11	
1.4	QPSK	3	0	22.19	22.13	22.13	
1.4	QPSK	3	1	22.22	22.18	22.15	
1.4	QPSK	3	3	22.19	22.13	22.12	
1.4	QPSK	6	0	22.20	22.14	22.11	23.3
1.4	16QAM	1	0	22.42	22.36	22.32	23.3
1.4	16QAM	1	3	22.47	22.46	22.36	
1.4	16QAM	1	5	22.39	22.32	22.31	
1.4	16QAM	3	0	22.22	22.17	22.10	
1.4	16QAM	3	1	22.25	22.19	22.15	
1.4	16QAM	3	3	22.21	22.13	22.12	
1.4	16QAM	6	0	22.35	22.27	22.16	23.3
1.4	64QAM	1	0	22.36	22.34	22.21	23.3
1.4	64QAM	1	3	22.47	22.37	22.35	
1.4	64QAM	1	5	22.39	22.34	22.23	
1.4	64QAM	3	0	22.38	22.31	22.23	
1.4	64QAM	3	1	22.44	22.36	22.31	
1.4	64QAM	3	3	22.40	22.33	22.26	
1.4	64QAM	6	0	21.68	21.60	21.52	22.7

Band 7							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				20850	21100	21350	
Frequency (MHz)				2510	2535	2560	
20	QPSK	1	0	21.63	21.57	21.48	22
20	QPSK	1	49	21.62	21.56	21.47	
20	QPSK	1	99	21.69	21.61	21.55	
20	QPSK	50	0	21.69	21.65	21.55	22
20	QPSK	50	24	21.74	21.65	21.59	
20	QPSK	50	50	21.74	21.68	21.59	
20	QPSK	100	0	21.73	21.64	21.57	
20	16QAM	1	0	21.87	21.86	21.77	22
20	16QAM	1	49	21.93	21.84	21.81	
20	16QAM	1	99	22.00	21.89	21.83	
20	16QAM	50	0	21.77	21.68	21.59	22
20	16QAM	50	24	21.78	21.73	21.63	
20	16QAM	50	50	21.81	21.74	21.65	
20	16QAM	100	0	21.78	21.71	21.60	
20	64QAM	1	0	21.89	21.83	21.67	22
20	64QAM	1	49	21.83	21.78	21.73	
20	64QAM	1	99	21.93	21.83	21.75	
20	64QAM	50	0	21.06	21.00	20.92	22
20	64QAM	50	24	21.11	21.04	20.94	
20	64QAM	50	50	21.12	21.02	20.94	
20	64QAM	100	0	21.08	21.01	20.94	
Channel				20825	21100	21375	Tune-up limit (dBm)
Frequency (MHz)				2507.5	2535	2562.5	
15	QPSK	1	0	21.65	21.59	21.49	22
15	QPSK	1	37	21.64	21.57	21.46	
15	QPSK	1	74	21.72	21.63	21.58	
15	QPSK	36	0	21.73	21.64	21.54	22
15	QPSK	36	20	21.76	21.66	21.56	
15	QPSK	36	39	21.71	21.65	21.55	
15	QPSK	75	0	21.73	21.63	21.55	
15	16QAM	1	0	21.93	21.91	21.76	22
15	16QAM	1	37	21.94	21.85	21.71	
15	16QAM	1	74	22.00	21.92	21.85	
15	16QAM	36	0	21.73	21.68	21.59	22
15	16QAM	36	20	21.79	21.71	21.62	
15	16QAM	36	39	21.82	21.69	21.61	
15	16QAM	75	0	21.78	21.68	21.58	
15	64QAM	1	0	21.94	21.85	21.75	22
15	64QAM	1	37	21.86	21.78	21.70	
15	64QAM	1	74	21.97	21.86	21.78	
15	64QAM	36	0	21.07	21.00	20.90	22
15	64QAM	36	20	21.12	21.03	20.95	
15	64QAM	36	39	21.10	21.01	20.93	
15	64QAM	75	0	21.06	20.99	20.89	
Channel				20800	21100	21400	Tune-up limit (dBm)
Frequency (MHz)				2505	2535	2565	
10	QPSK	1	0	21.62	21.55	21.46	22
10	QPSK	1	25	21.64	21.56	21.47	
10	QPSK	1	49	21.67	21.57	21.52	
10	QPSK	25	0	21.69	21.62	21.48	22
10	QPSK	25	12	21.74	21.65	21.53	
10	QPSK	25	25	21.71	21.61	21.51	
10	QPSK	50	0	21.71	21.61	21.53	
10	16QAM	1	0	21.92	21.86	21.76	22
10	16QAM	1	25	21.94	21.81	21.79	
10	16QAM	1	49	21.97	21.88	21.84	
10	16QAM	25	0	21.75	21.65	21.55	22
10	16QAM	25	12	21.76	21.71	21.60	
10	16QAM	25	25	21.75	21.68	21.61	
10	16QAM	50	0	21.75	21.68	21.58	
10	64QAM	1	0	21.87	21.80	21.67	22
10	64QAM	1	25	21.89	21.82	21.66	
10	64QAM	1	49	21.91	21.82	21.76	
10	64QAM	25	0	21.05	20.96	20.86	22
10	64QAM	25	12	21.07	20.99	20.90	
10	64QAM	25	25	21.09	21.00	20.89	
10	64QAM	50	0	21.06	20.98	20.89	
Channel				20775	21100	21425	Tune-up limit (dBm)
Frequency (MHz)				2502.5	2535	2567.5	
5	QPSK	1	0	21.63	21.55	21.44	22
5	QPSK	1	12	21.63	21.55	21.44	
5	QPSK	1	24	21.65	21.58	21.47	
5	QPSK	12	0	21.65	21.61	21.46	22
5	QPSK	12	7	21.72	21.63	21.51	
5	QPSK	12	13	21.69	21.59	21.52	
5	QPSK	25	0	21.68	21.62	21.48	
5	16QAM	1	0	21.88	21.86	21.73	22
5	16QAM	1	12	21.95	21.83	21.76	
5	16QAM	1	24	21.96	21.82	21.78	
5	16QAM	12	0	21.72	21.65	21.53	22
5	16QAM	12	7	21.76	21.68	21.57	
5	16QAM	12	13	21.76	21.68	21.60	
5	16QAM	25	0	21.73	21.67	21.54	
5	64QAM	1	0	21.90	21.79	21.65	22
5	64QAM	1	12	21.87	21.78	21.66	
5	64QAM	1	24	21.89	21.81	21.68	
5	64QAM	12	0	21.06	21.00	20.86	22
5	64QAM	12	7	21.11	21.03	20.91	
5	64QAM	12	13	21.10	21.00	20.93	
5	64QAM	25	0	21.03	20.97	20.85	

Band 12							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				23060	23095	23130	
Frequency (MHz)				704	707.5	711	
10	QPSK	1	0	22.65	22.50	22.52	23.7
10	QPSK	1	25	22.74	22.55	22.53	
10	QPSK	1	49	22.72	22.54	22.62	
10	QPSK	25	0	22.80	22.60	22.57	23.7
10	QPSK	25	12	22.83	22.61	22.57	
10	QPSK	25	25	22.73	22.60	22.54	
10	QPSK	50	0	22.78	22.63	22.55	
10	16QAM	1	0	23.01	22.76	22.79	23.7
10	16QAM	1	25	22.99	22.84	22.87	
10	16QAM	1	49	23.05	22.94	22.97	
10	16QAM	25	0	22.84	22.75	22.64	23.7
10	16QAM	25	12	22.85	22.77	22.71	
10	16QAM	25	25	22.80	22.71	22.66	
10	16QAM	50	0	22.85	22.74	22.66	
10	64QAM	1	0	22.82	22.79	22.81	23.7
10	64QAM	1	25	23.00	22.82	22.78	
10	64QAM	1	49	22.95	22.82	22.82	
10	64QAM	25	0	21.88	21.70	21.68	22.7
10	64QAM	25	12	21.90	21.73	21.67	
10	64QAM	25	25	21.88	21.70	21.67	
10	64QAM	50	0	21.86	21.71	21.67	
Channel				23035	23095	23155	Tune-up limit (dBm)
Frequency (MHz)				701.5	707.5	713.5	
5	QPSK	1	0	22.55	22.56	22.50	23.7
5	QPSK	1	12	22.52	22.55	22.58	
5	QPSK	1	24	22.59	22.52	22.57	
5	QPSK	12	0	22.60	22.59	22.52	23.7
5	QPSK	12	7	22.61	22.60	22.68	
5	QPSK	12	13	22.67	22.57	22.63	
5	QPSK	25	0	22.67	22.59	22.51	
5	16QAM	1	0	22.91	22.86	22.82	23.7
5	16QAM	1	12	22.83	22.84	22.92	
5	16QAM	1	24	22.90	22.87	22.91	
5	16QAM	12	0	22.67	22.71	22.63	23.7
5	16QAM	12	7	22.70	22.74	22.78	
5	16QAM	12	13	22.80	22.71	22.74	
5	16QAM	25	0	22.77	22.71	22.62	
5	64QAM	1	0	22.80	22.82	22.72	23.7
5	64QAM	1	12	22.80	22.81	22.82	
5	64QAM	1	24	22.85	22.76	22.79	
5	64QAM	12	0	21.71	21.77	21.67	22.7
5	64QAM	12	7	21.75	21.78	21.80	
5	64QAM	12	13	21.80	21.70	21.76	
5	64QAM	25	0	21.78	21.69	21.62	
Channel				23025	23095	23165	Tune-up limit (dBm)
Frequency (MHz)				700.5	707.5	714.5	
3	QPSK	1	0	22.61	22.51	22.55	23.7
3	QPSK	1	8	22.61	22.52	22.55	
3	QPSK	1	14	22.58	22.52	22.55	
3	QPSK	8	0	22.67	22.55	22.60	23.7
3	QPSK	8	4	22.67	22.60	22.63	
3	QPSK	8	7	22.65	22.56	22.58	
3	QPSK	15	0	22.67	22.58	22.58	
3	16QAM	1	0	22.95	22.84	22.87	23.7
3	16QAM	1	8	23.01	22.82	22.91	
3	16QAM	1	14	22.86	22.88	22.88	
3	16QAM	8	0	22.82	22.70	22.71	23.7
3	16QAM	8	4	22.83	22.76	22.73	
3	16QAM	8	7	22.78	22.73	22.71	
3	16QAM	15	0	22.76	22.69	22.69	
3	64QAM	1	0	22.79	22.78	22.70	23.7
3	64QAM	1	8	22.74	22.74	22.76	
3	64QAM	1	14	22.79	22.70	22.75	
3	64QAM	8	0	21.62	21.72	21.66	22.7
3	64QAM	8	4	21.65	21.68	21.71	
3	64QAM	8	7	21.77	21.63	21.72	
3	64QAM	15	0	21.68	21.64	21.58	
Channel				23017	23095	23173	Tune-up limit (dBm)
Frequency (MHz)				699.7	707.5	715.3	
1.4	QPSK	1	0	22.62	22.51	22.50	23.7
1.4	QPSK	1	3	22.66	22.57	22.59	
1.4	QPSK	1	5	22.57	22.50	22.52	
1.4	QPSK	3	0	22.63	22.54	22.56	
1.4	QPSK	3	1	22.65	22.55	22.58	
1.4	QPSK	3	3	22.63	22.54	22.55	
1.4	QPSK	6	0	22.58	22.50	22.53	23.7
1.4	16QAM	1	0	22.94	22.78	22.82	23.7
1.4	16QAM	1	3	22.97	22.80	22.89	
1.4	16QAM	1	5	22.89	22.74	22.77	
1.4	16QAM	3	0	22.71	22.54	22.61	
1.4	16QAM	3	1	22.73	22.58	22.62	
1.4	16QAM	3	3	22.70	22.53	22.58	
1.4	16QAM	6	0	22.78	22.68	22.68	23.7
1.4	64QAM	1	0	22.83	22.72	22.73	23.7
1.4	64QAM	1	3	22.91	22.78	22.76	
1.4	64QAM	1	5	22.80	22.68	22.70	
1.4	64QAM	3	0	22.81	22.70	22.70	
1.4	64QAM	3	1	22.84	22.74	22.73	
1.4	64QAM	3	3	22.81	22.69	22.68	
1.4	64QAM	6	0	21.70	21.58	21.62	22.7

Band 17							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				23780	23790	23800	
Frequency (MHz)				709	710	711	
10	QPSK	1	0	22.58	22.48	22.52	23.7
10	QPSK	1	25	22.74	22.48	22.52	
10	QPSK	1	49	22.68	22.54	22.61	
10	QPSK	25	0	22.74	22.56	22.56	23.7
10	QPSK	25	12	22.77	22.58	22.55	
10	QPSK	25	25	22.68	22.50	22.52	
10	QPSK	50	0	22.78	22.62	22.55	
10	16QAM	1	0	22.91	22.72	22.76	23.7
10	16QAM	1	25	22.96	22.80	22.79	
10	16QAM	1	49	23.02	22.92	22.91	
10	16QAM	25	0	22.82	22.72	22.63	23.7
10	16QAM	25	12	22.75	22.68	22.63	
10	16QAM	25	25	22.72	22.71	22.62	
10	16QAM	50	0	22.75	22.74	22.61	
10	64QAM	1	0	22.74	22.74	22.72	23.7
10	64QAM	1	25	22.90	22.72	22.68	
10	64QAM	1	49	22.95	22.73	22.75	
10	64QAM	25	0	21.85	21.65	21.61	22.7
10	64QAM	25	12	21.80	21.71	21.66	
10	64QAM	25	25	21.85	21.64	21.67	
10	64QAM	50	0	21.83	21.62	21.67	
Channel				23755	23790	23825	Tune-up limit (dBm)
Frequency (MHz)				706.5	710	713.5	
5	QPSK	1	0	22.46	22.54	22.46	23.7
5	QPSK	1	12	22.50	22.46	22.55	
5	QPSK	1	24	22.56	22.46	22.47	
5	QPSK	12	0	22.54	22.51	22.51	23.7
5	QPSK	12	7	22.54	22.53	22.58	
5	QPSK	12	13	22.62	22.49	22.61	
5	QPSK	25	0	22.64	22.49	22.47	
5	16QAM	1	0	22.86	22.78	22.80	23.7
5	16QAM	1	12	22.81	22.76	22.86	
5	16QAM	1	24	22.88	22.80	22.85	
5	16QAM	12	0	22.58	22.69	22.59	23.7
5	16QAM	12	7	22.70	22.71	22.77	
5	16QAM	12	13	22.72	22.67	22.66	
5	16QAM	25	0	22.69	22.66	22.56	
5	64QAM	1	0	22.77	22.76	22.64	23.7
5	64QAM	1	12	22.78	22.80	22.75	
5	64QAM	1	24	22.76	22.75	22.74	
5	64QAM	12	0	21.63	21.68	21.57	22.7
5	64QAM	12	7	21.68	21.72	21.77	
5	64QAM	12	13	21.71	21.67	21.66	
5	64QAM	25	0	21.68	21.66	21.60	

Band 26							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				26765	26865	26965	
Frequency (MHz)				821.5	831.5	841.5	
15	QPSK	1	0	22.26	22.27	22.19	23.3
15	QPSK	1	37	22.31	22.26	22.20	
15	QPSK	1	74	22.34	22.19	22.14	
15	QPSK	36	0	22.39	22.30	22.15	23.3
15	QPSK	36	20	22.39	22.32	22.16	
15	QPSK	36	39	22.39	22.29	22.20	
15	QPSK	75	0	22.32	22.28	22.14	
15	16QAM	1	0	22.55	22.60	22.49	23.3
15	16QAM	1	37	22.60	22.58	22.55	
15	16QAM	1	74	22.64	22.55	22.39	
15	16QAM	36	0	22.40	22.38	22.20	23.3
15	16QAM	36	20	22.38	22.35	22.23	
15	16QAM	36	39	22.47	22.34	22.23	
15	16QAM	75	0	22.39	22.35	22.20	
15	64QAM	1	0	22.51	22.46	22.41	23.3
15	64QAM	1	37	22.53	22.49	22.41	
15	64QAM	1	74	22.55	22.44	22.37	
15	64QAM	36	0	21.86	21.85	21.71	22.7
15	64QAM	36	20	21.91	21.82	21.67	
15	64QAM	36	39	21.95	21.79	21.71	
15	64QAM	75	0	21.84	21.78	21.64	
Channel				26740	26865	26990	Tune-up limit (dBm)
Frequency (MHz)				819	831.5	844	
10	QPSK	1	0	22.25	22.21	22.20	23.3
10	QPSK	1	25	22.31	22.26	22.16	
10	QPSK	1	49	22.27	22.19	22.10	
10	QPSK	25	0	22.39	22.30	22.21	23.3
10	QPSK	25	12	22.39	22.29	22.23	
10	QPSK	25	25	22.32	22.26	22.13	
10	QPSK	50	0	22.34	22.26	22.21	
10	16QAM	1	0	22.54	22.49	22.55	23.3
10	16QAM	1	25	22.61	22.59	22.46	
10	16QAM	1	49	22.54	22.52	22.39	
10	16QAM	25	0	22.43	22.40	22.26	23.3
10	16QAM	25	12	22.47	22.38	22.30	
10	16QAM	25	25	22.40	22.32	22.23	
10	16QAM	50	0	22.40	22.34	22.26	
10	64QAM	1	0	22.50	22.41	22.44	23.3
10	64QAM	1	25	22.54	22.45	22.38	
10	64QAM	1	49	22.53	22.43	22.31	
10	64QAM	25	0	21.90	21.79	21.73	22.7
10	64QAM	25	12	21.90	21.81	21.70	
10	64QAM	25	25	21.83	21.75	21.67	
10	64QAM	50	0	21.86	21.82	21.68	
Channel				26715	26865	27015	Tune-up limit (dBm)
Frequency (MHz)				816.5	831.5	846.5	
5	QPSK	1	0	22.26	22.28	22.13	23.3
5	QPSK	1	12	22.24	22.27	22.12	
5	QPSK	1	24	22.30	22.18	22.11	
5	QPSK	12	0	22.34	22.33	22.20	23.3
5	QPSK	12	7	22.31	22.32	22.20	
5	QPSK	12	13	22.40	22.30	22.16	
5	QPSK	25	0	22.38	22.28	22.14	
5	16QAM	1	0	22.51	22.59	22.47	23.3
5	16QAM	1	12	22.56	22.58	22.41	
5	16QAM	1	24	22.62	22.55	22.34	
5	16QAM	12	0	22.35	22.35	22.24	23.3
5	16QAM	12	7	22.40	22.39	22.26	
5	16QAM	12	13	22.44	22.33	22.17	
5	16QAM	25	0	22.46	22.32	22.24	
5	64QAM	1	0	22.50	22.49	22.37	23.3
5	64QAM	1	12	22.50	22.47	22.35	
5	64QAM	1	24	22.56	22.44	22.28	
5	64QAM	12	0	21.78	21.86	21.69	22.7
5	64QAM	12	7	21.84	21.89	21.72	
5	64QAM	12	13	21.89	21.84	21.65	
5	64QAM	25	0	21.91	21.79	21.64	
Channel				26705	26865	27025	Tune-up limit (dBm)
Frequency (MHz)				815.5	831.5	847.5	
3	QPSK	1	0	22.24	22.24	22.11	23.3
3	QPSK	1	8	22.23	22.22	22.13	
3	QPSK	1	14	22.25	22.21	22.14	
3	QPSK	8	0	22.26	22.26	22.11	23.3
3	QPSK	8	4	22.31	22.31	22.17	
3	QPSK	8	7	22.26	22.26	22.10	
3	QPSK	15	0	22.28	22.27	22.13	
3	16QAM	1	0	22.47	22.53	22.38	23.3
3	16QAM	1	8	22.52	22.56	22.36	
3	16QAM	1	14	22.54	22.53	22.32	
3	16QAM	8	0	22.42	22.38	22.22	23.3
3	16QAM	8	4	22.41	22.41	22.25	
3	16QAM	8	7	22.40	22.34	22.23	
3	16QAM	15	0	22.35	22.36	22.18	
3	64QAM	1	0	22.50	22.43	22.31	23.3
3	64QAM	1	8	22.48	22.44	22.31	
3	64QAM	1	14	22.50	22.46	22.31	
3	64QAM	8	0	21.79	21.82	21.64	22.7
3	64QAM	8	4	21.80	21.85	21.67	
3	64QAM	8	7	21.75	21.80	21.66	
3	64QAM	15	0	21.74	21.78	21.60	
Channel				26697	26865	27033	Tune-up limit (dBm)
Frequency (MHz)				814.7	831.5	848.3	
1.4	QPSK	1	0	22.17	22.13	22.11	23.3
1.4	QPSK	1	3	22.26	22.23	22.16	
1.4	QPSK	1	5	22.18	22.14	22.12	
1.4	QPSK	3	0	22.20	22.17	22.14	
1.4	QPSK	3	1	22.25	22.24	22.15	
1.4	QPSK	3	3	22.23	22.18	22.12	
1.4	QPSK	6	0	22.22	22.22	22.13	23.3
1.4	16QAM	1	0	22.42	22.47	22.28	23.3
1.4	16QAM	1	3	22.52	22.58	22.33	
1.4	16QAM	1	5	22.45	22.49	22.24	
1.4	16QAM	3	0	22.27	22.28	22.14	
1.4	16QAM	3	1	22.31	22.32	22.13	
1.4	16QAM	3	3	22.26	22.25	22.10	
1.4	16QAM	6	0	22.34	22.33	22.18	23.3
1.4	64QAM	1	0	22.45	22.38	22.27	23.3
1.4	64QAM	1	3	22.49	22.44	22.33	
1.4	64QAM	1	5	22.43	22.36	22.23	
1.4	64QAM	3	0	22.43	22.37	22.24	
1.4	64QAM	3	1	22.48	22.42	22.27	
1.4	64QAM	3	3	22.42	22.40	22.22	
1.4	64QAM	6	0	21.67	21.73	21.60	22.7

Band 71							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				133222	133322	133372	
Frequency (MHz)				673	683	688	
20	QPSK	1	0	22.70	22.71	22.82	24
20	QPSK	1	49	22.73	22.72	22.83	
20	QPSK	1	99	22.86	22.72	22.84	
20	QPSK	50	0	22.84	22.83	22.82	24
20	QPSK	50	24	22.87	22.79	22.80	
20	QPSK	50	50	22.89	22.84	22.88	
20	QPSK	100	0	22.83	22.78	22.70	
20	16QAM	1	0	22.96	23.04	23.25	24
20	16QAM	1	49	23.08	23.02	23.20	
20	16QAM	1	99	23.17	23.09	23.22	
20	16QAM	50	0	22.60	22.59	22.61	23.7
20	16QAM	50	24	22.66	22.58	22.60	
20	16QAM	50	50	22.66	22.50	22.65	
20	16QAM	100	0	22.64	22.53	22.57	
20	64QAM	1	0	22.54	22.71	22.85	23.7
20	64QAM	1	49	22.68	22.68	22.80	
20	64QAM	1	99	22.76	22.65	22.80	
20	64QAM	50	0	21.59	21.64	21.67	22.7
20	64QAM	50	24	21.66	21.60	21.60	
20	64QAM	50	50	21.67	21.50	21.65	
20	64QAM	100	0	21.65	21.54	21.63	
Channel				133197	133297	133397	Tune-up limit (dBm)
Frequency (MHz)				670.5	680.5	690.5	
15	QPSK	1	0	22.71	22.70	22.71	24
15	QPSK	1	37	22.81	22.77	22.73	
15	QPSK	1	74	22.88	22.79	22.78	
15	QPSK	36	0	22.78	22.87	22.71	24
15	QPSK	36	20	22.87	22.87	22.81	
15	QPSK	36	39	22.95	22.81	22.75	
15	QPSK	75	0	22.85	22.83	22.78	
15	16QAM	1	0	23.02	23.00	22.95	24
15	16QAM	1	37	23.16	23.15	23.03	
15	16QAM	1	74	23.20	23.18	23.11	
15	16QAM	36	0	22.52	22.65	22.48	23.7
15	16QAM	36	20	22.65	22.62	22.60	
15	16QAM	36	39	22.73	22.55	22.53	
15	16QAM	75	0	22.60	22.57	22.56	
15	64QAM	1	0	22.67	22.62	22.66	23.7
15	64QAM	1	37	22.78	22.74	22.70	
15	64QAM	1	74	22.78	22.74	22.73	
15	64QAM	36	0	21.58	21.67	21.51	22.7
15	64QAM	36	20	21.70	21.65	21.62	
15	64QAM	36	39	21.76	21.62	21.54	
15	64QAM	75	0	21.65	21.57	21.55	
Channel				133172	133272	133422	Tune-up limit (dBm)
Frequency (MHz)				668	678	693	
10	QPSK	1	0	22.73	22.70	22.72	24
10	QPSK	1	25	22.77	22.72	22.70	
10	QPSK	1	49	22.81	22.75	22.75	
10	QPSK	25	0	22.84	22.82	22.80	24
10	QPSK	25	12	22.93	22.88	22.80	
10	QPSK	25	25	22.89	22.84	22.73	
10	QPSK	50	0	22.94	22.89	22.73	
10	16QAM	1	0	23.08	23.03	23.06	24
10	16QAM	1	25	23.02	23.05	23.07	
10	16QAM	1	49	23.17	23.01	23.09	
10	16QAM	25	0	22.63	22.54	22.57	23.7
10	16QAM	25	12	22.73	22.67	22.56	
10	16QAM	25	25	22.68	22.58	22.53	
10	16QAM	50	0	22.72	22.61	22.52	
10	64QAM	1	0	22.67	22.60	22.67	23.7
10	64QAM	1	25	22.78	22.72	22.66	
10	64QAM	1	49	22.77	22.72	22.68	
10	64QAM	25	0	21.62	21.59	21.59	22.7
10	64QAM	25	12	21.72	21.65	21.59	
10	64QAM	25	25	21.69	21.64	21.51	
10	64QAM	50	0	21.74	21.62	21.53	
Channel				133147	133247	133447	Tune-up limit (dBm)
Frequency (MHz)				665.5	675.5	695.5	
5	QPSK	1	0	22.72	22.71	22.78	24
5	QPSK	1	12	22.80	22.77	22.86	
5	QPSK	1	24	22.78	22.74	22.83	
5	QPSK	12	0	22.88	22.85	22.85	24
5	QPSK	12	7	22.90	22.83	22.96	
5	QPSK	12	13	22.81	22.76	22.89	
5	QPSK	25	0	22.84	22.83	22.80	
5	16QAM	1	0	23.02	23.02	23.12	24
5	16QAM	1	12	23.14	23.09	23.22	
5	16QAM	1	24	23.03	23.07	23.17	
5	16QAM	12	0	22.67	22.60	22.61	23.7
5	16QAM	12	7	22.68	22.59	22.76	
5	16QAM	12	13	22.61	22.55	22.69	
5	16QAM	25	0	22.63	22.57	22.59	
5	64QAM	1	0	22.66	22.64	22.73	23.7
5	64QAM	1	12	22.76	22.75	22.81	
5	64QAM	1	24	22.73	22.68	22.78	
5	64QAM	12	0	21.71	21.67	21.68	22.7
5	64QAM	12	7	21.73	21.64	21.79	
5	64QAM	12	13	21.67	21.59	21.76	
5	64QAM	25	0	21.63	21.59	21.59	

Band 7							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. /	Power Middle Ch. /	Power High Ch. /	Tune-up limit (dBm)
Channel				20850	21100	21350	
Frequency (MHz)				2510	2535	2560	
20	QPSK	1	0	16.52	16.51	16.54	17.5
20	QPSK	1	49	16.47	16.61	16.56	
20	QPSK	1	99	16.60	16.61	16.63	
20	QPSK	50	0	16.48	16.53	16.53	17.5
20	QPSK	50	24	16.54	16.57	16.58	
20	QPSK	50	50	16.55	16.58	16.62	
20	QPSK	100	0	16.52	16.55	16.55	
20	16QAM	1	0	16.76	16.64	16.77	17.5
20	16QAM	1	49	16.75	16.77	16.81	
20	16QAM	1	99	16.86	16.85	16.93	
20	16QAM	50	0	16.57	16.58	16.61	17.5
20	16QAM	50	24	16.61	16.61	16.65	
20	16QAM	50	50	16.65	16.63	16.68	
20	16QAM	100	0	16.60	16.59	16.63	
20	64QAM	1	0	16.68	16.60	16.70	17.5
20	64QAM	1	49	16.66	16.73	16.72	
20	64QAM	1	99	16.75	16.80	16.79	
20	64QAM	50	0	16.58	16.60	16.62	17.5
20	64QAM	50	24	16.61	16.62	16.66	
20	64QAM	50	50	16.64	16.66	16.68	
20	64QAM	100	0	16.61	16.62	16.64	
Channel				20825	21100	21375	Tune-up limit (dBm)
Frequency (MHz)				2507.5	2535	2562.5	
15	QPSK	1	0	16.53	16.51	16.63	17.5
15	QPSK	1	37	16.47	16.54	16.46	
15	QPSK	1	74	16.61	16.61	16.67	
15	QPSK	36	0	16.48	16.51	16.50	17.5
15	QPSK	36	20	16.53	16.54	16.56	
15	QPSK	36	39	16.53	16.54	16.56	
15	QPSK	75	0	16.51	16.54	16.55	
15	16QAM	1	0	16.80	16.77	16.79	17.5
15	16QAM	1	37	16.75	16.75	16.80	
15	16QAM	1	74	16.91	16.89	16.92	
15	16QAM	36	0	16.56	16.57	16.58	17.5
15	16QAM	36	20	16.62	16.60	16.63	
15	16QAM	36	39	16.62	16.61	16.65	
15	16QAM	75	0	16.59	16.59	16.61	
15	64QAM	1	0	16.68	16.69	16.70	17.5
15	64QAM	1	37	16.72	16.70	16.71	
15	64QAM	1	74	16.81	16.80	16.83	
15	64QAM	36	0	16.59	16.61	16.62	17.5
15	64QAM	36	20	16.64	16.65	16.66	
15	64QAM	36	39	16.67	16.65	16.68	
15	64QAM	75	0	16.58	16.61	16.63	
Channel				20800	21100	21400	Tune-up limit (dBm)
Frequency (MHz)				2505	2535	2565	
10	QPSK	1	0	16.41	16.44	16.41	17.5
10	QPSK	1	25	16.49	16.44	16.51	
10	QPSK	1	49	16.51	16.50	16.55	
10	QPSK	25	0	16.45	16.49	16.51	17.5
10	QPSK	25	12	16.50	16.53	16.51	
10	QPSK	25	25	16.51	16.55	16.56	
10	QPSK	50	0	16.49	16.53	16.53	
10	16QAM	1	0	16.77	16.75	16.77	17.5
10	16QAM	1	25	16.79	16.77	16.79	
10	16QAM	1	49	16.83	16.83	16.86	
10	16QAM	25	0	16.55	16.57	16.57	17.5
10	16QAM	25	12	16.59	16.60	16.60	
10	16QAM	25	25	16.58	16.61	16.62	
10	16QAM	50	0	16.58	16.57	16.60	
10	64QAM	1	0	16.69	16.66	16.68	17.5
10	64QAM	1	25	16.68	16.72	16.72	
10	64QAM	1	49	16.78	16.78	16.76	
10	64QAM	25	0	16.55	16.58	16.58	17.5
10	64QAM	25	12	16.60	16.61	16.64	
10	64QAM	25	25	16.61	16.61	16.64	
10	64QAM	50	0	16.59	16.59	16.61	
Channel				20775	21100	21425	Tune-up limit (dBm)
Frequency (MHz)				2502.5	2535	2567.5	
5	QPSK	1	0	16.45	16.44	16.45	17.5
5	QPSK	1	12	16.43	16.46	16.41	
5	QPSK	1	24	16.47	16.52	16.49	
5	QPSK	12	0	16.48	16.47	16.46	17.5
5	QPSK	12	7	16.52	16.55	16.60	
5	QPSK	12	13	16.50	16.54	16.52	
5	QPSK	25	0	16.47	16.50	16.49	
5	16QAM	1	0	16.77	16.74	16.74	17.5
5	16QAM	1	12	16.77	16.76	16.79	
5	16QAM	1	24	16.79	16.79	16.79	
5	16QAM	12	0	16.56	16.54	16.54	17.5
5	16QAM	12	7	16.59	16.59	16.60	
5	16QAM	12	13	16.59	16.56	16.59	
5	16QAM	25	0	16.57	16.57	16.57	
5	64QAM	1	0	16.71	16.67	16.68	17.5
5	64QAM	1	12	16.72	16.69	16.69	
5	64QAM	1	24	16.72	16.72	16.71	
5	64QAM	12	0	16.60	16.60	16.60	17.5
5	64QAM	12	7	16.64	16.64	16.65	
5	64QAM	12	13	16.63	16.64	16.64	
5	64QAM	25	0	16.59	16.59	16.58	

Band 4							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				20050	20175	20300	
Frequency (MHz)				1720	1732.5	1745	
20	QPSK	1	0	21.99	22.02	21.95	22.7
20	QPSK	1	49	22.01	21.92	21.95	
20	QPSK	1	99	21.94	21.94	21.86	
20	QPSK	50	0	22.10	22.02	21.97	22.7
20	QPSK	50	24	22.12	22.02	22.02	
20	QPSK	50	50	22.06	21.95	21.95	
20	QPSK	100	0	22.08	21.97	21.92	
20	16QAM	1	0	22.35	22.32	22.21	22.7
20	16QAM	1	49	22.31	22.23	22.29	
20	16QAM	1	99	22.21	22.25	22.20	
20	16QAM	50	0	22.18	22.07	22.01	22.7
20	16QAM	50	24	22.15	22.04	22.09	
20	16QAM	50	50	22.10	22.01	22.03	
20	16QAM	100	0	22.11	22.02	21.96	
20	64QAM	1	0	22.22	22.17	22.13	22.7
20	64QAM	1	49	22.22	22.14	22.21	
20	64QAM	1	99	22.17	22.17	22.11	
20	64QAM	50	0	22.16	22.10	22.02	22.7
20	64QAM	50	24	22.17	22.07	22.11	
20	64QAM	50	50	22.11	22.03	22.05	
20	64QAM	100	0	22.14	22.05	21.99	
Channel				20025	20175	20325	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1732.5	1747.5	
15	QPSK	1	0	22.00	22.00	21.99	22.7
15	QPSK	1	37	22.02	21.93	21.95	
15	QPSK	1	74	21.97	21.87	21.84	
15	QPSK	36	0	22.00	22.02	22.02	22.7
15	QPSK	36	20	22.14	22.01	22.01	
15	QPSK	36	39	22.04	21.95	21.97	
15	QPSK	75	0	22.09	21.99	22.01	
15	16QAM	1	0	22.32	22.31	22.32	22.7
15	16QAM	1	37	22.30	22.22	22.27	
15	16QAM	1	74	22.28	22.18	22.17	
15	16QAM	36	0	22.05	22.06	22.09	22.7
15	16QAM	36	20	22.18	22.05	22.08	
15	16QAM	36	39	22.11	22.02	22.03	
15	16QAM	75	0	22.14	22.03	22.06	
15	64QAM	1	0	22.27	22.22	22.26	22.7
15	64QAM	1	37	22.26	22.15	22.22	
15	64QAM	1	74	22.17	22.06	22.10	
15	64QAM	36	0	22.11	22.10	22.11	22.7
15	64QAM	36	20	22.21	22.07	22.12	
15	64QAM	36	39	22.13	22.04	22.08	
15	64QAM	75	0	22.15	22.04	22.06	
Channel				20000	20175	20350	Tune-up limit (dBm)
Frequency (MHz)				1715	1732.5	1750	
10	QPSK	1	0	22.02	21.97	21.99	22.7
10	QPSK	1	25	21.98	21.93	21.96	
10	QPSK	1	49	22.00	21.89	21.88	
10	QPSK	25	0	22.02	22.03	22.02	22.7
10	QPSK	25	12	22.00	21.99	21.99	
10	QPSK	25	25	22.09	21.94	21.96	
10	QPSK	50	0	22.12	21.99	21.98	
10	16QAM	1	0	22.30	22.25	22.30	22.7
10	16QAM	1	25	22.26	22.24	22.26	
10	16QAM	1	49	22.33	22.15	22.19	
10	16QAM	25	0	22.11	22.06	22.10	22.7
10	16QAM	25	12	22.06	22.06	22.08	
10	16QAM	25	25	22.14	22.02	22.04	
10	16QAM	50	0	22.13	22.04	22.04	
10	64QAM	1	0	22.24	22.22	22.24	22.7
10	64QAM	1	25	22.17	22.16	22.17	
10	64QAM	1	49	22.22	22.09	22.07	
10	64QAM	25	0	22.10	22.08	22.09	22.7
10	64QAM	25	12	22.06	22.07	22.09	
10	64QAM	25	25	22.15	22.05	22.04	
10	64QAM	50	0	22.19	22.04	22.06	
Channel				19975	20175	20375	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1732.5	1752.5	
5	QPSK	1	0	21.99	21.99	21.92	22.7
5	QPSK	1	12	22.00	21.96	21.92	
5	QPSK	1	24	21.92	21.89	21.86	
5	QPSK	12	0	22.03	21.99	21.97	22.7
5	QPSK	12	7	22.06	22.01	21.98	
5	QPSK	12	13	21.99	21.99	21.93	
5	QPSK	25	0	22.00	22.02	21.98	
5	16QAM	1	0	22.33	22.28	22.20	22.7
5	16QAM	1	12	22.29	22.26	22.25	
5	16QAM	1	24	22.20	22.18	22.14	
5	16QAM	12	0	22.07	22.03	22.04	22.7
5	16QAM	12	7	22.14	22.06	22.06	
5	16QAM	12	13	22.08	22.00	22.00	
5	16QAM	25	0	22.08	22.06	22.00	
5	64QAM	1	0	22.25	22.18	22.14	22.7
5	64QAM	1	12	22.23	22.17	22.18	
5	64QAM	1	24	22.15	22.12	22.06	
5	64QAM	12	0	22.13	22.08	22.10	22.7
5	64QAM	12	7	22.18	22.11	22.09	
5	64QAM	12	13	22.12	22.08	22.05	
5	64QAM	25	0	22.12	22.07	22.04	
Channel				19965	20175	20385	Tune-up limit (dBm)
Frequency (MHz)				1711.5	1732.5	1753.5	
3	QPSK	1	0	21.96	21.95	21.91	22.7
3	QPSK	1	8	21.98	21.95	21.92	
3	QPSK	1	14	21.96	21.92	21.88	
3	QPSK	8	0	22.00	21.99	21.94	22.7
3	QPSK	8	4	22.03	22.00	21.94	
3	QPSK	8	7	21.97	21.97	21.92	
3	QPSK	15	0	21.99	21.99	21.94	
3	16QAM	1	0	22.29	22.21	22.19	22.7
3	16QAM	1	8	22.30	22.28	22.19	
3	16QAM	1	14	22.21	22.17	22.16	
3	16QAM	8	0	22.12	22.07	22.04	22.7
3	16QAM	8	4	22.13	22.10	22.08	
3	16QAM	8	7	22.10	22.05	22.03	
3	16QAM	15	0	22.08	22.04	22.01	
3	64QAM	1	0	22.20	22.16	22.10	22.7
3	64QAM	1	8	22.20	22.15	22.12	
3	64QAM	1	14	22.17	22.13	22.08	
3	64QAM	8	0	22.12	22.06	22.05	22.7
3	64QAM	8	4	22.13	22.08	22.07	
3	64QAM	8	7	22.10	22.06	22.03	
3	64QAM	15	0	22.07	22.04	22.00	
Channel				19957	20175	20393	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1732.5	1754.3	
1.4	QPSK	1	0	21.91	21.89	21.84	22.7
1.4	QPSK	1	3	21.99	21.96	21.91	
1.4	QPSK	1	5	21.88	21.86	21.81	
1.4	QPSK	3	0	21.93	21.92	21.87	
1.4	QPSK	3	1	21.97	21.95	21.92	
1.4	QPSK	3	3	21.93	21.93	21.87	
1.4	QPSK	6	0	21.96	21.92	21.88	22.7
1.4	16QAM	1	0	22.22	22.17	22.15	22.7
1.4	16QAM	1	3	22.34	22.25	22.23	
1.4	16QAM	1	5	22.22	22.15	22.09	
1.4	16QAM	3	0	22.00	21.99	21.94	
1.4	16QAM	3	1	22.07	22.01	21.99	
1.4	16QAM	3	3	22.01	21.97	21.94	
1.4	16QAM	6	0	22.07	22.06	22.01	22.7
1.4	64QAM	1	0	22.14	22.12	22.08	22.7
1.4	64QAM	1	3	22.20	22.16	22.16	
1.4	64QAM	1	5	22.14	22.10	22.04	
1.4	64QAM	3	0	22.13	22.12	22.09	
1.4	64QAM	3	1	22.20	22.15	22.12	
1.4	64QAM	3	3	22.13	22.09	22.06	
1.4	64QAM	6	0	22.03	22.00	21.97	22.7

