

Ant 0								
GSM850	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
TX Channel	128	189	251		128	189	251	
Frequency (MHz)	824.2	836.4	848.8		824.2	836.4	848.8	
GSM 1 Tx slot	32.59	32.86	32.55	33.70	23.59	23.86	23.55	24.70
GPRS 1 Tx slot	32.67	32.94	32.62	33.70	23.67	23.94	23.62	24.70
GPRS 2 Tx slots	31.11	31.12	30.76	32.00	25.11	25.12	24.76	26.00
GPRS 3 Tx slots	29.72	29.87	29.30	31.00	25.46	25.61	25.04	26.74
GPRS 4 Tx slots	28.60	28.74	28.15	30.00	25.60	25.74	25.15	27.00
EDGE 1 Tx slot	27.23	27.05	27.08	28.00	18.23	18.05	18.08	19.00
EDGE 2 Tx slots	25.77	25.99	25.86	27.00	19.77	19.99	19.86	21.00
EDGE 3 Tx slots	25.61	25.82	25.66	27.00	21.35	21.56	21.40	22.74
EDGE 4 Tx slots	24.61	24.82	24.51	25.00	21.61	21.82	21.51	22.00
Ant 2								
GSM1900	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
TX Channel	512	661	810		512	661	810	
Frequency (MHz)	1850.2	1880	1909.8		1850.2	1880	1909.8	
GSM 1 Tx slot	30.07	30.28	30.09	31.00	21.07	21.28	21.09	22.00
GPRS 1 Tx slot	29.83	30.09	29.91	31.00	20.83	21.09	20.91	22.00
GPRS 2 Tx slots	28.53	28.58	28.43	29.50	22.53	22.58	22.43	23.50
GPRS 3 Tx slots	28.17	28.24	27.69	29.00	23.91	23.98	23.43	24.74
GPRS 4 Tx slots	26.55	26.94	26.23	28.00	23.55	23.94	23.23	25.00
EDGE 1 Tx slot	25.16	25.03	25.07	27.00	16.16	16.03	16.07	18.00
EDGE 2 Tx slots	25.05	24.86	24.70	26.00	19.05	18.86	18.70	20.00
EDGE 3 Tx slots	24.02	23.65	23.50	25.00	19.76	19.39	19.24	20.74
EDGE 4 Tx slots	22.95	22.76	22.22	24.00	19.95	19.76	19.22	21.00

Ant 0								
GSM850	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
TX Channel	128	189	251		128	189	251	
Frequency (MHz)	824.2	836.4	848.8		824.2	836.4	848.8	
GSM 1 Tx slot	32.59	32.86	32.55	33.70	23.59	23.86	23.55	24.70
GPRS 1 Tx slot	32.67	32.94	32.62	33.70	23.67	23.94	23.62	24.70
GPRS 2 Tx slots	31.11	31.12	30.76	32.00	25.11	25.12	24.76	26.00
GPRS 3 Tx slots	29.72	29.87	29.30	31.00	25.46	25.61	25.04	26.74
GPRS 4 Tx slots	28.60	28.74	28.15	30.00	25.60	25.74	25.15	27.00
EDGE 1 Tx slot	27.23	27.05	27.08	28.00	18.23	18.05	18.08	19.00
EDGE 2 Tx slots	25.77	25.99	25.86	27.00	19.77	19.99	19.86	21.00
EDGE 3 Tx slots	25.61	25.82	25.66	27.00	21.35	21.56	21.40	22.74
EDGE 4 Tx slots	24.61	24.82	24.51	25.00	21.61	21.82	21.51	22.00
Ant 2								
GSM1900	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
TX Channel	512	661	810		512	661	810	
Frequency (MHz)	1850.2	1880	1909.8		1850.2	1880	1909.8	
GSM 1 Tx slot	30.07	30.28	30.09	31.00	21.07	21.28	21.09	22.00
GPRS 1 Tx slot	29.83	30.09	29.91	31.00	20.83	21.09	20.91	22.00
GPRS 2 Tx slots	28.53	28.58	28.43	29.50	22.53	22.58	22.43	23.50
GPRS 3 Tx slots	28.17	28.24	27.69	29.00	23.91	23.98	23.43	24.74
GPRS 4 Tx slots	26.55	26.94	26.23	28.00	23.55	23.94	23.23	25.00
EDGE 1 Tx slot	25.16	25.03	25.07	27.00	16.16	16.03	16.07	18.00
EDGE 2 Tx slots	25.05	24.86	24.70	26.00	19.05	18.86	18.70	20.00
EDGE 3 Tx slots	24.02	23.65	23.50	25.00	19.76	19.39	19.24	20.74
EDGE 4 Tx slots	22.95	22.76	22.22	24.00	19.95	19.76	19.22	21.00

Ant 0								
GSM850	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
TX Channel	128	189	251		128	189	251	
Frequency (MHz)	824.2	836.4	848.8		824.2	836.4	848.8	
GSM 1 Tx slot	32.59	32.86	32.55	33.70	23.59	23.86	23.55	24.70
GPRS 1 Tx slot	32.67	32.94	32.62	33.70	23.67	23.94	23.62	24.70
GPRS 2 Tx slots	31.11	31.12	30.76	32.00	25.11	25.12	24.76	26.00
GPRS 3 Tx slots	29.72	29.87	29.30	31.00	25.46	25.61	25.04	26.74
GPRS 4 Tx slots	28.60	28.74	28.15	30.00	25.60	25.74	25.15	27.00
EDGE 1 Tx slot	27.23	27.05	27.08	28.00	18.23	18.05	18.08	19.00
EDGE 2 Tx slots	25.77	25.99	25.86	27.00	19.77	19.99	19.86	21.00
EDGE 3 Tx slots	25.61	25.82	25.66	27.00	21.35	21.56	21.40	22.74
EDGE 4 Tx slots	24.61	24.82	24.51	25.00	21.61	21.82	21.51	22.00
Ant 2								
GSM1900	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
TX Channel	512	661	810		512	661	810	
Frequency (MHz)	1850.2	1880	1909.8		1850.2	1880	1909.8	
GSM 1 Tx slot	30.07	30.28	30.09	31.00	21.07	21.28	21.09	22.00
GPRS 1 Tx slot	29.83	30.09	29.91	31.00	20.83	21.09	20.91	22.00
GPRS 2 Tx slots	28.53	28.58	28.43	29.50	22.53	22.58	22.43	23.50
GPRS 3 Tx slots	28.17	28.24	27.69	29.00	23.91	23.98	23.43	24.74
GPRS 4 Tx slots	26.55	26.94	26.23	28.00	23.55	23.94	23.23	25.00
EDGE 1 Tx slot	25.16	25.03	25.07	27.00	16.16	16.03	16.07	18.00
EDGE 2 Tx slots	25.05	24.86	24.70	26.00	19.05	18.86	18.70	20.00
EDGE 3 Tx slots	24.02	23.65	23.50	25.00	19.76	19.39	19.24	20.74
EDGE 4 Tx slots	22.95	22.76	22.22	24.00	19.95	19.76	19.22	21.00

		Ant 2				Ant 2				Ant0			
Band		WCDMA II			Tune-up Limit (dBm)	WCDMA IV			Tune-up Limit (dBm)	WCDMA V			Tune-up Limit (dBm)
TX Channel		9262	9400	9538		1312	1413	1513		4132	4182	4233	
Rx Channel		9662	9800	9938		1537	1638	1738		4357	4407	4458	
Frequency (MHz)		1852.4	1880	1907.6		1712.4	1732.6	1752.6		826.4	836.4	846.6	
3GPP Rel 99	AMR 12.2Kbps	24.75	24.62	24.51	25.00	23.98	24.02	24.05	25.00	24.75	24.71	23.85	25.00
3GPP Rel 99	RMC 12.2Kbps	24.78	24.68	24.53	25.00	24.03	24.10	24.09	25.00	24.78	24.75	23.88	25.00
3GPP Rel 6	HSDPA Subtest-1	23.66	23.66	23.55	24.00	22.80	22.88	22.80	24.00	23.81	23.70	22.55	24.00
3GPP Rel 6	HSDPA Subtest-2	23.64	23.71	23.52	24.00	22.89	22.94	22.88	24.00	23.79	23.69	22.51	24.00
3GPP Rel 6	HSDPA Subtest-3	23.24	23.26	23.07	23.50	22.29	22.42	22.43	23.50	23.23	23.37	22.23	23.50
3GPP Rel 6	HSDPA Subtest-4	23.28	23.35	23.05	23.50	22.33	22.46	22.42	23.50	23.31	23.32	22.20	23.50
3GPP Rel 8	DC-HSDPA Subtest-1	23.62	23.64	23.44	24.00	22.78	22.95	22.84	24.00	23.76	23.80	22.46	24.00
3GPP Rel 8	DC-HSDPA Subtest-2	23.55	23.76	23.49	24.00	22.72	22.87	22.94	24.00	23.70	23.72	22.48	24.00
3GPP Rel 8	DC-HSDPA Subtest-3	23.30	23.26	22.99	23.50	22.36	22.50	22.35	23.50	23.26	23.28	22.15	23.50
3GPP Rel 8	DC-HSDPA Subtest-4	23.21	23.20	22.95	23.50	22.47	22.39	22.42	23.50	23.28	23.23	22.15	23.50
3GPP Rel 6	HSUPA Subtest-1	23.79	23.60	23.68	24.00	22.75	22.98	22.84	24.00	23.59	23.71	22.60	24.00
3GPP Rel 6	HSUPA Subtest-2	21.79	21.66	21.63	22.00	20.90	20.99	21.08	22.00	21.59	21.56	20.82	22.00
3GPP Rel 6	HSUPA Subtest-3	22.81	22.72	22.68	23.00	21.97	22.10	22.01	23.00	22.71	22.70	21.71	23.00
3GPP Rel 6	HSUPA Subtest-4	21.78	21.82	21.64	22.00	20.97	21.03	21.12	22.00	21.47	21.58	20.69	22.00
3GPP Rel 6	HSUPA Subtest-5	23.74	23.76	23.53	24.00	22.83	22.95	22.98	24.00	23.53	23.64	22.68	24.00

		Ant 0				Ant 0				Ant 1			
Band		WCDMA II			Tune-up Limit (dBm)	WCDMA IV			Tune-up Limit (dBm)	WCDMA V			Tune-up Limit (dBm)
TX Channel		9262	9400	9538		1312	1413	1513		4132	4182	4233	
Rx Channel		9662	9800	9938		1537	1638	1738		4357	4407	4458	
Frequency (MHz)		1852.4	1880	1907.6		1712.4	1732.6	1752.6		826.4	836.4	846.6	
3GPP Rel 99	AMR 12.2Kbps	24.85	24.79	24.77	25.00	24.65	24.71	24.69	25.00	24.65	24.72	23.80	25.00
3GPP Rel 99	RMC 12.2Kbps	24.87	24.83	24.80	25.00	24.70	24.75	24.72	25.00	24.70	24.76	23.82	25.00
3GPP Rel 6	HSDPA Subtest-1	23.77	23.85	23.66	24.00	23.50	23.52	23.47	24.00	23.80	23.80	22.58	24.00
3GPP Rel 6	HSDPA Subtest-2	23.77	23.83	23.63	24.00	23.53	23.56	23.59	24.00	23.80	23.72	22.49	24.00
3GPP Rel 6	HSDPA Subtest-3	23.27	23.33	23.18	23.50	22.98	23.11	23.04	23.50	23.26	23.31	22.18	23.50
3GPP Rel 6	HSDPA Subtest-4	23.37	23.43	23.13	23.50	22.94	23.14	23.09	23.50	23.24	23.36	22.24	23.50
3GPP Rel 8	DC-HSDPA Subtest-1	23.70	23.75	23.64	24.00	23.39	23.57	23.52	24.00	23.72	23.76	22.43	24.00
3GPP Rel 8	DC-HSDPA Subtest-2	23.69	23.83	23.55	24.00	23.48	23.51	23.59	24.00	23.68	23.80	22.48	24.00
3GPP Rel 8	DC-HSDPA Subtest-3	23.31	23.34	23.19	23.50	23.06	23.21	23.05	23.50	23.23	23.25	22.13	23.50
3GPP Rel 8	DC-HSDPA Subtest-4	23.39	23.29	23.10	23.50	23.09	23.09	23.08	23.50	23.30	23.18	22.19	23.50
3GPP Rel 6	HSUPA Subtest-1	23.89	23.73	23.80	24.00	23.45	23.66	23.56	24.00	23.67	23.71	22.58	24.00
3GPP Rel 6	HSUPA Subtest-2	21.82	21.72	21.79	22.00	21.64	21.68	21.76	22.00	21.53	21.51	20.80	22.00
3GPP Rel 6	HSUPA Subtest-3	22.94	22.82	22.84	23.00	22.69	22.78	22.73	23.00	22.61	22.74	21.65	23.00
3GPP Rel 6	HSUPA Subtest-4	21.98	21.94	21.81	22.00	21.55	21.68	21.78	22.00	21.52	21.53	20.69	22.00
3GPP Rel 6	HSUPA Subtest-5	23.83	23.82	23.59	24.00	23.55	23.63	23.70	24.00	23.57	23.66	22.70	24.00

		Ant 2			
Band		WCDMA II			Tune-up Limit (dBm)
TX Channel		9262	9400	9538	
Rx Channel		9662	9800	9938	
Frequency (MHz)		1852.4	1880	1907.6	
3GPP Rel 99	AMR 12.2Kbps	23.87	23.99	23.96	25.00
3GPP Rel 99	RMC 12.2Kbps	23.89	24.03	24.00	25.00
3GPP Rel 6	HSDPA Subtest-1	22.76	22.77	22.68	24.00
3GPP Rel 6	HSDPA Subtest-2	22.77	22.74	22.70	24.00
3GPP Rel 6	HSDPA Subtest-3	22.30	22.38	22.17	23.50
3GPP Rel 6	HSDPA Subtest-4	22.30	22.44	22.18	23.50
3GPP Rel 8	DC-HSDPA Subtest-1	22.73	22.73	22.60	24.00
3GPP Rel 8	DC-HSDPA Subtest-2	22.73	22.85	22.61	24.00
3GPP Rel 8	DC-HSDPA Subtest-3	22.41	22.32	22.17	23.50
3GPP Rel 8	DC-HSDPA Subtest-4	22.34	22.31	22.14	23.50
3GPP Rel 6	HSUPA Subtest-1	22.94	22.76	22.80	24.00
3GPP Rel 6	HSUPA Subtest-2	20.87	20.78	20.77	22.00
3GPP Rel 6	HSUPA Subtest-3	21.90	21.90	21.85	23.00
3GPP Rel 6	HSUPA Subtest-4	20.96	20.92	20.76	22.00
3GPP Rel 6	HSUPA Subtest-5	22.86	22.84	22.60	24.00

		Ant 0			
Band		WCDMA IV			Tune-up Limit (dBm)
TX Channel		1312	1413	1513	
Rx Channel		1537	1638	1738	
Frequency (MHz)		1712.4	1732.6	1752.6	
3GPP Rel 99	AMR 12.2Kbps	21.44	21.44	21.30	23.00
3GPP Rel 99	RMC 12.2Kbps	21.45	21.47	21.32	23.00
3GPP Rel 6	HSDPA Subtest-1	20.14	20.14	20.20	22.00
3GPP Rel 6	HSDPA Subtest-2	20.18	20.24	20.17	22.00
3GPP Rel 6	HSDPA Subtest-3	19.67	19.72	19.75	21.50
3GPP Rel 6	HSDPA Subtest-4	19.61	19.85	19.82	21.50
3GPP Rel 8	DC-HSDPA Subtest-1	20.12	20.30	20.15	22.00
3GPP Rel 8	DC-HSDPA Subtest-2	20.07	20.22	20.21	22.00
3GPP Rel 8	DC-HSDPA Subtest-3	19.73	19.82	19.69	21.50
3GPP Rel 8	DC-HSDPA Subtest-4	19.77	19.77	19.71	21.50
3GPP Rel 6	HSUPA Subtest-1	20.16	20.31	20.14	22.00
3GPP Rel 6	HSUPA Subtest-2	18.25	18.32	18.37	20.00
3GPP Rel 6	HSUPA Subtest-3	19.34	19.42	19.34	21.00
3GPP Rel 6	HSUPA Subtest-4	18.30	18.36	18.45	20.00
3GPP Rel 6	HSUPA Subtest-5	20.25	20.27	20.30	22.00

		Ant 2				Ant 2				Ant0			
Band		WCDMA II			Tune-up Limit (dBm)	WCDMA IV			Tune-up Limit (dBm)	WCDMA V			Tune-up Limit (dBm)
TX Channel		9262	9400	9538		1312	1413	1513		4132	4182	4233	
Rx Channel		9662	9800	9938		1537	1638	1738		4357	4407	4458	
Frequency (MHz)		1852.4	1880	1907.6		1712.4	1732.6	1752.6		826.4	836.4	846.6	
3GPP Rel 99	AMR 12.2Kbps	23.19	23.25	23.04	24.20	23.61	23.68	23.69	24.80	24.75	24.71	23.85	25.00
3GPP Rel 99	RMC 12.2Kbps	23.24	23.31	23.05	24.20	23.63	23.72	23.74	24.80	24.78	24.75	23.88	25.00
3GPP Rel 6	HSDPA Subtest-1	22.22	22.22	22.14	23.20	22.48	22.49	22.45	23.80	23.81	23.70	22.55	24.00
3GPP Rel 6	HSDPA Subtest-2	22.20	22.19	22.08	23.20	22.48	22.48	22.51	23.80	23.79	23.69	22.51	24.00
3GPP Rel 6	HSDPA Subtest-3	21.74	21.82	21.57	22.70	21.94	22.05	22.01	23.30	23.23	23.37	22.23	23.50
3GPP Rel 6	HSDPA Subtest-4	21.76	21.86	21.60	22.70	21.99	22.13	22.10	23.30	23.31	23.32	22.20	23.50
3GPP Rel 8	DC-HSDPA Subtest-1	22.14	22.16	22.03	23.20	22.39	22.58	22.43	23.80	23.76	23.80	22.46	24.00
3GPP Rel 8	DC-HSDPA Subtest-2	22.16	22.36	22.00	23.20	22.41	22.47	22.48	23.80	23.70	23.72	22.48	24.00
3GPP Rel 8	DC-HSDPA Subtest-3	21.84	21.78	21.57	22.70	21.98	22.07	21.97	23.30	23.26	23.28	22.15	23.50
3GPP Rel 8	DC-HSDPA Subtest-4	21.76	21.80	21.54	22.70	22.01	22.01	22.04	23.30	23.28	23.23	22.15	23.50
3GPP Rel 6	HSUPA Subtest-1	22.37	22.23	22.27	23.20	22.37	22.57	22.52	23.80	23.59	23.71	22.60	24.00
3GPP Rel 6	HSUPA Subtest-2	20.30	20.17	20.18	21.20	20.59	20.60	20.67	21.80	21.59	21.56	20.82	22.00
3GPP Rel 6	HSUPA Subtest-3	21.41	21.32	21.23	22.20	21.64	21.67	21.66	22.80	22.71	22.70	21.71	23.00
3GPP Rel 6	HSUPA Subtest-4	20.34	20.31	20.23	21.20	20.52	20.69	20.71	21.80	21.47	21.58	20.69	22.00
3GPP Rel 6	HSUPA Subtest-5	22.28	22.29	22.11	23.20	22.50	22.56	22.63	23.80	23.53	23.64	22.68	24.00

		Ant 0				Ant 0				Ant 1			
Band		WCDMA II			Tune-up Limit (dBm)	WCDMA IV			Tune-up Limit (dBm)	WCDMA V			Tune-up Limit (dBm)
TX Channel		9262	9400	9538		1312	1413	1513		4132	4182	4233	
Rx Channel		9662	9800	9938		1537	1638	1738		4357	4407	4458	
Frequency (MHz)		1852.4	1880	1907.6		1712.4	1732.6	1752.6		826.4	836.4	846.6	
3GPP Rel 99	AMR 12.2Kbps	24.85	24.79	24.77	25.00	21.04	21.20	21.15	21.90	24.65	24.72	23.80	25.00
3GPP Rel 99	RMC 12.2Kbps	24.87	24.83	24.80	25.00	21.09	21.24	21.19	21.90	24.70	24.76	23.82	25.00
3GPP Rel 6	HSDPA Subtest-1	23.77	23.85	23.66	24.00	20.07	20.08	20.01	20.90	23.80	23.80	22.58	24.00
3GPP Rel 6	HSDPA Subtest-2	23.77	23.83	23.63	24.00	20.01	20.11	20.04	20.90	23.80	23.72	22.49	24.00
3GPP Rel 6	HSDPA Subtest-3	23.27	23.33	23.18	23.50	19.51	19.59	19.56	20.40	23.26	23.31	22.18	23.50
3GPP Rel 6	HSDPA Subtest-4	23.37	23.43	23.13	23.50	19.47	19.69	19.64	20.40	23.24	23.36	22.24	23.50
3GPP Rel 8	DC-HSDPA Subtest-1	23.70	23.75	23.64	24.00	19.90	20.17	20.04	20.90	23.72	23.76	22.43	24.00
3GPP Rel 8	DC-HSDPA Subtest-2	23.69	23.83	23.55	24.00	20.00	20.06	20.08	20.90	23.68	23.80	22.48	24.00
3GPP Rel 8	DC-HSDPA Subtest-3	23.31	23.34	23.19	23.50	19.54	19.70	19.62	20.40	23.23	23.25	22.13	23.50
3GPP Rel 8	DC-HSDPA Subtest-4	23.39	23.29	23.10	23.50	19.59	19.65	19.57	20.40	23.30	23.18	22.19	23.50
3GPP Rel 6	HSUPA Subtest-1	23.89	23.73	23.80	24.00	19.97	20.13	20.05	20.90	23.67	23.71	22.58	24.00
3GPP Rel 6	HSUPA Subtest-2	21.82	21.72	21.79	22.00	18.09	18.21	18.31	18.90	21.53	21.51	20.80	22.00
3GPP Rel 6	HSUPA Subtest-3	22.94	22.82	22.84	23.00	19.12	19.35	19.20	19.90	22.61	22.74	21.65	23.00
3GPP Rel 6	HSUPA Subtest-4	21.98	21.94	21.81	22.00	18.08	18.23	18.33	18.90	21.52	21.53	20.69	22.00
3GPP Rel 6	HSUPA Subtest-5	23.83	23.82	23.59	24.00	20.06	20.13	20.15	20.90	23.57	23.66	22.70	24.00

		Ant 2				Ant 2				Ant0			
Band		WCDMA II			Tune-up Limit (dBm)	WCDMA IV			Tune-up Limit (dBm)	WCDMA V			Tune-up Limit (dBm)
TX Channel		9262	9400	9538		1312	1413	1513		4132	4182	4233	
Rx Channel		9662	9800	9938		1537	1638	1738		4357	4407	4458	
Frequency (MHz)		1852.4	1880	1907.6		1712.4	1732.6	1752.6		826.4	836.4	846.6	
3GPP Rel 99	AMR 12.2Kbps	23.87	23.99	23.96	24.70	23.98	24.02	24.05	25.00	24.75	24.71	23.85	25.00
3GPP Rel 99	RMC 12.2Kbps	23.89	24.03	24.00	24.70	24.03	24.10	24.09	25.00	24.78	24.75	23.88	25.00
3GPP Rel 6	HSDPA Subtest-1	22.76	22.77	22.68	23.70	22.80	22.88	22.80	24.00	23.81	23.70	22.55	24.00
3GPP Rel 6	HSDPA Subtest-2	22.77	22.74	22.70	23.70	22.89	22.94	22.88	24.00	23.79	23.69	22.51	24.00
3GPP Rel 6	HSDPA Subtest-3	22.30	22.38	22.17	23.20	22.29	22.42	22.43	23.50	23.23	23.37	22.23	23.50
3GPP Rel 6	HSDPA Subtest-4	22.30	22.44	22.18	23.20	22.33	22.46	22.42	23.50	23.31	23.32	22.20	23.50
3GPP Rel 8	DC-HSDPA Subtest-1	22.73	22.73	22.60	23.70	22.78	22.95	22.84	24.00	23.76	23.80	22.46	24.00
3GPP Rel 8	DC-HSDPA Subtest-2	22.73	22.85	22.61	23.70	22.72	22.87	22.94	24.00	23.70	23.72	22.48	24.00
3GPP Rel 8	DC-HSDPA Subtest-3	22.41	22.32	22.17	23.20	22.36	22.50	22.35	23.50	23.26	23.28	22.15	23.50
3GPP Rel 8	DC-HSDPA Subtest-4	22.34	22.31	22.14	23.20	22.47	22.39	22.42	23.50	23.28	23.23	22.15	23.50
3GPP Rel 6	HSUPA Subtest-1	22.94	22.76	22.80	23.70	22.75	22.98	22.84	24.00	23.59	23.71	22.60	24.00
3GPP Rel 6	HSUPA Subtest-2	20.87	20.78	20.77	21.70	20.90	20.99	21.08	22.00	21.59	21.56	20.82	22.00
3GPP Rel 6	HSUPA Subtest-3	21.90	21.90	21.85	22.70	21.97	22.10	22.01	23.00	22.71	22.70	21.71	23.00
3GPP Rel 6	HSUPA Subtest-4	20.96	20.92	20.76	21.70	20.97	21.03	21.12	22.00	21.47	21.58	20.69	22.00
3GPP Rel 6	HSUPA Subtest-5	22.86	22.84	22.60	23.70	22.83	22.95	22.98	24.00	23.53	23.64	22.68	24.00

		Ant 0				Ant 0				Ant 1			
Band		WCDMA II			Tune-up Limit (dBm)	WCDMA IV			Tune-up Limit (dBm)	WCDMA V			Tune-up Limit (dBm)
TX Channel		9262	9400	9538		1312	1413	1513		4132	4182	4233	
Rx Channel		9662	9800	9938		1537	1638	1738		4357	4407	4458	
Frequency (MHz)		1852.4	1880	1907.6		1712.4	1732.6	1752.6		826.4	836.4	846.6	
3GPP Rel 99	AMR 12.2Kbps	24.85	24.79	24.77	25.00	21.44	21.44	21.30	22.20	24.65	24.72	23.80	25.00
3GPP Rel 99	RMC 12.2Kbps	24.87	24.83	24.80	25.00	21.45	21.47	21.32	22.20	24.70	24.76	23.82	25.00
3GPP Rel 6	HSDPA Subtest-1	23.77	23.85	23.66	24.00	20.14	20.14	20.20	21.20	23.80	23.80	22.58	24.00
3GPP Rel 6	HSDPA Subtest-2	23.77	23.83	23.63	24.00	20.18	20.24	20.17	21.20	23.80	23.72	22.49	24.00
3GPP Rel 6	HSDPA Subtest-3	23.27	23.33	23.18	23.50	19.67	19.72	19.75	20.70	23.26	23.31	22.18	23.50
3GPP Rel 6	HSDPA Subtest-4	23.37	23.43	23.13	23.50	19.61	19.85	19.82	20.70	23.24	23.36	22.24	23.50
3GPP Rel 8	DC-HSDPA Subtest-1	23.70	23.75	23.64	24.00	20.12	20.30	20.15	21.20	23.72	23.76	22.43	24.00
3GPP Rel 8	DC-HSDPA Subtest-2	23.69	23.83	23.55	24.00	20.07	20.22	20.21	21.20	23.68	23.80	22.48	24.00
3GPP Rel 8	DC-HSDPA Subtest-3	23.31	23.34	23.19	23.50	19.73	19.82	19.69	20.70	23.23	23.25	22.13	23.50
3GPP Rel 8	DC-HSDPA Subtest-4	23.39	23.29	23.10	23.50	19.77	19.77	19.71	20.70	23.30	23.18	22.19	23.50
3GPP Rel 6	HSUPA Subtest-1	23.89	23.73	23.80	24.00	20.16	20.31	20.14	21.20	23.67	23.71	22.58	24.00
3GPP Rel 6	HSUPA Subtest-2	21.82	21.72	21.79	22.00	18.25	18.32	18.37	19.20	21.53	21.51	20.80	22.00
3GPP Rel 6	HSUPA Subtest-3	22.94	22.82	22.84	23.00	19.34	19.42	19.34	20.20	22.61	22.74	21.65	23.00
3GPP Rel 6	HSUPA Subtest-4	21.98	21.94	21.81	22.00	18.30	18.36	18.45	19.20	21.52	21.53	20.69	22.00
3GPP Rel 6	HSUPA Subtest-5	23.83	23.82	23.59	24.00	20.25	20.27	20.30	21.20	23.57	23.66	22.70	24.00



Band	Ant 0				Ant 2				Ant 0			
	CDMA BC0			Tune-up Limit (dBm)	CDMA BC1			Tune-up Limit (dBm)	CDMA BC10			Tune-up Limit (dBm)
	1013	384	777		25	600	1175		476	580	684	
TX Channel	824.7	836.52	848.31		1851.25	1880	1908.75		817.9	820.5	823.1	
Frequency (MHz)	824.7	836.52	848.31		1851.25	1880	1908.75		817.9	820.5	823.1	
RC1 SO55	24.69	24.66	24.05	25.00	24.66	24.70	24.57	25.00	24.63	24.61	24.68	25.00
RC3 SO55	24.70	24.70	24.09	25.00	24.66	24.70	24.58	25.00	24.66	24.64	24.67	25.00
RC3 SO32 (F+SCH)	24.71	24.73	24.04	25.00	24.61	24.64	24.57	25.00	24.69	24.73	24.70	25.00
RC3 SO32 (+SCH)	24.68	24.67	24.07	25.00	24.59	24.61	24.48	25.00	24.64	24.64	24.60	25.00
RTAP 153.6Kbps	24.68	24.74	24.06	25.00	24.63	24.68	24.59	25.00	24.70	24.75	24.71	25.00
RETAP 4096Bits	24.60	24.72	24.01	25.00	24.72	24.73	24.48	25.00	24.69	24.73	24.69	25.00



Band	Ant 1				Ant 0				Ant 1			
	CDMA BC0			Tune-up Limit (dBm)	CDMA BC1			Tune-up Limit (dBm)	CDMA BC10			Tune-up Limit (dBm)
	1013	384	777		25	600	1175		476	580	684	
TX Channel	824.7	836.52	848.31		1851.25	1880	1908.75		817.9	820.5	823.1	
Frequency (MHz)	24.68	24.69	24.47	25.00	24.61	24.65	24.51	25.00	24.70	24.41	24.53	25.00
RC1 SO55	24.67	24.75	24.50	25.00	24.70	24.77	24.58	25.00	24.74	24.48	24.51	25.00
RC3 SO55	24.64	24.72	24.45	25.00	24.62	24.69	24.57	25.00	24.69	24.45	24.46	25.00
RC3 SO32 (F+SCH)	24.69	24.71	24.50	25.00	24.66	24.68	24.47	25.00	24.68	24.46	24.51	25.00
RC3 SO32 (+SCH)	24.62	24.67	24.47	25.00	24.60	24.68	24.59	25.00	24.58	24.42	24.43	25.00
RTAP 153.6Kbps	24.65	24.68	24.51	25.00	24.66	24.71	24.56	25.00	24.72	24.47	24.47	25.00
RETAP 4096Bits												



	Ant 0			
Band	CDMA BC1			Tune-up Limit (dBm)
TX Channel	25	600	1175	
Frequency (MHz)	1851.25	1880	1908.75	
RC1 SO55	23.18	23.14	23.04	24.70
RC3 SO55	23.16	23.28	23.00	24.70
RC3 SO32 (F+SCH)	23.10	23.12	23.02	24.70
RC3 SO32 (+SCH)	23.10	23.27	23.05	24.70
RTAP 153.6kbps	23.16	23.24	23.04	24.70
RETAP 4096Bits	23.16	23.20	23.05	24.70



Band	Ant 0				Ant 2				Ant 0			
	CDMA BC0			Tune-up Limit (dBm)	CDMA BC1			Tune-up Limit (dBm)	CDMA BC10			Tune-up Limit (dBm)
	1013	384	777		25	600	1175		476	580	684	
TX Channel	824.7	836.52	848.31		1851.25	1880	1908.75		817.9	820.5	823.1	
Frequency (MHz)	824.7	836.52	848.31		1851.25	1880	1908.75		817.9	820.5	823.1	
RC1 SO55	24.69	24.66	24.05	25.00	22.92	22.97	22.68	23.70	24.63	24.61	24.68	25.00
RC3 SO55	24.70	24.70	24.09	25.00	22.96	22.98	22.69	23.70	24.66	24.64	24.67	25.00
RC3 SO32 (F+SCH)	24.71	24.73	24.04	25.00	22.96	22.95	22.70	23.70	24.69	24.73	24.70	25.00
RC3 SO32 (+SCH)	24.68	24.67	24.07	25.00	22.93	22.94	22.71	23.70	24.64	24.64	24.60	25.00
RTAP 153.6Kbps	24.68	24.74	24.06	25.00	22.99	23.00	22.74	23.70	24.70	24.75	24.71	25.00
RETAP 4096Bits	24.60	24.72	24.01	25.00	22.91	22.93	22.72	23.70	24.69	24.73	24.69	25.00



Band	Ant 1				Ant 0				Ant 1			
	CDMA BC0			Tune-up Limit (dBm)	CDMA BC1			Tune-up Limit (dBm)	CDMA BC10			Tune-up Limit (dBm)
	1013	384	777		25	600	1175		476	580	684	
TX Channel	824.7	836.52	848.31		1851.25	1880	1908.75		817.9	820.5	823.1	
Frequency (MHz)	24.68	24.69	24.47	25.00	23.29	23.28	23.38	24.10	24.70	24.41	24.53	25.00
RC1 SO55	24.67	24.75	24.50	25.00	23.33	23.39	23.41	24.10	24.74	24.48	24.51	25.00
RC3 SO55	24.64	24.72	24.45	25.00	23.28	23.35	23.50	24.10	24.69	24.45	24.46	25.00
RC3 SO32 (F+SCH)	24.69	24.71	24.50	25.00	23.31	23.33	23.46	24.10	24.68	24.46	24.51	25.00
RC3 SO32 (+SCH)	24.62	24.67	24.47	25.00	23.36	23.44	23.52	24.10	24.58	24.42	24.43	25.00
RTAP 153.6Kbps	24.65	24.68	24.51	25.00	23.31	23.29	23.45	24.10	24.72	24.47	24.47	25.00
RETAP 4096Bits												



Band	Ant 0				Ant 2				Ant 0			
	CDMA BC0			Tune-up Limit (dBm)	CDMA BC1			Tune-up Limit (dBm)	CDMA BC10			Tune-up Limit (dBm)
	1013	384	777		25	600	1175		476	580	684	
TX Channel	824.7	836.52	848.31		1851.25	1880	1908.75		817.9	820.5	823.1	
Frequency (MHz)	24.69	24.66	24.05	25.00	23.18	23.14	23.04	23.90	24.63	24.61	24.68	25.00
RC1 SO55	24.70	24.70	24.09	25.00	23.16	23.28	23.00	23.90	24.66	24.64	24.67	25.00
RC3 SO55	24.71	24.73	24.04	25.00	23.10	23.12	23.02	23.90	24.69	24.73	24.70	25.00
RC3 SO32 (F+SCH)	24.68	24.67	24.07	25.00	23.10	23.27	23.05	23.90	24.64	24.64	24.60	25.00
RC3 SO32 (+SCH)	24.68	24.74	24.06	25.00	23.16	23.24	23.04	23.90	24.70	24.75	24.71	25.00
RTAP 153.6Kbps	24.60	24.72	24.01	25.00	23.16	23.20	23.05	23.90	24.69	24.73	24.69	25.00
RETAP 4096Bits												



Band	Ant 1				Ant 0				Ant 1			
	CDMA BC0			Tune-up Limit (dBm)	CDMA BC1			Tune-up Limit (dBm)	CDMA BC10			Tune-up Limit (dBm)
	1013	384	777		25	600	1175		476	580	684	
TX Channel	824.7	836.52	848.31		1851.25	1880	1908.75		817.9	820.5	823.1	
Frequency (MHz)	24.68	24.69	24.47	25.00	24.61	24.65	24.51	25.00	24.70	24.41	24.53	25.00
RC1 SO55	24.67	24.75	24.50	25.00	24.70	24.77	24.58	25.00	24.74	24.48	24.51	25.00
RC3 SO55	24.64	24.72	24.45	25.00	24.62	24.69	24.57	25.00	24.69	24.45	24.46	25.00
RC3 SO32 (F+SCH)	24.69	24.71	24.50	25.00	24.66	24.68	24.47	25.00	24.68	24.46	24.51	25.00
RC3 SO32 (+SCH)	24.62	24.67	24.47	25.00	24.60	24.68	24.59	25.00	24.58	24.42	24.43	25.00
RTAP 153.6Kbps	24.65	24.68	24.51	25.00	24.66	24.71	24.56	25.00	24.72	24.47	24.47	25.00
RETAP 4096Bits												



Band 2							
Art 2							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq. 1870	Power Middle Ch / Freq. 1890	Power High Ch / Freq. 1910	Tune-up limit (dBm)
Channel				1860	1880	1900	
Frequency (MHz)							
20	QPSK	1	0	24.61	24.63	24.50	25
20	QPSK	1	49	24.54	24.59	24.41	
20	QPSK	1	89	24.46	24.50	24.37	
20	QPSK	50	0	23.64	23.66	23.60	24
20	QPSK	50	24	23.73	23.69	23.60	
20	QPSK	50	50	23.71	23.66	23.57	
20	QPSK	100	0	23.73	23.67	23.60	24
20	16QAM	1	0	24.00	23.99	23.94	
20	16QAM	1	49	23.92	23.92	23.77	
20	16QAM	1	89	23.84	23.89	23.69	23
20	16QAM	50	0	22.67	22.66	22.63	
20	16QAM	50	24	22.74	22.72	22.60	
20	16QAM	50	50	22.73	22.68	22.58	23
20	16QAM	100	0	22.74	22.69	22.63	
20	64QAM	1	0	22.75	22.81	22.75	
20	64QAM	1	49	22.80	22.84	22.63	23
20	64QAM	1	89	22.75	22.69	22.51	
20	64QAM	50	0	21.69	21.71	21.63	
20	64QAM	50	24	21.77	21.72	21.64	22
20	64QAM	50	50	21.74	21.70	21.61	
20	64QAM	100	0	21.76	21.69	21.62	
Channel				1867.5	1890	1912.5	Tune-up limit (dBm)
Frequency (MHz)				1857.5	1880	1902.5	
15	QPSK	1	0	24.51	24.60	24.50	25
15	QPSK	1	37	24.53	24.52	24.37	
15	QPSK	1	74	24.41	24.43	24.32	
15	QPSK	36	0	23.56	23.64	23.58	24
15	QPSK	36	20	23.72	23.64	23.54	
15	QPSK	36	39	23.65	23.59	23.53	
15	QPSK	75	0	23.72	23.59	23.55	24
15	16QAM	1	0	23.94	23.59	23.79	
15	16QAM	1	37	23.85	23.85	23.70	
15	16QAM	1	74	23.84	23.87	23.63	23
15	16QAM	36	0	22.66	22.65	22.56	
15	16QAM	36	20	22.73	22.63	22.58	
15	16QAM	36	39	22.64	22.59	22.52	23
15	16QAM	75	0	22.72	22.59	22.56	
15	64QAM	1	0	22.74	22.75	22.66	
15	64QAM	1	37	22.70	22.76	22.60	23
15	64QAM	1	74	22.64	22.67	22.43	
15	64QAM	36	0	21.66	21.64	21.56	
15	64QAM	36	20	21.77	21.68	21.63	22
15	64QAM	36	39	21.70	21.61	21.63	
15	64QAM	75	0	21.67	21.65	21.57	
Channel				1865	1890	1915	Tune-up limit (dBm)
Frequency (MHz)				1855	1880	1905	
10	QPSK	1	0	24.55	24.60	24.47	25
10	QPSK	1	25	24.47	24.55	24.41	
10	QPSK	1	49	24.40	24.42	24.34	
10	QPSK	25	0	23.54	23.60	23.52	24
10	QPSK	25	12	23.73	23.68	23.53	
10	QPSK	25	25	23.70	23.61	23.51	
10	QPSK	50	0	23.65	23.64	23.50	24
10	16QAM	1	0	23.94	23.59	23.77	
10	16QAM	1	25	23.90	23.83	23.68	
10	16QAM	1	49	23.74	23.85	23.67	23
10	16QAM	25	0	22.62	22.65	22.55	
10	16QAM	25	12	22.71	22.62	22.59	
10	16QAM	25	25	22.64	22.68	22.52	23
10	16QAM	50	0	22.74	22.69	22.61	
10	64QAM	1	0	22.74	22.74	22.74	
10	64QAM	1	25	22.74	22.79	22.59	23
10	64QAM	1	49	22.73	22.61	22.45	
10	64QAM	25	0	21.63	21.66	21.60	
10	64QAM	25	12	21.72	21.68	21.64	22
10	64QAM	25	25	21.70	21.60	21.68	
10	64QAM	50	0	21.75	21.66	21.55	
Channel				1862.5	1890	1917.5	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1880	1907.5	
5	QPSK	1	0	24.54	24.62	24.46	25
5	QPSK	1	12	24.53	24.52	24.32	
5	QPSK	1	24	24.45	24.42	24.31	
5	QPSK	12	0	23.54	23.63	23.56	24
5	QPSK	12	7	23.63	23.63	23.52	
5	QPSK	12	13	23.64	23.65	23.56	
5	QPSK	25	0	23.72	23.67	23.53	24
5	16QAM	1	0	23.99	23.52	23.63	
5	16QAM	1	12	23.97	23.86	23.67	
5	16QAM	1	24	23.76	23.85	23.64	23
5	16QAM	12	0	22.67	22.64	22.59	
5	16QAM	12	7	22.69	22.71	22.58	
5	16QAM	12	13	22.69	22.59	22.54	23
5	16QAM	25	0	22.67	22.63	22.56	
5	64QAM	1	0	22.76	22.75	22.70	
5	64QAM	1	12	22.75	22.80	22.63	23
5	64QAM	1	24	22.65	22.62	22.42	
5	64QAM	12	0	21.61	21.61	21.62	
5	64QAM	12	7	21.71	21.71	21.56	22
5	64QAM	12	13	21.70	21.60	21.60	
5	64QAM	25	0	21.73	21.68	21.62	
Channel				1861.5	1890	1918.5	Tune-up limit (dBm)
Frequency (MHz)				1851.5	1880	1908.5	
3	QPSK	1	0	24.60	24.55	24.46	25
3	QPSK	1	8	24.52	24.55	24.34	
3	QPSK	1	14	24.39	24.40	24.36	
3	QPSK	8	0	23.56	23.55	23.57	24
3	QPSK	8	4	23.72	23.67	23.56	
3	QPSK	8	7	23.65	23.59	23.48	
3	QPSK	15	0	23.64	23.57	23.59	24
3	16QAM	1	0	23.95	23.58	23.77	
3	16QAM	1	8	23.95	23.86	23.68	
3	16QAM	1	14	23.80	23.83	23.61	23
3	16QAM	8	0	22.64	22.66	22.56	
3	16QAM	8	4	22.75	22.64	22.51	
3	16QAM	8	7	22.68	22.58	22.52	23
3	16QAM	15	0	22.74	22.59	22.63	
3	64QAM	1	0	22.76	22.72	22.70	
3	64QAM	1	8	22.70	22.76	22.62	23
3	64QAM	1	14	22.66	22.69	22.51	
3	64QAM	8	0	21.66	21.65	21.62	
3	64QAM	8	4	21.70	21.71	21.54	22
3	64QAM	8	7	21.68	21.68	21.60	
3	64QAM	15	0	21.67	21.60	21.59	
Channel				1860.7	1890	1919.3	Tune-up limit (dBm)
Frequency (MHz)				1850.7	1880	1909.3	
1.4	QPSK	1	0	24.60	24.61	24.43	25
1.4	QPSK	1	3	24.51	24.49	24.31	
1.4	QPSK	1	5	24.44	24.48	24.37	
1.4	QPSK	3	0	24.61	24.57	24.43	24
1.4	QPSK	3	1	24.52	24.51	24.38	
1.4	QPSK	3	3	24.40	24.50	24.36	
1.4	QPSK	6	0	23.70	23.60	23.51	24
1.4	16QAM	1	0	23.95	23.99	23.78	
1.4	16QAM	1	3	23.96	23.95	23.70	
1.4	16QAM	1	5	23.77	23.75	23.67	24
1.4	16QAM	3	0	23.65	23.60	23.60	
1.4	16QAM	3	1	23.71	23.59	23.47	
1.4	16QAM	3	3	23.72	23.67	23.57	23
1.4	16QAM	6	0	22.69	22.62	22.63	
1.4	64QAM	1	0	22.73	22.73	22.68	
1.4	64QAM	1	3	22.74	22.83	22.55	23
1.4	64QAM	1	5	22.69	22.62	22.47	
1.4	64QAM	3	0	22.73	22.57	22.59	
1.4	64QAM	3	1	22.75	22.74	22.74	22
1.4	64QAM	3	3	22.70	22.76	22.62	
1.4	64QAM	6	0	21.68	21.69	21.58	



Band 5							
Art 0							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. Freq. 20450	Power Middle Ch. Freq. 20525	Power High Ch. Freq. 20600	Tune-up limit (dBm)
Channel				829	836.5	844	
Frequency (MHz)							
10	QPSK	1	0	24.40	24.37	24.38	25
10	QPSK	1	25	24.27	24.29	24.30	
10	QPSK	1	49	24.32	24.33	24.28	
10	QPSK	25	0	23.43	23.41	23.40	24
10	QPSK	25	12	23.49	23.41	23.42	
10	QPSK	25	25	23.46	23.44	23.45	
10	QPSK	50	0	23.50	23.50	23.39	24
10	16QAM	1	0	23.77	23.74	23.72	
10	16QAM	1	25	23.69	23.70	23.66	
10	16QAM	1	49	23.89	23.66	23.61	23
10	16QAM	25	0	22.44	22.42	22.40	
10	16QAM	25	12	22.52	22.41	22.39	
10	16QAM	25	25	22.46	22.43	22.40	23
10	16QAM	50	0	22.53	22.46	22.41	
10	64QAM	1	0	22.58	22.58	22.57	
10	64QAM	1	25	22.64	22.63	22.46	23
10	64QAM	1	49	22.56	22.60	22.11	
10	64QAM	25	0	21.44	21.43	21.45	
10	64QAM	25	12	21.55	21.44	21.45	22
10	64QAM	25	25	21.51	21.48	21.08	
10	64QAM	50	0	21.54	21.52	21.32	
Channel				20425	20525	20625	Tune-up limit (dBm)
Frequency (MHz)				826.5	836.5	846.5	
5	QPSK	1	0	24.34	24.37	24.34	25
5	QPSK	1	12	24.22	24.21	24.22	
5	QPSK	1	24	24.24	24.31	24.26	
5	QPSK	12	0	23.38	23.35	23.35	24
5	QPSK	12	7	23.46	23.31	23.33	
5	QPSK	12	13	23.37	23.39	23.41	
5	QPSK	25	0	23.42	23.43	23.31	24
5	16QAM	1	0	23.73	23.68	23.71	
5	16QAM	1	12	23.68	23.70	23.59	
5	16QAM	1	24	23.64	23.56	23.59	23
5	16QAM	12	0	22.37	22.37	22.33	
5	16QAM	12	7	22.46	22.41	22.33	
5	16QAM	12	13	22.38	22.35	22.33	23
5	16QAM	25	0	22.46	22.36	22.39	
5	64QAM	1	0	22.46	22.58	22.50	
5	64QAM	1	12	22.61	22.58	22.41	23
5	64QAM	1	24	22.54	22.52	22.07	
5	64QAM	12	0	21.36	21.34	21.44	
5	64QAM	12	7	21.55	21.40	21.43	22
5	64QAM	12	13	21.45	21.48	21.05	
5	64QAM	25	0	21.44	21.52	21.25	
Channel				20415	20525	20635	Tune-up limit (dBm)
Frequency (MHz)				825.5	836.5	847.5	
3	QPSK	1	0	24.32	24.27	24.32	25
3	QPSK	1	8	24.19	24.23	24.30	
3	QPSK	1	14	24.26	24.27	24.26	
3	QPSK	8	0	23.42	23.41	23.31	24
3	QPSK	8	4	23.46	23.37	23.35	
3	QPSK	8	7	23.37	23.39	23.35	
3	QPSK	15	0	23.42	23.49	23.36	24
3	16QAM	1	0	23.72	23.66	23.69	
3	16QAM	1	8	23.66	23.65	23.65	
3	16QAM	1	14	23.65	23.59	23.56	23
3	16QAM	8	0	22.44	22.32	22.36	
3	16QAM	8	4	22.51	22.33	22.34	
3	16QAM	8	7	22.46	22.43	22.34	23
3	16QAM	15	0	22.53	22.44	22.37	
3	64QAM	1	0	22.51	22.54	22.47	
3	64QAM	1	8	22.57	22.63	22.44	23
3	64QAM	1	14	22.48	22.50	22.09	
3	64QAM	8	0	21.39	21.40	21.40	
3	64QAM	8	4	21.46	21.43	21.35	22
3	64QAM	8	7	21.51	21.45	21.05	
3	64QAM	15	0	21.45	21.43	21.27	
Channel				20407	20525	20643	Tune-up limit (dBm)
Frequency (MHz)				824.7	836.5	848.3	
1.4	QPSK	1	0	24.30	24.33	24.36	25
1.4	QPSK	1	3	24.20	24.24	24.27	
1.4	QPSK	1	5	24.32	24.29	24.24	
1.4	QPSK	3	0	24.22	24.32	24.32	24
1.4	QPSK	3	1	24.10	24.24	24.27	
1.4	QPSK	3	3	24.29	24.19	24.18	
1.4	QPSK	6	0	23.44	23.41	23.30	24
1.4	16QAM	1	0	23.76	23.71	23.70	
1.4	16QAM	1	3	23.62	23.63	23.56	
1.4	16QAM	1	5	23.63	23.61	23.60	24
1.4	16QAM	3	0	23.76	23.64	23.63	
1.4	16QAM	3	1	23.53	23.65	23.50	
1.4	16QAM	3	3	23.60	23.55	23.54	23
1.4	16QAM	6	0	22.52	22.40	22.40	
1.4	64QAM	1	0	22.52	22.52	22.52	
1.4	64QAM	1	3	22.54	22.57	22.45	23
1.4	64QAM	1	5	22.53	22.50	22.01	
1.4	64QAM	3	0	22.44	22.48	22.50	
1.4	64QAM	3	1	22.51	22.52	22.42	23
1.4	64QAM	3	3	22.52	22.49	21.96	
1.4	64QAM	6	0	21.49	21.50	21.32	22



Band 7							
Art 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				20850	21100	21350	
Frequency (MHz)				2510	2535	2560	
20	QPSK	1	0	24.38	24.26	24.26	25
20	QPSK	1	49	24.41	24.30	24.28	
20	QPSK	1	99	24.42	24.40	24.36	
20	QPSK	50	0	23.53	23.40	23.42	24
20	QPSK	50	24	23.55	23.53	23.49	
20	QPSK	50	50	23.49	23.52	23.46	
20	QPSK	100	0	23.54	23.40	23.47	24
20	16QAM	1	0	23.70	23.55	23.54	
20	16QAM	1	49	23.75	23.70	23.67	
20	16QAM	1	99	23.75	23.78	23.72	23
20	16QAM	50	0	22.53	22.38	22.44	
20	16QAM	50	24	22.58	22.50	22.49	
20	16QAM	50	50	22.49	22.53	22.48	23
20	16QAM	100	0	22.53	22.41	22.47	
20	64QAM	1	0	22.61	22.46	22.42	
20	64QAM	1	49	22.65	22.52	22.38	23
20	64QAM	1	99	22.57	22.64	22.29	
20	64QAM	50	0	21.55	21.42	21.20	
20	64QAM	50	24	21.58	21.53	21.31	22
20	64QAM	50	50	21.52	21.54	21.41	
20	64QAM	100	0	21.56	21.44	21.20	
Channel				20825	21100	21375	Tune-up limit (dBm)
Frequency (MHz)				2507.5	2535	2562.5	
15	QPSK	1	0	24.33	24.23	24.16	25
15	QPSK	1	37	24.36	24.25	24.18	
15	QPSK	1	74	24.37	24.33	24.29	
15	QPSK	36	0	23.47	23.40	23.37	24
15	QPSK	36	20	23.51	23.43	23.43	
15	QPSK	36	39	23.44	23.47	23.43	
15	QPSK	75	0	23.49	23.35	23.41	24
15	16QAM	1	0	23.61	23.63	23.63	
15	16QAM	1	37	23.73	23.65	23.67	
15	16QAM	1	74	23.67	23.71	23.69	23
15	16QAM	36	0	22.48	22.30	22.35	
15	16QAM	36	20	22.55	22.47	22.49	
15	16QAM	36	39	22.39	22.53	22.41	23
15	16QAM	75	0	22.45	22.34	22.36	
15	64QAM	1	0	22.58	22.46	22.33	
15	64QAM	1	37	22.61	22.44	22.28	23
15	64QAM	1	74	22.49	22.60	22.22	
15	64QAM	36	0	21.45	21.36	21.17	
15	64QAM	36	20	21.52	21.43	21.25	22
15	64QAM	36	39	21.46	21.51	21.34	
15	64QAM	75	0	21.54	21.34	21.12	
Channel				20800	21100	21400	Tune-up limit (dBm)
Frequency (MHz)				2505	2535	2565	
10	QPSK	1	0	24.28	24.17	24.20	25
10	QPSK	1	25	24.40	24.22	24.23	
10	QPSK	1	49	24.32	24.39	24.35	
10	QPSK	25	0	23.44	23.32	23.34	24
10	QPSK	25	12	23.53	23.45	23.39	
10	QPSK	25	25	23.46	23.45	23.43	
10	QPSK	50	0	23.49	23.31	23.44	24
10	16QAM	1	0	23.65	23.57	23.55	
10	16QAM	1	25	23.73	23.69	23.63	
10	16QAM	1	49	23.66	23.75	23.66	23
10	16QAM	25	0	22.44	22.28	22.41	
10	16QAM	25	12	22.50	22.43	22.48	
10	16QAM	25	25	22.43	22.47	22.40	23
10	16QAM	50	0	22.44	22.36	22.40	
10	64QAM	1	0	22.58	22.40	22.35	
10	64QAM	1	25	22.64	22.45	22.32	23
10	64QAM	1	49	22.55	22.56	22.23	
10	64QAM	25	0	21.49	21.41	21.18	
10	64QAM	25	12	21.57	21.47	21.23	22
10	64QAM	25	25	21.46	21.45	21.34	
10	64QAM	50	0	21.50	21.37	21.14	
Channel				20775	21100	21425	Tune-up limit (dBm)
Frequency (MHz)				2502.5	2535	2567.5	
5	QPSK	1	0	24.36	24.24	24.21	25
5	QPSK	1	12	24.35	24.24	24.23	
5	QPSK	1	24	24.41	24.39	24.27	
5	QPSK	12	0	23.46	23.36	23.34	24
5	QPSK	12	7	23.47	23.46	23.39	
5	QPSK	12	13	23.48	23.43	23.38	
5	QPSK	25	0	23.50	23.40	23.38	24
5	16QAM	1	0	23.70	23.61	23.59	
5	16QAM	1	12	23.64	23.65	23.57	
5	16QAM	1	24	23.66	23.73	23.70	23
5	16QAM	12	0	22.44	22.32	22.44	
5	16QAM	12	7	22.54	22.42	22.42	
5	16QAM	12	13	22.43	22.47	22.45	23
5	16QAM	25	0	22.48	22.39	22.39	
5	64QAM	1	0	22.53	22.39	22.38	
5	64QAM	1	12	22.60	22.44	22.32	23
5	64QAM	1	24	22.57	22.54	22.29	
5	64QAM	12	0	21.55	21.40	21.11	
5	64QAM	12	7	21.56	21.51	21.22	22
5	64QAM	12	13	21.52	21.52	21.34	
5	64QAM	25	0	21.56	21.38	21.17	



Band 12							
Art 0							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. Freq. 23060	Power Middle Ch. Freq. 23095	Power High Ch. Freq. 23130	Tune-up limit (dBm)
Channel				704	707.5	711	
Frequency (MHz)							
10	QPSK	1	0	24.32	24.27	24.27	25
10	QPSK	1	25	24.30	24.30	24.33	
10	QPSK	1	49	24.37	24.38	24.31	
10	QPSK	25	0	23.43	23.46	23.43	24
10	QPSK	25	12	23.50	23.42	23.45	
10	QPSK	25	25	23.51	23.53	23.50	
10	QPSK	50	0	23.52	23.48	23.47	24
10	16QAM	1	0	23.73	23.65	23.64	
10	16QAM	1	25	23.70	23.72	23.66	
10	16QAM	1	49	23.77	23.74	23.72	23
10	16QAM	25	0	22.44	22.48	22.47	
10	16QAM	25	12	22.51	22.47	22.46	
10	16QAM	25	25	22.49	22.51	22.51	23
10	16QAM	50	0	22.53	22.47	22.44	
10	64QAM	1	0	22.53	22.47	22.48	
10	64QAM	1	25	22.61	22.64	22.61	23
10	64QAM	1	49	22.67	22.60	22.60	
10	64QAM	25	0	21.46	21.47	21.48	
10	64QAM	25	12	21.56	21.49	21.49	22
10	64QAM	25	25	21.51	21.55	21.53	
10	64QAM	50	0	21.55	21.48	21.48	
Channel				23065	23095	23105	Tune-up limit (dBm)
Frequency (MHz)				701.5	707.5	713.5	
5	QPSK	1	0	24.31	24.28	24.21	25
5	QPSK	1	12	24.22	24.21	24.24	
5	QPSK	1	24	24.36	24.30	24.25	
5	QPSK	12	0	23.40	23.46	23.42	24
5	QPSK	12	7	23.46	23.40	23.41	
5	QPSK	12	13	23.48	23.43	23.46	
5	QPSK	25	0	23.48	23.42	23.47	24
5	16QAM	1	0	23.71	23.63	23.59	
5	16QAM	1	12	23.69	23.62	23.61	
5	16QAM	1	24	23.76	23.72	23.65	23
5	16QAM	12	0	22.34	22.38	22.43	
5	16QAM	12	7	22.46	22.43	22.43	
5	16QAM	12	13	22.39	22.43	22.45	23
5	16QAM	25	0	22.47	22.44	22.36	
5	64QAM	1	0	22.45	22.46	22.46	
5	64QAM	1	12	22.58	22.61	22.57	23
5	64QAM	1	24	22.63	22.50	22.54	
5	64QAM	12	0	21.38	21.40	21.46	
5	64QAM	12	7	21.55	21.46	21.45	22
5	64QAM	12	13	21.46	21.51	21.43	
5	64QAM	25	0	21.49	21.38	21.41	
Channel				23065	23095	23105	Tune-up limit (dBm)
Frequency (MHz)				700.5	707.5	714.5	
3	QPSK	1	0	24.28	24.17	24.21	25
3	QPSK	1	8	24.20	24.29	24.27	
3	QPSK	1	14	24.32	24.30	24.25	
3	QPSK	8	0	23.40	23.38	23.39	24
3	QPSK	8	4	23.44	23.41	23.40	
3	QPSK	8	7	23.41	23.42	23.50	
3	QPSK	15	0	23.42	23.38	23.38	24
3	16QAM	1	0	23.71	23.56	23.63	
3	16QAM	1	8	23.61	23.68	23.63	
3	16QAM	1	14	23.73	23.73	23.72	23
3	16QAM	8	0	22.41	22.37	22.41	
3	16QAM	8	4	22.42	22.45	22.45	
3	16QAM	8	7	22.46	22.43	22.51	23
3	16QAM	15	0	22.51	22.45	22.43	
3	64QAM	1	0	22.46	22.37	22.40	
3	64QAM	1	8	22.56	22.60	22.59	23
3	64QAM	1	14	22.59	22.51	22.60	
3	64QAM	8	0	21.40	21.37	21.47	
3	64QAM	8	4	21.48	21.43	21.49	22
3	64QAM	8	7	21.51	21.54	21.44	
3	64QAM	15	0	21.54	21.45	21.41	
Channel				23017	23095	23173	Tune-up limit (dBm)
Frequency (MHz)				699.7	707.5	715.3	
1.4	QPSK	1	0	24.29	24.18	24.23	25
1.4	QPSK	1	3	24.24	24.30	24.29	
1.4	QPSK	1	5	24.29	24.28	24.27	
1.4	QPSK	3	0	24.23	24.11	24.15	24
1.4	QPSK	3	1	24.14	24.22	24.23	
1.4	QPSK	3	3	24.19	24.18	24.22	
1.4	QPSK	6	0	23.51	23.37	23.41	24
1.4	16QAM	1	0	23.69	23.60	23.63	
1.4	16QAM	1	3	23.66	23.68	23.65	
1.4	16QAM	1	5	23.75	23.69	23.68	24
1.4	16QAM	3	0	23.65	23.50	23.63	
1.4	16QAM	3	1	23.62	23.63	23.61	
1.4	16QAM	3	3	23.69	23.62	23.58	23
1.4	16QAM	6	0	22.44	22.44	22.35	
1.4	64QAM	1	0	22.46	22.47	22.48	
1.4	64QAM	1	3	22.55	22.61	22.61	23
1.4	64QAM	1	5	22.58	22.53	22.57	
1.4	64QAM	3	0	22.38	22.40	22.40	
1.4	64QAM	3	1	22.51	22.59	22.52	22
1.4	64QAM	3	3	22.58	22.53	22.53	
1.4	64QAM	6	0	21.50	21.38	21.46	22



Band 13							
Art 0							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch./Freq.	Power Middle Ch./Freq.	Power High Ch./Freq.	Tune-up limit (dBm)
Channel				23230			
Frequency (MHz)				782			
10	QPSK	1	0		24.52		25
10	QPSK	1	25		24.48		
10	QPSK	1	49		24.45		
10	QPSK	25	0		23.54		24
10	QPSK	25	12		23.56		
10	QPSK	25	25		23.61		
10	QPSK	50	0		23.60		24
10	16QAM	1	0		23.79		
10	16QAM	1	25		23.82		
10	16QAM	1	49		23.82		23
10	16QAM	25	0		22.96		
10	16QAM	25	12		22.62		
10	16QAM	25	25		22.63		23
10	16QAM	50	0		22.96		
10	64QAM	1	0		22.74		
10	64QAM	1	25		22.72		23
10	64QAM	1	49		22.75		
10	64QAM	25	0		21.58		
10	64QAM	25	12		21.84		22
10	64QAM	25	25		21.84		
10	64QAM	50	0		21.59		
Channel				23205	23230	23255	Tune-up limit (dBm)
Frequency (MHz)				779.5	782	784.5	
5	QPSK	1	0	24.38	24.36	24.39	25
5	QPSK	1	12	24.43	24.48	24.40	
5	QPSK	1	24	24.47	24.48	24.42	
5	QPSK	12	0	23.53	23.45	23.50	24
5	QPSK	12	7	23.56	23.56	23.47	
5	QPSK	12	13	23.57	23.60	23.54	
5	QPSK	25	0	23.51	23.55	23.59	24
5	16QAM	1	0	23.89	23.74	23.76	
5	16QAM	1	12	23.81	23.72	23.77	
5	16QAM	1	24	23.80	23.72	23.73	23
5	16QAM	12	0	22.51	22.50	22.53	
5	16QAM	12	7	22.54	22.55	22.60	
5	16QAM	12	13	22.61	22.56	22.60	23
5	16QAM	25	0	22.50	22.52	22.56	
5	64QAM	1	0	22.71	22.65	22.72	
5	64QAM	1	12	22.71	22.69	22.64	23
5	64QAM	1	24	22.75	22.65	22.66	
5	64QAM	12	0	21.55	21.50	21.51	
5	64QAM	12	7	21.58	21.63	21.56	22
5	64QAM	12	13	21.63	21.57	21.59	
5	64QAM	25	0	21.59	21.49	21.59	



Band 14							
Art 0							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch./Freq.	Power Middle Ch./Freq.	Power High Ch./Freq.	Tune-up limit (dBm)
Channel				2330			
Frequency (MHz)				793			
10	QPSK	1	0		24.45		25
10	QPSK	1	25		24.40		
10	QPSK	1	49		24.35		
10	QPSK	25	0		23.49		24
10	QPSK	25	12		23.52		
10	QPSK	25	25		23.56		
10	QPSK	50	0		23.48		24
10	16QAM	1	0		23.99		
10	16QAM	1	25		23.76		
10	16QAM	1	49		23.78		23
10	16QAM	25	0		22.90		
10	16QAM	25	12		22.51		
10	16QAM	25	25		22.54		23
10	16QAM	50	0		22.48		
10	64QAM	1	0		22.70		
10	64QAM	1	25		22.76		23
10	64QAM	1	49		22.63		
10	64QAM	25	0		21.53		
10	64QAM	25	12		21.53		22
10	64QAM	25	25		21.59		
10	64QAM	50	0		21.51		
Channel				23305	23330	23355	Tune-up limit (dBm)
Frequency (MHz)				790.5	793	795.5	
5	QPSK	1	0	24.38	24.44	24.43	25
5	QPSK	1	12	24.41	24.36	24.42	
5	QPSK	1	24	24.30	24.27	24.31	
5	QPSK	12	0	23.39	23.43	23.43	24
5	QPSK	12	7	23.49	23.44	23.47	
5	QPSK	12	13	23.55	23.46	23.55	
5	QPSK	25	0	23.42	23.43	23.48	24
5	16QAM	1	0	23.62	23.61	23.67	
5	16QAM	1	12	23.68	23.68	23.69	
5	16QAM	1	24	23.70	23.70	23.78	23
5	16QAM	12	0	22.60	22.41	22.41	
5	16QAM	12	7	22.41	22.60	22.46	
5	16QAM	12	13	22.51	22.49	22.51	23
5	16QAM	25	0	22.41	22.46	22.39	
5	64QAM	1	0	22.70	22.61	22.65	
5	64QAM	1	12	22.75	22.68	22.75	23
5	64QAM	1	24	22.60	22.63	22.54	
5	64QAM	12	0	21.51	21.47	21.46	
5	64QAM	12	7	21.44	21.47	21.47	22
5	64QAM	12	13	21.60	21.54	21.54	
5	64QAM	25	0	21.42	21.49	21.51	



Band 17									
Art 0									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)		
Channel				23780	23790	23800			
Frequency (MHz)				709	710	711			
10	QPSK	1	0	24.28	24.29	24.25	25		
10	QPSK	1	25	24.33	24.32	24.31			
10	QPSK	1	49	24.38	24.37	24.32			
10	QPSK	25	0	23.38	23.38	23.37			
10	QPSK	25	12	23.54	23.45	23.44	24		
10	QPSK	25	25	23.54	23.54	23.54			
10	QPSK	50	0	23.62	23.43	23.43			
10	16QAM	1	0	23.65	23.64	23.64			
10	16QAM	1	25	23.69	23.69	23.71	24		
10	16QAM	1	49	23.71	23.73	23.70			
10	16QAM	25	0	22.38	22.39	22.40			
10	16QAM	25	12	22.54	22.45	22.45			
10	16QAM	25	25	22.54	22.58	22.51	23		
10	16QAM	50	0	22.62	22.43	22.41			
10	64QAM	1	0	22.56	22.51	22.53			
10	64QAM	1	25	22.64	22.64	22.66			
10	64QAM	1	49	22.64	22.64	22.62	23		
10	64QAM	25	0	21.43	21.42	21.43			
10	64QAM	25	12	21.58	21.50	21.49			
10	64QAM	25	25	21.57	21.55	21.57			
10	64QAM	50	0	21.54	21.46	21.44	22		
Channel				23785	23790	23805			
Frequency (MHz)				706.5	710	713.5			
5	QPSK	1	0	24.20	24.23	24.22	25		
5	QPSK	1	12	24.23	24.32	24.28			
5	QPSK	1	24	24.31	24.33	24.27			
5	QPSK	12	0	23.33	23.29	23.31			
5	QPSK	12	7	23.48	23.45	23.43	24		
5	QPSK	12	13	23.48	23.53	23.45			
5	QPSK	25	0	23.51	23.38	23.39			
5	16QAM	1	0	23.63	23.62	23.59			
5	16QAM	1	12	23.68	23.61	23.66	24		
5	16QAM	1	24	23.68	23.73	23.65			
5	16QAM	12	0	22.34	22.29	22.31			
5	16QAM	12	7	22.44	22.35	22.45			
5	16QAM	12	13	22.54	22.55	22.45	23		
5	16QAM	25	0	22.42	22.40	22.35			
5	64QAM	1	0	22.46	22.44	22.53			
5	64QAM	1	12	22.60	22.54	22.62			
5	64QAM	1	24	22.61	22.54	22.54	23		
5	64QAM	12	0	21.35	21.36	21.37			
5	64QAM	12	7	21.49	21.49	21.46			
5	64QAM	12	13	21.55	21.47	21.54			
5	64QAM	25	0	21.52	21.42	21.43	22		



Band 30							
Art 2							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch./Freq.	Power Middle Ch./Freq.	Power High Ch./Freq.	Tune-up limit (dBm)
Channel				27710			
Frequency (MHz)				2310			
10	QPSK	1	0	24.48	24.48		25
10	QPSK	1	25	24.38	24.38		
10	QPSK	1	49	24.36	24.36		
10	QPSK	25	0	23.42	23.42		24
10	QPSK	25	12	23.48	23.48		
10	QPSK	25	25	23.49	23.49		
10	QPSK	50	0	23.46	23.46		24
10	16QAM	1	0	23.76	23.76		
10	16QAM	1	25	23.77	23.77		
10	16QAM	1	49	23.74	23.74		23
10	16QAM	25	0	22.42	22.42		
10	16QAM	25	12	22.47	22.47		
10	16QAM	25	25	22.49	22.49		23
10	16QAM	50	0	22.44	22.44		
10	64QAM	1	0	22.58	22.58		
10	64QAM	1	25	22.70	22.70		23
10	64QAM	1	49	22.54	22.54		
10	64QAM	25	0	21.44	21.44		
10	64QAM	25	12	21.51	21.51		22
10	64QAM	25	25	21.50	21.50		
10	64QAM	50	0	21.51	21.51		
Channel				27885	27710	27735	Tune-up limit (dBm)
Frequency (MHz)				2307.5	2310	2312.5	
5	QPSK	1	0	24.42	24.38	24.46	25
5	QPSK	1	12	24.35	24.35	24.35	
5	QPSK	1	24	24.29	24.29	24.33	
5	QPSK	12	0	23.35	23.33	23.35	24
5	QPSK	12	7	23.38	23.39	23.48	
5	QPSK	12	13	23.40	23.43	23.46	
5	QPSK	25	0	23.40	23.45	23.44	24
5	16QAM	1	0	23.74	23.70	23.74	
5	16QAM	1	12	23.75	23.76	23.70	
5	16QAM	1	24	23.71	23.69	23.70	23
5	16QAM	12	0	22.32	22.39	22.34	
5	16QAM	12	7	22.42	22.44	22.47	
5	16QAM	12	13	22.49	22.42	22.43	23
5	16QAM	25	0	22.40	22.45	22.41	
5	64QAM	1	0	22.58	22.49	22.57	
5	64QAM	1	12	22.68	22.70	22.61	23
5	64QAM	1	24	22.44	22.45	22.47	
5	64QAM	12	0	21.35	21.38	21.37	
5	64QAM	12	7	21.43	21.43	21.42	22
5	64QAM	12	13	21.45	21.47	21.42	
5	64QAM	25	0	21.51	21.45	21.47	



Band 71										
Art 0										
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. Freq.	Power Middle Ch. Freq.	Power High Ch. Freq.	Tune-up limit (dBm)			
Channel				133222	133322	133372				
Frequency (MHz)				673	683	688				
20	QPSK	1	0	24.41	24.33	24.29	25			
20	QPSK	1	49	24.30	24.32	24.32				
20	QPSK	1	99	24.34	24.33	24.28				
20	QPSK	50	0	23.58	23.49	23.45	24			
20	QPSK	50	24	23.53	23.43	23.44				
20	QPSK	50	50	23.49	23.41	23.40				
20	QPSK	100	0	23.50	23.46	23.43	24			
20	16QAM	1	0	23.77	23.66	23.61				
20	16QAM	1	49	23.65	23.69	23.67				
20	16QAM	1	99	23.67	23.70	23.59	23			
20	16QAM	50	0	22.47	22.40	22.40				
20	16QAM	50	24	22.50	22.43	22.43				
20	16QAM	50	50	22.50	22.52	22.51	23			
20	16QAM	100	0	22.49	22.42	22.47				
20	64QAM	1	0	22.58	22.44	22.45				
20	64QAM	1	49	22.54	22.54	22.55	23			
20	64QAM	1	99	22.58	22.57	22.50				
20	64QAM	50	0	21.48	21.41	21.41				
20	64QAM	50	24	21.53	21.48	21.47	22			
20	64QAM	50	50	21.49	21.54	21.55				
20	64QAM	100	0	21.52	21.41	21.48		Tune-up limit (dBm)		
Channel				133197	133297	133397				
Frequency (MHz)				670.5	680.5	690.5				
15	QPSK	1	0	24.35	24.19	24.27	25			
15	QPSK	1	37	24.23	24.29	24.26				
15	QPSK	1	74	24.34	24.28	24.20				
15	QPSK	36	0	23.39	23.31	23.33	24			
15	QPSK	36	20	23.46	23.40	23.41				
15	QPSK	36	39	23.49	23.43	23.45				
15	QPSK	75	0	23.40	23.36	23.45	24			
15	16QAM	1	0	23.73	23.62	23.53				
15	16QAM	1	37	23.58	23.63	23.59				
15	16QAM	1	74	23.66	23.69	23.51	23			
15	16QAM	36	0	22.38	22.34	22.34				
15	16QAM	36	20	22.40	22.38	22.40				
15	16QAM	36	39	22.42	22.44	22.43	23			
15	16QAM	75	0	22.45	22.40	22.42				
15	64QAM	1	0	22.53	22.36	22.45				
15	64QAM	1	37	22.45	22.54	22.54	23			
15	64QAM	1	74	22.52	22.52	22.40				
15	64QAM	36	0	21.39	21.35	21.33				
15	64QAM	36	20	21.52	21.48	21.40	22			
15	64QAM	36	39	21.41	21.53	21.50				
15	64QAM	75	0	21.45	21.32	21.48		Tune-up limit (dBm)		
Channel				133172	133272	133422				
Frequency (MHz)				668	678	693				
10	QPSK	1	0	24.32	24.26	24.27	25			
10	QPSK	1	25	24.27	24.31	24.25				
10	QPSK	1	49	24.28	24.23	24.21				
10	QPSK	25	0	23.39	23.34	23.31	24			
10	QPSK	25	12	23.51	23.38	23.36				
10	QPSK	25	25	23.47	23.43	23.45				
10	QPSK	50	0	23.41	23.34	23.42	24			
10	16QAM	1	0	23.69	23.57	23.54				
10	16QAM	1	25	23.59	23.65	23.67				
10	16QAM	1	49	23.59	23.63	23.57	24			
10	16QAM	25	0	22.42	22.40	22.40				
10	16QAM	25	12	22.43	22.39	22.43				
10	16QAM	25	25	22.43	22.43	22.50	23			
10	16QAM	50	0	22.46	22.40	22.45				
10	64QAM	1	0	22.48	22.36	22.40				
10	64QAM	1	25	22.50	22.52	22.50	23			
10	64QAM	1	49	22.58	22.53	22.49				
10	64QAM	25	0	21.42	21.41	21.37				
10	64QAM	25	12	21.48	21.48	21.42	22			
10	64QAM	25	25	21.39	21.48	21.46				
10	64QAM	50	0	21.50	21.36	21.48		Tune-up limit (dBm)		
Channel				133147	133247	133447				
Frequency (MHz)				665.5	675.5	695.5				
5	QPSK	1	0	24.36	24.21	24.19	25			
5	QPSK	1	12	24.24	24.27	24.29				
5	QPSK	1	24	24.28	24.23	24.21				
5	QPSK	12	0	23.42	23.37	23.35	24			
5	QPSK	12	7	23.51	23.36	23.43				
5	QPSK	12	13	23.44	23.42	23.47				
5	QPSK	25	0	23.45	23.35	23.40	24			
5	16QAM	1	0	23.72	23.61	23.54				
5	16QAM	1	12	23.56	23.69	23.67				
5	16QAM	1	24	23.58	23.62	23.55	23			
5	16QAM	12	0	22.44	22.38	22.38				
5	16QAM	12	7	22.45	22.33	22.33				
5	16QAM	12	13	22.43	22.51	22.48	23			
5	16QAM	25	0	22.41	22.39	22.40				
5	64QAM	1	0	22.48	22.36	22.40				
5	64QAM	1	12	22.47	22.52	22.55	23			
5	64QAM	1	24	22.54	22.47	22.48				
5	64QAM	12	0	21.48	21.36	21.36				
5	64QAM	12	7	21.45	21.47	21.44	22			
5	64QAM	12	13	21.45	21.47	21.53				
5	64QAM	25	0	21.42	21.37	21.48				



Band 2							
Ann 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq 1870.0	Power Middle Ch / Freq 1890.0	Power High Ch / Freq 1910.0	Tune-up limit (dBm)
Channel				1870.0	1890.0	1910.0	
Frequency (MHz)				1870.0	1890.0	1910.0	
20	QPSK	1	0	24.78	24.77	24.84	25
20	QPSK	1	49	24.78	24.73	24.63	
20	QPSK	1	99	24.68	24.71	24.74	
20	QPSK	50	0	23.83	23.79	23.78	24
20	QPSK	50	24	23.84	23.81	23.81	
20	QPSK	50	50	23.90	23.89	23.81	
20	QPSK	100	0	23.85	23.89	23.80	24
20	16QAM	1	0	23.90	23.90	23.81	
20	16QAM	1	49	23.90	23.90	23.88	
20	16QAM	1	99	23.86	23.85	23.83	23
20	16QAM	50	0	22.85	22.81	22.83	
20	16QAM	50	24	22.84	22.90	22.83	
20	16QAM	50	50	22.82	22.90	22.82	23
20	16QAM	100	0	22.84	22.88	22.81	
20	64QAM	1	0	22.89	22.82	22.88	
20	64QAM	1	49	22.84	22.85	21.93	23
20	64QAM	1	99	22.25	22.88	22.90	
20	64QAM	50	0	21.87	21.82	21.17	
20	64QAM	50	24	21.87	21.84	21.10	22
20	64QAM	50	50	21.35	21.81	21.78	
20	64QAM	100	0	21.69	21.90	21.41	
Channel				1870.0	1890.0	1910.0	Tune-up limit (dBm)
Frequency (MHz)				1870.0	1890.0	1910.0	
15	QPSK	1	0	24.69	24.76	24.83	25
15	QPSK	1	37	24.78	24.70	24.53	
15	QPSK	1	74	24.64	24.64	24.74	
15	QPSK	36	0	23.79	23.77	23.75	24
15	QPSK	36	20	23.80	23.81	23.80	
15	QPSK	36	39	23.84	23.89	23.88	
15	QPSK	75	0	23.83	23.81	23.78	24
15	16QAM	1	0	23.84	23.80	23.80	
15	16QAM	1	37	23.87	23.89	23.78	
15	16QAM	1	74	23.86	22.82	23.89	23
15	16QAM	36	0	22.82	22.72	22.83	
15	16QAM	36	20	22.84	22.87	22.82	
15	16QAM	36	39	22.88	22.89	22.82	23
15	16QAM	75	0	22.82	22.88	22.79	
15	64QAM	1	0	22.83	22.79	22.90	
15	64QAM	1	37	22.74	22.81	21.85	23
15	64QAM	1	74	22.17	22.84	22.81	
15	64QAM	36	0	21.82	21.73	21.10	
15	64QAM	36	20	21.84	21.89	21.10	22
15	64QAM	36	39	21.26	21.81	21.77	
15	64QAM	75	0	21.65	21.80	21.36	
Channel				1890.0	1890.0	1910.0	Tune-up limit (dBm)
Frequency (MHz)				1890.0	1890.0	1910.0	
10	QPSK	1	0	24.77	24.76	24.77	25
10	QPSK	1	25	24.70	24.64	24.63	
10	QPSK	1	49	24.68	24.64	24.70	
10	QPSK	25	0	23.78	23.73	23.78	24
10	QPSK	25	12	23.80	23.86	23.80	
10	QPSK	25	25	23.81	23.88	23.86	
10	QPSK	50	0	22.81	23.82	23.77	24
10	16QAM	1	0	23.90	23.89	23.84	
10	16QAM	1	25	23.83	23.83	23.85	
10	16QAM	1	49	23.86	23.85	23.89	23
10	16QAM	25	0	22.85	22.72	22.83	
10	16QAM	25	12	22.87	22.88	22.78	
10	16QAM	25	25	22.89	22.89	22.89	23
10	16QAM	50	0	22.86	22.78	22.80	
10	64QAM	1	0	22.90	22.75	22.83	
10	64QAM	1	25	22.79	22.83	21.83	23
10	64QAM	1	49	22.23	22.87	22.89	
10	64QAM	25	0	21.85	21.81	21.08	
10	64QAM	25	12	21.79	21.83	21.07	22
10	64QAM	25	25	21.25	21.89	21.72	
10	64QAM	50	0	21.61	21.80	21.39	
Channel				1890.0	1890.0	1910.0	Tune-up limit (dBm)
Frequency (MHz)				1890.0	1890.0	1910.0	
5	QPSK	1	0	24.69	24.71	24.77	25
5	QPSK	1	12	24.78	24.68	24.63	
5	QPSK	1	24	24.63	24.66	24.64	
5	QPSK	12	0	23.77	23.75	23.68	24
5	QPSK	12	7	23.85	23.86	23.78	
5	QPSK	12	13	23.84	23.86	23.82	
5	QPSK	25	0	23.89	23.89	23.78	24
5	16QAM	1	0	23.81	23.83	23.89	
5	16QAM	1	12	23.89	23.86	23.78	
5	16QAM	1	24	23.82	23.83	23.84	23
5	16QAM	12	0	22.85	22.80	22.78	
5	16QAM	12	7	22.84	22.80	22.73	
5	16QAM	12	13	22.84	22.87	22.86	23
5	16QAM	25	0	22.87	22.83	22.78	
5	64QAM	1	0	22.90	22.74	22.85	
5	64QAM	1	12	22.79	22.85	21.86	23
5	64QAM	1	24	22.18	22.84	22.86	
5	64QAM	12	0	21.82	21.75	21.14	
5	64QAM	12	7	21.81	21.85	21.08	22
5	64QAM	12	13	21.29	21.82	21.70	
5	64QAM	25	0	21.63	21.80	21.39	
Channel				1890.0	1890.0	1910.0	Tune-up limit (dBm)
Frequency (MHz)				1890.0	1890.0	1910.0	
3	QPSK	1	0	24.78	24.71	24.81	25
3	QPSK	1	8	24.75	24.67	24.58	
3	QPSK	1	14	24.61	24.70	24.74	
3	QPSK	8	0	23.73	23.75	23.68	24
3	QPSK	8	4	23.86	23.84	23.78	
3	QPSK	8	7	23.90	23.87	23.85	
3	QPSK	15	0	23.85	23.84	23.73	24
3	16QAM	1	0	23.84	23.80	23.87	
3	16QAM	1	8	23.86	23.81	23.85	
3	16QAM	1	14	23.86	22.81	22.81	23
3	16QAM	8	0	22.85	22.77	22.77	
3	16QAM	8	4	22.81	22.84	22.81	
3	16QAM	8	7	22.88	22.80	22.83	23
3	16QAM	15	0	22.84	22.80	22.77	
3	64QAM	1	0	22.87	22.72	22.83	
3	64QAM	1	8	22.81	22.82	21.83	23
3	64QAM	1	14	22.25	22.87	22.88	
3	64QAM	8	0	21.87	21.80	21.10	
3	64QAM	8	4	21.86	21.87	21.01	22
3	64QAM	8	7	21.27	21.81	21.70	
3	64QAM	15	0	21.70	21.85	21.39	
Channel				1890.0	1890.0	1910.0	Tune-up limit (dBm)
Frequency (MHz)				1890.0	1890.0	1910.0	
1.4	QPSK	1	0	24.75	24.76	24.83	25
1.4	QPSK	1	3	24.77	24.69	24.57	
1.4	QPSK	1	5	24.67	24.63	24.67	
1.4	QPSK	3	0	24.75	24.73	24.63	24
1.4	QPSK	3	1	24.67	24.60	24.47	
1.4	QPSK	3	3	24.59	24.63	24.60	
1.4	QPSK	6	0	23.86	23.84	23.76	24
1.4	16QAM	1	0	23.80	23.82	23.82	
1.4	16QAM	1	3	23.84	23.85	23.80	
1.4	16QAM	1	5	23.85	23.89	23.90	24
1.4	16QAM	3	0	23.80	23.82	23.72	
1.4	16QAM	3	1	23.81	23.83	23.76	
1.4	16QAM	3	3	23.82	23.79	23.81	23
1.4	16QAM	6	0	22.87	22.82	22.72	
1.4	64QAM	1	0	22.81	22.76	22.82	
1.4	64QAM	1	3	22.79	22.86	21.87	23
1.4	64QAM	1	5	22.25	22.82	22.90	
1.4	64QAM	3	0	22.90	22.67	22.86	
1.4	64QAM	3	1	22.76	22.87	21.79	22
1.4	64QAM	3	3	22.20	22.82	22.85	
1.4	64QAM	6	0	21.86	21.82	21.37	



Band 5							
Art 1							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				20450	20525	20600	
Frequency (MHz)				825	835.5	844	
10	QPSK	1	0	24.29	24.26	24.33	25
10	QPSK	1	25	24.18	24.17	24.22	
10	QPSK	1	49	24.19	24.23	24.13	
10	QPSK	25	0	23.30	23.32	23.30	24
10	QPSK	25	12	23.38	23.31	23.30	
10	QPSK	25	25	23.34	23.36	23.35	
10	QPSK	50	0	23.39	23.39	23.32	24
10	16QAM	1	0	23.66	23.63	23.61	
10	16QAM	1	25	23.58	23.59	23.57	
10	16QAM	1	49	23.58	23.56	23.53	23
10	16QAM	25	0	22.32	22.33	22.28	
10	16QAM	25	12	22.39	22.29	22.30	
10	16QAM	25	25	22.36	22.35	22.36	23
10	16QAM	50	0	22.39	22.37	22.30	
10	64QAM	1	0	22.50	22.50	22.46	
10	64QAM	1	25	22.54	22.57	22.53	22
10	64QAM	1	49	22.48	22.51	21.71	
10	64QAM	25	0	21.34	21.35	21.33	
10	64QAM	25	12	21.42	21.38	21.36	22
10	64QAM	25	25	21.38	21.40	21.13	
10	64QAM	50	0	21.45	21.41	21.21	
Channel				20452	20525	20625	Tune-up limit (dBm)
Frequency (MHz)				826.5	836.5	846.5	
5	QPSK	1	0	24.24	24.22	24.19	25
5	QPSK	1	12	24.11	24.16	24.16	
5	QPSK	1	24	24.19	24.14	24.12	
5	QPSK	12	0	23.24	23.27	23.24	24
5	QPSK	12	7	23.35	23.31	23.29	
5	QPSK	12	13	23.30	23.30	23.33	
5	QPSK	25	0	23.31	23.38	23.26	24
5	16QAM	1	0	23.64	23.60	23.60	
5	16QAM	1	12	23.50	23.53	23.56	
5	16QAM	1	24	23.58	23.56	23.53	23
5	16QAM	12	0	22.32	22.26	22.21	
5	16QAM	12	7	22.30	22.28	22.23	
5	16QAM	12	13	22.26	22.30	22.36	23
5	16QAM	25	0	22.34	22.34	22.27	
5	64QAM	1	0	22.44	22.43	22.38	
5	64QAM	1	12	22.45	22.53	22.47	23
5	64QAM	1	24	22.45	22.49	21.61	
5	64QAM	12	0	21.28	21.35	21.29	
5	64QAM	12	7	21.33	21.32	21.28	22
5	64QAM	12	13	21.33	21.31	21.09	
5	64QAM	25	0	21.41	21.36	21.16	
Channel				20415	20525	20635	Tune-up limit (dBm)
Frequency (MHz)				825.5	836.5	847.5	
3	QPSK	1	0	24.25	24.25	24.29	25
3	QPSK	1	8	24.12	24.13	24.21	
3	QPSK	1	14	24.13	24.14	24.10	
3	QPSK	8	0	23.26	23.26	23.29	24
3	QPSK	8	4	23.30	23.25	23.26	
3	QPSK	8	7	23.24	23.34	23.26	
3	QPSK	15	0	23.31	23.29	23.22	24
3	16QAM	1	0	23.62	23.54	23.54	
3	16QAM	1	8	23.48	23.54	23.50	
3	16QAM	1	14	23.56	23.54	23.50	23
3	16QAM	8	0	22.29	22.30	22.25	
3	16QAM	8	4	22.38	22.22	22.25	
3	16QAM	8	7	22.30	22.35	22.37	23
3	16QAM	15	0	22.37	22.36	22.29	
3	64QAM	1	0	22.47	22.44	22.37	
3	64QAM	1	8	22.48	22.57	22.53	22
3	64QAM	1	14	22.45	22.45	21.68	
3	64QAM	8	0	21.29	21.29	21.27	
3	64QAM	8	4	21.38	21.32	21.33	22
3	64QAM	8	7	21.31	21.37	21.06	
3	64QAM	15	0	21.43	21.37	21.12	
Channel				20407	20525	20543	Tune-up limit (dBm)
Frequency (MHz)				824.7	836.5	848.3	
1.4	QPSK	1	0	24.27	24.26	24.21	25
1.4	QPSK	1	3	24.13	24.16	24.21	
1.4	QPSK	1	5	24.16	24.18	24.13	
1.4	QPSK	3	0	24.19	24.26	24.12	24
1.4	QPSK	3	1	24.03	24.09	24.13	
1.4	QPSK	3	3	24.15	24.17	24.04	
1.4	QPSK	6	0	23.33	23.30	23.26	24
1.4	16QAM	1	0	23.66	23.56	23.52	
1.4	16QAM	1	3	23.49	23.51	23.47	
1.4	16QAM	1	5	23.49	23.49	23.49	24
1.4	16QAM	3	0	23.61	23.46	23.50	
1.4	16QAM	3	1	23.43	23.47	23.40	
1.4	16QAM	3	3	23.42	23.47	23.44	23
1.4	16QAM	6	0	22.31	22.30	22.29	
1.4	64QAM	1	0	22.43	22.46	22.40	
1.4	64QAM	1	3	22.47	22.35	22.52	23
1.4	64QAM	1	5	22.39	22.49	21.69	
1.4	64QAM	3	0	22.42	22.37	22.34	
1.4	64QAM	3	1	22.44	22.47	22.42	22
1.4	64QAM	3	3	22.36	22.44	21.60	
1.4	64QAM	6	0	21.35	21.38	21.14	



Band 7							
Art 0							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				20650	21100	21550	
Frequency (MHz)				2510	2535	2560	
20	QPSK	1	0	24.70	24.74	23.54	25
20	QPSK	1	49	24.77	24.83	23.48	
20	QPSK	1	99	24.88	24.98	24.50	
20	QPSK	50	0	23.88	23.91	22.23	24
20	QPSK	50	24	23.94	24.00	22.65	
20	QPSK	50	50	23.88	23.95	23.66	
20	QPSK	100	0	23.94	23.99	22.86	24
20	16QAM	1	0	23.98	23.97	22.82	
20	16QAM	1	49	23.93	23.90	22.67	
20	16QAM	1	99	23.80	23.85	23.75	23
20	16QAM	50	0	22.98	22.93	21.28	
20	16QAM	50	24	22.95	22.98	21.68	
20	16QAM	50	50	22.90	22.86	22.65	23
20	16QAM	100	0	22.92	22.99	21.96	
20	64QAM	1	0	22.93	22.81	21.02	
20	64QAM	1	49	22.81	22.86	21.66	22
20	64QAM	1	99	22.88	22.70	21.78	
20	64QAM	50	0	21.90	21.95	20.32	
20	64QAM	50	24	21.97	21.92	20.62	22
20	64QAM	50	50	21.51	21.94	20.60	
20	64QAM	100	0	21.78	21.81	20.16	
Channel				25952	21100	21375	Tune-up limit (dBm)
Frequency (MHz)				2507.5	2535	2562.5	
15	QPSK	1	0	24.65	24.71	23.48	25
15	QPSK	1	37	24.67	24.77	23.45	
15	QPSK	1	74	24.80	24.94	24.47	
15	QPSK	36	0	23.87	23.85	22.16	24
15	QPSK	36	20	23.88	23.94	22.63	
15	QPSK	36	39	23.85	23.93	23.64	
15	QPSK	75	0	23.84	23.95	22.78	24
15	16QAM	1	0	23.96	23.91	22.80	
15	16QAM	1	37	23.85	23.88	22.62	
15	16QAM	1	74	23.76	23.83	23.67	23
15	16QAM	36	0	22.93	22.87	21.27	
15	16QAM	36	20	22.93	22.90	21.68	
15	16QAM	36	39	22.86	22.77	22.58	23
15	16QAM	75	0	22.89	22.90	21.93	
15	64QAM	1	0	22.83	22.52	21.89	
15	64QAM	1	37	22.81	22.81	21.65	23
15	64QAM	1	74	22.85	22.81	21.78	
15	64QAM	36	0	21.88	21.94	20.24	
15	64QAM	36	20	21.96	21.85	20.53	22
15	64QAM	36	39	21.44	21.88	20.57	
15	64QAM	75	0	21.76	21.75	20.13	
Channel				25952	21100	21409	Tune-up limit (dBm)
Frequency (MHz)				2505	2535	2565	
10	QPSK	1	0	24.64	24.72	23.44	25
10	QPSK	1	25	24.73	24.77	23.41	
10	QPSK	1	49	24.81	24.94	24.48	
10	QPSK	25	0	23.79	23.84	22.20	24
10	QPSK	25	12	23.80	23.90	22.59	
10	QPSK	25	25	23.78	23.92	23.64	
10	QPSK	50	0	23.92	23.93	22.86	24
10	16QAM	1	0	23.90	23.94	22.76	
10	16QAM	1	25	23.83	23.85	22.66	
10	16QAM	1	49	23.76	23.74	23.69	23
10	16QAM	25	0	22.83	22.91	21.22	
10	16QAM	25	12	22.86	22.98	21.63	
10	16QAM	25	25	22.80	22.82	22.55	23
10	16QAM	50	0	22.91	22.91	21.94	
10	64QAM	1	0	22.91	22.55	21.95	
10	64QAM	1	25	22.81	22.79	21.64	23
10	64QAM	1	49	22.81	22.83	21.69	
10	64QAM	25	0	21.83	21.92	20.28	
10	64QAM	25	12	21.97	21.92	20.62	22
10	64QAM	25	25	21.46	21.90	20.54	
10	64QAM	50	0	21.70	21.75	20.06	
Channel				25775	21100	21425	Tune-up limit (dBm)
Frequency (MHz)				2502.5	2535	2567.5	
5	QPSK	1	0	24.68	24.65	23.45	25
5	QPSK	1	12	24.74	24.79	23.43	
5	QPSK	1	24	24.82	24.98	24.41	
5	QPSK	12	0	23.78	23.90	22.13	24
5	QPSK	12	7	23.84	23.90	22.60	
5	QPSK	12	13	23.85	23.86	23.58	
5	QPSK	25	0	23.85	23.98	22.83	24
5	16QAM	1	0	23.94	23.92	22.75	
5	16QAM	1	12	23.92	23.84	22.64	
5	16QAM	1	24	23.76	23.80	23.73	23
5	16QAM	12	0	22.86	22.91	21.26	
5	16QAM	12	7	22.94	22.92	21.68	
5	16QAM	12	13	22.85	22.81	22.55	23
5	16QAM	25	0	22.86	22.89	21.92	
5	64QAM	1	0	22.84	22.51	21.93	
5	64QAM	1	12	22.77	22.85	21.62	23
5	64QAM	1	24	22.83	22.80	21.69	
5	64QAM	12	0	21.84	21.85	20.23	
5	64QAM	12	7	21.89	21.90	20.54	22
5	64QAM	12	13	21.50	21.93	20.54	
5	64QAM	25	0	21.68	21.73	20.16	



Band 12											
Art 1											
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)				
Channel				2390	2395	2399					
Frequency (MHz)				704	707.5	711					
10	QPSK	1	0	24.31	24.25	24.23	25				
10	QPSK	1	25	24.24	24.29	24.26					
10	QPSK	1	49	24.35	24.34	24.27					
10	QPSK	25	0	23.39	23.43	23.38	24				
10	QPSK	25	12	23.50	23.46	23.45					
10	QPSK	25	25	23.44	23.38	23.40					
10	QPSK	50	0	23.48	23.40	23.41	24				
10	16QAM	1	0	23.66	23.62	23.62					
10	16QAM	1	25	23.62	23.66	23.65					
10	16QAM	1	49	23.72	23.68	23.68	23				
10	16QAM	25	0	22.39	22.40	22.40					
10	16QAM	25	12	22.48	22.41	22.41					
10	16QAM	25	25	22.44	22.46	22.40	23				
10	16QAM	50	0	22.46	22.41	22.40					
10	64QAM	1	0	22.53	22.46	22.46					
10	64QAM	1	25	22.58	22.60	22.56	23				
10	64QAM	1	49	22.64	22.56	22.54					
10	64QAM	25	0	21.44	21.44	21.43					
10	64QAM	25	12	21.53	21.44	21.45	22				
10	64QAM	25	25	21.48	21.48	21.47					
10	64QAM	50	0	21.52	21.45	21.42					
Channel				2395	2399	2399	Tune-up limit (dBm)				
Frequency (MHz)				701.5	707.5	713.5					
5	QPSK	1	0	24.22	24.18	24.20	25				
5	QPSK	1	12	24.19	24.29	24.22					
5	QPSK	1	24	24.32	24.25	24.27					
5	QPSK	12	0	23.30	23.41	23.29	24				
5	QPSK	12	7	23.40	23.38	23.33					
5	QPSK	12	13	23.38	23.42	23.42					
5	QPSK	25	0	23.46	23.33	23.39	24				
5	16QAM	1	0	23.59	23.56	23.52					
5	16QAM	1	12	23.57	23.57	23.60					
5	16QAM	1	24	23.66	23.62	23.62	23				
5	16QAM	12	0	22.37	22.34	22.35					
5	16QAM	12	7	22.43	22.32	22.31					
5	16QAM	12	13	22.43	22.42	22.35	23				
5	16QAM	25	0	22.36	22.33	22.35					
5	64QAM	1	0	22.43	22.37	22.38					
5	64QAM	1	12	22.57	22.54	22.47	23				
5	64QAM	1	24	22.61	22.56	22.48					
5	64QAM	12	0	21.37	21.38	21.41					
5	64QAM	12	7	21.45	21.34	21.45	22				
5	64QAM	12	13	21.38	21.44	21.43					
5	64QAM	25	0	21.52	21.37	21.38					
Channel				2399	2399	2399	Tune-up limit (dBm)				
Frequency (MHz)				700.5	707.5	714.5					
3	QPSK	1	0	24.24	24.19	24.21	25				
3	QPSK	1	8	24.22	24.22	24.23					
3	QPSK	1	14	24.26	24.24	24.19					
3	QPSK	8	0	23.33	23.39	23.37	24				
3	QPSK	8	4	23.41	23.38	23.37					
3	QPSK	8	7	23.35	23.41	23.42					
3	QPSK	15	0	23.43	23.31	23.31	24				
3	16QAM	1	0	23.57	23.61	23.57					
3	16QAM	1	8	23.61	23.60	23.57					
3	16QAM	1	14	23.66	23.67	23.63	24				
3	16QAM	8	0	22.30	22.30	22.38					
3	16QAM	8	4	22.40	22.38	22.37					
3	16QAM	8	7	22.42	22.40	22.39	23				
3	16QAM	15	0	22.40	22.33	22.30					
3	64QAM	1	0	22.46	22.39	22.39					
3	64QAM	1	8	22.49	22.56	22.51	23				
3	64QAM	1	14	22.56	22.53	22.44					
3	64QAM	8	0	21.41	21.40	21.39					
3	64QAM	8	4	21.48	21.43	21.42	22				
3	64QAM	8	7	21.44	21.48	21.45					
3	64QAM	15	0	21.46	21.43	21.32					
Channel				2399	2399	2399	Tune-up limit (dBm)				
Frequency (MHz)				699.7	707.5	715.3					
1.4	QPSK	1	0	24.25	24.25	24.21	25				
1.4	QPSK	1	3	24.15	24.25	24.19					
1.4	QPSK	1	5	24.26	24.24	24.21					
1.4	QPSK	3	0	24.24	24.16	24.14	24				
1.4	QPSK	3	1	24.06	24.16	24.13					
1.4	QPSK	3	3	24.22	24.22	24.21					
1.4	QPSK	6	0	23.38	23.39	23.35	24				
1.4	16QAM	1	0	23.57	23.58	23.52					
1.4	16QAM	1	3	23.55	23.62	23.56					
1.4	16QAM	1	5	23.66	23.65	23.65	24				
1.4	16QAM	3	0	23.47	23.53	23.50					
1.4	16QAM	3	1	23.55	23.56	23.50					
1.4	16QAM	3	3	23.62	23.62	23.58	23				
1.4	16QAM	6	0	22.45	22.34	22.35					
1.4	64QAM	1	0	22.51	22.38	22.38					
1.4	64QAM	1	3	22.49	22.51	22.52	23				
1.4	64QAM	1	5	22.61	22.48	22.44					
1.4	64QAM	3	0	22.47	22.31	22.35					
1.4	64QAM	3	1	22.42	22.46	22.46	23				
1.4	64QAM	3	3	22.59	22.41	22.37					
1.4	64QAM	6	0	21.45	21.41	21.36					



Band 13							
Art 1							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				23230	23230	23230	
Frequency (MHz)				782	782	782	
10	QPSK	1	0	24.36	24.36	24.36	25
10	QPSK	1	25	24.38	24.38	24.38	
10	QPSK	1	49	24.47	24.47	24.47	
10	QPSK	25	0	23.43	23.43	23.43	24
10	QPSK	25	12	23.53	23.53	23.53	
10	QPSK	25	25	23.51	23.51	23.51	
10	QPSK	50	0	23.53	23.53	23.53	24
10	16QAM	1	0	23.71	23.71	23.71	
10	16QAM	1	25	23.74	23.74	23.74	
10	16QAM	1	49	23.74	23.74	23.74	23
10	16QAM	25	0	22.46	22.46	22.46	
10	16QAM	25	12	22.54	22.54	22.54	
10	16QAM	25	25	22.55	22.55	22.55	23
10	16QAM	50	0	22.50	22.50	22.50	
10	64QAM	1	0	22.65	22.65	22.65	
10	64QAM	1	25	22.71	22.71	22.71	22
10	64QAM	1	49	22.63	22.63	22.63	
10	64QAM	25	0	21.51	21.51	21.51	
10	64QAM	25	12	21.66	21.66	21.66	22
10	64QAM	25	25	21.56	21.56	21.56	
10	64QAM	50	0	21.53	21.53	21.53	
Channel				23205	23230	23205	Tune-up limit (dBm)
Frequency (MHz)				779.5	782	784.5	
5	QPSK	1	0	24.29	24.31	24.35	25
5	QPSK	1	12	24.30	24.32	24.33	
5	QPSK	1	24	24.43	24.42	24.45	
5	QPSK	12	0	23.42	23.43	23.40	24
5	QPSK	12	7	23.47	23.41	23.50	
5	QPSK	12	13	23.49	23.53	23.46	
5	QPSK	25	0	23.47	23.45	23.52	24
5	16QAM	1	0	23.66	23.66	23.62	
5	16QAM	1	12	23.65	23.70	23.68	
5	16QAM	1	24	23.64	23.74	23.67	23
5	16QAM	12	0	22.36	22.43	22.46	
5	16QAM	12	7	22.49	22.53	22.51	
5	16QAM	12	13	22.48	22.50	22.53	23
5	16QAM	25	0	22.47	22.40	22.49	
5	64QAM	1	0	22.60	22.56	22.56	
5	64QAM	1	12	22.67	22.65	22.65	23
5	64QAM	1	24	22.62	22.59	22.58	
5	64QAM	12	0	21.41	21.45	21.49	
5	64QAM	12	7	21.49	21.53	21.47	22
5	64QAM	12	13	21.56	21.53	21.55	
5	64QAM	25	0	21.48	21.46	21.47	