Band 30							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					27710		
Frequency (MHz)					2310		
10	QPSK	1	0		18.06		18.9
10	QPSK	1	25		18.02		
10	QPSK	1	49		18.04		
10	QPSK	25	0		18.09		18.9
10	QPSK	25	12		18.10		
10	QPSK	25	25		18.09		
10	QPSK	50	0		18.09		
10	16QAM	1	0		18.34		18.9
10	16QAM	1	25		18.39		
10	16QAM	1	49		18.42		
10	16QAM	25	0		18.15		18.9
10	16QAM	25	12		18.20		
10	16QAM	25	25		18.18		
10	16QAM	50	0		18.17		
10	64QAM	1	0		18.27		18.9
10	64QAM	1	25		18.25		
10	64QAM	1	49		18.27		
10	64QAM	25	0		18.15		18.9
10	64QAM	25	12		18.16		
10	64QAM	25	25		18.14		
10	64QAM	50	0		18.15		
Channel				27685	27710	27735	Tune-up limit (dBm)
Frequency (MHz)				2307.5	2310	2312.5	
5	QPSK	1	0	18.07	18.07	18.06	18.9
5	QPSK	1	12	18.07	18.06	18.02	
5	QPSK	1	24	18.06	18.05	18.04	
5	QPSK	12	0	18.10	18.09	18.07	18.9
5	QPSK	12	7	18.14	18.13	18.12	
5	QPSK	12	13	18.12	18.12	18.10	
5	QPSK	25	0	18.09	18.08	18.08	
5	16QAM	1	0	18.32	18.36	18.38	18.9
5	16QAM	1	12	18.38	18.42	18.42	
5	16QAM	1	24	18.39	18.41	18.39	
5	16QAM	12	0	18.17	18.17	18.16	18.9
5	16QAM	12	7	18.20	18.19	18.21	
5	16QAM	12	13	18.18	18.20	18.15	
5	16QAM	25	0	18.16	18.17	18.16	
5	64QAM	1	0	18.26	18.26	18.27	18.9
5	64QAM	1	12	18.29	18.28	18.27	
5	64QAM	1	24	18.29	18.26	18.27	
5	64QAM	12	0	18.18	18.18	18.15	18.9
5	64QAM	12	7	18.22	18.19	18.20	
5	64QAM	12	13	18.20	18.19	18.18	
5	64QAM	25	0	18.15	18.15	18.13	

Band 66

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				132072	132322	132572	
Frequency (MHz)				1720	1745	1770	
20	QPSK	1	0	22.08	22.04	21.94	22.7
20	QPSK	1	49	22.05	22.02	22.00	
20	QPSK	1	99	22.04	21.95	21.81	
20	QPSK	50	0	22.02	21.96	21.85	22.7
20	QPSK	50	24	21.95	21.92	21.80	
20	QPSK	50	50	22.04	21.97	21.86	
20	QPSK	100	0	22.09	22.00	21.80	
20	16QAM	1	0	22.41	22.31	22.24	22.7
20	16QAM	1	49	22.36	22.37	22.30	
20	16QAM	1	99	22.29	22.25	22.17	
20	16QAM	50	0	22.05	22.01	21.91	22.7
20	16QAM	50	24	22.01	21.96	21.85	
20	16QAM	50	50	22.09	22.03	21.95	
20	16QAM	100	0	22.13	22.06	21.86	
20	64QAM	1	0	22.29	22.22	22.13	22.7
20	64QAM	1	49	22.27	22.27	22.19	
20	64QAM	1	99	22.21	22.21	22.02	
20	64QAM	50	0	22.09	22.00	21.94	22.7
20	64QAM	50	24	22.03	21.96	21.69	
20	64QAM	50	50	22.12	22.03	21.51	
20	64QAM	100	0	22.12	22.06	21.71	
Channel				132047	132322	132597	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1745	1772.5	
15	QPSK	1	0	22.07	22.03	21.87	22.7
15	QPSK	1	37	22.07	22.03	21.97	
15	QPSK	1	74	21.93	21.97	21.83	
15	QPSK	36	0	21.95	21.87	21.74	22.7
15	QPSK	36	20	22.00	21.95	21.83	
15	QPSK	36	39	21.90	21.91	21.82	
15	QPSK	75	0	21.92	21.96	21.72	
15	16QAM	1	0	22.39	22.30	22.20	22.7
15	16QAM	1	37	22.36	22.29	22.30	
15	16QAM	1	74	22.24	22.26	22.18	
15	16QAM	36	0	22.02	21.92	21.80	22.7
15	16QAM	36	20	22.06	22.00	21.87	
15	16QAM	36	39	21.96	21.95	21.85	
15	16QAM	75	0	21.97	22.02	21.77	
15	64QAM	1	0	22.27	22.21	22.09	22.7
15	64QAM	1	37	22.30	22.27	22.17	
15	64QAM	1	74	22.14	22.19	22.02	
15	64QAM	36	0	22.06	21.95	21.67	22.7
15	64QAM	36	20	22.11	22.03	21.55	
15	64QAM	36	39	21.98	22.01	21.50	
15	64QAM	75	0	21.99	22.02	21.52	
Channel				132022	132322	132622	Tune-up limit (dBm)
Frequency (MHz)				1715	1745	1775	
10	QPSK	1	0	22.01	21.95	21.90	22.7
10	QPSK	1	25	22.02	21.94	21.88	
10	QPSK	1	49	21.90	21.84	21.80	
10	QPSK	25	0	22.01	21.93	21.87	22.7
10	QPSK	25	12	21.97	21.88	21.87	
10	QPSK	25	25	21.95	21.88	21.79	
10	QPSK	50	0	21.95	21.89	21.83	
10	16QAM	1	0	22.35	22.24	22.27	22.7
10	16QAM	1	25	22.37	22.22	22.21	
10	16QAM	1	49	22.20	22.14	22.13	
10	16QAM	25	0	22.05	21.97	21.95	22.7
10	16QAM	25	12	22.04	21.95	21.92	
10	16QAM	25	25	22.02	21.92	21.90	
10	16QAM	50	0	22.02	21.94	21.91	
10	64QAM	1	0	22.30	22.15	22.12	22.7
10	64QAM	1	25	22.23	22.15	22.08	
10	64QAM	1	49	22.11	22.06	21.99	
10	64QAM	25	0	22.07	21.98	21.46	22.7
10	64QAM	25	12	22.05	21.96	21.46	
10	64QAM	25	25	22.03	21.94	21.49	
10	64QAM	50	0	22.04	21.93	21.43	
Channel				131997	132322	132647	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1745	1777.5	
5	QPSK	1	0	21.90	21.82	21.71	22.7
5	QPSK	1	12	22.05	21.95	21.88	
5	QPSK	1	24	21.82	21.74	21.68	
5	QPSK	12	0	21.96	21.90	21.84	22.7
5	QPSK	12	7	22.09	21.94	21.89	
5	QPSK	12	13	21.99	21.88	21.83	
5	QPSK	25	0	21.97	21.89	21.80	
5	16QAM	1	0	22.20	22.07	22.08	22.7
5	16QAM	1	12	22.33	22.21	22.21	
5	16QAM	1	24	22.15	22.00	21.99	
5	16QAM	12	0	22.05	21.95	21.93	22.7
5	16QAM	12	7	22.11	22.02	21.98	
5	16QAM	12	13	22.03	21.90	21.86	
5	16QAM	25	0	22.05	21.92	21.87	
5	64QAM	1	0	22.12	22.01	21.96	22.7
5	64QAM	1	12	22.29	22.16	22.11	
5	64QAM	1	24	22.07	21.95	21.89	
5	64QAM	12	0	22.11	21.98	21.57	22.7
5	64QAM	12	7	22.18	22.06	21.62	
5	64QAM	12	13	22.08	21.95	21.63	
5	64QAM	25	0	22.06	21.93	21.52	
Channel				131987	132322	132657	Tune-up limit (dBm)
Frequency (MHz)				1711.5	1745	1778.5	
3	QPSK	1	0	21.89	21.81	21.70	22.7
3	QPSK	1	8	22.00	21.89	21.81	
3	QPSK	1	14	21.88	21.77	21.70	
3	QPSK	8	0	22.02	21.91	21.85	22.7
3	QPSK	8	4	22.05	21.96	21.88	
3	QPSK	8	7	22.00	21.86	21.81	
3	QPSK	15	0	22.02	21.89	21.84	
3	16QAM	1	0	22.22	22.09	22.09	22.7
3	16QAM	1	8	22.34	22.22	22.19	
3	16QAM	1	14	22.15	22.04	22.02	
3	16QAM	8	0	22.10	21.97	21.96	22.7
3	16QAM	8	4	22.19	22.06	22.04	
3	16QAM	8	7	22.10	21.97	21.94	
3	16QAM	15	0	22.08	21.97	21.93	
3	64QAM	1	0	22.14	22.00	21.93	22.7
3	64QAM	1	8	22.26	22.13	22.06	
3	64QAM	1	14	22.06	21.96	21.92	
3	64QAM	8	0	22.11	21.98	21.53	22.7
3	64QAM	8	4	22.15	22.05	21.57	
3	64QAM	8	7	22.10	21.98	21.60	
3	64QAM	15	0	22.09	21.94	21.52	
Channel				131979	132322	132665	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1745	1779.3	
1.4	QPSK	1	0	21.95	21.84	21.80	22.7
1.4	QPSK	1	3	22.03	21.94	21.86	
1.4	QPSK	1	5	21.93	21.83	21.77	
1.4	QPSK	3	0	21.98	21.91	21.83	
1.4	QPSK	3	1	22.03	21.94	21.89	
1.4	QPSK	3	3	22.00	21.90	21.85	
1.4	QPSK	6	0	22.01	21.91	21.83	22.7
1.4	16QAM	1	0	22.29	22.12	22.15	22.7
1.4	16QAM	1	3	22.40	22.25	22.24	
1.4	16QAM	1	5	22.23	22.12	22.10	
1.4	16QAM	3	0	22.10	21.98	21.93	
1.4	16QAM	3	1	22.13	22.01	21.99	
1.4	16QAM	3	3	22.08	21.96	21.92	
1.4	16QAM	6	0	22.15	22.03	22.00	22.7
1.4	64QAM	1	0	22.19	22.06	22.00	22.7
1.4	64QAM	1	3	22.31	22.18	22.11	
1.4	64QAM	1	5	22.17	22.07	21.99	
1.4	64QAM	3	0	22.19	22.07	22.00	
1.4	64QAM	3	1	22.26	22.13	22.08	
1.4	64QAM	3	3	22.18	22.05	22.01	
1.4	64QAM	6	0	22.10	21.96	21.52	22.7

<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.

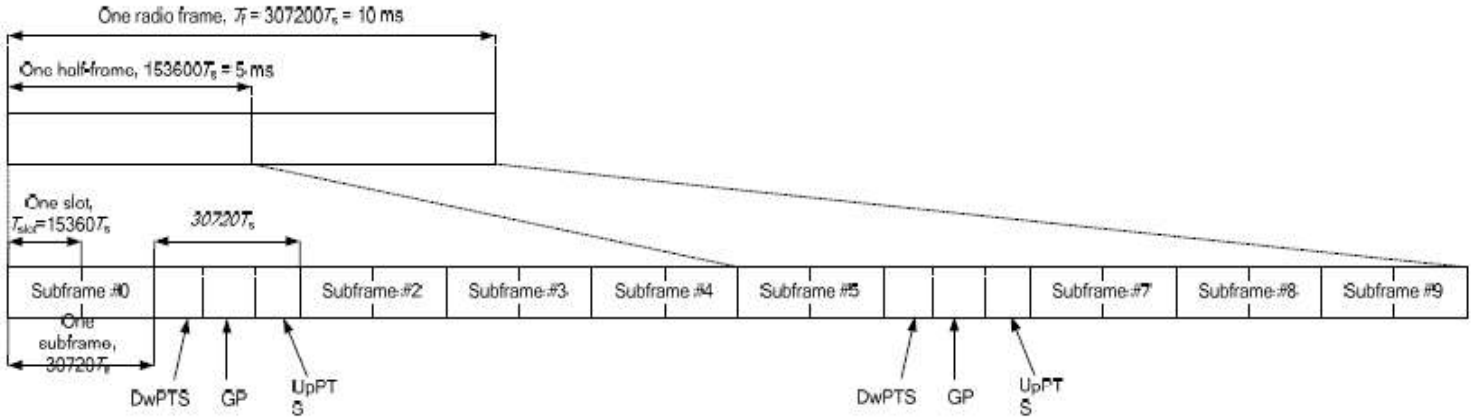


Figure 4.2-1: Frame structure type 2 (for 5 ms switch-point periodicity).

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	$6592 \cdot T_s$	$2192 \cdot T_s$	$2560 \cdot T_s$	$7680 \cdot T_s$	$2192 \cdot T_s$	$2560 \cdot T_s$
1	$19760 \cdot T_s$			$20480 \cdot T_s$		
2	$21952 \cdot T_s$			$23040 \cdot T_s$		
3	$24144 \cdot T_s$			$25600 \cdot T_s$		
4	$26336 \cdot T_s$			$7680 \cdot T_s$	$4384 \cdot T_s$	$5120 \cdot T_s$
5	$6592 \cdot T_s$	$4384 \cdot T_s$	$5120 \cdot T_s$	$20480 \cdot T_s$		
6	$19760 \cdot T_s$			$23040 \cdot T_s$		
7	$21952 \cdot T_s$			$12800 \cdot T_s$		
8	$24144 \cdot T_s$			-	-	-
9	$13168 \cdot T_s$			-	-	-

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 subfames, 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 scaled TDD LTE SAR = measured SAR (W/kg)* Tune-up Scaling Factor* scaling factor for extended cyclic prefix.

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							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				37850	38000	38150	
Frequency (MHz)				2580	2595	2610	
20	QPSK	1	0	24.14	23.95	23.86	25
20	QPSK	1	49	24.01	23.85	23.76	
20	QPSK	1	99	23.91	23.87	23.78	
20	QPSK	50	0	23.14	22.96	22.87	24
20	QPSK	50	24	23.04	22.94	22.85	
20	QPSK	50	50	22.98	22.95	22.83	
20	QPSK	100	0	23.02	22.93	22.86	
20	16QAM	1	0	23.17	23.05	22.97	24
20	16QAM	1	49	23.12	22.96	22.88	
20	16QAM	1	99	23.02	22.98	22.91	
20	16QAM	50	0	22.20	22.04	21.94	23
20	16QAM	50	24	22.07	22.02	21.95	
20	16QAM	50	50	22.07	21.99	21.91	
20	16QAM	100	0	22.09	22.02	21.92	
20	64QAM	1	0	21.93	21.77	21.71	23
20	64QAM	1	49	21.85	21.70	21.62	
20	64QAM	1	99	21.75	21.70	21.63	
20	64QAM	50	0	21.18	21.03	20.95	22
20	64QAM	50	24	21.09	21.05	20.93	
20	64QAM	50	50	21.05	21.03	20.92	
20	64QAM	100	0	21.08	21.03	20.94	
Channel				37825	38000	38175	Tune-up limit (dBm)
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	24.13	23.93	23.88	25
15	QPSK	1	37	24.05	23.86	23.77	
15	QPSK	1	74	24.03	23.93	23.84	
15	QPSK	36	0	23.14	22.94	22.84	24
15	QPSK	36	20	23.11	22.96	22.82	
15	QPSK	36	39	23.01	22.89	22.79	
15	QPSK	75	0	23.01	22.93	22.84	
15	16QAM	1	0	23.21	23.05	22.93	24
15	16QAM	1	37	23.15	22.98	22.87	
15	16QAM	1	74	23.09	23.03	22.92	
15	16QAM	36	0	22.18	21.97	21.85	23
15	16QAM	36	20	22.20	22.00	21.90	
15	16QAM	36	39	22.06	21.95	21.82	
15	16QAM	75	0	22.09	22.03	21.91	
15	64QAM	1	0	21.94	21.78	21.69	23
15	64QAM	1	37	21.90	21.72	21.63	
15	64QAM	1	74	21.84	21.76	21.66	
15	64QAM	36	0	21.20	20.99	20.89	22
15	64QAM	36	20	21.19	21.01	20.89	
15	64QAM	36	39	21.04	20.94	20.88	
15	64QAM	75	0	21.08	21.03	20.91	
Channel				37800	38000	38200	Tune-up limit (dBm)
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	24.06	23.89	23.79	25
10	QPSK	1	25	24.05	23.88	23.76	
10	QPSK	1	49	24.08	23.90	23.80	
10	QPSK	25	0	23.12	22.90	22.80	24
10	QPSK	25	12	23.13	22.91	22.82	
10	QPSK	25	25	23.14	22.87	22.78	
10	QPSK	50	0	23.11	22.92	22.81	
10	16QAM	1	0	23.21	23.00	22.91	24
10	16QAM	1	25	23.15	22.99	22.88	
10	16QAM	1	49	23.16	22.98	22.85	
10	16QAM	25	0	22.21	22.01	21.88	23
10	16QAM	25	12	22.20	22.01	21.91	
10	16QAM	25	25	22.23	22.00	21.86	
10	16QAM	50	0	22.21	21.99	21.92	
10	64QAM	1	0	21.95	21.75	21.67	23
10	64QAM	1	25	21.91	21.72	21.61	
10	64QAM	1	49	21.92	21.74	21.61	
10	64QAM	25	0	21.22	21.04	20.92	22
10	64QAM	25	12	21.25	21.05	20.93	
10	64QAM	25	25	21.25	21.02	20.92	
10	64QAM	50	0	21.20	21.01	20.91	
Channel				37775	38000	38225	Tune-up limit (dBm)
Frequency (MHz)				2572.5	2595	2617.5	
5	QPSK	1	0	24.04	23.86	23.74	25
5	QPSK	1	12	24.06	23.88	23.75	
5	QPSK	1	24	24.02	23.81	23.69	
5	QPSK	12	0	23.10	22.91	22.76	24
5	QPSK	12	7	23.11	22.92	22.78	
5	QPSK	12	13	23.11	22.92	22.75	
5	QPSK	25	0	23.10	22.88	22.78	
5	16QAM	1	0	23.13	22.96	22.86	24
5	16QAM	1	12	23.17	22.97	22.86	
5	16QAM	1	24	23.13	22.96	22.88	
5	16QAM	12	0	22.11	21.94	21.81	23
5	16QAM	12	7	22.16	21.96	21.83	
5	16QAM	12	13	22.16	21.95	21.80	
5	16QAM	25	0	22.20	21.97	21.84	
5	64QAM	1	0	21.88	21.70	21.60	23
5	64QAM	1	12	21.93	21.72	21.61	
5	64QAM	1	24	21.92	21.73	21.59	
5	64QAM	12	0	21.19	20.97	20.85	22
5	64QAM	12	7	21.21	21.00	20.90	
5	64QAM	12	13	21.19	21.02	20.89	
5	64QAM	25	0	21.23	21.00	20.89	

Band 38 HPUE							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				37850	38000	38150	
Frequency (MHz)				2580	2595	2610	
20	QPSK	1	0	25.16	25.14	25.27	26.5
20	QPSK	1	49	25.14	25.18	25.28	
20	QPSK	1	99	25.19	25.28	25.41	
20	QPSK	50	0	24.30	24.28	24.39	25.5
20	QPSK	50	24	24.27	24.29	24.44	
20	QPSK	50	50	24.27	24.29	24.40	
20	QPSK	100	0	24.18	24.29	24.42	
20	16QAM	1	0	24.44	24.44	24.58	25.5
20	16QAM	1	49	24.40	24.23	24.60	
20	16QAM	1	99	24.43	24.58	24.73	
20	16QAM	50	0	23.37	23.39	23.53	24.5
20	16QAM	50	24	23.39	23.40	23.54	
20	16QAM	50	50	23.38	23.40	23.52	
20	16QAM	100	0	23.31	23.37	23.52	
20	64QAM	1	0	23.36	23.37	23.48	24.5
20	64QAM	1	49	23.33	23.34	23.48	
20	64QAM	1	99	23.37	23.50	23.60	
20	64QAM	50	0	22.39	22.36	22.50	23.5
20	64QAM	50	24	22.37	22.38	22.50	
20	64QAM	50	50	22.33	22.39	22.52	
20	64QAM	100	0	22.31	22.38	22.53	
Channel				37825	38000	38175	Tune-up limit (dBm)
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	25.15	25.10	25.17	26.5
15	QPSK	1	37	25.09	25.15	25.23	
15	QPSK	1	74	25.18	25.20	25.37	
15	QPSK	36	0	24.26	24.25	24.39	25.5
15	QPSK	36	20	24.21	24.26	24.39	
15	QPSK	36	39	24.25	24.26	24.36	
15	QPSK	75	0	24.11	24.21	24.34	
15	16QAM	1	0	24.40	24.41	24.50	25.5
15	16QAM	1	37	24.36	24.13	24.52	
15	16QAM	1	74	24.43	24.50	24.64	
15	16QAM	36	0	23.29	23.37	23.50	24.5
15	16QAM	36	20	23.30	23.36	23.52	
15	16QAM	36	39	23.37	23.35	23.42	
15	16QAM	75	0	23.30	23.28	23.42	
15	64QAM	1	0	23.36	23.34	23.40	24.5
15	64QAM	1	37	23.30	23.28	23.39	
15	64QAM	1	74	23.31	23.45	23.54	
15	64QAM	36	0	22.33	22.27	22.47	23.5
15	64QAM	36	20	22.35	22.30	22.41	
15	64QAM	36	39	22.29	22.36	22.47	
15	64QAM	75	0	22.30	22.38	22.44	
Channel				37800	38000	38200	Tune-up limit (dBm)
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	25.11	25.12	25.27	26.5
10	QPSK	1	25	25.13	25.13	25.23	
10	QPSK	1	49	25.10	25.23	25.32	
10	QPSK	25	0	24.25	24.20	24.37	25.5
10	QPSK	25	12	24.21	24.29	24.41	
10	QPSK	25	25	24.24	24.22	24.30	
10	QPSK	50	0	24.16	24.27	24.34	
10	16QAM	1	0	24.42	24.35	24.52	25.5
10	16QAM	1	25	24.35	24.20	24.59	
10	16QAM	1	49	24.41	24.55	24.70	
10	16QAM	25	0	23.27	23.35	23.49	24.5
10	16QAM	25	12	23.34	23.38	23.51	
10	16QAM	25	25	23.34	23.37	23.43	
10	16QAM	50	0	23.31	23.34	23.42	
10	64QAM	1	0	23.30	23.33	23.44	24.5
10	64QAM	1	25	23.29	23.29	23.44	
10	64QAM	1	49	23.29	23.50	23.52	
10	64QAM	25	0	22.31	22.32	22.48	23.5
10	64QAM	25	12	22.34	22.34	22.43	
10	64QAM	25	25	22.32	22.30	22.45	
10	64QAM	50	0	22.25	22.34	22.43	
Channel				37775	38000	38225	Tune-up limit (dBm)
Frequency (MHz)				2572.5	2595	2617.5	
5	QPSK	1	0	25.12	25.09	25.21	26.5
5	QPSK	1	12	25.04	25.12	25.21	
5	QPSK	1	24	25.14	25.21	25.38	
5	QPSK	12	0	24.24	24.27	24.29	25.5
5	QPSK	12	7	24.26	24.20	24.34	
5	QPSK	12	13	24.27	24.29	24.35	
5	QPSK	25	0	24.09	24.20	24.38	
5	16QAM	1	0	24.37	24.36	24.57	25.5
5	16QAM	1	12	24.30	24.17	24.51	
5	16QAM	1	24	24.38	24.57	24.68	
5	16QAM	12	0	23.33	23.32	23.48	24.5
5	16QAM	12	7	23.30	23.33	23.51	
5	16QAM	12	13	23.28	23.33	23.48	
5	16QAM	25	0	23.21	23.33	23.44	
5	64QAM	1	0	23.36	23.36	23.42	24.5
5	64QAM	1	12	23.28	23.31	23.47	
5	64QAM	1	24	23.35	23.42	23.55	
5	64QAM	12	0	22.33	22.27	22.41	23.5
5	64QAM	12	7	22.29	22.35	22.46	
5	64QAM	12	13	22.27	22.37	22.42	
5	64QAM	25	0	22.23	22.35	22.52	

Band 41									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Low Middle Ch. / Freq.	Power Middle Ch. / Freq.	Power High Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				39750	40185	40620	41055	41490	
Frequency (MHz)				2506	2549.5	2593	2636.5	2680	
20	QPSK	1	0	24.08	24.09	23.94	23.95	23.89	25
20	QPSK	1	49	23.90	23.85	23.79	23.81	23.81	
20	QPSK	1	99	23.88	23.86	23.87	23.79	23.76	
20	QPSK	50	0	23.01	23.02	22.92	22.89	22.88	24
20	QPSK	50	24	22.99	22.93	22.86	22.82	22.93	
20	QPSK	50	50	22.91	22.90	22.83	22.88	22.82	
20	QPSK	100	0	22.97	22.95	22.86	22.82	22.79	
20	16QAM	1	0	23.21	23.17	23.09	23.06	23.04	24
20	16QAM	1	49	23.03	22.97	22.90	22.94	22.93	
20	16QAM	1	99	22.96	22.96	22.97	22.90	22.87	
20	16QAM	50	0	22.11	22.08	22.01	21.95	21.93	23
20	16QAM	50	24	22.05	22.02	21.94	21.89	22.03	
20	16QAM	50	50	22.00	21.95	21.88	21.95	21.93	
20	16QAM	100	0	22.06	22.01	21.95	21.89	21.88	
20	64QAM	1	0	21.94	21.89	21.83	21.79	21.76	23
20	64QAM	1	49	21.75	21.71	21.65	21.68	21.68	
20	64QAM	1	99	21.70	21.68	21.70	21.61	21.61	
20	64QAM	50	0	21.12	21.06	20.98	20.94	20.94	22
20	64QAM	50	24	21.06	21.05	20.95	20.88	21.00	
20	64QAM	50	50	20.99	20.97	20.88	20.93	20.93	
20	64QAM	100	0	21.04	21.02	20.93	20.87	20.87	
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	24.07	24.02	23.95	23.90	23.98	25
15	QPSK	1	37	23.93	23.86	23.80	23.83	23.82	
15	QPSK	1	74	23.91	23.88	23.90	23.82	23.76	
15	QPSK	36	0	22.99	22.93	22.87	22.82	22.95	24
15	QPSK	36	20	22.94	22.95	22.82	22.82	22.89	
15	QPSK	36	39	22.94	22.86	22.78	22.84	22.85	
15	QPSK	75	0	22.98	22.90	22.87	22.79	22.89	
15	16QAM	1	0	23.20	23.11	23.07	23.00	23.06	24
15	16QAM	1	37	23.04	22.98	22.92	22.94	22.94	
15	16QAM	1	74	23.04	22.98	23.01	22.92	22.89	
15	16QAM	36	0	22.02	21.97	21.89	21.85	21.97	23
15	16QAM	36	20	21.99	21.99	21.89	21.82	21.92	
15	16QAM	36	39	21.94	21.91	21.80	21.87	21.88	
15	16QAM	75	0	22.07	22.02	21.93	21.87	21.95	
15	64QAM	1	0	21.90	21.85	21.80	21.75	21.80	23
15	64QAM	1	37	21.79	21.73	21.66	21.67	21.68	
15	64QAM	1	74	21.75	21.72	21.75	21.64	21.61	
15	64QAM	36	0	21.07	21.01	20.95	20.88	20.99	22
15	64QAM	36	20	21.03	20.99	20.92	20.84	20.95	
15	64QAM	36	39	20.99	20.93	20.87	20.89	20.89	
15	64QAM	75	0	21.06	21.00	20.90	20.87	20.95	
Channel				39700	40160	40620	41080	41540	Tune-up limit (dBm)
Frequency (MHz)				2501	2547	2593	2639	2685	
10	QPSK	1	0	23.99	23.94	23.88	23.84	23.92	25
10	QPSK	1	25	23.93	23.88	23.81	23.83	23.83	
10	QPSK	1	49	23.89	23.86	23.90	23.82	23.83	
10	QPSK	25	0	22.96	22.93	22.85	22.78	22.93	24
10	QPSK	25	12	22.98	22.92	22.86	22.92	22.88	
10	QPSK	25	25	22.89	22.86	22.79	22.88	22.84	
10	QPSK	50	0	22.97	22.90	22.86	22.78	22.90	
10	16QAM	1	0	23.15	23.06	23.03	22.96	23.05	24
10	16QAM	1	25	23.05	23.00	22.92	22.97	22.92	
10	16QAM	1	49	22.98	22.97	23.02	22.91	22.91	
10	16QAM	25	0	22.07	22.02	21.95	21.88	22.01	23
10	16QAM	25	12	22.07	22.03	21.94	22.00	21.95	
10	16QAM	25	25	22.00	21.98	21.91	21.96	21.92	
10	16QAM	50	0	22.05	22.01	21.93	21.86	21.98	
10	64QAM	1	0	21.86	21.82	21.75	21.70	21.80	23
10	64QAM	1	25	21.81	21.75	21.68	21.72	21.66	
10	64QAM	1	49	21.75	21.70	21.74	21.64	21.66	
10	64QAM	25	0	21.08	21.06	20.97	20.92	21.04	22
10	64QAM	25	12	21.09	21.05	20.98	21.01	21.01	
10	64QAM	25	25	21.04	21.01	20.92	20.97	20.96	
10	64QAM	50	0	21.04	21.00	20.91	20.85	20.98	
Channel				39675	40148	40620	41093	41565	Tune-up limit (dBm)
Frequency (MHz)				2498.5	2545.8	2593	2640.30	2687.5	
5	QPSK	1	0	23.93	23.88	23.80	23.84	23.82	25
5	QPSK	1	12	23.95	23.90	23.83	23.84	23.81	
5	QPSK	1	24	23.86	23.80	23.75	23.72	23.72	
5	QPSK	12	0	22.97	22.91	22.82	22.86	22.86	24
5	QPSK	12	7	22.98	22.92	22.89	22.89	22.88	
5	QPSK	12	13	22.93	22.86	22.80	22.84	22.82	
5	QPSK	25	0	22.92	22.91	22.83	22.85	22.85	
5	16QAM	1	0	23.05	22.98	22.91	22.91	22.91	24
5	16QAM	1	12	23.06	23.02	22.94	22.97	22.93	
5	16QAM	1	24	23.01	22.94	22.87	22.93	22.87	
5	16QAM	12	0	22.00	21.94	21.88	21.90	21.89	23
5	16QAM	12	7	22.01	21.94	21.87	21.93	21.89	
5	16QAM	12	13	21.96	21.90	21.85	21.87	21.85	
5	16QAM	25	0	22.02	21.98	21.93	21.97	21.93	
5	64QAM	1	0	21.81	21.74	21.69	21.70	21.69	23
5	64QAM	1	12	21.80	21.75	21.68	21.70	21.69	
5	64QAM	1	24	21.76	21.74	21.66	21.65	21.65	
5	64QAM	12	0	21.03	21.00	20.93	20.97	20.95	22
5	64QAM	12	7	21.07	21.02	20.90	20.96	20.96	
5	64QAM	12	13	21.02	20.99	20.89	20.92	20.89	
5	64QAM	25	0	21.04	20.99	20.93	20.97	20.96	