Band 14							
Art 1							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				23330			
Frequency (MHz)				793			
10	QPSK	1	0		24.41		25
10	QPSK	1	25		24.31		
10	QPSK	1	49		24.29		
10	QPSK	25	0		23.42		24
10	QPSK	25	12		23.41		
10	QPSK	25	25		23.47		
10	QPSK	50	0		23.40		24
10	16QAM	1	0		23.76		
10	16QAM	1	25		23.78		
10	16QAM	1	49		23.89		23
10	16QAM	25	0		22.40		
10	16QAM	25	12		22.44		
10	16QAM	25	25		22.45		23
10	16QAM	50	0		22.40		
10	64QAM	1	0		22.65		
10	64QAM	1	25		22.68		23
10	64QAM	1	49		22.59		
10	64QAM	25	0		21.45		
10	64QAM	25	12		21.48		22
10	64QAM	25	25		21.50		
10	64QAM	50	0		21.42		
Channel				23305	23330	23355	Tune-up limit (dBm)
Frequency (MHz)				790.5	793	795.5	
5	QPSK	1	0	24.39	24.32	24.35	25
5	QPSK	1	12	24.22	24.29	24.26	
5	QPSK	1	24	24.24	24.25	24.24	
5	QPSK	12	0	23.34	23.34	23.40	24
5	QPSK	12	7	23.34	23.33	23.38	
5	QPSK	12	13	23.44	23.43	23.48	
5	QPSK	25	0	23.37	23.31	23.32	24
5	16QAM	1	0	23.74	23.67	23.76	
5	16QAM	1	12	23.69	23.68	23.72	
5	16QAM	1	24	23.98	23.94	23.80	23
5	16QAM	12	0	22.30	22.32	22.35	
5	16QAM	12	7	22.38	22.34	22.44	
5	16QAM	12	13	22.36	22.36	22.36	23
5	16QAM	25	0	22.37	22.38	22.35	
5	64QAM	1	0	22.58	22.60	22.65	
5	64QAM	1	12	22.59	22.59	22.63	23
5	64QAM	1	24	22.53	22.51	22.48	
5	64QAM	12	0	21.38	21.43	21.37	
5	64QAM	12	7	21.47	21.39	21.47	22
5	64QAM	12	13	21.43	21.43	21.50	
5	64QAM	25	0	21.42	21.41	21.33	



Band 17							
Art 1							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)
Channel				23780	23790	23800	
Frequency (MHz)				708	710	711	
10	QPSK	1	0	24.24	24.16	24.23	25
10	QPSK	1	25	24.23	24.25	24.30	
10	QPSK	1	49	24.28	24.31	24.29	
10	QPSK	25	0	23.33	23.33	23.36	
10	QPSK	25	12	23.45	23.39	23.39	24
10	QPSK	25	25	23.48	23.50	23.48	
10	QPSK	50	0	23.47	23.38	23.37	
10	16QAM	1	0	23.59	23.61	23.61	
10	16QAM	1	25	23.64	23.68	23.68	24
10	16QAM	1	49	23.72	23.70	23.69	
10	16QAM	25	0	22.34	22.34	22.36	
10	16QAM	25	12	22.45	22.41	22.40	
10	16QAM	25	25	22.44	22.48	22.46	23
10	16QAM	50	0	22.46	22.39	22.38	
10	64QAM	1	0	22.50	22.46	22.47	
10	64QAM	1	25	22.60	22.59	22.59	
10	64QAM	1	49	22.55	22.61	22.59	23
10	64QAM	25	0	21.36	21.33	21.36	
10	64QAM	25	12	21.46	21.46	21.43	
10	64QAM	25	25	21.50	21.51	21.50	
10	64QAM	50	0	21.51	21.43	21.41	22
Channel				23755	23760	23825	
Frequency (MHz)				706.5	710	713.5	
5	QPSK	1	0	24.15	24.10	24.15	25
5	QPSK	1	12	24.17	24.18	24.29	
5	QPSK	1	24	24.18	24.29	24.19	
5	QPSK	12	0	23.33	23.28	23.28	
5	QPSK	12	7	23.38	23.32	23.31	24
5	QPSK	12	13	23.44	23.43	23.47	
5	QPSK	25	0	23.40	23.29	23.35	
5	16QAM	1	0	23.54	23.61	23.59	
5	16QAM	1	12	23.54	23.64	23.65	24
5	16QAM	1	24	23.65	23.66	23.63	
5	16QAM	12	0	22.26	22.31	22.36	
5	16QAM	12	7	22.43	22.33	22.31	
5	16QAM	12	13	22.37	22.45	22.39	23
5	16QAM	25	0	22.36	22.33	22.33	
5	64QAM	1	0	22.44	22.41	22.46	
5	64QAM	1	12	22.51	22.51	22.56	
5	64QAM	1	24	22.49	22.55	22.57	23
5	64QAM	12	0	21.27	21.24	21.36	
5	64QAM	12	7	21.39	21.40	21.36	
5	64QAM	12	13	21.42	21.51	21.44	
5	64QAM	25	0	21.43	21.37	21.32	22



Band 30							
Airtel							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				2771.0	2771.0	2771.0	25
Frequency (MHz)				2310	2310	2310	
10	QPSK	1	0	24.61	24.61	24.61	24
10	QPSK	1	25	24.65	24.65	24.65	
10	QPSK	1	49	24.62	24.62	24.62	
10	QPSK	25	0	23.62	23.62	23.62	
10	QPSK	25	12	23.68	23.68	23.68	
10	QPSK	25	25	23.71	23.71	23.71	23
10	QPSK	50	0	23.69	23.69	23.69	
10	16QAM	1	0	23.99	23.99	23.99	
10	16QAM	1	25	23.93	23.93	23.93	
10	16QAM	1	49	23.96	23.96	23.96	
10	16QAM	25	0	22.54	22.54	22.54	23
10	16QAM	25	12	22.71	22.71	22.71	
10	16QAM	25	25	22.70	22.70	22.70	
10	16QAM	50	0	22.70	22.70	22.70	
10	64QAM	1	0	22.62	22.62	22.62	
10	64QAM	1	25	22.90	22.90	22.90	22
10	64QAM	1	49	22.83	22.83	22.83	
10	64QAM	25	0	21.89	21.89	21.89	
10	64QAM	25	12	21.71	21.71	21.71	
10	64QAM	25	25	21.75	21.75	21.75	
10	64QAM	50	0	21.70	21.70	21.70	22
Channel				2786.5	2771.0	2773.5	
Frequency (MHz)				2307.5	2310	2312.5	25
5	QPSK	1	0	24.53	24.51	24.55	
5	QPSK	1	12	24.60	24.59	24.63	24
5	QPSK	1	24	24.54	24.56	24.60	
5	QPSK	12	0	23.60	23.61	23.57	
5	QPSK	12	7	23.62	23.64	23.59	
5	QPSK	12	13	23.68	23.63	23.64	
5	QPSK	25	0	23.62	23.64	23.63	24
5	16QAM	1	0	23.93	23.96	23.93	
5	16QAM	1	12	23.93	23.88	23.88	
5	16QAM	1	24	23.93	23.89	23.92	
5	16QAM	12	0	22.54	22.59	22.60	
5	16QAM	12	7	22.68	22.65	22.71	23
5	16QAM	12	13	22.65	22.64	22.67	
5	16QAM	25	0	22.63	22.67	22.62	
5	64QAM	1	0	22.61	22.75	22.76	
5	64QAM	1	12	22.61	22.96	22.82	
5	64QAM	1	24	22.80	22.77	22.80	23
5	64QAM	12	0	21.65	21.63	21.60	
5	64QAM	12	7	21.64	21.63	21.63	
5	64QAM	12	13	21.69	21.73	21.68	
5	64QAM	25	0	21.70	21.65	21.63	



Band 71							
Art 1							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)
Channel				133222	133222	133272	
Frequency (MHz)				873	883	888	
20	QPSK	1	0	24.40	24.34	24.28	25
20	QPSK	1	49	24.30	24.32	24.31	
20	QPSK	1	99	24.30	24.30	24.26	
20	QPSK	50	0	23.45	23.52	23.39	24
20	QPSK	50	24	23.42	23.42	23.46	
20	QPSK	50	50	23.50	23.51	23.50	
20	QPSK	100	0	23.48	23.44	23.48	24
20	16QAM	1	0	23.72	23.62	23.64	
20	16QAM	1	49	23.65	23.69	23.65	
20	16QAM	1	99	23.65	23.69	23.62	23
20	16QAM	50	0	22.47	22.42	22.46	
20	16QAM	50	24	22.52	22.45	22.42	
20	16QAM	50	50	22.51	22.53	22.49	23
20	16QAM	100	0	22.46	22.42	22.47	
20	64QAM	1	0	22.60	22.50	22.48	
20	64QAM	1	49	22.50	22.55	22.52	22
20	64QAM	1	99	22.57	22.59	22.50	
20	64QAM	50	0	21.49	21.40	21.41	
20	64QAM	50	24	21.52	21.47	21.46	22
20	64QAM	50	50	21.49	21.53	21.52	
20	64QAM	100	0	21.53	21.41	21.49	
Channel				133197	133207	133267	Tune-up limit (dBm)
Frequency (MHz)				870.5	880.5	890.5	
15	QPSK	1	0	24.33	24.29	24.18	25
15	QPSK	1	37	24.27	24.24	24.25	
15	QPSK	1	74	24.24	24.34	24.17	
15	QPSK	36	0	23.39	23.37	23.31	24
15	QPSK	36	20	23.50	23.38	23.42	
15	QPSK	36	39	23.49	23.51	23.47	
15	QPSK	75	0	23.48	23.36	23.41	24
15	16QAM	1	0	23.89	23.58	23.59	
15	16QAM	1	37	23.59	23.68	23.58	
15	16QAM	1	74	23.65	23.66	23.53	23
15	16QAM	36	0	22.43	22.37	22.36	
15	16QAM	36	20	22.45	22.36	22.35	
15	16QAM	36	39	22.50	22.43	22.47	23
15	16QAM	75	0	22.38	22.42	22.39	
15	64QAM	1	0	22.50	22.45	22.36	
15	64QAM	1	37	22.46	22.45	22.40	23
15	64QAM	1	74	22.53	22.50	22.43	
15	64QAM	36	0	21.47	21.37	21.37	
15	64QAM	36	20	21.47	21.40	21.38	22
15	64QAM	36	39	21.41	21.48	21.43	
15	64QAM	75	0	21.46	21.32	21.46	
Channel				133172	133272	133422	Tune-up limit (dBm)
Frequency (MHz)				868	878	893	
10	QPSK	1	0	24.35	24.30	24.18	25
10	QPSK	1	25	24.27	24.27	24.23	
10	QPSK	1	49	24.20	24.25	24.24	
10	QPSK	25	0	23.45	23.42	23.32	24
10	QPSK	25	12	23.52	23.32	23.37	
10	QPSK	25	25	23.42	23.47	23.44	
10	QPSK	50	0	23.46	23.36	23.43	24
10	16QAM	1	0	23.64	23.60	23.60	
10	16QAM	1	25	23.63	23.63	23.57	
10	16QAM	1	49	23.57	23.62	23.52	23
10	16QAM	25	0	22.43	22.36	22.37	
10	16QAM	25	12	22.49	22.36	22.32	
10	16QAM	25	25	22.46	22.52	22.43	23
10	16QAM	50	0	22.36	22.41	22.43	
10	64QAM	1	0	22.55	22.45	22.46	
10	64QAM	1	25	22.43	22.47	22.52	22
10	64QAM	1	49	22.50	22.54	22.42	
10	64QAM	25	0	21.43	21.37	21.35	
10	64QAM	25	12	21.46	21.37	21.37	22
10	64QAM	25	25	21.44	21.52	21.50	
10	64QAM	50	0	21.47	21.32	21.46	
Channel				133147	133247	133417	Tune-up limit (dBm)
Frequency (MHz)				865.5	875.5	895.5	
5	QPSK	1	0	24.32	24.25	24.23	25
5	QPSK	1	12	24.23	24.28	24.28	
5	QPSK	1	24	24.22	24.24	24.18	
5	QPSK	12	0	23.43	23.37	23.36	24
5	QPSK	12	7	23.48	23.39	23.36	
5	QPSK	12	13	23.50	23.45	23.42	
5	QPSK	25	0	23.47	23.39	23.43	24
5	16QAM	1	0	23.65	23.62	23.61	
5	16QAM	1	12	23.59	23.66	23.64	
5	16QAM	1	24	23.59	23.67	23.53	23
5	16QAM	12	0	22.39	22.42	22.38	
5	16QAM	12	7	22.42	22.39	22.34	
5	16QAM	12	13	22.46	22.48	22.45	23
5	16QAM	25	0	22.42	22.34	22.37	
5	64QAM	1	0	22.51	22.45	22.46	
5	64QAM	1	12	22.50	22.52	22.43	22
5	64QAM	1	24	22.47	22.57	22.48	
5	64QAM	12	0	21.48	21.36	21.40	
5	64QAM	12	7	21.44	21.41	21.45	22
5	64QAM	12	13	21.46	21.51	21.42	
5	64QAM	25	0	21.43	21.36	21.41	



Band 2							
Ann 2							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch./Freq.	Power Middle Ch./Freq.	Power High Ch./Freq.	Tune-up limit (dBm)
Channel				1870.0	1890.0	1910.0	
Frequency (MHz)				1860	1880	1900	
20	QPSK	1	0	23.62	23.61	23.69	25
20	QPSK	1	49	23.62	23.62	23.52	
20	QPSK	1	99	23.54	23.49	23.51	
20	QPSK	50	0	23.35	23.37	23.30	24
20	QPSK	50	24	23.44	23.39	23.30	
20	QPSK	50	50	23.42	23.37	23.27	
20	QPSK	100	0	23.44	23.37	23.30	24
20	16QAM	1	0	23.66	23.68	23.59	
20	16QAM	1	49	23.62	23.64	23.49	
20	16QAM	1	99	23.54	23.55	23.39	23
20	16QAM	50	0	22.89	22.87	22.82	
20	16QAM	50	24	22.74	22.70	22.60	
20	16QAM	50	50	22.72	22.67	22.59	23
20	16QAM	100	0	22.72	22.66	22.61	
20	64QAM	1	0	22.94	22.78	22.77	23
20	64QAM	1	49	22.78	22.75	22.66	
20	64QAM	1	99	22.69	22.75	22.53	
20	64QAM	50	0	21.68	21.70	21.64	22
20	64QAM	50	24	21.76	21.71	21.62	
20	64QAM	50	50	21.73	21.71	21.60	
20	64QAM	100	0	21.74	21.68	21.61	
Channel				1867.5	1890.0	1912.5	
Frequency (MHz)				1857.5	1880	1902.5	Tune-up limit (dBm)
15	QPSK	1	0	23.26	23.29	23.29	25
15	QPSK	1	37	23.17	23.18	23.16	
15	QPSK	1	74	23.11	23.10	23.13	
15	QPSK	36	0	23.35	23.33	23.28	24
15	QPSK	36	20	23.44	23.38	23.39	
15	QPSK	36	39	23.38	23.41	23.33	
15	QPSK	75	0	23.37	23.37	23.37	24
15	16QAM	1	0	23.66	23.68	23.59	
15	16QAM	1	37	23.62	23.64	23.49	
15	16QAM	1	74	23.54	23.55	23.39	23
15	16QAM	36	0	22.84	22.86	22.85	
15	16QAM	36	20	22.74	22.69	22.64	
15	16QAM	36	39	22.68	22.62	22.58	23
15	16QAM	75	0	22.69	22.70	22.63	
15	64QAM	1	0	22.77	22.85	22.77	
15	64QAM	1	37	22.70	22.75	22.78	23
15	64QAM	1	74	22.63	22.63	22.60	
15	64QAM	36	0	21.61	21.59	21.67	
15	64QAM	36	20	21.72	21.76	21.68	22
15	64QAM	36	39	21.67	21.71	21.67	
15	64QAM	75	0	21.69	21.68	21.72	
Channel				1859.0	1890.0	1915.0	Tune-up limit (dBm)
Frequency (MHz)				1855	1880	1905	
10	QPSK	1	0	23.24	23.33	23.27	25
10	QPSK	1	25	23.18	23.20	23.16	
10	QPSK	1	49	23.15	23.18	23.10	
10	QPSK	25	0	23.34	23.33	23.28	24
10	QPSK	25	12	23.36	23.34	23.36	
10	QPSK	25	25	23.42	23.42	23.38	
10	QPSK	50	0	23.41	23.37	23.42	24
10	16QAM	1	0	23.59	23.65	23.60	
10	16QAM	1	25	23.55	23.55	23.53	
10	16QAM	1	49	23.47	23.53	23.46	23
10	16QAM	25	0	22.65	22.63	22.60	
10	16QAM	25	12	22.69	22.64	22.66	
10	16QAM	25	25	22.63	22.65	22.68	23
10	16QAM	50	0	22.67	22.66	22.72	
10	64QAM	1	0	22.83	22.85	22.74	
10	64QAM	1	25	22.73	22.69	22.74	23
10	64QAM	1	49	22.66	22.59	22.63	
10	64QAM	25	0	21.58	21.64	21.64	
10	64QAM	25	12	21.67	21.69	21.74	22
10	64QAM	25	25	21.72	21.70	21.63	
10	64QAM	50	0	21.72	21.72	21.68	
Channel				1892.5	1890.0	1917.5	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1880	1907.5	
5	QPSK	1	0	23.32	23.33	23.25	25
5	QPSK	1	12	23.19	23.16	23.17	
5	QPSK	1	24	23.09	23.14	23.10	
5	QPSK	12	0	23.28	23.23	23.27	24
5	QPSK	12	7	23.37	23.41	23.44	
5	QPSK	12	13	23.39	23.40	23.37	
5	QPSK	25	0	23.34	23.44	23.36	24
5	16QAM	1	0	23.65	23.68	23.67	
5	16QAM	1	12	23.60	23.52	23.52	
5	16QAM	1	24	23.45	23.48	23.51	23
5	16QAM	12	0	22.62	22.57	22.58	
5	16QAM	12	7	22.66	22.73	22.68	
5	16QAM	12	13	22.62	22.69	22.69	23
5	16QAM	25	0	22.69	22.70	22.72	
5	64QAM	1	0	22.76	22.76	22.81	
5	64QAM	1	12	22.70	22.77	22.71	23
5	64QAM	1	24	22.65	22.59	22.68	
5	64QAM	12	0	21.59	21.59	21.64	
5	64QAM	12	7	21.74	21.71	21.73	22
5	64QAM	12	13	21.73	21.70	21.63	
5	64QAM	25	0	21.74	21.72	21.71	
Channel				1891.5	1890.0	1918.5	Tune-up limit (dBm)
Frequency (MHz)				1851.5	1880	1908.5	
3	QPSK	1	0	23.25	23.33	23.34	25
3	QPSK	1	8	23.18	23.21	23.17	
3	QPSK	1	14	23.13	23.10	23.16	
3	QPSK	8	0	23.30	23.27	23.35	24
3	QPSK	8	4	23.35	23.41	23.44	
3	QPSK	8	7	23.39	23.42	23.32	
3	QPSK	15	0	23.36	23.38	23.40	24
3	16QAM	1	0	23.65	23.68	23.67	
3	16QAM	1	8	23.55	23.53	23.52	
3	16QAM	1	14	23.50	23.50	23.48	23
3	16QAM	8	0	22.65	22.58	22.66	
3	16QAM	8	4	22.72	22.74	22.69	
3	16QAM	8	7	22.66	22.70	22.72	23
3	16QAM	15	0	22.69	22.63	22.67	
3	64QAM	1	0	22.80	22.84	22.76	
3	64QAM	1	8	22.69	22.69	22.69	23
3	64QAM	1	14	22.59	22.68	22.68	
3	64QAM	8	0	21.58	21.62	21.59	
3	64QAM	8	4	21.72	21.69	21.73	22
3	64QAM	8	7	21.63	21.64	21.63	
3	64QAM	15	0	21.67	21.74	21.67	
Channel				1890.7	1890.0	1919.3	Tune-up limit (dBm)
Frequency (MHz)				1850.7	1880	1909.3	
1.4	QPSK	1	0	23.25	23.31	23.31	25
1.4	QPSK	1	3	23.16	23.14	23.13	
1.4	QPSK	1	5	23.09	23.09	23.12	
1.4	QPSK	3	0	23.30	23.30	23.30	24
1.4	QPSK	3	1	23.30	23.35	23.38	
1.4	QPSK	3	3	23.42	23.32	23.34	
1.4	QPSK	6	0	23.40	23.39	23.37	24
1.4	16QAM	1	0	23.67	23.64	23.62	
1.4	16QAM	1	3	23.55	23.59	23.59	
1.4	16QAM	1	5	23.44	23.51	23.50	24
1.4	16QAM	3	0	23.56	23.68	23.62	
1.4	16QAM	3	1	23.54	23.63	23.68	
1.4	16QAM	3	3	23.64	23.65	23.62	23
1.4	16QAM	6	0	23.66	22.66	22.63	
1.4	64QAM	1	0	22.76	22.81	22.80	
1.4	64QAM	1	3	22.70	22.69	22.69	23
1.4	64QAM	1	5	22.65	22.65	22.63	
1.4	64QAM	3	0	22.64	22.58	22.60	
1.4	64QAM	3	1	22.72	22.74	22.71	23
1.4	64QAM	3	3	22.66	22.64	22.66	
1.4	64QAM	6	0	21.67	21.70	21.64	



Band 4							
Art 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				2000	2017.5	2035	
Frequency (MHz)				1720	1732.5	1745	
20	QPSK	1	0	23.90	23.94	23.98	25
20	QPSK	1	49	23.74	23.78	23.79	
20	QPSK	1	99	23.72	23.75	23.78	
20	QPSK	50	0	23.25	23.28	23.31	24
20	QPSK	50	24	23.27	23.21	23.33	
20	QPSK	50	50	23.21	23.20	23.24	
20	QPSK	100	0	23.25	23.24	23.30	24
20	16QAM	1	0	23.54	23.59	23.62	
20	16QAM	1	49	23.40	23.42	23.46	
20	16QAM	1	99	23.35	23.38	23.40	23
20	16QAM	50	0	22.25	22.29	22.32	
20	16QAM	50	24	22.29	22.23	22.31	
20	16QAM	50	50	22.22	22.22	22.24	23
20	16QAM	100	0	22.24	22.21	22.32	
20	64QAM	1	0	22.42	22.46	22.47	
20	64QAM	1	49	22.30	22.33	22.31	23
20	64QAM	1	99	22.32	22.34	22.32	
20	64QAM	50	0	21.27	21.32	21.35	
20	64QAM	50	24	21.28	21.26	21.34	22
20	64QAM	50	50	21.23	21.24	21.28	
20	64QAM	100	0	21.27	21.24	21.33	
Channel				2000	2017.5	2035	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1732.5	1747.5	
15	QPSK	1	0	23.89	23.94	23.88	25
15	QPSK	1	37	23.65	23.69	23.79	
15	QPSK	1	74	23.62	23.72	23.78	
15	QPSK	36	0	23.16	23.22	23.24	24
15	QPSK	36	20	23.19	23.17	23.25	
15	QPSK	36	39	23.16	23.10	23.24	
15	QPSK	75	0	23.22	23.22	23.25	24
15	16QAM	1	0	23.50	23.51	23.55	
15	16QAM	1	37	23.36	23.35	23.45	
15	16QAM	1	74	23.28	23.25	23.40	23
15	16QAM	36	0	22.15	22.28	22.25	
15	16QAM	36	20	22.22	22.14	22.23	
15	16QAM	36	39	22.17	22.13	22.28	23
15	16QAM	75	0	22.15	22.21	22.26	
15	64QAM	1	0	22.43	22.47	22.38	
15	64QAM	1	37	22.26	22.31	22.31	23
15	64QAM	1	74	22.32	22.34	22.30	
15	64QAM	36	0	21.20	21.31	21.35	
15	64QAM	36	20	21.18	21.23	21.28	22
15	64QAM	36	39	21.20	21.19	21.24	
15	64QAM	75	0	21.20	21.23	21.26	
Channel				2000	2017.5	2035	Tune-up limit (dBm)
Frequency (MHz)				1715	1732.5	1750	
10	QPSK	1	0	23.84	23.85	23.96	25
10	QPSK	1	25	23.73	23.68	23.77	
10	QPSK	1	49	23.68	23.66	23.77	
10	QPSK	25	0	23.25	23.18	23.29	24
10	QPSK	25	12	23.25	23.15	23.31	
10	QPSK	25	25	23.11	23.20	23.21	
10	QPSK	50	0	23.20	23.14	23.21	24
10	16QAM	1	0	23.53	23.56	23.52	
10	16QAM	1	25	23.35	23.33	23.40	
10	16QAM	1	49	23.28	23.25	23.39	23
10	16QAM	25	0	22.15	22.25	22.27	
10	16QAM	25	12	22.20	22.20	22.25	
10	16QAM	25	25	22.13	22.21	22.18	23
10	16QAM	50	0	22.23	22.13	22.24	
10	64QAM	1	0	22.32	22.40	22.45	
10	64QAM	1	25	22.27	22.29	22.25	23
10	64QAM	1	49	22.30	22.34	22.24	
10	64QAM	25	0	21.17	21.23	21.26	
10	64QAM	25	12	21.18	21.25	21.28	22
10	64QAM	25	25	21.16	21.16	21.27	
10	64QAM	50	0	21.21	21.15	21.29	
Channel				1997.5	2017.5	2037.5	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1732.5	1752.5	
5	QPSK	1	0	23.88	23.90	23.89	25
5	QPSK	1	12	23.67	23.70	23.76	
5	QPSK	1	24	23.63	23.72	23.71	
5	QPSK	12	0	23.25	23.20	23.24	24
5	QPSK	12	7	23.27	23.12	23.28	
5	QPSK	12	13	23.21	23.14	23.23	
5	QPSK	25	0	23.15	23.15	23.25	24
5	16QAM	1	0	23.50	23.52	23.55	
5	16QAM	1	12	23.36	23.34	23.46	
5	16QAM	1	24	23.28	23.25	23.30	23
5	16QAM	12	0	22.20	22.25	22.23	
5	16QAM	12	7	22.28	22.14	22.30	
5	16QAM	12	13	22.20	22.19	22.22	23
5	16QAM	25	0	22.23	22.15	22.31	
5	64QAM	1	0	22.34	22.42	22.41	
5	64QAM	1	12	22.30	22.23	22.28	23
5	64QAM	1	24	22.27	22.27	22.27	
5	64QAM	12	0	21.23	21.22	21.33	
5	64QAM	12	7	21.18	21.21	21.26	22
5	64QAM	12	13	21.13	21.22	21.20	
5	64QAM	25	0	21.24	21.19	21.27	
Channel				1995	2017.5	2035	Tune-up limit (dBm)
Frequency (MHz)				1711.5	1732.5	1753.5	
3	QPSK	1	0	23.83	23.88	23.93	25
3	QPSK	1	8	23.73	23.74	23.79	
3	QPSK	1	14	23.67	23.70	23.73	
3	QPSK	8	0	23.23	23.16	23.31	24
3	QPSK	8	4	23.22	23.15	23.33	
3	QPSK	8	7	23.17	23.16	23.23	
3	QPSK	15	0	23.22	23.23	23.24	24
3	16QAM	1	0	23.53	23.49	23.56	
3	16QAM	1	8	23.35	23.33	23.45	
3	16QAM	1	14	23.26	23.20	23.31	23
3	16QAM	8	0	22.24	22.19	22.23	
3	16QAM	8	4	22.19	22.17	22.22	
3	16QAM	8	7	22.17	22.18	22.16	23
3	16QAM	15	0	22.16	22.14	22.31	
3	64QAM	1	0	22.42	22.47	22.37	
3	64QAM	1	8	22.30	22.23	22.26	23
3	64QAM	1	14	22.26	22.34	22.27	
3	64QAM	8	0	21.22	21.26	21.27	
3	64QAM	8	4	21.21	21.26	21.24	22
3	64QAM	8	7	21.15	21.15	21.25	
3	64QAM	15	0	21.24	21.19	21.27	
Channel				1997.5	2017.5	2035	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1732.5	1754.3	
1.4	QPSK	1	0	23.80	23.93	23.97	25
1.4	QPSK	1	3	23.69	23.67	23.74	
1.4	QPSK	1	5	23.72	23.75	23.72	
1.4	QPSK	3	0	23.76	23.88	23.92	24
1.4	QPSK	3	1	23.64	23.64	23.67	
1.4	QPSK	3	3	23.72	23.69	23.68	
1.4	QPSK	6	0	23.24	23.21	23.28	24
1.4	16QAM	1	0	23.49	23.59	23.57	
1.4	16QAM	1	3	23.39	23.34	23.45	
1.4	16QAM	1	5	23.26	23.29	23.30	24
1.4	16QAM	3	0	23.46	23.49	23.49	
1.4	16QAM	3	1	23.32	23.29	23.42	
1.4	16QAM	3	3	23.27	23.21	23.23	23
1.4	16QAM	6	0	22.21	22.15	22.22	
1.4	64QAM	1	0	22.39	22.46	22.43	
1.4	64QAM	1	3	22.29	22.26	22.26	23
1.4	64QAM	1	5	22.23	22.31	22.28	
1.4	64QAM	3	0	22.29	22.42	22.39	
1.4	64QAM	3	1	22.25	22.24	22.20	23
1.4	64QAM	3	3	22.19	22.27	22.28	
1.4	64QAM	6	0	21.25	21.19	21.28	22



Band 5							
Art 0							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				2040	2052	2060	
Frequency (MHz)				829	836.5	844	
10	QPSK	1	0	24.40	24.37	24.38	25
10	QPSK	1	25	24.27	24.29	24.30	
10	QPSK	1	49	24.32	24.33	24.28	
10	QPSK	25	0	23.43	23.41	23.40	24
10	QPSK	25	12	23.49	23.41	23.42	
10	QPSK	25	25	23.46	23.44	23.45	
10	QPSK	50	0	23.50	23.50	23.39	24
10	16QAM	1	0	23.77	23.74	23.72	
10	16QAM	1	25	23.69	23.70	23.66	
10	16QAM	1	49	23.69	23.66	23.61	23
10	16QAM	25	0	22.44	22.42	22.40	
10	16QAM	25	12	22.52	22.41	22.39	
10	16QAM	25	25	22.46	22.43	22.40	23
10	16QAM	50	0	22.53	22.48	22.41	
10	64QAM	1	0	22.08	22.36	22.57	
10	64QAM	1	25	22.04	22.03	22.46	23
10	64QAM	1	49	22.56	22.60	22.11	
10	64QAM	25	0	21.44	21.43	21.45	
10	64QAM	25	12	21.55	21.44	21.45	22
10	64QAM	25	25	21.51	21.48	21.08	
10	64QAM	50	0	21.54	21.52	21.32	
Channel				20425	20525	20625	Tune-up limit (dBm)
Frequency (MHz)				828.5	836.5	846.5	
5	QPSK	1	0	24.34	24.37	24.34	25
5	QPSK	1	12	24.22	24.21	24.22	
5	QPSK	1	24	24.24	24.31	24.26	
5	QPSK	12	0	23.38	23.35	23.35	24
5	QPSK	12	7	23.46	23.31	23.33	
5	QPSK	12	13	23.37	23.39	23.41	
5	QPSK	25	0	23.42	23.43	23.31	24
5	16QAM	1	0	23.73	23.68	23.71	
5	16QAM	1	12	23.66	23.70	23.59	
5	16QAM	1	24	23.64	23.56	23.59	23
5	16QAM	12	0	22.37	22.37	22.33	
5	16QAM	12	7	22.46	22.41	22.33	
5	16QAM	12	13	22.38	22.35	22.33	23
5	16QAM	25	0	22.48	22.38	22.39	
5	64QAM	1	0	22.48	22.36	22.50	
5	64QAM	1	12	22.51	22.56	22.41	23
5	64QAM	1	24	22.54	22.52	22.07	
5	64QAM	12	0	21.36	21.34	21.44	
5	64QAM	12	7	21.55	21.40	21.43	22
5	64QAM	12	13	21.45	21.48	21.05	
5	64QAM	25	0	21.44	21.52	21.25	
Channel				20415	20525	20635	Tune-up limit (dBm)
Frequency (MHz)				825.5	836.5	847.5	
3	QPSK	1	0	24.32	24.27	24.32	25
3	QPSK	1	8	24.19	24.23	24.30	
3	QPSK	1	14	24.26	24.27	24.25	
3	QPSK	8	0	23.42	23.41	23.31	24
3	QPSK	8	4	23.46	23.37	23.35	
3	QPSK	8	7	23.37	23.39	23.35	
3	QPSK	15	0	23.42	23.49	23.36	24
3	16QAM	1	0	23.72	23.66	23.69	
3	16QAM	1	8	23.66	23.65	23.65	
3	16QAM	1	14	23.65	23.59	23.56	23
3	16QAM	8	0	22.44	22.32	22.36	
3	16QAM	8	4	22.51	22.33	22.34	
3	16QAM	8	7	22.46	22.43	22.34	23
3	16QAM	15	0	22.53	22.44	22.37	
3	64QAM	1	0	22.51	22.54	22.47	
3	64QAM	1	8	22.57	22.63	22.44	23
3	64QAM	1	14	22.48	22.50	22.09	
3	64QAM	8	0	21.39	21.40	21.40	
3	64QAM	8	4	21.46	21.43	21.35	22
3	64QAM	8	7	21.51	21.45	21.05	
3	64QAM	15	0	21.45	21.43	21.27	
Channel				20407	20525	20643	Tune-up limit (dBm)
Frequency (MHz)				824.7	836.5	848.3	
1.4	QPSK	1	0	24.30	24.33	24.36	25
1.4	QPSK	1	3	24.20	24.24	24.27	
1.4	QPSK	1	5	24.32	24.29	24.24	
1.4	QPSK	3	0	24.22	24.32	24.32	24
1.4	QPSK	3	1	24.10	24.24	24.27	
1.4	QPSK	3	3	24.29	24.19	24.18	
1.4	QPSK	6	0	23.44	23.41	23.30	24
1.4	16QAM	1	0	23.76	23.71	23.70	
1.4	16QAM	1	3	23.62	23.63	23.56	
1.4	16QAM	1	5	23.63	23.61	23.60	24
1.4	16QAM	3	0	23.76	23.64	23.63	
1.4	16QAM	3	1	23.63	23.65	23.50	
1.4	16QAM	3	3	23.60	23.65	23.54	23
1.4	16QAM	6	0	22.52	22.40	22.40	
1.4	64QAM	1	0	22.52	22.52	22.52	
1.4	64QAM	1	3	22.54	22.57	22.45	23
1.4	64QAM	1	5	22.53	22.50	22.01	
1.4	64QAM	3	0	22.44	22.48	22.50	
1.4	64QAM	3	1	22.51	22.52	22.42	22
1.4	64QAM	3	3	22.52	22.49	21.96	
1.4	64QAM	6	0	21.49	21.50	21.32	



Band 7							
Art 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				20650	21100	21350	
Frequency (MHz)				2510	2535	2560	
20	QPSK	1	0	2140	2142	2143	23.1
20	QPSK	1	49	2128	2139	2130	
20	QPSK	1	99	2131	2121	2124	
20	QPSK	50	0	2135	2136	2139	23.1
20	QPSK	50	24	2127	2135	2130	
20	QPSK	50	50	2132	2132	2131	
20	QPSK	100	0	2131	2133	2137	23.1
20	16QAM	1	0	2139	2121	2124	
20	16QAM	1	49	2136	2126	2125	
20	16QAM	1	99	2134	2139	2139	23
20	16QAM	50	0	2133	2128	2124	
20	16QAM	50	24	2121	2124	2128	
20	16QAM	50	50	2138	2138	2136	23
20	16QAM	100	0	2132	2125	2121	
20	64QAM	1	0	2128	2135	2140	
20	64QAM	1	49	2127	2128	2132	23
20	64QAM	1	99	2128	2124	2122	
20	64QAM	50	0	2117	2102	2117	
20	64QAM	50	24	2111	2113	2117	22
20	64QAM	50	50	2116	2119	2115	
20	64QAM	100	0	2111	2120	2100	
Channel				20625	21100	21375	Tune-up limit (dBm)
Frequency (MHz)				2507.5	2535	2562.5	
15	QPSK	1	0	2140	2136	2135	23.1
15	QPSK	1	37	2123	2136	2129	
15	QPSK	1	74	2131	2114	2123	
15	QPSK	36	0	2127	2128	2134	23.1
15	QPSK	36	20	2125	2132	2122	
15	QPSK	36	39	2129	2129	2127	
15	QPSK	75	0	2125	2130	2135	23.1
15	16QAM	1	0	2131	2120	2121	
15	16QAM	1	37	2136	2116	2121	
15	16QAM	1	74	2126	2134	2135	23
15	16QAM	36	0	2133	2119	2114	
15	16QAM	36	20	2112	2114	2125	
15	16QAM	36	39	2130	2137	2128	23
15	16QAM	75	0	2129	2116	2112	
15	64QAM	1	0	2127	2131	2133	
15	64QAM	1	37	2122	2124	2132	23
15	64QAM	1	74	2128	2114	2115	
15	64QAM	36	0	2108	2099	2113	
15	64QAM	36	20	2107	2103	2116	22
15	64QAM	36	39	2106	2116	2112	
15	64QAM	75	0	2111	2113	2099	
Channel				20600	21100	21400	Tune-up limit (dBm)
Frequency (MHz)				2505	2535	2565	
10	QPSK	1	0	2138	2136	2142	23.1
10	QPSK	1	25	2123	2135	2120	
10	QPSK	1	49	2129	2113	2124	
10	QPSK	25	0	2127	2126	2133	23.1
10	QPSK	25	12	2117	2134	2120	
10	QPSK	25	25	2128	2122	2121	
10	QPSK	50	0	2122	2126	2129	23.1
10	16QAM	1	0	2138	2121	2119	
10	16QAM	1	25	2133	2119	2123	
10	16QAM	1	49	2124	2137	2138	23
10	16QAM	25	0	2124	2122	2122	
10	16QAM	25	12	2118	2114	2124	
10	16QAM	25	25	2135	2131	2134	23
10	16QAM	50	0	2126	2117	2115	
10	64QAM	1	0	2119	2130	2134	
10	64QAM	1	25	2122	2121	2127	23
10	64QAM	1	49	2128	2121	2121	
10	64QAM	25	0	2111	2092	2107	
10	64QAM	25	12	2104	2109	2113	22
10	64QAM	25	25	2110	2114	2107	
10	64QAM	50	0	2109	2120	2097	
Channel				20775	21100	21425	Tune-up limit (dBm)
Frequency (MHz)				2502.5	2535	2567.5	
5	QPSK	1	0	2139	2136	2135	23.1
5	QPSK	1	12	2116	2135	2123	
5	QPSK	1	24	2124	2114	2121	
5	QPSK	12	0	2135	2134	2131	23.1
5	QPSK	12	7	2127	2126	2125	
5	QPSK	12	13	2129	2128	2123	
5	QPSK	25	0	2125	2130	2134	23.1
5	16QAM	1	0	2130	2113	2124	
5	16QAM	1	12	2133	2122	2116	
5	16QAM	1	24	2124	2136	2134	23
5	16QAM	12	0	2124	2128	2123	
5	16QAM	12	7	2111	2117	2127	
5	16QAM	12	13	2137	2132	2131	23
5	16QAM	25	0	2124	2118	2111	
5	64QAM	1	0	2128	2125	2136	
5	64QAM	1	12	2126	2120	2132	23
5	64QAM	1	24	2120	2123	2114	
5	64QAM	12	0	2114	2097	2113	
5	64QAM	12	7	2111	2110	2109	22
5	64QAM	12	13	2115	2113	2114	
5	64QAM	25	0	2106	2120	2096	



Band 12							
Art 0							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				2300	2306	2330	
Frequency (MHz)				704	707.5	711	
10	QPSK	1	0	24.32	24.27	24.27	25
10	QPSK	1	25	24.30	24.30	24.33	
10	QPSK	1	49	24.37	24.38	24.31	
10	QPSK	25	0	23.43	23.46	23.43	24
10	QPSK	25	12	23.50	23.42	23.45	
10	QPSK	25	25	23.51	23.53	23.50	
10	QPSK	50	0	23.52	23.46	23.47	24
10	16QAM	1	0	23.73	23.65	23.64	
10	16QAM	1	25	23.70	23.72	23.69	
10	16QAM	1	49	23.77	23.74	23.72	23
10	16QAM	25	0	22.44	22.46	22.47	
10	16QAM	25	12	22.51	22.47	22.46	
10	16QAM	25	25	22.49	22.51	22.51	23
10	16QAM	50	0	22.53	22.47	22.44	
10	64QAM	1	0	22.63	22.47	22.49	
10	64QAM	1	25	22.61	22.64	22.61	22
10	64QAM	1	49	22.67	22.60	22.60	
10	64QAM	25	0	21.46	21.47	21.46	
10	64QAM	25	12	21.56	21.49	21.49	22
10	64QAM	25	25	21.51	21.55	21.53	
10	64QAM	50	0	21.55	21.48	21.49	
Channel				2306	2306	23105	Tune-up limit (dBm)
Frequency (MHz)				701.5	707.5	713.5	
5	QPSK	1	0	24.31	24.26	24.21	25
5	QPSK	1	12	24.22	24.21	24.24	
5	QPSK	1	24	24.36	24.30	24.25	
5	QPSK	12	0	23.40	23.46	23.42	24
5	QPSK	12	7	23.46	23.40	23.41	
5	QPSK	12	13	23.48	23.43	23.46	
5	QPSK	25	0	23.48	23.42	23.47	24
5	16QAM	1	0	23.71	23.63	23.59	
5	16QAM	1	12	23.69	23.62	23.61	
5	16QAM	1	24	23.76	23.72	23.65	23
5	16QAM	12	0	22.34	22.38	22.43	
5	16QAM	12	7	22.46	22.43	22.43	
5	16QAM	12	13	22.39	22.43	22.45	23
5	16QAM	25	0	22.47	22.44	22.36	
5	64QAM	1	0	22.46	22.46	22.49	
5	64QAM	1	12	22.58	22.51	22.57	22
5	64QAM	1	24	22.63	22.50	22.54	
5	64QAM	12	0	21.38	21.40	21.46	
5	64QAM	12	7	21.55	21.46	21.45	22
5	64QAM	12	13	21.46	21.51	21.43	
5	64QAM	25	0	21.49	21.38	21.41	
Channel				2306	2306	23105	Tune-up limit (dBm)
Frequency (MHz)				700.5	707.5	714.5	
3	QPSK	1	0	24.28	24.17	24.21	25
3	QPSK	1	8	24.20	24.29	24.27	
3	QPSK	1	14	24.32	24.28	24.23	
3	QPSK	8	0	23.40	23.38	23.39	24
3	QPSK	8	4	23.44	23.41	23.40	
3	QPSK	8	7	23.41	23.42	23.50	
3	QPSK	15	0	23.42	23.38	23.38	24
3	16QAM	1	0	23.71	23.66	23.63	
3	16QAM	1	8	23.61	23.68	23.63	
3	16QAM	1	14	23.73	23.73	23.72	23
3	16QAM	8	0	22.41	22.37	22.41	
3	16QAM	8	4	22.42	22.45	22.45	
3	16QAM	8	7	22.46	22.43	22.51	23
3	16QAM	15	0	22.51	22.45	22.43	
3	64QAM	1	0	22.46	22.37	22.40	
3	64QAM	1	8	22.56	22.60	22.56	22
3	64QAM	1	14	22.59	22.51	22.60	
3	64QAM	8	0	21.40	21.37	21.47	
3	64QAM	8	4	21.48	21.43	21.49	22
3	64QAM	8	7	21.51	21.54	21.44	
3	64QAM	15	0	21.54	21.45	21.41	
Channel				2317	2306	23173	Tune-up limit (dBm)
Frequency (MHz)				699.7	707.5	716.3	
1.4	QPSK	1	0	24.29	24.18	24.23	25
1.4	QPSK	1	3	24.24	24.30	24.29	
1.4	QPSK	1	5	24.29	24.28	24.27	
1.4	QPSK	3	0	24.23	24.11	24.15	24
1.4	QPSK	3	1	24.14	24.22	24.23	
1.4	QPSK	3	3	24.19	24.18	24.22	
1.4	QPSK	6	0	23.51	23.37	23.41	24
1.4	16QAM	1	0	23.69	23.60	23.63	
1.4	16QAM	1	3	23.66	23.68	23.65	
1.4	16QAM	1	5	23.75	23.69	23.66	24
1.4	16QAM	3	0	23.65	23.50	23.63	
1.4	16QAM	3	1	23.62	23.63	23.61	
1.4	16QAM	3	3	23.69	23.62	23.58	23
1.4	16QAM	6	0	22.44	22.44	22.35	
1.4	64QAM	1	0	22.48	22.47	22.48	
1.4	64QAM	1	3	22.55	22.61	22.61	23
1.4	64QAM	1	5	22.58	22.53	22.57	
1.4	64QAM	3	0	22.38	22.40	22.40	
1.4	64QAM	3	1	22.51	22.59	22.52	22
1.4	64QAM	3	3	22.58	22.53	22.53	
1.4	64QAM	6	0	21.50	21.38	21.46	



Band 13							
Art 0							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				23230			
Frequency (MHz)				782			
10	QPSK	1	0	24.52			25
10	QPSK	1	25	24.48			
10	QPSK	1	49	24.45			
10	QPSK	25	0	23.54			24
10	QPSK	25	12	23.58			
10	QPSK	25	25	23.61			
10	QPSK	50	0	23.60			24
10	16QAM	1	0	23.79			
10	16QAM	1	25	23.82			
10	16QAM	1	49	23.82			23
10	16QAM	25	0	22.56			
10	16QAM	25	12	22.62			
10	16QAM	25	25	22.63			23
10	16QAM	50	0	22.58			
10	64QAM	1	0	22.74			
10	64QAM	1	25	22.72			23
10	64QAM	1	49	22.75			
10	64QAM	25	0	21.58			
10	64QAM	25	12	21.64			22
10	64QAM	25	25	21.64			
10	64QAM	50	0	21.59			
Channel				23205	23230	23255	Tune-up limit (dBm)
Frequency (MHz)				779.5	782	784.5	
5	QPSK	1	0	24.38	24.36	24.39	25
5	QPSK	1	12	24.43	24.48	24.40	
5	QPSK	1	24	24.47	24.48	24.42	
5	QPSK	12	0	23.53	23.45	23.50	24
5	QPSK	12	7	23.56	23.56	23.47	
5	QPSK	12	13	23.57	23.60	23.54	
5	QPSK	25	0	23.51	23.55	23.59	24
5	16QAM	1	0	23.69	23.74	23.76	
5	16QAM	1	12	23.81	23.72	23.77	
5	16QAM	1	24	23.80	23.72	23.73	23
5	16QAM	12	0	22.51	22.50	22.53	
5	16QAM	12	7	22.54	22.55	22.60	
5	16QAM	12	13	22.61	22.56	22.60	23
5	16QAM	25	0	22.50	22.52	22.56	
5	64QAM	1	0	22.71	22.65	22.72	
5	64QAM	1	12	22.71	22.65	22.64	23
5	64QAM	1	24	22.75	22.65	22.66	
5	64QAM	12	0	21.55	21.50	21.51	
5	64QAM	12	7	21.58	21.63	21.56	22
5	64QAM	12	13	21.63	21.57	21.59	
5	64QAM	25	0	21.59	21.49	21.59	



Band 14							
Art 0							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch./Freq.	Power Middle Ch./Freq.	Power High Ch./Freq.	Tune-up limit (dBm)
Channel				23330			
Frequency (MHz)				793			
10	QPSK	1	0	24.45			25
10	QPSK	1	25	24.40			
10	QPSK	1	49	24.35			
10	QPSK	25	0	23.49			24
10	QPSK	25	12	23.52			
10	QPSK	25	25	23.56			
10	QPSK	50	0	23.48			24
10	16QAM	1	0	23.89			
10	16QAM	1	25	23.76			
10	16QAM	1	49	23.76			23
10	16QAM	25	0	22.50			
10	16QAM	25	12	22.51			
10	16QAM	25	25	22.54			23
10	16QAM	50	0	22.48			
10	64QAM	1	0	22.70			
10	64QAM	1	25	22.76			23
10	64QAM	1	49	22.63			
10	64QAM	25	0	21.53			
10	64QAM	25	12	21.53			22
10	64QAM	25	25	21.59			
10	64QAM	50	0	21.51			
Channel				23305	23330	23355	Tune-up limit (dBm)
Frequency (MHz)				790.5	793	795.5	
5	QPSK	1	0	24.38	24.44	24.43	25
5	QPSK	1	12	24.41	24.36	24.42	
5	QPSK	1	24	24.30	24.27	24.31	
5	QPSK	12	0	23.39	23.43	23.43	24
5	QPSK	12	7	23.49	23.44	23.47	
5	QPSK	12	13	23.55	23.46	23.55	
5	QPSK	25	0	23.42	23.43	23.48	24
5	16QAM	1	0	23.82	23.81	23.87	
5	16QAM	1	12	23.68	23.68	23.69	
5	16QAM	1	24	23.70	23.70	23.76	23
5	16QAM	12	0	22.50	22.41	22.41	
5	16QAM	12	7	22.41	22.50	22.46	
5	16QAM	12	13	22.51	22.49	22.51	23
5	16QAM	25	0	22.41	22.48	22.39	
5	64QAM	1	0	22.70	22.81	22.85	
5	64QAM	1	12	22.75	22.68	22.75	23
5	64QAM	1	24	22.60	22.63	22.54	
5	64QAM	12	0	21.51	21.47	21.46	
5	64QAM	12	7	21.44	21.47	21.47	22
5	64QAM	12	13	21.50	21.54	21.54	
5	64QAM	25	0	21.42	21.49	21.51	



Band 17								
Art 0								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	
Channel				2370	2370	2380		
Frequency (MHz)				709	710	711		
10	QPSK	1	0	24.28	24.29	24.25	25	
10	QPSK	1	25	24.33	24.32	24.31		
10	QPSK	1	49	24.38	24.37	24.32		
10	QPSK	25	0	23.38	23.38	23.37	24	
10	QPSK	25	12	23.54	23.45	23.44		
10	QPSK	25	25	23.54	23.54	23.54		
10	QPSK	50	0	23.52	23.43	23.43	24	
10	16QAM	1	0	23.65	23.64	23.64		
10	16QAM	1	25	23.69	23.69	23.71		
10	16QAM	1	49	23.71	23.73	23.70	23	
10	16QAM	25	0	22.38	22.38	22.40		
10	16QAM	25	12	22.54	22.45	22.45		
10	16QAM	25	25	22.54	22.58	22.51	23	
10	16QAM	50	0	22.52	22.43	22.41		
10	64QAM	1	0	22.56	22.51	22.53		
10	64QAM	1	25	22.64	22.64	22.66	23	
10	64QAM	1	49	22.64	22.64	22.62		
10	64QAM	25	0	21.43	21.42	21.43		
10	64QAM	25	12	21.58	21.50	21.49	22	
10	64QAM	25	25	21.57	21.55	21.57		
10	64QAM	50	0	21.54	21.46	21.44		
Channel				2375	2370	2385	Tune-up limit (dBm)	
Frequency (MHz)				708.5	710	713.5		
5	QPSK	1	0	24.20	24.23	24.22	25	
5	QPSK	1	12	24.23	24.32	24.28		
5	QPSK	1	24	24.31	24.33	24.27		
5	QPSK	12	0	23.33	23.29	23.31	24	
5	QPSK	12	7	23.48	23.45	23.43		
5	QPSK	12	13	23.48	23.53	23.45		
5	QPSK	25	0	23.51	23.38	23.39	24	
5	16QAM	1	0	23.63	23.62	23.59		
5	16QAM	1	12	23.68	23.61	23.68		
5	16QAM	1	24	23.68	23.73	23.65	23	
5	16QAM	12	0	22.34	22.29	22.31		
5	16QAM	12	7	22.44	22.35	22.45		
5	16QAM	12	13	22.54	22.55	22.45	23	
5	16QAM	25	0	22.42	22.42	22.36		
5	64QAM	1	0	22.48	22.44	22.53		
5	64QAM	1	12	22.60	22.54	22.62	23	
5	64QAM	1	24	22.61	22.54	22.54		
5	64QAM	12	0	21.35	21.36	21.37		
5	64QAM	12	7	21.49	21.49	21.46	22	
5	64QAM	12	13	21.55	21.47	21.54		
5	64QAM	25	0	21.52	21.42	21.43		