Band 41 HPUE

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Low Middle Ch. / Freq.	Power Middle Ch. / Freq.	Power High Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				39750	40185	40620	41055	41490	
Frequency (MHz)				2506	2549.5	2593	2636.5	2680	
20	QPSK	1	0	25.35	25.36	25.2	25.18	24.59	26.5
20	QPSK	1	49	25.16	25.12	25.03	25.1	25.06	
20	QPSK	1	99	25.14	25.07	25.16	25.07	25	
20	QPSK	50	0	24.34	24.35	24.29	24.19	24.19	25.5
20	QPSK	50	24	24.33	24.29	24.24	24.16	24.24	
20	QPSK	50	50	24.25	24.25	24.18	24.19	24.18	
20	QPSK	100	0	24.32	24.3	24.2	24.16	23.73	
20	16QAM	1	0	24.65	24.63	24.52	24.5	24.16	25.5
20	16QAM	1	49	24.48	24.45	24.35	24.44	24.43	
20	16QAM	1	99	24.48	24.4	24.49	24.34	24.34	
20	16QAM	50	0	23.45	23.43	23.39	23.3	23.28	24.5
20	16QAM	50	24	23.39	23.4	23.33	23.26	23.33	
20	16QAM	50	50	23.37	23.34	23.25	23.3	23.27	
20	16QAM	100	0	23.39	23.39	23.31	23.22	23.19	
20	64QAM	1	0	23.54	23.53	23.41	23.39	23.24	24.5
20	64QAM	1	49	23.39	23.33	23.25	23.28	23.29	
20	64QAM	1	99	23.33	23.32	23.34	23.23	23.23	
20	64QAM	50	0	22.46	22.43	22.36	22.29	22.27	23.5
20	64QAM	50	24	22.41	22.39	22.29	22.21	22.32	
20	64QAM	50	50	22.36	22.34	22.24	22.24	22.22	
20	64QAM	100	0	22.41	22.37	22.3	22.22	22.18	
Channel				39725	40173	40620	41068	41515	Tune-up limit (dBm)
Frequency (MHz)				2503.5	2548.3	2593	2637.8	2682.5	
15	QPSK	1	0	25.34	25.29	25.22	25.19	25.23	26.5
15	QPSK	1	37	25.21	25.16	25.06	25.12	25.12	
15	QPSK	1	74	25.21	25.18	25.25	25.12	25.08	
15	QPSK	36	0	24.32	24.29	24.2	24.15	24.23	25.5
15	QPSK	36	20	24.29	24.3	24.22	24.12	24.21	
15	QPSK	36	39	24.27	24.22	24.12	24.14	24.14	
15	QPSK	75	0	24.27	24.29	24.19	24.13	24.23	
15	16QAM	1	0	24.62	24.62	24.49	24.45	24.51	25.5
15	16QAM	1	37	24.45	24.45	24.33	24.38	24.38	
15	16QAM	1	74	24.45	24.48	24.48	24.36	24.38	
15	16QAM	36	0	23.37	23.33	23.29	23.2	23.28	24.5
15	16QAM	36	20	23.33	23.32	23.25	23.15	23.24	
15	16QAM	36	39	23.29	23.3	23.19	23.18	23.19	
15	16QAM	75	0	23.38	23.33	23.27	23.22	23.26	
15	64QAM	1	0	23.51	23.47	23.38	23.34	23.4	24.5
15	64QAM	1	37	23.4	23.37	23.26	23.29	23.28	
15	64QAM	1	74	23.39	23.35	23.39	23.27	23.22	
15	64QAM	36	0	22.4	22.38	22.3	22.19	22.34	23.5
15	64QAM	36	20	22.38	22.35	22.26	22.19	22.28	
15	64QAM	36	39	22.35	22.3	22.21	22.23	22.22	
15	64QAM	75	0	22.36	22.35	22.26	22.2	22.31	
Channel				39700	40160	40620	41080	41540	Tune-up limit (dBm)
Frequency (MHz)				2501	2547	2593	2639	2685	
10	QPSK	1	0	25.21	25.18	25.08	25.04	24.85	26.5
10	QPSK	1	25	25.16	25.14	25.05	24.97	24.45	
10	QPSK	1	49	25.12	25.1	25.17	25.08	24.88	
10	QPSK	25	0	24.27	24.24	24.17	24.11	23.96	25.5
10	QPSK	25	12	24.33	24.29	24.2	24.21	24.08	
10	QPSK	25	25	24.25	24.2	24.16	24.16	23.88	
10	QPSK	50	0	24.3	24.25	24.19	24.11	24.02	
10	16QAM	1	0	24.57	24.54	24.42	24.39	24.43	25.5
10	16QAM	1	25	24.5	24.47	24.38	24.41	24.35	
10	16QAM	1	49	24.45	24.41	24.46	24.37	24.35	
10	16QAM	25	0	23.44	23.4	23.34	23.23	23.33	24.5
10	16QAM	25	12	23.44	23.42	23.31	23.33	23.31	
10	16QAM	25	25	23.35	23.32	23.28	23.28	23.25	
10	16QAM	50	0	23.39	23.37	23.31	23.2	23.3	
10	64QAM	1	0	23.48	23.42	23.33	23.27	23.37	24.5
10	64QAM	1	25	23.41	23.36	23.25	23.3	23.28	
10	64QAM	1	49	23.35	23.33	23.35	23.24	23.26	
10	64QAM	25	0	22.45	22.41	22.33	22.26	22.36	23.5
10	64QAM	25	12	22.46	22.44	22.35	22.37	22.31	
10	64QAM	25	25	22.41	22.36	22.27	22.29	22.06	
10	64QAM	50	0	22.41	22.36	22.27	22.18	22.13	
Channel				39675	40148	40620	41093	41565	Tune-up limit (dBm)
Frequency (MHz)				2498.5	2545.8	2593	2640.30	2687.5	
5	QPSK	1	0	25.21	25.18	25.05	25.13	25.1	26.5
5	QPSK	1	12	25.21	25.16	25.05	25.11	25.1	
5	QPSK	1	24	25.13	25.07	24.98	25.06	24.84	
5	QPSK	12	0	24.35	24.28	24.22	24.21	23.75	25.5
5	QPSK	12	7	24.36	24.27	24.24	24.21	23.83	
5	QPSK	12	13	24.32	24.28	24.19	24.16	23.9	
5	QPSK	25	0	24.32	24.25	24.15	24.21	23.83	
5	16QAM	1	0	24.54	24.51	24.36	24.4	24.36	25.5
5	16QAM	1	12	24.53	24.49	24.4	24.43	24.36	
5	16QAM	1	24	24.49	24.47	24.33	24.38	24.34	
5	16QAM	12	0	23.41	23.39	23.3	23.3	23.28	24.5
5	16QAM	12	7	23.43	23.39	23.34	23.32	23.29	
5	16QAM	12	13	23.42	23.33	23.25	23.25	23.27	
5	16QAM	25	0	23.43	23.37	23.28	23.27	23.27	
5	64QAM	1	0	23.41	23.38	23.28	23.31	23.28	24.5
5	64QAM	1	12	23.43	23.39	23.26	23.34	23.31	
5	64QAM	1	24	23.38	23.36	23.23	23.25	23.25	
5	64QAM	12	0	22.46	22.39	22.34	22.36	22.32	23.5
5	64QAM	12	7	22.46	22.41	22.33	22.36	22.32	
5	64QAM	12	13	22.43	22.35	22.3	22.31	22.29	
5	64QAM	25	0	22.47	22.38	22.27	22.34	22.28	

Band 38							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				37850	38000	38150	
Frequency (MHz)				2580	2595	2610	
20	QPSK	1	0	24.22	24.23	24.23	25
20	QPSK	1	49	24.19	24.19	24.26	
20	QPSK	1	99	24.25	24.27	24.34	
20	QPSK	50	0	23.29	23.27	23.26	24
20	QPSK	50	24	23.28	23.31	23.31	
20	QPSK	50	50	23.27	23.32	23.35	
20	QPSK	100	0	23.30	23.29	23.29	
20	16QAM	1	0	23.34	23.35	23.35	24
20	16QAM	1	49	23.30	23.32	23.39	
20	16QAM	1	99	23.36	23.36	23.43	
20	16QAM	50	0	22.37	22.36	22.38	23
20	16QAM	50	24	22.37	22.40	22.37	
20	16QAM	50	50	22.37	22.40	22.47	
20	16QAM	100	0	22.37	22.38	22.35	
20	64QAM	1	0	22.06	22.08	22.08	23
20	64QAM	1	49	22.05	22.05	22.13	
20	64QAM	1	99	22.08	22.09	22.18	
20	64QAM	50	0	21.34	21.35	21.34	22
20	64QAM	50	24	21.35	21.36	21.34	
20	64QAM	50	50	21.36	21.35	21.46	
20	64QAM	100	0	21.34	21.38	21.37	
Channel				37825	38000	38175	Tune-up limit (dBm)
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	24.29	24.27	24.27	25
15	QPSK	1	37	24.22	24.22	24.29	
15	QPSK	1	74	24.33	24.30	24.38	
15	QPSK	36	0	23.29	23.27	23.29	24
15	QPSK	36	20	23.27	23.30	23.40	
15	QPSK	36	39	23.28	23.25	23.36	
15	QPSK	75	0	23.29	23.30	23.29	
15	16QAM	1	0	23.32	23.36	23.37	24
15	16QAM	1	37	23.34	23.32	23.41	
15	16QAM	1	74	23.42	23.42	23.51	
15	16QAM	36	0	22.29	22.33	22.31	23
15	16QAM	36	20	22.35	22.35	22.43	
15	16QAM	36	39	22.31	22.30	22.41	
15	16QAM	75	0	22.35	22.36	22.37	
15	64QAM	1	0	22.09	22.11	22.10	23
15	64QAM	1	37	22.06	22.07	22.16	
15	64QAM	1	74	22.16	22.15	22.25	
15	64QAM	36	0	21.33	21.34	21.32	22
15	64QAM	36	20	21.34	21.36	21.44	
15	64QAM	36	39	21.34	21.34	21.42	
15	64QAM	75	0	21.36	21.35	21.37	
Channel				37800	38000	38200	Tune-up limit (dBm)
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	24.22	24.24	24.28	25
10	QPSK	1	25	24.23	24.23	24.31	
10	QPSK	1	49	24.27	24.27	24.35	
10	QPSK	25	0	23.28	23.23	23.34	24
10	QPSK	25	12	23.30	23.29	23.33	
10	QPSK	25	25	23.25	23.27	23.38	
10	QPSK	50	0	23.31	23.29	23.37	
10	16QAM	1	0	23.32	23.40	23.45	24
10	16QAM	1	25	23.34	23.36	23.45	
10	16QAM	1	49	23.37	23.39	23.46	
10	16QAM	25	0	22.35	22.33	22.42	23
10	16QAM	25	12	22.36	22.37	22.48	
10	16QAM	25	25	22.37	22.38	22.44	
10	16QAM	50	0	22.35	22.40	22.48	
10	64QAM	1	0	22.09	22.12	22.19	23
10	64QAM	1	25	22.09	22.11	22.18	
10	64QAM	1	49	22.11	22.14	22.18	
10	64QAM	25	0	21.36	21.37	21.46	22
10	64QAM	25	12	21.37	21.39	21.48	
10	64QAM	25	25	21.40	21.40	21.48	
10	64QAM	50	0	21.36	21.36	21.45	
Channel				37775	38000	38225	Tune-up limit (dBm)
Frequency (MHz)				2572.5	2595	2617.5	
5	QPSK	1	0	24.21	24.20	24.28	25
5	QPSK	1	12	24.23	24.22	24.29	
5	QPSK	1	24	24.20	24.19	24.28	
5	QPSK	12	0	23.24	23.28	23.35	24
5	QPSK	12	7	23.27	23.26	23.36	
5	QPSK	12	13	23.27	23.26	23.39	
5	QPSK	25	0	23.26	23.22	23.35	
5	16QAM	1	0	23.26	23.33	23.39	24
5	16QAM	1	12	23.36	23.34	23.44	
5	16QAM	1	24	23.37	23.36	23.46	
5	16QAM	12	0	22.30	22.30	22.39	23
5	16QAM	12	7	22.32	22.31	22.43	
5	16QAM	12	13	22.31	22.34	22.41	
5	16QAM	25	0	22.33	22.36	22.46	
5	64QAM	1	0	22.02	22.05	22.15	23
5	64QAM	1	12	22.08	22.09	22.19	
5	64QAM	1	24	22.11	22.13	22.21	
5	64QAM	12	0	21.34	21.33	21.42	22
5	64QAM	12	7	21.38	21.38	21.45	
5	64QAM	12	13	21.33	21.33	21.43	
5	64QAM	25	0	21.36	21.38	21.46	

Band 38 HPUE							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				37850	38000	38150	
Frequency (MHz)				2580	2595	2610	
20	QPSK	1	0	25.18	24.52	24.64	26.5
20	QPSK	1	49	25.05	24.81	24.97	
20	QPSK	1	99	24.55	24.81	25.64	
20	QPSK	50	0	24.14	23.67	23.99	25.5
20	QPSK	50	24	23.93	23.67	24.13	
20	QPSK	50	50	23.73	23.65	24.42	
20	QPSK	100	0	23.77	23.55	24.08	
20	16QAM	1	0	24.54	23.89	23.96	25.5
20	16QAM	1	49	23.91	23.50	24.41	
20	16QAM	1	99	23.81	23.95	24.94	
20	16QAM	50	0	23.23	22.76	23.10	24.5
20	16QAM	50	24	23.06	22.79	23.27	
20	16QAM	50	50	22.88	22.77	23.52	
20	16QAM	100	0	22.94	22.68	23.20	
20	64QAM	1	0	23.55	22.86	22.92	24.5
20	64QAM	1	49	23.07	22.83	23.25	
20	64QAM	1	99	22.80	23.02	23.85	
20	64QAM	50	0	22.23	21.73	22.11	23.5
20	64QAM	50	24	22.04	21.75	22.22	
20	64QAM	50	50	21.86	21.79	22.47	
20	64QAM	100	0	21.92	21.69	22.22	
Channel				37825	38000	38175	Tune-up limit (dBm)
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	25.10	24.50	24.57	26.5
15	QPSK	1	37	24.98	24.74	24.87	
15	QPSK	1	74	24.50	24.76	25.60	
15	QPSK	36	0	24.14	23.58	23.89	25.5
15	QPSK	36	20	23.91	23.65	24.11	
15	QPSK	36	39	23.70	23.58	24.33	
15	QPSK	75	0	23.76	23.55	24.02	
15	16QAM	1	0	24.52	23.86	23.94	25.5
15	16QAM	1	37	23.81	23.53	24.41	
15	16QAM	1	74	23.80	23.90	24.91	
15	16QAM	36	0	23.18	22.66	23.07	24.5
15	16QAM	36	20	23.06	22.71	23.18	
15	16QAM	36	39	22.83	22.75	23.48	
15	16QAM	75	0	22.88	22.62	23.11	
15	64QAM	1	0	23.52	22.85	22.87	24.5
15	64QAM	1	37	23.06	22.76	23.20	
15	64QAM	1	74	22.70	22.97	23.78	
15	64QAM	36	0	22.13	21.67	22.08	23.5
15	64QAM	36	20	21.97	21.68	22.22	
15	64QAM	36	39	21.86	21.77	22.38	
15	64QAM	75	0	21.86	21.65	22.22	
Channel				37800	38000	38200	Tune-up limit (dBm)
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	25.15	24.52	24.55	26.5
10	QPSK	1	25	25.03	24.80	24.91	
10	QPSK	1	49	24.54	24.72	25.61	
10	QPSK	25	0	24.08	23.66	23.89	25.5
10	QPSK	25	12	23.93	23.59	24.13	
10	QPSK	25	25	23.70	23.58	24.33	
10	QPSK	50	0	23.68	23.55	24.00	
10	16QAM	1	0	24.48	23.85	23.89	25.5
10	16QAM	1	25	23.83	23.57	24.37	
10	16QAM	1	49	23.79	23.93	24.91	
10	16QAM	25	0	23.21	22.73	23.00	24.5
10	16QAM	25	12	23.00	22.76	23.20	
10	16QAM	25	25	22.80	22.69	23.52	
10	16QAM	50	0	22.91	22.61	23.13	
10	64QAM	1	0	23.50	22.79	22.88	24.5
10	64QAM	1	25	23.07	22.75	23.25	
10	64QAM	1	49	22.75	23.00	23.76	
10	64QAM	25	0	22.21	21.63	22.05	23.5
10	64QAM	25	12	21.97	21.75	22.14	
10	64QAM	25	25	21.78	21.74	22.37	
10	64QAM	50	0	21.83	21.61	22.22	
Channel				37775	38000	38225	Tune-up limit (dBm)
Frequency (MHz)				2572.5	2595	2617.5	
5	QPSK	1	0	25.17	24.51	24.59	26.5
5	QPSK	1	12	25.00	24.80	24.94	
5	QPSK	1	24	24.50	24.72	25.62	
5	QPSK	12	0	24.13	23.57	23.89	25.5
5	QPSK	12	7	23.89	23.66	24.05	
5	QPSK	12	13	23.65	23.59	24.38	
5	QPSK	25	0	23.75	23.55	24.07	
5	16QAM	1	0	24.44	23.82	23.87	25.5
5	16QAM	1	12	23.85	23.56	24.34	
5	16QAM	1	24	23.71	23.95	24.84	
5	16QAM	12	0	23.13	22.70	23.07	24.5
5	16QAM	12	7	23.06	22.70	23.18	
5	16QAM	12	13	22.82	22.75	23.44	
5	16QAM	25	0	22.85	22.63	23.12	
5	64QAM	1	0	23.47	22.84	22.91	24.5
5	64QAM	1	12	23.01	22.73	23.15	
5	64QAM	1	24	22.70	22.93	23.84	
5	64QAM	12	0	22.21	21.72	22.01	23.5
5	64QAM	12	7	22.02	21.72	22.20	
5	64QAM	12	13	21.82	21.76	22.38	
5	64QAM	25	0	21.86	21.61	22.22	

Band 41									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Low Middle Ch. / Freq.	Power Middle Ch. / Freq.	Power High Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				39750	40185	40620	41055	41490	
Frequency (MHz)				2506	2549.5	2593	2636.5	2680	
20	QPSK	1	0	24.40	24.36	24.37	24.55	24.45	25
20	QPSK	1	49	24.26	24.18	24.22	24.47	24.63	
20	QPSK	1	99	24.23	24.29	24.34	24.52	24.28	
20	QPSK	50	0	23.39	23.32	23.36	23.56	23.68	24
20	QPSK	50	24	23.36	23.37	23.31	23.60	23.64	
20	QPSK	50	50	23.31	23.35	23.30	23.55	23.66	
20	QPSK	100	0	23.36	23.37	23.32	23.59	23.64	
20	16QAM	1	0	23.55	23.47	23.51	23.66	23.82	24
20	16QAM	1	49	23.37	23.33	23.36	23.59	23.76	
20	16QAM	1	99	23.33	23.42	23.48	23.67	23.66	
20	16QAM	50	0	22.49	22.42	22.45	22.61	22.77	23
20	16QAM	50	24	22.43	22.45	22.43	22.65	22.71	
20	16QAM	50	50	22.40	22.44	22.39	22.60	22.75	
20	16QAM	100	0	22.42	22.45	22.41	22.63	22.69	
20	64QAM	1	0	22.25	22.20	22.24	22.40	22.59	23
20	64QAM	1	49	22.11	22.06	22.08	22.34	22.50	
20	64QAM	1	99	22.07	22.14	22.20	22.44	22.41	
20	64QAM	50	0	21.45	21.42	21.44	21.62	21.77	22
20	64QAM	50	24	21.41	21.44	21.40	21.67	21.71	
20	64QAM	50	50	21.38	21.42	21.36	21.62	21.76	
20	64QAM	100	0	21.42	21.47	21.41	21.64	21.70	
Channel				39725	40173	40620	41068	41515	Tune-up limit (dBm)
Frequency (MHz)				2503.5	2548.3	2593	2637.8	2682.5	
15	QPSK	1	0	24.41	24.31	24.37	24.62	24.60	25
15	QPSK	1	37	24.27	24.20	24.25	24.51	24.59	
15	QPSK	1	74	24.27	24.32	24.41	24.61	24.58	
15	QPSK	36	0	23.39	23.29	23.33	23.60	23.65	24
15	QPSK	36	20	23.35	23.38	23.33	23.56	23.70	
15	QPSK	36	39	23.27	23.31	23.28	23.52	23.67	
15	QPSK	75	0	23.34	23.35	23.31	23.55	23.62	
15	16QAM	1	0	23.51	23.43	23.47	23.73	23.78	24
15	16QAM	1	37	23.40	23.34	23.35	23.61	23.76	
15	16QAM	1	74	23.39	23.41	23.49	23.71	23.67	
15	16QAM	36	0	22.38	22.32	22.36	22.58	22.69	23
15	16QAM	36	20	22.38	22.38	22.36	22.59	22.74	
15	16QAM	36	39	22.38	22.35	22.33	22.52	22.68	
15	16QAM	75	0	22.44	22.45	22.38	22.61	22.67	
15	64QAM	1	0	22.24	22.17	22.21	22.46	22.54	23
15	64QAM	1	37	22.12	22.08	22.09	22.37	22.51	
15	64QAM	1	74	22.12	22.15	22.22	22.44	22.45	
15	64QAM	36	0	21.45	21.35	21.38	21.64	21.71	22
15	64QAM	36	20	21.40	21.45	21.38	21.60	21.79	
15	64QAM	36	39	21.39	21.41	21.34	21.56	21.71	
15	64QAM	75	0	21.42	21.45	21.38	21.63	21.69	
Channel				39700	40160	40620	41080	41540	Tune-up limit (dBm)
Frequency (MHz)				2501	2547	2593	2639	2685	
10	QPSK	1	0	24.32	24.29	24.32	24.56	24.60	25
10	QPSK	1	25	24.26	24.21	24.27	24.50	24.59	
10	QPSK	1	49	24.26	24.21	24.39	24.52	24.62	
10	QPSK	25	0	23.33	23.26	23.33	23.60	23.76	24
10	QPSK	25	12	23.34	23.29	23.35	23.60	23.73	
10	QPSK	25	25	23.29	23.27	23.27	23.53	23.65	
10	QPSK	50	0	23.34	23.29	23.32	23.58	23.73	
10	16QAM	1	0	23.47	23.40	23.47	23.72	23.86	24
10	16QAM	1	25	23.39	23.36	23.39	23.64	23.73	
10	16QAM	1	49	23.34	23.29	23.47	23.61	23.72	
10	16QAM	25	0	22.45	22.38	22.41	22.67	22.85	23
10	16QAM	25	12	22.45	22.39	22.42	22.65	22.80	
10	16QAM	25	25	22.40	22.34	22.41	22.62	22.74	
10	16QAM	50	0	22.43	22.34	22.38	22.65	22.81	
10	64QAM	1	0	22.22	22.16	22.18	22.44	22.62	23
10	64QAM	1	25	22.14	22.10	22.13	22.39	22.50	
10	64QAM	1	49	22.12	22.04	22.21	22.35	22.46	
10	64QAM	25	0	21.44	21.40	21.46	21.69	21.86	22
10	64QAM	25	12	21.46	21.39	21.46	21.71	21.85	
10	64QAM	25	25	21.44	21.35	21.39	21.64	21.78	
10	64QAM	50	0	21.42	21.34	21.40	21.65	21.80	
Channel				39675	40148	40620	41093	41565	Tune-up limit (dBm)
Frequency (MHz)				2498.5	2545.8	2593	2640.30	2687.5	
5	QPSK	1	0	24.27	24.22	24.26	24.51	24.60	25
5	QPSK	1	12	24.29	24.22	24.27	24.53	24.60	
5	QPSK	1	24	24.19	24.15	24.19	24.46	24.54	
5	QPSK	12	0	23.33	23.26	23.31	23.56	23.68	24
5	QPSK	12	7	23.37	23.28	23.32	23.60	23.69	
5	QPSK	12	13	23.31	23.28	23.27	23.56	23.68	
5	QPSK	25	0	23.34	23.28	23.30	23.56	23.69	
5	16QAM	1	0	23.36	23.34	23.38	23.63	23.75	24
5	16QAM	1	12	23.42	23.34	23.40	23.64	23.75	
5	16QAM	1	24	23.39	23.30	23.34	23.62	23.70	
5	16QAM	12	0	22.35	22.30	22.34	22.60	22.71	23
5	16QAM	12	7	22.38	22.32	22.38	22.61	22.71	
5	16QAM	12	13	22.34	22.28	22.32	22.57	22.68	
5	16QAM	25	0	22.42	22.37	22.42	22.64	22.79	
5	64QAM	1	0	22.14	22.10	22.14	22.38	22.50	23
5	64QAM	1	12	22.16	22.10	22.15	22.38	22.52	
5	64QAM	1	24	22.11	22.05	22.14	22.36	22.47	
5	64QAM	12	0	21.43	21.38	21.38	21.65	21.79	22
5	64QAM	12	7	21.42	21.34	21.42	21.64	21.78	
5	64QAM	12	13	21.41	21.31	21.38	21.61	21.75	
5	64QAM	25	0	21.45	21.39	21.42	21.66	21.79	

Band 41 HPUE

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Low Middle Ch. / Freq.	Power Middle Ch. / Freq.	Power High Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				39750	40185	40620	41055	41490	
Frequency (MHz)				2506	2549.5	2593	2636.5	2680	
20	QPSK	1	0	25.37	25.7	25.27	25.16	24.88	26.5
20	QPSK	1	49	25.65	25.52	25.59	25.85	25.88	
20	QPSK	1	99	25.6	25.61	25.27	25.77	24.97	
20	QPSK	50	0	24.74	24.73	24.57	24.68	24.52	25.5
20	QPSK	50	24	24.79	24.82	24.59	24.94	24.54	
20	QPSK	50	50	24.75	24.75	24.44	24.73	24.33	
20	QPSK	100	0	24.51	24.79	24.21	24.33	24.04	
20	16QAM	1	0	24.82	25.07	24.87	24.85	24.45	25.5
20	16QAM	1	49	24.74	24.91	24.48	24.56	25.28	
20	16QAM	1	99	24.9	24.94	24.51	24.8	25.02	
20	16QAM	50	0	23.91	23.8	23.86	24.02	24.16	24.5
20	16QAM	50	24	23.87	23.86	23.74	24.06	23.94	
20	16QAM	50	50	23.83	23.83	23.54	24.03	23.51	
20	16QAM	100	0	23.86	23.85	23.43	23.7	23.38	
20	64QAM	1	0	23.87	23.95	23.85	23.92	23.57	24.5
20	64QAM	1	49	23.81	23.81	23.75	24.04	24.18	
20	64QAM	1	99	23.84	23.86	23.78	24.1	23.64	
20	64QAM	50	0	22.91	22.8	22.73	22.98	22.87	23.5
20	64QAM	50	24	22.83	22.87	22.61	22.94	22.68	
20	64QAM	50	50	22.78	22.83	22.61	22.98	22.52	
20	64QAM	100	0	22.81	22.88	22.51	22.73	22.45	
Channel				39725	40173	40620	41068	41515	Tune-up limit (dBm)
Frequency (MHz)				2503.5	2548.3	2593	2637.8	2682.5	
15	QPSK	1	0	25.48	25.7	25.31	25.45	25.5	26.5
15	QPSK	1	37	25.69	25.56	25.61	25.87	25.72	
15	QPSK	1	74	25.69	25.71	25.32	25.68	25.47	
15	QPSK	36	0	24.55	24.7	24.41	24.56	24.38	25.5
15	QPSK	36	20	24.73	24.78	24.54	24.71	24.41	
15	QPSK	36	39	24.69	24.74	24.39	24.65	24.3	
15	QPSK	75	0	24.64	24.75	24.32	24.57	24.27	
15	16QAM	1	0	24.93	25.02	24.89	25.06	25.11	25.5
15	16QAM	1	37	24.88	24.87	24.84	25.14	25.27	
15	16QAM	1	74	24.92	24.97	24.94	25.23	25.18	
15	16QAM	36	0	23.78	23.75	23.74	24.01	23.74	24.5
15	16QAM	36	20	23.78	23.79	23.61	23.98	23.75	
15	16QAM	36	39	23.74	23.81	23.51	23.93	23.64	
15	16QAM	75	0	23.81	23.82	23.56	23.93	23.59	
15	64QAM	1	0	23.91	23.89	23.84	24.04	23.86	24.5
15	64QAM	1	37	23.82	23.8	23.69	24.02	24.16	
15	64QAM	1	74	23.81	23.87	23.76	24.11	23.79	
15	64QAM	36	0	22.83	22.76	22.68	23.03	22.67	23.5
15	64QAM	36	20	22.81	22.85	22.59	22.89	22.54	
15	64QAM	36	39	22.75	22.83	22.55	22.83	22.35	
15	64QAM	75	0	22.8	22.83	22.51	22.76	22.37	
Channel				39700	40160	40620	41080	41540	Tune-up limit (dBm)
Frequency (MHz)				2501	2547	2593	2639	2685	
10	QPSK	1	0	25.5	25.59	25.25	25.42	24.94	26.5
10	QPSK	1	25	25.61	25.54	25	24.95	24.32	
10	QPSK	1	49	25.57	25.52	25.19	25.46	24.86	
10	QPSK	25	0	24.52	24.62	24.31	24.62	24.04	25.5
10	QPSK	25	12	24.7	24.68	24.37	24.74	24.14	
10	QPSK	25	25	24.7	24.59	24.4	24.73	24.1	
10	QPSK	50	0	24.33	24.64	24.15	24.11	24.08	
10	16QAM	1	0	24.91	24.98	24.77	25	24.64	25.5
10	16QAM	1	25	24.9	24.88	24.75	25.12	24.69	
10	16QAM	1	49	24.83	24.84	24.72	25.08	24.6	
10	16QAM	25	0	23.85	23.77	23.72	24.05	23.6	24.5
10	16QAM	25	12	23.81	23.76	23.71	24.04	23.69	
10	16QAM	25	25	23.81	23.75	23.57	24.03	23.58	
10	16QAM	50	0	23.64	23.77	23.42	23.76	23.4	
10	64QAM	1	0	23.84	23.84	23.74	23.95	23.77	24.5
10	64QAM	1	25	23.81	23.8	23.72	24.01	23.68	
10	64QAM	1	49	23.8	23.76	23.76	24	23.84	
10	64QAM	25	0	22.9	22.83	22.66	22.99	22.48	23.5
10	64QAM	25	12	22.89	22.82	22.66	22.98	22.54	
10	64QAM	25	25	22.81	22.74	22.57	22.87	22.25	
10	64QAM	50	0	22.66	22.74	22.49	22.72	22.19	
Channel				39675	40148	40620	41093	41565	Tune-up limit (dBm)
Frequency (MHz)				2498.5	2545.8	2593	2640.30	2687.5	
5	QPSK	1	0	25.54	25.56	25.43	25.8	25.27	26.5
5	QPSK	1	12	25.48	25.55	25.24	25.7	25.04	
5	QPSK	1	24	25.54	25.49	25.15	25.42	24.85	
5	QPSK	12	0	24.51	24.66	24.25	24.5	24.04	25.5
5	QPSK	12	7	24.51	24.67	24.3	24.5	24.02	
5	QPSK	12	13	24.55	24.6	24.27	24.57	24.07	
5	QPSK	25	0	24.55	24.62	24.29	24.57	24.02	
5	16QAM	1	0	24.85	24.91	24.71	25.1	24.69	25.5
5	16QAM	1	12	24.83	24.88	24.6	25.1	24.59	
5	16QAM	1	24	24.84	24.88	24.7	25.1	24.78	
5	16QAM	12	0	23.83	23.75	23.63	24.04	23.63	24.5
5	16QAM	12	7	23.83	23.76	23.61	24.01	23.62	
5	16QAM	12	13	23.81	23.73	23.59	23.99	23.67	
5	16QAM	25	0	23.8	23.77	23.64	24.04	23.66	
5	64QAM	1	0	23.8	23.78	23.73	24.04	23.79	24.5
5	64QAM	1	12	23.85	23.78	23.78	24.08	23.97	
5	64QAM	1	24	23.78	23.77	23.72	23.99	23.99	
5	64QAM	12	0	22.82	22.75	22.79	23.08	22.9	23.5
5	64QAM	12	7	22.82	22.79	22.77	23.05	22.82	
5	64QAM	12	13	22.8	22.76	22.69	23.02	22.69	
5	64QAM	25	0	22.83	22.79	22.66	23.02	22.68	

Band 38							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				37850	38000	38150	
Frequency (MHz)				2580	2595	2610	
20	QPSK	1	0	19.49	19.32	19.31	20.5
20	QPSK	1	49	19.38	19.21	19.17	
20	QPSK	1	99	19.26	19.19	19.14	
20	QPSK	50	0	19.50	19.34	19.32	20.5
20	QPSK	50	24	19.38	19.31	19.26	
20	QPSK	50	50	19.28	19.29	19.24	
20	QPSK	100	0	19.35	19.28	19.27	
20	16QAM	1	0	19.55	19.46	19.42	20.5
20	16QAM	1	49	19.47	19.32	19.31	
20	16QAM	1	99	19.36	19.28	19.21	
20	16QAM	50	0	19.52	19.41	19.37	20.5
20	16QAM	50	24	19.41	19.38	19.35	
20	16QAM	50	50	19.41	19.34	19.29	
20	16QAM	100	0	19.42	19.34	19.34	
20	64QAM	1	0	19.16	19.02	18.98	20.5
20	64QAM	1	49	19.06	18.91	18.90	
20	64QAM	1	99	18.94	18.87	18.83	
20	64QAM	50	0	19.52	19.38	19.34	20.5
20	64QAM	50	24	19.39	19.35	19.34	
20	64QAM	50	50	19.35	19.32	19.27	
20	64QAM	100	0	19.40	19.35	19.31	
Channel				37825	38000	38175	Tune-up limit (dBm)
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	19.48	19.34	19.31	20.5
15	QPSK	1	37	19.41	19.24	19.20	
15	QPSK	1	74	19.33	19.28	19.20	
15	QPSK	36	0	19.41	19.28	19.26	20.5
15	QPSK	36	20	19.42	19.28	19.22	
15	QPSK	36	39	19.28	19.25	19.19	
15	QPSK	75	0	19.30	19.25	19.23	
15	16QAM	1	0	19.53	19.43	19.39	20.5
15	16QAM	1	37	19.48	19.32	19.25	
15	16QAM	1	74	19.40	19.36	19.28	
15	16QAM	36	0	19.45	19.32	19.25	20.5
15	16QAM	36	20	19.47	19.33	19.29	
15	16QAM	36	39	19.32	19.24	19.22	
15	16QAM	75	0	19.39	19.35	19.30	
15	64QAM	1	0	19.14	19.01	18.99	20.5
15	64QAM	1	37	19.06	18.94	18.89	
15	64QAM	1	74	18.98	18.93	18.89	
15	64QAM	36	0	19.50	19.31	19.28	20.5
15	64QAM	36	20	19.46	19.32	19.29	
15	64QAM	36	39	19.32	19.28	19.25	
15	64QAM	75	0	19.37	19.35	19.31	
Channel				37800	38000	38200	Tune-up limit (dBm)
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	19.46	19.26	19.22	20.5
10	QPSK	1	25	19.41	19.24	19.16	
10	QPSK	1	49	19.40	19.25	19.18	
10	QPSK	25	0	19.43	19.26	19.19	20.5
10	QPSK	25	12	19.43	19.23	19.20	
10	QPSK	25	25	19.41	19.22	19.16	
10	QPSK	50	0	19.40	19.26	19.22	
10	16QAM	1	0	19.53	19.37	19.34	20.5
10	16QAM	1	25	19.47	19.33	19.28	
10	16QAM	1	49	19.47	19.32	19.22	
10	16QAM	25	0	19.47	19.31	19.24	20.5
10	16QAM	25	12	19.46	19.34	19.25	
10	16QAM	25	25	19.46	19.29	19.22	
10	16QAM	50	0	19.50	19.31	19.26	
10	64QAM	1	0	19.13	18.98	18.92	20.5
10	64QAM	1	25	19.09	18.92	18.86	
10	64QAM	1	49	19.09	18.92	18.86	
10	64QAM	25	0	19.50	19.33	19.28	20.5
10	64QAM	25	12	19.53	19.36	19.30	
10	64QAM	25	25	19.47	19.32	19.25	
10	64QAM	50	0	19.49	19.32	19.27	
Channel				37775	38000	38225	Tune-up limit (dBm)
Frequency (MHz)				2572.5	2595	2617.5	
5	QPSK	1	0	19.40	19.24	19.18	20.5
5	QPSK	1	12	19.39	19.23	19.15	
5	QPSK	1	24	19.38	19.19	19.11	
5	QPSK	12	0	19.42	19.25	19.18	20.5
5	QPSK	12	7	19.42	19.28	19.18	
5	QPSK	12	13	19.41	19.25	19.18	
5	QPSK	25	0	19.38	19.24	19.18	
5	16QAM	1	0	19.48	19.31	19.22	20.5
5	16QAM	1	12	19.49	19.35	19.22	
5	16QAM	1	24	19.46	19.32	19.22	
5	16QAM	12	0	19.41	19.27	19.20	20.5
5	16QAM	12	7	19.42	19.27	19.21	
5	16QAM	12	13	19.38	19.26	19.18	
5	16QAM	25	0	19.44	19.31	19.22	
5	64QAM	1	0	19.11	18.90	18.85	20.5
5	64QAM	1	12	19.08	18.91	18.85	
5	64QAM	1	24	19.08	18.91	18.85	
5	64QAM	12	0	19.48	19.31	19.23	20.5
5	64QAM	12	7	19.51	19.34	19.28	
5	64QAM	12	13	19.45	19.32	19.23	
5	64QAM	25	0	19.49	19.31	19.28	

Band 38 HPUE							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				37850	38000	38150	
Frequency (MHz)				2580	2595	2610	
20	QPSK	1	0	20.59	20.63	20.69	
20	QPSK	1	49	20.62	20.59	20.71	22
20	QPSK	1	99	20.67	20.78	20.83	
20	QPSK	50	0	20.74	20.73	20.81	
20	QPSK	50	24	20.79	20.78	20.83	22
20	QPSK	50	50	20.78	20.76	20.86	
20	QPSK	100	0	20.78	20.77	20.81	
20	16QAM	1	0	20.92	20.93	21.03	
20	16QAM	1	49	20.94	20.95	21.02	22
20	16QAM	1	99	20.99	21.12	21.16	
20	16QAM	50	0	20.84	20.84	20.91	
20	16QAM	50	24	20.88	20.89	20.96	22
20	16QAM	50	50	20.88	20.89	20.96	
20	16QAM	100	0	20.84	20.83	20.94	
20	64QAM	1	0	20.76	20.81	20.86	
20	64QAM	1	49	20.82	20.77	20.89	22
20	64QAM	1	99	20.85	20.93	21.04	
20	64QAM	50	0	20.84	20.85	20.90	
20	64QAM	50	24	20.87	20.87	20.92	22
20	64QAM	50	50	20.89	20.86	20.92	
20	64QAM	100	0	20.84	20.88	20.93	
Channel				37825	38000	38175	Tune-up limit (dBm)
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	20.68	20.68	20.76	
15	QPSK	1	37	20.66	20.65	20.73	22
15	QPSK	1	74	20.78	20.84	20.93	
15	QPSK	36	0	20.72	20.72	20.77	
15	QPSK	36	20	20.74	20.73	20.80	22
15	QPSK	36	39	20.76	20.75	20.81	
15	QPSK	75	0	20.75	20.76	20.82	
15	16QAM	1	0	20.96	20.91	21.04	
15	16QAM	1	37	20.90	20.87	20.97	22
15	16QAM	1	74	21.02	21.13	21.18	
15	16QAM	36	0	20.75	20.76	20.84	
15	16QAM	36	20	20.79	20.83	20.87	22
15	16QAM	36	39	20.79	20.80	20.88	
15	16QAM	75	0	20.87	20.83	20.89	
15	64QAM	1	0	20.79	20.80	20.87	
15	64QAM	1	37	20.80	20.80	20.87	22
15	64QAM	1	74	20.91	20.96	21.09	
15	64QAM	36	0	20.80	20.79	20.90	
15	64QAM	36	20	20.86	20.86	20.92	22
15	64QAM	36	39	20.84	20.81	20.89	
15	64QAM	75	0	20.87	20.81	20.89	
Channel				37800	38000	38200	Tune-up limit (dBm)
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	20.57	20.60	20.66	
10	QPSK	1	25	20.60	20.59	20.77	22
10	QPSK	1	49	20.65	20.66	20.82	
10	QPSK	25	0	20.71	20.69	20.76	
10	QPSK	25	12	20.74	20.75	20.81	22
10	QPSK	25	25	20.71	20.72	20.87	
10	QPSK	50	0	20.76	20.74	20.79	
10	16QAM	1	0	20.90	20.94	21.03	
10	16QAM	1	25	20.94	20.90	21.12	22
10	16QAM	1	49	20.95	20.99	21.13	
10	16QAM	25	0	20.82	20.81	20.91	
10	16QAM	25	12	20.87	20.86	20.94	22
10	16QAM	25	25	20.83	20.86	21.01	
10	16QAM	50	0	20.83	20.82	20.92	
10	64QAM	1	0	20.75	20.78	20.88	
10	64QAM	1	25	20.77	20.79	20.99	22
10	64QAM	1	49	20.85	20.83	21.04	
10	64QAM	25	0	20.86	20.86	20.94	
10	64QAM	25	12	20.90	20.92	20.97	22
10	64QAM	25	25	20.87	20.91	21.08	
10	64QAM	50	0	20.82	20.81	20.87	
Channel				37775	38000	38225	Tune-up limit (dBm)
Frequency (MHz)				2572.5	2595	2617.5	
5	QPSK	1	0	20.56	20.60	20.79	
5	QPSK	1	12	20.57	20.60	20.77	22
5	QPSK	1	24	20.58	20.59	20.78	
5	QPSK	12	0	20.68	20.72	20.85	
5	QPSK	12	7	20.73	20.74	20.92	22
5	QPSK	12	13	20.72	20.74	20.88	
5	QPSK	25	0	20.67	20.68	20.85	
5	16QAM	1	0	20.86	20.88	21.08	
5	16QAM	1	12	20.91	20.93	21.13	22
5	16QAM	1	24	20.91	20.96	21.11	
5	16QAM	12	0	20.79	20.81	20.97	
5	16QAM	12	7	20.79	20.82	21.01	22
5	16QAM	12	13	20.79	20.84	21.03	
5	16QAM	25	0	20.81	20.83	21.02	
5	64QAM	1	0	20.73	20.76	20.96	
5	64QAM	1	12	20.76	20.78	20.96	22
5	64QAM	1	24	20.79	20.81	21.00	
5	64QAM	12	0	20.80	20.81	20.99	
5	64QAM	12	7	20.88	20.90	21.05	22
5	64QAM	12	13	20.84	20.83	21.05	
5	64QAM	25	0	20.82	20.88	21.05	

Band 41									
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	19.45	19.43	19.38	19.30	19.29	20.5
20	QPSK	1	49	19.27	19.27	19.17	19.22	19.21	
20	QPSK	1	99	19.25	19.25	19.26	19.17	19.16	
20	QPSK	50	0	19.41	19.40	19.35	19.25	19.24	20.5
20	QPSK	50	24	19.34	19.33	19.30	19.22	19.30	
20	QPSK	50	50	19.33	19.31	19.22	19.24	19.20	
20	QPSK	100	0	19.35	19.33	19.28	19.17	19.18	
20	16QAM	1	0	19.49	19.49	19.39	19.36	19.41	20.5
20	16QAM	1	49	19.34	19.32	19.26	19.29	19.27	
20	16QAM	1	99	19.30	19.35	19.32	19.25	19.24	
20	16QAM	50	0	19.48	19.44	19.39	19.34	19.33	20.5
20	16QAM	50	24	19.41	19.42	19.31	19.27	19.37	
20	16QAM	50	50	19.37	19.34	19.30	19.29	19.29	
20	16QAM	100	0	19.38	19.37	19.31	19.25	19.26	
20	64QAM	1	0	19.29	19.26	19.21	19.17	19.14	20.5
20	64QAM	1	49	19.07	19.09	19.04	19.06	19.05	
20	64QAM	1	99	19.05	19.09	19.09	19.02	19.00	
20	64QAM	50	0	19.48	19.47	19.36	19.32	19.33	20.5
20	64QAM	50	24	19.42	19.42	19.35	19.28	19.38	
20	64QAM	50	50	19.37	19.35	19.27	19.31	19.28	
20	64QAM	100	0	19.40	19.42	19.32	19.27	19.26	
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	19.44	19.40	19.30	19.26	19.34	20.5
15	QPSK	1	37	19.29	19.27	19.19	19.20	19.22	
15	QPSK	1	74	19.27	19.28	19.25	19.17	19.14	
15	QPSK	36	0	19.38	19.36	19.29	19.19	19.30	20.5
15	QPSK	36	20	19.34	19.32	19.25	19.20	19.27	
15	QPSK	36	39	19.30	19.25	19.22	19.22	19.23	
15	QPSK	75	0	19.32	19.33	19.25	19.13	19.28	
15	16QAM	1	0	19.45	19.46	19.38	19.34	19.41	20.5
15	16QAM	1	37	19.36	19.30	19.24	19.29	19.29	
15	16QAM	1	74	19.35	19.30	19.35	19.25	19.24	
15	16QAM	36	0	19.38	19.32	19.29	19.25	19.30	20.5
15	16QAM	36	20	19.37	19.35	19.24	19.21	19.28	
15	16QAM	36	39	19.31	19.31	19.21	19.23	19.22	
15	16QAM	75	0	19.38	19.36	19.30	19.23	19.30	
15	64QAM	1	0	19.26	19.21	19.16	19.10	19.19	20.5
15	64QAM	1	37	19.12	19.08	19.04	19.07	19.03	
15	64QAM	1	74	19.11	19.07	19.12	19.02	18.97	
15	64QAM	36	0	19.44	19.36	19.35	19.28	19.38	20.5
15	64QAM	36	20	19.38	19.38	19.33	19.23	19.33	
15	64QAM	36	39	19.35	19.35	19.24	19.27	19.27	
15	64QAM	75	0	19.39	19.40	19.30	19.24	19.34	
Channel				39700	40160	40620	41080	41540	Tune-up limit (dBm)
Frequency (MHz)				2501	2547	2593	2639	2685	
10	QPSK	1	0	19.38	19.35	19.27	19.17	19.29	20.5
10	QPSK	1	25	19.27	19.28	19.21	19.21	19.20	
10	QPSK	1	49	19.28	19.27	19.29	19.21	19.20	
10	QPSK	25	0	19.34	19.29	19.26	19.18	19.28	20.5
10	QPSK	25	12	19.31	19.31	19.27	19.27	19.23	
10	QPSK	25	25	19.31	19.25	19.19	19.20	19.20	
10	QPSK	50	0	19.34	19.33	19.21	19.16	19.24	
10	16QAM	1	0	19.42	19.42	19.34	19.26	19.38	20.5
10	16QAM	1	25	19.36	19.34	19.27	19.28	19.27	
10	16QAM	1	49	19.30	19.27	19.32	19.23	19.23	
10	16QAM	25	0	19.42	19.40	19.31	19.24	19.34	20.5
10	16QAM	25	12	19.40	19.38	19.33	19.36	19.32	
10	16QAM	25	25	19.37	19.36	19.25	19.27	19.27	
10	16QAM	50	0	19.40	19.35	19.31	19.24	19.33	
10	64QAM	1	0	19.20	19.18	19.13	19.06	19.15	20.5
10	64QAM	1	25	19.13	19.10	19.05	19.08	19.01	
10	64QAM	1	49	19.10	19.04	19.13	19.04	19.03	
10	64QAM	25	0	19.45	19.43	19.37	19.31	19.37	20.5
10	64QAM	25	12	19.46	19.44	19.37	19.41	19.39	
10	64QAM	25	25	19.38	19.38	19.31	19.34	19.33	
10	64QAM	50	0	19.37	19.36	19.30	19.24	19.33	
Channel				39675	40148	40620	41093	41565	Tune-up limit (dBm)
Frequency (MHz)				2498.5	2545.8	2593	2640.30	2687.5	
5	QPSK	1	0	19.31	19.28	19.21	19.18	19.21	20.5
5	QPSK	1	12	19.31	19.26	19.21	19.20	19.19	
5	QPSK	1	24	19.22	19.21	19.14	19.10	19.08	
5	QPSK	12	0	19.31	19.29	19.20	19.25	19.26	20.5
5	QPSK	12	7	19.31	19.32	19.25	19.25	19.25	
5	QPSK	12	13	19.27	19.29	19.19	19.20	19.15	
5	QPSK	25	0	19.33	19.26	19.18	19.24	19.19	
5	16QAM	1	0	19.32	19.32	19.25	19.26	19.28	20.5
5	16QAM	1	12	19.35	19.32	19.24	19.28	19.26	
5	16QAM	1	24	19.31	19.29	19.24	19.25	19.24	
5	16QAM	12	0	19.36	19.32	19.22	19.23	19.25	20.5
5	16QAM	12	7	19.36	19.32	19.28	19.26	19.27	
5	16QAM	12	13	19.30	19.26	19.24	19.21	19.18	
5	16QAM	25	0	19.36	19.34	19.26	19.32	19.24	
5	64QAM	1	0	19.13	19.10	19.03	19.05	19.02	20.5
5	64QAM	1	12	19.15	19.10	19.04	19.07	19.06	
5	64QAM	1	24	19.12	19.07	19.04	19.03	18.97	
5	64QAM	12	0	19.40	19.38	19.32	19.30	19.28	20.5
5	64QAM	12	7	19.42	19.39	19.29	19.33	19.31	
5	64QAM	12	13	19.37	19.37	19.27	19.30	19.26	
5	64QAM	25	0	19.41	19.39	19.30	19.33	19.31	

Band 41 HPUE

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Low Middle Ch. / Freq.	Power Middle Ch. / Freq.	Power High Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				39750	40185	40620	41055	41490	
Frequency (MHz)				2506	2549.5	2593	2636.5	2680	
20	QPSK	1	0	20.84	20.82	20.74	20.72	20.72	22
20	QPSK	1	49	20.69	20.67	20.59	20.64	20.63	
20	QPSK	1	99	20.66	20.67	20.70	20.64	20.57	
20	QPSK	50	0	20.89	20.86	20.79	20.77	20.78	22
20	QPSK	50	24	20.87	20.85	20.76	20.68	20.82	
20	QPSK	50	50	20.80	20.80	20.67	20.73	20.72	
20	QPSK	100	0	20.84	20.82	20.75	20.71	20.67	
20	16QAM	1	0	21.14	21.18	21.04	21.02	21.02	22
20	16QAM	1	49	20.97	21.01	20.88	20.95	20.90	
20	16QAM	1	99	21.01	20.95	20.93	20.85	20.84	
20	16QAM	50	0	21.00	20.98	20.88	20.87	20.83	22
20	16QAM	50	24	20.95	20.92	20.86	20.80	20.86	
20	16QAM	50	50	20.90	20.86	20.82	20.85	20.81	
20	16QAM	100	0	20.95	20.94	20.88	20.81	20.77	
20	64QAM	1	0	21.09	21.05	21.01	20.94	20.94	22
20	64QAM	1	49	20.92	20.87	20.84	20.90	20.86	
20	64QAM	1	99	20.84	20.85	20.88	20.80	20.77	
20	64QAM	50	0	20.98	20.94	20.91	20.84	20.83	22
20	64QAM	50	24	20.93	20.93	20.85	20.79	20.88	
20	64QAM	50	50	20.91	20.87	20.80	20.84	20.83	
20	64QAM	100	0	20.93	20.92	20.87	20.77	20.76	
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	20.86	20.85	20.77	20.73	20.81	22
15	QPSK	1	37	20.75	20.70	20.64	20.69	20.67	
15	QPSK	1	74	20.69	20.71	20.76	20.65	20.58	
15	QPSK	36	0	20.86	20.85	20.79	20.67	20.85	22
15	QPSK	36	20	20.81	20.81	20.72	20.64	20.75	
15	QPSK	36	39	20.78	20.77	20.70	20.71	20.69	
15	QPSK	75	0	20.82	20.78	20.69	20.67	20.73	
15	16QAM	1	0	21.12	21.16	20.97	20.95	21.04	22
15	16QAM	1	37	20.98	20.96	20.92	20.89	20.91	
15	16QAM	1	74	21.00	20.97	20.95	20.89	20.86	
15	16QAM	36	0	20.88	20.88	20.79	20.74	20.80	22
15	16QAM	36	20	20.85	20.83	20.78	20.73	20.77	
15	16QAM	36	39	20.80	20.80	20.71	20.77	20.73	
15	16QAM	75	0	20.92	20.89	20.81	20.75	20.84	
15	64QAM	1	0	21.08	20.99	20.96	20.89	20.98	22
15	64QAM	1	37	20.92	20.88	20.81	20.84	20.82	
15	64QAM	1	74	20.91	20.87	20.90	20.82	20.77	
15	64QAM	36	0	20.98	20.90	20.86	20.79	20.88	22
15	64QAM	36	20	20.93	20.86	20.80	20.74	20.83	
15	64QAM	36	39	20.85	20.85	20.82	20.82	20.80	
15	64QAM	75	0	20.93	20.90	20.86	20.78	20.87	
Channel				39700	40160	40620	41080	41540	Tune-up limit (dBm)
Frequency (MHz)				2501	2547	2593	2639	2685	
10	QPSK	1	0	20.77	20.70	20.64	20.64	20.74	22
10	QPSK	1	25	20.71	20.67	20.59	20.66	20.63	
10	QPSK	1	49	20.65	20.68	20.67	20.63	20.61	
10	QPSK	25	0	20.82	20.83	20.75	20.65	20.76	22
10	QPSK	25	12	20.84	20.78	20.75	20.76	20.75	
10	QPSK	25	25	20.72	20.78	20.70	20.74	20.71	
10	QPSK	50	0	20.80	20.78	20.70	20.65	20.76	
10	16QAM	1	0	21.06	21.12	20.93	20.92	21.03	22
10	16QAM	1	25	20.98	21.04	20.88	20.94	20.94	
10	16QAM	1	49	20.96	20.99	20.93	20.89	20.90	
10	16QAM	25	0	20.96	20.90	20.84	20.82	20.89	22
10	16QAM	25	12	20.93	20.94	20.86	20.91	20.85	
10	16QAM	25	25	20.94	20.88	20.81	20.84	20.81	
10	16QAM	50	0	20.91	20.88	20.82	20.76	20.84	
10	64QAM	1	0	20.99	20.98	20.90	20.84	20.97	22
10	64QAM	1	25	20.95	20.92	20.83	20.86	20.85	
10	64QAM	1	49	20.90	20.83	20.89	20.83	20.79	
10	64QAM	25	0	21.02	20.98	20.89	20.84	20.94	22
10	64QAM	25	12	20.98	20.94	20.90	20.94	20.89	
10	64QAM	25	25	20.94	20.91	20.86	20.87	20.86	
10	64QAM	50	0	20.95	20.92	20.84	20.75	20.86	
Channel				39675	40148	40620	41093	41565	Tune-up limit (dBm)
Frequency (MHz)				2498.5	2545.8	2593	2640.30	2687.5	
5	QPSK	1	0	20.71	20.66	20.62	20.64	20.63	22
5	QPSK	1	12	20.72	20.67	20.59	20.67	20.63	
5	QPSK	1	24	20.65	20.64	20.54	20.59	20.57	
5	QPSK	12	0	20.83	20.80	20.71	20.72	20.74	22
5	QPSK	12	7	20.84	20.80	20.70	20.76	20.76	
5	QPSK	12	13	20.79	20.74	20.68	20.76	20.72	
5	QPSK	25	0	20.79	20.72	20.69	20.71	20.67	
5	16QAM	1	0	20.96	21.01	20.86	20.91	20.91	22
5	16QAM	1	12	21.00	21.05	20.86	20.93	20.93	
5	16QAM	1	24	20.94	20.98	20.86	20.86	20.85	
5	16QAM	12	0	20.92	20.91	20.84	20.88	20.81	22
5	16QAM	12	7	20.92	20.92	20.82	20.87	20.81	
5	16QAM	12	13	20.89	20.89	20.80	20.85	20.81	
5	16QAM	25	0	20.92	20.91	20.85	20.84	20.83	
5	64QAM	1	0	20.94	20.89	20.81	20.86	20.85	22
5	64QAM	1	12	20.94	20.92	20.83	20.87	20.85	
5	64QAM	1	24	20.92	20.86	20.80	20.83	20.78	
5	64QAM	12	0	20.98	20.93	20.86	20.89	20.86	22
5	64QAM	12	7	20.99	20.93	20.90	20.89	20.88	
5	64QAM	12	13	20.92	20.91	20.84	20.86	20.83	
5	64QAM	25	0	20.96	20.92	20.87	20.87	20.88	

Band 38							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				37850	38000	38150	
Frequency (MHz)				2580	2595	2610	
20	QPSK	1	0	21.91	21.88	21.86	23.5
20	QPSK	1	49	21.88	21.88	21.95	
20	QPSK	1	99	21.99	21.96	22.04	
20	QPSK	50	0	21.99	21.97	21.92	23.5
20	QPSK	50	24	22.00	21.98	21.95	
20	QPSK	50	50	21.99	21.99	22.04	
20	QPSK	100	0	22.00	21.97	21.95	
20	16QAM	1	0	22.00	21.95	21.96	23.5
20	16QAM	1	49	21.99	22.02	22.11	
20	16QAM	1	99	22.03	22.06	22.13	
20	16QAM	50	0	21.77	21.73	21.74	23
20	16QAM	50	24	21.77	21.79	21.75	
20	16QAM	50	50	21.82	21.77	21.86	
20	16QAM	100	0	21.78	21.75	21.76	
20	64QAM	1	0	21.44	21.43	21.40	23
20	64QAM	1	49	21.46	21.46	21.52	
20	64QAM	1	99	21.52	21.50	21.58	
20	64QAM	50	0	20.74	20.73	20.70	22
20	64QAM	50	24	20.77	20.75	20.73	
20	64QAM	50	50	20.78	20.76	20.84	
20	64QAM	100	0	20.77	20.75	20.73	
Channel				37825	38000	38175	Tune-up limit (dBm)
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	21.93	21.93	21.87	23.5
15	QPSK	1	37	21.93	21.88	21.97	
15	QPSK	1	74	22.03	22.02	22.08	
15	QPSK	36	0	21.95	21.92	21.87	23.5
15	QPSK	36	20	21.98	21.98	22.02	
15	QPSK	36	39	21.96	21.92	22.04	
15	QPSK	75	0	21.98	21.96	21.97	
15	16QAM	1	0	22.03	21.98	21.97	23.5
15	16QAM	1	37	21.99	22.00	22.10	
15	16QAM	1	74	22.07	22.11	22.18	
15	16QAM	36	0	21.68	21.64	21.67	23
15	16QAM	36	20	21.75	21.69	21.83	
15	16QAM	36	39	21.71	21.71	21.81	
15	16QAM	75	0	21.77	21.74	21.75	
15	64QAM	1	0	21.45	21.46	21.45	23
15	64QAM	1	37	21.47	21.47	21.55	
15	64QAM	1	74	21.53	21.56	21.64	
15	64QAM	36	0	20.71	20.68	20.69	22
15	64QAM	36	20	20.74	20.71	20.82	
15	64QAM	36	39	20.74	20.73	20.80	
15	64QAM	75	0	20.75	20.74	20.73	
Channel				37800	38000	38200	Tune-up limit (dBm)
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	21.91	21.88	21.94	23.5
10	QPSK	1	25	21.90	21.89	22.00	
10	QPSK	1	49	21.96	21.94	22.07	
10	QPSK	25	0	21.93	21.89	21.99	23.5
10	QPSK	25	12	21.97	21.95	22.05	
10	QPSK	25	25	21.96	21.94	22.01	
10	QPSK	50	0	21.96	21.94	22.07	
10	16QAM	1	0	22.01	22.00	22.09	23.5
10	16QAM	1	25	22.00	22.02	22.10	
10	16QAM	1	49	22.03	22.08	22.13	
10	16QAM	25	0	21.72	21.73	21.82	23
10	16QAM	25	12	21.76	21.75	21.86	
10	16QAM	25	25	21.76	21.74	21.83	
10	16QAM	50	0	21.74	21.72	21.83	
10	64QAM	1	0	21.45	21.48	21.56	23
10	64QAM	1	25	21.46	21.48	21.55	
10	64QAM	1	49	21.51	21.52	21.57	
10	64QAM	25	0	20.74	20.75	20.83	22
10	64QAM	25	12	20.77	20.77	20.85	
10	64QAM	25	25	20.78	20.77	20.87	
10	64QAM	50	0	20.74	20.72	20.83	
Channel				37775	38000	38225	Tune-up limit (dBm)
Frequency (MHz)				2572.5	2595	2617.5	
5	QPSK	1	0	21.89	21.86	21.95	23.5
5	QPSK	1	12	21.90	21.88	21.98	
5	QPSK	1	24	21.88	21.88	21.96	
5	QPSK	12	0	21.93	21.93	21.98	23.5
5	QPSK	12	7	21.98	21.96	22.04	
5	QPSK	12	13	21.95	21.93	22.04	
5	QPSK	25	0	21.93	21.89	21.98	
5	16QAM	1	0	21.97	21.97	22.03	23.5
5	16QAM	1	12	22.00	22.02	22.09	
5	16QAM	1	24	22.00	22.02	22.14	
5	16QAM	12	0	21.66	21.65	21.73	23
5	16QAM	12	7	21.71	21.66	21.80	
5	16QAM	12	13	21.70	21.68	21.75	
5	16QAM	25	0	21.73	21.71	21.84	
5	64QAM	1	0	21.41	21.44	21.55	23
5	64QAM	1	12	21.48	21.46	21.57	
5	64QAM	1	24	21.47	21.47	21.55	
5	64QAM	12	0	20.72	20.71	20.79	22
5	64QAM	12	7	20.73	20.75	20.85	
5	64QAM	12	13	20.72	20.73	20.80	
5	64QAM	25	0	20.75	20.73	20.84	

Band 38 HPUE							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				37850	38000	38150	
Frequency (MHz)				2580	2595	2610	
20	QPSK	1	0	23.45	23.55	23.59	25
20	QPSK	1	49	23.46	23.58	23.51	
20	QPSK	1	99	23.66	23.68	23.60	
20	QPSK	50	0	23.58	23.52	23.76	25
20	QPSK	50	24	23.73	23.57	23.79	
20	QPSK	50	50	23.62	23.59	23.72	
20	QPSK	100	0	23.68	23.41	23.76	
20	16QAM	1	0	23.75	23.74	23.82	25
20	16QAM	1	49	23.72	23.81	23.81	
20	16QAM	1	99	23.74	23.93	23.95	
20	16QAM	50	0	22.70	22.65	22.83	24.5
20	16QAM	50	24	22.83	22.71	22.87	
20	16QAM	50	50	22.79	22.72	22.78	
20	16QAM	100	0	22.83	22.57	22.87	
20	64QAM	1	0	22.63	22.68	22.77	24.5
20	64QAM	1	49	22.65	22.56	22.70	
20	64QAM	1	99	22.72	22.84	22.82	
20	64QAM	50	0	21.66	21.64	21.82	23.5
20	64QAM	50	24	21.79	21.67	21.90	
20	64QAM	50	50	21.75	21.67	21.81	
20	64QAM	100	0	21.80	21.57	21.86	
Channel				37825	38000	38175	Tune-up limit (dBm)
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	23.49	23.65	23.65	25
15	QPSK	1	37	23.52	23.63	23.58	
15	QPSK	1	74	23.75	23.74	23.69	
15	QPSK	36	0	23.61	23.53	23.78	25
15	QPSK	36	20	23.62	23.60	23.70	
15	QPSK	36	39	23.75	23.58	23.66	
15	QPSK	75	0	23.73	23.47	23.75	
15	16QAM	1	0	23.78	23.70	23.88	25
15	16QAM	1	37	23.73	23.83	23.81	
15	16QAM	1	74	23.91	23.93	23.94	
15	16QAM	36	0	22.63	22.60	22.79	24.5
15	16QAM	36	20	22.65	22.67	22.76	
15	16QAM	36	39	22.77	22.65	22.76	
15	16QAM	75	0	22.80	22.64	22.85	
15	64QAM	1	0	22.64	22.69	22.76	24.5
15	64QAM	1	37	22.63	22.57	22.73	
15	64QAM	1	74	22.84	22.88	22.86	
15	64QAM	36	0	21.64	21.57	21.81	23.5
15	64QAM	36	20	21.69	21.64	21.75	
15	64QAM	36	39	21.81	21.65	21.77	
15	64QAM	75	0	21.80	21.59	21.83	
Channel				37800	38000	38200	Tune-up limit (dBm)
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	23.41	23.53	23.47	25
10	QPSK	1	25	23.43	23.56	23.52	
10	QPSK	1	49	23.49	23.63	23.60	
10	QPSK	25	0	23.56	23.51	23.64	25
10	QPSK	25	12	23.61	23.55	23.64	
10	QPSK	25	25	23.61	23.55	23.67	
10	QPSK	50	0	23.59	23.39	23.67	
10	16QAM	1	0	23.75	23.70	23.83	25
10	16QAM	1	25	23.75	23.80	23.84	
10	16QAM	1	49	23.79	23.85	23.90	
10	16QAM	25	0	22.66	22.65	22.76	24.5
10	16QAM	25	12	22.70	22.66	22.78	
10	16QAM	25	25	22.69	22.65	22.79	
10	16QAM	50	0	22.67	22.54	22.78	
10	64QAM	1	0	22.64	22.66	22.69	24.5
10	64QAM	1	25	22.65	22.69	22.75	
10	64QAM	1	49	22.66	22.81	22.80	
10	64QAM	25	0	21.71	21.66	21.76	23.5
10	64QAM	25	12	21.76	21.70	21.83	
10	64QAM	25	25	21.73	21.69	21.81	
10	64QAM	50	0	21.66	21.53	21.74	
Channel				37775	38000	38225	Tune-up limit (dBm)
Frequency (MHz)				2572.5	2595	2617.5	
5	QPSK	1	0	23.44	23.58	23.52	25
5	QPSK	1	12	23.46	23.62	23.52	
5	QPSK	1	24	23.42	23.57	23.53	
5	QPSK	12	0	23.57	23.53	23.64	25
5	QPSK	12	7	23.56	23.54	23.66	
5	QPSK	12	13	23.60	23.55	23.70	
5	QPSK	25	0	23.53	23.50	23.64	
5	16QAM	1	0	23.71	23.69	23.84	25
5	16QAM	1	12	23.73	23.62	23.88	
5	16QAM	1	24	23.74	23.76	23.92	
5	16QAM	12	0	22.64	22.61	22.73	24.5
5	16QAM	12	7	22.68	22.62	22.78	
5	16QAM	12	13	22.69	22.67	22.80	
5	16QAM	25	0	22.65	22.63	22.78	
5	64QAM	1	0	22.59	22.64	22.69	24.5
5	64QAM	1	12	22.65	22.51	22.74	
5	64QAM	1	24	22.63	22.75	22.78	
5	64QAM	12	0	21.65	21.68	21.75	23.5
5	64QAM	12	7	21.72	21.66	21.79	
5	64QAM	12	13	21.69	21.69	21.81	
5	64QAM	25	0	21.67	21.66	21.79	

Band 41

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Low Middle Ch. / Freq.	Power Middle Ch. / Freq.	Power High Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				39750	40185	40620	41055	41490	
Frequency (MHz)				2506	2549.5	2593	2636.5	2680	
20	QPSK	1	0	22.24	22.19	22.22	22.38	22.57	23.5
20	QPSK	1	49	22.09	22.03	22.08	22.32	22.51	
20	QPSK	1	99	22.06	22.11	22.20	22.42	22.43	
20	QPSK	50	0	22.23	22.16	22.18	22.36	22.55	23.5
20	QPSK	50	24	22.19	22.22	22.17	22.43	22.48	
20	QPSK	50	50	22.14	22.17	22.12	22.40	22.51	
20	QPSK	100	0	22.19	22.22	22.17	22.43	22.47	
20	16QAM	1	0	22.41	22.31	22.33	22.50	22.70	23.5
20	16QAM	1	49	22.22	22.13	22.18	22.45	22.61	
20	16QAM	1	99	22.20	22.23	22.32	22.55	22.54	
20	16QAM	50	0	22.00	21.94	21.97	22.16	22.31	23
20	16QAM	50	24	21.96	21.99	21.95	22.20	22.24	
20	16QAM	50	50	21.95	21.99	21.93	22.14	22.29	
20	16QAM	100	0	21.99	22.02	21.95	22.18	22.23	
20	64QAM	1	0	21.81	21.75	21.79	21.93	22.13	23
20	64QAM	1	49	21.65	21.61	21.64	21.87	22.03	
20	64QAM	1	99	21.63	21.68	21.74	21.96	21.96	
20	64QAM	50	0	21.02	20.96	20.99	21.15	21.32	22
20	64QAM	50	24	20.97	20.99	20.95	21.19	21.25	
20	64QAM	50	50	20.91	20.94	20.90	21.15	21.29	
20	64QAM	100	0	20.96	21.00	20.94	21.18	21.24	
Channel				39725	40173	40620	41068	41515	Tune-up limit (dBm)
Frequency (MHz)				2503.5	2548.3	2593	2637.8	2682.5	
15	QPSK	1	0	22.23	22.15	22.19	22.42	22.53	23.5
15	QPSK	1	37	22.10	22.02	22.09	22.33	22.51	
15	QPSK	1	74	22.12	22.12	22.22	22.43	22.45	
15	QPSK	36	0	22.18	22.13	22.14	22.42	22.47	23.5
15	QPSK	36	20	22.15	22.18	22.12	22.39	22.56	
15	QPSK	36	39	22.13	22.13	22.07	22.35	22.47	
15	QPSK	75	0	22.18	22.20	22.15	22.41	22.43	
15	16QAM	1	0	22.35	22.28	22.29	22.58	22.64	23.5
15	16QAM	1	37	22.23	22.16	22.19	22.47	22.60	
15	16QAM	1	74	22.22	22.24	22.33	22.56	22.54	
15	16QAM	36	0	21.91	21.87	21.89	22.12	22.21	23
15	16QAM	36	20	21.89	21.95	21.87	22.12	22.26	
15	16QAM	36	39	21.86	21.91	21.84	22.09	22.22	
15	16QAM	75	0	21.96	21.97	21.93	22.16	22.21	
15	64QAM	1	0	21.79	21.71	21.75	21.99	22.07	23
15	64QAM	1	37	21.66	21.60	21.67	21.89	22.02	
15	64QAM	1	74	21.65	21.74	21.77	21.97	21.97	
15	64QAM	36	0	20.98	20.92	20.90	21.16	21.23	22
15	64QAM	36	20	20.94	20.97	20.91	21.15	21.30	
15	64QAM	36	39	20.88	20.94	20.90	21.11	21.24	
15	64QAM	75	0	20.96	20.98	20.92	21.16	21.22	
Channel				39700	40160	40620	41080	41540	Tune-up limit (dBm)
Frequency (MHz)				2501	2547	2593	2639	2685	
10	QPSK	1	0	22.15	22.10	22.12	22.40	22.59	23.5
10	QPSK	1	25	22.09	22.03	22.08	22.33	22.49	
10	QPSK	1	49	22.07	22.03	22.17	22.32	22.45	
10	QPSK	25	0	22.13	22.06	22.13	22.38	22.58	23.5
10	QPSK	25	12	22.16	22.08	22.13	22.39	22.51	
10	QPSK	25	25	22.12	22.02	22.08	22.39	22.50	
10	QPSK	50	0	22.15	22.09	22.11	22.40	22.54	
10	16QAM	1	0	22.29	22.19	22.23	22.53	22.69	23.5
10	16QAM	1	25	22.24	22.16	22.20	22.47	22.59	
10	16QAM	1	49	22.23	22.11	22.28	22.41	22.54	
10	16QAM	25	0	21.94	21.92	21.96	22.16	22.36	23
10	16QAM	25	12	21.92	21.90	21.96	22.18	22.31	
10	16QAM	25	25	21.91	21.87	21.88	22.13	22.27	
10	16QAM	50	0	21.93	21.90	21.92	22.15	22.30	
10	64QAM	1	0	21.74	21.65	21.69	21.96	22.14	23
10	64QAM	1	25	21.66	21.63	21.65	21.89	22.00	
10	64QAM	1	49	21.62	21.55	21.74	21.86	21.98	
10	64QAM	25	0	20.98	20.91	20.95	21.22	21.37	22
10	64QAM	25	12	20.96	20.93	20.97	21.23	21.34	
10	64QAM	25	25	20.94	20.90	20.94	21.15	21.31	
10	64QAM	50	0	20.95	20.85	20.89	21.16	21.31	
Channel				39675	40148	40620	41093	41565	Tune-up limit (dBm)
Frequency (MHz)				2498.5	2545.8	2593	2640.30	2687.5	
5	QPSK	1	0	22.07	22.05	22.07	22.35	22.49	23.5
5	QPSK	1	12	22.10	22.06	22.10	22.37	22.48	
5	QPSK	1	24	21.97	21.98	22.01	22.27	22.35	
5	QPSK	12	0	22.13	22.09	22.13	22.39	22.53	23.5
5	QPSK	12	7	22.13	22.12	22.17	22.42	22.52	
5	QPSK	12	13	22.12	22.07	22.13	22.39	22.48	
5	QPSK	25	0	22.11	22.03	22.12	22.38	22.51	
5	16QAM	1	0	22.21	22.16	22.20	22.45	22.58	23.5
5	16QAM	1	12	22.22	22.22	22.21	22.49	22.57	
5	16QAM	1	24	22.14	22.14	22.19	22.43	22.51	
5	16QAM	12	0	21.89	21.85	21.88	22.11	22.24	23
5	16QAM	12	7	21.84	21.87	21.86	22.13	22.24	
5	16QAM	12	13	21.83	21.83	21.86	22.08	22.19	
5	16QAM	25	0	21.90	21.86	21.91	22.15	22.28	
5	64QAM	1	0	21.64	21.63	21.63	21.89	22.01	23
5	64QAM	1	12	21.67	21.63	21.67	21.91	22.01	
5	64QAM	1	24	21.62	21.60	21.63	21.87	21.96	
5	64QAM	12	0	20.90	20.90	20.90	21.17	21.29	22
5	64QAM	12	7	20.91	20.88	20.92	21.19	21.27	
5	64QAM	12	13	20.87	20.85	20.89	21.14	21.23	
5	64QAM	25	0	20.92	20.89	20.94	21.17	21.30	