Band 30							
Art 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				277.0			
Frequency (MHz)				2310			
10	QPSK	1	0		21.15		22.9
10	QPSK	1	25		21.16		
10	QPSK	1	49		21.11		
10	QPSK	25	0		20.91		22.9
10	QPSK	25	12		20.93		
10	QPSK	25	25		20.94		
10	QPSK	50	0		20.98		22.9
10	16QAM	1	0		20.99		
10	16QAM	1	25		20.96		
10	16QAM	1	49		20.91		22.9
10	16QAM	25	0		20.94		
10	16QAM	25	12		20.95		
10	16QAM	25	25		20.92		22.9
10	16QAM	50	0		20.94		
10	64QAM	1	0		21.03		
10	64QAM	1	25		21.12		22.9
10	64QAM	1	49		20.99		
10	64QAM	25	0		20.93		
10	64QAM	25	12		20.92		22
10	64QAM	25	25		20.93		
10	64QAM	50	0		20.91		
Channel				278.5	277.0	277.5	Tune-up limit (dBm)
Frequency (MHz)				2307.5	2310	2312.5	
5	QPSK	1	0	20.96	20.94	20.94	22.9
5	QPSK	1	12	20.94	20.95	20.94	
5	QPSK	1	24	20.98	20.97	20.92	
5	QPSK	12	0	20.92	20.92	20.95	22.9
5	QPSK	12	7	20.98	20.97	20.99	
5	QPSK	12	13	20.94	20.90	20.93	
5	QPSK	25	0	20.95	20.97	20.92	22.9
5	16QAM	1	0	20.91	20.92	20.92	
5	16QAM	1	12	20.92	20.91	20.98	
5	16QAM	1	24	20.90	20.92	20.92	22.9
5	16QAM	12	0	20.98	20.92	20.98	
5	16QAM	12	7	20.94	20.90	20.98	
5	16QAM	12	13	20.96	20.92	20.92	22.9
5	16QAM	25	0	20.93	20.98	20.94	
5	64QAM	1	0	21.00	20.96	21.04	
5	64QAM	1	12	21.10	21.06	21.11	22.9
5	64QAM	1	24	21.01	20.96	21.02	
5	64QAM	12	0	20.95	20.97	20.98	
5	64QAM	12	7	20.97	20.91	20.88	22
5	64QAM	12	13	20.91	20.97	20.88	
5	64QAM	25	0	20.90	20.95	20.95	



Band 71							
Art 0							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)
Channel				133222	133222	133272	
Frequency (MHz)				673	683	688	
20	QPSK	1	0	24.41	24.33	24.29	25
20	QPSK	1	49	24.30	24.32	24.32	
20	QPSK	1	99	24.34	24.33	24.28	
20	QPSK	50	0	23.98	23.49	23.45	24
20	QPSK	50	24	23.53	23.43	23.44	
20	QPSK	50	50	23.49	23.41	23.40	
20	QPSK	100	0	23.50	23.46	23.43	24
20	16QAM	1	0	23.77	23.66	23.61	
20	16QAM	1	49	23.65	23.69	23.67	
20	16QAM	1	99	23.67	23.70	23.56	23
20	16QAM	50	0	22.47	22.40	22.40	
20	16QAM	50	24	22.50	22.43	22.43	
20	16QAM	50	50	22.50	22.52	22.51	23
20	16QAM	100	0	22.49	22.42	22.47	
20	64QAM	1	0	22.58	22.44	22.45	
20	64QAM	1	49	22.54	22.54	22.55	23
20	64QAM	1	99	22.58	22.57	22.50	
20	64QAM	50	0	21.48	21.41	21.41	
20	64QAM	50	24	21.53	21.48	21.47	22
20	64QAM	50	50	21.49	21.54	21.55	
20	64QAM	100	0	21.52	21.41	21.49	
Channel				133197	133207	133397	Tune-up limit (dBm)
Frequency (MHz)				670.5	680.5	690.5	
15	QPSK	1	0	24.35	24.19	24.27	25
15	QPSK	1	37	24.23	24.29	24.26	
15	QPSK	1	74	24.34	24.28	24.20	
15	QPSK	36	0	23.39	23.31	23.33	24
15	QPSK	36	20	23.46	23.40	23.41	
15	QPSK	36	39	23.49	23.43	23.45	
15	QPSK	75	0	23.40	23.36	23.45	24
15	16QAM	1	0	23.73	23.62	23.53	
15	16QAM	1	37	23.58	23.63	23.59	
15	16QAM	1	74	23.66	23.69	23.51	23
15	16QAM	36	0	22.38	22.34	22.33	
15	16QAM	36	20	22.40	22.38	22.40	
15	16QAM	36	39	22.42	22.44	22.43	23
15	16QAM	75	0	22.45	22.40	22.42	
15	64QAM	1	0	22.63	22.36	22.45	
15	64QAM	1	37	22.45	22.54	22.54	23
15	64QAM	1	74	22.52	22.52	22.40	
15	64QAM	36	0	21.39	21.35	21.33	
15	64QAM	36	20	21.52	21.48	21.40	22
15	64QAM	36	39	21.41	21.53	21.50	
15	64QAM	75	0	21.45	21.32	21.48	
Channel				133172	133272	133422	Tune-up limit (dBm)
Frequency (MHz)				668	678	683	
10	QPSK	1	0	24.32	24.26	24.27	25
10	QPSK	1	25	24.27	24.31	24.25	
10	QPSK	1	49	24.26	24.23	24.21	
10	QPSK	25	0	23.39	23.34	23.31	24
10	QPSK	25	12	23.51	23.38	23.38	
10	QPSK	25	25	23.47	23.43	23.45	
10	QPSK	50	0	23.41	23.34	23.42	24
10	16QAM	1	0	23.69	23.67	23.54	
10	16QAM	1	25	23.59	23.65	23.67	
10	16QAM	1	49	23.59	23.63	23.57	23
10	16QAM	25	0	22.42	22.40	22.40	
10	16QAM	25	12	22.43	22.39	22.43	
10	16QAM	25	25	22.43	22.43	22.50	23
10	16QAM	50	0	22.46	22.40	22.45	
10	64QAM	1	0	22.48	22.36	22.40	
10	64QAM	1	25	22.50	22.52	22.50	23
10	64QAM	1	49	22.58	22.53	22.49	
10	64QAM	25	0	21.42	21.41	21.37	
10	64QAM	25	12	21.48	21.48	21.42	22
10	64QAM	25	25	21.39	21.46	21.46	
10	64QAM	50	0	21.50	21.36	21.48	
Channel				133147	133247	133447	Tune-up limit (dBm)
Frequency (MHz)				665.5	675.5	685.5	
5	QPSK	1	0	24.36	24.21	24.19	25
5	QPSK	1	12	24.24	24.27	24.29	
5	QPSK	1	24	24.28	24.23	24.21	
5	QPSK	12	0	23.42	23.37	23.35	24
5	QPSK	12	7	23.51	23.36	23.43	
5	QPSK	12	13	23.44	23.42	23.47	
5	QPSK	25	0	23.45	23.35	23.40	24
5	16QAM	1	0	23.72	23.61	23.54	
5	16QAM	1	12	23.56	23.69	23.67	
5	16QAM	1	24	23.58	23.62	23.55	23
5	16QAM	12	0	22.44	22.38	22.38	
5	16QAM	12	7	22.45	22.33	22.33	
5	16QAM	12	13	22.43	22.51	22.48	23
5	16QAM	25	0	22.41	22.39	22.40	
5	64QAM	1	0	22.49	22.36	22.40	
5	64QAM	1	12	22.47	22.52	22.55	23
5	64QAM	1	24	22.54	22.47	22.48	
5	64QAM	12	0	21.48	21.36	21.36	
5	64QAM	12	7	21.45	21.47	21.44	22
5	64QAM	12	13	21.45	21.47	21.53	
5	64QAM	25	0	21.42	21.37	21.49	



Band 2							
Ann 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)
Channel				1870.0	1890.0	1910.0	Tune-up limit (dBm)
Frequency (MHz)				1860	1880	1900	
20	QPSK	1	0	24.78	24.77	24.84	25
20	QPSK	1	49	24.78	24.73	24.63	
20	QPSK	1	99	24.68	24.71	24.74	
20	QPSK	50	0	23.83	23.79	23.78	24
20	QPSK	50	24	23.84	23.81	23.81	
20	QPSK	50	50	23.90	23.89	23.81	
20	QPSK	100	0	23.85	23.89	23.80	24
20	16QAM	1	0	23.90	23.90	23.81	
20	16QAM	1	49	23.90	23.90	23.88	
20	16QAM	1	99	23.86	23.85	23.83	23
20	16QAM	50	0	22.85	22.81	22.83	
20	16QAM	50	24	22.84	22.90	22.83	
20	16QAM	50	50	22.82	22.90	22.82	23
20	16QAM	100	0	22.84	22.88	22.81	
20	64QAM	1	0	22.89	22.82	22.88	
20	64QAM	1	49	22.84	22.85	21.93	22
20	64QAM	1	99	22.25	22.88	22.90	
20	64QAM	50	0	21.87	21.82	21.17	
20	64QAM	50	24	21.87	21.84	21.10	22
20	64QAM	50	50	21.35	21.81	21.78	
20	64QAM	100	0	21.69	21.90	21.41	
Channel				1867.5	1890.0	1910.5	Tune-up limit (dBm)
Frequency (MHz)				1867.5	1880	1902.5	
15	QPSK	1	0	24.69	24.76	24.83	25
15	QPSK	1	37	24.78	24.70	24.53	
15	QPSK	1	74	24.64	24.64	24.74	
15	QPSK	36	0	23.79	23.77	23.75	24
15	QPSK	36	20	23.80	23.81	23.80	
15	QPSK	36	39	23.84	23.89	23.88	
15	QPSK	75	0	23.83	23.81	23.78	24
15	16QAM	1	0	23.84	23.80	23.80	
15	16QAM	1	37	23.87	23.89	23.78	
15	16QAM	1	74	23.86	22.82	23.89	23
15	16QAM	36	0	22.82	22.72	22.83	
15	16QAM	36	20	22.84	22.87	22.82	
15	16QAM	36	39	22.88	22.80	22.82	23
15	16QAM	75	0	22.82	22.88	22.79	
15	64QAM	1	0	22.83	22.79	22.90	
15	64QAM	1	37	22.74	22.81	21.85	22
15	64QAM	1	74	22.17	22.84	22.81	
15	64QAM	36	0	21.82	21.73	21.10	
15	64QAM	36	20	21.84	21.89	21.10	22
15	64QAM	36	39	21.26	21.81	21.77	
15	64QAM	75	0	21.65	21.80	21.36	
Channel				1865.0	1890.0	1915.0	Tune-up limit (dBm)
Frequency (MHz)				1865.0	1880	1905.0	
10	QPSK	1	0	24.77	24.76	24.77	25
10	QPSK	1	25	24.70	24.64	24.63	
10	QPSK	1	49	24.68	24.64	24.70	
10	QPSK	25	0	23.78	23.73	23.78	24
10	QPSK	25	12	23.80	23.86	23.80	
10	QPSK	25	25	23.81	23.88	23.86	
10	QPSK	50	0	22.81	23.82	23.77	24
10	16QAM	1	0	23.90	23.89	23.84	
10	16QAM	1	25	23.83	23.83	23.85	
10	16QAM	1	49	23.86	23.85	23.89	23
10	16QAM	25	0	22.85	22.72	22.83	
10	16QAM	25	12	22.87	22.86	22.78	
10	16QAM	25	25	22.89	22.89	22.89	23
10	16QAM	50	0	22.86	22.78	22.80	
10	64QAM	1	0	22.90	22.75	22.83	
10	64QAM	1	25	22.79	22.83	21.83	22
10	64QAM	1	49	22.23	22.87	22.89	
10	64QAM	25	0	21.85	21.81	21.08	
10	64QAM	25	12	21.79	21.83	21.07	22
10	64QAM	25	25	21.25	21.89	21.72	
10	64QAM	50	0	21.61	21.80	21.39	
Channel				1862.5	1890.0	1917.5	Tune-up limit (dBm)
Frequency (MHz)				1862.5	1880	1907.5	
5	QPSK	1	0	24.69	24.71	24.77	25
5	QPSK	1	12	24.78	24.68	24.63	
5	QPSK	1	24	24.63	24.66	24.64	
5	QPSK	12	0	23.77	23.75	23.68	24
5	QPSK	12	7	23.85	23.86	23.78	
5	QPSK	12	13	23.84	23.86	23.82	
5	QPSK	25	0	23.89	23.89	23.78	24
5	16QAM	1	0	23.81	23.83	23.89	
5	16QAM	1	12	23.89	23.86	23.78	
5	16QAM	1	24	23.82	23.83	23.84	23
5	16QAM	12	0	22.85	22.80	22.78	
5	16QAM	12	7	22.84	22.80	22.73	
5	16QAM	12	13	22.84	22.87	22.86	23
5	16QAM	25	0	22.87	22.83	22.78	
5	64QAM	1	0	22.90	22.74	22.85	
5	64QAM	1	12	22.79	22.85	21.86	22
5	64QAM	1	24	22.18	22.84	22.86	
5	64QAM	12	0	21.82	21.75	21.14	
5	64QAM	12	7	21.81	21.85	21.08	22
5	64QAM	12	13	21.29	21.82	21.70	
5	64QAM	25	0	21.63	21.80	21.39	
Channel				1860.0	1890.0	1918.0	Tune-up limit (dBm)
Frequency (MHz)				1860.0	1880	1908.0	
3	QPSK	1	0	24.78	24.71	24.81	25
3	QPSK	1	8	24.75	24.67	24.58	
3	QPSK	1	14	24.61	24.70	24.74	
3	QPSK	8	0	23.73	23.75	23.68	24
3	QPSK	8	4	23.86	23.84	23.78	
3	QPSK	8	7	23.90	23.87	23.85	
3	QPSK	15	0	23.85	23.84	23.73	24
3	16QAM	1	0	23.84	23.80	23.87	
3	16QAM	1	8	23.86	23.81	23.85	
3	16QAM	1	14	23.86	22.81	22.81	23
3	16QAM	8	0	22.85	22.77	22.77	
3	16QAM	8	4	22.81	22.84	22.81	
3	16QAM	8	7	22.88	22.80	22.83	23
3	16QAM	15	0	22.84	22.80	22.77	
3	64QAM	1	0	22.87	22.72	22.83	
3	64QAM	1	8	22.81	22.82	21.83	22
3	64QAM	1	14	22.25	22.87	22.88	
3	64QAM	8	0	21.87	21.80	21.10	
3	64QAM	8	4	21.86	21.87	21.01	22
3	64QAM	8	7	21.27	21.81	21.70	
3	64QAM	15	0	21.70	21.85	21.39	
Channel				1860.7	1890.0	1919.3	Tune-up limit (dBm)
Frequency (MHz)				1860.7	1880	1909.3	
1.4	QPSK	1	0	24.75	24.76	24.83	25
1.4	QPSK	1	3	24.77	24.69	24.57	
1.4	QPSK	1	5	24.67	24.63	24.67	
1.4	QPSK	3	0	24.75	24.73	24.63	24
1.4	QPSK	3	1	24.67	24.60	24.47	
1.4	QPSK	3	3	24.59	24.63	24.60	
1.4	QPSK	6	0	23.86	23.84	23.76	24
1.4	16QAM	1	0	23.80	23.82	23.82	
1.4	16QAM	1	3	23.84	23.85	23.80	
1.4	16QAM	1	5	23.85	23.89	23.90	23
1.4	16QAM	3	0	23.80	23.82	23.72	
1.4	16QAM	3	1	23.81	23.83	23.76	
1.4	16QAM	3	3	23.82	23.79	23.81	23
1.4	16QAM	6	0	22.87	22.82	22.72	
1.4	64QAM	1	0	22.81	22.76	22.82	
1.4	64QAM	1	3	22.79	22.86	21.87	23
1.4	64QAM	1	5	22.25	22.82	22.90	
1.4	64QAM	3	0	22.90	22.67	22.86	
1.4	64QAM	3	1	22.76	22.87	21.79	22
1.4	64QAM	3	3	22.20	22.82	22.85	
1.4	64QAM	6	0	21.86	21.82	21.37	



Band 5									
Art 1									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch./ Freq.	Power Middle Ch./ Freq.	Power High Ch./ Freq.	Tune-up limit (dBm)		
Channel				20450	20525	20600			
Frequency (MHz)				825	836.5	844			
10	QPSK	1	0	24.29	24.26	24.33	25		
10	QPSK	1	25	24.18	24.17	24.22			
10	QPSK	1	49	24.19	24.23	24.13			
10	QPSK	25	0	23.30	23.32	23.30	24		
10	QPSK	25	12	23.38	23.33	23.30			
10	QPSK	25	25	23.34	23.36	23.35			
10	QPSK	50	0	23.39	23.39	23.32	24		
10	16QAM	1	0	23.66	23.63	23.61			
10	16QAM	1	25	23.58	23.59	23.57			
10	16QAM	1	49	23.58	23.56	23.53	23		
10	16QAM	25	0	22.32	22.33	22.29			
10	16QAM	25	12	22.39	22.29	22.30			
10	16QAM	25	25	22.36	22.35	22.39	23		
10	16QAM	50	0	22.39	22.37	22.30			
10	64QAM	1	0	22.50	22.50	22.46			
10	64QAM	1	25	22.54	22.57	22.53	23		
10	64QAM	1	49	22.48	22.48	22.51			
10	64QAM	25	0	21.34	21.35	21.33			
10	64QAM	25	12	21.42	21.38	21.36	22		
10	64QAM	25	25	21.38	21.40	21.13			
10	64QAM	50	0	21.45	21.41	21.21			
Channel				20452	20525	20625	Tune-up limit (dBm)		
Frequency (MHz)				826.5	836.5	846.5			
5	QPSK	1	0	24.24	24.22	24.19	25		
5	QPSK	1	12	24.11	24.16	24.16			
5	QPSK	1	24	24.19	24.14	24.12			
5	QPSK	12	0	23.24	23.27	23.24	24		
5	QPSK	12	7	23.35	23.31	23.29			
5	QPSK	12	13	23.30	23.30	23.33			
5	QPSK	25	0	23.31	23.38	23.26	24		
5	16QAM	1	0	23.64	23.60	23.60			
5	16QAM	1	12	23.50	23.53	23.56			
5	16QAM	1	24	23.58	23.55	23.53	23		
5	16QAM	12	0	22.32	22.32	22.54			
5	16QAM	12	7	22.30	22.28	22.23			
5	16QAM	12	13	22.26	22.30	22.36	23		
5	16QAM	25	0	22.34	22.34	22.27			
5	64QAM	1	0	22.44	22.43	22.38			
5	64QAM	1	12	22.45	22.53	22.47	23		
5	64QAM	1	24	22.45	22.49	21.61			
5	64QAM	12	0	21.28	21.35	21.29			
5	64QAM	12	7	21.33	21.32	21.28	22		
5	64QAM	12	13	21.33	21.31	21.09			
5	64QAM	25	0	21.41	21.36	21.16			
Channel				20415	20525	20635	Tune-up limit (dBm)		
Frequency (MHz)				825.5	836.5	847.5			
3	QPSK	1	0	24.25	24.25	24.29	25		
3	QPSK	1	8	24.12	24.13	24.21			
3	QPSK	1	14	24.13	24.14	24.10			
3	QPSK	8	0	23.26	23.26	23.29	24		
3	QPSK	8	4	23.30	23.25	23.26			
3	QPSK	8	7	23.24	23.34	23.26			
3	QPSK	16	0	23.31	23.29	23.22	24		
3	16QAM	1	0	23.62	23.54	23.54			
3	16QAM	1	8	23.48	23.54	23.50			
3	16QAM	1	14	23.56	23.54	23.50	24		
3	16QAM	8	0	22.29	22.30	22.25			
3	16QAM	8	4	22.38	22.22	22.25			
3	16QAM	8	7	22.30	22.35	22.37	23		
3	16QAM	16	0	22.37	22.36	22.29			
3	64QAM	1	0	22.47	22.44	22.37			
3	64QAM	1	8	22.48	22.57	22.53	22		
3	64QAM	1	14	22.45	22.45	21.68			
3	64QAM	8	0	21.29	21.29	21.27			
3	64QAM	8	4	21.38	21.32	21.33	22		
3	64QAM	8	7	21.31	21.37	21.06			
3	64QAM	16	0	21.43	21.37	21.12			
Channel				20407	20525	20543	Tune-up limit (dBm)		
Frequency (MHz)				824.7	836.5	848.3			
1.4	QPSK	1	0	24.27	24.26	24.21	25		
1.4	QPSK	1	3	24.13	24.16	24.21			
1.4	QPSK	1	5	24.16	24.18	24.13			
1.4	QPSK	3	0	24.19	24.26	24.12	24		
1.4	QPSK	3	1	24.03	24.09	24.13			
1.4	QPSK	3	3	24.15	24.17	24.04			
1.4	QPSK	6	0	23.33	23.30	23.26	24		
1.4	16QAM	1	0	23.66	23.56	23.52			
1.4	16QAM	1	3	23.49	23.51	23.47			
1.4	16QAM	1	5	23.49	23.49	23.49	24		
1.4	16QAM	3	0	23.61	23.46	23.50			
1.4	16QAM	3	1	23.43	23.47	23.40			
1.4	16QAM	3	3	23.42	23.47	23.44	23		
1.4	16QAM	6	0	22.31	22.30	22.29			
1.4	64QAM	1	0	22.43	22.42	22.40			
1.4	64QAM	1	3	22.47	22.55	22.52	23		
1.4	64QAM	1	5	22.39	22.49	21.69			
1.4	64QAM	3	0	22.42	22.37	22.34			
1.4	64QAM	3	1	22.44	22.47	22.42	23		
1.4	64QAM	3	3	22.36	22.44	21.60			
1.4	64QAM	6	0	21.35	21.38	21.14			



Band 7							
Art 0							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				2050	2100	2150	
Frequency (MHz)				2510	2535	2560	
20	QPSK	1	0	24.57	24.58	23.68	25
20	QPSK	1	49	24.54	24.55	23.54	
20	QPSK	1	99	24.58	24.62	24.68	
20	QPSK	50	0	23.63	23.67	23.29	24
20	QPSK	50	24	23.68	23.64	23.51	
20	QPSK	50	50	23.54	23.48	23.53	
20	QPSK	100	0	23.59	23.63	23.45	24
20	16QAM	1	0	23.68	23.62	23.05	
20	16QAM	1	49	23.41	23.63	22.78	
20	16QAM	1	99	23.55	23.66	23.69	23
20	16QAM	50	0	22.61	22.66	21.37	
20	16QAM	50	24	22.60	22.65	21.73	
20	16QAM	50	50	22.56	22.50	22.68	23
20	16QAM	100	0	22.69	22.64	22.02	
20	64QAM	1	0	22.68	22.67	21.14	
20	64QAM	1	49	22.40	22.47	21.68	23
20	64QAM	1	99	22.52	22.54	21.83	
20	64QAM	50	0	21.65	21.89	21.00	
20	64QAM	50	24	21.62	21.66	21.09	22
20	64QAM	50	50	21.69	21.64	20.66	
20	64QAM	100	0	20.91	20.92	20.05	
Channel				2565	2100	2137.5	Tune-up limit (dBm)
Frequency (MHz)				2507.5	2535	2562.5	
15	QPSK	1	0	23.61	23.68	23.67	25
15	QPSK	1	37	23.52	23.51	23.54	
15	QPSK	1	74	24.58	24.61	24.67	
15	QPSK	36	0	22.26	22.27	22.26	24
15	QPSK	36	20	22.65	22.65	22.61	
15	QPSK	36	39	23.43	23.50	23.50	
15	QPSK	75	0	22.90	22.87	22.93	24
15	16QAM	1	0	23.02	23.01	23.02	
15	16QAM	1	37	22.72	22.68	22.73	
15	16QAM	1	74	23.66	23.60	23.63	23
15	16QAM	36	0	21.28	21.31	21.30	
15	16QAM	36	20	21.68	21.73	21.73	
15	16QAM	36	39	22.61	22.60	22.67	23
15	16QAM	75	0	21.95	22.00	21.93	
15	64QAM	1	0	21.06	21.06	21.06	
15	64QAM	1	37	21.66	21.64	21.60	23
15	64QAM	1	74	21.74	21.73	21.74	
15	64QAM	36	0	20.83	21.00	20.99	
15	64QAM	36	20	21.09	21.04	20.99	22
15	64QAM	36	39	20.64	20.63	20.56	
15	64QAM	75	0	20.02	19.95	19.96	
Channel				2590	2100	2160	Tune-up limit (dBm)
Frequency (MHz)				2505	2535	2565	
10	QPSK	1	0	23.58	23.60	23.63	25
10	QPSK	1	25	23.54	23.44	23.53	
10	QPSK	1	49	24.63	24.60	24.67	
10	QPSK	25	0	22.28	22.27	22.21	24
10	QPSK	25	12	22.61	22.61	22.65	
10	QPSK	25	25	23.53	23.48	23.50	
10	QPSK	50	0	22.89	22.91	22.89	24
10	16QAM	1	0	22.95	23.04	23.03	
10	16QAM	1	25	22.68	22.69	22.75	
10	16QAM	1	49	23.60	23.65	23.69	23
10	16QAM	25	0	21.36	21.29	21.29	
10	16QAM	25	12	21.83	21.67	21.72	
10	16QAM	25	25	22.65	22.62	22.65	23
10	16QAM	50	0	22.02	21.92	21.92	
10	64QAM	1	0	21.09	21.09	21.05	
10	64QAM	1	25	21.66	21.64	21.60	23
10	64QAM	1	49	21.83	21.82	21.75	
10	64QAM	25	0	20.94	21.00	20.92	
10	64QAM	25	12	21.02	21.05	21.02	22
10	64QAM	25	25	20.66	20.63	20.60	
10	64QAM	50	0	20.05	19.95	19.96	
Channel				2577.5	2100	2162.5	Tune-up limit (dBm)
Frequency (MHz)				2502.5	2535	2567.5	
5	QPSK	1	0	23.58	23.65	23.64	25
5	QPSK	1	12	23.46	23.48	23.44	
5	QPSK	1	24	24.64	24.66	24.63	
5	QPSK	12	0	22.24	22.23	22.19	24
5	QPSK	12	7	22.67	22.68	22.69	
5	QPSK	12	13	23.43	23.44	23.43	
5	QPSK	25	0	22.91	22.86	22.91	24
5	16QAM	1	0	23.00	23.00	22.95	
5	16QAM	1	12	22.78	22.74	22.70	
5	16QAM	1	24	23.59	23.60	23.67	23
5	16QAM	12	0	21.31	21.31	21.30	
5	16QAM	12	7	21.73	21.71	21.68	
5	16QAM	12	13	22.65	22.62	22.65	23
5	16QAM	25	0	21.96	22.01	22.02	
5	64QAM	1	0	21.10	21.14	21.04	
5	64QAM	1	12	21.61	21.64	21.64	23
5	64QAM	1	24	21.82	21.83	21.79	
5	64QAM	12	0	20.99	20.98	20.94	
5	64QAM	12	7	21.03	20.99	21.04	22
5	64QAM	12	13	20.65	20.65	20.57	
5	64QAM	25	0	20.05	20.01	19.99	



Band 12										
Art 1										
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch./ Freq.	Power Middle Ch./ Freq.	Power High Ch./ Freq.	Tune-up limit (dBm)			
Channel				2300	2305	2310				
Frequency (MHz)				704	707.5	711				
10	QPSK	1	0	24.31	24.25	24.23	25			
10	QPSK	1	25	24.24	24.29	24.26				
10	QPSK	1	49	24.35	24.34	24.27				
10	QPSK	25	0	23.39	23.43	23.38	24			
10	QPSK	25	12	23.50	23.46	23.45				
10	QPSK	25	25	23.44	23.38	23.40				
10	QPSK	50	0	23.48	23.40	23.41	24			
10	16QAM	1	0	23.66	23.62	23.62				
10	16QAM	1	25	23.62	23.66	23.65				
10	16QAM	1	49	23.72	23.66	23.66	23			
10	16QAM	25	0	22.36	22.40	22.40				
10	16QAM	25	12	22.48	22.41	22.41				
10	16QAM	25	25	22.44	22.46	22.40	23			
10	16QAM	50	0	22.46	22.41	22.40				
10	64QAM	1	0	22.53	22.46	22.46				
10	64QAM	1	25	22.58	22.50	22.56	23			
10	64QAM	1	49	22.64	22.56	22.54				
10	64QAM	25	0	21.44	21.44	21.43				
10	64QAM	25	12	21.53	21.44	21.45	22			
10	64QAM	25	25	21.48	21.48	21.47				
10	64QAM	50	0	21.52	21.45	21.42		Tune-up limit (dBm)		
Channel				2305	2306	23105				
Frequency (MHz)				701.5	707.5	713.5				
5	QPSK	1	0	24.22	24.18	24.20	25			
5	QPSK	1	12	24.19	24.29	24.22				
5	QPSK	1	24	24.32	24.25	24.27				
5	QPSK	12	0	23.30	23.41	23.29	24			
5	QPSK	12	7	23.40	23.38	23.33				
5	QPSK	12	13	23.38	23.42	23.42				
5	QPSK	25	0	23.46	23.33	23.39	24			
5	16QAM	1	0	23.59	23.56	23.52				
5	16QAM	1	12	23.57	23.57	23.60				
5	16QAM	1	24	23.66	23.62	23.62	23			
5	16QAM	12	0	22.37	22.34	22.35				
5	16QAM	12	7	22.43	22.32	22.31				
5	16QAM	12	13	22.43	22.42	22.35	23			
5	16QAM	25	0	22.36	22.33	22.35				
5	64QAM	1	0	22.43	22.37	22.38				
5	64QAM	1	12	22.57	22.54	22.47	23			
5	64QAM	1	24	22.61	22.56	22.48				
5	64QAM	12	0	21.37	21.38	21.41				
5	64QAM	12	7	21.45	21.34	21.45	22			
5	64QAM	12	13	21.38	21.44	21.43				
5	64QAM	25	0	21.52	21.37	21.38		Tune-up limit (dBm)		
Channel				2306	2306	23105				
Frequency (MHz)				700.5	707.5	714.5				
3	QPSK	1	0	24.24	24.19	24.21	25			
3	QPSK	1	8	24.22	24.22	24.23				
3	QPSK	1	14	24.26	24.24	24.19				
3	QPSK	8	0	23.33	23.39	23.37	24			
3	QPSK	8	4	23.41	23.38	23.40				
3	QPSK	8	7	23.35	23.41	23.42				
3	QPSK	15	0	23.43	23.31	23.31	24			
3	16QAM	1	0	23.57	23.61	23.57				
3	16QAM	1	8	23.61	23.60	23.57				
3	16QAM	1	14	23.66	23.67	23.63	24			
3	16QAM	8	0	22.30	22.30	22.38				
3	16QAM	8	4	22.40	22.38	22.37				
3	16QAM	8	7	22.42	22.40	22.39	23			
3	16QAM	15	0	22.40	22.33	22.30				
3	64QAM	1	0	22.46	22.39	22.39				
3	64QAM	1	8	22.49	22.56	22.51	23			
3	64QAM	1	14	22.56	22.53	22.44				
3	64QAM	8	0	21.41	21.40	21.39				
3	64QAM	8	4	21.48	21.43	21.42	22			
3	64QAM	8	7	21.44	21.48	21.45				
3	64QAM	15	0	21.46	21.43	21.32		Tune-up limit (dBm)		
Channel				23017	23056	23173				
Frequency (MHz)				699.7	707.5	715.3				
1.4	QPSK	1	0	24.25	24.25	24.21	25			
1.4	QPSK	1	3	24.15	24.25	24.19				
1.4	QPSK	1	5	24.26	24.24	24.21				
1.4	QPSK	3	0	24.24	24.16	24.14	24			
1.4	QPSK	3	1	24.06	24.16	24.13				
1.4	QPSK	3	3	24.22	24.22	24.21				
1.4	QPSK	6	0	23.38	23.39	23.35	24			
1.4	16QAM	1	0	23.57	23.58	23.52				
1.4	16QAM	1	3	23.55	23.62	23.56				
1.4	16QAM	1	5	23.66	23.65	23.65	24			
1.4	16QAM	3	0	23.47	23.53	23.50				
1.4	16QAM	3	1	23.55	23.56	23.50				
1.4	16QAM	3	3	23.62	23.62	23.58	23			
1.4	16QAM	6	0	22.45	22.34	22.35				
1.4	64QAM	1	0	22.51	22.38	22.38				
1.4	64QAM	1	3	22.49	22.51	22.52	23			
1.4	64QAM	1	5	22.61	22.48	22.44				
1.4	64QAM	3	0	22.47	22.31	22.35				
1.4	64QAM	3	1	22.42	22.46	22.46	22			
1.4	64QAM	3	3	22.59	22.41	22.37				
1.4	64QAM	6	0	21.45	21.41	21.36				



Band 13							
Art 1							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				23230			
Frequency (MHz)				782			
10	QPSK	1	0		24.36		25
10	QPSK	1	25		24.38		
10	QPSK	1	49		24.47		
10	QPSK	25	0		23.43		24
10	QPSK	25	12		23.53		
10	QPSK	25	25		23.51		
10	QPSK	50	0		23.53		24
10	16QAM	1	0		23.71		
10	16QAM	1	25		23.74		
10	16QAM	1	49		23.74		23
10	16QAM	25	0		22.46		
10	16QAM	25	12		22.54		
10	16QAM	25	25		22.55		23
10	16QAM	50	0		22.50		
10	64QAM	1	0		22.65		
10	64QAM	1	25		22.71		22
10	64QAM	1	49		22.63		
10	64QAM	25	0		21.51		
10	64QAM	25	12		21.56		22
10	64QAM	25	25		21.56		
10	64QAM	50	0		21.53		
Channel				23205	23230	23255	Tune-up limit (dBm)
Frequency (MHz)				779.5	782	784.5	
5	QPSK	1	0	24.29	24.31	24.35	25
5	QPSK	1	12	24.30	24.32	24.33	
5	QPSK	1	24	24.43	24.42	24.45	
5	QPSK	12	0	23.42	23.43	23.40	24
5	QPSK	12	7	23.47	23.41	23.50	
5	QPSK	12	13	23.49	23.53	23.46	
5	QPSK	25	0	23.47	23.45	23.52	24
5	16QAM	1	0	23.66	23.66	23.62	
5	16QAM	1	12	23.65	23.70	23.68	
5	16QAM	1	24	23.64	23.74	23.67	23
5	16QAM	12	0	22.36	22.43	22.46	
5	16QAM	12	7	22.49	22.53	22.51	
5	16QAM	12	13	22.48	22.50	22.53	23
5	16QAM	25	0	22.47	22.40	22.49	
5	64QAM	1	0	22.60	22.56	22.56	
5	64QAM	1	12	22.67	22.65	22.65	22
5	64QAM	1	24	22.62	22.59	22.58	
5	64QAM	12	0	21.41	21.45	21.49	
5	64QAM	12	7	21.49	21.53	21.47	22
5	64QAM	12	13	21.56	21.53	21.55	
5	64QAM	25	0	21.48	21.46	21.47	



Band 14							
Art 1							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				23330			
Frequency (MHz)				793			
10	QPSK	1	0		24.41		25
10	QPSK	1	25		24.31		
10	QPSK	1	49		24.29		
10	QPSK	25	0		23.42		24
10	QPSK	25	12		23.41		
10	QPSK	25	25		23.47		
10	QPSK	50	0		23.40		24
10	16QAM	1	0		23.76		
10	16QAM	1	25		23.78		
10	16QAM	1	49		23.89		23
10	16QAM	25	0		22.40		
10	16QAM	25	12		22.44		
10	16QAM	25	25		22.45		23
10	16QAM	50	0		22.40		
10	64QAM	1	0		22.65		
10	64QAM	1	25		22.68		23
10	64QAM	1	49		22.59		
10	64QAM	25	0		21.45		
10	64QAM	25	12		21.48		22
10	64QAM	25	25		21.50		
10	64QAM	50	0		21.42		
Channel				23305	23330	23355	Tune-up limit (dBm)
Frequency (MHz)				790.5	793	795.5	
5	QPSK	1	0	24.39	24.32	24.35	25
5	QPSK	1	12	24.22	24.29	24.26	
5	QPSK	1	24	24.24	24.25	24.24	
5	QPSK	12	0	23.34	23.34	23.40	24
5	QPSK	12	7	23.34	23.33	23.38	
5	QPSK	12	13	23.44	23.43	23.48	
5	QPSK	25	0	23.37	23.31	23.32	24
5	16QAM	1	0	23.74	23.67	23.76	
5	16QAM	1	12	23.69	23.68	23.72	
5	16QAM	1	24	23.58	23.54	23.60	23
5	16QAM	12	0	22.30	22.32	22.35	
5	16QAM	12	7	22.38	22.34	22.44	
5	16QAM	12	13	22.36	22.36	22.36	23
5	16QAM	25	0	22.37	22.38	22.35	
5	64QAM	1	0	22.58	22.60	22.65	
5	64QAM	1	12	22.59	22.59	22.63	23
5	64QAM	1	24	22.53	22.51	22.48	
5	64QAM	12	0	21.38	21.43	21.37	
5	64QAM	12	7	21.47	21.39	21.47	22
5	64QAM	12	13	21.43	21.43	21.50	
5	64QAM	25	0	21.42	21.41	21.33	



Band 17							
Art 1							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)
Channel				23780	23790	23800	
Frequency (MHz)				708	710	711	
10	QPSK	1	0	24.24	24.16	24.23	25
10	QPSK	1	25	24.23	24.25	24.30	
10	QPSK	1	49	24.28	24.31	24.29	
10	QPSK	25	0	23.33	23.33	23.36	
10	QPSK	25	12	23.45	23.39	23.39	24
10	QPSK	25	25	23.48	23.50	23.48	
10	QPSK	50	0	23.47	23.38	23.37	
10	16QAM	1	0	23.59	23.61	23.61	
10	16QAM	1	25	23.64	23.68	23.68	24
10	16QAM	1	49	23.72	23.70	23.69	
10	16QAM	25	0	22.34	22.34	22.36	
10	16QAM	25	12	22.45	22.41	22.40	
10	16QAM	25	25	22.44	22.48	22.46	23
10	16QAM	50	0	22.46	22.39	22.38	
10	64QAM	1	0	22.50	22.46	22.47	
10	64QAM	1	25	22.60	22.59	22.59	
10	64QAM	1	49	22.55	22.61	22.59	23
10	64QAM	25	0	21.36	21.33	21.36	
10	64QAM	25	12	21.46	21.46	21.43	
10	64QAM	25	25	21.50	21.51	21.50	
10	64QAM	50	0	21.51	21.43	21.41	22
Channel				23755	23760	23825	
Frequency (MHz)				706.5	710	713.5	Tune-up limit (dBm)
5	QPSK	1	0	24.15	24.10	24.15	25
5	QPSK	1	12	24.17	24.18	24.29	
5	QPSK	1	24	24.18	24.29	24.19	
5	QPSK	12	0	23.33	23.28	23.28	
5	QPSK	12	7	23.38	23.32	23.31	24
5	QPSK	12	13	23.44	23.43	23.47	
5	QPSK	25	0	23.40	23.29	23.35	
5	16QAM	1	0	23.54	23.61	23.59	
5	16QAM	1	12	23.54	23.64	23.65	24
5	16QAM	1	24	23.65	23.66	23.63	
5	16QAM	12	0	22.26	22.31	22.36	
5	16QAM	12	7	22.43	22.33	22.31	
5	16QAM	12	13	22.37	22.45	22.39	23
5	16QAM	25	0	22.36	22.33	22.33	
5	64QAM	1	0	22.44	22.41	22.46	
5	64QAM	1	12	22.51	22.51	22.56	
5	64QAM	1	24	22.49	22.55	22.57	23
5	64QAM	12	0	21.27	21.24	21.36	
5	64QAM	12	7	21.39	21.40	21.36	
5	64QAM	12	13	21.42	21.51	21.44	
5	64QAM	25	0	21.43	21.37	21.32	22



Band 30							
Ar1 0							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				277.0			
Frequency (MHz)				231.0			
10	QPSK	1	0		24.61		25
10	QPSK	1	25		24.65		
10	QPSK	1	49		24.62		
10	QPSK	25	0		23.62		24
10	QPSK	25	12		23.68		
10	QPSK	25	25		23.71		
10	QPSK	50	0		23.69		24
10	16QAM	1	0		23.99		
10	16QAM	1	25		23.93		
10	16QAM	1	49		23.96		23
10	16QAM	25	0		22.54		
10	16QAM	25	12		22.71		
10	16QAM	25	25		22.70		23
10	16QAM	50	0		22.70		
10	64QAM	1	0		22.62		
10	64QAM	1	25		22.90		22
10	64QAM	1	49		22.83		
10	64QAM	25	0		21.69		
10	64QAM	25	12		21.71		22
10	64QAM	25	25		21.75		
10	64QAM	50	0		21.70		
Channel				278.6	277.0	277.35	Tune-up limit (dBm)
Frequency (MHz)				2307.5	2310	2312.5	
5	QPSK	1	0	24.53	24.51	24.55	25
5	QPSK	1	12	24.60	24.59	24.63	
5	QPSK	1	24	24.54	24.56	24.60	
5	QPSK	12	0	23.60	23.61	23.57	24
5	QPSK	12	7	23.62	23.64	23.59	
5	QPSK	12	13	23.68	23.63	23.64	
5	QPSK	25	0	23.62	23.64	23.63	24
5	16QAM	1	0	23.93	23.96	23.93	
5	16QAM	1	12	23.93	23.88	23.88	
5	16QAM	1	24	23.93	23.89	23.92	23
5	16QAM	12	0	22.54	22.59	22.60	
5	16QAM	12	7	22.68	22.65	22.71	
5	16QAM	12	13	22.65	22.64	22.67	23
5	16QAM	25	0	22.63	22.67	22.62	
5	64QAM	1	0	22.61	22.75	22.76	
5	64QAM	1	12	22.61	22.96	22.82	23
5	64QAM	1	24	22.80	22.77	22.80	
5	64QAM	12	0	21.65	21.63	21.60	
5	64QAM	12	7	21.64	21.63	21.63	22
5	64QAM	12	13	21.69	21.73	21.68	
5	64QAM	25	0	21.70	21.65	21.63	



Band 71							
Art 1							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				133222	133222	133272	
Frequency (MHz)				873	883	888	
20	QPSK	1	0	24.40	24.34	24.28	25
20	QPSK	1	49	24.30	24.32	24.31	
20	QPSK	1	99	24.30	24.30	24.26	
20	QPSK	50	0	23.45	23.52	23.39	24
20	QPSK	50	24	23.42	23.42	23.46	
20	QPSK	50	50	23.50	23.51	23.50	
20	QPSK	100	0	23.48	23.44	23.48	24
20	16QAM	1	0	23.72	23.62	23.64	
20	16QAM	1	49	23.65	23.69	23.65	
20	16QAM	1	99	23.65	23.69	23.62	23
20	16QAM	50	0	22.47	22.42	22.46	
20	16QAM	50	24	22.52	22.45	22.42	
20	16QAM	50	50	22.51	22.53	22.49	23
20	16QAM	100	0	22.46	22.42	22.47	
20	64QAM	1	0	22.60	22.50	22.48	
20	64QAM	1	49	22.50	22.55	22.52	22
20	64QAM	1	99	22.57	22.59	22.50	
20	64QAM	50	0	21.49	21.40	21.41	
20	64QAM	50	24	21.52	21.47	21.46	22
20	64QAM	50	50	21.49	21.53	21.52	
20	64QAM	100	0	21.53	21.41	21.49	
Channel				133197	133207	133267	Tune-up limit (dBm)
Frequency (MHz)				870.5	880.5	890.5	
15	QPSK	1	0	24.33	24.29	24.18	25
15	QPSK	1	37	24.27	24.24	24.25	
15	QPSK	1	74	24.24	24.34	24.17	
15	QPSK	36	0	23.39	23.37	23.31	24
15	QPSK	36	20	23.50	23.38	23.42	
15	QPSK	36	39	23.49	23.51	23.47	
15	QPSK	75	0	23.48	23.36	23.41	24
15	16QAM	1	0	23.89	23.58	23.59	
15	16QAM	1	37	23.59	23.68	23.58	
15	16QAM	1	74	23.65	23.66	23.53	23
15	16QAM	36	0	22.43	22.37	22.36	
15	16QAM	36	20	22.45	22.36	22.35	
15	16QAM	36	39	22.50	22.43	22.47	23
15	16QAM	75	0	22.38	22.42	22.39	
15	64QAM	1	0	22.50	22.45	22.36	
15	64QAM	1	37	22.46	22.45	22.40	23
15	64QAM	1	74	22.53	22.50	22.43	
15	64QAM	36	0	21.47	21.37	21.37	
15	64QAM	36	20	21.47	21.40	21.38	22
15	64QAM	36	39	21.41	21.48	21.43	
15	64QAM	75	0	21.46	21.32	21.46	
Channel				133172	133272	133422	Tune-up limit (dBm)
Frequency (MHz)				868	878	893	
10	QPSK	1	0	24.35	24.30	24.18	25
10	QPSK	1	25	24.27	24.27	24.23	
10	QPSK	1	49	24.20	24.25	24.24	
10	QPSK	25	0	23.45	23.42	23.32	24
10	QPSK	25	12	23.52	23.32	23.37	
10	QPSK	25	25	23.42	23.47	23.44	
10	QPSK	50	0	23.46	23.36	23.43	24
10	16QAM	1	0	23.64	23.60	23.60	
10	16QAM	1	25	23.63	23.63	23.57	
10	16QAM	1	49	23.57	23.62	23.52	23
10	16QAM	25	0	22.43	22.36	22.37	
10	16QAM	25	12	22.49	22.36	22.32	
10	16QAM	25	25	22.46	22.52	22.43	23
10	16QAM	50	0	22.36	22.41	22.43	
10	64QAM	1	0	22.55	22.45	22.46	
10	64QAM	1	25	22.43	22.47	22.52	22
10	64QAM	1	49	22.50	22.54	22.42	
10	64QAM	25	0	21.43	21.37	21.35	
10	64QAM	25	12	21.46	21.37	21.37	22
10	64QAM	25	25	21.44	21.52	21.50	
10	64QAM	50	0	21.47	21.32	21.46	
Channel				133147	133247	133417	Tune-up limit (dBm)
Frequency (MHz)				865.5	875.5	895.5	
5	QPSK	1	0	24.32	24.25	24.23	25
5	QPSK	1	12	24.23	24.28	24.28	
5	QPSK	1	24	24.22	24.24	24.18	
5	QPSK	12	0	23.43	23.37	23.36	24
5	QPSK	12	7	23.48	23.39	23.36	
5	QPSK	12	13	23.50	23.45	23.42	
5	QPSK	25	0	23.47	23.39	23.43	24
5	16QAM	1	0	23.65	23.62	23.61	
5	16QAM	1	12	23.59	23.66	23.64	
5	16QAM	1	24	23.59	23.67	23.53	23
5	16QAM	12	0	22.39	22.42	22.38	
5	16QAM	12	7	22.42	22.39	22.34	
5	16QAM	12	13	22.46	22.48	22.45	23
5	16QAM	25	0	22.42	22.34	22.37	
5	64QAM	1	0	22.51	22.45	22.46	
5	64QAM	1	12	22.50	22.52	22.43	22
5	64QAM	1	24	22.47	22.57	22.48	
5	64QAM	12	0	21.48	21.36	21.40	
5	64QAM	12	7	21.44	21.41	21.45	22
5	64QAM	12	13	21.46	21.51	21.42	
5	64QAM	25	0	21.43	21.36	21.41	



Band 5							
Art 0							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				2040	2052	2060	
Frequency (MHz)				829	836.5	844	
10	QPSK	1	0	24.40	24.37	24.38	25
10	QPSK	1	25	24.27	24.29	24.30	
10	QPSK	1	49	24.32	24.33	24.28	
10	QPSK	25	0	23.43	23.41	23.40	24
10	QPSK	25	12	23.49	23.41	23.42	
10	QPSK	25	25	23.46	23.44	23.45	
10	QPSK	50	0	23.50	23.50	23.39	24
10	16QAM	1	0	23.77	23.74	23.72	
10	16QAM	1	25	23.69	23.70	23.66	
10	16QAM	1	49	23.69	23.66	23.61	23
10	16QAM	25	0	22.44	22.42	22.40	
10	16QAM	25	12	22.52	22.41	22.39	
10	16QAM	25	25	22.46	22.43	22.40	23
10	16QAM	50	0	22.53	22.48	22.41	
10	64QAM	1	0	22.08	22.36	22.57	
10	64QAM	1	25	22.04	22.03	22.46	23
10	64QAM	1	49	22.56	22.60	22.11	
10	64QAM	25	0	21.44	21.43	21.45	
10	64QAM	25	12	21.55	21.44	21.45	22
10	64QAM	25	25	21.51	21.48	21.08	
10	64QAM	50	0	21.54	21.52	21.32	
Channel				2040	2052	2062	Tune-up limit (dBm)
Frequency (MHz)				828.5	836.5	846.5	
5	QPSK	1	0	24.34	24.37	24.34	25
5	QPSK	1	12	24.22	24.21	24.22	
5	QPSK	1	24	24.24	24.31	24.26	
5	QPSK	12	0	23.38	23.35	23.35	24
5	QPSK	12	7	23.46	23.31	23.33	
5	QPSK	12	13	23.37	23.39	23.41	
5	QPSK	25	0	23.42	23.43	23.31	24
5	16QAM	1	0	23.73	23.68	23.71	
5	16QAM	1	12	23.66	23.70	23.59	
5	16QAM	1	24	23.64	23.56	23.59	23
5	16QAM	12	0	22.37	22.37	22.33	
5	16QAM	12	7	22.46	22.41	22.33	
5	16QAM	12	13	22.38	22.35	22.33	23
5	16QAM	25	0	22.48	22.38	22.39	
5	64QAM	1	0	22.48	22.36	22.50	
5	64QAM	1	12	22.51	22.58	22.41	23
5	64QAM	1	24	22.54	22.52	22.07	
5	64QAM	12	0	21.36	21.34	21.44	
5	64QAM	12	7	21.55	21.40	21.43	22
5	64QAM	12	13	21.45	21.48	21.05	
5	64QAM	25	0	21.44	21.52	21.25	
Channel				20415	20525	20635	Tune-up limit (dBm)
Frequency (MHz)				825.5	836.5	847.5	
3	QPSK	1	0	24.32	24.27	24.32	25
3	QPSK	1	8	24.19	24.23	24.30	
3	QPSK	1	14	24.26	24.27	24.25	
3	QPSK	8	0	23.42	23.41	23.31	24
3	QPSK	8	4	23.46	23.37	23.35	
3	QPSK	8	7	23.37	23.39	23.35	
3	QPSK	15	0	23.42	23.49	23.36	24
3	16QAM	1	0	23.72	23.66	23.69	
3	16QAM	1	8	23.66	23.65	23.65	
3	16QAM	1	14	23.65	23.59	23.56	23
3	16QAM	8	0	22.44	22.32	22.36	
3	16QAM	8	4	22.51	22.33	22.34	
3	16QAM	8	7	22.46	22.43	22.34	23
3	16QAM	15	0	22.53	22.44	22.37	
3	64QAM	1	0	22.51	22.54	22.47	
3	64QAM	1	8	22.57	22.63	22.44	23
3	64QAM	1	14	22.48	22.50	22.09	
3	64QAM	8	0	21.39	21.40	21.40	
3	64QAM	8	4	21.46	21.43	21.35	22
3	64QAM	8	7	21.51	21.45	21.05	
3	64QAM	15	0	21.45	21.43	21.27	
Channel				20407	20525	20643	Tune-up limit (dBm)
Frequency (MHz)				824.7	836.5	848.3	
1.4	QPSK	1	0	24.30	24.33	24.36	25
1.4	QPSK	1	3	24.20	24.24	24.27	
1.4	QPSK	1	5	24.32	24.29	24.24	
1.4	QPSK	3	0	24.22	24.32	24.32	24
1.4	QPSK	3	1	24.10	24.24	24.27	
1.4	QPSK	3	3	24.29	24.19	24.18	
1.4	QPSK	6	0	23.44	23.41	23.30	24
1.4	16QAM	1	0	23.76	23.71	23.70	
1.4	16QAM	1	3	23.62	23.63	23.56	
1.4	16QAM	1	5	23.63	23.61	23.60	24
1.4	16QAM	3	0	23.76	23.64	23.63	
1.4	16QAM	3	1	23.63	23.65	23.50	
1.4	16QAM	3	3	23.60	23.65	23.54	23
1.4	16QAM	6	0	22.52	22.40	22.40	
1.4	64QAM	1	0	22.52	22.52	22.52	
1.4	64QAM	1	3	22.54	22.57	22.45	23
1.4	64QAM	1	5	22.53	22.50	22.01	
1.4	64QAM	3	0	22.44	22.48	22.50	
1.4	64QAM	3	1	22.51	22.52	22.42	22
1.4	64QAM	3	3	22.52	22.49	21.96	
1.4	64QAM	6	0	21.49	21.50	21.32	



Band 7								
Art 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				20650	21100	21350		
Frequency (MHz)				2510	2535	2560		
20	QPSK	1	0	17.56	17.69	17.74	18.7	
20	QPSK	1	49	17.44	17.41	17.57		
20	QPSK	1	99	17.46	17.32	17.62		
20	QPSK	50	0	17.48	17.49	17.50	18.7	
20	QPSK	50	24	17.30	17.46	17.33		
20	QPSK	50	50	17.25	17.40	17.34		
20	QPSK	100	0	17.42	17.33	17.45	18.7	
20	16QAM	1	0	17.40	17.49	17.43		
20	16QAM	1	49	17.54	17.60	17.60		
20	16QAM	1	99	17.60	17.52	17.34	18.7	
20	16QAM	50	0	17.51	17.34	17.52		
20	16QAM	50	24	17.58	17.31	17.55		
20	16QAM	50	50	17.22	17.27	17.54	18.7	
20	16QAM	100	0	17.57	17.45	17.45		
20	64QAM	1	0	17.50	17.23	17.52	18.7	
20	64QAM	1	49	17.21	17.25	17.25		
20	64QAM	1	99	17.27	17.22	17.52		
20	64QAM	50	0	17.44	17.27	17.53	18.7	
20	64QAM	50	24	17.46	17.35	17.44		
20	64QAM	50	50	17.53	17.59	17.34		
20	64QAM	100	0	17.21	17.29	17.53	Tune-up limit (dBm)	
Channel				20625	21100	21375		
Frequency (MHz)				2507.5	2535	2562.5		
15	QPSK	1	0	17.55	17.40	17.24	18.7	
15	QPSK	1	37	17.30	17.40	17.49		
15	QPSK	1	74	17.58	17.20	17.56		
15	QPSK	36	0	17.36	17.50	17.40	18.7	
15	QPSK	36	20	17.47	17.49	17.29		
15	QPSK	36	39	17.24	17.50	17.57		
15	QPSK	75	0	17.20	17.47	17.55	18.7	
15	16QAM	1	0	17.60	17.27	17.60		
15	16QAM	1	37	17.60	17.24	17.35		
15	16QAM	1	74	17.59	17.53	17.41	18.7	
15	16QAM	36	0	17.28	17.54	17.59		
15	16QAM	36	20	17.39	17.25	17.57	18.7	
15	16QAM	36	39	17.31	17.36	17.48		
15	16QAM	75	0	17.52	17.53	17.32		
15	64QAM	1	0	17.23	17.22	17.38	18.7	
15	64QAM	1	37	17.36	17.54	17.41		
15	64QAM	1	74	17.36	17.30	17.45		
15	64QAM	36	0	17.45	17.24	17.35	18.7	
15	64QAM	36	20	17.24	17.29	17.51		
15	64QAM	36	39	17.55	17.29	17.49		
15	64QAM	75	0	17.55	17.44	17.43	Tune-up limit (dBm)	
Channel				20800	21100	21400		
Frequency (MHz)				2505	2535	2565		
10	QPSK	1	0	17.55	17.40	17.24	18.7	
10	QPSK	1	25	17.30	17.40	17.49		
10	QPSK	1	49	17.58	17.20	17.56		
10	QPSK	25	0	17.36	17.50	17.40	18.7	
10	QPSK	25	12	17.47	17.49	17.29		
10	QPSK	25	25	17.24	17.50	17.57		
10	QPSK	50	0	17.20	17.47	17.55	18.7	
10	16QAM	1	0	17.60	17.27	17.60		
10	16QAM	1	25	17.60	17.24	17.35		
10	16QAM	1	49	17.59	17.53	17.41	18.7	
10	16QAM	25	0	17.28	17.54	17.59		
10	16QAM	25	12	17.39	17.25	17.57		
10	16QAM	25	25	17.31	17.36	17.48	18.7	
10	16QAM	50	0	17.52	17.53	17.32		
10	64QAM	1	0	17.23	17.22	17.38	18.7	
10	64QAM	1	25	17.36	17.54	17.41		
10	64QAM	1	49	17.36	17.30	17.45		
10	64QAM	25	0	17.45	17.24	17.35	18.7	
10	64QAM	25	12	17.24	17.29	17.51		
10	64QAM	25	25	17.55	17.29	17.49		
10	64QAM	50	0	17.55	17.44	17.43	Tune-up limit (dBm)	
Channel				20775	21100	21425		
Frequency (MHz)				2502.5	2535	2567.5		
5	QPSK	1	0	17.26	17.60	17.28	18.7	
5	QPSK	1	12	17.57	17.27	17.44		
5	QPSK	1	24	17.23	17.36	17.36		
5	QPSK	12	0	17.32	17.41	17.31	18.7	
5	QPSK	12	7	17.28	17.36	17.24		
5	QPSK	12	13	17.56	17.49	17.42		
5	QPSK	25	0	17.27	17.46	17.38	18.7	
5	16QAM	1	0	17.28	17.57	17.21		
5	16QAM	1	12	17.39	17.52	17.44		
5	16QAM	1	24	17.29	17.48	17.21	18.7	
5	16QAM	12	0	17.40	17.48	17.38		
5	16QAM	12	7	17.58	17.37	17.37		
5	16QAM	12	13	17.59	17.51	17.30	18.7	
5	16QAM	25	0	17.29	17.55	17.45		
5	64QAM	1	0	17.33	17.50	17.45		
5	64QAM	1	12	17.20	17.22	17.50	18.7	
5	64QAM	1	24	17.49	17.60	17.56		
5	64QAM	12	0	17.39	17.25	17.48		
5	64QAM	12	7	17.40	17.48	17.44	18.7	
5	64QAM	12	13	17.43	17.22	17.27		
5	64QAM	25	0	17.54	17.38	17.38		



Band 12											
Art 0											
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch./Frac.	Power Middle Ch./Frac.	Power High Ch./Frac.	Tune-up limit (dBm)				
Channel				2300	2306	2310					
Frequency (MHz)				704	707.5	711					
10	QPSK	1	0	24.32	24.27	24.27	25				
10	QPSK	1	25	24.30	24.30	24.33					
10	QPSK	1	49	24.37	24.38	24.31					
10	QPSK	25	0	23.43	23.46	23.43	24				
10	QPSK	25	12	23.50	23.42	23.45					
10	QPSK	25	25	23.51	23.53	23.50					
10	QPSK	50	0	23.52	23.46	23.47	24				
10	16QAM	1	0	23.73	23.65	23.64					
10	16QAM	1	25	23.70	23.72	23.69					
10	16QAM	1	49	23.77	23.74	23.72	23				
10	16QAM	25	0	22.44	22.46	22.47					
10	16QAM	25	12	22.51	22.47	22.46					
10	16QAM	25	25	22.49	22.51	22.51	23				
10	16QAM	50	0	22.53	22.47	22.44					
10	64QAM	1	0	22.63	22.47	22.49					
10	64QAM	1	25	22.61	22.64	22.61	23				
10	64QAM	1	49	22.67	22.60	22.60					
10	64QAM	25	0	21.46	21.47	21.48					
10	64QAM	25	12	21.56	21.49	21.49	22				
10	64QAM	25	25	21.51	21.55	21.53					
10	64QAM	50	0	21.55	21.48	21.49					
Channel				2306	2306	23105	Tune-up limit (dBm)				
Frequency (MHz)				701.5	707.5	713.5					
5	QPSK	1	0	24.31	24.26	24.21	25				
5	QPSK	1	12	24.22	24.21	24.24					
5	QPSK	1	24	24.36	24.30	24.25					
5	QPSK	12	0	23.40	23.46	23.42	24				
5	QPSK	12	7	23.46	23.40	23.41					
5	QPSK	12	13	23.48	23.43	23.46					
5	QPSK	25	0	23.48	23.42	23.47	24				
5	16QAM	1	0	23.71	23.63	23.59					
5	16QAM	1	12	23.69	23.62	23.61					
5	16QAM	1	24	23.76	23.72	23.65	24				
5	16QAM	12	0	22.34	22.38	22.43					
5	16QAM	12	7	22.46	22.43	22.43					
5	16QAM	12	13	22.39	22.43	22.45	23				
5	16QAM	25	0	22.47	22.44	22.36					
5	64QAM	1	0	22.46	22.46	22.49					
5	64QAM	1	12	22.58	22.61	22.57	23				
5	64QAM	1	24	22.63	22.50	22.54					
5	64QAM	12	0	21.38	21.40	21.46					
5	64QAM	12	7	21.55	21.46	21.45	22				
5	64QAM	12	13	21.46	21.51	21.43					
5	64QAM	25	0	21.49	21.38	21.41					
Channel				2306	2306	23105	Tune-up limit (dBm)				
Frequency (MHz)				700.5	707.5	714.5					
3	QPSK	1	0	24.28	24.17	24.21	25				
3	QPSK	1	8	24.20	24.29	24.27					
3	QPSK	1	14	24.32	24.28	24.23					
3	QPSK	8	0	23.40	23.38	23.39	24				
3	QPSK	8	4	23.44	23.41	23.40					
3	QPSK	8	7	23.41	23.42	23.50					
3	QPSK	15	0	23.42	23.38	23.38	24				
3	16QAM	1	0	23.71	23.66	23.63					
3	16QAM	1	8	23.61	23.68	23.63					
3	16QAM	1	14	23.73	23.73	23.72	24				
3	16QAM	8	0	22.41	22.37	22.41					
3	16QAM	8	4	22.42	22.45	22.45					
3	16QAM	8	7	22.46	22.43	22.51	23				
3	16QAM	15	0	22.51	22.45	22.43					
3	64QAM	1	0	22.46	22.37	22.40					
3	64QAM	1	8	22.56	22.60	22.59	23				
3	64QAM	1	14	22.59	22.51	22.60					
3	64QAM	8	0	21.40	21.37	21.47					
3	64QAM	8	4	21.48	21.43	21.49	22				
3	64QAM	8	7	21.51	21.54	21.44					
3	64QAM	15	0	21.54	21.45	21.41					
Channel				2307	2306	23173	Tune-up limit (dBm)				
Frequency (MHz)				699.7	707.5	716.3					
1.4	QPSK	1	0	24.29	24.18	24.23	25				
1.4	QPSK	1	3	24.24	24.30	24.29					
1.4	QPSK	1	5	24.29	24.28	24.27					
1.4	QPSK	3	0	24.23	24.11	24.15	24				
1.4	QPSK	3	1	24.14	24.22	24.23					
1.4	QPSK	3	3	24.19	24.18	24.22					
1.4	QPSK	6	0	23.51	23.37	23.41	24				
1.4	16QAM	1	0	23.69	23.60	23.63					
1.4	16QAM	1	3	23.66	23.68	23.65					
1.4	16QAM	1	5	23.75	23.69	23.66	24				
1.4	16QAM	3	0	23.65	23.50	23.63					
1.4	16QAM	3	1	23.62	23.63	23.61					
1.4	16QAM	3	3	23.69	23.62	23.58	23				
1.4	16QAM	6	0	22.44	22.44	22.35					
1.4	64QAM	1	0	22.48	22.47	22.48					
1.4	64QAM	1	3	22.55	22.61	22.61	23				
1.4	64QAM	1	5	22.58	22.53	22.57					
1.4	64QAM	3	0	22.38	22.40	22.40					
1.4	64QAM	3	1	22.51	22.59	22.52	23				
1.4	64QAM	3	3	22.58	22.53	22.53					
1.4	64QAM	6	0	21.50	21.38	21.46					



Band 13							
Art 0							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				23230			
Frequency (MHz)				782			
10	QPSK	1	0	24.52			25
10	QPSK	1	25	24.48			
10	QPSK	1	49	24.45			
10	QPSK	25	0	23.54			24
10	QPSK	25	12	23.56			
10	QPSK	25	25	23.61			
10	QPSK	50	0	23.60			24
10	16QAM	1	0	23.79			
10	16QAM	1	25	23.82			
10	16QAM	1	49	23.82			23
10	16QAM	25	0	22.56			
10	16QAM	25	12	22.62			
10	16QAM	25	25	22.63			23
10	16QAM	50	0	22.58			
10	64QAM	1	0	22.74			
10	64QAM	1	25	22.72			23
10	64QAM	1	49	22.75			
10	64QAM	25	0	21.58			
10	64QAM	25	12	21.64			22
10	64QAM	25	25	21.64			
10	64QAM	50	0	21.59			
Channel				23205	23230	23255	Tune-up limit (dBm)
Frequency (MHz)				779.5	782	784.5	
5	QPSK	1	0	24.38	24.36	24.39	25
5	QPSK	1	12	24.43	24.48	24.40	
5	QPSK	1	24	24.47	24.48	24.42	
5	QPSK	12	0	23.53	23.45	23.50	24
5	QPSK	12	7	23.56	23.56	23.47	
5	QPSK	12	13	23.57	23.60	23.54	
5	QPSK	25	0	23.51	23.55	23.59	24
5	16QAM	1	0	23.69	23.74	23.76	
5	16QAM	1	12	23.81	23.72	23.77	
5	16QAM	1	24	23.80	23.72	23.73	23
5	16QAM	12	0	22.51	22.50	22.53	
5	16QAM	12	7	22.54	22.55	22.60	
5	16QAM	12	13	22.61	22.56	22.60	23
5	16QAM	25	0	22.50	22.52	22.56	
5	64QAM	1	0	22.71	22.65	22.72	
5	64QAM	1	12	22.71	22.65	22.64	23
5	64QAM	1	24	22.75	22.65	22.66	
5	64QAM	12	0	21.55	21.50	21.51	
5	64QAM	12	7	21.58	21.63	21.56	22
5	64QAM	12	13	21.63	21.57	21.59	
5	64QAM	25	0	21.59	21.49	21.59	



Band 14							
Art 0							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch./Freq.	Power Middle Ch./Freq.	Power High Ch./Freq.	Tune-up limit (dBm)
Channel				2330			
Frequency (MHz)				793			
10	QPSK	1	0	24.45			25
10	QPSK	1	25	24.40			
10	QPSK	1	49	24.35			
10	QPSK	25	0	23.49			24
10	QPSK	25	12	23.52			
10	QPSK	25	25	23.56			
10	QPSK	50	0	23.48			24
10	16QAM	1	0	23.89			
10	16QAM	1	25	23.76			
10	16QAM	1	49	23.76			23
10	16QAM	25	0	22.50			
10	16QAM	25	12	22.51			
10	16QAM	25	25	22.54			23
10	16QAM	50	0	22.48			
10	64QAM	1	0	22.70			
10	64QAM	1	25	22.76			23
10	64QAM	1	49	22.63			
10	64QAM	25	0	21.53			
10	64QAM	25	12	21.53			22
10	64QAM	25	25	21.59			
10	64QAM	50	0	21.51			
Channel				23305	23330	23355	Tune-up limit (dBm)
Frequency (MHz)				790.5	793	795.5	
5	QPSK	1	0	24.38	24.44	24.43	25
5	QPSK	1	12	24.41	24.36	24.42	
5	QPSK	1	24	24.30	24.27	24.31	
5	QPSK	12	0	23.39	23.43	23.43	24
5	QPSK	12	7	23.49	23.44	23.47	
5	QPSK	12	13	23.55	23.46	23.55	
5	QPSK	25	0	23.42	23.43	23.48	24
5	16QAM	1	0	23.82	23.81	23.87	
5	16QAM	1	12	23.68	23.68	23.69	
5	16QAM	1	24	23.70	23.70	23.78	23
5	16QAM	12	0	22.50	22.41	22.41	
5	16QAM	12	7	22.41	22.50	22.46	
5	16QAM	12	13	22.51	22.49	22.51	23
5	16QAM	25	0	22.41	22.48	22.39	
5	64QAM	1	0	22.70	22.81	22.85	
5	64QAM	1	12	22.75	22.68	22.75	22
5	64QAM	1	24	22.60	22.63	22.54	
5	64QAM	12	0	21.51	21.47	21.46	
5	64QAM	12	7	21.44	21.47	21.47	22
5	64QAM	12	13	21.50	21.54	21.54	
5	64QAM	25	0	21.42	21.49	21.51	



Band 17								
Art 0								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	
Channel				2370	2370	2380		
Frequency (MHz)				709	710	711		
10	QPSK	1	0	24.28	24.29	24.25	25	
10	QPSK	1	25	24.33	24.32	24.31		
10	QPSK	1	49	24.38	24.37	24.32		
10	QPSK	25	0	23.38	23.38	23.37	24	
10	QPSK	25	12	23.54	23.45	23.44		
10	QPSK	25	25	23.54	23.54	23.54		
10	QPSK	50	0	23.52	23.43	23.43	24	
10	16QAM	1	0	23.65	23.64	23.64		
10	16QAM	1	25	23.69	23.69	23.71		
10	16QAM	1	49	23.71	23.73	23.70	23	
10	16QAM	25	0	22.38	22.38	22.40		
10	16QAM	25	12	22.54	22.45	22.45		
10	16QAM	25	25	22.54	22.58	22.51	23	
10	16QAM	50	0	22.52	22.43	22.41		
10	64QAM	1	0	22.58	22.51	22.53		
10	64QAM	1	25	22.64	22.64	22.66	23	
10	64QAM	1	49	22.64	22.64	22.62		
10	64QAM	25	0	21.43	21.42	21.43		
10	64QAM	25	12	21.58	21.50	21.49	22	
10	64QAM	25	25	21.57	21.55	21.57		
10	64QAM	50	0	21.54	21.46	21.44		
Channel				2375	2370	2385	Tune-up limit (dBm)	
Frequency (MHz)				708.5	710	713.5		
5	QPSK	1	0	24.20	24.23	24.22	25	
5	QPSK	1	12	24.23	24.32	24.28		
5	QPSK	1	24	24.31	24.33	24.27		
5	QPSK	12	0	23.33	23.29	23.31	24	
5	QPSK	12	7	23.48	23.45	23.43		
5	QPSK	12	13	23.48	23.53	23.45		
5	QPSK	25	0	23.51	23.38	23.39	24	
5	16QAM	1	0	23.63	23.62	23.59		
5	16QAM	1	12	23.68	23.61	23.68		
5	16QAM	1	24	23.68	23.73	23.65	23	
5	16QAM	12	0	22.34	22.29	22.31		
5	16QAM	12	7	22.44	22.35	22.45		
5	16QAM	12	13	22.54	22.55	22.45	23	
5	16QAM	25	0	22.42	22.42	22.36		
5	64QAM	1	0	22.48	22.44	22.53		
5	64QAM	1	12	22.60	22.54	22.62	23	
5	64QAM	1	24	22.61	22.54	22.54		
5	64QAM	12	0	21.35	21.36	21.37		
5	64QAM	12	7	21.49	21.49	21.46	22	
5	64QAM	12	13	21.55	21.47	21.54		
5	64QAM	25	0	21.52	21.42	21.43		



Band 30							
Art 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				2770			
Frequency (MHz)				2310			
10	QPSK	1	0		19.01		19.7
10	QPSK	1	25		18.93		
10	QPSK	1	49		18.92		
10	QPSK	25	0		18.88		19.7
10	QPSK	25	12		18.81		
10	QPSK	25	25		18.73		
10	QPSK	50	0		18.74		19.7
10	16QAM	1	0		18.54		
10	16QAM	1	25		18.51		
10	16QAM	1	49		18.49		19.7
10	16QAM	25	0		18.60		
10	16QAM	25	12		18.68		
10	16QAM	25	25		18.69		19.7
10	16QAM	50	0		18.64		
10	64QAM	1	0		18.84		19.7
10	64QAM	1	25		18.94		
10	64QAM	1	49		18.78		
10	64QAM	25	0		18.67		19.7
10	64QAM	25	12		18.70		
10	64QAM	25	25		18.71		
10	64QAM	50	0		18.68		
Channel				2785	2770	2775	Tune-up limit (dBm)
Frequency (MHz)				2307.5	2310	2312.5	
5	QPSK	1	0	18.85	18.85	18.87	19.7
5	QPSK	1	12	18.90	18.90	18.93	
5	QPSK	1	24	18.86	18.87	18.87	
5	QPSK	12	0	18.57	18.53	18.53	19.7
5	QPSK	12	7	18.53	18.58	18.61	
5	QPSK	12	13	18.62	18.58	18.59	
5	QPSK	25	0	18.57	18.61	18.54	19.7
5	16QAM	1	0	18.54	18.52	18.48	
5	16QAM	1	12	18.48	18.43	18.46	
5	16QAM	1	24	18.42	18.41	18.45	19.7
5	16QAM	12	0	18.56	18.59	18.53	
5	16QAM	12	7	18.66	18.66	18.62	
5	16QAM	12	13	18.62	18.62	18.65	19.7
5	16QAM	25	0	18.54	18.63	18.62	
5	64QAM	1	0	18.62	18.75	18.77	19.7
5	64QAM	1	12	18.93	18.85	18.91	
5	64QAM	1	24	18.75	18.69	18.75	
5	64QAM	12	0	18.67	18.62	18.59	19.7
5	64QAM	12	7	18.65	18.61	18.61	
5	64QAM	12	13	18.65	18.61	18.64	
5	64QAM	25	0	18.61	18.68	18.60	



Band 5							
Art 1							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				20450	20525	20600	
Frequency (MHz)				826	836.5	844	
10	QPSK	1	0	24.29	24.26	24.33	25
10	QPSK	1	25	24.18	24.17	24.22	
10	QPSK	1	49	24.19	24.23	24.13	
10	QPSK	25	0	23.30	23.32	23.30	24
10	QPSK	25	12	23.38	23.31	23.30	
10	QPSK	25	25	23.34	23.36	23.35	
10	QPSK	50	0	23.39	23.39	23.32	24
10	16QAM	1	0	23.66	23.63	23.61	
10	16QAM	1	25	23.58	23.59	23.57	
10	16QAM	1	49	23.58	23.56	23.53	23
10	16QAM	25	0	22.32	22.33	22.28	
10	16QAM	25	12	22.39	22.29	22.30	
10	16QAM	25	25	22.36	22.35	22.36	23
10	16QAM	50	0	22.39	22.37	22.30	
10	64QAM	1	0	22.50	22.50	22.46	
10	64QAM	1	25	22.54	22.57	22.53	22
10	64QAM	1	49	22.48	22.51	21.71	
10	64QAM	25	0	21.34	21.35	21.33	
10	64QAM	25	12	21.42	21.38	21.36	22
10	64QAM	25	25	21.38	21.40	21.13	
10	64QAM	50	0	21.45	21.41	21.21	
Channel				20452	20525	20625	Tune-up limit (dBm)
Frequency (MHz)				826.5	836.5	846.5	
5	QPSK	1	0	24.24	24.22	24.19	25
5	QPSK	1	12	24.11	24.16	24.16	
5	QPSK	1	24	24.19	24.14	24.12	
5	QPSK	12	0	23.24	23.27	23.24	24
5	QPSK	12	7	23.35	23.31	23.29	
5	QPSK	12	13	23.30	23.30	23.33	
5	QPSK	25	0	23.31	23.38	23.26	24
5	16QAM	1	0	23.64	23.60	23.60	
5	16QAM	1	12	23.50	23.53	23.56	
5	16QAM	1	24	23.58	23.56	23.53	23
5	16QAM	12	0	22.32	22.28	22.21	
5	16QAM	12	7	22.30	22.28	22.23	
5	16QAM	12	13	22.26	22.30	22.36	23
5	16QAM	25	0	22.34	22.34	22.27	
5	64QAM	1	0	22.44	22.43	22.38	
5	64QAM	1	12	22.45	22.53	22.47	23
5	64QAM	1	24	22.45	22.49	21.61	
5	64QAM	12	0	21.28	21.35	21.29	
5	64QAM	12	7	21.33	21.32	21.28	22
5	64QAM	12	13	21.33	21.31	21.09	
5	64QAM	25	0	21.41	21.36	21.16	
Channel				20415	20525	20635	Tune-up limit (dBm)
Frequency (MHz)				825.5	836.5	847.5	
3	QPSK	1	0	24.25	24.25	24.29	25
3	QPSK	1	8	24.12	24.13	24.21	
3	QPSK	1	14	24.13	24.14	24.10	
3	QPSK	8	0	23.26	23.26	23.29	24
3	QPSK	8	4	23.30	23.25	23.26	
3	QPSK	8	7	23.24	23.34	23.26	
3	QPSK	16	0	23.31	23.29	23.22	24
3	16QAM	1	0	23.62	23.54	23.54	
3	16QAM	1	8	23.48	23.54	23.50	
3	16QAM	1	14	23.56	23.54	23.50	23
3	16QAM	8	0	22.29	22.30	22.25	
3	16QAM	8	4	22.38	22.22	22.25	
3	16QAM	8	7	22.30	22.35	22.37	23
3	16QAM	16	0	22.37	22.36	22.29	
3	64QAM	1	0	22.47	22.44	22.37	
3	64QAM	1	8	22.48	22.57	22.53	22
3	64QAM	1	14	22.45	22.45	21.68	
3	64QAM	8	0	21.29	21.29	21.27	
3	64QAM	8	4	21.38	21.32	21.33	22
3	64QAM	8	7	21.31	21.37	21.06	
3	64QAM	16	0	21.43	21.37	21.12	
Channel				20407	20525	20543	Tune-up limit (dBm)
Frequency (MHz)				824.7	836.5	848.3	
1.4	QPSK	1	0	24.27	24.26	24.21	25
1.4	QPSK	1	3	24.13	24.16	24.21	
1.4	QPSK	1	5	24.16	24.18	24.13	
1.4	QPSK	3	0	24.19	24.26	24.12	24
1.4	QPSK	3	1	24.03	24.09	24.13	
1.4	QPSK	3	3	24.15	24.17	24.04	
1.4	QPSK	6	0	23.33	23.30	23.26	24
1.4	16QAM	1	0	23.66	23.56	23.52	
1.4	16QAM	1	3	23.49	23.51	23.47	
1.4	16QAM	1	5	23.49	23.49	23.49	24
1.4	16QAM	3	0	23.61	23.46	23.50	
1.4	16QAM	3	1	23.43	23.47	23.40	
1.4	16QAM	3	3	23.42	23.47	23.44	23
1.4	16QAM	6	0	22.31	22.30	22.29	
1.4	64QAM	1	0	22.43	22.46	22.40	
1.4	64QAM	1	3	22.47	22.35	22.52	23
1.4	64QAM	1	5	22.39	22.49	21.69	
1.4	64QAM	3	0	22.42	22.37	22.34	
1.4	64QAM	3	1	22.44	22.47	22.42	22
1.4	64QAM	3	3	22.36	22.44	21.60	
1.4	64QAM	6	0	21.35	21.38	21.14	



Band 7							
Art 0							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				2050	2100	2150	
Frequency (MHz)				2510	2535	2560	
20	QPSK	1	0	23.73	23.77	23.40	24.7
20	QPSK	1	49	23.79	23.81	23.30	
20	QPSK	1	99	24.05	24.00	23.86	
20	QPSK	50	0	23.72	23.74	23.03	24
20	QPSK	50	24	23.87	23.82	22.93	
20	QPSK	50	50	23.89	23.73	23.47	
20	QPSK	100	0	23.81	23.77	22.72	24
20	16QAM	1	0	23.85	23.87	22.65	
20	16QAM	1	49	23.94	23.97	22.47	
20	16QAM	1	99	24.00	23.94	23.57	23
20	16QAM	50	0	22.71	22.74	22.06	
20	16QAM	50	24	22.77	22.81	22.16	
20	16QAM	50	50	22.71	22.88	22.46	23
20	16QAM	100	0	22.75	22.81	21.74	
20	64QAM	1	0	22.77	22.42	21.83	
20	64QAM	1	49	22.86	22.87	21.39	22
20	64QAM	1	99	22.80	22.59	21.53	
20	64QAM	50	0	21.73	21.76	20.41	
20	64QAM	50	24	21.79	21.81	20.42	22
20	64QAM	50	50	21.41	21.87	20.39	
20	64QAM	100	0	21.68	21.59	20.67	
Channel				2550	2100	2137.5	Tune-up limit (dBm)
Frequency (MHz)				2507.5	2535	2562.5	
15	QPSK	1	0	23.65	23.68	23.31	24.7
15	QPSK	1	37	23.75	23.80	23.24	
15	QPSK	1	74	23.82	23.90	24.00	
15	QPSK	36	0	23.70	23.66	22.97	24
15	QPSK	36	20	23.70	23.74	22.88	
15	QPSK	36	39	23.85	23.81	23.45	
15	QPSK	75	0	23.70	23.72	22.87	24
15	16QAM	1	0	23.83	23.77	22.65	
15	16QAM	1	37	23.85	23.92	22.37	
15	16QAM	1	74	23.95	23.94	23.53	23
15	16QAM	36	0	22.67	22.69	22.08	
15	16QAM	36	20	22.70	22.80	22.06	
15	16QAM	36	39	22.69	22.81	22.38	23
15	16QAM	75	0	22.74	22.81	21.69	
15	64QAM	1	0	22.75	22.39	21.80	
15	64QAM	1	37	22.76	22.84	21.32	23
15	64QAM	1	74	22.41	22.55	21.50	
15	64QAM	36	0	21.63	21.75	20.38	
15	64QAM	36	20	21.79	21.75	20.35	22
15	64QAM	36	39	21.41	21.83	20.31	
15	64QAM	75	0	21.62	21.59	20.63	
Channel				2590	2100	2160	Tune-up limit (dBm)
Frequency (MHz)				2505	2535	2565	
10	QPSK	1	0	23.69	23.75	23.32	24.7
10	QPSK	1	25	23.76	23.74	23.21	
10	QPSK	1	49	23.78	23.97	23.96	
10	QPSK	25	0	23.68	23.74	23.01	24
10	QPSK	25	12	23.68	23.74	22.84	
10	QPSK	25	25	23.64	23.80	23.47	
10	QPSK	50	0	23.75	23.77	22.68	24
10	16QAM	1	0	23.77	23.83	22.64	
10	16QAM	1	25	23.94	23.92	22.39	
10	16QAM	1	49	23.90	23.76	23.53	23
10	16QAM	25	0	22.71	22.67	22.06	
10	16QAM	25	12	22.70	22.72	22.12	
10	16QAM	25	25	22.70	22.80	22.45	23
10	16QAM	50	0	22.70	22.75	21.67	
10	64QAM	1	0	22.70	22.40	21.73	
10	64QAM	1	25	22.78	22.86	21.34	23
10	64QAM	1	49	22.48	22.59	21.51	
10	64QAM	25	0	21.70	21.74	20.38	
10	64QAM	25	12	21.77	21.78	20.32	22
10	64QAM	25	25	21.57	21.86	20.32	
10	64QAM	50	0	21.58	21.50	20.67	
Channel				2577.5	2100	2162.5	Tune-up limit (dBm)
Frequency (MHz)				2502.5	2535	2567.5	
5	QPSK	1	0	23.73	23.73	23.38	24.7
5	QPSK	1	12	23.79	23.77	23.30	
5	QPSK	1	24	23.85	23.99	23.99	
5	QPSK	12	0	23.64	23.64	22.59	24
5	QPSK	12	7	23.67	23.72	22.85	
5	QPSK	12	13	23.62	23.83	23.43	
5	QPSK	25	0	23.70	23.77	22.62	24
5	16QAM	1	0	23.75	23.84	22.57	
5	16QAM	1	12	23.93	23.88	22.47	
5	16QAM	1	24	24.00	23.82	23.52	23
5	16QAM	12	0	22.70	22.68	22.06	
5	16QAM	12	7	22.73	22.81	22.10	
5	16QAM	12	13	22.61	22.79	22.42	23
5	16QAM	25	0	22.69	22.74	21.74	
5	64QAM	1	0	22.72	22.34	21.79	
5	64QAM	1	12	22.83	22.79	21.36	23
5	64QAM	1	24	22.43	22.51	21.51	
5	64QAM	12	0	21.63	21.72	20.34	
5	64QAM	12	7	21.73	21.78	20.33	22
5	64QAM	12	13	21.32	21.77	20.32	
5	64QAM	25	0	21.58	21.67	20.59	



Band 12										
Art 1										
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch./ Freq.	Power Middle Ch./ Freq.	Power High Ch./ Freq.	Tune-up limit (dBm)			
Channel				2390	2395	2399				
Frequency (MHz)				704	707.5	711				
10	QPSK	1	0	24.31	24.25	24.23	25			
10	QPSK	1	25	24.24	24.29	24.26				
10	QPSK	1	49	24.35	24.34	24.27				
10	QPSK	25	0	23.39	23.43	23.38	24			
10	QPSK	25	12	23.50	23.46	23.45				
10	QPSK	25	25	23.44	23.38	23.40				
10	QPSK	50	0	23.48	23.40	23.41	24			
10	16QAM	1	0	23.66	23.62	23.62				
10	16QAM	1	25	23.62	23.66	23.65				
10	16QAM	1	49	23.72	23.66	23.66	23			
10	16QAM	25	0	22.36	22.40	22.40				
10	16QAM	25	12	22.48	22.41	22.41				
10	16QAM	25	25	22.44	22.46	22.40	23			
10	16QAM	50	0	22.46	22.41	22.40				
10	64QAM	1	0	22.53	22.46	22.46				
10	64QAM	1	25	22.58	22.50	22.56	23			
10	64QAM	1	49	22.64	22.56	22.54				
10	64QAM	25	0	21.44	21.44	21.43				
10	64QAM	25	12	21.53	21.44	21.45	22			
10	64QAM	25	25	21.48	21.48	21.47				
10	64QAM	50	0	21.52	21.45	21.42		Tune-up limit (dBm)		
Channel				2305	2306	2305				
Frequency (MHz)				701.5	707.5	713.5				
5	QPSK	1	0	24.22	24.18	24.20	25			
5	QPSK	1	12	24.19	24.29	24.22				
5	QPSK	1	24	24.32	24.25	24.27				
5	QPSK	12	0	23.30	23.41	23.29	24			
5	QPSK	12	7	23.40	23.38	23.33				
5	QPSK	12	13	23.38	23.42	23.42				
5	QPSK	25	0	23.46	23.33	23.39	24			
5	16QAM	1	0	23.59	23.56	23.52				
5	16QAM	1	12	23.57	23.57	23.60				
5	16QAM	1	24	23.66	23.62	23.62	23			
5	16QAM	12	0	22.37	22.34	22.35				
5	16QAM	12	7	22.43	22.32	22.31				
5	16QAM	12	13	22.43	22.42	22.35	23			
5	16QAM	25	0	22.36	22.33	22.35				
5	64QAM	1	0	22.43	22.37	22.38				
5	64QAM	1	12	22.57	22.54	22.47	23			
5	64QAM	1	24	22.61	22.56	22.48				
5	64QAM	12	0	21.37	21.38	21.41				
5	64QAM	12	7	21.45	21.34	21.45	22			
5	64QAM	12	13	21.38	21.44	21.43				
5	64QAM	25	0	21.52	21.37	21.38		Tune-up limit (dBm)		
Channel				2305	2306	2305				
Frequency (MHz)				700.5	707.5	714.5				
3	QPSK	1	0	24.24	24.19	24.21	25			
3	QPSK	1	8	24.22	24.22	24.23				
3	QPSK	1	14	24.26	24.24	24.19				
3	QPSK	8	0	23.33	23.39	23.37	24			
3	QPSK	8	4	23.41	23.38	23.40				
3	QPSK	8	7	23.35	23.41	23.42				
3	QPSK	15	0	23.43	23.31	23.31	24			
3	16QAM	1	0	23.57	23.61	23.57				
3	16QAM	1	8	23.61	23.60	23.57				
3	16QAM	1	14	23.66	23.67	23.63	24			
3	16QAM	8	0	22.30	22.30	22.38				
3	16QAM	8	4	22.40	22.38	22.37				
3	16QAM	8	7	22.42	22.40	22.39	23			
3	16QAM	15	0	22.40	22.33	22.30				
3	64QAM	1	0	22.46	22.39	22.39				
3	64QAM	1	8	22.49	22.56	22.51	23			
3	64QAM	1	14	22.56	22.53	22.44				
3	64QAM	8	0	21.41	21.40	21.39				
3	64QAM	8	4	21.48	21.43	21.42	22			
3	64QAM	8	7	21.44	21.48	21.45				
3	64QAM	15	0	21.46	21.43	21.32		Tune-up limit (dBm)		
Channel				2307	2306	2307				
Frequency (MHz)				699.7	707.5	715.3				
1.4	QPSK	1	0	24.25	24.25	24.21	25			
1.4	QPSK	1	3	24.15	24.25	24.19				
1.4	QPSK	1	5	24.26	24.24	24.21				
1.4	QPSK	3	0	24.24	24.16	24.14	24			
1.4	QPSK	3	1	24.06	24.16	24.13				
1.4	QPSK	3	3	24.22	24.22	24.21				
1.4	QPSK	6	0	23.38	23.39	23.35	24			
1.4	16QAM	1	0	23.57	23.58	23.52				
1.4	16QAM	1	3	23.55	23.62	23.56				
1.4	16QAM	1	5	23.66	23.65	23.65	24			
1.4	16QAM	3	0	23.47	23.53	23.50				
1.4	16QAM	3	1	23.55	23.56	23.50				
1.4	16QAM	3	3	23.62	23.62	23.58	23			
1.4	16QAM	6	0	22.45	22.34	22.35				
1.4	64QAM	1	0	22.51	22.38	22.38				
1.4	64QAM	1	3	22.49	22.51	22.52	23			
1.4	64QAM	1	5	22.61	22.48	22.44				
1.4	64QAM	3	0	22.47	22.31	22.35				
1.4	64QAM	3	1	22.42	22.46	22.46	23			
1.4	64QAM	3	3	22.59	22.41	22.37				
1.4	64QAM	6	0	21.45	21.41	21.36				



Band 13							
Art 1							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				2320	2320	2320	
Frequency (MHz)				782	782	782	
10	QPSK	1	0	24.36	24.36	24.36	25
10	QPSK	1	25	24.38	24.38	24.38	
10	QPSK	1	49	24.47	24.47	24.47	
10	QPSK	25	0	23.43	23.43	23.43	24
10	QPSK	25	12	23.53	23.53	23.53	
10	QPSK	25	25	23.51	23.51	23.51	
10	QPSK	50	0	23.53	23.53	23.53	24
10	16QAM	1	0	23.71	23.71	23.71	
10	16QAM	1	25	23.74	23.74	23.74	
10	16QAM	1	49	23.74	23.74	23.74	23
10	16QAM	25	0	22.46	22.46	22.46	
10	16QAM	25	12	22.54	22.54	22.54	
10	16QAM	25	25	22.55	22.55	22.55	23
10	16QAM	50	0	22.50	22.50	22.50	
10	64QAM	1	0	22.65	22.65	22.65	
10	64QAM	1	25	22.71	22.71	22.71	22
10	64QAM	1	49	22.63	22.63	22.63	
10	64QAM	25	0	21.51	21.51	21.51	
10	64QAM	25	12	21.56	21.56	21.56	22
10	64QAM	25	25	21.56	21.56	21.56	
10	64QAM	50	0	21.53	21.53	21.53	
Channel				2320	2320	2320	Tune-up limit (dBm)
Frequency (MHz)				779.5	782	784.5	
5	QPSK	1	0	24.29	24.31	24.35	25
5	QPSK	1	12	24.30	24.32	24.33	
5	QPSK	1	24	24.43	24.42	24.45	
5	QPSK	12	0	23.42	23.43	23.40	24
5	QPSK	12	7	23.47	23.41	23.50	
5	QPSK	12	13	23.49	23.53	23.46	
5	QPSK	25	0	23.47	23.45	23.52	24
5	16QAM	1	0	23.66	23.66	23.62	
5	16QAM	1	12	23.65	23.70	23.68	
5	16QAM	1	24	23.64	23.74	23.67	23
5	16QAM	12	0	22.36	22.43	22.46	
5	16QAM	12	7	22.49	22.53	22.51	
5	16QAM	12	13	22.48	22.50	22.53	23
5	16QAM	25	0	22.47	22.40	22.49	
5	64QAM	1	0	22.60	22.56	22.56	
5	64QAM	1	12	22.67	22.65	22.65	23
5	64QAM	1	24	22.62	22.59	22.58	
5	64QAM	12	0	21.41	21.45	21.49	
5	64QAM	12	7	21.49	21.53	21.47	22
5	64QAM	12	13	21.56	21.53	21.55	
5	64QAM	25	0	21.48	21.46	21.47	



Band 14							
Art 1							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				23330			
Frequency (MHz)				793			
10	QPSK	1	0		24.41		25
10	QPSK	1	25		24.31		
10	QPSK	1	49		24.29		
10	QPSK	25	0		23.42		24
10	QPSK	25	12		23.41		
10	QPSK	25	25		23.47		
10	QPSK	50	0		23.40		24
10	16QAM	1	0		23.76		
10	16QAM	1	25		23.78		
10	16QAM	1	49		23.89		23
10	16QAM	25	0		22.40		
10	16QAM	25	12		22.44		
10	16QAM	25	25		22.45		23
10	16QAM	50	0		22.40		
10	64QAM	1	0		22.65		23
10	64QAM	1	25		22.68		
10	64QAM	1	49		22.59		
10	64QAM	25	0		21.45		22
10	64QAM	25	12		21.48		
10	64QAM	25	25		21.50		
10	64QAM	50	0		21.42		
Channel				23305	23330	23355	
Frequency (MHz)				790.5	793	795.5	Tune-up limit (dBm)
5	QPSK	1	0	24.39	24.32	24.35	25
5	QPSK	1	12	24.22	24.29	24.26	
5	QPSK	1	24	24.24	24.25	24.24	
5	QPSK	12	0	23.34	23.34	23.40	24
5	QPSK	12	7	23.34	23.33	23.38	
5	QPSK	12	13	23.44	23.43	23.48	
5	QPSK	25	0	23.37	23.31	23.32	24
5	16QAM	1	0	23.74	23.67	23.76	
5	16QAM	1	12	23.69	23.68	23.72	
5	16QAM	1	24	23.98	23.94	23.80	23
5	16QAM	12	0	22.30	22.32	22.35	
5	16QAM	12	7	22.38	22.34	22.44	
5	16QAM	12	13	22.36	22.36	22.36	23
5	16QAM	25	0	22.37	22.38	22.35	
5	64QAM	1	0	22.58	22.60	22.65	
5	64QAM	1	12	22.59	22.59	22.63	23
5	64QAM	1	24	22.53	22.51	22.48	
5	64QAM	12	0	21.38	21.43	21.37	
5	64QAM	12	7	21.47	21.39	21.47	22
5	64QAM	12	13	21.43	21.43	21.50	
5	64QAM	25	0	21.42	21.41	21.33	



Band 17							
Art 1							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				23780	23790	23800	
Frequency (MHz)				708	710	711	
10	QPSK	1	0	24.24	24.16	24.23	25
10	QPSK	1	25	24.23	24.25	24.30	
10	QPSK	1	49	24.28	24.31	24.29	
10	QPSK	25	0	23.33	23.33	23.36	
10	QPSK	25	12	23.45	23.39	23.39	24
10	QPSK	25	25	23.48	23.50	23.48	
10	QPSK	50	0	23.47	23.38	23.37	
10	16QAM	1	0	23.59	23.61	23.61	
10	16QAM	1	25	23.64	23.68	23.68	24
10	16QAM	1	49	23.72	23.70	23.69	
10	16QAM	25	0	22.34	22.34	22.36	
10	16QAM	25	12	22.45	22.41	22.40	
10	16QAM	25	25	22.44	22.48	22.46	23
10	16QAM	50	0	22.46	22.39	22.38	
10	64QAM	1	0	22.50	22.46	22.47	
10	64QAM	1	25	22.60	22.59	22.59	
10	64QAM	1	49	22.55	22.61	22.59	23
10	64QAM	25	0	21.36	21.33	21.36	
10	64QAM	25	12	21.46	21.46	21.43	
10	64QAM	25	25	21.50	21.51	21.50	
10	64QAM	50	0	21.51	21.43	21.41	22
Channel				23755	23760	23825	
Frequency (MHz)				706.5	710	713.5	Tune-up limit (dBm)
5	QPSK	1	0	24.15	24.10	24.15	25
5	QPSK	1	12	24.17	24.18	24.29	
5	QPSK	1	24	24.18	24.29	24.19	
5	QPSK	12	0	23.33	23.28	23.28	
5	QPSK	12	7	23.38	23.32	23.31	24
5	QPSK	12	13	23.44	23.43	23.47	
5	QPSK	25	0	23.40	23.29	23.35	
5	16QAM	1	0	23.54	23.61	23.59	
5	16QAM	1	12	23.54	23.64	23.65	24
5	16QAM	1	24	23.65	23.66	23.63	
5	16QAM	12	0	22.26	22.31	22.36	
5	16QAM	12	7	22.43	22.33	22.31	
5	16QAM	12	13	22.37	22.45	22.39	23
5	16QAM	25	0	22.36	22.33	22.33	
5	64QAM	1	0	22.44	22.41	22.46	
5	64QAM	1	12	22.51	22.51	22.56	
5	64QAM	1	24	22.49	22.55	22.57	23
5	64QAM	12	0	21.27	21.24	21.36	
5	64QAM	12	7	21.39	21.40	21.36	
5	64QAM	12	13	21.42	21.51	21.44	
5	64QAM	25	0	21.43	21.37	21.32	22



Band 30							
Airtel							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				27710	27710	27710	24.7
Frequency (MHz)				2310	2310	2310	
10	QPSK	1	0	24.18	24.18	24.18	24
10	QPSK	1	25	24.18	24.18	24.18	
10	QPSK	1	49	24.19	24.19	24.19	
10	QPSK	25	0	23.20	23.20	23.20	
10	QPSK	25	12	23.24	23.24	23.24	24
10	QPSK	25	25	23.29	23.29	23.29	
10	QPSK	50	0	23.26	23.26	23.26	
10	16QAM	1	0	23.55	23.55	23.55	
10	16QAM	1	25	23.58	23.58	23.58	24
10	16QAM	1	49	23.55	23.55	23.55	
10	16QAM	25	0	22.23	22.23	22.23	
10	16QAM	25	12	22.27	22.27	22.27	
10	16QAM	25	25	22.27	22.27	22.27	23
10	16QAM	50	0	22.24	22.24	22.24	
10	64QAM	1	0	22.42	22.42	22.42	
10	64QAM	1	25	22.50	22.50	22.50	
10	64QAM	1	49	22.42	22.42	22.42	23
10	64QAM	25	0	21.24	21.24	21.24	
10	64QAM	25	12	21.31	21.31	21.31	
10	64QAM	25	25	21.30	21.30	21.30	
10	64QAM	50	0	21.30	21.30	21.30	22
Channel				27885	27710	27735	
Frequency (MHz)				2307.5	2310	2312.5	24.7
5	QPSK	1	0	24.18	24.13	24.18	
5	QPSK	1	12	24.10	24.16	24.09	24
5	QPSK	1	24	24.09	24.10	24.15	
5	QPSK	12	0	23.12	23.20	23.14	
5	QPSK	12	7	23.15	23.19	23.18	
5	QPSK	12	13	23.28	23.24	23.25	24
5	QPSK	25	0	23.22	23.25	23.26	
5	16QAM	1	0	23.52	23.52	23.48	
5	16QAM	1	12	23.51	23.48	23.48	
5	16QAM	1	24	23.47	23.49	23.54	24
5	16QAM	12	0	22.23	22.23	22.20	
5	16QAM	12	7	22.20	22.20	22.17	
5	16QAM	12	13	22.23	22.26	22.19	
5	16QAM	25	0	22.22	22.24	22.19	23
5	64QAM	1	0	22.40	22.41	22.34	
5	64QAM	1	12	22.40	22.45	22.46	
5	64QAM	1	24	22.40	22.34	22.33	
5	64QAM	12	0	21.23	21.22	21.15	22
5	64QAM	12	7	21.24	21.27	21.21	
5	64QAM	12	13	21.22	21.20	21.23	
5	64QAM	25	0	21.30	21.25	21.28	



Band 71							
Art 1							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)
Channel				133222	133222	133272	
Frequency (MHz)				873	883	888	
20	QPSK	1	0	24.40	24.34	24.28	25
20	QPSK	1	49	24.30	24.32	24.31	
20	QPSK	1	99	24.30	24.30	24.26	
20	QPSK	50	0	23.45	23.52	23.39	24
20	QPSK	50	24	23.42	23.42	23.46	
20	QPSK	50	50	23.50	23.51	23.50	
20	QPSK	100	0	23.48	23.44	23.48	24
20	16QAM	1	0	23.72	23.62	23.64	
20	16QAM	1	49	23.65	23.69	23.65	
20	16QAM	1	99	23.65	23.69	23.62	23
20	16QAM	50	0	22.47	22.42	22.46	
20	16QAM	50	24	22.52	22.45	22.42	
20	16QAM	50	50	22.51	22.53	22.49	23
20	16QAM	100	0	22.46	22.42	22.47	
20	64QAM	1	0	22.60	22.50	22.48	
20	64QAM	1	49	22.50	22.55	22.52	22
20	64QAM	1	99	22.57	22.59	22.50	
20	64QAM	50	0	21.49	21.40	21.41	
20	64QAM	50	24	21.52	21.47	21.46	22
20	64QAM	50	50	21.49	21.53	21.52	
20	64QAM	100	0	21.53	21.41	21.49	
Channel				133197	133207	133267	Tune-up limit (dBm)
Frequency (MHz)				870.5	880.5	890.5	
15	QPSK	1	0	24.33	24.29	24.18	25
15	QPSK	1	37	24.27	24.24	24.25	
15	QPSK	1	74	24.24	24.34	24.17	
15	QPSK	36	0	23.39	23.37	23.31	24
15	QPSK	36	20	23.50	23.38	23.42	
15	QPSK	36	39	23.49	23.51	23.47	
15	QPSK	75	0	23.48	23.36	23.41	24
15	16QAM	1	0	23.89	23.58	23.59	
15	16QAM	1	37	23.59	23.68	23.58	
15	16QAM	1	74	23.65	23.66	23.53	23
15	16QAM	36	0	22.43	22.37	22.36	
15	16QAM	36	20	22.45	22.36	22.35	
15	16QAM	36	39	22.50	22.43	22.47	23
15	16QAM	75	0	22.38	22.42	22.39	
15	64QAM	1	0	22.50	22.45	22.36	
15	64QAM	1	37	22.46	22.45	22.40	23
15	64QAM	1	74	22.53	22.50	22.43	
15	64QAM	36	0	21.47	21.37	21.37	
15	64QAM	36	20	21.47	21.40	21.38	22
15	64QAM	36	39	21.41	21.48	21.43	
15	64QAM	75	0	21.46	21.32	21.46	
Channel				133172	133272	133422	Tune-up limit (dBm)
Frequency (MHz)				868	878	893	
10	QPSK	1	0	24.35	24.30	24.18	25
10	QPSK	1	25	24.27	24.27	24.23	
10	QPSK	1	49	24.20	24.25	24.24	
10	QPSK	25	0	23.45	23.42	23.32	24
10	QPSK	25	12	23.52	23.32	23.37	
10	QPSK	25	25	23.42	23.47	23.44	
10	QPSK	50	0	23.46	23.36	23.43	24
10	16QAM	1	0	23.64	23.60	23.60	
10	16QAM	1	25	23.63	23.63	23.57	
10	16QAM	1	49	23.57	23.62	23.52	23
10	16QAM	25	0	22.43	22.36	22.37	
10	16QAM	25	12	22.49	22.36	22.32	
10	16QAM	25	25	22.46	22.52	22.43	23
10	16QAM	50	0	22.36	22.41	22.43	
10	64QAM	1	0	22.55	22.45	22.46	
10	64QAM	1	25	22.43	22.47	22.52	22
10	64QAM	1	49	22.50	22.54	22.42	
10	64QAM	25	0	21.43	21.37	21.35	
10	64QAM	25	12	21.46	21.37	21.37	22
10	64QAM	25	25	21.44	21.52	21.50	
10	64QAM	50	0	21.47	21.32	21.46	
Channel				133147	133247	133417	Tune-up limit (dBm)
Frequency (MHz)				865.5	875.5	895.5	
5	QPSK	1	0	24.32	24.25	24.23	25
5	QPSK	1	12	24.23	24.28	24.28	
5	QPSK	1	24	24.22	24.24	24.18	
5	QPSK	12	0	23.43	23.37	23.36	24
5	QPSK	12	7	23.48	23.39	23.36	
5	QPSK	12	13	23.50	23.45	23.42	
5	QPSK	25	0	23.47	23.39	23.43	24
5	16QAM	1	0	23.65	23.62	23.61	
5	16QAM	1	12	23.59	23.66	23.64	
5	16QAM	1	24	23.59	23.67	23.53	23
5	16QAM	12	0	22.39	22.42	22.38	
5	16QAM	12	7	22.42	22.39	22.34	
5	16QAM	12	13	22.46	22.48	22.45	23
5	16QAM	25	0	22.42	22.34	22.37	
5	64QAM	1	0	22.51	22.45	22.46	
5	64QAM	1	12	22.50	22.52	22.43	22
5	64QAM	1	24	22.47	22.57	22.48	
5	64QAM	12	0	21.48	21.36	21.40	
5	64QAM	12	7	21.44	21.41	21.45	22
5	64QAM	12	13	21.46	21.51	21.42	
5	64QAM	25	0	21.43	21.36	21.41	