Band 41 HPUE

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Low Middle Ch. / Freq.	Power Middle Ch. / Freq.	Power High Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				39750	40185	40620	41055	41490	
Frequency (MHz)				2506	2549.5	2593	2636.5	2680	
20	QPSK	1	0	23.55	23.47	23.41	23.59	23.73	25
20	QPSK	1	49	23.45	23.36	23.31	23.61	23.70	
20	QPSK	1	99	23.48	23.46	23.48	23.72	23.68	
20	QPSK	50	0	23.62	23.51	23.51	23.68	23.84	25
20	QPSK	50	24	23.63	23.58	23.49	23.78	23.84	
20	QPSK	50	50	23.55	23.57	23.47	23.75	23.70	
20	QPSK	100	0	23.60	23.60	23.46	23.62	23.24	
20	16QAM	1	0	23.83	23.80	23.69	23.87	23.61	25
20	16QAM	1	49	23.74	23.65	23.63	23.95	24.08	
20	16QAM	1	99	23.76	23.74	23.76	24.04	24.03	
20	16QAM	50	0	23.41	23.32	23.16	23.46	23.36	24.5
20	16QAM	50	24	23.37	23.39	23.09	23.48	23.22	
20	16QAM	50	50	23.32	23.32	22.96	23.31	22.83	
20	16QAM	100	0	23.29	23.37	22.77	22.97	22.58	
20	64QAM	1	0	23.24	23.39	23.18	23.10	22.79	24.5
20	64QAM	1	49	23.33	23.31	23.21	23.49	23.65	
20	64QAM	1	99	23.34	23.37	23.09	23.57	23.05	
20	64QAM	50	0	22.32	22.30	22.03	22.37	22.20	23.5
20	64QAM	50	24	22.36	22.36	21.93	22.19	22.05	
20	64QAM	50	50	22.31	22.36	21.97	22.26	21.99	
20	64QAM	100	0	22.28	22.37	21.78	22.07	21.61	
Channel				39725	40173	40620	41068	41515	Tune-up limit (dBm)
Frequency (MHz)				2503.5	2548.3	2593	2637.8	2682.5	
15	QPSK	1	0	23.56	23.51	23.46	23.74	23.77	25
15	QPSK	1	37	23.51	23.37	23.38	23.66	23.75	
15	QPSK	1	74	23.48	23.49	23.52	23.77	23.73	
15	QPSK	36	0	23.59	23.47	23.46	23.75	23.75	25
15	QPSK	36	20	23.56	23.57	23.47	23.77	23.83	
15	QPSK	36	39	23.58	23.50	23.44	23.71	23.72	
15	QPSK	75	0	23.58	23.55	23.46	23.77	23.68	
15	16QAM	1	0	23.80	23.79	23.69	24.00	24.03	25
15	16QAM	1	37	23.74	23.66	23.57	23.92	24.06	
15	16QAM	1	74	23.79	23.75	23.75	24.06	23.97	
15	16QAM	36	0	23.22	23.27	23.09	23.31	22.99	24.5
15	16QAM	36	20	23.31	23.32	23.01	23.30	22.96	
15	16QAM	36	39	23.27	23.31	22.88	23.25	22.85	
15	16QAM	75	0	23.35	23.33	22.87	23.19	22.78	
15	64QAM	1	0	23.33	23.37	23.25	23.42	23.13	24.5
15	64QAM	1	37	23.31	23.30	23.20	23.48	23.61	
15	64QAM	1	74	23.35	23.36	23.21	23.60	23.14	
15	64QAM	36	0	22.26	22.28	22.14	22.41	21.90	23.5
15	64QAM	36	20	22.37	22.39	22.01	22.22	21.87	
15	64QAM	36	39	22.28	22.32	21.93	22.17	21.58	
15	64QAM	75	0	22.26	22.35	21.83	22.13	21.51	
Channel				39700	40160	40620	41080	41540	Tune-up limit (dBm)
Frequency (MHz)				2501	2547	2593	2639	2685	
10	QPSK	1	0	23.45	23.39	23.33	23.66	23.81	25
10	QPSK	1	25	23.42	23.36	23.34	23.63	23.62	
10	QPSK	1	49	23.40	23.33	23.47	23.63	23.72	
10	QPSK	25	0	23.55	23.46	23.45	23.74	23.44	25
10	QPSK	25	12	23.57	23.52	23.46	23.77	23.55	
10	QPSK	25	25	23.52	23.45	23.43	23.76	23.46	
10	QPSK	50	0	23.60	23.47	23.48	23.58	23.41	
10	16QAM	1	0	23.75	23.76	23.64	23.93	23.88	25
10	16QAM	1	25	23.70	23.65	23.62	23.94	23.99	
10	16QAM	1	49	23.68	23.63	23.73	23.94	23.91	
10	16QAM	25	0	23.27	23.26	23.06	23.51	22.92	24.5
10	16QAM	25	12	23.33	23.26	23.08	23.51	22.97	
10	16QAM	25	25	23.32	23.23	22.96	23.39	22.88	
10	16QAM	50	0	22.99	23.24	22.73	23.02	22.63	
10	64QAM	1	0	23.29	23.35	23.18	23.37	23.08	24.5
10	64QAM	1	25	23.23	23.26	23.13	23.40	23.61	
10	64QAM	1	49	23.32	23.35	23.13	23.54	23.08	
10	64QAM	25	0	22.22	22.24	22.10	22.40	21.87	23.5
10	64QAM	25	12	22.34	22.29	21.91	22.16	21.87	
10	64QAM	25	25	22.21	22.26	21.89	22.09	21.48	
10	64QAM	50	0	22.25	22.32	21.77	22.05	21.43	
Channel				39675	40148	40620	41093	41565	Tune-up limit (dBm)
Frequency (MHz)				2498.5	2545.8	2593	2640.30	2687.5	
5	QPSK	1	0	23.43	23.39	23.32	23.61	23.72	25
5	QPSK	1	12	23.45	23.41	23.35	23.64	23.72	
5	QPSK	1	24	23.37	23.33	23.32	23.55	23.64	
5	QPSK	12	0	23.53	23.49	23.46	23.73	23.62	25
5	QPSK	12	7	23.53	23.51	23.46	23.78	23.61	
5	QPSK	12	13	23.56	23.44	23.43	23.77	23.58	
5	QPSK	25	0	23.51	23.49	23.43	23.71	23.60	
5	16QAM	1	0	23.68	23.69	23.60	23.92	23.92	25
5	16QAM	1	12	23.74	23.69	23.61	23.96	23.81	
5	16QAM	1	24	23.66	23.66	23.57	23.90	23.91	
5	16QAM	12	0	23.24	23.28	22.96	23.44	22.85	24.5
5	16QAM	12	7	23.25	23.26	22.94	23.44	22.85	
5	16QAM	12	13	23.28	23.27	22.92	23.50	22.89	
5	16QAM	25	0	23.26	23.27	22.97	23.47	22.88	
5	64QAM	1	0	23.28	23.29	23.08	23.47	23.02	24.5
5	64QAM	1	12	23.33	23.32	23.17	23.53	23.24	
5	64QAM	1	24	23.28	23.30	23.16	23.52	23.27	
5	64QAM	12	0	22.27	22.32	22.10	22.50	22.04	23.5
5	64QAM	12	7	22.28	22.32	22.04	22.53	22.03	
5	64QAM	12	13	22.32	22.29	22.02	22.51	21.94	
5	64QAM	25	0	22.25	22.31	21.85	22.25	21.75	

Band 38							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				37850	38000	38150	
Frequency (MHz)				2580	2595	2610	
20	QPSK	1	0	17.44	17.30	17.27	18.5
20	QPSK	1	49	17.35	17.21	17.19	
20	QPSK	1	99	17.22	17.17	17.13	
20	QPSK	50	0	17.45	17.28	17.29	18.5
20	QPSK	50	24	17.31	17.27	17.23	
20	QPSK	50	50	17.29	17.22	17.21	
20	QPSK	100	0	17.30	17.29	17.24	
20	16QAM	1	0	17.58	17.43	17.43	18.5
20	16QAM	1	49	17.45	17.33	17.30	
20	16QAM	1	99	17.35	17.28	17.25	
20	16QAM	50	0	17.53	17.39	17.36	18.5
20	16QAM	50	24	17.40	17.37	17.32	
20	16QAM	50	50	17.37	17.33	17.30	
20	16QAM	100	0	17.39	17.35	17.30	
20	64QAM	1	0	17.20	17.06	17.04	18.5
20	64QAM	1	49	17.09	16.97	16.94	
20	64QAM	1	99	16.95	16.91	16.87	
20	64QAM	50	0	17.53	17.39	17.38	18.5
20	64QAM	50	24	17.42	17.38	17.35	
20	64QAM	50	50	17.36	17.34	17.30	
20	64QAM	100	0	17.41	17.38	17.34	
Channel				37825	38000	38175	Tune-up limit (dBm)
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	17.47	17.32	17.28	18.5
15	QPSK	1	37	17.38	17.23	17.19	
15	QPSK	1	74	17.29	17.24	17.20	
15	QPSK	36	0	17.40	17.24	17.21	18.5
15	QPSK	36	20	17.41	17.25	17.19	
15	QPSK	36	39	17.25	17.20	17.15	
15	QPSK	75	0	17.29	17.27	17.21	
15	16QAM	1	0	17.57	17.43	17.39	18.5
15	16QAM	1	37	17.48	17.33	17.31	
15	16QAM	1	74	17.42	17.36	17.30	
15	16QAM	36	0	17.42	17.29	17.25	18.5
15	16QAM	36	20	17.40	17.28	17.25	
15	16QAM	36	39	17.31	17.23	17.20	
15	16QAM	75	0	17.39	17.30	17.30	
15	64QAM	1	0	17.18	17.05	17.01	18.5
15	64QAM	1	37	17.12	16.96	16.93	
15	64QAM	1	74	17.02	16.97	16.93	
15	64QAM	36	0	17.48	17.34	17.30	18.5
15	64QAM	36	20	17.47	17.34	17.32	
15	64QAM	36	39	17.35	17.32	17.27	
15	64QAM	75	0	17.40	17.36	17.33	
Channel				37800	38000	38200	Tune-up limit (dBm)
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	17.40	17.25	17.20	18.5
10	QPSK	1	25	17.38	17.21	17.14	
10	QPSK	1	49	17.40	17.21	17.15	
10	QPSK	25	0	17.41	17.24	17.17	18.5
10	QPSK	25	12	17.40	17.27	17.20	
10	QPSK	25	25	17.39	17.22	17.16	
10	QPSK	50	0	17.42	17.25	17.17	
10	16QAM	1	0	17.54	17.40	17.33	18.5
10	16QAM	1	25	17.49	17.36	17.27	
10	16QAM	1	49	17.49	17.32	17.25	
10	16QAM	25	0	17.48	17.33	17.25	18.5
10	16QAM	25	12	17.48	17.32	17.26	
10	16QAM	25	25	17.44	17.27	17.22	
10	16QAM	50	0	17.48	17.32	17.26	
10	64QAM	1	0	17.19	17.00	16.96	18.5
10	64QAM	1	25	17.14	16.97	16.90	
10	64QAM	1	49	17.12	16.95	16.89	
10	64QAM	25	0	17.56	17.37	17.32	18.5
10	64QAM	25	12	17.55	17.37	17.32	
10	64QAM	25	25	17.50	17.34	17.29	
10	64QAM	50	0	17.50	17.34	17.27	
Channel				37775	38000	38225	Tune-up limit (dBm)
Frequency (MHz)				2572.5	2595	2617.5	
5	QPSK	1	0	17.35	17.21	17.15	18.5
5	QPSK	1	12	17.37	17.20	17.14	
5	QPSK	1	24	17.32	17.17	17.08	
5	QPSK	12	0	17.39	17.22	17.16	18.5
5	QPSK	12	7	17.41	17.24	17.19	
5	QPSK	12	13	17.37	17.23	17.16	
5	QPSK	25	0	17.38	17.21	17.15	
5	16QAM	1	0	17.46	17.33	17.27	18.5
5	16QAM	1	12	17.51	17.34	17.29	
5	16QAM	1	24	17.47	17.32	17.25	
5	16QAM	12	0	17.40	17.24	17.18	18.5
5	16QAM	12	7	17.40	17.27	17.22	
5	16QAM	12	13	17.39	17.24	17.18	
5	16QAM	25	0	17.42	17.28	17.20	
5	64QAM	1	0	17.11	16.96	16.91	18.5
5	64QAM	1	12	17.13	16.95	16.89	
5	64QAM	1	24	17.11	16.95	16.89	
5	64QAM	12	0	17.50	17.33	17.26	18.5
5	64QAM	12	7	17.50	17.36	17.29	
5	64QAM	12	13	17.48	17.32	17.28	
5	64QAM	25	0	17.52	17.36	17.28	

Band 38 HPUE							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				37850	38000	38150	
Frequency (MHz)				2580	2595	2610	
20	QPSK	1	0	19.46	19.46	19.53	20
20	QPSK	1	49	19.47	19.48	19.56	
20	QPSK	1	99	19.55	19.64	19.73	
20	QPSK	50	0	19.61	19.63	19.67	20
20	QPSK	50	24	19.63	19.66	19.72	
20	QPSK	50	50	19.66	19.63	19.71	
20	QPSK	100	0	19.60	19.64	19.70	
20	16QAM	1	0	19.79	19.77	19.86	20
20	16QAM	1	49	19.76	19.76	19.80	
20	16QAM	1	99	19.85	19.94	20.00	
20	16QAM	50	0	19.69	19.66	19.76	20
20	16QAM	50	24	19.73	19.68	19.82	
20	16QAM	50	50	19.74	19.71	19.81	
20	16QAM	100	0	19.69	19.67	19.79	
20	64QAM	1	0	19.65	19.64	19.73	20
20	64QAM	1	49	19.67	19.67	19.74	
20	64QAM	1	99	19.73	19.81	19.89	
20	64QAM	50	0	19.70	19.69	19.80	20
20	64QAM	50	24	19.72	19.72	19.81	
20	64QAM	50	50	19.73	19.73	19.80	
20	64QAM	100	0	19.71	19.72	19.80	
Channel				37825	38000	38175	Tune-up limit (dBm)
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	19.55	19.56	19.64	20
15	QPSK	1	37	19.54	19.53	19.60	
15	QPSK	1	74	19.66	19.71	19.83	
15	QPSK	36	0	19.58	19.60	19.61	20
15	QPSK	36	20	19.64	19.62	19.65	
15	QPSK	36	39	19.60	19.64	19.67	
15	QPSK	75	0	19.63	19.60	19.68	
15	16QAM	1	0	19.79	19.81	19.89	20
15	16QAM	1	37	19.75	19.73	19.90	
15	16QAM	1	74	19.88	19.96	20.00	
15	16QAM	36	0	19.65	19.63	19.71	20
15	16QAM	36	20	19.66	19.65	19.75	
15	16QAM	36	39	19.64	19.66	19.72	
15	16QAM	75	0	19.70	19.69	19.74	
15	64QAM	1	0	19.68	19.68	19.76	20
15	64QAM	1	37	19.68	19.68	19.72	
15	64QAM	1	74	19.80	19.87	19.93	
15	64QAM	36	0	19.65	19.66	19.74	20
15	64QAM	36	20	19.72	19.72	19.76	
15	64QAM	36	39	19.71	19.69	19.76	
15	64QAM	75	0	19.70	19.70	19.74	
Channel				37800	38000	38200	Tune-up limit (dBm)
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	19.48	19.47	19.54	20
10	QPSK	1	25	19.49	19.48	19.66	
10	QPSK	1	49	19.54	19.57	19.73	
10	QPSK	25	0	19.56	19.57	19.60	20
10	QPSK	25	12	19.61	19.61	19.66	
10	QPSK	25	25	19.58	19.58	19.75	
10	QPSK	50	0	19.61	19.62	19.64	
10	16QAM	1	0	19.77	19.77	19.83	20
10	16QAM	1	25	19.75	19.80	19.91	
10	16QAM	1	49	19.80	19.84	19.97	
10	16QAM	25	0	19.64	19.68	19.76	20
10	16QAM	25	12	19.71	19.71	19.77	
10	16QAM	25	25	19.69	19.70	19.86	
10	16QAM	50	0	19.69	19.70	19.76	
10	64QAM	1	0	19.67	19.70	19.76	20
10	64QAM	1	25	19.68	19.68	19.84	
10	64QAM	1	49	19.71	19.73	19.84	
10	64QAM	25	0	19.70	19.70	19.81	20
10	64QAM	25	12	19.75	19.76	19.81	
10	64QAM	25	25	19.74	19.74	19.91	
10	64QAM	50	0	19.69	19.67	19.76	
Channel				37775	38000	38225	Tune-up limit (dBm)
Frequency (MHz)				2572.5	2595	2617.5	
5	QPSK	1	0	19.47	19.49	19.66	20
5	QPSK	1	12	19.50	19.48	19.64	
5	QPSK	1	24	19.48	19.48	19.67	
5	QPSK	12	0	19.56	19.58	19.76	20
5	QPSK	12	7	19.61	19.62	19.79	
5	QPSK	12	13	19.61	19.62	19.80	
5	QPSK	25	0	19.57	19.57	19.69	
5	16QAM	1	0	19.72	19.75	19.87	20
5	16QAM	1	12	19.76	19.77	19.91	
5	16QAM	1	24	19.76	19.79	19.94	
5	16QAM	12	0	19.64	19.67	19.84	20
5	16QAM	12	7	19.65	19.67	19.89	
5	16QAM	12	13	19.65	19.70	19.85	
5	16QAM	25	0	19.63	19.69	19.85	
5	64QAM	1	0	19.62	19.65	19.80	20
5	64QAM	1	12	19.65	19.69	19.83	
5	64QAM	1	24	19.68	19.71	19.87	
5	64QAM	12	0	19.65	19.68	19.82	20
5	64QAM	12	7	19.72	19.73	19.90	
5	64QAM	12	13	19.72	19.72	19.85	
5	64QAM	25	0	19.70	19.71	19.87	

Band 41									
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	17.49	17.68	17.63	17.63	17.49	18.5
20	QPSK	1	49	17.31	17.43	17.38	17.47	17.37	
20	QPSK	1	99	17.29	17.43	17.55	17.54	17.38	
20	QPSK	50	0	17.44	17.46	17.43	17.46	17.46	18.5
20	QPSK	50	24	17.39	17.41	17.40	17.40	17.46	
20	QPSK	50	50	17.33	17.36	17.36	17.43	17.34	
20	QPSK	100	0	17.38	17.41	17.40	17.39	17.34	
20	16QAM	1	0	17.58	17.62	17.58	17.61	17.59	18.5
20	16QAM	1	49	17.43	17.44	17.42	17.51	17.48	
20	16QAM	1	99	17.42	17.43	17.51	17.50	17.37	
20	16QAM	50	0	17.52	17.53	17.53	17.50	17.45	18.5
20	16QAM	50	24	17.48	17.47	17.44	17.47	17.50	
20	16QAM	50	50	17.40	17.42	17.42	17.49	17.40	
20	16QAM	100	0	17.46	17.49	17.44	17.42	17.42	
20	64QAM	1	0	17.33	17.38	17.28	17.32	17.34	18.5
20	64QAM	1	49	17.16	17.22	17.15	17.26	17.22	
20	64QAM	1	99	17.15	17.20	17.21	17.23	17.12	
20	64QAM	50	0	17.52	17.56	17.51	17.49	17.50	18.5
20	64QAM	50	24	17.46	17.48	17.43	17.48	17.53	
20	64QAM	50	50	17.41	17.43	17.39	17.49	17.43	
20	64QAM	100	0	17.44	17.47	17.45	17.46	17.38	
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	17.47	17.57	17.47	17.58	17.54	18.5
15	QPSK	1	37	17.32	17.51	17.39	17.54	17.41	
15	QPSK	1	74	17.33	17.50	17.54	17.50	17.34	
15	QPSK	36	0	17.42	17.40	17.40	17.40	17.47	18.5
15	QPSK	36	20	17.39	17.38	17.37	17.37	17.44	
15	QPSK	36	39	17.32	17.33	17.33	17.41	17.34	
15	QPSK	75	0	17.35	17.39	17.39	17.36	17.40	
15	16QAM	1	0	17.54	17.56	17.52	17.54	17.60	18.5
15	16QAM	1	37	17.44	17.43	17.40	17.52	17.44	
15	16QAM	1	74	17.44	17.45	17.50	17.50	17.41	
15	16QAM	36	0	17.43	17.44	17.42	17.41	17.47	18.5
15	16QAM	36	20	17.41	17.40	17.38	17.40	17.41	
15	16QAM	36	39	17.34	17.38	17.35	17.44	17.34	
15	16QAM	75	0	17.48	17.47	17.43	17.41	17.47	
15	64QAM	1	0	17.30	17.31	17.29	17.32	17.35	18.5
15	64QAM	1	37	17.19	17.23	17.14	17.26	17.20	
15	64QAM	1	74	17.17	17.22	17.26	17.20	17.16	
15	64QAM	36	0	17.47	17.50	17.45	17.47	17.51	18.5
15	64QAM	36	20	17.45	17.47	17.42	17.43	17.47	
15	64QAM	36	39	17.39	17.40	17.37	17.45	17.39	
15	64QAM	75	0	17.45	17.48	17.43	17.40	17.47	
Channel				39700	40160	40620	41080	41540	Tune-up limit (dBm)
Frequency (MHz)				2501	2547	2593	2639	2685	
10	QPSK	1	0	17.42	17.43	17.38	17.35	17.46	18.5
10	QPSK	1	25	17.34	17.37	17.32	17.46	17.37	
10	QPSK	1	49	17.33	17.37	17.43	17.37	17.33	
10	QPSK	25	0	17.39	17.39	17.38	17.38	17.42	18.5
10	QPSK	25	12	17.42	17.39	17.38	17.50	17.41	
10	QPSK	25	25	17.32	17.33	17.35	17.43	17.36	
10	QPSK	50	0	17.38	17.36	17.38	17.34	17.38	
10	16QAM	1	0	17.52	17.53	17.51	17.49	17.55	18.5
10	16QAM	1	25	17.45	17.49	17.43	17.55	17.46	
10	16QAM	1	49	17.40	17.41	17.50	17.46	17.40	
10	16QAM	25	0	17.46	17.49	17.43	17.45	17.50	18.5
10	16QAM	25	12	17.45	17.48	17.45	17.55	17.48	
10	16QAM	25	25	17.43	17.43	17.38	17.52	17.42	
10	16QAM	50	0	17.43	17.42	17.43	17.40	17.44	
10	64QAM	1	0	17.25	17.30	17.21	17.23	17.31	18.5
10	64QAM	1	25	17.19	17.22	17.16	17.29	17.20	
10	64QAM	1	49	17.15	17.19	17.21	17.23	17.14	
10	64QAM	25	0	17.50	17.50	17.45	17.49	17.52	18.5
10	64QAM	25	12	17.52	17.52	17.48	17.56	17.48	
10	64QAM	25	25	17.44	17.48	17.44	17.54	17.44	
10	64QAM	50	0	17.47	17.46	17.40	17.45	17.49	
Channel				39675	40148	40620	41093	41565	Tune-up limit (dBm)
Frequency (MHz)				2498.5	2545.8	2593	2640.30	2687.5	
5	QPSK	1	0	17.34	17.34	17.28	17.42	17.32	18.5
5	QPSK	1	12	17.35	17.41	17.32	17.49	17.34	
5	QPSK	1	24	17.28	17.27	17.23	17.32	17.23	
5	QPSK	12	0	17.37	17.37	17.36	17.43	17.37	18.5
5	QPSK	12	7	17.38	17.39	17.39	17.47	17.36	
5	QPSK	12	13	17.36	17.36	17.34	17.41	17.31	
5	QPSK	25	0	17.35	17.34	17.31	17.43	17.34	
5	16QAM	1	0	17.43	17.44	17.39	17.53	17.41	18.5
5	16QAM	1	12	17.45	17.46	17.41	17.53	17.42	
5	16QAM	1	24	17.39	17.42	17.39	17.49	17.39	
5	16QAM	12	0	17.39	17.41	17.34	17.49	17.41	18.5
5	16QAM	12	7	17.39	17.42	17.38	17.50	17.40	
5	16QAM	12	13	17.35	17.38	17.34	17.46	17.33	
5	16QAM	25	0	17.45	17.45	17.39	17.51	17.39	
5	64QAM	1	0	17.16	17.24	17.17	17.28	17.17	18.5
5	64QAM	1	12	17.20	17.25	17.16	17.26	17.19	
5	64QAM	1	24	17.15	17.18	17.12	17.23	17.16	
5	64QAM	12	0	17.46	17.49	17.43	17.53	17.41	18.5
5	64QAM	12	7	17.44	17.47	17.44	17.51	17.44	
5	64QAM	12	13	17.43	17.42	17.42	17.47	17.38	
5	64QAM	25	0	17.46	17.47	17.41	17.53	17.46	

Band 41 HPUE

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	18.69	18.70	18.59	18.60	18.60	20
20	QPSK	1	49	18.56	18.51	18.43	18.48	18.49	
20	QPSK	1	99	18.53	18.51	18.59	18.47	18.40	
20	QPSK	50	0	18.76	18.71	18.62	18.63	18.61	20
20	QPSK	50	24	18.73	18.70	18.59	18.55	18.63	
20	QPSK	50	50	18.69	18.63	18.52	18.59	18.54	
20	QPSK	100	0	18.72	18.64	18.56	18.52	18.55	
20	16QAM	1	0	19.01	19.00	18.91	18.89	18.87	20
20	16QAM	1	49	18.86	18.84	18.75	18.70	18.74	
20	16QAM	1	99	18.81	18.80	18.84	18.75	18.66	
20	16QAM	50	0	18.85	18.81	18.72	18.66	18.66	20
20	16QAM	50	24	18.80	18.75	18.71	18.63	18.68	
20	16QAM	50	50	18.72	18.71	18.64	18.64	18.61	
20	16QAM	100	0	18.75	18.75	18.68	18.63	18.61	
20	64QAM	1	0	18.90	18.87	18.82	18.76	18.79	20
20	64QAM	1	49	18.69	18.72	18.60	18.66	18.66	
20	64QAM	1	99	18.68	18.70	18.74	18.55	18.61	
20	64QAM	50	0	18.82	18.80	18.72	18.65	18.67	20
20	64QAM	50	24	18.79	18.78	18.63	18.59	18.73	
20	64QAM	50	50	18.70	18.71	18.62	18.65	18.64	
20	64QAM	100	0	18.79	18.73	18.65	18.60	18.58	
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	18.74	18.72	18.63	18.61	18.64	20
15	QPSK	1	37	18.60	18.56	18.48	18.50	18.52	
15	QPSK	1	74	18.60	18.59	18.65	18.49	18.44	
15	QPSK	36	0	18.73	18.67	18.61	18.58	18.65	20
15	QPSK	36	20	18.71	18.67	18.58	18.52	18.60	
15	QPSK	36	39	18.65	18.63	18.47	18.58	18.56	
15	QPSK	75	0	18.69	18.67	18.53	18.47	18.58	
15	16QAM	1	0	18.96	18.94	18.90	18.84	18.82	20
15	16QAM	1	37	18.85	18.82	18.67	18.67	18.74	
15	16QAM	1	74	18.83	18.82	18.76	18.67	18.68	
15	16QAM	36	0	18.76	18.69	18.61	18.57	18.67	20
15	16QAM	36	20	18.74	18.72	18.65	18.53	18.63	
15	16QAM	36	39	18.66	18.62	18.57	18.54	18.57	
15	16QAM	75	0	18.75	18.69	18.66	18.60	18.62	
15	64QAM	1	0	18.90	18.85	18.76	18.70	18.74	20
15	64QAM	1	37	18.71	18.72	18.63	18.65	18.64	
15	64QAM	1	74	18.68	18.71	18.70	18.63	18.57	
15	64QAM	36	0	18.79	18.75	18.67	18.60	18.71	20
15	64QAM	36	20	18.72	18.73	18.61	18.55	18.66	
15	64QAM	36	39	18.70	18.64	18.59	18.61	18.60	
15	64QAM	75	0	18.78	18.70	18.64	18.58	18.69	
Channel				39700	40160	40620	41080	41540	Tune-up limit (dBm)
Frequency (MHz)				2501	2547	2593	2639	2685	
10	QPSK	1	0	18.58	18.57	18.49	18.46	18.58	20
10	QPSK	1	25	18.54	18.54	18.43	18.46	18.48	
10	QPSK	1	49	18.53	18.52	18.56	18.45	18.49	
10	QPSK	25	0	18.69	18.66	18.55	18.53	18.60	20
10	QPSK	25	12	18.67	18.63	18.54	18.63	18.61	
10	QPSK	25	25	18.62	18.61	18.51	18.53	18.53	
10	QPSK	50	0	18.70	18.66	18.58	18.47	18.61	
10	16QAM	1	0	18.94	18.94	18.80	18.75	18.84	20
10	16QAM	1	25	18.83	18.88	18.70	18.72	18.70	
10	16QAM	1	49	18.78	18.84	18.81	18.73	18.71	
10	16QAM	25	0	18.80	18.78	18.65	18.58	18.70	20
10	16QAM	25	12	18.80	18.75	18.67	18.70	18.66	
10	16QAM	25	25	18.72	18.70	18.62	18.60	18.59	
10	16QAM	50	0	18.76	18.70	18.66	18.56	18.62	
10	64QAM	1	0	18.80	18.77	18.67	18.64	18.75	20
10	64QAM	1	25	18.69	18.70	18.60	18.64	18.62	
10	64QAM	1	49	18.67	18.70	18.66	18.55	18.57	
10	64QAM	25	0	18.83	18.80	18.70	18.63	18.73	20
10	64QAM	25	12	18.83	18.78	18.72	18.77	18.70	
10	64QAM	25	25	18.75	18.73	18.61	18.68	18.68	
10	64QAM	50	0	18.74	18.72	18.60	18.57	18.69	
Channel				39675	40148	40620	41093	41565	Tune-up limit (dBm)
Frequency (MHz)				2498.5	2545.8	2593	2640.30	2687.5	
5	QPSK	1	0	18.58	18.54	18.47	18.49	18.49	20
5	QPSK	1	12	18.58	18.52	18.44	18.49	18.48	
5	QPSK	1	24	18.51	18.47	18.37	18.43	18.38	
5	QPSK	12	0	18.67	18.63	18.56	18.61	18.60	20
5	QPSK	12	7	18.68	18.68	18.57	18.60	18.59	
5	QPSK	12	13	18.66	18.60	18.52	18.56	18.56	
5	QPSK	25	0	18.64	18.60	18.52	18.57	18.56	
5	16QAM	1	0	18.86	18.87	18.69	18.76	18.69	20
5	16QAM	1	12	18.86	18.87	18.75	18.78	18.72	
5	16QAM	1	24	18.79	18.78	18.65	18.63	18.65	
5	16QAM	12	0	18.78	18.71	18.65	18.64	18.62	20
5	16QAM	12	7	18.78	18.74	18.69	18.66	18.62	
5	16QAM	12	13	18.73	18.68	18.65	18.61	18.58	
5	16QAM	25	0	18.75	18.71	18.62	18.68	18.65	
5	64QAM	1	0	18.79	18.74	18.59	18.60	18.66	20
5	64QAM	1	12	18.75	18.71	18.61	18.64	18.64	
5	64QAM	1	24	18.69	18.68	18.54	18.59	18.60	
5	64QAM	12	0	18.78	18.72	18.67	18.64	18.69	20
5	64QAM	12	7	18.76	18.76	18.67	18.70	18.69	
5	64QAM	12	13	18.73	18.71	18.64	18.67	18.65	
5	64QAM	25	0	18.78	18.77	18.67	18.70	18.69	

Band 38							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				37850	38000	38150	
Frequency (MHz)				2580	2595	2610	
20	QPSK	1	0	21.12	21.13	21.10	22
20	QPSK	1	49	21.08	21.08	21.20	
20	QPSK	1	99	21.14	21.14	21.26	
20	QPSK	50	0	21.16	21.16	21.17	22
20	QPSK	50	24	21.19	21.22	21.20	
20	QPSK	50	50	21.19	21.16	21.32	
20	QPSK	100	0	21.20	21.20	21.20	
20	16QAM	1	0	21.22	21.26	21.25	22
20	16QAM	1	49	21.22	21.20	21.31	
20	16QAM	1	99	21.23	21.25	21.43	
20	16QAM	50	0	21.27	21.26	21.27	22
20	16QAM	50	24	21.28	21.25	21.29	
20	16QAM	50	50	21.28	21.28	21.37	
20	16QAM	100	0	21.26	21.27	21.28	
20	64QAM	1	0	20.99	20.97	21.01	22
20	64QAM	1	49	20.92	20.94	21.06	
20	64QAM	1	99	20.98	21.01	21.11	
20	64QAM	50	0	20.78	20.78	20.79	21.5
20	64QAM	50	24	20.77	20.79	20.79	
20	64QAM	50	50	20.78	20.80	20.88	
20	64QAM	100	0	20.78	20.78	20.78	
Channel				37825	38000	38175	Tune-up limit (dBm)
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	21.18	21.15	21.16	22
15	QPSK	1	37	21.13	21.11	21.22	
15	QPSK	1	74	21.19	21.19	21.32	
15	QPSK	36	0	21.17	21.19	21.19	22
15	QPSK	36	20	21.16	21.19	21.29	
15	QPSK	36	39	21.18	21.20	21.25	
15	QPSK	75	0	21.18	21.17	21.19	
15	16QAM	1	0	21.23	21.28	21.27	22
15	16QAM	1	37	21.24	21.24	21.35	
15	16QAM	1	74	21.30	21.33	21.42	
15	16QAM	36	0	21.19	21.21	21.21	22
15	16QAM	36	20	21.20	21.20	21.33	
15	16QAM	36	39	21.19	21.21	21.30	
15	16QAM	75	0	21.27	21.26	21.28	
15	64QAM	1	0	21.01	21.00	21.02	22
15	64QAM	1	37	20.98	21.01	21.11	
15	64QAM	1	74	21.04	21.07	21.19	
15	64QAM	36	0	20.74	20.76	20.77	21.5
15	64QAM	36	20	20.75	20.77	20.87	
15	64QAM	36	39	20.74	20.76	20.86	
15	64QAM	75	0	20.78	20.78	20.80	
Channel				37800	38000	38200	Tune-up limit (dBm)
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	21.12	21.11	21.21	22
10	QPSK	1	25	21.11	21.12	21.22	
10	QPSK	1	49	21.17	21.14	21.25	
10	QPSK	25	0	21.15	21.15	21.27	22
10	QPSK	25	12	21.16	21.15	21.27	
10	QPSK	25	25	21.18	21.17	21.27	
10	QPSK	50	0	21.17	21.20	21.31	
10	16QAM	1	0	21.22	21.28	21.39	22
10	16QAM	1	25	21.24	21.24	21.34	
10	16QAM	1	49	21.22	21.25	21.36	
10	16QAM	25	0	21.22	21.26	21.35	22
10	16QAM	25	12	21.24	21.27	21.37	
10	16QAM	25	25	21.26	21.26	21.37	
10	16QAM	50	0	21.25	21.28	21.38	
10	64QAM	1	0	20.99	21.02	21.15	22
10	64QAM	1	25	20.97	21.01	21.09	
10	64QAM	1	49	20.96	21.03	21.11	
10	64QAM	25	0	20.79	20.80	20.87	21.5
10	64QAM	25	12	20.82	20.83	20.92	
10	64QAM	25	25	20.80	20.80	20.90	
10	64QAM	50	0	20.78	20.78	20.87	
Channel				37775	38000	38225	Tune-up limit (dBm)
Frequency (MHz)				2572.5	2595	2617.5	
5	QPSK	1	0	21.06	21.07	21.21	22
5	QPSK	1	12	21.10	21.09	21.20	
5	QPSK	1	24	21.04	21.06	21.19	
5	QPSK	12	0	21.08	21.11	21.26	22
5	QPSK	12	7	21.14	21.17	21.26	
5	QPSK	12	13	21.14	21.14	21.25	
5	QPSK	25	0	21.11	21.13	21.25	
5	16QAM	1	0	21.14	21.20	21.28	22
5	16QAM	1	12	21.17	21.22	21.33	
5	16QAM	1	24	21.18	21.25	21.33	
5	16QAM	12	0	21.14	21.16	21.24	22
5	16QAM	12	7	21.16	21.19	21.28	
5	16QAM	12	13	21.18	21.19	21.28	
5	16QAM	25	0	21.19	21.25	21.33	
5	64QAM	1	0	20.92	20.96	21.04	22
5	64QAM	1	12	20.97	20.99	21.07	
5	64QAM	1	24	20.97	21.01	21.12	
5	64QAM	12	0	20.72	20.77	20.84	21.5
5	64QAM	12	7	20.76	20.77	20.87	
5	64QAM	12	13	20.74	20.78	20.83	
5	64QAM	25	0	20.76	20.76	20.87	

Band 38 HPUE							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				37850	38000	38150	
Frequency (MHz)				2580	2595	2610	
20	QPSK	1	0	22.54	22.66	22.66	23.5
20	QPSK	1	49	22.59	22.70	22.65	
20	QPSK	1	99	22.75	22.82	22.78	
20	QPSK	50	0	22.71	22.82	22.87	23.5
20	QPSK	50	24	22.82	22.90	22.91	
20	QPSK	50	50	22.84	22.88	22.87	
20	QPSK	100	0	22.83	22.87	22.93	
20	16QAM	1	0	22.89	22.97	22.98	23.5
20	16QAM	1	49	22.89	22.93	22.99	
20	16QAM	1	99	23.01	23.10	23.05	
20	16QAM	50	0	22.75	22.35	22.79	23.5
20	16QAM	50	24	22.60	22.41	23.00	
20	16QAM	50	50	22.43	22.43	22.97	
20	16QAM	100	0	22.50	22.30	22.97	
20	64QAM	1	0	22.74	22.40	22.55	23.5
20	64QAM	1	49	22.63	22.43	22.87	
20	64QAM	1	99	22.42	22.73	23.01	
20	64QAM	50	0	21.74	21.30	21.82	23
20	64QAM	50	24	21.57	21.38	21.97	
20	64QAM	50	50	21.43	21.42	22.29	
20	64QAM	100	0	21.44	21.28	21.95	
Channel				37825	38000	38175	Tune-up limit (dBm)
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	22.63	22.70	22.76	23.5
15	QPSK	1	37	22.62	22.75	22.75	
15	QPSK	1	74	22.83	22.90	22.88	
15	QPSK	36	0	22.72	22.79	22.85	23.5
15	QPSK	36	20	22.71	22.87	22.83	
15	QPSK	36	39	22.80	22.86	22.88	
15	QPSK	75	0	22.81	22.85	22.88	
15	16QAM	1	0	22.89	22.99	23.05	23.5
15	16QAM	1	37	22.84	22.96	22.93	
15	16QAM	1	74	23.06	23.10	23.08	
15	16QAM	36	0	22.70	22.34	22.89	23.5
15	16QAM	36	20	22.72	22.42	22.88	
15	16QAM	36	39	22.54	22.41	22.91	
15	16QAM	75	0	22.69	22.39	22.99	
15	64QAM	1	0	22.77	22.42	22.84	23.5
15	64QAM	1	37	22.73	22.32	22.89	
15	64QAM	1	74	22.57	22.69	23.01	
15	64QAM	36	0	21.85	21.31	22.00	23
15	64QAM	36	20	21.71	21.43	22.16	
15	64QAM	36	39	21.54	21.37	22.43	
15	64QAM	75	0	21.64	21.36	22.18	
Channel				37800	38000	38200	Tune-up limit (dBm)
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	22.55	22.68	22.65	23.5
10	QPSK	1	25	22.58	22.71	22.69	
10	QPSK	1	49	22.61	22.76	22.77	
10	QPSK	25	0	22.67	22.81	22.77	23.5
10	QPSK	25	12	22.68	22.86	22.83	
10	QPSK	25	25	22.70	22.86	22.85	
10	QPSK	50	0	22.72	22.82	22.81	
10	16QAM	1	0	22.81	22.98	23.01	23.5
10	16QAM	1	25	22.89	22.98	22.95	
10	16QAM	1	49	22.93	23.07	23.02	
10	16QAM	25	0	22.76	22.43	22.89	23.5
10	16QAM	25	12	22.78	22.47	22.92	
10	16QAM	25	25	22.75	22.47	22.97	
10	16QAM	50	0	22.78	22.32	22.90	
10	64QAM	1	0	22.75	22.41	22.88	23.5
10	64QAM	1	25	22.77	22.47	22.92	
10	64QAM	1	49	22.71	22.58	22.97	
10	64QAM	25	0	22.01	21.44	22.35	23
10	64QAM	25	12	21.88	21.48	22.45	
10	64QAM	25	25	21.76	21.48	22.60	
10	64QAM	50	0	21.77	21.31	22.34	
Channel				37775	38000	38225	Tune-up limit (dBm)
Frequency (MHz)				2572.5	2595	2617.5	
5	QPSK	1	0	22.54	22.70	22.71	23.5
5	QPSK	1	12	22.58	22.72	22.70	
5	QPSK	1	24	22.54	22.70	22.75	
5	QPSK	12	0	22.70	22.83	22.78	23.5
5	QPSK	12	7	22.72	22.86	22.81	
5	QPSK	12	13	22.68	22.84	22.88	
5	QPSK	25	0	22.67	22.81	22.80	
5	16QAM	1	0	22.77	22.95	22.92	23.5
5	16QAM	1	12	22.86	23.03	22.95	
5	16QAM	1	24	22.89	23.01	23.03	
5	16QAM	12	0	22.77	22.41	22.90	23.5
5	16QAM	12	7	22.80	22.42	22.96	
5	16QAM	12	13	22.76	22.40	22.93	
5	16QAM	25	0	22.74	22.39	22.90	
5	64QAM	1	0	22.74	22.41	22.88	23.5
5	64QAM	1	12	22.77	22.48	22.92	
5	64QAM	1	24	22.78	22.55	22.95	
5	64QAM	12	0	22.13	21.44	22.64	23
5	64QAM	12	7	22.06	21.44	22.67	
5	64QAM	12	13	22.02	21.42	22.76	
5	64QAM	25	0	22.04	21.42	22.64	

Band 41									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Low Middle Ch. / Freq.	Power Middle Ch. / Freq.	Power High Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				39750	40185	40620	41055	41490	
Frequency (MHz)				2506	2549.5	2593	2636.5	2680	
20	QPSK	1	0	21.32	21.22	21.25	21.42	21.67	22
20	QPSK	1	49	21.15	21.09	21.14	21.38	21.57	
20	QPSK	1	99	21.16	21.21	21.25	21.45	21.51	
20	QPSK	50	0	21.30	21.19	21.25	21.42	21.64	22
20	QPSK	50	24	21.27	21.30	21.23	21.46	21.58	
20	QPSK	50	50	21.21	21.25	21.17	21.44	21.58	
20	QPSK	100	0	21.26	21.29	21.21	21.50	21.56	
20	16QAM	1	0	21.47	21.40	21.38	21.59	21.79	22
20	16QAM	1	49	21.29	21.21	21.25	21.52	21.67	
20	16QAM	1	99	21.29	21.28	21.41	21.62	21.61	
20	16QAM	50	0	21.40	21.33	21.31	21.52	21.71	22
20	16QAM	50	24	21.35	21.34	21.27	21.57	21.64	
20	16QAM	50	50	21.30	21.32	21.27	21.52	21.66	
20	16QAM	100	0	21.34	21.36	21.31	21.57	21.63	
20	64QAM	1	0	21.22	21.12	21.14	21.33	21.51	22
20	64QAM	1	49	21.05	20.96	20.99	21.25	21.43	
20	64QAM	1	99	21.00	21.04	21.10	21.34	21.36	
20	64QAM	50	0	20.88	20.83	20.85	21.01	21.18	21.5
20	64QAM	50	24	20.85	20.88	20.81	21.05	21.14	
20	64QAM	50	50	20.81	20.82	20.78	21.01	21.17	
20	64QAM	100	0	20.87	20.89	20.80	21.05	21.11	
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	21.33	21.26	21.26	21.53	21.64	22
15	QPSK	1	37	21.20	21.13	21.15	21.42	21.59	
15	QPSK	1	74	21.20	21.22	21.29	21.51	21.52	
15	QPSK	36	0	21.28	21.19	21.25	21.49	21.57	22
15	QPSK	36	20	21.23	21.29	21.20	21.46	21.64	
15	QPSK	36	39	21.20	21.23	21.16	21.41	21.57	
15	QPSK	75	0	21.23	21.25	21.22	21.46	21.55	
15	16QAM	1	0	21.44	21.35	21.38	21.66	21.73	22
15	16QAM	1	37	21.33	21.25	21.27	21.54	21.69	
15	16QAM	1	74	21.33	21.34	21.42	21.63	21.63	
15	16QAM	36	0	21.32	21.25	21.29	21.54	21.61	22
15	16QAM	36	20	21.30	21.32	21.25	21.52	21.67	
15	16QAM	36	39	21.23	21.27	21.23	21.48	21.61	
15	16QAM	75	0	21.33	21.36	21.30	21.56	21.63	
15	64QAM	1	0	21.18	21.11	21.11	21.39	21.49	22
15	64QAM	1	37	21.08	21.02	21.03	21.28	21.45	
15	64QAM	1	74	21.08	21.07	21.15	21.37	21.39	
15	64QAM	36	0	20.90	20.79	20.84	21.06	21.13	21.5
15	64QAM	36	20	20.86	20.85	20.80	21.04	21.20	
15	64QAM	36	39	20.82	20.80	20.77	20.98	21.15	
15	64QAM	75	0	20.88	20.86	20.82	21.04	21.12	
Channel				39700	40160	40620	41080	41540	Tune-up limit (dBm)
Frequency (MHz)				2501	2547	2593	2639	2685	
10	QPSK	1	0	21.23	21.19	21.21	21.49	21.68	22
10	QPSK	1	25	21.19	21.14	21.17	21.42	21.57	
10	QPSK	1	49	21.17	21.10	21.27	21.41	21.56	
10	QPSK	25	0	21.22	21.14	21.21	21.49	21.68	22
10	QPSK	25	12	21.23	21.19	21.23	21.49	21.65	
10	QPSK	25	25	21.23	21.15	21.19	21.43	21.60	
10	QPSK	50	0	21.25	21.15	21.24	21.48	21.64	
10	16QAM	1	0	21.37	21.36	21.33	21.61	21.78	22
10	16QAM	1	25	21.33	21.27	21.28	21.55	21.68	
10	16QAM	1	49	21.30	21.23	21.36	21.50	21.65	
10	16QAM	25	0	21.36	21.28	21.29	21.57	21.72	22
10	16QAM	25	12	21.32	21.26	21.34	21.57	21.70	
10	16QAM	25	25	21.31	21.25	21.27	21.52	21.67	
10	16QAM	50	0	21.36	21.27	21.29	21.54	21.69	
10	64QAM	1	0	21.13	21.08	21.08	21.36	21.57	22
10	64QAM	1	25	21.08	21.01	21.03	21.27	21.42	
10	64QAM	1	49	21.03	20.98	21.13	21.23	21.41	
10	64QAM	25	0	20.86	20.82	20.86	21.10	21.28	21.5
10	64QAM	25	12	20.89	20.84	20.87	21.11	21.25	
10	64QAM	25	25	20.84	20.77	20.81	21.05	21.20	
10	64QAM	50	0	20.82	20.77	20.80	21.05	21.21	
Channel				39675	40148	40620	41093	41565	Tune-up limit (dBm)
Frequency (MHz)				2498.5	2545.8	2593	2640.30	2687.5	
5	QPSK	1	0	21.16	21.11	21.15	21.42	21.57	22
5	QPSK	1	12	21.19	21.12	21.15	21.43	21.58	
5	QPSK	1	24	21.11	21.04	21.09	21.35	21.48	
5	QPSK	12	0	21.20	21.12	21.20	21.48	21.66	22
5	QPSK	12	7	21.24	21.15	21.19	21.47	21.64	
5	QPSK	12	13	21.18	21.15	21.21	21.43	21.58	
5	QPSK	25	0	21.21	21.14	21.21	21.46	21.62	
5	16QAM	1	0	21.27	21.25	21.26	21.54	21.67	22
5	16QAM	1	12	21.32	21.27	21.29	21.55	21.69	
5	16QAM	1	24	21.25	21.23	21.27	21.51	21.64	
5	16QAM	12	0	21.27	21.21	21.23	21.49	21.65	22
5	16QAM	12	7	21.27	21.21	21.25	21.51	21.65	
5	16QAM	12	13	21.24	21.18	21.20	21.48	21.62	
5	16QAM	25	0	21.32	21.25	21.28	21.56	21.71	
5	64QAM	1	0	21.07	20.98	21.00	21.29	21.45	22
5	64QAM	1	12	21.08	21.01	21.04	21.29	21.45	
5	64QAM	1	24	21.03	20.97	20.99	21.27	21.40	
5	64QAM	12	0	20.84	20.75	20.81	21.04	21.22	21.5
5	64QAM	12	7	20.84	20.78	20.82	21.06	21.21	
5	64QAM	12	13	20.82	20.75	20.77	21.03	21.15	
5	64QAM	25	0	20.86	20.77	20.83	21.07	21.19	

Band 41 HPUE

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Low Middle Ch. / Freq.	Power Middle Ch. / Freq.	Power High Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				39750	40185	40620	41055	41490	
Frequency (MHz)				2506	2549.5	2593	2636.5	2680	
20	QPSK	1	0	22.74	22.66	22.64	22.78	22.97	23.5
20	QPSK	1	49	22.65	22.56	22.52	22.77	22.96	
20	QPSK	1	99	22.67	22.64	22.64	22.91	22.89	
20	QPSK	50	0	22.82	22.75	22.69	22.91	23.07	23.5
20	QPSK	50	24	22.82	22.84	22.73	23.00	23.01	
20	QPSK	50	50	22.76	22.76	22.69	22.92	23.07	
20	QPSK	100	0	22.83	22.81	22.68	22.95	23.01	
20	16QAM	1	0	23.08	23.00	22.95	23.08	23.31	23.5
20	16QAM	1	49	22.99	22.89	22.87	23.10	23.26	
20	16QAM	1	99	22.94	22.97	22.95	23.19	23.18	
20	16QAM	50	0	22.89	22.82	22.80	22.97	23.12	23.5
20	16QAM	50	24	22.87	22.91	22.81	23.05	23.08	
20	16QAM	50	50	22.87	22.88	22.76	23.00	22.84	
20	16QAM	100	0	22.86	22.87	22.70	22.96	22.55	
20	64QAM	1	0	22.97	22.93	22.84	22.95	22.75	23.5
20	64QAM	1	49	22.86	22.81	22.76	22.98	23.14	
20	64QAM	1	99	22.83	22.87	22.86	23.10	22.95	
20	64QAM	50	0	22.27	22.31	22.04	22.37	22.13	23
20	64QAM	50	24	22.34	22.39	21.90	22.14	21.98	
20	64QAM	50	50	22.33	22.32	21.93	22.23	21.97	
20	64QAM	100	0	22.30	22.38	21.75	21.97	21.64	
Channel				39725	40173	40620	41068	41515	Tune-up limit (dBm)
Frequency (MHz)				2503.5	2548.3	2593	2637.8	2682.5	
15	QPSK	1	0	22.79	22.69	22.64	22.91	22.97	23.5
15	QPSK	1	37	22.68	22.62	22.58	22.85	22.96	
15	QPSK	1	74	22.74	22.68	22.70	22.95	22.94	
15	QPSK	36	0	22.81	22.68	22.70	22.96	23.01	23.5
15	QPSK	36	20	22.79	22.76	22.69	22.91	23.09	
15	QPSK	36	39	22.71	22.77	22.63	22.87	23.02	
15	QPSK	75	0	22.77	22.80	22.66	22.93	22.97	
15	16QAM	1	0	23.06	22.97	22.92	23.18	23.25	23.5
15	16QAM	1	37	22.93	22.86	22.85	23.11	23.25	
15	16QAM	1	74	22.99	22.94	22.95	23.24	23.20	
15	16QAM	36	0	22.82	22.72	22.72	22.97	22.98	23.5
15	16QAM	36	20	22.82	22.83	22.73	22.97	23.06	
15	16QAM	36	39	22.80	22.78	22.71	22.92	22.88	
15	16QAM	75	0	22.86	22.88	22.76	23.00	22.81	
15	64QAM	1	0	22.92	22.88	22.80	23.05	22.98	23.5
15	64QAM	1	37	22.86	22.79	22.75	23.00	23.13	
15	64QAM	1	74	22.90	22.91	22.86	23.11	23.05	
15	64QAM	36	0	22.29	22.25	21.97	22.44	21.94	23
15	64QAM	36	20	22.33	22.35	21.95	22.16	21.82	
15	64QAM	36	39	22.32	22.31	21.88	22.18	21.57	
15	64QAM	75	0	22.29	22.36	21.85	22.05	21.54	
Channel				39700	40160	40620	41080	41540	Tune-up limit (dBm)
Frequency (MHz)				2501	2547	2593	2639	2685	
10	QPSK	1	0	22.66	22.59	22.59	22.82	23.02	23.5
10	QPSK	1	25	22.65	22.55	22.52	22.82	22.92	
10	QPSK	1	49	22.65	22.54	22.63	22.81	22.95	
10	QPSK	25	0	22.75	22.70	22.67	22.93	23.09	23.5
10	QPSK	25	12	22.80	22.72	22.67	22.93	23.09	
10	QPSK	25	25	22.74	22.63	22.65	22.92	23.03	
10	QPSK	50	0	22.79	22.67	22.69	22.94	23.08	
10	16QAM	1	0	22.99	22.99	22.91	23.17	23.31	23.5
10	16QAM	1	25	22.98	22.88	22.88	23.14	23.20	
10	16QAM	1	49	22.97	22.87	22.96	23.13	23.23	
10	16QAM	25	0	22.90	22.82	22.79	23.03	23.14	23.5
10	16QAM	25	12	22.85	22.81	22.76	23.07	23.09	
10	16QAM	25	25	22.83	22.73	22.77	23.00	22.88	
10	16QAM	50	0	22.86	22.75	22.74	23.02	22.64	
10	64QAM	1	0	22.88	22.89	22.77	23.03	22.98	23.5
10	64QAM	1	25	22.83	22.83	22.76	23.05	23.06	
10	64QAM	1	49	22.83	22.77	22.81	23.01	23.06	
10	64QAM	25	0	22.33	22.32	22.08	22.36	21.78	23
10	64QAM	25	12	22.29	22.35	22.03	22.25	21.76	
10	64QAM	25	25	22.33	22.26	21.95	22.21	21.62	
10	64QAM	50	0	22.10	22.27	21.81	22.06	21.48	
Channel				39675	40148	40620	41093	41565	Tune-up limit (dBm)
Frequency (MHz)				2498.5	2545.8	2593	2640.30	2687.5	
5	QPSK	1	0	22.66	22.59	22.56	22.82	22.93	23.5
5	QPSK	1	12	22.65	22.62	22.55	22.82	22.96	
5	QPSK	1	24	22.60	22.53	22.53	22.80	22.86	
5	QPSK	12	0	22.77	22.68	22.70	22.96	23.09	23.5
5	QPSK	12	7	22.78	22.68	22.68	22.93	23.08	
5	QPSK	12	13	22.73	22.71	22.65	22.93	23.03	
5	QPSK	25	0	22.72	22.69	22.65	22.89	23.00	
5	16QAM	1	0	22.94	22.89	22.85	23.11	23.21	23.5
5	16QAM	1	12	23.00	22.91	22.88	23.17	23.24	
5	16QAM	1	24	22.93	22.84	22.85	23.12	23.19	
5	16QAM	12	0	22.86	22.78	22.75	23.03	23.05	23.5
5	16QAM	12	7	22.82	22.81	22.74	23.06	23.04	
5	16QAM	12	13	22.86	22.79	22.72	23.01	23.08	
5	16QAM	25	0	22.83	22.78	22.75	23.03	22.94	
5	64QAM	1	0	22.86	22.83	22.74	23.00	23.06	23.5
5	64QAM	1	12	22.88	22.85	22.78	23.04	23.12	
5	64QAM	1	24	22.83	22.77	22.76	22.99	23.05	
5	64QAM	12	0	22.33	22.31	22.14	22.53	22.17	23
5	64QAM	12	7	22.33	22.28	22.12	22.54	22.09	
5	64QAM	12	13	22.34	22.24	22.00	22.52	22.00	
5	64QAM	25	0	22.26	22.27	21.93	22.31	21.91	

Band 38							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				37850	38000	38150	
Frequency (MHz)				2580	2595	2610	
20	QPSK	1	0	18.42	18.29	18.27	19.5
20	QPSK	1	49	18.32	18.20	18.16	
20	QPSK	1	99	18.22	18.16	18.12	
20	QPSK	50	0	18.43	18.29	18.28	19.5
20	QPSK	50	24	18.30	18.26	18.24	
20	QPSK	50	50	18.29	18.22	18.20	
20	QPSK	100	0	18.28	18.27	18.25	
20	16QAM	1	0	18.59	18.44	18.43	19.5
20	16QAM	1	49	18.47	18.32	18.32	
20	16QAM	1	99	18.34	18.28	18.26	
20	16QAM	50	0	18.57	18.40	18.39	19.5
20	16QAM	50	24	18.45	18.38	18.35	
20	16QAM	50	50	18.38	18.31	18.30	
20	16QAM	100	0	18.39	18.38	18.35	
20	64QAM	1	0	18.14	18.02	18.02	19.5
20	64QAM	1	49	18.07	17.95	17.91	
20	64QAM	1	99	17.94	17.88	17.84	
20	64QAM	50	0	18.53	18.39	18.37	19.5
20	64QAM	50	24	18.42	18.35	18.35	
20	64QAM	50	50	18.36	18.30	18.30	
20	64QAM	100	0	18.43	18.36	18.32	
Channel				37825	38000	38175	Tune-up limit (dBm)
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	18.44	18.30	18.28	19.5
15	QPSK	1	37	18.37	18.23	18.18	
15	QPSK	1	74	18.30	18.25	18.19	
15	QPSK	36	0	18.38	18.24	18.22	19.5
15	QPSK	36	20	18.40	18.24	18.19	
15	QPSK	36	39	18.26	18.18	18.12	
15	QPSK	75	0	18.29	18.23	18.19	
15	16QAM	1	0	18.58	18.42	18.40	19.5
15	16QAM	1	37	18.48	18.33	18.30	
15	16QAM	1	74	18.40	18.34	18.29	
15	16QAM	36	0	18.44	18.31	18.27	19.5
15	16QAM	36	20	18.48	18.28	18.30	
15	16QAM	36	39	18.32	18.23	18.21	
15	16QAM	75	0	18.39	18.34	18.30	
15	64QAM	1	0	18.15	18.00	17.98	19.5
15	64QAM	1	37	18.09	17.93	17.88	
15	64QAM	1	74	18.02	17.94	17.88	
15	64QAM	36	0	18.44	18.36	18.28	19.5
15	64QAM	36	20	18.45	18.32	18.28	
15	64QAM	36	39	18.34	18.27	18.23	
15	64QAM	75	0	18.41	18.36	18.31	
Channel				37800	38000	38200	Tune-up limit (dBm)
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	18.40	18.24	18.19	19.5
10	QPSK	1	25	18.34	18.21	18.15	
10	QPSK	1	49	18.36	18.24	18.15	
10	QPSK	25	0	18.40	18.25	18.17	19.5
10	QPSK	25	12	18.42	18.26	18.16	
10	QPSK	25	25	18.38	18.22	18.14	
10	QPSK	50	0	18.39	18.26	18.20	
10	16QAM	1	0	18.56	18.39	18.35	19.5
10	16QAM	1	25	18.51	18.34	18.30	
10	16QAM	1	49	18.49	18.33	18.26	
10	16QAM	25	0	18.47	18.33	18.28	19.5
10	16QAM	25	12	18.52	18.34	18.26	
10	16QAM	25	25	18.48	18.30	18.24	
10	16QAM	50	0	18.51	18.34	18.31	
10	64QAM	1	0	18.14	18.01	17.93	19.5
10	64QAM	1	25	18.08	17.94	17.87	
10	64QAM	1	49	18.11	17.95	17.87	
10	64QAM	25	0	18.51	18.35	18.29	19.5
10	64QAM	25	12	18.52	18.39	18.31	
10	64QAM	25	25	18.49	18.34	18.29	
10	64QAM	50	0	18.48	18.34	18.27	
Channel				37775	38000	38225	Tune-up limit (dBm)
Frequency (MHz)				2572.5	2595	2617.5	
5	QPSK	1	0	18.36	18.20	18.14	19.5
5	QPSK	1	12	18.35	18.22	18.11	
5	QPSK	1	24	18.34	18.16	18.09	
5	QPSK	12	0	18.42	18.21	18.19	19.5
5	QPSK	12	7	18.40	18.27	18.18	
5	QPSK	12	13	18.41	18.26	18.18	
5	QPSK	25	0	18.37	18.21	18.14	
5	16QAM	1	0	18.48	18.34	18.29	19.5
5	16QAM	1	12	18.49	18.33	18.28	
5	16QAM	1	24	18.49	18.33	18.25	
5	16QAM	12	0	18.41	18.26	18.16	19.5
5	16QAM	12	7	18.44	18.30	18.23	
5	16QAM	12	13	18.44	18.26	18.18	
5	16QAM	25	0	18.46	18.31	18.22	
5	64QAM	1	0	18.08	17.97	17.87	19.5
5	64QAM	1	12	18.10	17.93	17.88	
5	64QAM	1	24	18.07	17.95	17.84	
5	64QAM	12	0	18.48	18.32	18.26	19.5
5	64QAM	12	7	18.50	18.36	18.28	
5	64QAM	12	13	18.48	18.32	18.27	
5	64QAM	25	0	18.48	18.34	18.27	

Band 38 HPUE							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				37850	38000	38150	
Frequency (MHz)				2580	2595	2610	
20	QPSK	1	0	19.85	19.83	19.90	21
20	QPSK	1	49	19.88	19.88	19.91	
20	QPSK	1	99	19.90	20.00	20.05	
20	QPSK	50	0	19.95	19.98	19.99	21
20	QPSK	50	24	19.97	20.00	20.04	
20	QPSK	50	50	19.99	19.99	20.00	
20	QPSK	100	0	19.98	19.95	20.03	
20	16QAM	1	0	20.15	20.14	20.24	21
20	16QAM	1	49	20.13	20.14	20.21	
20	16QAM	1	99	20.20	20.31	20.32	
20	16QAM	50	0	20.05	20.02	20.13	21
20	16QAM	50	24	20.05	20.05	20.14	
20	16QAM	50	50	20.08	20.04	20.13	
20	16QAM	100	0	20.03	20.01	20.11	
20	64QAM	1	0	20.01	20.01	20.09	21
20	64QAM	1	49	20.02	20.03	20.10	
20	64QAM	1	99	20.10	20.18	20.22	
20	64QAM	50	0	20.05	20.04	20.12	21
20	64QAM	50	24	20.05	20.08	20.18	
20	64QAM	50	50	20.08	20.07	20.12	
20	64QAM	100	0	20.07	20.04	20.11	
Channel				37825	38000	38175	Tune-up limit (dBm)
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	19.92	19.89	20.00	21
15	QPSK	1	37	19.91	19.91	19.95	
15	QPSK	1	74	20.00	20.09	20.17	
15	QPSK	36	0	19.94	19.91	20.00	21
15	QPSK	36	20	19.94	19.93	20.04	
15	QPSK	36	39	20.00	19.93	20.02	
15	QPSK	75	0	19.95	19.97	20.00	
15	16QAM	1	0	20.13	20.13	20.24	21
15	16QAM	1	37	20.08	20.05	20.18	
15	16QAM	1	74	20.21	20.30	20.35	
15	16QAM	36	0	19.95	19.93	20.05	21
15	16QAM	36	20	20.02	20.02	20.06	
15	16QAM	36	39	20.02	20.01	20.11	
15	16QAM	75	0	20.01	19.99	20.07	
15	64QAM	1	0	20.01	20.04	20.10	21
15	64QAM	1	37	20.02	20.03	20.09	
15	64QAM	1	74	20.12	20.22	20.27	
15	64QAM	36	0	19.99	20.04	20.08	21
15	64QAM	36	20	20.07	20.02	20.12	
15	64QAM	36	39	20.07	20.07	20.11	
15	64QAM	75	0	20.06	20.04	20.11	
Channel				37800	38000	38200	Tune-up limit (dBm)
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	19.82	19.79	19.88	21
10	QPSK	1	25	19.84	19.82	20.03	
10	QPSK	1	49	19.90	19.88	20.09	
10	QPSK	25	0	19.89	19.91	19.96	21
10	QPSK	25	12	19.95	19.96	20.04	
10	QPSK	25	25	19.94	19.93	20.11	
10	QPSK	50	0	19.97	19.97	19.99	
10	16QAM	1	0	20.11	20.13	20.18	21
10	16QAM	1	25	20.11	20.12	20.25	
10	16QAM	1	49	20.16	20.15	20.32	
10	16QAM	25	0	20.01	20.01	20.07	21
10	16QAM	25	12	20.06	20.07	20.13	
10	16QAM	25	25	20.02	20.06	20.21	
10	16QAM	50	0	20.02	20.01	20.09	
10	64QAM	1	0	20.04	20.00	20.10	21
10	64QAM	1	25	20.02	20.06	20.20	
10	64QAM	1	49	20.03	20.06	20.20	
10	64QAM	25	0	20.06	20.06	20.13	21
10	64QAM	25	12	20.09	20.11	20.16	
10	64QAM	25	25	20.10	20.09	20.27	
10	64QAM	50	0	20.05	20.05	20.09	
Channel				37775	38000	38225	Tune-up limit (dBm)
Frequency (MHz)				2572.5	2595	2617.5	
5	QPSK	1	0	19.79	19.83	19.98	21
5	QPSK	1	12	19.83	19.84	20.01	
5	QPSK	1	24	19.83	19.83	20.00	
5	QPSK	12	0	19.91	19.95	20.07	21
5	QPSK	12	7	19.97	19.97	20.14	
5	QPSK	12	13	19.98	19.97	20.09	
5	QPSK	25	0	19.90	19.89	20.04	
5	16QAM	1	0	20.06	20.09	20.21	21
5	16QAM	1	12	20.10	20.12	20.26	
5	16QAM	1	24	20.12	20.15	20.28	
5	16QAM	12	0	19.97	19.96	20.17	21
5	16QAM	12	7	20.03	20.04	20.23	
5	16QAM	12	13	20.00	19.99	20.17	
5	16QAM	25	0	19.98	19.98	20.20	
5	64QAM	1	0	19.97	19.98	20.16	21
5	64QAM	1	12	20.00	20.03	20.18	
5	64QAM	1	24	20.03	20.06	20.20	
5	64QAM	12	0	20.05	20.03	20.17	21
5	64QAM	12	7	20.08	20.07	20.25	
5	64QAM	12	13	20.08	20.05	20.23	
5	64QAM	25	0	20.04	20.05	20.22	

Band 41									
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	18.49	18.50	18.43	18.48	18.45	19.5
20	QPSK	1	49	18.32	18.33	18.29	18.42	18.34	
20	QPSK	1	99	18.31	18.31	18.36	18.37	18.26	
20	QPSK	50	0	18.42	18.45	18.40	18.44	18.43	19.5
20	QPSK	50	24	18.40	18.40	18.36	18.40	18.42	
20	QPSK	50	50	18.37	18.35	18.35	18.43	18.32	
20	QPSK	100	0	18.36	18.38	18.35	18.37	18.30	
20	16QAM	1	0	18.58	18.64	18.53	18.58	18.56	19.5
20	16QAM	1	49	18.40	18.46	18.38	18.51	18.47	
20	16QAM	1	99	18.42	18.45	18.46	18.49	18.38	
20	16QAM	50	0	18.53	18.56	18.50	18.53	18.47	19.5
20	16QAM	50	24	18.46	18.47	18.47	18.45	18.53	
20	16QAM	50	50	18.41	18.43	18.40	18.52	18.43	
20	16QAM	100	0	18.48	18.50	18.45	18.48	18.37	
20	64QAM	1	0	18.30	18.33	18.27	18.34	18.33	19.5
20	64QAM	1	49	18.14	18.15	18.10	18.22	18.20	
20	64QAM	1	99	18.13	18.16	18.17	18.20	18.10	
20	64QAM	50	0	18.51	18.53	18.49	18.52	18.45	19.5
20	64QAM	50	24	18.45	18.44	18.40	18.44	18.50	
20	64QAM	50	50	18.39	18.41	18.38	18.50	18.40	
20	64QAM	100	0	18.47	18.45	18.41	18.46	18.41	
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	18.43	18.42	18.35	18.37	18.45	19.5
15	QPSK	1	37	18.33	18.29	18.22	18.36	18.31	
15	QPSK	1	74	18.34	18.28	18.32	18.34	18.26	
15	QPSK	36	0	18.38	18.36	18.30	18.32	18.43	19.5
15	QPSK	36	20	18.37	18.36	18.29	18.30	18.38	
15	QPSK	36	39	18.34	18.28	18.23	18.36	18.31	
15	QPSK	75	0	18.38	18.34	18.26	18.30	18.33	
15	16QAM	1	0	18.56	18.53	18.43	18.44	18.54	19.5
15	16QAM	1	37	18.41	18.43	18.31	18.44	18.43	
15	16QAM	1	74	18.43	18.39	18.39	18.41	18.33	
15	16QAM	36	0	18.45	18.44	18.36	18.38	18.46	19.5
15	16QAM	36	20	18.43	18.40	18.30	18.34	18.40	
15	16QAM	36	39	18.37	18.37	18.30	18.38	18.33	
15	16QAM	75	0	18.43	18.45	18.36	18.35	18.46	
15	64QAM	1	0	18.24	18.24	18.15	18.19	18.28	19.5
15	64QAM	1	37	18.15	18.13	18.04	18.17	18.15	
15	64QAM	1	74	18.13	18.11	18.09	18.15	18.07	
15	64QAM	36	0	18.45	18.44	18.37	18.37	18.46	19.5
15	64QAM	36	20	18.43	18.36	18.33	18.35	18.43	
15	64QAM	36	39	18.36	18.33	18.31	18.37	18.38	
15	64QAM	75	0	18.41	18.40	18.33	18.36	18.43	
Channel				39700	40160	40620	41080	41540	Tune-up limit (dBm)
Frequency (MHz)				2501	2547	2593	2639	2685	
10	QPSK	1	0	18.36	18.36	18.27	18.30	18.43	19.5
10	QPSK	1	25	18.29	18.29	18.22	18.35	18.28	
10	QPSK	1	49	18.30	18.29	18.32	18.33	18.30	
10	QPSK	25	0	18.33	18.36	18.26	18.28	18.37	19.5
10	QPSK	25	12	18.35	18.34	18.27	18.40	18.34	
10	QPSK	25	25	18.30	18.30	18.22	18.36	18.32	
10	QPSK	50	0	18.31	18.30	18.28	18.26	18.35	
10	16QAM	1	0	18.47	18.51	18.37	18.44	18.53	19.5
10	16QAM	1	25	18.38	18.45	18.31	18.44	18.41	
10	16QAM	1	49	18.38	18.41	18.36	18.40	18.40	
10	16QAM	25	0	18.42	18.45	18.36	18.37	18.47	19.5
10	16QAM	25	12	18.45	18.44	18.36	18.47	18.42	
10	16QAM	25	25	18.39	18.40	18.30	18.45	18.41	
10	16QAM	50	0	18.41	18.40	18.33	18.35	18.42	
10	64QAM	1	0	18.18	18.20	18.11	18.14	18.28	19.5
10	64QAM	1	25	18.13	18.13	18.06	18.19	18.12	
10	64QAM	1	49	18.07	18.09	18.12	18.12	18.08	
10	64QAM	25	0	18.47	18.44	18.34	18.42	18.48	19.5
10	64QAM	25	12	18.43	18.44	18.37	18.52	18.45	
10	64QAM	25	25	18.41	18.39	18.35	18.46	18.40	
10	64QAM	50	0	18.40	18.39	18.30	18.35	18.45	
Channel				39675	40148	40620	41093	41565	Tune-up limit (dBm)
Frequency (MHz)				2498.5	2545.8	2593	2640.30	2687.5	
5	QPSK	1	0	18.31	18.28	18.20	18.34	18.28	19.5
5	QPSK	1	12	18.31	18.27	18.21	18.35	18.28	
5	QPSK	1	24	18.24	18.22	18.14	18.27	18.18	
5	QPSK	12	0	18.36	18.32	18.25	18.37	18.33	19.5
5	QPSK	12	7	18.35	18.33	18.26	18.38	18.31	
5	QPSK	12	13	18.30	18.28	18.23	18.34	18.28	
5	QPSK	25	0	18.29	18.29	18.19	18.33	18.28	
5	16QAM	1	0	18.37	18.43	18.30	18.45	18.38	19.5
5	16QAM	1	12	18.40	18.43	18.30	18.44	18.41	
5	16QAM	1	24	18.37	18.39	18.29	18.40	18.36	
5	16QAM	12	0	18.35	18.33	18.27	18.39	18.35	19.5
5	16QAM	12	7	18.36	18.39	18.27	18.38	18.38	
5	16QAM	12	13	18.33	18.36	18.23	18.37	18.29	
5	16QAM	25	0	18.42	18.40	18.32	18.44	18.36	
5	64QAM	1	0	18.11	18.12	18.02	18.16	18.16	19.5
5	64QAM	1	12	18.12	18.14	18.04	18.18	18.14	
5	64QAM	1	24	18.11	18.10	18.00	18.11	18.07	
5	64QAM	12	0	18.40	18.40	18.32	18.44	18.41	19.5
5	64QAM	12	7	18.39	18.38	18.29	18.43	18.40	
5	64QAM	12	13	18.37	18.33	18.26	18.41	18.37	
5	64QAM	25	0	18.42	18.40	18.35	18.46	18.39	