Band 5									
Art 0									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch./Freq.	Power Middle Ch./Freq.	Power High Ch./Freq.	Tune-up limit (dBm)		
Channel				2040	2052	2060			
Frequency (MHz)				829	836.5	844			
10	QPSK	1	0	24.40	24.37	24.38	25		
10	QPSK	1	25	24.27	24.29	24.30			
10	QPSK	1	49	24.32	24.33	24.28			
10	QPSK	25	0	23.43	23.41	23.40	24		
10	QPSK	25	12	23.49	23.41	23.42			
10	QPSK	25	25	23.46	23.44	23.45			
10	QPSK	50	0	23.50	23.50	23.39	24		
10	16QAM	1	0	23.77	23.74	23.72			
10	16QAM	1	25	23.69	23.70	23.66			
10	16QAM	1	49	23.69	23.66	23.61	23		
10	16QAM	25	0	22.44	22.42	22.40			
10	16QAM	25	12	22.52	22.41	22.39			
10	16QAM	25	25	22.46	22.43	22.40	23		
10	16QAM	50	0	22.53	22.48	22.41			
10	64QAM	1	0	22.58	22.58	22.57			
10	64QAM	1	25	22.04	22.03	22.46	23		
10	64QAM	1	49	22.56	22.60	22.11			
10	64QAM	25	0	21.44	21.43	21.45			
10	64QAM	25	12	21.55	21.44	21.45	22		
10	64QAM	25	25	21.51	21.48	21.08			
10	64QAM	50	0	21.54	21.52	21.32			
Channel				2040	2052	2060	Tune-up limit (dBm)		
Frequency (MHz)				828.5	836.5	846.5			
5	QPSK	1	0	24.34	24.37	24.34	25		
5	QPSK	1	12	24.22	24.21	24.22			
5	QPSK	1	24	24.24	24.31	24.26			
5	QPSK	12	0	23.38	23.35	23.35	24		
5	QPSK	12	7	23.46	23.31	23.33			
5	QPSK	12	13	23.37	23.39	23.41			
5	QPSK	25	0	23.42	23.43	23.31	24		
5	16QAM	1	0	23.73	23.68	23.71			
5	16QAM	1	12	23.66	23.70	23.59			
5	16QAM	1	24	23.64	23.56	23.59	23		
5	16QAM	12	0	22.37	22.37	22.33			
5	16QAM	12	7	22.46	22.41	22.33			
5	16QAM	12	13	22.38	22.35	22.33	23		
5	16QAM	25	0	22.48	22.38	22.39			
5	64QAM	1	0	22.48	22.56	22.50			
5	64QAM	1	12	22.51	22.58	22.41	23		
5	64QAM	1	24	22.54	22.52	22.07			
5	64QAM	12	0	21.36	21.34	21.44			
5	64QAM	12	7	21.55	21.40	21.43	22		
5	64QAM	12	13	21.45	21.48	21.05			
5	64QAM	25	0	21.44	21.52	21.25			
Channel				2040	2052	2060	Tune-up limit (dBm)		
Frequency (MHz)				825.5	836.5	847.5			
3	QPSK	1	0	24.32	24.27	24.32	25		
3	QPSK	1	8	24.19	24.23	24.30			
3	QPSK	1	14	24.26	24.27	24.25			
3	QPSK	8	0	23.42	23.41	23.31	24		
3	QPSK	8	4	23.46	23.37	23.35			
3	QPSK	8	7	23.37	23.39	23.35			
3	QPSK	15	0	23.42	23.49	23.36	24		
3	16QAM	1	0	23.72	23.66	23.69			
3	16QAM	1	8	23.66	23.65	23.65			
3	16QAM	1	14	23.65	23.59	23.56	23		
3	16QAM	8	0	22.44	22.32	22.36			
3	16QAM	8	4	22.51	22.33	22.34			
3	16QAM	8	7	22.46	22.43	22.34	23		
3	16QAM	15	0	22.53	22.44	22.37			
3	64QAM	1	0	22.51	22.54	22.47			
3	64QAM	1	8	22.57	22.63	22.44	23		
3	64QAM	1	14	22.48	22.50	22.09			
3	64QAM	8	0	21.39	21.40	21.40			
3	64QAM	8	4	21.46	21.43	21.35	22		
3	64QAM	8	7	21.51	21.45	21.05			
3	64QAM	15	0	21.45	21.43	21.27			
Channel				2040	2052	2060	Tune-up limit (dBm)		
Frequency (MHz)				824.7	836.5	848.3			
1.4	QPSK	1	0	24.30	24.33	24.36	25		
1.4	QPSK	1	3	24.20	24.24	24.27			
1.4	QPSK	1	5	24.32	24.29	24.24			
1.4	QPSK	3	0	24.22	24.32	24.32	24		
1.4	QPSK	3	1	24.10	24.24	24.27			
1.4	QPSK	3	3	24.29	24.19	24.18			
1.4	QPSK	6	0	23.44	23.41	23.30	24		
1.4	16QAM	1	0	23.76	23.71	23.70			
1.4	16QAM	1	3	23.62	23.63	23.56			
1.4	16QAM	1	5	23.63	23.61	23.60	24		
1.4	16QAM	3	0	23.76	23.64	23.63			
1.4	16QAM	3	1	23.63	23.65	23.50			
1.4	16QAM	3	3	23.60	23.65	23.54	23		
1.4	16QAM	6	0	22.52	22.40	22.40			
1.4	64QAM	1	0	22.52	22.52	22.52			
1.4	64QAM	1	3	22.54	22.57	22.45	23		
1.4	64QAM	1	5	22.53	22.50	22.01			
1.4	64QAM	3	0	22.44	22.48	22.50			
1.4	64QAM	3	1	22.51	22.52	22.42	22		
1.4	64QAM	3	3	22.52	22.49	21.96			
1.4	64QAM	6	0	21.49	21.50	21.32			



Band 7							
Art 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				20650	21100	21350	
Frequency (MHz)				2510	2535	2560	
20	QPSK	1	0	2140	2142	2143	22.3
20	QPSK	1	49	2128	2139	2130	
20	QPSK	1	99	2131	2121	2124	
20	QPSK	50	0	2135	2136	2139	22.3
20	QPSK	50	24	2127	2135	2130	
20	QPSK	50	50	2132	2132	2131	
20	QPSK	100	0	2131	2133	2137	22.3
20	16QAM	1	0	2139	2121	2124	
20	16QAM	1	49	2136	2126	2125	
20	16QAM	1	99	2134	2139	2139	22.3
20	16QAM	50	0	2133	2128	2124	
20	16QAM	50	24	2121	2124	2128	
20	16QAM	50	50	2138	2138	2136	22.3
20	16QAM	100	0	2132	2125	2121	
20	64QAM	1	0	2128	2135	2140	
20	64QAM	1	49	2127	2128	2132	22.3
20	64QAM	1	99	2128	2124	2122	
20	64QAM	50	0	2117	2102	2117	
20	64QAM	50	24	2111	2113	2117	22
20	64QAM	50	50	2116	2119	2115	
20	64QAM	100	0	2111	2120	2100	
Channel				20625	21100	21375	Tune-up limit (dBm)
Frequency (MHz)				2507.5	2535	2562.5	
15	QPSK	1	0	2140	2136	2135	22.3
15	QPSK	1	37	2123	2136	2129	
15	QPSK	1	74	2131	2114	2123	
15	QPSK	36	0	2127	2128	2134	22.3
15	QPSK	36	20	2125	2132	2122	
15	QPSK	36	39	2129	2129	2127	
15	QPSK	75	0	2125	2130	2135	22.3
15	16QAM	1	0	2131	2120	2121	
15	16QAM	1	37	2136	2116	2121	
15	16QAM	1	74	2126	2134	2135	22.3
15	16QAM	36	0	2133	2119	2114	
15	16QAM	36	20	2112	2114	2125	
15	16QAM	36	39	2130	2137	2128	22.3
15	16QAM	75	0	2129	2116	2112	
15	64QAM	1	0	2127	2131	2133	
15	64QAM	1	37	2122	2124	2132	22.3
15	64QAM	1	74	2128	2114	2115	
15	64QAM	36	0	2108	2099	2113	
15	64QAM	36	20	2107	2103	2116	22
15	64QAM	36	39	2106	2116	2112	
15	64QAM	75	0	2111	2113	2099	
Channel				20600	21100	21400	Tune-up limit (dBm)
Frequency (MHz)				2505	2535	2565	
10	QPSK	1	0	2138	2136	2142	22.3
10	QPSK	1	25	2123	2135	2120	
10	QPSK	1	49	2129	2113	2124	
10	QPSK	25	0	2127	2126	2133	22.3
10	QPSK	25	12	2117	2134	2120	
10	QPSK	25	25	2128	2122	2121	
10	QPSK	50	0	2122	2126	2129	22.3
10	16QAM	1	0	2138	2121	2119	
10	16QAM	1	25	2133	2119	2123	
10	16QAM	1	49	2124	2137	2138	22.3
10	16QAM	25	0	2124	2122	2122	
10	16QAM	25	12	2118	2114	2124	
10	16QAM	25	25	2135	2131	2134	22.3
10	16QAM	50	0	2126	2117	2115	
10	64QAM	1	0	2119	2130	2134	
10	64QAM	1	25	2122	2121	2127	22.3
10	64QAM	1	49	2128	2121	2121	
10	64QAM	25	0	2111	2092	2107	
10	64QAM	25	12	2104	2109	2113	22
10	64QAM	25	25	2110	2114	2107	
10	64QAM	50	0	2109	2120	2097	
Channel				20775	21100	21425	Tune-up limit (dBm)
Frequency (MHz)				2502.5	2535	2567.5	
5	QPSK	1	0	2139	2136	2135	22.3
5	QPSK	1	12	2116	2135	2123	
5	QPSK	1	24	2124	2114	2121	
5	QPSK	12	0	2135	2134	2131	22.3
5	QPSK	12	7	2127	2126	2125	
5	QPSK	12	13	2129	2128	2123	
5	QPSK	25	0	2125	2130	2134	22.3
5	16QAM	1	0	2130	2113	2124	
5	16QAM	1	12	2133	2122	2116	
5	16QAM	1	24	2124	2136	2134	22.3
5	16QAM	12	0	2124	2128	2123	
5	16QAM	12	7	2111	2117	2127	
5	16QAM	12	13	2137	2132	2131	22.3
5	16QAM	25	0	2124	2118	2111	
5	64QAM	1	0	2128	2125	2136	
5	64QAM	1	12	2126	2120	2132	22.3
5	64QAM	1	24	2120	2123	2114	
5	64QAM	12	0	2114	2097	2113	
5	64QAM	12	7	2111	2110	2109	22
5	64QAM	12	13	2115	2113	2114	
5	64QAM	25	0	2106	2120	2096	



Band 12									
Art 0									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)		
Channel				2300	2306	2330			
Frequency (MHz)				704	707.5	711			
10	QPSK	1	0	24.32	24.27	24.27	25		
10	QPSK	1	25	24.30	24.30	24.33			
10	QPSK	1	49	24.37	24.38	24.31			
10	QPSK	25	0	23.43	23.46	23.43			
10	QPSK	25	12	23.50	23.42	23.45	24		
10	QPSK	25	25	23.51	23.53	23.50			
10	QPSK	50	0	23.52	23.46	23.47			
10	16QAM	1	0	23.73	23.65	23.64			
10	16QAM	1	25	23.70	23.72	23.69	24		
10	16QAM	1	49	23.77	23.74	23.72			
10	16QAM	25	0	22.44	22.46	22.47			
10	16QAM	25	12	22.51	22.47	22.46			
10	16QAM	25	25	22.49	22.51	22.51	23		
10	16QAM	50	0	22.53	22.47	22.44			
10	64QAM	1	0	22.63	22.47	22.49			
10	64QAM	1	25	22.61	22.64	22.61			
10	64QAM	1	49	22.67	22.60	22.60	23		
10	64QAM	25	0	21.46	21.47	21.46			
10	64QAM	25	12	21.56	21.49	21.49			
10	64QAM	25	25	21.51	21.55	21.53			
10	64QAM	50	0	21.55	21.48	21.49	22		
Channel				2306	2306	23105			
Frequency (MHz)				701.5	707.5	713.5			
5	QPSK	1	0	24.31	24.26	24.21	25		
5	QPSK	1	12	24.22	24.21	24.24			
5	QPSK	1	24	24.36	24.30	24.25			
5	QPSK	12	0	23.40	23.46	23.42			
5	QPSK	12	7	23.46	23.40	23.41	24		
5	QPSK	12	13	23.48	23.43	23.46			
5	QPSK	25	0	23.48	23.42	23.47			
5	16QAM	1	0	23.71	23.63	23.59			
5	16QAM	1	12	23.69	23.62	23.61	24		
5	16QAM	1	24	23.76	23.72	23.65			
5	16QAM	12	0	22.34	22.38	22.43			
5	16QAM	12	7	22.46	22.43	22.43			
5	16QAM	12	13	22.39	22.43	22.45	23		
5	16QAM	25	0	22.47	22.44	22.36			
5	64QAM	1	0	22.46	22.46	22.49			
5	64QAM	1	12	22.58	22.51	22.57			
5	64QAM	1	24	22.63	22.50	22.54	23		
5	64QAM	12	0	21.38	21.40	21.46			
5	64QAM	12	7	21.55	21.46	21.45			
5	64QAM	12	13	21.46	21.51	21.43			
5	64QAM	25	0	21.49	21.38	21.41	22		
Channel				2306	2306	23105			
Frequency (MHz)				700.5	707.5	714.5			
3	QPSK	1	0	24.28	24.17	24.21	25		
3	QPSK	1	8	24.20	24.29	24.27			
3	QPSK	1	14	24.32	24.28	24.23			
3	QPSK	8	0	23.40	23.38	23.39			
3	QPSK	8	4	23.44	23.41	23.40	24		
3	QPSK	8	7	23.41	23.42	23.50			
3	QPSK	15	0	23.42	23.38	23.38			
3	16QAM	1	0	23.71	23.66	23.63			
3	16QAM	1	8	23.61	23.68	23.63	24		
3	16QAM	1	14	23.73	23.73	23.72			
3	16QAM	8	0	22.41	22.37	22.41			
3	16QAM	8	4	22.42	22.45	22.45			
3	16QAM	8	7	22.46	22.43	22.51	23		
3	16QAM	15	0	22.51	22.45	22.43			
3	64QAM	1	0	22.46	22.37	22.40			
3	64QAM	1	8	22.56	22.60	22.56			
3	64QAM	1	14	22.59	22.51	22.60	23		
3	64QAM	8	0	21.40	21.37	21.47			
3	64QAM	8	4	21.48	21.43	21.49			
3	64QAM	8	7	21.51	21.54	21.44			
3	64QAM	15	0	21.54	21.45	21.41	22		
Channel				2307	2306	23173			
Frequency (MHz)				699.7	707.5	716.3			
1.4	QPSK	1	0	24.29	24.18	24.23	25		
1.4	QPSK	1	3	24.24	24.30	24.29			
1.4	QPSK	1	5	24.29	24.28	24.27			
1.4	QPSK	3	0	24.23	24.11	24.15			
1.4	QPSK	3	1	24.14	24.22	24.23	24		
1.4	QPSK	3	3	24.19	24.18	24.22			
1.4	QPSK	6	0	23.51	23.37	23.41			
1.4	16QAM	1	0	23.69	23.60	23.63			
1.4	16QAM	1	3	23.66	23.68	23.65	24		
1.4	16QAM	1	5	23.75	23.69	23.66			
1.4	16QAM	3	0	23.65	23.50	23.63			
1.4	16QAM	3	1	23.62	23.63	23.61			
1.4	16QAM	3	3	23.69	23.62	23.58	23		
1.4	16QAM	6	0	22.44	22.44	22.35			
1.4	64QAM	1	0	22.48	22.47	22.48			
1.4	64QAM	1	3	22.55	22.61	22.61			
1.4	64QAM	1	5	22.58	22.53	22.57	23		
1.4	64QAM	3	0	22.38	22.40	22.40			
1.4	64QAM	3	1	22.51	22.59	22.52			
1.4	64QAM	3	3	22.58	22.53	22.53			
1.4	64QAM	6	0	21.50	21.38	21.46	22		



Band 13							
Art 0							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch./Freq.	Power Middle Ch./Freq.	Power High Ch./Freq.	Tune-up limit (dBm)
Channel				23230			
Frequency (MHz)				782			
10	QPSK	1	0	24.52			25
10	QPSK	1	25	24.48			
10	QPSK	1	49	24.45			
10	QPSK	25	0	23.54			24
10	QPSK	25	12	23.58			
10	QPSK	25	25	23.61			
10	QPSK	50	0	23.60			24
10	16QAM	1	0	23.79			
10	16QAM	1	25	23.82			
10	16QAM	1	49	23.82			23
10	16QAM	25	0	22.56			
10	16QAM	25	12	22.62			
10	16QAM	25	25	22.63			23
10	16QAM	50	0	22.58			
10	64QAM	1	0	22.74			
10	64QAM	1	25	22.72			23
10	64QAM	1	49	22.75			
10	64QAM	25	0	21.58			
10	64QAM	25	12	21.64			22
10	64QAM	25	25	21.64			
10	64QAM	50	0	21.59			
Channel				23205	23230	23255	Tune-up limit (dBm)
Frequency (MHz)				779.5	782	784.5	
5	QPSK	1	0	24.38	24.36	24.39	25
5	QPSK	1	12	24.43	24.48	24.40	
5	QPSK	1	24	24.47	24.48	24.42	
5	QPSK	12	0	23.53	23.45	23.50	24
5	QPSK	12	7	23.56	23.56	23.47	
5	QPSK	12	13	23.57	23.60	23.54	
5	QPSK	25	0	23.51	23.55	23.59	24
5	16QAM	1	0	23.69	23.74	23.76	
5	16QAM	1	12	23.81	23.72	23.77	
5	16QAM	1	24	23.80	23.72	23.73	23
5	16QAM	12	0	22.51	22.50	22.53	
5	16QAM	12	7	22.54	22.55	22.60	
5	16QAM	12	13	22.61	22.56	22.60	23
5	16QAM	25	0	22.50	22.52	22.56	
5	64QAM	1	0	22.71	22.65	22.72	
5	64QAM	1	12	22.71	22.69	22.64	23
5	64QAM	1	24	22.75	22.65	22.66	
5	64QAM	12	0	21.55	21.50	21.51	
5	64QAM	12	7	21.58	21.63	21.56	22
5	64QAM	12	13	21.63	21.57	21.59	
5	64QAM	25	0	21.59	21.49	21.59	



Band 14							
Art 0							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				23330			
Frequency (MHz)				793			
10	QPSK	1	0	24.45			25
10	QPSK	1	25	24.40			
10	QPSK	1	49	24.35			
10	QPSK	25	0	23.49			24
10	QPSK	25	12	23.52			
10	QPSK	25	25	23.56			
10	QPSK	50	0	23.48			24
10	16QAM	1	0	23.89			
10	16QAM	1	25	23.76			
10	16QAM	1	49	23.76			23
10	16QAM	25	0	22.50			
10	16QAM	25	12	22.51			
10	16QAM	25	25	22.54			23
10	16QAM	50	0	22.48			
10	64QAM	1	0	22.70			
10	64QAM	1	25	22.76			23
10	64QAM	1	49	22.63			
10	64QAM	25	0	21.53			
10	64QAM	25	12	21.53			22
10	64QAM	25	25	21.59			
10	64QAM	50	0	21.51			
Channel				23305	23330	23355	Tune-up limit (dBm)
Frequency (MHz)				790.5	793	795.5	
5	QPSK	1	0	24.38	24.44	24.43	25
5	QPSK	1	12	24.41	24.36	24.42	
5	QPSK	1	24	24.30	24.27	24.31	
5	QPSK	12	0	23.39	23.43	23.43	24
5	QPSK	12	7	23.49	23.44	23.47	
5	QPSK	12	13	23.55	23.46	23.55	
5	QPSK	25	0	23.42	23.43	23.48	24
5	16QAM	1	0	23.82	23.81	23.87	
5	16QAM	1	12	23.66	23.66	23.69	
5	16QAM	1	24	23.70	23.70	23.76	24
5	16QAM	12	0	22.50	22.41	22.41	
5	16QAM	12	7	22.41	22.50	22.46	
5	16QAM	12	13	22.51	22.49	22.51	23
5	16QAM	25	0	22.41	22.48	22.39	
5	64QAM	1	0	22.70	22.81	22.65	
5	64QAM	1	12	22.75	22.66	22.75	23
5	64QAM	1	24	22.60	22.63	22.54	
5	64QAM	12	0	21.51	21.47	21.46	
5	64QAM	12	7	21.44	21.47	21.47	22
5	64QAM	12	13	21.50	21.54	21.54	
5	64QAM	25	0	21.42	21.49	21.51	



Band 17								
Art 0								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	
Channel				2370	2370	2380		
Frequency (MHz)				709	710	711		
10	QPSK	1	0	24.28	24.29	24.25	25	
10	QPSK	1	25	24.33	24.32	24.31		
10	QPSK	1	49	24.38	24.37	24.32		
10	QPSK	25	0	23.38	23.38	23.37	24	
10	QPSK	25	12	23.54	23.45	23.44		
10	QPSK	25	25	23.54	23.54	23.54		
10	QPSK	50	0	23.52	23.43	23.43	24	
10	16QAM	1	0	23.65	23.64	23.64		
10	16QAM	1	25	23.69	23.69	23.71		
10	16QAM	1	49	23.71	23.73	23.70	23	
10	16QAM	25	0	22.38	22.38	22.40		
10	16QAM	25	12	22.54	22.45	22.45		
10	16QAM	25	25	22.54	22.58	22.51	23	
10	16QAM	50	0	22.52	22.43	22.41		
10	64QAM	1	0	22.56	22.51	22.53		
10	64QAM	1	25	22.64	22.64	22.66	23	
10	64QAM	1	49	22.64	22.64	22.62		
10	64QAM	25	0	21.43	21.42	21.43		
10	64QAM	25	12	21.58	21.50	21.49	22	
10	64QAM	25	25	21.57	21.55	21.57		
10	64QAM	50	0	21.54	21.46	21.44		
Channel				2375	2370	2385	Tune-up limit (dBm)	
Frequency (MHz)				708.5	710	713.5		
5	QPSK	1	0	24.20	24.23	24.22	25	
5	QPSK	1	12	24.23	24.32	24.28		
5	QPSK	1	24	24.31	24.33	24.27		
5	QPSK	12	0	23.33	23.29	23.31	24	
5	QPSK	12	7	23.48	23.45	23.43		
5	QPSK	12	13	23.48	23.53	23.45		
5	QPSK	25	0	23.51	23.38	23.39	24	
5	16QAM	1	0	23.63	23.62	23.59		
5	16QAM	1	12	23.68	23.61	23.68		
5	16QAM	1	24	23.68	23.73	23.65	23	
5	16QAM	12	0	22.34	22.29	22.31		
5	16QAM	12	7	22.44	22.35	22.45		
5	16QAM	12	13	22.54	22.55	22.45	23	
5	16QAM	25	0	22.42	22.42	22.36		
5	64QAM	1	0	22.48	22.44	22.53		
5	64QAM	1	12	22.60	22.54	22.62	23	
5	64QAM	1	24	22.61	22.54	22.54		
5	64QAM	12	0	21.35	21.36	21.37		
5	64QAM	12	7	21.49	21.49	21.46	22	
5	64QAM	12	13	21.55	21.47	21.54		
5	64QAM	25	0	21.52	21.42	21.43		



Band 30							
Art 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				277.0			
Frequency (MHz)				2310			
10	QPSK	1	0	21.15			22.1
10	QPSK	1	25	21.16			
10	QPSK	1	49	21.11			
10	QPSK	25	0	20.80			22.1
10	QPSK	25	12	20.88			
10	QPSK	25	25	20.89			
10	QPSK	50	0	20.88			22.1
10	16QAM	1	0	20.79			
10	16QAM	1	25	20.86			
10	16QAM	1	49	20.71			22.1
10	16QAM	25	0	20.84			
10	16QAM	25	12	20.85			
10	16QAM	25	25	20.82			22.1
10	16QAM	50	0	20.84			
10	64QAM	1	0	21.03			
10	64QAM	1	25	21.12			22.1
10	64QAM	1	49	20.99			
10	64QAM	25	0	20.83			
10	64QAM	25	12	20.82			22
10	64QAM	25	25	20.83			
10	64QAM	50	0	20.91			
Channel				278.5	277.0	277.5	Tune-up limit (dBm)
Frequency (MHz)				2307.5	2310	2312.5	
5	QPSK	1	0	20.76	20.74	20.74	22.1
5	QPSK	1	12	20.79	20.75	20.74	
5	QPSK	1	24	20.78	20.77	20.79	
5	QPSK	12	0	20.80	20.82	20.85	22.1
5	QPSK	12	7	20.88	20.87	20.88	
5	QPSK	12	13	20.94	20.90	20.93	
5	QPSK	25	0	20.85	20.87	20.92	22.1
5	16QAM	1	0	20.81	20.82	20.82	
5	16QAM	1	12	20.82	20.81	20.78	
5	16QAM	1	24	20.80	20.80	20.79	22.1
5	16QAM	12	0	20.88	20.79	20.88	
5	16QAM	12	7	20.84	20.80	20.88	
5	16QAM	12	13	20.86	20.82	20.82	22.1
5	16QAM	25	0	20.83	20.88	20.84	
5	64QAM	1	0	21.00	20.96	21.04	
5	64QAM	1	12	21.10	21.06	21.11	22.1
5	64QAM	1	24	21.01	20.96	21.02	
5	64QAM	12	0	20.85	20.87	20.88	
5	64QAM	12	7	20.87	20.91	20.88	22
5	64QAM	12	13	20.91	20.97	20.88	
5	64QAM	25	0	20.90	20.90	20.95	



Band 71									
Art 0									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch./Frac.	Power Middle Ch./Frac.	Power High Ch./Frac.	Tune-up limit (dBm)		
Channel				133222	133292	133372			
Frequency (MHz)				673	683	688			
20	QPSK	1	0	24.41	24.33	24.29	25		
20	QPSK	1	49	24.30	24.32	24.32			
20	QPSK	1	99	24.34	24.33	24.28			
20	QPSK	50	0	23.58	23.49	23.45	24		
20	QPSK	50	24	23.53	23.43	23.44			
20	QPSK	50	50	23.51	23.41	23.40			
20	QPSK	100	0	23.50	23.46	23.43	24		
20	16QAM	1	0	23.77	23.66	23.61			
20	16QAM	1	49	23.65	23.69	23.67			
20	16QAM	1	99	23.67	23.70	23.59	23		
20	16QAM	50	0	22.47	22.40	22.40			
20	16QAM	50	24	22.50	22.43	22.43			
20	16QAM	50	50	22.50	22.52	22.51	23		
20	16QAM	100	0	22.49	22.42	22.47			
20	64QAM	1	0	22.58	22.44	22.45			
20	64QAM	1	49	22.54	22.54	22.55	23		
20	64QAM	1	99	22.58	22.57	22.50			
20	64QAM	50	0	21.48	21.41	21.41			
20	64QAM	50	24	21.53	21.48	21.47	22		
20	64QAM	50	50	21.49	21.54	21.55			
20	64QAM	100	0	21.52	21.41	21.49			
Channel				133197	133207	133297	Tune-up limit (dBm)		
Frequency (MHz)				670.5	680.5	690.5			
15	QPSK	1	0	24.35	24.19	24.27	25		
15	QPSK	1	37	24.23	24.29	24.26			
15	QPSK	1	74	24.34	24.28	24.20			
15	QPSK	36	0	23.39	23.31	23.33	24		
15	QPSK	36	20	23.46	23.40	23.41			
15	QPSK	36	39	23.49	23.43	23.45			
15	QPSK	75	0	23.40	23.36	23.45	24		
15	16QAM	1	0	23.73	23.62	23.53			
15	16QAM	1	37	23.58	23.63	23.59			
15	16QAM	1	74	23.66	23.69	23.51	23		
15	16QAM	36	0	22.38	22.34	22.33			
15	16QAM	36	20	22.40	22.38	22.40			
15	16QAM	36	39	22.42	22.44	22.43	23		
15	16QAM	75	0	22.45	22.40	22.42			
15	64QAM	1	0	22.63	22.36	22.45			
15	64QAM	1	37	22.45	22.54	22.54	23		
15	64QAM	1	74	22.52	22.52	22.40			
15	64QAM	36	0	21.39	21.35	21.33			
15	64QAM	36	20	21.52	21.48	21.40	22		
15	64QAM	36	39	21.41	21.53	21.50			
15	64QAM	75	0	21.45	21.32	21.48			
Channel				133172	133272	133422	Tune-up limit (dBm)		
Frequency (MHz)				668	678	683			
10	QPSK	1	0	24.32	24.26	24.27	25		
10	QPSK	1	25	24.27	24.31	24.25			
10	QPSK	1	49	24.26	24.23	24.21			
10	QPSK	25	0	23.39	23.34	23.31	24		
10	QPSK	25	12	23.51	23.38	23.38			
10	QPSK	25	25	23.47	23.43	23.45			
10	QPSK	50	0	23.41	23.34	23.42	24		
10	16QAM	1	0	23.69	23.67	23.54			
10	16QAM	1	25	23.59	23.65	23.67			
10	16QAM	1	49	23.59	23.63	23.57	23		
10	16QAM	25	0	22.42	22.40	22.40			
10	16QAM	25	12	22.43	22.39	22.43			
10	16QAM	25	25	22.43	22.43	22.50	23		
10	16QAM	50	0	22.46	22.40	22.45			
10	64QAM	1	0	22.48	22.36	22.40			
10	64QAM	1	25	22.50	22.52	22.50	23		
10	64QAM	1	49	22.58	22.53	22.49			
10	64QAM	25	0	21.42	21.41	21.37			
10	64QAM	25	12	21.48	21.48	21.42	22		
10	64QAM	25	25	21.39	21.46	21.46			
10	64QAM	50	0	21.50	21.36	21.48			
Channel				133147	133247	133447	Tune-up limit (dBm)		
Frequency (MHz)				665.5	675.5	685.5			
5	QPSK	1	0	24.36	24.21	24.19	25		
5	QPSK	1	12	24.24	24.27	24.29			
5	QPSK	1	24	24.28	24.23	24.21			
5	QPSK	12	0	23.42	23.37	23.35	24		
5	QPSK	12	7	23.51	23.36	23.43			
5	QPSK	12	13	23.44	23.42	23.47			
5	QPSK	25	0	23.45	23.35	23.40	24		
5	16QAM	1	0	23.72	23.61	23.54			
5	16QAM	1	12	23.56	23.69	23.67			
5	16QAM	1	24	23.58	23.62	23.55	23		
5	16QAM	12	0	22.44	22.38	22.38			
5	16QAM	12	7	22.45	22.33	22.33			
5	16QAM	12	13	22.43	22.51	22.48	23		
5	16QAM	25	0	22.41	22.39	22.40			
5	64QAM	1	0	22.49	22.36	22.40			
5	64QAM	1	12	22.47	22.52	22.55	23		
5	64QAM	1	24	22.54	22.47	22.48			
5	64QAM	12	0	21.48	21.36	21.36			
5	64QAM	12	7	21.45	21.47	21.44	22		
5	64QAM	12	13	21.45	21.47	21.53			
5	64QAM	25	0	21.42	21.37	21.49			



Band 5									
Art 1									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch./ Freq.	Power Middle Ch./ Freq.	Power High Ch./ Freq.	Tune-up limit (dBm)		
Channel				20450	20525	20600			
Frequency (MHz)				825	835.5	844			
10	QPSK	1	0	24.29	24.26	24.33	25		
10	QPSK	1	25	24.18	24.17	24.22			
10	QPSK	1	49	24.19	24.23	24.13			
10	QPSK	25	0	23.30	23.32	23.30	24		
10	QPSK	25	12	23.38	23.33	23.30			
10	QPSK	25	25	23.34	23.36	23.35			
10	QPSK	50	0	23.39	23.39	23.32	24		
10	16QAM	1	0	23.66	23.63	23.61			
10	16QAM	1	25	23.58	23.59	23.57			
10	16QAM	1	49	23.58	23.56	23.53	23		
10	16QAM	25	0	22.32	22.33	22.29			
10	16QAM	25	12	22.39	22.29	22.30			
10	16QAM	25	25	22.36	22.35	22.39	23		
10	16QAM	50	0	22.39	22.37	22.30			
10	64QAM	1	0	22.50	22.50	22.46			
10	64QAM	1	25	22.54	22.57	22.53	23		
10	64QAM	1	49	22.48	22.48	22.51			
10	64QAM	25	0	21.34	21.35	21.33			
10	64QAM	25	12	21.42	21.38	21.36	22		
10	64QAM	25	25	21.38	21.40	21.13			
10	64QAM	50	0	21.45	21.41	21.21			
Channel				20452	20525	20625	Tune-up limit (dBm)		
Frequency (MHz)				826.5	836.5	846.5			
5	QPSK	1	0	24.24	24.22	24.19	25		
5	QPSK	1	12	24.11	24.16	24.16			
5	QPSK	1	24	24.19	24.14	24.12			
5	QPSK	12	0	23.24	23.27	23.24	24		
5	QPSK	12	7	23.35	23.31	23.29			
5	QPSK	12	13	23.30	23.30	23.33			
5	QPSK	25	0	23.31	23.38	23.26	24		
5	16QAM	1	0	23.64	23.60	23.60			
5	16QAM	1	12	23.50	23.53	23.56			
5	16QAM	1	24	23.58	23.55	23.53	23		
5	16QAM	12	0	22.32	22.32	22.54			
5	16QAM	12	7	22.30	22.28	22.23			
5	16QAM	12	13	22.26	22.30	22.36	23		
5	16QAM	25	0	22.34	22.34	22.27			
5	64QAM	1	0	22.44	22.43	22.38			
5	64QAM	1	12	22.45	22.53	22.47	23		
5	64QAM	1	24	22.45	22.49	21.61			
5	64QAM	12	0	21.28	21.35	21.29			
5	64QAM	12	7	21.33	21.32	21.28	22		
5	64QAM	12	13	21.33	21.31	21.09			
5	64QAM	25	0	21.41	21.36	21.16			
Channel				20415	20525	20635	Tune-up limit (dBm)		
Frequency (MHz)				825.5	836.5	847.5			
3	QPSK	1	0	24.25	24.25	24.29	25		
3	QPSK	1	8	24.12	24.13	24.21			
3	QPSK	1	14	24.13	24.14	24.10			
3	QPSK	8	0	23.26	23.26	23.29	24		
3	QPSK	8	4	23.30	23.25	23.26			
3	QPSK	8	7	23.24	23.34	23.26			
3	QPSK	15	0	23.31	23.29	23.22	24		
3	16QAM	1	0	23.62	23.54	23.54			
3	16QAM	1	8	23.48	23.54	23.50			
3	16QAM	1	14	23.56	23.54	23.50	24		
3	16QAM	8	0	22.29	22.30	22.25			
3	16QAM	8	4	22.38	22.22	22.25			
3	16QAM	8	7	22.30	22.35	22.37	23		
3	16QAM	15	0	22.37	22.36	22.29			
3	64QAM	1	0	22.47	22.44	22.37			
3	64QAM	1	8	22.48	22.57	22.53	22		
3	64QAM	1	14	22.45	22.45	21.68			
3	64QAM	8	0	21.29	21.29	21.27			
3	64QAM	8	4	21.38	21.32	21.33	22		
3	64QAM	8	7	21.31	21.37	21.06			
3	64QAM	15	0	21.43	21.37	21.12			
Channel				20407	20525	20543	Tune-up limit (dBm)		
Frequency (MHz)				824.7	836.5	848.3			
1.4	QPSK	1	0	24.27	24.26	24.21	25		
1.4	QPSK	1	3	24.13	24.16	24.21			
1.4	QPSK	1	5	24.16	24.18	24.13			
1.4	QPSK	3	0	24.19	24.26	24.12	24		
1.4	QPSK	3	1	24.03	24.09	24.13			
1.4	QPSK	3	3	24.15	24.17	24.04			
1.4	QPSK	6	0	23.33	23.30	23.26	24		
1.4	16QAM	1	0	23.66	23.56	23.52			
1.4	16QAM	1	3	23.49	23.51	23.47			
1.4	16QAM	1	5	23.49	23.49	23.49	24		
1.4	16QAM	3	0	23.61	23.46	23.50			
1.4	16QAM	3	1	23.43	23.47	23.40			
1.4	16QAM	3	3	23.42	23.47	23.44	23		
1.4	16QAM	6	0	22.31	22.30	22.29			
1.4	64QAM	1	0	22.43	22.42	22.40			
1.4	64QAM	1	3	22.47	22.55	22.52	23		
1.4	64QAM	1	5	22.39	22.49	21.69			
1.4	64QAM	3	0	22.42	22.37	22.34			
1.4	64QAM	3	1	22.44	22.47	22.42	23		
1.4	64QAM	3	3	22.36	22.44	21.60			
1.4	64QAM	6	0	21.35	21.38	21.14			



Band 7							
Ave 0							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				2060	2100	2135	
Frequency (MHz)				2510	2535	2560	
20	QPSK	1	0	24.57	24.58	23.68	24.7
20	QPSK	1	49	24.54	24.55	23.54	
20	QPSK	1	99	24.58	24.62	24.68	
20	QPSK	50	0	23.63	23.67	23.29	24
20	QPSK	50	24	23.68	23.64	23.51	
20	QPSK	50	50	23.54	23.48	23.53	
20	QPSK	100	0	23.59	23.63	23.45	24
20	16QAM	1	0	23.68	23.62	23.05	
20	16QAM	1	49	23.41	23.63	22.78	
20	16QAM	1	99	23.55	23.66	23.69	23
20	16QAM	50	0	22.61	22.66	21.37	
20	16QAM	50	24	22.60	22.65	21.73	
20	16QAM	50	50	22.56	22.50	22.68	23
20	16QAM	100	0	22.69	22.64	22.02	
20	64QAM	1	0	22.68	22.67	21.14	
20	64QAM	1	49	22.40	22.47	21.68	22
20	64QAM	1	99	22.52	22.54	21.83	
20	64QAM	50	0	21.65	21.89	21.00	
20	64QAM	50	24	21.62	21.66	21.09	22
20	64QAM	50	50	21.69	21.64	20.66	
20	64QAM	100	0	20.91	20.92	20.05	
Channel				2565	2100	2135	Tune-up limit (dBm)
Frequency (MHz)				2507.5	2535	2562.5	
15	QPSK	1	0	23.61	23.68	23.67	24.7
15	QPSK	1	37	23.52	23.51	23.54	
15	QPSK	1	74	24.58	24.61	24.67	
15	QPSK	36	0	22.26	22.27	22.26	24
15	QPSK	36	20	22.65	22.65	22.61	
15	QPSK	36	39	23.43	23.50	23.50	
15	QPSK	75	0	22.90	22.87	22.93	24
15	16QAM	1	0	23.02	23.01	23.02	
15	16QAM	1	37	22.72	22.68	22.73	
15	16QAM	1	74	23.66	23.60	23.63	23
15	16QAM	36	0	21.28	21.31	21.30	
15	16QAM	36	20	21.68	21.73	21.73	
15	16QAM	36	39	22.61	22.60	22.67	23
15	16QAM	75	0	21.95	22.00	21.93	
15	64QAM	1	0	21.06	21.06	21.06	
15	64QAM	1	37	21.66	21.64	21.60	23
15	64QAM	1	74	21.74	21.73	21.74	
15	64QAM	36	0	20.93	21.00	20.99	
15	64QAM	36	20	21.09	21.04	20.99	22
15	64QAM	36	39	20.64	20.63	20.66	
15	64QAM	75	0	20.02	19.95	19.96	
Channel				2565	2100	2100	Tune-up limit (dBm)
Frequency (MHz)				2505	2535	2565	
10	QPSK	1	0	23.58	23.60	23.63	24.7
10	QPSK	1	25	23.54	23.44	23.53	
10	QPSK	1	49	24.63	24.60	24.67	
10	QPSK	25	0	22.28	22.27	22.21	24
10	QPSK	25	12	22.61	22.61	22.65	
10	QPSK	25	25	23.53	23.48	23.50	
10	QPSK	50	0	22.89	22.91	22.89	24
10	16QAM	1	0	22.95	23.04	23.03	
10	16QAM	1	25	22.68	22.69	22.75	
10	16QAM	1	49	23.60	23.65	23.69	23
10	16QAM	25	0	21.36	21.29	21.29	
10	16QAM	25	12	21.83	21.67	21.72	
10	16QAM	25	25	22.65	22.62	22.65	23
10	16QAM	50	0	22.02	21.92	21.92	
10	64QAM	1	0	21.09	21.09	21.05	
10	64QAM	1	25	21.66	21.64	21.60	23
10	64QAM	1	49	21.83	21.82	21.75	
10	64QAM	25	0	20.94	21.00	20.92	
10	64QAM	25	12	21.02	21.05	21.02	22
10	64QAM	25	25	20.66	20.63	20.60	
10	64QAM	50	0	20.05	19.95	19.96	
Channel				2572	2100	2100	Tune-up limit (dBm)
Frequency (MHz)				2502.5	2535	2567.5	
5	QPSK	1	0	23.58	23.65	23.64	24.7
5	QPSK	1	12	23.46	23.48	23.44	
5	QPSK	1	24	24.64	24.66	24.63	
5	QPSK	12	0	22.24	22.23	22.19	24
5	QPSK	12	7	22.67	22.68	22.69	
5	QPSK	12	13	23.43	23.44	23.43	
5	QPSK	25	0	22.91	22.86	22.91	24
5	16QAM	1	0	23.00	23.00	22.95	
5	16QAM	1	12	22.78	22.74	22.70	
5	16QAM	1	24	23.59	23.60	23.67	23
5	16QAM	12	0	21.31	21.31	21.30	
5	16QAM	12	7	21.73	21.71	21.68	
5	16QAM	12	13	22.65	22.62	22.65	23
5	16QAM	25	0	21.96	22.01	22.02	
5	64QAM	1	0	21.10	21.14	21.04	
5	64QAM	1	12	21.61	21.64	21.64	23
5	64QAM	1	24	21.82	21.83	21.79	
5	64QAM	12	0	20.99	20.98	20.94	
5	64QAM	12	7	21.03	20.99	21.04	22
5	64QAM	12	13	20.65	20.65	20.57	
5	64QAM	25	0	20.05	20.01	19.99	



Band 12											
Art 1											
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)				
Channel				2390	2395	2399					
Frequency (MHz)				704	707.5	711					
10	QPSK	1	0	24.31	24.25	24.23	25				
10	QPSK	1	25	24.24	24.29	24.26					
10	QPSK	1	49	24.35	24.34	24.27					
10	QPSK	25	0	23.39	23.43	23.38	24				
10	QPSK	25	12	23.50	23.46	23.45					
10	QPSK	25	25	23.44	23.38	23.40					
10	QPSK	50	0	23.48	23.40	23.41	24				
10	16QAM	1	0	23.66	23.62	23.62					
10	16QAM	1	25	23.62	23.66	23.65					
10	16QAM	1	49	23.72	23.66	23.66	23				
10	16QAM	25	0	22.39	22.40	22.40					
10	16QAM	25	12	22.48	22.41	22.41					
10	16QAM	25	25	22.44	22.46	22.40	23				
10	16QAM	50	0	22.46	22.41	22.40					
10	64QAM	1	0	22.53	22.46	22.46					
10	64QAM	1	25	22.58	22.60	22.59	23				
10	64QAM	1	49	22.64	22.56	22.54					
10	64QAM	25	0	21.44	21.44	21.43					
10	64QAM	25	12	21.53	21.44	21.45	22				
10	64QAM	25	25	21.48	21.48	21.47					
10	64QAM	50	0	21.52	21.45	21.42					
Channel				2395	2399	2399	Tune-up limit (dBm)				
Frequency (MHz)				701.5	707.5	713.5					
5	QPSK	1	0	24.22	24.18	24.20	25				
5	QPSK	1	12	24.19	24.29	24.22					
5	QPSK	1	24	24.32	24.25	24.27					
5	QPSK	12	0	23.30	23.41	23.29	24				
5	QPSK	12	7	23.40	23.38	23.33					
5	QPSK	12	13	23.38	23.42	23.42					
5	QPSK	25	0	23.46	23.33	23.39	24				
5	16QAM	1	0	23.59	23.56	23.52					
5	16QAM	1	12	23.57	23.57	23.60					
5	16QAM	1	24	23.68	23.62	23.62	23				
5	16QAM	12	0	22.37	22.34	22.35					
5	16QAM	12	7	22.43	22.32	22.31					
5	16QAM	12	13	22.43	22.42	22.35	23				
5	16QAM	25	0	22.36	22.33	22.35					
5	64QAM	1	0	22.43	22.37	22.38					
5	64QAM	1	12	22.57	22.54	22.47	23				
5	64QAM	1	24	22.61	22.56	22.48					
5	64QAM	12	0	21.37	21.38	21.41					
5	64QAM	12	7	21.45	21.34	21.45	22				
5	64QAM	12	13	21.38	21.44	21.43					
5	64QAM	25	0	21.52	21.37	21.38					
Channel				2399	2399	2399	Tune-up limit (dBm)				
Frequency (MHz)				700.5	707.5	714.5					
3	QPSK	1	0	24.24	24.19	24.21	25				
3	QPSK	1	8	24.22	24.22	24.23					
3	QPSK	1	14	24.26	24.24	24.19					
3	QPSK	8	0	23.33	23.39	23.37	24				
3	QPSK	8	4	23.41	23.38	23.40					
3	QPSK	8	7	23.35	23.41	23.42					
3	QPSK	15	0	23.43	23.31	23.31	24				
3	16QAM	1	0	23.57	23.61	23.57					
3	16QAM	1	8	23.61	23.60	23.57					
3	16QAM	1	14	23.68	23.67	23.63	23				
3	16QAM	8	0	22.30	22.30	22.38					
3	16QAM	8	4	22.40	22.38	22.37					
3	16QAM	8	7	22.42	22.40	22.39	23				
3	16QAM	15	0	22.40	22.33	22.30					
3	64QAM	1	0	22.46	22.39	22.39					
3	64QAM	1	8	22.49	22.56	22.51	23				
3	64QAM	1	14	22.56	22.53	22.44					
3	64QAM	8	0	21.41	21.40	21.39					
3	64QAM	8	4	21.48	21.43	21.42	22				
3	64QAM	8	7	21.44	21.48	21.45					
3	64QAM	15	0	21.48	21.43	21.32					
Channel				2399	2399	2399	Tune-up limit (dBm)				
Frequency (MHz)				699.7	707.5	715.3					
1.4	QPSK	1	0	24.25	24.25	24.21	25				
1.4	QPSK	1	3	24.15	24.25	24.19					
1.4	QPSK	1	5	24.26	24.24	24.21					
1.4	QPSK	3	0	24.24	24.16	24.14	24				
1.4	QPSK	3	1	24.06	24.16	24.13					
1.4	QPSK	3	3	24.22	24.22	24.21					
1.4	QPSK	6	0	23.38	23.39	23.35	24				
1.4	16QAM	1	0	23.57	23.58	23.52					
1.4	16QAM	1	3	23.55	23.62	23.56					
1.4	16QAM	1	5	23.66	23.65	23.65	24				
1.4	16QAM	3	0	23.47	23.53	23.50					
1.4	16QAM	3	1	23.55	23.56	23.50					
1.4	16QAM	3	3	23.62	23.62	23.58	23				
1.4	16QAM	6	0	22.45	22.34	22.35					
1.4	64QAM	1	0	22.51	22.38	22.38					
1.4	64QAM	1	3	22.49	22.51	22.52	23				
1.4	64QAM	1	5	22.61	22.48	22.44					
1.4	64QAM	3	0	22.47	22.31	22.35					
1.4	64QAM	3	1	22.42	22.46	22.46	23				
1.4	64QAM	3	3	22.59	22.41	22.37					
1.4	64QAM	6	0	21.45	21.41	21.36					



Band 13							
Art 1							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				23230	23230	23230	
Frequency (MHz)				782	782	782	
10	QPSK	1	0	24.36	24.36	24.36	25
10	QPSK	1	25	24.38	24.38	24.38	
10	QPSK	1	49	24.47	24.47	24.47	
10	QPSK	25	0	23.43	23.43	23.43	24
10	QPSK	25	12	23.53	23.53	23.53	
10	QPSK	25	25	23.51	23.51	23.51	
10	QPSK	50	0	23.53	23.53	23.53	24
10	16QAM	1	0	23.71	23.71	23.71	
10	16QAM	1	25	23.74	23.74	23.74	
10	16QAM	1	49	23.74	23.74	23.74	23
10	16QAM	25	0	22.46	22.46	22.46	
10	16QAM	25	12	22.54	22.54	22.54	
10	16QAM	25	25	22.55	22.55	22.55	23
10	16QAM	50	0	22.50	22.50	22.50	
10	64QAM	1	0	22.65	22.65	22.65	
10	64QAM	1	25	22.71	22.71	22.71	22
10	64QAM	1	49	22.63	22.63	22.63	
10	64QAM	25	0	21.51	21.51	21.51	
10	64QAM	25	12	21.66	21.66	21.66	22
10	64QAM	25	25	21.56	21.56	21.56	
10	64QAM	50	0	21.53	21.53	21.53	
Channel				23205	23230	23205	Tune-up limit (dBm)
Frequency (MHz)				779.5	782	784.5	
5	QPSK	1	0	24.29	24.31	24.35	25
5	QPSK	1	12	24.30	24.32	24.33	
5	QPSK	1	24	24.43	24.42	24.45	
5	QPSK	12	0	23.42	23.43	23.40	24
5	QPSK	12	7	23.47	23.41	23.50	
5	QPSK	12	13	23.49	23.53	23.46	
5	QPSK	25	0	23.47	23.45	23.52	24
5	16QAM	1	0	23.66	23.66	23.62	
5	16QAM	1	12	23.65	23.70	23.68	
5	16QAM	1	24	23.64	23.74	23.67	23
5	16QAM	12	0	22.36	22.43	22.46	
5	16QAM	12	7	22.49	22.53	22.51	
5	16QAM	12	13	22.48	22.50	22.53	23
5	16QAM	25	0	22.47	22.40	22.49	
5	64QAM	1	0	22.60	22.56	22.56	
5	64QAM	1	12	22.67	22.65	22.65	23
5	64QAM	1	24	22.62	22.59	22.58	
5	64QAM	12	0	21.41	21.45	21.49	22
5	64QAM	12	7	21.49	21.53	21.47	
5	64QAM	12	13	21.56	21.53	21.55	
5	64QAM	25	0	21.48	21.46	21.47	