Band 41 HPUE

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	19.50	19.47	19.36	19.35	19.30	21
20	QPSK	1	49	19.31	19.33	19.32	19.30	19.34	
20	QPSK	1	99	19.32	19.34	19.31	19.34	19.32	
20	QPSK	50	0	19.49	19.47	19.40	19.34	19.33	21
20	QPSK	50	24	19.47	19.43	19.35	19.33	19.40	
20	QPSK	50	50	19.39	19.41	19.32	19.32	19.31	
20	QPSK	100	0	19.46	19.42	19.36	19.30	19.34	
20	16QAM	1	0	19.70	19.71	19.63	19.57	19.64	21
20	16QAM	1	49	19.56	19.55	19.46	19.49	19.48	
20	16QAM	1	99	19.52	19.52	19.53	19.43	19.43	
20	16QAM	50	0	19.54	19.56	19.50	19.41	19.41	21
20	16QAM	50	24	19.51	19.52	19.44	19.36	19.45	
20	16QAM	50	50	19.49	19.45	19.38	19.40	19.35	
20	16QAM	100	0	19.53	19.50	19.43	19.36	19.35	
20	64QAM	1	0	19.65	19.60	19.57	19.53	19.51	21
20	64QAM	1	49	19.47	19.43	19.40	19.42	19.40	
20	64QAM	1	99	19.42	19.42	19.48	19.37	19.34	
20	64QAM	50	0	19.56	19.53	19.50	19.44	19.42	21
20	64QAM	50	24	19.53	19.48	19.43	19.37	19.45	
20	64QAM	50	50	19.46	19.43	19.38	19.42	19.40	
20	64QAM	100	0	19.52	19.47	19.41	19.38	19.34	
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	19.47	19.48	19.40	19.31	19.40	21
15	QPSK	1	37	19.34	19.36	19.32	19.35	19.32	
15	QPSK	1	74	19.34	19.33	19.35	19.33	19.30	
15	QPSK	36	0	19.46	19.48	19.35	19.34	19.40	21
15	QPSK	36	20	19.47	19.46	19.33	19.35	19.39	
15	QPSK	36	39	19.36	19.34	19.36	19.32	19.33	
15	QPSK	75	0	19.43	19.42	19.30	19.38	19.33	
15	16QAM	1	0	19.68	19.65	19.57	19.51	19.64	21
15	16QAM	1	37	19.55	19.55	19.42	19.47	19.44	
15	16QAM	1	74	19.52	19.51	19.54	19.45	19.45	
15	16QAM	36	0	19.46	19.42	19.37	19.32	19.42	21
15	16QAM	36	20	19.46	19.46	19.39	19.31	19.39	
15	16QAM	36	39	19.40	19.36	19.31	19.34	19.36	
15	16QAM	75	0	19.50	19.45	19.40	19.31	19.44	
15	64QAM	1	0	19.60	19.58	19.53	19.45	19.57	21
15	64QAM	1	37	19.48	19.48	19.39	19.41	19.37	
15	64QAM	1	74	19.47	19.43	19.47	19.40	19.35	
15	64QAM	36	0	19.57	19.49	19.46	19.35	19.47	21
15	64QAM	36	20	19.52	19.49	19.40	19.33	19.41	
15	64QAM	36	39	19.46	19.44	19.35	19.38	19.38	
15	64QAM	75	0	19.52	19.47	19.40	19.34	19.41	
Channel				39700	40160	40620	41080	41540	Tune-up limit (dBm)
Frequency (MHz)				2501	2547	2593	2639	2685	
10	QPSK	1	0	19.39	19.37	19.31	19.31	19.32	21
10	QPSK	1	25	19.34	19.31	19.31	19.32	19.34	
10	QPSK	1	49	19.34	19.33	19.30	19.32	19.35	
10	QPSK	25	0	19.46	19.43	19.36	19.32	19.34	21
10	QPSK	25	12	19.46	19.41	19.38	19.37	19.34	
10	QPSK	25	25	19.38	19.37	19.31	19.32	19.31	
10	QPSK	50	0	19.44	19.43	19.30	19.33	19.38	
10	16QAM	1	0	19.66	19.63	19.58	19.50	19.64	21
10	16QAM	1	25	19.61	19.57	19.51	19.50	19.47	
10	16QAM	1	49	19.53	19.53	19.57	19.46	19.47	
10	16QAM	25	0	19.54	19.50	19.42	19.39	19.43	21
10	16QAM	25	12	19.56	19.54	19.44	19.43	19.46	
10	16QAM	25	25	19.46	19.44	19.36	19.43	19.41	
10	16QAM	50	0	19.52	19.44	19.40	19.31	19.43	
10	64QAM	1	0	19.59	19.52	19.46	19.41	19.51	21
10	64QAM	1	25	19.52	19.46	19.45	19.46	19.39	
10	64QAM	1	49	19.45	19.44	19.46	19.42	19.36	
10	64QAM	25	0	19.58	19.56	19.47	19.39	19.53	21
10	64QAM	25	12	19.61	19.57	19.48	19.49	19.50	
10	64QAM	25	25	19.53	19.48	19.43	19.46	19.44	
10	64QAM	50	0	19.52	19.46	19.43	19.34	19.43	
Channel				39675	40148	40620	41093	41565	Tune-up limit (dBm)
Frequency (MHz)				2498.5	2545.8	2593	2640.30	2687.5	
5	QPSK	1	0	19.32	19.32	19.31	19.33	19.32	21
5	QPSK	1	12	19.31	19.33	19.32	19.30	19.32	
5	QPSK	1	24	19.32	19.33	19.32	19.31	19.34	
5	QPSK	12	0	19.44	19.44	19.31	19.37	19.33	21
5	QPSK	12	7	19.45	19.44	19.37	19.36	19.33	
5	QPSK	12	13	19.41	19.38	19.32	19.32	19.30	
5	QPSK	25	0	19.40	19.41	19.39	19.34	19.33	
5	16QAM	1	0	19.56	19.56	19.51	19.48	19.47	21
5	16QAM	1	12	19.56	19.56	19.46	19.53	19.50	
5	16QAM	1	24	19.54	19.51	19.41	19.46	19.41	
5	16QAM	12	0	19.51	19.44	19.44	19.40	19.40	21
5	16QAM	12	7	19.53	19.48	19.39	19.42	19.40	
5	16QAM	12	13	19.49	19.46	19.37	19.42	19.34	
5	16QAM	25	0	19.50	19.46	19.39	19.43	19.41	
5	64QAM	1	0	19.53	19.49	19.41	19.47	19.42	21
5	64QAM	1	12	19.52	19.48	19.42	19.45	19.41	
5	64QAM	1	24	19.49	19.44	19.40	19.38	19.39	
5	64QAM	12	0	19.54	19.52	19.44	19.45	19.43	21
5	64QAM	12	7	19.51	19.48	19.44	19.45	19.43	
5	64QAM	12	13	19.51	19.46	19.39	19.42	19.39	
5	64QAM	25	0	19.54	19.47	19.47	19.46	19.41	

Band 38							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				37850	38000	38150	
Frequency (MHz)				2580	2595	2610	
20	QPSK	1	0	21.61	21.58	21.56	22.8
20	QPSK	1	49	21.58	21.58	21.65	
20	QPSK	1	99	21.69	21.66	21.74	
20	QPSK	50	0	21.69	21.67	21.62	22.8
20	QPSK	50	24	21.70	21.68	21.65	
20	QPSK	50	50	21.69	21.69	21.74	
20	QPSK	100	0	21.70	21.67	21.65	
20	16QAM	1	0	21.70	21.65	21.66	22.8
20	16QAM	1	49	21.69	21.72	21.81	
20	16QAM	1	99	21.73	21.76	21.83	
20	16QAM	50	0	21.47	21.43	21.44	22.8
20	16QAM	50	24	21.47	21.49	21.45	
20	16QAM	50	50	21.52	21.47	21.56	
20	16QAM	100	0	21.48	21.45	21.46	
20	64QAM	1	0	21.14	21.13	21.10	22.8
20	64QAM	1	49	21.16	21.16	21.22	
20	64QAM	1	99	21.22	21.20	21.28	
20	64QAM	50	0	20.44	20.43	20.40	22
20	64QAM	50	24	20.47	20.45	20.43	
20	64QAM	50	50	20.48	20.46	20.54	
20	64QAM	100	0	20.47	20.45	20.43	
Channel				37825	38000	38175	Tune-up limit (dBm)
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	21.63	21.63	21.57	22.8
15	QPSK	1	37	21.63	21.58	21.67	
15	QPSK	1	74	21.73	21.72	21.78	
15	QPSK	36	0	21.65	21.62	21.57	22.8
15	QPSK	36	20	21.68	21.68	21.72	
15	QPSK	36	39	21.66	21.62	21.74	
15	QPSK	75	0	21.68	21.66	21.67	
15	16QAM	1	0	21.73	21.68	21.67	22.8
15	16QAM	1	37	21.69	21.70	21.80	
15	16QAM	1	74	21.77	21.81	21.88	
15	16QAM	36	0	21.38	21.34	21.37	22.8
15	16QAM	36	20	21.45	21.39	21.53	
15	16QAM	36	39	21.41	21.41	21.51	
15	16QAM	75	0	21.47	21.44	21.45	
15	64QAM	1	0	21.15	21.16	21.15	22.8
15	64QAM	1	37	21.17	21.17	21.25	
15	64QAM	1	74	21.23	21.26	21.34	
15	64QAM	36	0	20.41	20.38	20.39	22
15	64QAM	36	20	20.44	20.41	20.52	
15	64QAM	36	39	20.44	20.43	20.50	
15	64QAM	75	0	20.45	20.44	20.43	
Channel				37800	38000	38200	Tune-up limit (dBm)
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	21.61	21.58	21.64	22.8
10	QPSK	1	25	21.60	21.59	21.70	
10	QPSK	1	49	21.66	21.64	21.77	
10	QPSK	25	0	21.63	21.59	21.69	22.8
10	QPSK	25	12	21.67	21.65	21.75	
10	QPSK	25	25	21.66	21.64	21.71	
10	QPSK	50	0	21.66	21.64	21.77	
10	16QAM	1	0	21.71	21.70	21.79	22.8
10	16QAM	1	25	21.70	21.72	21.80	
10	16QAM	1	49	21.73	21.78	21.83	
10	16QAM	25	0	21.42	21.43	21.52	22.8
10	16QAM	25	12	21.46	21.45	21.56	
10	16QAM	25	25	21.46	21.44	21.53	
10	16QAM	50	0	21.44	21.42	21.53	
10	64QAM	1	0	21.15	21.18	21.26	22.8
10	64QAM	1	25	21.16	21.18	21.25	
10	64QAM	1	49	21.21	21.22	21.27	
10	64QAM	25	0	20.44	20.45	20.53	22
10	64QAM	25	12	20.47	20.47	20.55	
10	64QAM	25	25	20.48	20.47	20.57	
10	64QAM	50	0	20.44	20.42	20.53	
Channel				37775	38000	38225	Tune-up limit (dBm)
Frequency (MHz)				2572.5	2595	2617.5	
5	QPSK	1	0	21.59	21.56	21.65	22.8
5	QPSK	1	12	21.60	21.58	21.68	
5	QPSK	1	24	21.58	21.58	21.66	
5	QPSK	12	0	21.63	21.63	21.68	22.8
5	QPSK	12	7	21.68	21.66	21.74	
5	QPSK	12	13	21.65	21.63	21.74	
5	QPSK	25	0	21.63	21.59	21.68	
5	16QAM	1	0	21.67	21.67	21.73	22.8
5	16QAM	1	12	21.70	21.72	21.79	
5	16QAM	1	24	21.70	21.72	21.84	
5	16QAM	12	0	21.36	21.35	21.43	22.8
5	16QAM	12	7	21.41	21.36	21.50	
5	16QAM	12	13	21.40	21.38	21.45	
5	16QAM	25	0	21.43	21.41	21.54	
5	64QAM	1	0	21.11	21.14	21.25	22.8
5	64QAM	1	12	21.18	21.16	21.27	
5	64QAM	1	24	21.17	21.17	21.25	
5	64QAM	12	0	20.42	20.41	20.49	22
5	64QAM	12	7	20.43	20.45	20.55	
5	64QAM	12	13	20.42	20.43	20.50	
5	64QAM	25	0	20.45	20.43	20.54	

Band 38 HPUE							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				37850	38000	38150	
Frequency (MHz)				2580	2595	2610	
20	QPSK	1	0	22.76	22.87	22.85	24.3
20	QPSK	1	49	22.79	22.89	22.84	
20	QPSK	1	99	22.94	22.96	22.95	
20	QPSK	50	0	22.92	23.01	23.02	24.3
20	QPSK	50	24	23.04	23.08	23.11	
20	QPSK	50	50	23.02	23.06	23.01	
20	QPSK	100	0	23.04	23.04	23.05	
20	16QAM	1	0	23.03	23.15	23.20	24.3
20	16QAM	1	49	23.11	23.17	23.19	
20	16QAM	1	99	23.22	23.29	23.21	
20	16QAM	50	0	22.71	22.63	22.84	24.3
20	16QAM	50	24	22.81	22.64	22.87	
20	16QAM	50	50	22.76	22.70	22.79	
20	16QAM	100	0	22.80	22.56	22.84	
20	64QAM	1	0	22.64	22.68	22.77	24.3
20	64QAM	1	49	22.63	22.69	22.70	
20	64QAM	1	99	22.69	22.84	22.81	
20	64QAM	50	0	21.67	21.59	21.81	23.3
20	64QAM	50	24	21.82	21.63	21.90	
20	64QAM	50	50	21.72	21.70	21.78	
20	64QAM	100	0	21.77	21.56	21.86	
Channel				37825	38000	38175	Tune-up limit (dBm)
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	22.86	22.94	22.95	24.3
15	QPSK	1	37	22.83	22.94	22.90	
15	QPSK	1	74	23.04	23.02	23.01	
15	QPSK	36	0	22.90	22.97	23.01	24.3
15	QPSK	36	20	22.94	23.01	22.98	
15	QPSK	36	39	23.04	23.06	23.02	
15	QPSK	75	0	23.01	22.99	23.04	
15	16QAM	1	0	23.02	23.17	23.23	24.3
15	16QAM	1	37	23.04	23.17	23.08	
15	16QAM	1	74	23.24	23.28	23.22	
15	16QAM	36	0	22.63	22.60	22.79	24.3
15	16QAM	36	20	22.64	22.64	22.75	
15	16QAM	36	39	22.79	22.62	22.75	
15	16QAM	75	0	22.80	22.60	22.88	
15	64QAM	1	0	22.65	22.68	22.81	24.3
15	64QAM	1	37	22.62	22.56	22.73	
15	64QAM	1	74	22.83	22.88	22.84	
15	64QAM	36	0	21.64	21.56	21.82	23.3
15	64QAM	36	20	21.67	21.67	21.73	
15	64QAM	36	39	21.79	21.64	21.76	
15	64QAM	75	0	21.81	21.60	21.84	
Channel				37800	38000	38200	Tune-up limit (dBm)
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	22.73	22.84	22.80	24.3
10	QPSK	1	25	22.79	22.88	22.85	
10	QPSK	1	49	22.84	22.95	22.94	
10	QPSK	25	0	22.84	22.96	22.91	24.3
10	QPSK	25	12	22.93	22.99	22.99	
10	QPSK	25	25	22.91	23.04	23.00	
10	QPSK	50	0	22.92	23.04	22.96	
10	16QAM	1	0	23.02	23.15	23.18	24.3
10	16QAM	1	25	23.09	23.16	23.11	
10	16QAM	1	49	23.10	23.22	23.21	
10	16QAM	25	0	22.66	22.66	22.75	24.3
10	16QAM	25	12	22.69	22.70	22.79	
10	16QAM	25	25	22.71	22.69	22.79	
10	16QAM	50	0	22.70	22.55	22.78	
10	64QAM	1	0	22.65	22.66	22.74	24.3
10	64QAM	1	25	22.64	22.70	22.75	
10	64QAM	1	49	22.68	22.81	22.81	
10	64QAM	25	0	21.70	21.66	21.76	23.3
10	64QAM	25	12	21.73	21.70	21.83	
10	64QAM	25	25	21.73	21.69	21.81	
10	64QAM	50	0	21.67	21.54	21.74	
Channel				37775	38000	38225	Tune-up limit (dBm)
Frequency (MHz)				2572.5	2595	2617.5	
5	QPSK	1	0	22.78	22.86	22.84	24.3
5	QPSK	1	12	22.80	22.89	22.88	
5	QPSK	1	24	22.75	22.85	22.86	
5	QPSK	12	0	22.90	23.00	22.98	24.3
5	QPSK	12	7	22.92	23.02	22.99	
5	QPSK	12	13	22.92	23.03	23.02	
5	QPSK	25	0	22.87	22.96	22.96	
5	16QAM	1	0	22.98	23.13	23.08	24.3
5	16QAM	1	12	23.10	23.20	23.14	
5	16QAM	1	24	23.10	23.20	23.17	
5	16QAM	12	0	22.65	22.60	22.75	24.3
5	16QAM	12	7	22.68	22.63	22.80	
5	16QAM	12	13	22.70	22.68	22.81	
5	16QAM	25	0	22.66	22.64	22.80	
5	64QAM	1	0	22.59	22.65	22.70	24.3
5	64QAM	1	12	22.66	22.41	22.74	
5	64QAM	1	24	22.64	22.74	22.79	
5	64QAM	12	0	21.66	21.66	21.73	23.3
5	64QAM	12	7	21.71	21.66	21.80	
5	64QAM	12	13	21.69	21.64	21.82	
5	64QAM	25	0	21.71	21.64	21.79	

Band 41									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Low Middle Ch. / Freq.	Power Middle Ch. / Freq.	Power High Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				39750	40185	40620	41055	41490	
Frequency (MHz)				2506	2549.5	2593	2636.5	2680	
20	QPSK	1	0	22.24	22.19	22.22	22.38	22.57	22.8
20	QPSK	1	49	22.09	22.03	22.08	22.32	22.51	
20	QPSK	1	99	22.06	22.11	22.20	22.42	22.43	
20	QPSK	50	0	22.23	22.16	22.18	22.36	22.55	22.8
20	QPSK	50	24	22.19	22.22	22.17	22.43	22.48	
20	QPSK	50	50	22.14	22.17	22.12	22.40	22.51	
20	QPSK	100	0	22.19	22.22	22.17	22.43	22.47	
20	16QAM	1	0	22.41	22.31	22.33	22.50	22.70	22.8
20	16QAM	1	49	22.22	22.13	22.18	22.45	22.61	
20	16QAM	1	99	22.20	22.23	22.32	22.55	22.54	
20	16QAM	50	0	22.00	21.94	21.97	22.16	22.31	22.8
20	16QAM	50	24	21.96	21.99	21.95	22.20	22.24	
20	16QAM	50	50	21.95	21.99	21.93	22.14	22.29	
20	16QAM	100	0	21.99	22.02	21.95	22.18	22.23	
20	64QAM	1	0	21.81	21.75	21.79	21.93	22.13	22.8
20	64QAM	1	49	21.65	21.61	21.64	21.87	22.03	
20	64QAM	1	99	21.63	21.68	21.74	21.96	21.96	
20	64QAM	50	0	21.02	20.96	20.99	21.15	21.32	22
20	64QAM	50	24	20.97	20.99	20.95	21.19	21.25	
20	64QAM	50	50	20.91	20.94	20.90	21.15	21.29	
20	64QAM	100	0	20.96	21.00	20.94	21.18	21.24	
Channel				39725	40173	40620	41068	41515	Tune-up limit (dBm)
Frequency (MHz)				2503.5	2548.3	2593	2637.8	2682.5	
15	QPSK	1	0	22.23	22.15	22.19	22.42	22.53	22.8
15	QPSK	1	37	22.10	22.02	22.09	22.33	22.51	
15	QPSK	1	74	22.12	22.12	22.22	22.43	22.45	
15	QPSK	36	0	22.18	22.13	22.14	22.42	22.47	22.8
15	QPSK	36	20	22.15	22.18	22.12	22.39	22.56	
15	QPSK	36	39	22.13	22.13	22.07	22.35	22.47	
15	QPSK	75	0	22.18	22.20	22.15	22.41	22.43	
15	16QAM	1	0	22.35	22.28	22.29	22.58	22.64	22.8
15	16QAM	1	37	22.23	22.16	22.19	22.47	22.60	
15	16QAM	1	74	22.22	22.24	22.33	22.56	22.54	
15	16QAM	36	0	21.91	21.87	21.89	22.12	22.21	22.8
15	16QAM	36	20	21.89	21.95	21.87	22.12	22.26	
15	16QAM	36	39	21.86	21.91	21.84	22.09	22.22	
15	16QAM	75	0	21.96	21.97	21.93	22.16	22.21	
15	64QAM	1	0	21.79	21.71	21.75	21.99	22.07	22.8
15	64QAM	1	37	21.66	21.60	21.67	21.89	22.02	
15	64QAM	1	74	21.65	21.74	21.77	21.97	21.97	
15	64QAM	36	0	20.98	20.92	20.90	21.16	21.23	22
15	64QAM	36	20	20.94	20.97	20.91	21.15	21.30	
15	64QAM	36	39	20.88	20.94	20.90	21.11	21.24	
15	64QAM	75	0	20.96	20.98	20.92	21.16	21.22	
Channel				39700	40160	40620	41080	41540	Tune-up limit (dBm)
Frequency (MHz)				2501	2547	2593	2639	2685	
10	QPSK	1	0	22.15	22.10	22.12	22.40	22.59	22.8
10	QPSK	1	25	22.09	22.03	22.08	22.33	22.49	
10	QPSK	1	49	22.07	22.03	22.17	22.32	22.45	
10	QPSK	25	0	22.13	22.06	22.13	22.38	22.58	22.8
10	QPSK	25	12	22.16	22.08	22.13	22.39	22.51	
10	QPSK	25	25	22.12	22.02	22.08	22.39	22.50	
10	QPSK	50	0	22.15	22.09	22.11	22.40	22.54	
10	16QAM	1	0	22.29	22.19	22.23	22.53	22.69	22.8
10	16QAM	1	25	22.24	22.16	22.20	22.47	22.59	
10	16QAM	1	49	22.23	22.11	22.28	22.41	22.54	
10	16QAM	25	0	21.94	21.92	21.96	22.16	22.36	22.8
10	16QAM	25	12	21.92	21.90	21.96	22.18	22.31	
10	16QAM	25	25	21.91	21.87	21.88	22.13	22.27	
10	16QAM	50	0	21.93	21.90	21.92	22.15	22.30	
10	64QAM	1	0	21.74	21.65	21.69	21.96	22.14	22.8
10	64QAM	1	25	21.66	21.63	21.65	21.89	22.00	
10	64QAM	1	49	21.62	21.55	21.74	21.86	21.98	
10	64QAM	25	0	20.98	20.91	20.95	21.22	21.37	22
10	64QAM	25	12	20.96	20.93	20.97	21.23	21.34	
10	64QAM	25	25	20.94	20.90	20.94	21.15	21.31	
10	64QAM	50	0	20.95	20.85	20.89	21.16	21.31	
Channel				39675	40148	40620	41093	41565	Tune-up limit (dBm)
Frequency (MHz)				2498.5	2545.8	2593	2640.30	2687.5	
5	QPSK	1	0	22.07	22.05	22.07	22.35	22.49	22.8
5	QPSK	1	12	22.10	22.06	22.10	22.37	22.48	
5	QPSK	1	24	21.97	21.98	22.01	22.27	22.35	
5	QPSK	12	0	22.13	22.09	22.13	22.39	22.53	22.8
5	QPSK	12	7	22.13	22.12	22.17	22.42	22.52	
5	QPSK	12	13	22.12	22.07	22.13	22.39	22.48	
5	QPSK	25	0	22.11	22.03	22.12	22.38	22.51	
5	16QAM	1	0	22.21	22.16	22.20	22.45	22.58	22.8
5	16QAM	1	12	22.22	22.22	22.21	22.49	22.57	
5	16QAM	1	24	22.14	22.14	22.19	22.43	22.51	
5	16QAM	12	0	21.89	21.85	21.88	22.11	22.24	22.8
5	16QAM	12	7	21.84	21.87	21.86	22.13	22.24	
5	16QAM	12	13	21.83	21.83	21.86	22.08	22.19	
5	16QAM	25	0	21.90	21.86	21.91	22.15	22.28	
5	64QAM	1	0	21.64	21.63	21.63	21.89	22.01	22.8
5	64QAM	1	12	21.67	21.63	21.67	21.91	22.01	
5	64QAM	1	24	21.62	21.60	21.63	21.87	21.96	
5	64QAM	12	0	20.90	20.90	20.90	21.17	21.29	22
5	64QAM	12	7	20.91	20.88	20.92	21.19	21.27	
5	64QAM	12	13	20.87	20.85	20.89	21.14	21.23	
5	64QAM	25	0	20.92	20.89	20.94	21.17	21.30	

Band 41 HPUE

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Low Middle Ch. / Freq.	Power Middle Ch. / Freq.	Power High Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				39750	40185	40620	41055	41490	
Frequency (MHz)				2506	2549.5	2593	2636.5	2680	
20	QPSK	1	0	23.55	23.47	23.41	23.59	23.73	24.3
20	QPSK	1	49	23.45	23.36	23.31	23.61	23.70	
20	QPSK	1	99	23.48	23.46	23.48	23.72	23.68	
20	QPSK	50	0	23.62	23.51	23.51	23.68	23.84	24.3
20	QPSK	50	24	23.63	23.58	23.49	23.78	23.84	
20	QPSK	50	50	23.55	23.57	23.47	23.75	23.70	
20	QPSK	100	0	23.60	23.60	23.46	23.62	23.24	
20	16QAM	1	0	23.83	23.80	23.69	23.87	23.61	24.3
20	16QAM	1	49	23.74	23.65	23.63	23.95	24.08	
20	16QAM	1	99	23.76	23.74	23.76	24.04	24.03	
20	16QAM	50	0	23.41	23.32	23.16	23.46	23.36	24.3
20	16QAM	50	24	23.37	23.39	23.09	23.48	23.22	
20	16QAM	50	50	23.32	23.32	22.96	23.31	22.83	
20	16QAM	100	0	23.29	23.37	22.77	22.97	22.58	
20	64QAM	1	0	23.24	23.39	23.18	23.10	22.79	24.3
20	64QAM	1	49	23.33	23.31	23.21	23.49	23.65	
20	64QAM	1	99	23.34	23.37	23.09	23.57	23.05	
20	64QAM	50	0	22.32	22.30	22.03	22.37	22.20	23.3
20	64QAM	50	24	22.36	22.36	21.93	22.19	22.05	
20	64QAM	50	50	22.31	22.36	21.97	22.26	21.99	
20	64QAM	100	0	22.28	22.37	21.78	22.07	21.61	
Channel				39725	40173	40620	41068	41515	Tune-up limit (dBm)
Frequency (MHz)				2503.5	2548.3	2593	2637.8	2682.5	
15	QPSK	1	0	23.56	23.51	23.46	23.74	23.77	24.3
15	QPSK	1	37	23.51	23.37	23.38	23.66	23.75	
15	QPSK	1	74	23.48	23.49	23.52	23.77	23.73	
15	QPSK	36	0	23.59	23.47	23.46	23.75	23.75	24.3
15	QPSK	36	20	23.56	23.57	23.47	23.77	23.83	
15	QPSK	36	39	23.58	23.50	23.44	23.71	23.72	
15	QPSK	75	0	23.58	23.55	23.46	23.77	23.68	
15	16QAM	1	0	23.80	23.79	23.69	24.00	24.03	24.3
15	16QAM	1	37	23.74	23.66	23.57	23.92	24.06	
15	16QAM	1	74	23.79	23.75	23.75	24.06	23.97	
15	16QAM	36	0	23.22	23.27	23.09	23.31	22.99	24.3
15	16QAM	36	20	23.31	23.32	23.01	23.30	22.96	
15	16QAM	36	39	23.27	23.31	22.88	23.25	22.85	
15	16QAM	75	0	23.35	23.33	22.87	23.19	22.78	
15	64QAM	1	0	23.33	23.37	23.25	23.42	23.13	24.3
15	64QAM	1	37	23.31	23.30	23.20	23.48	23.61	
15	64QAM	1	74	23.35	23.36	23.21	23.60	23.14	
15	64QAM	36	0	22.26	22.28	22.14	22.41	21.90	23.3
15	64QAM	36	20	22.37	22.39	22.01	22.22	21.87	
15	64QAM	36	39	22.28	22.32	21.93	22.17	21.58	
15	64QAM	75	0	22.26	22.35	21.83	22.13	21.51	
Channel				39700	40160	40620	41080	41540	Tune-up limit (dBm)
Frequency (MHz)				2501	2547	2593	2639	2685	
10	QPSK	1	0	23.45	23.39	23.33	23.66	23.81	24.3
10	QPSK	1	25	23.42	23.36	23.34	23.63	23.62	
10	QPSK	1	49	23.40	23.33	23.47	23.63	23.72	
10	QPSK	25	0	23.55	23.46	23.45	23.74	23.44	24.3
10	QPSK	25	12	23.57	23.52	23.46	23.77	23.55	
10	QPSK	25	25	23.52	23.45	23.43	23.76	23.46	
10	QPSK	50	0	23.60	23.47	23.48	23.58	23.41	
10	16QAM	1	0	23.75	23.76	23.64	23.93	23.88	24.3
10	16QAM	1	25	23.70	23.65	23.62	23.94	23.99	
10	16QAM	1	49	23.68	23.63	23.73	23.94	23.91	
10	16QAM	25	0	23.27	23.26	23.06	23.51	22.92	24.3
10	16QAM	25	12	23.33	23.26	23.08	23.51	22.97	
10	16QAM	25	25	23.32	23.23	22.96	23.39	22.88	
10	16QAM	50	0	22.99	23.24	22.73	23.02	22.63	
10	64QAM	1	0	23.29	23.35	23.18	23.37	23.08	24.3
10	64QAM	1	25	23.23	23.26	23.13	23.40	23.61	
10	64QAM	1	49	23.32	23.35	23.13	23.54	23.08	
10	64QAM	25	0	22.22	22.24	22.10	22.40	21.87	23.3
10	64QAM	25	12	22.34	22.29	21.91	22.16	21.87	
10	64QAM	25	25	22.21	22.26	21.89	22.09	21.48	
10	64QAM	50	0	22.25	22.32	21.77	22.05	21.43	
Channel				39675	40148	40620	41093	41565	Tune-up limit (dBm)
Frequency (MHz)				2498.5	2545.8	2593	2640.30	2687.5	
5	QPSK	1	0	23.43	23.39	23.32	23.61	23.72	24.3
5	QPSK	1	12	23.45	23.41	23.35	23.64	23.72	
5	QPSK	1	24	23.37	23.33	23.32	23.55	23.64	
5	QPSK	12	0	23.53	23.49	23.46	23.73	23.62	24.3
5	QPSK	12	7	23.53	23.51	23.46	23.78	23.61	
5	QPSK	12	13	23.56	23.44	23.43	23.77	23.58	
5	QPSK	25	0	23.51	23.49	23.43	23.71	23.60	
5	16QAM	1	0	23.68	23.69	23.60	23.92	23.92	24.3
5	16QAM	1	12	23.74	23.69	23.61	23.96	23.81	
5	16QAM	1	24	23.66	23.66	23.57	23.90	23.91	
5	16QAM	12	0	23.24	23.28	22.96	23.44	22.85	24.3
5	16QAM	12	7	23.25	23.26	22.94	23.44	22.85	
5	16QAM	12	13	23.28	23.27	22.92	23.50	22.89	
5	16QAM	25	0	23.26	23.27	22.97	23.47	22.88	
5	64QAM	1	0	23.28	23.29	23.08	23.47	23.02	24.3
5	64QAM	1	12	23.33	23.32	23.17	23.53	23.24	
5	64QAM	1	24	23.28	23.30	23.16	23.52	23.27	
5	64QAM	12	0	22.27	22.32	22.10	22.50	22.04	23.3
5	64QAM	12	7	22.28	22.32	22.04	22.53	22.03	
5	64QAM	12	13	22.32	22.29	22.02	22.51	21.94	
5	64QAM	25	0	22.25	22.31	21.85	22.25	21.75	

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.

Transmit Antenna				Ant 4			ANT 4+3(4)		ANT 4+3(3)		ANT 4+3		
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %
2.4GHz WLAN	802.11b 1Mbps	1	2412	19.60	20.00	98.80	19.60	20.00	19.70	20.00	22.66	23.0	98.66
		6	2437	19.80	20.00		20.00	20.00	19.60	20.00	22.81	23.0	
		11	2462	19.60	20.00		19.60	20.00	19.90	20.00	22.76	23.0	
	802.11g 6Mbps	1	2412	15.10	15.50	98.16	15.40	15.50	15.30	15.50	18.36	18.5	98.36
		6	2437	19.50	20.00		19.50	20.00	19.60	20.00	22.56	23.0	
		11	2462	15.00	15.50		15.10	15.50	15.00	15.50	18.06	18.5	
	802.11n-HT20 MCS0	1	2412	14.60	15.00	97.83	14.80	15.00	14.80	15.00	17.81	18.0	98.16
		6	2437	19.30	19.50		19.50	19.50	19.20	19.50	22.36	22.5	
		11	2462	14.30	14.50		14.50	14.50	14.20	14.50	17.36	17.5	
	802.11ac-VHT20 MCS0	1	2412	14.50	15.00	98.25	14.70	15.00	14.70	15.00	17.71	18.0	98.03
		6	2437	19.20	19.50		19.40	19.50	19.10	19.50	22.26	22.5	
		11	2462	14.20	14.50		14.40	14.50	14.10	14.50	17.26	17.5	

Transmit Antenna				Ant 3			ANT 4+3(4)		ANT 4+3(3)		ANT 4+3		
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.2GHz WLAN	802.11a 6Mbps	36	5180	15.40	16.00	98.39	15.70	16.00	15.60	16.00	18.66	19.0	97.78
		40	5200	16.40	17.00		16.80	17.00	16.60	17.00	19.71	20.0	
		44	5220	16.50	17.00		16.80	17.00	16.60	17.00	19.71	20.0	
		48	5240	16.70	17.00		16.70	17.00	16.80	17.00	19.76	20.0	
	802.11n-HT20 MCS0	36	5180	14.50	15.00	97.83	14.80	15.00	14.20	15.00	17.52	18.0	97.83
		40	5200	16.00	16.50		16.30	16.50	16.10	16.50	19.21	19.5	
		44	5220	16.80	17.50		17.10	17.50	16.90	17.50	20.01	20.5	
		48	5240	16.90	17.50		17.10	17.50	17.00	17.50	20.06	20.5	
	802.11n-HT40 MCS0	38	5190	9.50	10.00	96.04	9.60	10.00	10.00	10.00	12.81	13.0	95.89
		46	5230	15.50	16.00		15.40	16.00	15.80	16.00	18.61	19.0	
	802.11ac-VHT20 MCS0	36	5180	14.40	15.00	98.36	14.70	15.00	14.10	15.00	17.42	18.0	97.63
		40	5200	15.90	16.50		16.20	16.50	16.00	16.50	19.11	19.5	
		44	5220	16.70	17.50		17.00	17.50	16.80	17.50	19.91	20.5	
		48	5240	16.80	17.50		17.00	17.50	16.90	17.50	19.96	20.5	
	802.11ac-VHT40 MCS0	38	5190	9.40	10.00	95.99	9.30	10.00	9.90	10.00	12.62	13.0	95.58
		46	5230	15.40	16.00		15.30	16.00	15.70	16.00	18.51	19.0	
	802.11ac-VHT80 MCS0	42	5210	8.70	10.00	91.94	8.90	10.00	9.10	10.00	12.01	13.0	91.96

Transmit Antenna				Ant 3			ANT 4+3(4)		ANT 4+3(3)		ANT 4+3		
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.3GHz WLAN	802.11a 6Mbps	52	5260	17.30	18.00	98.39	17.60	18.00	17.60	18.00	20.61	21.0	97.78
		56	5280	17.20	17.50		17.20	17.50	17.40	17.50	20.31	20.5	
		60	5300	17.00	17.50		17.20	17.50	17.30	17.50	20.26	20.5	
		64	5320	16.40	17.00		16.70	17.00	16.40	17.00	19.56	20.0	
	802.11n-HT20 MCS0	52	5260	16.50	17.00	97.83	17.00	17.00	16.80	17.00	19.91	20.0	97.83
		56	5280	17.30	17.50		17.40	17.50	17.40	17.50	20.41	20.5	
		60	5300	17.10	17.50		17.10	17.50	17.20	17.50	20.16	20.5	
		64	5320	17.00	17.50		17.30	17.50	17.20	17.50	20.26	20.5	
	802.11n-HT40 MCS0	54	5270	15.60	16.00	96.04	15.40	16.00	15.80	16.00	18.61	19.0	95.89
		62	5310	12.50	13.00		12.60	13.00	12.60	13.00	15.61	16.0	
	802.11ac-VHT20 MCS0	52	5260	16.40	17.00	98.36	16.90	17.00	16.70	17.00	19.81	20.0	97.63
		56	5280	17.20	17.50		17.40	17.50	17.30	17.50	20.36	20.5	
		60	5300	17.00	17.50		17.00	17.50	17.10	17.50	20.06	20.5	
		64	5320	16.90	17.50		17.20	17.50	17.10	17.50	20.16	20.5	
	802.11ac-VHT40 MCS0	54	5270	15.50	16.00	95.99	15.30	16.00	15.70	16.00	18.51	19.0	95.58
		62	5310	12.40	13.00		12.50	13.00	12.50	13.00	15.51	16.0	
	802.11ac-VHT80 MCS0	58	5290	9.90	10.50	91.94	9.70	10.50	10.20	10.50	12.97	13.5	91.96

Transmit Antenna				Ant 3			ANT 4+3(4)		ANT 4+3(3)		ANT 4+3		
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.5GHz WLAN	802.11a 6Mbps	100	5500	16.80	17.50	98.39	17.10	17.50	16.90	17.50	20.01	20.5	97.78
		116	5580	16.50	17.00		16.40	17.00	16.70	17.00	19.56	20.0	
		124	5620	17.30	17.50		17.20	17.50	17.40	17.50	20.31	20.5	
		132	5660	17.30	17.50		17.30	17.50	17.40	17.50	20.36	20.5	
		144	5720	17.50	18.00		17.50	18.00	17.70	18.00	20.61	21.0	
	802.11n-HT20 MCS0	100	5500	16.80	17.00	97.83	17.00	17.00	16.90	17.00	19.96	20.0	97.83
		116	5580	16.80	17.00		16.90	17.00	16.90	17.00	19.91	20.0	
		124	5620	17.40	18.00		17.50	18.00	17.80	18.00	20.66	21.0	
		132	5660	17.40	18.00		17.60	18.00	17.70	18.00	20.66	21.0	
		144	5720	17.50	18.00		17.50	18.00	17.60	18.00	20.56	21.0	
	802.11n-HT40 MCS0	102	5510	13.60	14.50	96.04	14.20	14.50	13.80	14.50	17.01	17.5	95.89
		110	5550	15.90	16.00		15.80	16.00	15.90	16.00	18.86	19.0	
		126	5630	15.50	16.00		15.50	16.00	15.60	16.00	18.56	19.0	
		134	5670	15.20	16.00		15.40	16.00	15.60	16.00	18.51	19.0	
		142	5710	15.50	16.00		15.10	16.00	16.00	16.00	18.58	19.0	
	802.11ac-VHT20 MCS0	100	5500	16.70	17.00	98.36	16.90	17.00	16.80	17.00	19.86	20.0	97.63
		116	5580	16.70	17.00		16.80	17.00	17.00	17.00	19.91	20.0	
		124	5620	17.30	18.00		17.50	18.00	17.60	18.00	20.56	21.0	
		132	5660	17.30	18.00		17.50	18.00	17.60	18.00	20.56	21.0	
		144	5720	17.40	18.00		17.40	18.00	17.50	18.00	20.46	21.0	
	802.11ac-VHT40 MCS0	102	5510	13.50	14.50	95.99	14.10	14.50	13.70	14.50	16.91	17.5	95.58
		110	5550	15.80	16.00		16.00	16.00	15.70	16.00	18.86	19.0	
		126	5630	15.50	16.00		15.60	16.00	15.60	16.00	18.61	19.0	
		134	5670	15.10	16.00		15.30	16.00	15.50	16.00	18.41	19.0	
		142	5710	15.40	16.00		15.00	16.00	15.90	16.00	18.48	19.0	
	802.11ac-VHT80 MCS0	106	5530	10.20	11.00	91.94	10.80	11.00	10.60	11.00	13.71	14.0	91.96
		122	5610	16.40	17.00		16.50	17.00	16.50	17.00	19.51	20.0	
		138	5690	16.50	17.00		16.10	17.00	17.00	17.00	19.58	20.0	

Transmit Antenna				Ant 3			ANT 4+3(4)		ANT 4+3(3)		ANT 4+3		
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.8GHz WLAN	802.11a 6Mbps	149	5745	18.30	18.50	98.39	18.30	18.50	18.50	18.50	21.41	21.5	97.78
		157	5785	18.40	18.50		18.00	18.50	18.40	18.50	21.24	21.5	
		165	5825	18.40	18.50		18.40	18.50	18.10	18.50	21.26	21.5	
	802.11n-HT20 MCS0	149	5745	17.70	18.00	97.83	17.50	18.00	18.00	18.00	20.77	21.0	97.83
		157	5785	17.80	18.00		17.50	18.00	18.00	18.00	20.77	21.0	
		165	5825	17.90	18.00		18.00	18.00	17.60	18.00	20.81	21.0	
	802.11n-HT40 MCS0	151	5755	15.90	16.00	96.04	15.90	16.00	15.50	16.00	18.71	19.0	95.89
		159	5795	15.90	16.00		15.80	16.00	15.70	16.00	18.76	19.0	
	802.11ac-VHT20 MCS0	149	5745	17.60	18.00	98.36	17.40	18.00	17.90	18.00	20.67	21.0	97.63
		157	5785	17.70	18.00		17.40	18.00	17.90	18.00	20.67	21.0	
		165	5825	17.80	18.00		17.90	18.00	17.50	18.00	20.71	21.0	
	802.11ac-VHT40 MCS0	151	5755	15.80	16.00	95.99	15.80	16.00	15.40	16.00	18.61	19.0	95.58
		159	5795	15.80	16.00		15.70	16.00	15.60	16.00	18.66	19.0	
	802.11ac-VHT80 MCS0	155	5775	16.50	17.00	91.94	16.80	17.00	17.00	17.00	19.91	20.0	91.96

Transmit Antenna				Ant 4			ANT 4+3(4)		ANT 4+3(3)		ANT 4+3		
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %
2.4GHz WLAN	802.11b 1Mbps	1	2412	10.90	11.00	98.80	13.60	14.00	16.20	16.50	18.10	18.4	98.66
		6	2437	10.70	11.00		13.60	14.00	16.50	16.50	18.00	18.4	
		11	2462	10.90	11.00		13.70	14.00	16.40	16.50	18.27	18.4	
	802.11g 6Mbps	1	2412	10.80	11.00	98.16	13.90	14.00	16.40	16.50	18.34	18.4	98.36
		6	2437	10.90	11.00		13.80	14.00	16.40	16.50	18.30	18.4	
		11	2462	10.70	11.00		13.90	14.00	16.40	16.50	18.34	18.4	
	802.11n-HT20 MCS0	1	2412	10.80	11.00	97.83	13.90	14.00	14.20	14.50	17.06	17.3	98.16
		6	2437	10.90	11.00		13.70	14.00	16.30	16.50	18.20	18.4	
		11	2462	10.90	11.00		13.80	14.00	16.20	16.50	18.17	18.4	
	802.11ac-VHT20 MCS0	1	2412	10.60	11.00	98.25	13.80	14.00	14.40	14.50	17.12	17.3	98.03
		6	2437	10.90	11.00		13.70	14.00	16.20	16.50	18.14	18.4	
		11	2462	10.90	11.00		13.90	14.00	16.40	16.50	18.34	18.4	

Transmit Antenna				Ant 3			ANT 4+3(4)		ANT 4+3(3)		ANT 4+3		
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.2GHz WLAN	802.11a 6Mbps	36	5180	13.40	13.50	98.39	14.30	14.50	14.90	15.00	17.62	17.8	97.78
		40	5200	13.40	13.50		14.40	14.50	14.70	15.00	17.66	17.8	
		44	5220	13.40	13.50		14.30	14.50	14.70	15.00	17.51	17.8	
		48	5240	13.30	13.50		14.40	14.50	14.70	15.00	17.56	17.8	
	802.11n-HT20 MCS0	36	5180	13.40	13.50	97.83	14.20	14.50	14.80	15.00	17.52	17.8	97.83
		40	5200	13.40	13.50		14.20	14.50	14.70	15.00	17.47	17.8	
		44	5220	13.10	13.50		14.20	14.50	14.80	15.00	17.52	17.8	
		48	5240	13.30	13.50		14.30	14.50	14.70	15.00	17.51	17.8	
	802.11n-HT40 MCS0	38	5190	9.50	10.00	96.04	9.60	10.00	10.00	10.00	12.81	13.0	95.89
		46	5230	13.30	13.50		14.20	14.50	14.70	15.00	17.47	17.8	
	802.11ac-VHT20 MCS0	36	5180	13.30	13.50	98.36	14.10	14.50	14.70	15.00	17.42	17.8	97.63
		40	5200	13.30	13.50		14.10	14.50	14.60	15.00	17.37	17.8	
		44	5220	13.00	13.50		14.10	14.50	14.70	15.00	17.42	17.8	
		48	5240	13.20	13.50		14.20	14.50	14.60	15.00	17.41	17.8	
	802.11ac-VHT40 MCS0	38	5190	9.40	10.00	95.99	9.30	10.00	9.90	10.00	12.62	13.0	95.58
		46	5230	13.20	13.50		14.10	14.50	14.60	15.00	17.37	17.8	
	802.11ac-VHT80 MCS0	42	5210	9.40	9.50	91.94	8.90	10.00	9.10	10.00	12.01	13.0	91.96

Transmit Antenna				Ant 3			ANT 4+3(4)		ANT 4+3(3)		ANT 4+3		
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.3GHz WLAN	802.11a 6Mbps	52	5260	13.40	13.50	98.39	14.40	14.50	14.60	15.00	17.51	17.8	97.78
		56	5280	13.20	13.50		14.40	14.50	14.60	15.00	17.51	17.8	
		60	5300	13.30	13.50		14.40	14.50	14.80	15.00	17.61	17.8	
		64	5320	13.40	13.50		14.20	14.50	14.60	15.00	17.41	17.8	
	802.11n-HT20 MCS0	52	5260	13.40	13.50	97.83	14.40	14.50	14.70	15.00	17.56	17.8	97.83
		56	5280	13.40	13.50		14.40	14.50	14.80	15.00	17.61	17.8	
		60	5300	13.40	13.50		14.40	14.50	14.80	15.00	17.61	17.8	
		64	5320	13.40	13.50		14.20	14.50	14.70	15.00	17.47	17.8	
	802.11n-HT40 MCS0	54	5270	13.40	13.50	96.04	14.20	14.50	14.70	15.00	17.47	17.8	95.89
		62	5310	13.10	13.50		12.60	13.00	12.60	13.00	15.61	16.0	
	802.11ac-VHT20 MCS0	52	5260	13.30	13.50	98.36	14.30	14.50	14.60	15.00	17.46	17.8	97.63
		56	5280	13.30	13.50		14.30	14.50	14.70	15.00	17.51	17.8	
		60	5300	13.30	13.50		14.30	14.50	14.70	15.00	17.51	17.8	
		64	5320	13.30	13.50		14.10	14.50	14.60	15.00	17.37	17.8	
	802.11ac-VHT40 MCS0	54	5270	13.30	13.50	95.99	14.10	14.50	14.60	15.00	17.37	17.8	95.58
		62	5310	12.40	13.00		12.50	13.00	12.50	13.00	15.51	16.0	
	802.11ac-VHT80 MCS0	58	5290	9.90	10.50	91.94	9.70	10.50	10.20	10.50	12.97	13.5	91.96

Transmit Antenna				Ant 3			ANT 4+3(4)		ANT 4+3(3)		ANT 4+3		
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.5GHz WLAN	802.11a 6Mbps	100	5500	13.40	14.00	98.39	14.40	16.00	14.70	15.00	17.56	18.5	97.78
		116	5580	13.40	14.00		14.20	16.00	14.90	15.00	18.33	18.5	
		124	5620	13.30	14.00		15.90	16.00	14.70	15.00	18.35	18.5	
		132	5660	13.30	14.00		15.80	16.00	14.80	15.00	18.34	18.5	
		144	5720	13.20	14.00		15.90	16.00	14.70	15.00	18.35	18.5	
	802.11n-HT20 MCS0	100	5500	13.70	14.00	97.83	15.90	16.00	14.70	15.00	18.35	18.5	97.83
		116	5580	13.90	14.00		15.80	16.00	14.90	15.00	18.38	18.5	
		124	5620	13.80	14.00		15.80	16.00	14.80	15.00	18.34	18.5	
		132	5660	13.80	14.00		15.90	16.00	14.80	15.00	18.40	18.5	
		144	5720	13.70	14.00		15.70	16.00	14.80	15.00	18.28	18.5	
	802.11n-HT40 MCS0	102	5510	13.70	14.00	96.04	14.20	14.50	13.80	14.50	17.01	17.5	95.89
		110	5550	13.70	14.00		15.70	16.00	14.60	15.00	18.20	18.5	
		126	5630	13.90	14.00		15.40	16.00	14.90	15.00	18.02	18.5	
		134	5670	13.70	14.00		15.30	16.00	14.70	15.00	18.17	18.5	
		142	5710	13.70	14.00		15.20	16.00	14.90	15.00	18.06	18.5	
	802.11ac-VHT20 MCS0	100	5500	13.60	14.00	98.36	15.80	16.00	14.60	15.00	18.25	18.5	97.63
		116	5580	13.70	14.00		15.70	16.00	14.80	15.00	18.28	18.5	
		124	5620	13.70	14.00		15.70	16.00	14.70	15.00	18.24	18.5	
		132	5660	13.70	14.00		15.80	16.00	14.70	15.00	18.30	18.5	
		144	5720	13.60	14.00		15.60	16.00	14.70	15.00	18.18	18.5	
	802.11ac-VHT40 MCS0	102	5510	13.60	14.00	95.99	14.10	14.50	13.70	14.50	16.91	17.5	95.58
		110	5550	13.60	14.00		15.60	16.00	14.50	15.00	18.10	18.5	
		126	5630	13.80	14.00		15.30	16.00	14.80	15.00	17.92	18.5	
		134	5670	13.60	14.00		15.20	16.00	14.60	15.00	18.07	18.5	
		142	5710	13.60	14.00		14.80	16.00	14.60	15.00	17.66	18.5	
	802.11ac-VHT80 MCS0	106	5530	11.80	12.00	91.94	10.80	11.00	10.60	11.00	13.71	14.0	91.96
		122	5610	13.60	14.00		15.80	16.00	14.90	15.00	18.38	18.5	
		138	5690	13.90	14.00		15.80	16.00	14.90	15.00	18.38	18.5	

Transmit Antenna				Ant 3			ANT 4+3(4)		ANT 4+3(3)		ANT 4+3		
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.8GHz WLAN	802.11a 6Mbps	149	5745	12.20	12.50	98.39	18.40	18.50	12.30	12.50	19.35	19.5	97.78
		157	5785	12.20	12.50		17.90	18.00	12.40	12.50	18.98	19.1	
		165	5825	12.20	12.50		18.40	18.50	12.40	12.50	19.37	19.5	
	802.11n-HT20 MCS0	149	5745	12.30	12.50	97.83	17.40	17.50	12.40	12.50	18.59	18.7	97.83
		157	5785	12.20	12.50		17.40	17.50	12.20	12.50	18.55	18.7	
		165	5825	12.30	12.50		17.60	18.00	12.40	12.50	18.75	19.1	
	802.11n-HT40 MCS0	151	5755	12.40	12.50	96.04	15.70	16.00	12.40	12.50	17.37	17.6	95.89
		159	5795	12.40	12.50		15.70	16.00	12.20	12.50	17.30	17.6	
	802.11ac-VHT20 MCS0	149	5745	12.20	12.50	98.36	17.30	17.50	12.20	12.50	18.49	18.7	97.63
		157	5785	12.10	12.50		17.40	17.50	12.20	12.50	18.55	18.7	
		165	5825	12.20	12.50		17.90	18.00	12.20	12.50	18.94	19.1	
	802.11ac-VHT40 MCS0	151	5755	12.30	12.50	95.99	15.90	16.00	12.40	12.50	17.50	17.6	95.58
		159	5795	12.30	12.50		15.90	16.00	12.10	12.50	17.41	17.6	
	802.11ac-VHT80 MCS0	155	5775	12.30	12.50	91.94	16.90	17.00	12.40	12.50	18.22	18.3	91.96

Transmit Antenna				Ant 4			ANT 4+3(4)		ANT 4+3(3)		ANT 4+3		
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %
2.4GHz WLAN	802.11b 1Mbps	1	2412	13.90	14.00	98.80	17.40	17.50	18.40	18.50	20.94	21.0	98.66
		6	2437	13.90	14.00		17.10	17.50	18.40	18.50	20.81	21.0	
		11	2462	13.90	14.00		17.20	17.50	18.30	18.50	20.80	21.0	
	802.11g 6Mbps	1	2412	13.80	14.00	98.16	16.80	17.00	16.90	17.00	19.86	20.0	98.36
		6	2437	13.80	14.00		17.40	17.50	18.30	18.50	20.88	21.0	
		11	2462	13.80	14.00		16.70	17.00	16.70	17.00	19.71	20.0	
	802.11n-HT20 MCS0	1	2412	13.70	14.00	97.83	14.90	15.00	14.20	14.50	17.57	17.8	98.16
		6	2437	13.70	14.00		17.40	17.50	18.20	18.50	20.83	21.0	
		11	2462	13.70	14.00		16.20	16.50	16.10	16.50	19.16	19.5	
	802.11ac-VHT20 MCS0	1	2412	13.80	14.00	98.25	14.30	14.50	14.30	14.50	17.31	17.5	98.03
		6	2437	13.70	14.00		17.40	17.50	18.30	18.50	20.88	21.0	
		11	2462	13.70	14.00		16.10	16.50	16.10	16.50	19.11	19.5	

Transmit Antenna				Ant 3			ANT 4+3(4)		ANT 4+3(3)		ANT 4+3		
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.2GHz WLAN	802.11a 6Mbps	36	5180	13.60	14.00	98.39	15.70	16.00	14.30	14.50	18.07	18.3	97.78
		40	5200	13.70	14.00		16.90	17.00	14.20	14.50	18.77	18.9	
		44	5220	13.80	14.00		16.70	17.00	14.40	14.50	18.71	18.9	
		48	5240	13.90	14.00		16.80	17.00	14.40	14.50	18.77	18.9	
	802.11n-HT20 MCS0	36	5180	13.80	14.00	97.83	14.80	15.00	14.20	15.00	17.52	18.0	97.83
		40	5200	13.70	14.00		16.20	16.50	14.10	14.50	18.29	18.6	
		44	5220	13.70	14.00		17.10	17.50	14.30	14.50	18.93	19.3	
		48	5240	13.60	14.00		17.20	17.50	14.20	14.50	18.96	19.3	
	802.11n-HT40 MCS0	38	5190	9.50	10.00	96.04	9.60	10.00	10.00	10.00	12.81	13.0	95.89
		46	5230	13.80	14.00		15.40	15.50	14.10	14.50	17.81	18.0	
	802.11ac-VHT20 MCS0	36	5180	13.70	14.00	98.36	14.70	15.00	14.10	15.00	17.42	18.0	97.63
		40	5200	13.60	14.00		16.10	16.50	14.00	14.50	18.19	18.6	
		44	5220	13.60	14.00		16.60	17.50	14.20	14.50	18.57	19.3	
		48	5240	13.50	14.00		16.70	17.50	14.10	14.50	18.60	19.3	
	802.11ac-VHT40 MCS0	38	5190	9.40	10.00	95.99	9.30	10.00	9.90	10.00	12.62	13.0	95.58
		46	5230	13.70	14.00		15.30	15.50	14.00	14.50	17.71	18.0	
	802.11ac-VHT80 MCS0	42	5210	8.70	10.00	91.94	8.90	10.00	9.10	10.00	12.01	13.0	91.96

Transmit Antenna				Ant 3			ANT 4+3(4)		ANT 4+3(3)		ANT 4+3		
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.3GHz WLAN	802.11a 6Mbps	52	5260	13.70	14.00	98.39	16.70	17.00	14.10	14.50	18.60	18.9	97.78
		56	5280	13.80	14.00		16.80	17.00	14.10	14.50	18.67	18.9	
		60	5300	13.90	14.00		16.70	17.00	14.10	14.50	18.60	18.9	
		64	5320	13.60	14.00		16.90	17.00	14.40	14.50	18.84	18.9	
	802.11n-HT20 MCS0	52	5260	13.90	14.00	97.83	16.90	17.00	14.20	14.50	18.77	18.9	97.83
		56	5280	13.90	14.00		16.90	17.00	14.30	14.50	18.80	18.9	
		60	5300	13.80	14.00		16.70	17.00	14.30	14.50	18.67	18.9	
		64	5320	13.90	14.00		16.90	17.00	14.40	14.50	18.84	18.9	
	802.11n-HT40 MCS0	54	5270	13.90	14.00	96.04	15.40	15.50	14.10	14.50	17.81	18.0	95.89
		62	5310	13.80	14.00		12.60	13.00	12.60	13.00	15.61	16.0	
	802.11ac-VHT20 MCS0	52	5260	13.80	14.00	98.36	16.80	17.00	14.10	14.50	18.67	18.9	97.63
		56	5280	13.80	14.00		16.80	17.00	14.20	14.50	18.70	18.9	
		60	5300	13.70	14.00		16.60	17.00	14.20	14.50	18.57	18.9	
		64	5320	13.80	14.00		16.80	17.00	14.30	14.50	18.74	18.9	
	802.11ac-VHT40 MCS0	54	5270	13.80	14.00	95.99	15.30	15.50	14.00	14.50	17.71	18.0	95.58
		62	5310	12.40	13.00		12.50	13.00	12.50	13.00	15.51	16.0	
	802.11ac-VHT80 MCS0	58	5290	9.90	10.50	91.94	9.70	10.50	10.20	10.50	12.97	13.5	91.96

Transmit Antenna				Ant 3			ANT 4+3(4)		ANT 4+3(3)		ANT 4+3		
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.5GHz WLAN	802.11a 6Mbps	100	5500	13.40	13.50	98.39	13.90	14.00	14.40	14.50	17.17	17.3	97.78
		116	5580	13.40	13.50		13.90	14.00	14.40	14.50	17.17	17.3	
		124	5620	13.40	13.50		13.90	14.00	14.40	14.50	17.17	17.3	
		132	5660	13.30	13.50		13.90	14.00	14.40	14.50	17.06	17.3	
		144	5720	13.30	13.50		13.90	14.00	14.30	14.50	17.11	17.3	
	802.11n-HT20 MCS0	100	5500	13.20	13.50	97.83	13.70	14.00	14.30	14.50	17.02	17.3	97.83
		116	5580	13.40	13.50		13.80	14.00	14.40	14.50	17.12	17.3	
		124	5620	13.30	13.50		13.60	14.00	14.40	14.50	17.03	17.3	
		132	5660	13.30	13.50		13.90	14.00	14.20	14.50	17.06	17.3	
		144	5720	13.40	13.50		13.80	14.00	14.20	14.50	17.01	17.3	
	802.11n-HT40 MCS0	102	5510	13.20	13.50	96.04	13.70	14.00	14.30	14.50	17.02	17.3	95.89
		110	5550	13.40	13.50		13.90	14.00	14.40	14.50	17.17	17.3	
		126	5630	13.40	13.50		13.90	14.00	14.40	14.50	17.17	17.3	
		134	5670	13.40	13.50		13.70	14.00	14.40	14.50	17.07	17.3	
		142	5710	13.20	13.50		13.60	14.00	14.40	14.50	17.03	17.3	
	802.11ac-VHT20 MCS0	100	5500	13.10	13.50	98.36	13.60	14.00	14.20	14.50	16.92	17.3	97.63
		116	5580	13.30	13.50		13.70	14.00	14.30	14.50	17.02	17.3	
		124	5620	13.20	13.50		13.50	14.00	14.30	14.50	16.93	17.3	
		132	5660	13.20	13.50		13.80	14.00	14.10	14.50	16.96	17.3	
		144	5720	13.30	13.50		13.70	14.00	14.10	14.50	16.91	17.3	
	802.11ac-VHT40 MCS0	102	5510	13.10	13.50	95.99	13.60	14.00	14.20	14.50	16.92	17.3	95.58
		110	5550	13.30	13.50		13.80	14.00	14.30	14.50	17.07	17.3	
		126	5630	13.30	13.50		13.80	14.00	14.30	14.50	17.07	17.3	
		134	5670	13.30	13.50		13.60	14.00	14.30	14.50	16.97	17.3	
		142	5710	13.10	13.50		13.50	14.00	14.30	14.50	16.93	17.3	
	802.11ac-VHT80 MCS0	106	5530	11.70	12.00	91.94	10.80	11.00	10.60	11.00	13.71	14.0	91.96
		122	5610	13.10	13.50		13.90	14.00	14.20	14.50	17.06	17.3	
		138	5690	13.40	13.50		13.90	14.00	14.10	14.50	17.01	17.3	

Transmit Antenna				Ant 3			ANT 4+3(4)		ANT 4+3(3)		ANT 4+3		
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.8GHz WLAN	802.11a 6Mbps	149	5745	9.60	10.00	98.39	14.90	15.00	11.40	11.50	16.50	16.6	97.78
		157	5785	9.60	10.00		14.60	15.00	11.20	11.50	16.23	16.6	
		165	5825	9.70	10.00		14.80	15.00	11.40	11.50	16.43	16.6	
	802.11n-HT20 MCS0	149	5745	9.80	10.00	97.83	14.90	15.00	11.40	11.50	16.50	16.6	97.83
		157	5785	9.90	10.00		14.90	15.00	11.30	11.50	16.47	16.6	
		165	5825	9.70	10.00		14.90	15.00	11.20	11.50	16.44	16.6	
	802.11n-HT40 MCS0	151	5755	9.80	10.00	96.04	14.90	15.00	11.40	11.50	16.50	16.6	95.89
		159	5795	9.90	10.00		14.90	15.00	11.20	11.50	16.44	16.6	
	802.11ac-VHT20 MCS0	149	5745	9.70	10.00	98.36	14.80	15.00	11.30	11.50	16.40	16.6	97.63
		157	5785	9.80	10.00		14.80	15.00	11.20	11.50	16.37	16.6	
		165	5825	9.60	10.00		14.80	15.00	11.30	11.50	16.34	16.6	
	802.11ac-VHT40 MCS0	151	5755	9.70	10.00	95.99	14.80	15.00	11.30	11.50	16.40	16.6	95.58
		159	5795	9.80	10.00		14.80	15.00	11.10	11.50	16.34	16.6	
	802.11ac-VHT80 MCS0	155	5775	9.60	10.00	91.94	14.90	15.00	11.40	11.50	16.50	16.6	91.96

Transmit Antenna				Ant 4			ANT 4+3(4)		ANT 4+3(3)		ANT 4+3		
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %
2.4GHz WLAN	802.11b 1Mbps	1	2412	18.80	19.00	98.80	19.60	20.00	19.70	20.00	22.66	23.0	98.66
		6	2437	18.80	19.00		20.00	20.00	19.60	20.00	22.81	23.0	
		11	2462	18.80	19.00		19.60	20.00	19.90	20.00	22.76	23.0	
	802.11g 6Mbps	1	2412	15.10	15.50	98.16	15.40	15.50	15.30	15.50	18.36	18.5	98.36
		6	2437	18.70	19.00		19.50	20.00	19.60	20.00	22.56	23.0	
		11	2462	15.00	15.50		15.10	15.50	15.00	15.50	18.06	18.5	
	802.11n-HT20 MCS0	1	2412	14.60	15.00	97.83	14.80	15.00	14.80	15.00	17.81	18.0	98.16
		6	2437	18.80	19.00		19.50	19.50	19.20	19.50	22.36	22.5	
		11	2462	14.30	14.50		14.50	14.50	14.20	14.50	17.36	17.5	
	802.11ac-VHT20 MCS0	1	2412	14.50	15.00	98.25	14.70	15.00	14.70	15.00	17.71	18.0	98.03
		6	2437	18.70	19.00		19.40	19.50	19.10	19.50	22.26	22.5	
		11	2462	14.20	14.50		14.40	14.50	14.10	14.50	17.26	17.5	

Transmit Antenna				Ant 3			ANT 4+3(4)		ANT 4+3(3)		ANT 4+3		
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.2GHz WLAN	802.11a 6Mbps	36	5180	5180	15.40	16.5	15.70	16.00	15.60	16.00	18.66	19.0	97.78
		40	5200	5200	16.40	16.5	16.80	17.00	16.60	17.00	19.71	20.0	
		44	5220	5220	16.50	17.0	16.80	17.00	16.60	17.00	19.71	20.0	
		48	5240	5240	16.70	17.0	16.70	17.00	16.80	17.00	19.76	20.0	
	802.11n-HT20 MCS0	36	5180	5180	14.50	16.0	14.80	15.00	14.20	15.00	17.52	18.0	97.83
		40	5200	5200	16.00	16.0	16.30	16.50	16.10	16.50	19.21	19.5	
		44	5220	5220	16.80	17.0	17.10	17.50	16.90	17.50	20.01	20.5	
		48	5240	5240	16.90	17.0	17.10	17.50	17.00	17.50	20.06	20.5	
	802.11n-HT40 MCS0	38	5190	5190	9.50	9.5	9.60	10.00	10.00	10.00	12.81	13.0	95.89
		46	5230	5230	15.50	15.5	15.40	16.00	15.80	16.00	18.61	19.0	
	802.11ac-VHT20 MCS0	36	5180	5180	14.40	16.0	14.70	15.00	14.10	15.00	17.42	18.0	97.63
		40	5200	5200	15.90	16.0	16.20	16.50	16.00	16.50	19.11	19.5	
		44	5220	5220	16.70	17.0	17.00	17.50	16.80	17.50	19.91	20.5	
		48	5240	5240	16.80	17.0	17.00	17.50	16.90	17.50	19.96	20.5	
	802.11ac-VHT40 MCS0	38	5190	5190	9.40	9.5	9.30	10.00	9.90	10.00	12.62	13.0	95.58
		46	5230	5230	15.40	15.5	15.30	16.00	15.70	16.00	18.51	19.0	
	802.11ac-VHT80 MCS0	42	5210	5210	8.70	9.0	8.90	10.00	9.10	10.00	12.01	13.0	91.96

Transmit Antenna				Ant 3			ANT 4+3(4)		ANT 4+3(3)		ANT 4+3		
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.3GHz WLAN	802.11a 6Mbps	52	5260	17.30	18.00	98.39	17.60	18.00	17.60	18.00	20.61	21.0	97.78
		56	5280	17.20	17.50		17.20	17.50	17.40	17.50	20.31	20.5	
		60	5300	17.00	17.50		17.20	17.50	17.30	17.50	20.26	20.5	
		64	5320	16.40	17.00		16.70	17.00	16.40	17.00	19.56	20.0	
	802.11n-HT20 MCS0	52	5260	16.50	17.00	97.83	17.00	17.00	16.80	17.00	19.91	20.0	97.83
		56	5280	17.30	17.50		17.40	17.50	17.40	17.50	20.41	20.5	
		60	5300	17.10	17.50		17.10	17.50	17.20	17.50	20.16	20.5	
		64	5320	17.00	17.50		17.30	17.50	17.20	17.50	20.26	20.5	
	802.11n-HT40 MCS0	54	5270	15.60	16.00	96.04	15.40	16.00	15.80	16.00	18.61	19.0	95.89
		62	5310	12.50	13.00		12.60	13.00	12.60	13.00	15.61	16.0	
	802.11ac-VHT20 MCS0	52	5260	16.40	17.00	98.36	16.90	17.00	16.70	17.00	19.81	20.0	97.63
		56	5280	17.20	17.50		17.40	17.50	17.30	17.50	20.36	20.5	
		60	5300	17.00	17.50		17.00	17.50	17.10	17.50	20.06	20.5	
		64	5320	16.90	17.50		17.20	17.50	17.10	17.50	20.16	20.5	
	802.11ac-VHT40 MCS0	54	5270	15.50	16.00	95.99	15.30	16.00	15.70	16.00	18.51	19.0	95.58
		62	5310	12.40	13.00		12.50	13.00	12.50	13.00	15.51	16.0	
	802.11ac-VHT80 MCS0	58	5290	9.90	10.50	91.94	9.70	10.50	10.20	10.50	12.97	13.5	91.96

Transmit Antenna				Ant 3			ANT 4+3(4)		ANT 4+3(3)		ANT 4+3		
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.5GHz WLAN	802.11a 6Mbps	100	5500	16.80	17.50	98.39	17.10	17.50	16.90	17.50	20.01	20.5	97.78
		116	5580	16.50	17.00		16.40	17.00	16.70	17.00	19.56	20.0	
		124	5620	17.30	17.50		17.20	17.50	17.40	17.50	20.31	20.5	
		132	5660	17.30	17.50		17.30	17.50	17.40	17.50	20.36	20.5	
		144	5720	17.50	18.00		17.50	18.00	17.70	18.00	20.61	21.0	
	802.11n-HT20 MCS0	100	5500	16.80	17.00	97.83	17.00	17.00	16.90	17.00	19.96	20.0	97.83
		116	5580	16.80	17.00		16.90	17.00	16.90	17.00	19.91	20.0	
		124	5620	17.40	18.00		17.50	18.00	17.80	18.00	20.66	21.0	
		132	5660	17.40	18.00		17.60	18.00	17.70	18.00	20.66	21.0	
		144	5720	17.50	18.00		17.50	18.00	17.60	18.00	20.56	21.0	
	802.11n-HT40 MCS0	102	5510	13.60	14.50	96.04	14.20	14.50	13.80	14.50	17.01	17.5	95.89
		110	5550	15.90	16.00		15.80	16.00	15.90	16.00	18.86	19.0	
		126	5630	15.50	16.00		15.50	16.00	15.60	16.00	18.56	19.0	
		134	5670	15.20	16.00		15.40	16.00	15.60	16.00	18.51	19.0	
		142	5710	15.50	16.00		15.10	16.00	16.00	16.00	18.58	19.0	
	802.11ac-VHT20 MCS0	100	5500	16.70	17.00	98.36	16.90	17.00	16.80	17.00	19.86	20.0	97.63
		116	5580	16.70	17.00		16.80	17.00	17.00	17.00	19.91	20.0	
		124	5620	17.30	18.00		17.50	18.00	17.60	18.00	20.56	21.0	
		132	5660	17.30	18.00		17.50	18.00	17.60	18.00	20.56	21.0	
		144	5720	17.40	18.00		17.40	18.00	17.50	18.00	20.46	21.0	
	802.11ac-VHT40 MCS0	102	5510	13.50	14.50	95.99	14.10	14.50	13.70	14.50	16.91	17.5	95.58
		110	5550	15.80	16.00		16.00	16.00	15.70	16.00	18.86	19.0	
		126	5630	15.50	16.00		15.60	16.00	15.60	16.00	18.61	19.0	
		134	5670	15.10	16.00		15.30	16.00	15.50	16.00	18.41	19.0	
		142	5710	15.40	16.00		15.00	16.00	15.90	16.00	18.48	19.0	
	802.11ac-VHT80 MCS0	106	5530	10.20	11.00	91.94	10.80	11.00	10.60	11.00	13.71	14.0	91.96
		122	5610	16.40	17.00		16.50	17.00	16.50	17.00	19.51	20.0	
		138	5690	16.50	17.00		16.10	17.00	17.00	17.00	19.58	20.0	

Transmit Antenna				Ant 3			ANT 4+3(4)		ANT 4+3(3)		ANT 4+3		
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.8GHz WLAN	802.11a 6Mbps	149	5745	16.90	17.00	98.39	18.30	18.50	18.50	18.50	21.41	21.5	97.78
		157	5785	16.90	17.00		18.00	18.50	18.40	18.50	21.24	21.5	
		165	5825	16.90	17.00		18.40	18.50	18.10	18.50	21.26	21.5	
	802.11n-HT20 MCS0	149	5745	16.90	17.00	97.83	17.50	18.00	18.00	18.00	20.77	21.0	97.83
		157	5785	16.90	17.00		17.50	18.00	18.00	18.00	20.77	21.0	
		165	5825	16.90	17.00		18.00	18.00	17.60	18.00	20.81	21.0	
	802.11n-HT40 MCS0	151	5755	15.90	16.00	96.04	15.90	16.00	15.50	16.00	18.71	19.0	95.89
		159	5795	15.80	16.00		15.80	16.00	15.70	16.00	18.76	19.0	
	802.11ac-VHT20 MCS0	149	5745	16.90	17.00	98.36	17.40	18.00	17.90	18.00	20.67	21.0	97.63
		157	5785	16.90	17.00		17.40	18.00	17.90	18.00	20.67	21.0	
		165	5825	16.90	17.00		17.90	18.00	17.50	18.00	20.71	21.0	
	802.11ac-VHT40 MCS0	151	5755	15.90	16.00	95.99	15.80	16.00	15.40	16.00	18.61	19.0	95.58
		159	5795	15.90	16.00		15.70	16.00	15.60	16.00	18.66	19.0	
	802.11ac-VHT80 MCS0	155	5775	16.30	16.50	91.94	16.80	17.00	17.00	17.00	19.91	20.0	91.96

General Note:

1. For 2.4GHz Bluetooth SAR testing was selected 1Mbps due to its highest average power and duty cycle is 77.03% considered in SAR testing, and the duty cycle would be scaled to theoretical 83.3% in reported SAR calculation.

Bluetooth Power for Body (WWAN off)

Mode	Channel	Frequency (MHz)	Average power (dBm)		
			1Mbps	2Mbps	3Mbps
BR / EDR	CH 00	2402	17.70	12.85	12.80
	CH 39	2441	17.90	12.91	12.82
	CH 78	2480	17.52	12.73	12.78
Tune-up Limit			18.00	13.50	13.50

Mode	Channel	Frequency (MHz)	Average power (dBm)	
			1Mbps	2Mbps
LE	CH 00	2402	8.30	8.20
	CH 19	2440	9.30	9.20
	CH 39	2480	9.30	9.20
Tune-up Limit			10.00	10.00

Bluetooth Power for Head

Mode	Channel	Frequency (MHz)	Average power (dBm)		
			1Mbps	2Mbps	3Mbps
BR / EDR	CH 00	2402	9.49	8.39	8.51
	CH 39	2441	10.25	9.14	9.26
	CH 78	2480	10.99	10.05	10.20
Tune-up Limit			11.00	11.00	11.00

Mode	Channel	Frequency (MHz)	Average power (dBm)	
			1Mbps	2Mbps
LE	CH 00	2402	8.30	8.20
	CH 19	2440	9.30	9.20
	CH 39	2480	9.30	9.20
Tune-up Limit			10.00	10.00

Bluetooth Power for Body (WWAN on)

Mode	Channel	Frequency (MHz)	Average power (dBm)		
			1Mbps	2Mbps	3Mbps
BR / EDR	CH 00	2402	14.75	12.76	12.86
	CH 39	2441	14.94	13.19	13.32
	CH 78	2480	14.81	13.16	13.19
Tune-up Limit			15.50	13.50	13.50

Mode	Channel	Frequency (MHz)	Average power (dBm)	
			1Mbps	2Mbps
LE	CH 00	2402	8.30	8.20
	CH 19	2440	9.30	9.20
	CH 39	2480	9.30	9.20
Tune-up Limit			10.00	10.00

BT Duty cycle