Band 14							
Art 1							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				23330			
Frequency (MHz)				793			
10	QPSK	1	0		24.41		25
10	QPSK	1	25		24.31		
10	QPSK	1	49		24.29		
10	QPSK	25	0		23.42		24
10	QPSK	25	12		23.41		
10	QPSK	25	25		23.47		
10	QPSK	50	0		23.40		24
10	16QAM	1	0		23.76		
10	16QAM	1	25		23.78		
10	16QAM	1	49		23.89		23
10	16QAM	25	0		22.40		
10	16QAM	25	12		22.44		
10	16QAM	25	25		22.45		23
10	16QAM	50	0		22.40		
10	64QAM	1	0		22.65		
10	64QAM	1	25		22.68		23
10	64QAM	1	49		22.59		
10	64QAM	25	0		21.45		
10	64QAM	25	12		21.48		22
10	64QAM	25	25		21.50		
10	64QAM	50	0		21.42		
Channel				23305	23330	23355	Tune-up limit (dBm)
Frequency (MHz)				790.5	793	795.5	
5	QPSK	1	0	24.39	24.32	24.35	25
5	QPSK	1	12	24.22	24.29	24.26	
5	QPSK	1	24	24.24	24.25	24.24	
5	QPSK	12	0	23.34	23.34	23.40	24
5	QPSK	12	7	23.34	23.33	23.38	
5	QPSK	12	13	23.44	23.43	23.48	
5	QPSK	25	0	23.37	23.31	23.32	24
5	16QAM	1	0	23.74	23.67	23.76	
5	16QAM	1	12	23.69	23.68	23.72	
5	16QAM	1	24	23.98	23.94	23.80	23
5	16QAM	12	0	22.30	22.32	22.35	
5	16QAM	12	7	22.38	22.34	22.44	
5	16QAM	12	13	22.36	22.36	22.36	23
5	16QAM	25	0	22.37	22.38	22.35	
5	64QAM	1	0	22.58	22.60	22.65	
5	64QAM	1	12	22.59	22.59	22.63	23
5	64QAM	1	24	22.53	22.51	22.48	
5	64QAM	12	0	21.38	21.43	21.37	
5	64QAM	12	7	21.47	21.39	21.47	22
5	64QAM	12	13	21.43	21.43	21.50	
5	64QAM	25	0	21.42	21.41	21.33	



Band 17							
Art 1							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				23780	23790	23800	
Frequency (MHz)				708	710	711	
10	QPSK	1	0	24.24	24.16	24.23	25
10	QPSK	1	25	24.23	24.25	24.30	
10	QPSK	1	49	24.28	24.31	24.29	
10	QPSK	25	0	23.33	23.33	23.36	
10	QPSK	25	12	23.45	23.39	23.39	24
10	QPSK	25	25	23.48	23.50	23.48	
10	QPSK	50	0	23.47	23.38	23.37	
10	16QAM	1	0	23.59	23.61	23.61	
10	16QAM	1	25	23.64	23.68	23.68	24
10	16QAM	1	49	23.72	23.70	23.69	
10	16QAM	25	0	22.34	22.34	22.36	
10	16QAM	25	12	22.45	22.41	22.40	
10	16QAM	25	25	22.44	22.48	22.46	23
10	16QAM	50	0	22.46	22.39	22.38	
10	64QAM	1	0	22.50	22.46	22.47	
10	64QAM	1	25	22.60	22.59	22.59	
10	64QAM	1	49	22.55	22.61	22.59	23
10	64QAM	25	0	21.36	21.33	21.36	
10	64QAM	25	12	21.46	21.46	21.43	
10	64QAM	25	25	21.50	21.51	21.50	
10	64QAM	50	0	21.51	21.43	21.41	22
Channel				23755	23760	23825	
Frequency (MHz)				706.5	710	713.5	Tune-up limit (dBm)
5	QPSK	1	0	24.15	24.10	24.15	25
5	QPSK	1	12	24.17	24.18	24.29	
5	QPSK	1	24	24.18	24.29	24.19	
5	QPSK	12	0	23.33	23.28	23.28	
5	QPSK	12	7	23.38	23.32	23.31	24
5	QPSK	12	13	23.44	23.43	23.47	
5	QPSK	25	0	23.40	23.29	23.35	
5	16QAM	1	0	23.54	23.61	23.59	
5	16QAM	1	12	23.54	23.64	23.65	24
5	16QAM	1	24	23.65	23.66	23.63	
5	16QAM	12	0	22.26	22.31	22.36	
5	16QAM	12	7	22.43	22.33	22.31	
5	16QAM	12	13	22.37	22.45	22.39	23
5	16QAM	25	0	22.36	22.33	22.33	
5	64QAM	1	0	22.44	22.41	22.46	
5	64QAM	1	12	22.51	22.51	22.56	
5	64QAM	1	24	22.49	22.55	22.57	23
5	64QAM	12	0	21.27	21.24	21.36	
5	64QAM	12	7	21.39	21.40	21.36	
5	64QAM	12	13	21.42	21.51	21.44	
5	64QAM	25	0	21.43	21.37	21.32	22



Band 30							
Ari 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				277.0	277.0	277.0	
Frequency (MHz)				231.0	231.0	231.0	
10	QPSK	1	0	24.61	24.61	24.61	25
10	QPSK	1	25	24.65	24.65	24.65	
10	QPSK	1	49	24.62	24.62	24.62	
10	QPSK	25	0	23.62	23.62	23.62	24
10	QPSK	25	12	23.68	23.68	23.68	
10	QPSK	25	25	23.71	23.71	23.71	
10	QPSK	50	0	23.69	23.69	23.69	24
10	16QAM	1	0	23.99	23.99	23.99	
10	16QAM	1	25	23.93	23.93	23.93	
10	16QAM	1	49	23.96	23.96	23.96	23
10	16QAM	25	0	22.54	22.54	22.54	
10	16QAM	25	12	22.71	22.71	22.71	
10	16QAM	25	25	22.70	22.70	22.70	23
10	16QAM	50	0	22.70	22.70	22.70	
10	64QAM	1	0	22.62	22.62	22.62	
10	64QAM	1	25	22.90	22.90	22.90	22
10	64QAM	1	49	22.83	22.83	22.83	
10	64QAM	25	0	21.89	21.89	21.89	
10	64QAM	25	12	21.71	21.71	21.71	22
10	64QAM	25	25	21.75	21.75	21.75	
10	64QAM	50	0	21.70	21.70	21.70	
Channel				278.6	277.0	277.35	Tune-up limit (dBm)
Frequency (MHz)				2307.5	2310	2312.5	
5	QPSK	1	0	24.53	24.51	24.55	25
5	QPSK	1	12	24.60	24.59	24.63	
5	QPSK	1	24	24.54	24.56	24.60	
5	QPSK	12	0	23.60	23.61	23.57	24
5	QPSK	12	7	23.62	23.64	23.59	
5	QPSK	12	13	23.68	23.63	23.64	
5	QPSK	25	0	23.62	23.64	23.63	24
5	16QAM	1	0	23.93	23.96	23.93	
5	16QAM	1	12	23.93	23.88	23.88	
5	16QAM	1	24	23.93	23.89	23.92	23
5	16QAM	12	0	22.54	22.59	22.60	
5	16QAM	12	7	22.68	22.65	22.71	
5	16QAM	12	13	22.65	22.64	22.67	23
5	16QAM	25	0	22.63	22.67	22.62	
5	64QAM	1	0	22.61	22.75	22.76	
5	64QAM	1	12	22.61	22.96	22.82	23
5	64QAM	1	24	22.80	22.77	22.80	
5	64QAM	12	0	21.65	21.63	21.60	
5	64QAM	12	7	21.64	21.63	21.63	22
5	64QAM	12	13	21.69	21.73	21.68	
5	64QAM	25	0	21.70	21.65	21.63	



Band 71							
Art 1							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)
Channel				133222	133222	133272	
Frequency (MHz)				873	883	888	
20	QPSK	1	0	24.40	24.34	24.28	25
20	QPSK	1	49	24.30	24.32	24.31	
20	QPSK	1	99	24.30	24.30	24.26	
20	QPSK	50	0	23.45	23.52	23.39	24
20	QPSK	50	24	23.42	23.42	23.46	
20	QPSK	50	50	23.50	23.51	23.50	
20	QPSK	100	0	23.48	23.44	23.48	24
20	16QAM	1	0	23.72	23.62	23.64	
20	16QAM	1	49	23.65	23.69	23.65	
20	16QAM	1	99	23.65	23.69	23.62	23
20	16QAM	50	0	22.47	22.42	22.46	
20	16QAM	50	24	22.52	22.45	22.42	
20	16QAM	50	50	22.51	22.53	22.49	23
20	16QAM	100	0	22.46	22.42	22.47	
20	64QAM	1	0	22.60	22.50	22.48	
20	64QAM	1	49	22.50	22.55	22.52	22
20	64QAM	1	99	22.57	22.59	22.50	
20	64QAM	50	0	21.49	21.40	21.41	
20	64QAM	50	24	21.52	21.47	21.46	22
20	64QAM	50	50	21.49	21.53	21.52	
20	64QAM	100	0	21.53	21.41	21.49	
Channel				133197	133207	133267	Tune-up limit (dBm)
Frequency (MHz)				870.5	880.5	890.5	
15	QPSK	1	0	24.33	24.29	24.18	25
15	QPSK	1	37	24.27	24.24	24.25	
15	QPSK	1	74	24.24	24.34	24.17	
15	QPSK	36	0	23.39	23.37	23.31	24
15	QPSK	36	20	23.50	23.38	23.42	
15	QPSK	36	39	23.49	23.51	23.47	
15	QPSK	75	0	23.48	23.36	23.41	24
15	16QAM	1	0	23.69	23.58	23.59	
15	16QAM	1	37	23.59	23.68	23.58	
15	16QAM	1	74	23.65	23.66	23.53	23
15	16QAM	36	0	22.43	22.37	22.36	
15	16QAM	36	20	22.45	22.36	22.35	
15	16QAM	36	39	22.50	22.43	22.47	23
15	16QAM	75	0	22.38	22.42	22.39	
15	64QAM	1	0	22.50	22.45	22.38	
15	64QAM	1	37	22.46	22.45	22.40	23
15	64QAM	1	74	22.53	22.50	22.43	
15	64QAM	36	0	21.47	21.37	21.37	
15	64QAM	36	20	21.47	21.40	21.38	22
15	64QAM	36	39	21.41	21.48	21.43	
15	64QAM	75	0	21.46	21.32	21.46	
Channel				133172	133272	133422	Tune-up limit (dBm)
Frequency (MHz)				868	878	893	
10	QPSK	1	0	24.35	24.30	24.18	25
10	QPSK	1	25	24.27	24.27	24.23	
10	QPSK	1	49	24.20	24.25	24.24	
10	QPSK	25	0	23.45	23.42	23.32	24
10	QPSK	25	12	23.52	23.32	23.37	
10	QPSK	25	25	23.42	23.47	23.44	
10	QPSK	50	0	23.46	23.36	23.43	24
10	16QAM	1	0	23.64	23.60	23.60	
10	16QAM	1	25	23.63	23.63	23.57	
10	16QAM	1	49	23.57	23.62	23.52	23
10	16QAM	25	0	22.43	22.36	22.37	
10	16QAM	25	12	22.49	22.36	22.32	
10	16QAM	25	25	22.46	22.52	22.43	23
10	16QAM	50	0	22.36	22.41	22.43	
10	64QAM	1	0	22.55	22.45	22.46	
10	64QAM	1	25	22.43	22.47	22.52	22
10	64QAM	1	49	22.50	22.54	22.42	
10	64QAM	25	0	21.43	21.37	21.35	
10	64QAM	25	12	21.46	21.37	21.37	22
10	64QAM	25	25	21.44	21.52	21.50	
10	64QAM	50	0	21.47	21.32	21.46	
Channel				133147	133247	133417	Tune-up limit (dBm)
Frequency (MHz)				865.5	875.5	895.5	
5	QPSK	1	0	24.32	24.25	24.23	25
5	QPSK	1	12	24.23	24.28	24.28	
5	QPSK	1	24	24.22	24.24	24.18	
5	QPSK	12	0	23.43	23.37	23.36	24
5	QPSK	12	7	23.48	23.39	23.36	
5	QPSK	12	13	23.50	23.45	23.42	
5	QPSK	25	0	23.47	23.39	23.43	24
5	16QAM	1	0	23.65	23.62	23.61	
5	16QAM	1	12	23.59	23.66	23.64	
5	16QAM	1	24	23.59	23.67	23.53	23
5	16QAM	12	0	22.39	22.42	22.38	
5	16QAM	12	7	22.42	22.39	22.34	
5	16QAM	12	13	22.46	22.48	22.45	23
5	16QAM	25	0	22.42	22.34	22.37	
5	64QAM	1	0	22.51	22.45	22.46	
5	64QAM	1	12	22.50	22.52	22.43	22
5	64QAM	1	24	22.47	22.57	22.48	
5	64QAM	12	0	21.48	21.36	21.40	
5	64QAM	12	7	21.44	21.41	21.45	22
5	64QAM	12	13	21.46	21.51	21.42	
5	64QAM	25	0	21.43	21.36	21.41	



Band 38							
Art 2							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				37850	38000	38150	
Frequency (MHz)				2580	2595	2610	
20	QPSK	1	0	24.16	24.19	24.23	25
20	QPSK	1	49	24.23	24.26	24.27	
20	QPSK	1	99	24.23	24.31	24.30	
20	QPSK	50	0	23.28	23.33	23.38	24
20	QPSK	50	24	23.36	23.35	23.34	
20	QPSK	50	50	23.41	23.41	23.44	
20	QPSK	100	0	23.38	23.36	23.35	24
20	16QAM	1	0	23.29	23.31	23.31	
20	16QAM	1	49	23.29	23.33	23.36	
20	16QAM	1	99	23.36	23.42	23.38	23
20	16QAM	50	0	22.32	22.36	22.37	
20	16QAM	50	24	22.40	22.37	22.36	
20	16QAM	50	50	22.42	22.46	22.44	23
20	16QAM	100	0	22.40	22.38	22.36	
20	64QAM	1	0	21.97	21.97	22.02	23
20	64QAM	1	49	22.01	22.06	22.08	
20	64QAM	1	99	22.10	22.13	22.08	
20	64QAM	50	0	21.33	21.38	21.37	22
20	64QAM	50	24	21.39	21.39	21.40	
20	64QAM	50	50	21.43	21.45	21.45	
20	64QAM	100	0	21.41	21.37	21.38	Tune-up limit (dBm)
Channel				37825	38000	38175	
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	24.14	24.12	24.18	25
15	QPSK	1	37	24.17	24.26	24.27	
15	QPSK	1	74	24.14	24.30	24.30	
15	QPSK	36	0	23.22	23.25	23.31	24
15	QPSK	36	20	23.32	23.28	23.31	
15	QPSK	36	39	23.36	23.31	23.37	
15	QPSK	75	0	23.36	23.32	23.25	24
15	16QAM	1	0	23.22	23.31	23.24	
15	16QAM	1	37	23.24	23.31	23.30	
15	16QAM	1	74	23.28	23.42	23.35	23
15	16QAM	36	0	22.22	22.29	22.35	
15	16QAM	36	20	22.34	22.29	22.32	
15	16QAM	36	39	22.35	22.39	22.36	23
15	16QAM	75	0	22.38	22.32	22.32	
15	64QAM	1	0	21.97	21.97	22.02	23
15	64QAM	1	37	21.96	22.03	22.06	
15	64QAM	1	74	22.00	22.08	21.98	
15	64QAM	36	0	21.23	21.37	21.35	22
15	64QAM	36	20	21.38	21.31	21.37	
15	64QAM	36	39	21.37	21.40	21.37	
15	64QAM	75	0	21.41	21.32	21.30	Tune-up limit (dBm)
Channel				37800	38000	38200	
Frequency (MHz)				2574	2595	2615	
10	QPSK	1	0	24.07	24.17	24.19	25
10	QPSK	1	25	24.21	24.26	24.18	
10	QPSK	1	49	24.14	24.28	24.26	
10	QPSK	25	0	23.22	23.27	23.36	24
10	QPSK	25	12	23.33	23.30	23.24	
10	QPSK	25	25	23.38	23.39	23.35	
10	QPSK	50	0	23.35	23.36	23.26	24
10	16QAM	1	0	23.22	23.31	23.30	
10	16QAM	1	25	23.29	23.31	23.33	
10	16QAM	1	49	23.30	23.36	23.28	23
10	16QAM	25	0	22.30	22.30	22.28	
10	16QAM	25	12	22.30	22.35	22.32	
10	16QAM	25	25	22.34	22.43	22.38	23
10	16QAM	50	0	22.32	22.33	22.30	
10	64QAM	1	0	21.89	21.89	22.02	
10	64QAM	1	25	21.96	21.99	22.03	23
10	64QAM	1	49	22.03	22.06	22.00	
10	64QAM	25	0	21.33	21.34	21.28	
10	64QAM	25	12	21.33	21.37	21.31	22
10	64QAM	25	25	21.33	21.40	21.39	
10	64QAM	50	0	21.32	21.36	21.29	
Channel				3777.5	38000	38225	Tune-up limit (dBm)
Frequency (MHz)				2572.5	2595	2617.5	
5	QPSK	1	0	24.11	24.16	24.18	25
5	QPSK	1	12	24.22	24.20	24.19	
5	QPSK	1	24	24.14	24.29	24.28	
5	QPSK	12	0	23.23	23.30	23.33	24
5	QPSK	12	7	23.31	23.28	23.33	
5	QPSK	12	13	23.34	23.31	23.38	
5	QPSK	25	0	23.34	23.31	23.27	24
5	16QAM	1	0	23.24	23.31	23.25	
5	16QAM	1	12	23.23	23.31	23.29	
5	16QAM	1	24	23.33	23.42	23.38	23
5	16QAM	12	0	22.23	22.33	22.37	
5	16QAM	12	7	22.34	22.27	22.31	
5	16QAM	12	13	22.38	22.36	22.40	23
5	16QAM	25	0	22.38	22.28	22.27	
5	64QAM	1	0	21.90	21.92	21.83	
5	64QAM	1	12	21.92	22.03	22.01	22
5	64QAM	1	24	22.07	22.06	22.08	
5	64QAM	12	0	21.28	21.33	21.36	
5	64QAM	12	7	21.38	21.29	21.34	22
5	64QAM	12	13	21.34	21.36	21.40	
5	64QAM	25	0	21.37	21.32	21.35	



Band 38_HPUE							
Ant. 2							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				37850	38000	38150	
Frequency (MHz)				2580	2595	2610	
20	QPSK	1	0	26.01	26.06	26.07	27.5
20	QPSK	1	49	26.06	26.10	26.10	
20	QPSK	1	99	26.11	26.14	25.99	
20	QPSK	50	0	25.27	25.13	24.99	26.5
20	QPSK	50	24	25.27	25.10	25.00	
20	QPSK	50	50	25.16	24.99	24.67	
20	QPSK	100	0	25.30	25.14	25.03	26.5
20	16QAM	1	0	25.40	25.45	25.48	
20	16QAM	1	49	25.48	25.49	25.47	
20	16QAM	1	99	25.47	25.48	25.32	25.5
20	16QAM	50	0	24.28	24.36	24.30	
20	16QAM	50	24	24.39	24.37	24.32	
20	16QAM	50	50	24.40	24.41	24.25	25.5
20	16QAM	100	0	24.36	24.25	24.11	
20	64QAM	1	0	23.79	23.74	23.65	25.5
20	64QAM	1	49	23.62	23.60	23.62	
20	64QAM	1	99	23.62	23.66	23.53	
20	64QAM	50	0	22.73	22.55	22.58	24.5
20	64QAM	50	24	22.69	22.56	22.56	
20	64QAM	50	50	22.58	22.52	22.61	
20	64QAM	100	0	22.53	22.56	22.68	
Channel				37825	38000	38175	Tune-up limit (dBm)
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	25.95	26.03	25.97	27.5
15	QPSK	1	37	26.08	26.10	26.03	
15	QPSK	1	74	26.04	26.10	25.95	
15	QPSK	36	0	25.24	25.06	24.96	26.5
15	QPSK	36	20	25.18	25.10	24.95	
15	QPSK	36	39	25.08	24.89	24.85	
15	QPSK	75	0	25.27	25.04	24.99	26.5
15	16QAM	1	0	25.36	25.40	25.41	
15	16QAM	1	37	25.40	25.47	25.40	
15	16QAM	1	74	25.42	25.43	25.32	25.5
15	16QAM	36	0	24.25	24.28	24.24	
15	16QAM	36	20	24.37	24.36	24.32	
15	16QAM	36	39	24.36	24.34	24.24	25.5
15	16QAM	75	0	24.36	24.18	24.01	
15	64QAM	1	0	23.71	23.64	23.64	25.5
15	64QAM	1	37	23.63	23.58	23.59	
15	64QAM	1	74	23.62	23.62	23.55	
15	64QAM	36	0	22.70	22.54	22.60	24.5
15	64QAM	36	20	22.61	22.58	22.62	
15	64QAM	36	39	22.59	22.52	22.60	
15	64QAM	75	0	22.56	22.58	22.64	
Channel				37800	38000	38200	Tune-up limit (dBm)
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	25.97	25.95	26.00	27.5
10	QPSK	1	25	25.98	26.05	26.05	
10	QPSK	1	49	26.06	26.06	25.92	
10	QPSK	25	0	25.27	25.05	24.93	26.5
10	QPSK	25	12	25.27	25.08	24.97	
10	QPSK	25	25	25.15	24.91	24.81	
10	QPSK	50	0	25.23	25.06	25.01	26.5
10	16QAM	1	0	25.31	25.38	25.42	
10	16QAM	1	25	25.38	25.48	25.45	
10	16QAM	1	49	25.39	25.39	25.31	25.5
10	16QAM	25	0	24.21	24.35	24.26	
10	16QAM	25	12	24.36	24.33	24.32	
10	16QAM	25	25	24.30	24.41	24.15	25.5
10	16QAM	50	0	24.34	24.24	24.04	
10	64QAM	1	0	23.74	23.70	23.59	25.5
10	64QAM	1	25	23.54	23.57	23.60	
10	64QAM	1	49	23.55	23.65	23.59	
10	64QAM	25	0	22.69	22.54	22.58	24.5
10	64QAM	25	12	22.69	22.52	22.60	
10	64QAM	25	25	22.58	22.52	22.57	
10	64QAM	50	0	22.58	22.52	22.68	
Channel				3777.5	38000	38225	Tune-up limit (dBm)
Frequency (MHz)				2572.5	2595	2617.5	
5	QPSK	1	0	26.00	26.01	26.07	27.5
5	QPSK	1	12	26.04	26.05	26.04	
5	QPSK	1	24	26.04	26.10	25.90	
5	QPSK	12	0	25.23	25.06	24.89	26.5
5	QPSK	12	7	25.20	25.05	24.95	
5	QPSK	12	13	25.15	24.89	24.83	
5	QPSK	25	0	25.25	25.07	25.02	26.5
5	16QAM	1	0	25.31	25.40	25.48	
5	16QAM	1	12	25.40	25.40	25.40	
5	16QAM	1	24	25.47	25.48	25.24	25.5
5	16QAM	12	0	24.27	24.35	24.28	
5	16QAM	12	7	24.34	24.34	24.25	
5	16QAM	12	13	24.34	24.35	24.21	25.5
5	16QAM	25	0	24.38	24.25	24.03	
5	64QAM	1	0	23.76	23.69	23.57	25.5
5	64QAM	1	12	23.52	23.50	23.62	
5	64QAM	1	24	23.63	23.61	23.59	
5	64QAM	12	0	22.70	22.54	22.55	24.5
5	64QAM	12	7	22.65	22.51	22.53	
5	64QAM	12	13	22.54	22.52	22.61	
5	64QAM	25	0	22.57	22.52	22.64	



Band 41										
Ant 2										
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Low Middle Ch. / Freq.	Power Middle Ch. / Freq.	Power High Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	
Channel				39750	40185	40620	41055	41490		
Frequency (MHz)				2506	2549.5	2593	2636.5	2680		
20	QPSK	1	0	24.47	24.31	24.29	24.02	23.73	25	
20	QPSK	1	49	24.51	24.31	24.27	24.29	24.10		
20	QPSK	1	99	24.44	24.21	24.39	23.84	24.05		
20	QPSK	50	0	23.62	23.46	23.37	23.33	23.09	24	
20	QPSK	50	24	23.65	23.42	23.37	23.30	23.25		
20	QPSK	50	50	23.53	23.39	23.44	23.18	23.25		
20	QPSK	100	0	23.56	23.41	23.37	23.22	23.16	23	
20	16QAM	1	0	23.60	23.42	23.42	23.16	22.80		
20	16QAM	1	49	23.59	23.40	23.35	23.42	23.19		
20	16QAM	1	99	23.56	23.45	23.46	22.94	23.17	23	
20	16QAM	50	0	22.65	22.50	22.39	22.34	22.13		
20	16QAM	50	24	22.59	22.43	22.41	22.33	22.26		
20	16QAM	50	50	22.56	22.41	22.40	22.20	22.26	23	
20	16QAM	100	0	22.57	22.42	22.39	22.22	22.17		
20	64QAM	1	0	22.33	22.15	22.09	21.89	21.38		
20	64QAM	1	49	22.31	22.13	22.12	22.16	21.81	23	
20	64QAM	1	99	22.23	22.13	22.18	21.53	21.89		
20	64QAM	50	0	21.67	21.52	21.39	21.37	21.11		
20	64QAM	50	24	21.60	21.45	21.40	21.35	21.26	22	
20	64QAM	50	50	21.56	21.44	21.48	21.19	21.27		
20	64QAM	100	0	21.60	21.45	21.38	21.24	21.18		
Channel				39700	40160	40620	41068	41515	Tune-up limit (dBm)	
Frequency (MHz)				2503.5	2548.3	2593	2637.8	2682.5		
15	QPSK	1	0	24.42	24.27	24.22	23.96	23.72	25	
15	QPSK	1	37	24.45	24.22	24.25	24.22	24.01		
15	QPSK	1	74	24.34	24.18	24.34	23.78	24.01		
15	QPSK	36	0	23.52	23.46	23.32	23.26	22.99	24	
15	QPSK	36	20	23.47	23.42	23.30	23.29	23.18		
15	QPSK	36	39	23.50	23.34	23.35	23.08	23.16		
15	QPSK	75	0	23.51	23.37	23.29	23.14	23.12	24	
15	16QAM	1	0	23.60	23.37	23.33	23.12	22.70		
15	16QAM	1	37	23.54	23.40	23.29	23.32	23.09		
15	16QAM	1	74	23.46	23.44	23.43	22.90	23.17	23	
15	16QAM	36	0	22.60	22.44	22.38	22.30	22.07		
15	16QAM	36	20	22.57	22.37	22.33	22.25	22.17		
15	16QAM	36	39	22.51	22.33	22.47	22.10	22.26	23	
15	16QAM	75	0	22.50	22.41	22.30	22.12	22.09		
15	64QAM	1	0	22.24	22.12	22.05	21.79	21.34		
15	64QAM	1	37	22.25	22.05	22.02	22.11	21.85	23	
15	64QAM	1	74	22.18	22.10	22.11	21.50	21.84		
15	64QAM	36	0	21.64	21.46	21.29	21.31	21.05		
15	64QAM	36	20	21.56	21.45	21.37	21.34	21.18	22	
15	64QAM	36	39	21.50	21.42	21.38	21.14	21.17		
15	64QAM	75	0	21.51	21.44	21.30	21.21	21.18		
Channel				39700	40160	40620	41080	41540	Tune-up limit (dBm)	
Frequency (MHz)				2501	2547	2593	2639	2685		
10	QPSK	1	0	24.47	24.23	24.22	23.93	23.68	25	
10	QPSK	1	25	24.44	24.21	24.18	24.23	24.06		
10	QPSK	1	49	24.40	24.12	24.29	23.80	24.00		
10	QPSK	25	0	23.58	23.44	23.31	23.30	22.99	24	
10	QPSK	25	12	23.51	23.38	23.29	23.21	23.20		
10	QPSK	25	25	23.49	23.30	23.44	23.13	23.18		
10	QPSK	50	0	23.55	23.38	23.32	23.21	23.09	24	
10	16QAM	1	0	23.54	23.33	23.39	23.13	22.75		
10	16QAM	1	25	23.58	23.37	23.29	23.39	23.16		
10	16QAM	1	49	23.51	23.35	23.39	22.90	23.16	23	
10	16QAM	25	0	22.56	22.50	22.32	22.24	22.06		
10	16QAM	25	12	22.50	22.34	22.33	22.26	22.18		
10	16QAM	25	25	22.49	22.39	22.47	22.11	22.18	23	
10	16QAM	50	0	22.48	22.36	22.37	22.16	22.15		
10	64QAM	1	0	22.28	22.13	22.05	21.85	21.32		
10	64QAM	1	25	22.27	22.05	22.05	22.15	21.87	23	
10	64QAM	1	49	22.13	22.03	22.18	21.47	21.85		
10	64QAM	25	0	21.66	21.45	21.34	21.37	21.10		
10	64QAM	25	12	21.67	21.43	21.32	21.31	21.26	22	
10	64QAM	25	25	21.56	21.38	21.38	21.17	21.20		
10	64QAM	50	0	21.58	21.38	21.38	21.17	21.18		
Channel				39575	40148	40680	41093	41555	Tune-up limit (dBm)	
Frequency (MHz)				2498.5	2545.8	2593	2640.30	2687.5		
5	QPSK	1	0	24.38	24.27	24.25	23.95	23.64	25	
5	QPSK	1	12	24.41	24.27	24.21	24.21	24.05		
5	QPSK	1	24	24.38	24.20	24.39	23.74	23.99		
5	QPSK	12	0	23.62	23.43	23.27	23.23	23.05	24	
5	QPSK	12	7	23.50	23.33	23.27	23.22	23.23		
5	QPSK	12	13	23.49	23.33	23.39	23.10	23.20		
5	QPSK	25	0	23.51	23.36	23.29	23.12	23.06	24	
5	16QAM	1	0	23.56	23.42	23.40	23.15	22.73		
5	16QAM	1	12	23.54	23.31	23.31	23.42	23.17		
5	16QAM	1	24	23.49	23.38	23.42	22.88	23.15	23	
5	16QAM	12	0	22.62	22.49	22.37	22.33	22.09		
5	16QAM	12	7	22.62	22.40	22.33	22.32	22.22		
5	16QAM	12	13	22.64	22.38	22.39	22.11	22.24	23	
5	16QAM	25	0	22.56	22.41	22.29	22.14	22.12		
5	64QAM	1	0	22.32	22.11	22.09	21.86	21.28		
5	64QAM	1	12	22.24	22.08	22.10	22.10	21.82	23	
5	64QAM	1	24	22.14	22.03	22.17	21.46	21.89		
5	64QAM	12	0	21.61	21.50	21.39	21.31	21.04		
5	64QAM	12	7	21.56	21.43	21.37	21.30	21.26	22	
5	64QAM	12	13	21.64	21.43	21.46	21.14	21.22		
5	64QAM	25	0	21.53	21.44	21.37	21.19	21.10		



Band 42							
Ant 7							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				43190	43340	43490	
Frequency (MHz)				3560	3575	3590	
20	QPSK	1	0	24.64	24.68	24.76	25
20	QPSK	1	49	24.61	24.66	24.74	
20	QPSK	1	99	24.59	24.62	24.66	
20	QPSK	50	0	23.79	23.86	23.94	24
20	QPSK	50	24	23.87	23.84	23.88	
20	QPSK	50	50	23.79	23.86	23.90	
20	QPSK	100	0	23.84	23.83	23.87	24
20	16QAM	1	0	23.94	23.92	23.90	
20	16QAM	1	49	23.93	23.95	23.90	
20	16QAM	1	99	23.96	23.98	23.99	23
20	16QAM	50	0	22.85	22.87	22.97	
20	16QAM	50	24	22.89	22.85	22.92	
20	16QAM	50	50	22.83	22.89	22.91	23
20	16QAM	100	0	22.88	22.85	22.90	
20	64QAM	1	0	22.79	22.82	22.90	
20	64QAM	1	49	22.81	22.88	22.85	22
20	64QAM	1	99	22.81	22.86	22.76	
20	64QAM	50	0	21.84	21.90	21.85	
20	64QAM	50	24	21.89	21.89	21.93	22
20	64QAM	50	50	21.84	21.89	21.84	
20	64QAM	100	0	21.88	21.85	21.84	
Channel				43165	43340	43515	limit (dBm)
Frequency (MHz)				3527.5	3572	3592.5	
15	QPSK	1	0	24.63	24.61	24.75	25
15	QPSK	1	37	24.60	24.66	24.67	
15	QPSK	1	74	24.56	24.53	24.61	
15	QPSK	36	0	23.77	23.78	23.92	24
15	QPSK	36	20	23.61	23.77	23.84	
15	QPSK	36	39	23.69	23.76	23.86	
15	QPSK	75	0	23.76	23.77	23.78	24
15	16QAM	1	0	23.93	23.99	23.99	
15	16QAM	1	37	23.97	23.95	23.97	
15	16QAM	1	74	23.86	23.88	23.97	23
15	16QAM	36	0	22.78	22.77	22.97	
15	16QAM	36	20	22.80	22.84	22.96	
15	16QAM	36	39	22.74	22.89	22.91	23
15	16QAM	75	0	22.86	22.76	22.83	
15	64QAM	1	0	22.75	22.72	22.83	23
15	64QAM	1	37	22.80	22.78	22.85	
15	64QAM	1	74	22.80	22.78	22.74	
15	64QAM	36	0	21.84	21.88	21.85	22
15	64QAM	36	20	21.83	21.85	21.92	
15	64QAM	36	39	21.81	21.82	21.82	
15	64QAM	75	0	21.84	21.78	21.75	limit (dBm)
Channel				43140	43340	43540	
Frequency (MHz)				3555	3576	3595	
10	QPSK	1	0	24.61	24.55	24.74	25
10	QPSK	1	25	24.58	24.56	24.68	
10	QPSK	1	49	24.59	24.52	24.61	
10	QPSK	25	0	23.74	23.79	23.88	24
10	QPSK	25	12	23.85	23.74	23.87	
10	QPSK	25	25	23.75	23.85	23.90	
10	QPSK	50	0	23.80	23.82	23.87	24
10	16QAM	1	0	23.94	23.96	23.96	
10	16QAM	1	25	23.90	23.96	23.90	
10	16QAM	1	49	23.92	23.88	23.98	23
10	16QAM	25	0	22.76	22.77	22.92	
10	16QAM	25	12	22.84	22.77	22.84	
10	16QAM	25	25	22.80	22.80	22.81	23
10	16QAM	50	0	22.85	22.77	22.87	
10	64QAM	1	0	22.79	22.81	22.90	
10	64QAM	1	25	22.71	22.80	22.79	22
10	64QAM	1	49	22.71	22.84	22.67	
10	64QAM	25	0	21.77	21.87	21.83	
10	64QAM	25	12	21.88	21.84	21.85	22
10	64QAM	25	25	21.74	21.80	21.81	
10	64QAM	50	0	21.88	21.80	21.76	
Channel				43115	43340	43565	limit (dBm)
Frequency (MHz)				3552.5	3579	3597.5	
5	QPSK	1	0	24.63	24.60	24.62	25
5	QPSK	1	12	24.59	24.63	24.71	
5	QPSK	1	24	24.59	24.53	24.59	
5	QPSK	12	0	23.75	23.80	23.88	24
5	QPSK	12	7	23.86	23.80	23.87	
5	QPSK	12	13	23.72	23.86	23.86	
5	QPSK	25	0	23.82	23.82	23.86	24
5	16QAM	1	0	23.93	23.94	23.95	
5	16QAM	1	12	23.84	23.93	23.91	
5	16QAM	1	24	23.91	23.91	23.97	23
5	16QAM	12	0	22.79	22.86	22.94	
5	16QAM	12	7	22.80	22.81	22.82	
5	16QAM	12	13	22.77	22.89	22.81	23
5	16QAM	25	0	22.86	22.81	22.87	
5	64QAM	1	0	22.79	22.73	22.89	
5	64QAM	1	12	22.73	22.80	22.78	22
5	64QAM	1	24	22.76	22.79	22.70	
5	64QAM	12	0	21.84	21.86	21.85	
5	64QAM	12	7	21.82	21.89	21.93	22
5	64QAM	12	13	21.83	21.81	21.84	
5	64QAM	25	0	21.84	21.78	21.78	



Band 48										
Ant. 7										
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Low Middle Ch. / Freq.	Power High Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)		
Channel				55340	55830	56150	56640			
Frequency (MHz)				3560	3609	3641	3690			
20	QPSK	1	0	20.89	24.38	24.55	20.93	25		
20	QPSK	1	49	20.78	24.21	24.18	20.76			
20	QPSK	1	99	20.77	24.20	24.13	20.67			
20	QPSK	50	0	19.97	23.52	23.58	19.96	24		
20	QPSK	50	24	19.92	23.53	23.50	19.90			
20	QPSK	50	50	19.88	23.47	23.44	19.80			
20	QPSK	100	0	19.93	23.52	23.51	19.87	24		
20	16QAM	1	0	19.91	23.58	23.58	19.92			
20	16QAM	1	49	19.84	23.46	23.46	19.80			
20	16QAM	1	99	19.89	23.47	23.46	19.76	23		
20	16QAM	50	0	19.00	22.54	22.52	19.00			
20	16QAM	50	24	18.97	22.57	22.56	18.94			
20	16QAM	50	50	18.89	22.51	22.48	18.82	23		
20	16QAM	100	0	18.95	22.58	22.53	18.90			
20	64QAM	1	0	18.74	22.36	22.11	18.87			
20	64QAM	1	49	18.60	22.23	22.09	18.61	23		
20	64QAM	1	99	18.67	22.27	22.01	18.55			
20	64QAM	50	0	17.99	21.56	21.43	17.99			
20	64QAM	50	24	17.95	21.59	21.46	17.94	22		
20	64QAM	50	50	17.90	21.52	21.35	17.82			
20	64QAM	100	0	17.95	21.57	21.36	17.91			
Channel				55315	55820	56160	56665	Tune-up limit (dBm)		
Frequency (MHz)				3557.5	3596	3642	3692.5			
15	QPSK	1	0	20.82	24.38	24.36	20.87	25		
15	QPSK	1	37	20.76	24.16	24.10	20.75			
15	QPSK	1	74	20.75	24.20	24.08	20.65			
15	QPSK	36	0	19.91	23.50	23.48	19.87	24		
15	QPSK	36	20	19.87	23.45	23.43	19.86			
15	QPSK	36	39	19.78	23.42	23.40	19.71			
15	QPSK	75	0	19.87	23.43	23.41	19.80	24		
15	16QAM	1	0	19.96	23.61	23.60	19.96			
15	16QAM	1	37	19.76	23.44	23.42	19.70			
15	16QAM	1	74	19.80	23.44	23.45	19.71	23		
15	16QAM	36	0	18.98	22.47	22.60	18.99			
15	16QAM	36	20	18.96	22.56	22.46	18.89			
15	16QAM	36	39	18.81	22.49	22.39	18.72	23		
15	16QAM	75	0	18.88	22.51	22.48	18.84			
15	64QAM	1	0	18.73	22.26	22.07	18.82			
15	64QAM	1	37	18.55	22.19	22.00	18.57	23		
15	64QAM	1	74	18.57	22.19	21.93	18.47			
15	64QAM	36	0	17.82	21.53	21.41	17.89			
15	64QAM	36	20	17.88	21.52	21.37	17.90	22		
15	64QAM	36	39	17.83	21.48	21.30	17.72			
15	64QAM	75	0	17.95	21.48	21.33	17.83			
Channel				55290	55815	56165	56690	Tune-up limit (dBm)		
Frequency (MHz)				3552.5	3601.5	3642.5	3695			
10	QPSK	1	0	20.81	24.30	24.32	20.92	25		
10	QPSK	1	25	20.76	24.18	24.14	20.70			
10	QPSK	1	49	20.72	24.16	24.12	20.66			
10	QPSK	25	0	19.90	23.51	23.58	19.89	24		
10	QPSK	25	12	19.90	23.46	23.48	19.86			
10	QPSK	25	25	19.87	23.45	23.38	19.72			
10	QPSK	50	0	19.91	23.42	23.51	19.84	24		
10	16QAM	1	0	19.94	23.59	23.66	19.96			
10	16QAM	1	25	19.83	23.44	23.40	19.72			
10	16QAM	1	49	19.89	23.46	23.45	19.74	23		
10	16QAM	25	0	18.94	22.53	22.59	19.00			
10	16QAM	25	12	18.87	22.57	22.54	18.88			
10	16QAM	25	25	18.84	22.51	22.40	18.80	23		
10	16QAM	50	0	18.92	22.55	22.50	18.82			
10	64QAM	1	0	18.67	22.31	22.05	18.82			
10	64QAM	1	25	18.60	22.22	22.06	18.60	23		
10	64QAM	1	49	18.61	22.26	21.99	18.47			
10	64QAM	25	0	17.95	21.50	21.33	17.89			
10	64QAM	25	12	17.92	21.54	21.43	17.84	22		
10	64QAM	25	25	17.89	21.42	21.25	17.77			
10	64QAM	50	0	17.87	21.56	21.36	17.81			
Channel				55265	55810	56170	56715	Tune-up limit (dBm)		
Frequency (MHz)				3552.5	3607	3643	3697.5			
5	QPSK	1	0	20.81	24.33	24.39	20.92	25		
5	QPSK	1	12	20.72	24.19	24.13	20.67			
5	QPSK	1	24	20.76	24.20	24.10	20.61			
5	QPSK	12	0	19.94	23.52	23.54	19.92	24		
5	QPSK	12	7	19.87	23.46	23.40	19.84			
5	QPSK	12	13	19.83	23.41	23.43	19.71			
5	QPSK	25	0	19.88	23.50	23.43	19.77	24		
5	16QAM	1	0	19.99	23.66	23.67	19.91			
5	16QAM	1	12	19.80	23.36	23.40	19.80			
5	16QAM	1	24	19.94	23.43	23.39	19.75	23		
5	16QAM	12	0	18.90	22.54	22.62	18.93			
5	16QAM	12	7	18.97	22.54	22.55	18.89			
5	16QAM	12	13	18.83	22.41	22.48	18.75	23		
5	16QAM	25	0	18.92	22.54	22.48	18.87			
5	64QAM	1	0	18.73	22.26	22.03	18.77			
5	64QAM	1	12	18.60	22.15	22.01	18.52	23		
5	64QAM	1	24	18.57	22.19	21.95	18.47			
5	64QAM	12	0	18.01	21.49	21.39	17.92			
5	64QAM	12	7	17.95	21.50	21.46	17.94	22		
5	64QAM	12	13	17.83	21.42	21.30	17.75			
5	64QAM	25	0	17.89	21.53	21.33	17.91			



Band 38							
Art.0							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				37850	38000	38150	
Frequency (MHz)				2550	2595	2610	
20	QPSK	1	0	24.93	24.94	24.98	25
20	QPSK	1	49	24.99	24.91	24.93	
20	QPSK	1	99	24.94	24.97	24.96	
20	QPSK	50	0	23.94	23.99	23.99	
20	QPSK	50	24	23.99	23.92	23.92	24
20	QPSK	50	50	23.88	23.84	23.82	
20	QPSK	100	0	23.89	23.88	23.82	
20	16QAM	1	0	23.83	23.86	23.86	
20	16QAM	1	49	23.86	23.87	23.80	24
20	16QAM	1	99	23.82	23.83	23.83	
20	16QAM	50	0	22.86	22.81	22.81	
20	16QAM	50	24	22.89	22.86	22.83	
20	16QAM	50	50	22.80	22.86	22.80	23
20	16QAM	100	0	22.88	22.83	22.82	
20	64QAM	1	0	22.80	22.81	22.81	
20	64QAM	1	49	22.79	22.81	22.83	
20	64QAM	1	99	22.85	22.80	22.79	23
20	64QAM	50	0	21.89	21.80	21.81	
20	64QAM	50	24	21.90	21.76	21.84	
20	64QAM	50	50	21.81	21.88	21.85	
20	64QAM	100	0	21.89	21.84	21.82	22
Channel				37825	38000	38175	
Frequency (MHz)				2571.5	2595	2612.5	Tune-up limit (dBm)
15	QPSK	1	0	24.91	24.94	24.97	25
15	QPSK	1	37	24.90	24.82	24.91	
15	QPSK	1	74	24.91	24.87	24.96	
15	QPSK	36	0	23.84	23.97	23.92	
15	QPSK	36	20	23.96	23.87	23.83	24
15	QPSK	36	39	23.79	23.80	23.72	
15	QPSK	75	0	23.81	23.87	23.76	
15	16QAM	1	0	23.74	23.83	23.81	
15	16QAM	1	37	23.86	23.81	23.71	24
15	16QAM	1	74	23.72	23.73	23.77	
15	16QAM	36	0	22.85	22.77	22.80	
15	16QAM	36	20	22.81	22.86	22.75	
15	16QAM	36	39	22.75	22.85	22.76	23
15	16QAM	75	0	22.86	22.74	22.79	
15	64QAM	1	0	22.71	22.80	22.73	
15	64QAM	1	37	22.71	22.79	22.78	
15	64QAM	1	74	22.85	22.70	22.75	23
15	64QAM	36	0	21.80	21.78	21.89	
15	64QAM	36	20	21.87	21.70	21.80	
15	64QAM	36	39	21.77	21.82	21.83	
15	64QAM	75	0	21.89	21.84	21.79	22
Channel				37800	38000	38200	
Frequency (MHz)				2575	2595	2615	Tune-up limit (dBm)
10	QPSK	1	0	24.92	24.89	24.91	25
10	QPSK	1	25	24.90	24.90	24.83	
10	QPSK	1	49	24.91	24.97	24.87	
10	QPSK	25	0	23.90	23.97	23.99	
10	QPSK	25	12	23.95	23.89	23.89	24
10	QPSK	25	25	23.84	23.77	23.72	
10	QPSK	50	0	23.82	23.82	23.74	
10	16QAM	1	0	23.74	23.76	23.84	
10	16QAM	1	25	23.77	23.84	23.70	24
10	16QAM	1	49	23.75	23.76	23.82	
10	16QAM	25	0	22.84	22.71	22.80	
10	16QAM	25	12	22.87	22.81	22.82	
10	16QAM	25	25	22.70	22.77	22.75	23
10	16QAM	50	0	22.86	22.75	22.74	
10	64QAM	1	0	22.80	22.74	22.74	
10	64QAM	1	25	22.72	22.71	22.75	
10	64QAM	1	49	22.77	22.75	22.73	23
10	64QAM	25	0	21.81	21.75	21.89	
10	64QAM	25	12	21.83	21.73	21.77	
10	64QAM	25	25	21.79	21.79	21.83	
10	64QAM	50	0	21.80	21.79	21.75	22
Channel				37775	38000	38225	
Frequency (MHz)				2572.5	2595	2617.5	Tune-up limit (dBm)
5	QPSK	1	0	24.86	24.92	24.94	25
5	QPSK	1	12	24.96	24.90	24.92	
5	QPSK	1	24	24.94	24.94	24.95	
5	QPSK	12	0	23.86	23.97	23.93	
5	QPSK	12	7	23.91	23.82	23.83	24
5	QPSK	12	13	23.88	23.82	23.81	
5	QPSK	25	0	23.79	23.82	23.72	
5	16QAM	1	0	23.74	23.76	23.86	
5	16QAM	1	12	23.79	23.83	23.76	24
5	16QAM	1	24	23.72	23.80	23.79	
5	16QAM	12	0	22.82	22.73	22.79	
5	16QAM	12	7	22.86	22.82	22.73	
5	16QAM	12	13	22.77	22.83	22.79	23
5	16QAM	25	0	22.84	22.78	22.79	
5	64QAM	1	0	22.77	22.77	22.79	
5	64QAM	1	12	22.74	22.71	22.76	
5	64QAM	1	24	22.82	22.70	22.73	23
5	64QAM	12	0	21.88	21.71	21.87	
5	64QAM	12	7	21.88	21.71	21.84	
5	64QAM	12	13	21.80	21.83	21.80	
5	64QAM	25	0	21.84	21.77	21.72	22



Band 38_HPUE							
Ant 0							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				37850	38000	38150	
Frequency (MHz)				2500	2595	2610	
20	QPSK	1	0	26.87	26.91	26.95	27.5
20	QPSK	1	49	26.82	26.98	26.99	
20	QPSK	1	99	26.60	27.01	27.00	
20	QPSK	50	0	25.73	25.88	26.11	26.5
20	QPSK	50	24	25.81	25.94	26.26	
20	QPSK	50	50	25.74	25.89	26.00	
20	QPSK	100	0	25.84	25.91	26.07	26.5
20	16QAM	1	0	26.20	26.33	26.32	
20	16QAM	1	49	25.96	26.26	26.32	
20	16QAM	1	99	25.96	26.37	26.34	25.5
20	16QAM	50	0	24.94	25.08	25.29	
20	16QAM	50	24	24.97	25.22	25.32	
20	16QAM	50	50	25.07	25.23	25.34	25.5
20	16QAM	100	0	24.92	25.04	25.16	
20	64QAM	1	0	24.31	24.38	24.44	
20	64QAM	1	49	24.04	24.31	24.74	25.5
20	64QAM	1	99	24.04	24.55	24.68	
20	64QAM	50	0	23.16	23.14	23.43	
20	64QAM	50	24	23.14	23.29	23.50	24.5
20	64QAM	50	50	23.13	23.34	23.43	
20	64QAM	100	0	23.10	23.14	23.24	
Channel				37825	38000	38175	Tune-up limit (dBm)
Frequency (MHz)				2617.5	2695	2612.5	
15	QPSK	1	0	26.82	26.82	26.94	27.5
15	QPSK	1	37	26.58	26.91	26.95	
15	QPSK	1	74	26.58	26.99	26.98	
15	QPSK	36	0	25.63	25.85	26.01	26.5
15	QPSK	36	20	25.81	25.86	26.19	
15	QPSK	36	39	25.65	25.83	25.94	
15	QPSK	75	0	25.82	25.82	26.01	26.5
15	16QAM	1	0	26.11	26.23	26.28	
15	16QAM	1	37	25.93	26.20	26.22	
15	16QAM	1	74	25.90	26.27	26.33	25.5
15	16QAM	36	0	24.90	25.06	25.27	
15	16QAM	36	20	24.90	25.13	25.27	
15	16QAM	36	39	24.97	25.15	25.29	25.5
15	16QAM	75	0	24.85	24.96	25.13	
15	64QAM	1	0	24.30	24.33	24.38	
15	64QAM	1	37	23.99	24.25	24.74	25.5
15	64QAM	1	74	24.04	24.55	24.66	
15	64QAM	36	0	23.12	23.11	23.43	
15	64QAM	36	20	23.05	23.21	23.44	24.5
15	64QAM	36	39	23.08	23.29	23.38	
15	64QAM	75	0	23.05	23.12	23.16	
Channel				37800	38000	38200	Tune-up limit (dBm)
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	26.80	26.89	26.94	27.5
10	QPSK	1	25	26.58	26.90	26.93	
10	QPSK	1	49	26.52	27.00	26.98	
10	QPSK	25	0	25.68	25.80	26.06	26.5
10	QPSK	25	12	25.78	25.85	26.19	
10	QPSK	25	25	25.73	25.89	25.91	
10	QPSK	50	0	25.74	25.87	25.99	26.5
10	16QAM	1	0	26.13	26.30	26.25	
10	16QAM	1	25	25.86	26.19	26.23	
10	16QAM	1	49	25.90	26.32	26.31	25.5
10	16QAM	25	0	24.90	25.07	25.22	
10	16QAM	25	12	24.92	25.17	25.22	
10	16QAM	25	25	25.04	25.14	25.34	25.5
10	16QAM	50	0	24.91	24.96	25.15	
10	64QAM	1	0	24.24	24.37	24.36	
10	64QAM	1	25	23.97	24.24	24.64	25.5
10	64QAM	1	49	24.04	24.53	24.65	
10	64QAM	25	0	23.07	23.12	23.33	
10	64QAM	25	12	23.05	23.19	23.43	24.5
10	64QAM	25	25	23.12	23.31	23.35	
10	64QAM	50	0	23.10	23.10	23.24	
Channel				37775	38000	38225	Tune-up limit (dBm)
Frequency (MHz)				2572.5	2595	2617.5	
5	QPSK	1	0	26.80	26.90	26.94	27.5
5	QPSK	1	12	26.59	26.97	26.91	
5	QPSK	1	24	26.53	26.96	26.91	
5	QPSK	12	0	25.64	25.85	26.04	26.5
5	QPSK	12	7	25.77	25.90	26.20	
5	QPSK	12	13	25.71	25.88	26.00	
5	QPSK	25	0	25.78	25.83	26.04	26.5
5	16QAM	1	0	26.17	26.32	26.31	
5	16QAM	1	12	25.96	26.21	26.27	
5	16QAM	1	24	25.93	26.32	26.28	25.5
5	16QAM	12	0	24.84	25.07	25.19	
5	16QAM	12	7	24.92	25.22	25.31	
5	16QAM	12	13	24.99	25.13	25.34	25.5
5	16QAM	25	0	24.82	24.99	25.12	
5	64QAM	1	0	24.28	24.33	24.43	
5	64QAM	1	12	23.96	24.28	24.67	25.5
5	64QAM	1	24	23.95	24.49	24.64	
5	64QAM	12	0	23.06	23.09	23.41	
5	64QAM	12	7	23.10	23.22	23.41	24.5
5	64QAM	12	13	23.11	23.25	23.42	
5	64QAM	25	0	23.03	23.05	23.20	



Band 41											
Airt 0											
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Low Middle Ch. / Freq.	Power Middle Ch. / Freq.	Power High Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)		
Channel				39750	40185	40620	41055	41490			
Frequency (MHz)				2506	2549.5	2593	2636.5	2680			
20	QPSK	1	0	24.63	24.82	24.91	24.99	24.45	25		
20	QPSK	1	49	24.87	24.87	24.94	24.95	24.81			
20	QPSK	1	99	24.73	24.95	24.96	24.75	24.68			
20	QPSK	50	0	23.81	23.99	23.90	23.98	23.79			
20	QPSK	50	24	23.83	23.93	23.93	23.94	23.92	24		
20	QPSK	50	50	23.84	23.90	23.94	23.94	23.81			
20	QPSK	100	0	23.84	23.95	23.91	23.97	23.85			
20	16QAM	1	0	23.73	23.94	23.99	24.00	23.55			
20	16QAM	1	49	23.73	23.98	23.91	23.99	23.88	24		
20	16QAM	1	99	23.84	23.93	23.92	23.86	23.75			
20	16QAM	50	0	22.81	22.83	22.82	22.80	22.81			
20	16QAM	50	24	22.87	22.86	22.83	22.87	22.86			
20	16QAM	50	50	22.88	22.88	22.87	22.89	22.85	23		
20	16QAM	100	0	22.84	22.85	22.84	22.89	22.87			
20	64QAM	1	0	22.50	22.67	22.79	22.77	22.25			
20	64QAM	1	49	22.44	22.70	22.71	22.68	22.62			
20	64QAM	1	99	22.56	22.77	22.73	22.54	22.41	23		
20	64QAM	50	0	21.81	21.94	21.85	21.81	21.81			
20	64QAM	50	24	21.88	21.91	21.86	21.80	21.98			
20	64QAM	50	50	21.86	21.91	21.86	21.89	21.87			
20	64QAM	100	0	21.87	21.98	21.84	21.81	21.86	22		
Channel				39725	40173	40620	41068	41515			
Frequency (MHz)				2503.5	2546.5	2593	2637.5	2682.5			
15	QPSK	1	0	24.59	24.78	24.84	24.84	24.40	25		
15	QPSK	1	37	24.57	24.78	24.88	24.85	24.75			
15	QPSK	1	74	24.72	24.95	24.94	24.71	24.65			
15	QPSK	36	0	23.81	23.91	23.83	23.98	23.75			
15	QPSK	36	20	23.76	23.89	23.85	23.91	23.89	24		
15	QPSK	36	39	23.79	23.80	23.84	23.87	23.71			
15	QPSK	75	0	23.81	23.88	23.88	23.94	23.82			
15	16QAM	1	0	23.71	23.84	23.90	23.94	23.47			
15	16QAM	1	37	23.71	23.97	23.86	23.99	23.83	24		
15	16QAM	1	74	23.82	23.89	23.89	23.83	23.65			
15	16QAM	36	0	22.74	22.81	22.77	22.70	22.80			
15	16QAM	36	20	22.84	22.84	22.75	22.86	22.87			
15	16QAM	36	39	22.79	22.85	22.77	22.82	22.84	23		
15	16QAM	75	0	22.75	22.83	22.82	22.85	22.82			
15	64QAM	1	0	22.40	22.59	22.78	22.77	22.16			
15	64QAM	1	37	22.42	22.61	22.63	22.62	22.53			
15	64QAM	1	74	22.49	22.77	22.69	22.61	22.39	23		
15	64QAM	36	0	21.77	21.91	21.78	21.78	21.80			
15	64QAM	36	20	21.85	21.85	21.82	21.73	21.95			
15	64QAM	36	39	21.80	21.91	21.81	21.84	21.80			
15	64QAM	75	0	21.81	21.88	21.75	21.78	21.84	22		
Channel				39700	40150	40600	41050	41500			
Frequency (MHz)				2501	2547	2593	2639	2685			
10	QPSK	1	0	24.59	24.72	24.82	24.82	24.45	25		
10	QPSK	1	25	24.60	24.81	24.85	24.93	24.80			
10	QPSK	1	49	24.67	24.90	24.92	24.68	24.58			
10	QPSK	25	0	23.74	23.97	23.84	23.89	23.75			
10	QPSK	25	12	23.81	23.87	23.85	23.88	23.83	24		
10	QPSK	25	25	23.80	23.88	23.89	23.85	23.78			
10	QPSK	50	0	23.76	23.95	23.81	23.96	23.77			
10	16QAM	1	0	23.71	23.87	23.96	23.97	23.51			
10	16QAM	1	25	23.64	23.93	23.82	23.95	23.86	24		
10	16QAM	1	49	23.81	23.91	23.96	23.84	23.75			
10	16QAM	25	0	22.76	22.75	22.75	22.76	22.80			
10	16QAM	25	12	22.79	22.81	22.82	22.79	22.93			
10	16QAM	25	25	22.85	22.87	22.85	22.81	22.82	23		
10	16QAM	50	0	22.77	22.81	22.77	22.80	22.82			
10	64QAM	1	0	22.44	22.63	22.76	22.76	22.21			
10	64QAM	1	25	22.40	22.68	22.64	22.66	22.54			
10	64QAM	1	49	22.51	22.70	22.63	22.50	22.31	23		
10	64QAM	25	0	21.75	21.87	21.78	21.77	21.79			
10	64QAM	25	12	21.82	21.90	21.79	21.78	21.98			
10	64QAM	25	25	21.80	21.83	21.80	21.81	21.86			
10	64QAM	50	0	21.79	21.98	21.83	21.79	21.76	22		
Channel				39675	40148	40620	41063	41565			
Frequency (MHz)				2498.5	2545.8	2593	2640.30	2687.5			
5	QPSK	1	0	24.61	24.80	24.90	24.84	24.38	25		
5	QPSK	1	12	24.60	24.85	24.87	24.89	24.79			
5	QPSK	1	24	24.71	24.94	24.96	24.71	24.65			
5	QPSK	12	0	23.77	23.92	23.85	23.97	23.74			
5	QPSK	12	7	23.80	23.93	23.90	23.87	23.82	24		
5	QPSK	12	13	23.81	23.84	23.93	23.87	23.71			
5	QPSK	25	0	23.82	23.91	23.81	23.90	23.79			
5	16QAM	1	0	23.73	23.92	23.93	23.95	23.47			
5	16QAM	1	12	23.73	23.96	23.85	23.97	23.84	24		
5	16QAM	1	24	23.82	23.91	23.86	23.82	23.71			
5	16QAM	12	0	22.71	22.78	22.75	22.72	22.73			
5	16QAM	12	7	22.87	22.78	22.81	22.83	22.94			
5	16QAM	12	13	22.88	22.83	22.79	22.79	22.84	23		
5	16QAM	25	0	22.78	22.81	22.74	22.85	22.89			
5	64QAM	1	0	22.41	22.67	22.75	22.73	22.17			
5	64QAM	1	12	22.41	22.65	22.69	22.65	22.54			
5	64QAM	1	24	22.48	22.76	22.72	22.45	22.40	23		
5	64QAM	12	0	21.75	21.89	21.81	21.75	21.80			
5	64QAM	12	7	21.88	21.87	21.77	21.74	21.98			
5	64QAM	12	13	21.76	21.88	21.77	21.84	21.84			
5	64QAM	25	0	21.87	21.96	21.80	21.77	21.78	22		



Band 41 HPUE											
Ant 0											
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Low Middle Ch / Freq	Power Middle Ch / Freq	Power High Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)		
Channel				39750	40185	40620	41055	41490			
Frequency (MHz)				2506	2549.5	2593	2636.5	2680			
20	QPSK	1	0	25.92	26.05	26.68	26.59	26.20	27.5		
20	QPSK	1	49	26.31	25.86	26.87	26.86	26.46			
20	QPSK	1	99	26.48	25.87	26.66	26.44	26.13			
20	QPSK	50	0	25.18	25.01	25.91	25.99	25.62	26.5		
20	QPSK	50	24	25.39	24.93	25.93	26.08	25.77			
20	QPSK	50	50	25.69	24.79	25.95	25.88	25.47			
20	QPSK	100	0	24.56	24.66	25.95	25.88	25.63	26.5		
20	16QAM	1	0	25.24	25.30	26.07	25.97	25.51			
20	16QAM	1	49	25.88	25.14	26.00	26.25	25.81			
20	16QAM	1	99	25.80	25.03	26.06	25.77	25.50	25.5		
20	16QAM	50	0	24.35	24.12	24.93	25.01	24.65			
20	16QAM	50	24	24.88	24.08	24.96	25.11	24.79			
20	16QAM	50	50	24.74	23.98	24.98	24.89	24.66	25.5		
20	16QAM	100	0	24.22	23.92	24.95	24.91	24.70			
20	64QAM	1	0	23.58	23.66	24.29	24.83	24.10			
20	64QAM	1	49	23.58	23.60	24.45	24.45	25.12	25.5		
20	64QAM	1	99	24.03	23.66	24.09	24.62	23.50			
20	64QAM	50	0	22.56	22.52	23.29	24.04	23.14			
20	64QAM	50	24	22.67	22.54	23.35	24.12	23.03	24.5		
20	64QAM	50	50	22.90	22.59	23.42	23.90	22.78			
20	64QAM	100	0	22.55	22.54	23.35	23.92	22.83			
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	25.88	25.95	26.64	26.49	26.14	27.5		
15	QPSK	1	37	26.21	25.80	26.62	26.79	26.44			
15	QPSK	1	74	26.44	25.77	26.65	26.42	26.07			
15	QPSK	36	0	25.18	24.91	25.82	25.90	25.60	26.5		
15	QPSK	36	20	25.35	24.83	25.88	26.03	25.67			
15	QPSK	36	39	25.66	24.72	25.87	25.78	25.37			
15	QPSK	75	0	24.51	24.80	25.86	25.86	25.55	26.5		
15	16QAM	1	0	25.24	25.21	26.05	25.97	25.50			
15	16QAM	1	37	25.66	25.08	25.99	26.15	25.81			
15	16QAM	1	74	25.73	24.96	26.05	25.76	25.50	25.5		
15	16QAM	36	0	24.29	24.06	24.94	24.97	24.56			
15	16QAM	36	20	24.62	24.08	24.86	25.04	24.73			
15	16QAM	36	39	24.70	23.89	24.93	24.89	24.64	25.5		
15	16QAM	75	0	24.17	23.82	24.87	24.82	24.61			
15	64QAM	1	0	23.55	23.56	24.25	24.79	24.07			
15	64QAM	1	37	23.58	23.60	24.41	25.03	23.75	25.5		
15	64QAM	1	74	24.00	23.61	24.98	24.88	24.55			
15	64QAM	36	0	22.56	22.48	23.23	23.99	23.10			
15	64QAM	36	20	22.85	22.47	23.34	24.11	23.02	24.5		
15	64QAM	36	39	22.84	22.59	23.32	23.88	22.78			
15	64QAM	75	0	22.53	22.51	23.28	23.85	22.90			
Channel				39700	40160	40600	41080	41540	Tune-up limit (dBm)		
Frequency (MHz)				2501	2547	2593	2639	2686			
10	QPSK	1	0	25.82	26.03	26.58	26.55	26.10	27.5		
10	QPSK	1	25	26.21	25.77	26.66	26.80	26.39			
10	QPSK	1	49	26.46	25.83	26.64	26.34	26.09			
10	QPSK	25	0	25.14	24.99	25.81	25.95	25.62	26.5		
10	QPSK	25	12	25.33	24.85	25.85	26.05	25.75			
10	QPSK	25	25	25.59	24.78	25.94	25.80	25.45			
10	QPSK	50	0	24.66	24.77	25.86	25.82	25.54	26.5		
10	16QAM	1	0	25.15	25.22	25.99	25.94	25.44			
10	16QAM	1	25	25.68	25.08	25.99	26.20	25.81			
10	16QAM	1	49	25.75	25.00	25.99	25.75	25.48	25.5		
10	16QAM	25	0	24.26	24.04	24.83	24.92	24.61			
10	16QAM	25	12	24.68	24.00	24.91	25.10	24.74			
10	16QAM	25	25	24.72	23.97	24.98	24.81	24.61	25.5		
10	16QAM	50	0	24.21	23.82	24.95	24.82	24.61			
10	64QAM	1	0	23.54	23.61	24.26	24.75	24.02			
10	64QAM	1	25	23.50	23.56	24.35	25.10	23.76	25.5		
10	64QAM	1	49	24.03	23.95	24.05	24.82	23.41			
10	64QAM	25	0	22.50	22.50	23.28	24.01	23.13			
10	64QAM	25	12	22.63	22.49	23.29	24.10	22.99	24.5		
10	64QAM	25	25	22.87	22.49	23.34	23.87	22.71			
10	64QAM	50	0	22.46	22.53	23.27	23.69	22.84			
Channel				39675	40148	40600	41083	41555	Tune-up limit (dBm)		
Frequency (MHz)				2498.5	2545.8	2593	2640.30	2687.5			
5	QPSK	1	0	25.82	25.95	26.66	26.59	26.19	27.5		
5	QPSK	1	12	26.27	25.76	26.61	26.83	26.45			
5	QPSK	1	24	26.38	25.79	26.60	26.41	26.04			
5	QPSK	12	0	25.17	25.00	25.91	25.97	25.60	26.5		
5	QPSK	12	7	25.33	24.91	25.87	26.06	25.72			
5	QPSK	12	13	25.65	24.78	25.95	25.83	25.41			
5	QPSK	25	0	24.64	24.77	25.94	25.87	25.59	26.5		
5	16QAM	1	0	25.19	25.24	26.05	25.89	25.45			
5	16QAM	1	12	25.58	25.06	25.92	26.15	25.75			
5	16QAM	1	24	25.72	24.96	25.99	25.71	25.49	25.5		
5	16QAM	12	0	24.28	24.10	24.92	24.99	24.58			
5	16QAM	12	7	24.64	24.06	24.87	25.06	24.75			
5	16QAM	12	13	24.64	23.96	24.94	24.79	24.62	25.5		
5	16QAM	25	0	24.16	23.90	24.91	24.88	24.68			
5	64QAM	1	0	23.48	23.60	24.24	24.80	24.04			
5	64QAM	1	12	23.54	23.56	24.37	25.11	23.77	25.5		
5	64QAM	1	24	24.00	23.56	24.09	24.61	23.46			
5	64QAM	12	0	22.49	22.43	23.21	23.99	23.08			
5	64QAM	12	7	22.66	22.44	23.33	24.04	22.99	24.5		
5	64QAM	12	13	22.80	22.53	23.37	23.83	22.72			
5	64QAM	25	0	22.52	22.54	23.29	23.92	22.83			



Band 42							
Art 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				43190	43340	43490	
Frequency (MHz)				3560	3575	3590	
20	QPSK	1	0	22.94	23.03	23.03	23.5
20	QPSK	1	49	22.98	23.01	23.06	
20	QPSK	1	99	22.89	22.94	22.97	
20	QPSK	50	0	22.03	22.08	22.12	22.5
20	QPSK	50	24	22.08	22.04	22.08	
20	QPSK	50	50	22.03	22.06	22.08	
20	QPSK	100	0	22.07	22.02	22.07	22.5
20	16QAM	1	0	22.09	22.11	22.17	
20	16QAM	1	49	22.04	22.08	22.12	
20	16QAM	1	99	22.00	22.04	22.07	21.5
20	16QAM	50	0	21.04	21.09	21.14	
20	16QAM	50	24	21.10	21.07	21.10	
20	16QAM	50	50	21.04	21.05	21.10	21.5
20	16QAM	100	0	21.07	21.03	21.09	
20	64QAM	1	0	20.70	20.81	20.75	
20	64QAM	1	49	20.75	20.84	20.66	21.5
20	64QAM	1	99	20.79	20.79	20.58	
20	64QAM	50	0	20.06	20.11	20.02	
20	64QAM	50	24	20.11	20.08	20.06	20.5
20	64QAM	50	50	20.05	20.08	19.95	
20	64QAM	100	0	20.09	20.03	19.94	
Channel				43165	43340	43515	Tune-up limit (dBm)
Frequency (MHz)				3657.4	3675	3692.5	
15	QPSK	1	0	22.85	22.94	22.94	23.5
15	QPSK	1	37	22.96	22.95	22.96	
15	QPSK	1	74	22.89	22.86	22.87	
15	QPSK	36	0	21.99	21.99	22.10	22.5
15	QPSK	36	20	21.98	21.97	22.04	
15	QPSK	36	39	22.00	22.04	22.05	
15	QPSK	75	0	22.01	22.00	21.98	22.5
15	16QAM	1	0	22.04	22.09	22.13	
15	16QAM	1	37	21.95	22.05	22.11	
15	16QAM	1	74	21.94	21.99	22.01	21.5
15	16QAM	36	0	20.99	21.07	21.12	
15	16QAM	36	20	21.08	20.97	21.06	
15	16QAM	36	39	20.97	21.01	21.07	21.5
15	16QAM	75	0	21.02	21.00	21.01	
15	64QAM	1	0	20.61	20.78	20.73	
15	64QAM	1	37	20.65	20.76	20.63	21.5
15	64QAM	1	74	20.79	20.75	20.48	
15	64QAM	36	0	20.03	20.03	19.92	
15	64QAM	36	20	20.05	20.08	20.03	20.5
15	64QAM	36	39	20.00	20.00	19.86	
15	64QAM	75	0	20.05	20.01	19.92	
Channel				43140	43340	43540	Tune-up limit (dBm)
Frequency (MHz)				3555	3575	3595	
10	QPSK	1	0	22.92	22.95	22.96	23.5
10	QPSK	1	25	22.93	22.93	23.05	
10	QPSK	1	49	22.80	22.87	22.94	
10	QPSK	25	0	21.96	22.02	22.09	22.5
10	QPSK	25	12	22.08	21.96	22.05	
10	QPSK	25	25	21.99	21.96	22.05	
10	QPSK	50	0	21.98	21.95	22.02	22.5
10	16QAM	1	0	22.01	22.02	22.10	
10	16QAM	1	25	21.99	22.06	22.10	
10	16QAM	1	49	21.96	21.96	21.88	21.5
10	16QAM	25	0	20.94	21.07	21.07	
10	16QAM	25	12	21.03	20.99	21.05	
10	16QAM	25	25	20.97	21.02	21.06	21.5
10	16QAM	50	0	21.05	20.94	20.99	
10	64QAM	1	0	20.70	20.79	20.67	
10	64QAM	1	25	20.73	20.76	20.58	21.5
10	64QAM	1	49	20.79	20.69	20.52	
10	64QAM	25	0	19.99	20.06	20.00	
10	64QAM	25	12	20.10	20.05	20.05	20.5
10	64QAM	25	25	19.98	20.02	19.89	
10	64QAM	50	0	20.09	19.94	19.89	
Channel				43115	43340	43565	Tune-up limit (dBm)
Frequency (MHz)				3562.5	3575	3597.5	
5	QPSK	1	0	22.92	23.01	22.97	23.5
5	QPSK	1	12	22.90	23.00	22.96	
5	QPSK	1	24	22.83	22.92	22.96	
5	QPSK	12	0	22.00	21.95	22.04	22.5
5	QPSK	12	7	22.05	22.00	22.01	
5	QPSK	12	13	21.99	21.96	22.02	
5	QPSK	25	0	22.03	21.93	22.02	22.5
5	16QAM	1	0	22.05	22.02	22.15	
5	16QAM	1	12	21.98	22.03	22.06	
5	16QAM	1	24	21.90	21.95	22.06	21.5
5	16QAM	12	0	21.04	21.02	21.09	
5	16QAM	12	7	21.08	21.00	21.04	
5	16QAM	12	13	20.98	21.05	21.10	21.5
5	16QAM	25	0	20.98	20.96	21.03	
5	64QAM	1	0	20.61	20.80	20.72	
5	64QAM	1	12	20.71	20.75	20.66	21.5
5	64QAM	1	24	20.75	20.72	20.52	
5	64QAM	12	0	19.96	20.02	19.99	
5	64QAM	12	7	20.05	20.00	19.98	20.5
5	64QAM	12	13	20.00	19.96	19.80	
5	64QAM	25	0	20.02	19.94	19.93	



Band 48										
Ant 2										
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Low Middle Ch. / Freq.	Power High Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)		
Channel				55340	55830	56150	56640			
Frequency (MHz)				3560	3609	3641	3690			
20	QPSK	1	0	19.65	23.27	23.37	19.53	23.5		
20	QPSK	1	49	19.47	23.06	23.02	19.31			
20	QPSK	1	99	19.50	23.04	22.93	19.21			
20	QPSK	50	0	18.70	22.22	22.26	18.51	22.5		
20	QPSK	50	24	18.68	22.25	22.18	18.45			
20	QPSK	50	50	18.61	22.18	22.09	18.34			
20	QPSK	100	0	18.65	22.24	22.17	18.44	22.5		
20	16QAM	1	0	18.74	22.39	22.38	18.67			
20	16QAM	1	49	18.57	22.18	22.11	18.39			
20	16QAM	1	99	18.63	22.16	22.05	18.30	21.5		
20	16QAM	50	0	17.74	21.24	21.26	17.57			
20	16QAM	50	24	17.72	21.27	21.20	17.46			
20	16QAM	50	50	17.65	21.20	21.12	17.40	21.5		
20	16QAM	100	0	17.68	21.24	21.20	17.48			
20	64QAM	1	0	17.45	21.06	20.77	17.44			
20	64QAM	1	49	17.36	20.91	20.75	17.13	21.5		
20	64QAM	1	99	17.39	20.93	20.67	17.09			
20	64QAM	50	0	16.74	20.25	20.09	16.54			
20	64QAM	50	24	16.70	20.26	20.10	16.48	20.5		
20	64QAM	50	50	16.64	20.19	19.99	16.38			
20	64QAM	100	0	16.69	20.27	20.03	16.47			
Channel				55315	55820	56160	56665	Tune-up limit (dBm)		
Frequency (MHz)				3557.5	3608	3642	3692.5			
15	QPSK	1	0	19.62	23.17	23.26	19.50	23.5		
15	QPSK	1	37	19.41	23.02	23.02	19.27			
15	QPSK	1	74	19.47	22.94	22.86	19.20			
15	QPSK	36	0	18.68	22.21	22.20	18.48	22.5		
15	QPSK	36	20	18.58	22.21	22.16	18.40			
15	QPSK	36	39	18.58	22.14	22.09	18.28			
15	QPSK	75	0	18.55	22.15	22.08	18.43	22.5		
15	16QAM	1	0	18.64	22.30	22.36	18.59			
15	16QAM	1	37	18.55	22.17	22.05	18.33			
15	16QAM	1	74	18.56	22.10	21.96	18.20	21.5		
15	16QAM	36	0	17.67	21.22	21.26	17.47			
15	16QAM	36	20	17.72	21.18	21.17	17.46			
15	16QAM	36	39	17.57	21.15	21.09	17.39	21.5		
15	16QAM	75	0	17.62	21.20	21.11	17.38			
15	64QAM	1	0	17.36	20.98	20.68	17.35			
15	64QAM	1	37	17.28	20.86	20.72	17.10	20.5		
15	64QAM	1	74	17.36	20.83	20.66	17.00			
15	64QAM	36	0	16.71	20.20	20.00	16.44			
15	64QAM	36	20	16.68	20.23	20.03	16.38	20.5		
15	64QAM	36	39	16.62	20.13	19.91	16.36			
15	64QAM	75	0	16.69	20.25	20.03	16.47			
Channel				55290	55815	56163	56669	Tune-up limit (dBm)		
Frequency (MHz)				3555	3607.5	3642.5	3695			
10	QPSK	1	0	19.64	23.22	23.18	19.43	23.5		
10	QPSK	1	25	19.46	23.00	22.97	19.21			
10	QPSK	1	49	19.42	23.01	22.86	19.21			
10	QPSK	25	0	18.60	22.20	22.19	18.48	22.5		
10	QPSK	25	12	18.58	22.21	22.11	18.38			
10	QPSK	25	25	18.60	22.18	22.04	18.30			
10	QPSK	50	0	18.55	22.17	22.07	18.38	22.5		
10	16QAM	1	0	18.73	22.31	22.33	18.61			
10	16QAM	1	25	18.54	22.17	22.02	18.34			
10	16QAM	1	49	18.62	22.09	21.96	18.28	21.5		
10	16QAM	25	0	17.66	21.19	21.24	17.48			
10	16QAM	25	12	17.64	21.24	21.11	17.36			
10	16QAM	25	25	17.60	21.16	21.03	17.35	21.5		
10	16QAM	50	0	17.63	21.18	21.14	17.46			
10	64QAM	1	0	17.38	21.02	20.74	17.39			
10	64QAM	1	25	17.27	20.89	20.75	17.08	21.5		
10	64QAM	1	49	17.32	20.92	20.62	17.05			
10	64QAM	25	0	16.69	20.20	20.09	16.47			
10	64QAM	25	12	16.70	20.20	20.07	16.41	20.5		
10	64QAM	25	25	16.60	20.16	19.95	16.29			
10	64QAM	50	0	16.67	20.19	20.01	16.41			
Channel				55285	55810	56170	56715	Tune-up limit (dBm)		
Frequency (MHz)				3552.5	3607	3643	3697.5			
5	QPSK	1	0	19.56	23.20	23.23	19.52	23.5		
5	QPSK	1	12	19.40	22.99	23.01	19.22			
5	QPSK	1	24	19.50	22.96	22.96	19.17			
5	QPSK	12	0	18.62	22.19	22.17	18.48	22.5		
5	QPSK	12	7	18.68	22.15	22.13	18.40			
5	QPSK	12	13	18.56	22.10	22.09	18.31			
5	QPSK	25	0	18.62	22.15	22.15	18.37	22.5		
5	16QAM	1	0	18.73	22.37	22.31	18.62			
5	16QAM	1	12	18.56	22.16	22.05	18.35			
5	16QAM	1	24	18.63	22.15	21.98	18.23	21.5		
5	16QAM	12	0	17.67	21.14	21.16	17.52			
5	16QAM	12	7	17.71	21.26	21.13	17.38			
5	16QAM	12	13	17.60	21.13	21.06	17.35	21.5		
5	16QAM	25	0	17.61	21.15	21.10	17.41			
5	64QAM	1	0	17.43	21.01	20.67	17.37			
5	64QAM	1	12	17.31	20.86	20.73	17.08	21.5		
5	64QAM	1	24	17.33	20.87	20.64	17.03			
5	64QAM	12	0	16.68	20.17	20.03	16.48			
5	64QAM	12	7	16.65	20.24	20.10	16.45	20.5		
5	64QAM	12	13	16.55	20.13	19.86	16.35			
5	64QAM	25	0	16.58	20.19	19.97	16.40			

Band 38							
Art 2							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				37850	38000	38150	
Frequency (MHz)				2580	2595	2610	
20	QPSK	1	0	24.16	24.19	24.23	25
20	QPSK	1	49	24.23	24.26	24.27	
20	QPSK	1	99	24.23	24.31	24.30	
20	QPSK	50	0	23.28	23.33	23.38	24
20	QPSK	50	24	23.36	23.35	23.34	
20	QPSK	50	50	23.41	23.41	23.44	
20	QPSK	100	0	23.38	23.36	23.35	24
20	16QAM	1	0	23.29	23.31	23.31	
20	16QAM	1	49	23.29	23.33	23.36	
20	16QAM	1	99	23.36	23.42	23.38	23
20	16QAM	50	0	22.32	22.36	22.37	
20	16QAM	50	24	22.40	22.37	22.36	
20	16QAM	50	50	22.42	22.46	22.44	23
20	16QAM	100	0	22.40	22.38	22.36	
20	64QAM	1	0	21.97	21.97	22.02	23
20	64QAM	1	49	22.01	22.06	22.08	
20	64QAM	1	99	22.10	22.13	22.08	
20	64QAM	50	0	21.33	21.38	21.37	22
20	64QAM	50	24	21.39	21.39	21.40	
20	64QAM	50	50	21.43	21.45	21.45	
20	64QAM	100	0	21.41	21.37	21.38	Tune-up limit (dBm)
Channel				37825	38000	38175	
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	24.14	24.12	24.18	25
15	QPSK	1	37	24.17	24.26	24.27	
15	QPSK	1	74	24.14	24.30	24.30	
15	QPSK	36	0	23.22	23.25	23.31	24
15	QPSK	36	20	23.32	23.28	23.31	
15	QPSK	36	39	23.36	23.31	23.37	
15	QPSK	75	0	23.36	23.32	23.25	24
15	16QAM	1	0	23.22	23.31	23.24	
15	16QAM	1	37	23.24	23.31	23.30	
15	16QAM	1	74	23.28	23.42	23.35	23
15	16QAM	36	0	22.22	22.29	22.35	
15	16QAM	36	20	22.34	22.29	22.32	
15	16QAM	36	39	22.35	22.39	22.36	23
15	16QAM	75	0	22.38	22.32	22.32	
15	64QAM	1	0	21.97	21.97	22.02	23
15	64QAM	1	37	21.96	22.03	22.06	
15	64QAM	1	74	22.00	22.08	21.98	
15	64QAM	36	0	21.23	21.37	21.35	22
15	64QAM	36	20	21.38	21.31	21.37	
15	64QAM	36	39	21.37	21.40	21.37	
15	64QAM	75	0	21.41	21.32	21.30	Tune-up limit (dBm)
Channel				37800	38000	38200	
Frequency (MHz)				2574	2595	2615	
10	QPSK	1	0	24.07	24.17	24.19	25
10	QPSK	1	25	24.21	24.26	24.18	
10	QPSK	1	49	24.14	24.28	24.26	
10	QPSK	25	0	23.22	23.27	23.36	24
10	QPSK	25	12	23.33	23.30	23.24	
10	QPSK	25	25	23.38	23.39	23.35	
10	QPSK	50	0	23.35	23.36	23.26	24
10	16QAM	1	0	23.22	23.31	23.30	
10	16QAM	1	25	23.29	23.31	23.33	
10	16QAM	1	49	23.30	23.36	23.28	23
10	16QAM	25	0	22.30	22.30	22.28	
10	16QAM	25	12	22.30	22.35	22.32	
10	16QAM	25	25	22.34	22.43	22.38	23
10	16QAM	50	0	22.32	22.33	22.30	
10	64QAM	1	0	21.89	21.89	22.02	
10	64QAM	1	25	21.96	21.99	22.03	23
10	64QAM	1	49	22.03	22.06	22.00	
10	64QAM	25	0	21.33	21.34	21.28	22
10	64QAM	25	12	21.33	21.37	21.31	
10	64QAM	25	25	21.33	21.40	21.39	
10	64QAM	50	0	21.32	21.36	21.29	Tune-up limit (dBm)
Channel				2577.5	2595	2617.5	
Frequency (MHz)				2572.5	2595	2617.5	
5	QPSK	1	0	24.11	24.16	24.18	25
5	QPSK	1	12	24.22	24.20	24.19	
5	QPSK	1	24	24.14	24.29	24.28	
5	QPSK	12	0	23.23	23.30	23.33	24
5	QPSK	12	7	23.31	23.28	23.33	
5	QPSK	12	13	23.34	23.31	23.38	
5	QPSK	25	0	23.34	23.31	23.27	24
5	16QAM	1	0	23.24	23.31	23.25	
5	16QAM	1	12	23.23	23.31	23.29	
5	16QAM	1	24	23.33	23.42	23.38	23
5	16QAM	12	0	22.23	22.33	22.37	
5	16QAM	12	7	22.34	22.27	22.31	
5	16QAM	12	13	22.38	22.36	22.40	23
5	16QAM	25	0	22.38	22.28	22.27	
5	64QAM	1	0	21.90	21.92	21.83	
5	64QAM	1	12	21.92	22.03	22.01	23
5	64QAM	1	24	22.07	22.06	22.08	
5	64QAM	12	0	21.28	21.33	21.36	22
5	64QAM	12	7	21.38	21.29	21.34	
5	64QAM	12	13	21.34	21.36	21.40	
5	64QAM	25	0	21.37	21.32	21.35	Tune-up limit (dBm)
Channel				2577.5	2595	2617.5	



Band 38_HPUE							
Ant 2							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				37850	38000	38150	
Frequency (MHz)				2580	2595	2610	
20	QPSK	1	0	25.72	25.69	25.44	26.6
20	QPSK	1	49	25.67	25.61	25.67	
20	QPSK	1	99	25.62	25.58	25.26	
20	QPSK	50	0	25.55	25.16	24.79	26.5
20	QPSK	50	24	25.18	25.09	24.72	
20	QPSK	50	50	25.16	25.07	24.53	
20	QPSK	100	0	23.71	23.06	24.63	26.5
20	16QAM	1	0	25.41	25.24	24.85	
20	16QAM	1	49	25.33	25.21	25.07	
20	16QAM	1	99	25.36	25.14	24.63	25.5
20	16QAM	50	0	24.34	24.15	23.96	
20	16QAM	50	24	24.30	24.06	23.97	
20	16QAM	50	50	24.19	24.05	23.88	25.5
20	16QAM	100	0	23.74	24.03	23.78	
20	64QAM	1	0	23.54	23.80	23.77	25.5
20	64QAM	1	49	23.88	23.81	23.72	
20	64QAM	1	99	23.94	23.99	23.76	
20	64QAM	50	0	22.76	22.73	22.70	24.5
20	64QAM	50	24	22.96	22.83	22.73	
20	64QAM	50	50	22.98	22.93	22.75	
20	64QAM	100	0	22.77	22.69	22.70	
Channel				37825	38000	38175	Tune-up limit (dBm)
Frequency (MHz)				2377.5	2395	2412.5	
15	QPSK	1	0	25.69	25.66	25.47	26.6
15	QPSK	1	37	25.60	25.61	25.67	
15	QPSK	1	74	25.57	25.61	25.28	
15	QPSK	36	0	25.58	25.08	24.79	26.5
15	QPSK	36	20	25.21	25.10	24.71	
15	QPSK	36	39	25.19	25.03	24.52	
15	QPSK	75	0	23.74	23.06	24.68	26.5
15	16QAM	1	0	25.42	25.24	24.85	
15	16QAM	1	37	25.34	25.20	25.08	
15	16QAM	1	74	25.32	25.19	24.60	25.5
15	16QAM	36	0	24.28	24.10	24.05	
15	16QAM	36	20	24.30	24.10	23.96	
15	16QAM	36	39	24.22	24.12	23.97	25.5
15	16QAM	75	0	23.75	24.07	23.76	
15	64QAM	1	0	23.60	23.83	23.72	25.5
15	64QAM	1	37	23.87	23.83	23.75	
15	64QAM	1	74	23.99	23.98	23.71	
15	64QAM	36	0	22.78	22.67	22.69	24.5
15	64QAM	36	20	22.94	22.81	22.70	
15	64QAM	36	39	23.06	22.93	22.77	
15	64QAM	75	0	22.77	22.71	22.75	
Channel				37800	38000	38200	Tune-up limit (dBm)
Frequency (MHz)				2375	2395	2415	
10	QPSK	1	0	25.66	25.65	25.48	26.6
10	QPSK	1	25	25.69	25.69	25.68	
10	QPSK	1	49	25.60	25.63	25.32	
10	QPSK	25	0	25.60	25.16	24.84	26.5
10	QPSK	25	12	25.23	25.03	24.77	
10	QPSK	25	25	25.22	25.04	24.52	
10	QPSK	50	0	23.70	23.06	24.59	26.5
10	16QAM	1	0	25.35	25.26	24.79	
10	16QAM	1	25	25.37	25.24	25.10	
10	16QAM	1	49	25.33	25.22	24.64	25.5
10	16QAM	25	0	24.31	24.15	24.00	
10	16QAM	25	12	24.22	24.05	23.98	
10	16QAM	25	25	24.25	24.11	23.93	25.5
10	16QAM	50	0	23.74	24.06	23.81	
10	64QAM	1	0	23.52	23.84	23.73	25.5
10	64QAM	1	25	23.62	23.83	23.74	
10	64QAM	1	49	24.03	24.04	23.75	
10	64QAM	25	0	22.77	22.69	22.74	24.5
10	64QAM	25	12	22.96	22.83	22.76	
10	64QAM	25	25	23.05	22.87	22.72	
10	64QAM	50	0	22.76	22.72	22.70	
Channel				37775	38000	38225	Tune-up limit (dBm)
Frequency (MHz)				2572.5	2595	2617.5	
5	QPSK	1	0	25.65	25.69	25.45	26.6
5	QPSK	1	12	25.66	25.71	25.71	
5	QPSK	1	24	25.55	25.68	25.25	
5	QPSK	12	0	25.60	25.13	24.78	26.5
5	QPSK	12	7	25.18	25.10	24.79	
5	QPSK	12	13	25.21	25.07	24.55	
5	QPSK	25	0	23.76	25.10	24.65	26.5
5	16QAM	1	0	25.35	25.26	24.78	
5	16QAM	1	12	25.37	25.28	25.03	
5	16QAM	1	24	25.36	25.14	24.58	25.5
5	16QAM	12	0	24.32	24.15	24.03	
5	16QAM	12	7	24.24	24.12	23.96	
5	16QAM	12	13	24.21	24.03	23.89	25.5
5	16QAM	25	0	23.73	24.05	23.73	
5	64QAM	1	0	23.60	23.86	23.73	
5	64QAM	1	12	23.87	23.89	23.72	24.5
5	64QAM	1	24	24.01	23.96	23.67	
5	64QAM	12	0	22.78	22.75	22.70	
5	64QAM	12	7	22.99	22.76	22.70	24.5
5	64QAM	12	13	23.05	22.93	22.73	
5	64QAM	25	0	22.79	22.75	22.73	



Band 41											
Ant 2											
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Low Middle Ch. / Freq.	Power Middle Ch. / Freq.	Power High Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)		
Channel				39750	40185	40620	41055	41490			
Frequency (MHz)				2506	2549.5	2593	2636.5	2680			
20	QPSK	1	0	23.41	23.25	23.24	23.14	23.15	25		
20	QPSK	1	49	23.34	23.19	23.15	23.05	23.13			
20	QPSK	1	99	23.33	23.17	23.13	23.04	23.03			
20	QPSK	50	0	23.27	23.07	23.13	23.09	23.13			
20	QPSK	50	24	23.26	23.09	23.07	23.05	23.02	24		
20	QPSK	50	50	23.22	23.08	23.18	23.12	23.09			
20	QPSK	100	0	23.35	23.19	23.14	23.04	23.13			
20	16QAM	1	0	23.38	23.21	23.23	23.20	23.16			
20	16QAM	1	49	23.34	23.19	23.13	23.08	23.12	23		
20	16QAM	1	99	23.32	23.23	23.26	23.26	23.20			
20	16QAM	50	0	22.63	22.47	22.37	22.32	22.30			
20	16QAM	50	24	22.56	22.42	22.39	22.30	22.30			
20	16QAM	50	50	22.54	22.41	22.45	22.43	22.37	23		
20	16QAM	100	0	22.54	22.42	22.36	22.36	22.34			
20	64QAM	1	0	22.32	22.09	22.09	22.08	22.08			
20	64QAM	1	49	22.27	22.11	22.10	22.02	22.08	23		
20	64QAM	1	99	22.21	22.11	22.17	22.15	22.09			
20	64QAM	50	0	21.66	21.49	21.37	21.32	21.29			
20	64QAM	50	24	21.58	21.44	21.38	21.33	21.37			
20	64QAM	50	50	21.56	21.42	21.48	21.39	21.44	22		
20	64QAM	100	0	21.55	21.41	21.37	21.29	21.27			
Channel				39725	40173	40620	41068	41515	Tune-up limit (dBm)		
Frequency (MHz)				2503.5	2548.3	2593	2637.5	2682.5			
15	QPSK	1	0	23.23	23.07	23.21	23.04	23.09	25		
15	QPSK	1	37	23.26	23.05	23.16	23.02	23.00			
15	QPSK	1	74	23.18	23.03	23.14	23.15	23.17			
15	QPSK	36	0	23.33	23.21	23.33	23.12	23.11			
15	QPSK	36	20	23.34	23.16	23.28	23.10	23.10	24		
15	QPSK	36	36	23.26	23.16	23.31	23.21	23.16			
15	QPSK	75	0	23.30	23.16	23.32	23.06	23.06			
15	16QAM	1	0	23.32	23.21	23.30	23.21	23.14			
15	16QAM	1	37	23.24	23.09	23.27	23.08	23.10	24		
15	16QAM	1	74	23.22	23.15	23.31	23.16	23.18			
15	16QAM	36	0	22.62	22.39	22.53	22.28	22.34			
15	16QAM	36	20	22.47	22.41	22.53	22.30	22.37			
15	16QAM	36	36	22.50	22.35	22.44	22.36	22.43	23		
15	16QAM	75	0	22.45	22.37	22.47	22.36	22.35			
15	64QAM	1	0	22.30	22.03	22.22	22.03	22.00			
15	64QAM	1	37	22.20	22.08	22.17	22.09	22.09	23		
15	64QAM	1	74	22.19	22.01	22.12	22.14	22.15			
15	64QAM	36	0	21.56	21.38	21.57	21.28	21.27			
15	64QAM	36	20	21.50	21.38	21.49	21.33	21.32			
15	64QAM	36	36	21.48	21.33	21.46	21.46	21.37	22		
15	64QAM	75	0	21.51	21.34	21.53	21.36	21.32			
Channel				39700	40160	40620	41080	41540	Tune-up limit (dBm)		
Frequency (MHz)				2501	2547	2593	2639	2685			
10	QPSK	1	0	23.21	23.01	23.15	23.07	23.13	25		
10	QPSK	1	25	23.21	23.09	23.16	23.08	23.00			
10	QPSK	1	49	23.14	23.08	23.18	23.15	23.10			
10	QPSK	25	0	23.36	23.20	23.31	23.07	23.11			
10	QPSK	25	12	23.32	23.16	23.34	23.12	23.08	24		
10	QPSK	25	25	23.26	23.07	23.24	23.20	23.17			
10	QPSK	50	0	23.33	23.15	23.31	23.11	23.11			
10	16QAM	1	0	23.34	23.11	23.30	23.21	23.17			
10	16QAM	1	25	23.32	23.17	23.30	23.11	23.08	24		
10	16QAM	1	49	23.32	23.23	23.30	23.17	23.16			
10	16QAM	25	0	22.63	22.42	22.57	22.30	22.29			
10	16QAM	25	12	22.49	22.32	22.49	22.39	22.33			
10	16QAM	25	25	22.46	22.32	22.51	22.38	22.40	23		
10	16QAM	50	0	22.62	22.42	22.50	22.28	22.34			
10	64QAM	1	0	22.26	22.00	22.22	22.05	22.06			
10	64QAM	1	25	22.25	22.01	22.17	22.10	22.01	23		
10	64QAM	1	49	22.17	22.08	22.15	22.09	22.12			
10	64QAM	25	0	21.63	21.46	21.64	21.29	21.36			
10	64QAM	25	12	21.58	21.36	21.58	21.34	21.37			
10	64QAM	25	25	21.54	21.32	21.51	21.44	21.39	22		
10	64QAM	50	0	21.45	21.41	21.54	21.36	21.30			
Channel				39513	40143	40680	41093	41593	Tune-up limit (dBm)		
Frequency (MHz)				2498.5	2545.8	2593	2640.30	2687.5			
5	QPSK	1	0	23.24	23.05	23.18	23.03	23.03	25		
5	QPSK	1	12	23.18	23.06	23.19	23.05	23.03			
5	QPSK	1	24	23.21	23.04	23.17	23.09	23.18			
5	QPSK	12	0	23.21	23.20	23.40	23.04	23.05			
5	QPSK	12	7	23.32	23.19	23.31	23.09	23.10	24		
5	QPSK	12	13	23.32	23.11	23.31	23.14	23.15			
5	QPSK	25	0	23.32	23.19	23.26	23.04	23.10			
5	16QAM	1	0	23.37	23.20	23.33	23.15	23.18			
5	16QAM	1	12	23.31	23.09	23.33	23.04	23.10	24		
5	16QAM	1	24	23.22	23.13	23.27	23.16	23.20			
5	16QAM	12	0	22.60	22.45	22.57	22.37	22.36			
5	16QAM	12	7	22.49	22.33	22.47	22.33	22.32			
5	16QAM	12	13	22.49	22.40	22.51	22.44	22.43	23		
5	16QAM	25	0	22.51	22.40	22.53	22.29	22.30			
5	64QAM	1	0	22.30	22.06	22.27	21.99	22.01			
5	64QAM	1	12	22.18	22.07	22.20	22.00	22.01	23		
5	64QAM	1	24	22.14	22.07	22.12	22.14	22.14			
5	64QAM	12	0	21.69	21.47	21.65	21.34	21.36			
5	64QAM	12	7	21.54	21.40	21.52	21.31	21.30			
5	64QAM	12	13	21.51	21.34	21.46	21.36	21.40	22		
5	64QAM	25	0	21.50	21.33	21.47	21.33	21.34			



Band 41_HPU										
Ant 2										
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Low Middle Ch. / Freq.	Power Middle Ch. / Freq.	Power High Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	
Channel				39750	40185	40620	41055	41490		
Frequency (MHz)				2506	2549.5	2593	2636.5	2680		
20	QPSK	1	0	25.72	25.73	25.53	25.63	25.36	26.6	
20	QPSK	1	49	25.69	25.71	25.73	25.76	25.74		
20	QPSK	1	99	25.84	25.71	25.32	25.46	25.64		
20	QPSK	50	0	25.63	25.16	24.85	25.01	24.81	26.5	
20	QPSK	50	24	25.27	25.10	24.79	24.98	24.96		
20	QPSK	50	50	25.22	25.09	24.57	24.88	24.94		
20	QPSK	100	0	23.76	25.11	24.68	24.91	24.86	26.5	
20	16QAM	1	0	25.42	25.26	24.88	24.99	24.68		
20	16QAM	1	49	25.40	25.30	25.11	25.21	25.05		
20	16QAM	1	99	25.40	25.23	24.65	24.79	25.01	25.5	
20	16QAM	50	0	24.39	24.19	24.05	24.05	23.82		
20	16QAM	50	24	24.31	24.15	24.00	24.04	23.99		
20	16QAM	50	50	24.28	24.12	23.97	23.91	23.97	25.5	
20	16QAM	100	0	23.79	24.13	23.83	23.93	23.89		
20	64QAM	1	0	23.82	23.87	23.78	23.87	23.51		
20	64QAM	1	49	23.89	23.89	23.75	24.14	23.81	25.5	
20	64QAM	1	99	24.04	24.05	23.76	23.59	23.50		
20	64QAM	50	0	22.82	22.77	22.79	23.07	22.85		
20	64QAM	50	24	23.04	22.83	22.78	23.04	22.89	24.5	
20	64QAM	50	50	23.08	22.93	22.79	22.94	22.57		
20	64QAM	100	0	22.82	22.75	22.76	22.96	22.68		
Channel				39700	40173	40620	41068	41515	Tune-up limit (dBm)	
Frequency (MHz)				2503.5	2548.3	2593	2637.8	2682.5		
15	QPSK	1	0	25.63	25.71	25.45	25.59	25.33	26.6	
15	QPSK	1	37	25.59	25.70	25.69	25.70	25.72		
15	QPSK	1	74	25.62	25.63	25.26	25.42	25.54		
15	QPSK	36	0	25.54	25.12	24.78	24.96	24.78	26.5	
15	QPSK	36	20	25.27	25.10	24.72	24.91	24.88		
15	QPSK	36	39	25.13	25.05	24.49	24.83	24.87		
15	QPSK	75	0	23.68	25.01	24.59	24.84	24.78	26.5	
15	16QAM	1	0	25.37	25.17	24.83	24.89	24.61		
15	16QAM	1	37	25.38	25.24	25.06	25.19	25.05		
15	16QAM	1	74	25.33	25.14	24.64	24.78	25.01	26.5	
15	16QAM	36	0	24.33	24.13	24.02	23.97	23.80		
15	16QAM	36	20	24.25	24.13	23.98	23.95	23.89		
15	16QAM	36	39	24.23	24.12	23.89	23.82	23.90	25.5	
15	16QAM	75	0	23.76	24.08	23.73	23.90	23.79		
15	64QAM	1	0	23.64	23.83	23.70	23.84	23.49		
15	64QAM	1	37	23.84	23.85	23.66	24.06	23.80	25.5	
15	64QAM	1	74	23.99	24.04	23.72	23.56	23.48		
15	64QAM	36	0	22.75	22.75	22.69	23.05	22.81		
15	64QAM	36	20	23.03	22.80	22.71	22.98	22.67	24.5	
15	64QAM	36	39	23.05	22.93	22.72	22.87	22.53		
15	64QAM	75	0	22.74	22.67	22.70	22.91	22.68		
Channel				39700	40160	40620	41080	41540	Tune-up limit (dBm)	
Frequency (MHz)				2501	2547	2593	2639	2685		
10	QPSK	1	0	25.89	25.72	25.44	25.58	25.28	26.6	
10	QPSK	1	25	25.66	25.71	25.65	25.70	25.64		
10	QPSK	1	49	25.63	25.66	25.22	25.38	25.63		
10	QPSK	25	0	25.55	25.16	24.84	24.97	24.79	26.5	
10	QPSK	25	12	25.21	25.06	24.73	24.94	24.88		
10	QPSK	25	25	25.12	25.01	24.55	24.80	24.89		
10	QPSK	50	0	23.76	25.02	24.59	24.86	24.80	26.5	
10	16QAM	1	0	25.36	25.19	24.85	24.91	24.67		
10	16QAM	1	25	25.37	25.29	25.06	25.16	25.02		
10	16QAM	1	49	25.32	25.17	24.62	24.78	24.91	26.5	
10	16QAM	25	0	24.29	24.17	24.04	24.05	23.76		
10	16QAM	25	12	24.29	24.05	23.97	23.98	23.91		
10	16QAM	25	25	24.19	24.06	23.93	23.89	23.92	25.5	
10	16QAM	50	0	23.75	24.05	23.75	23.90	23.81		
10	64QAM	1	0	23.53	23.61	23.68	23.77	23.49		
10	64QAM	1	25	23.88	23.80	23.74	24.11	23.71	25.5	
10	64QAM	1	49	23.95	24.00	23.71	23.52	23.50		
10	64QAM	25	0	22.76	22.75	22.73	23.03	22.80		
10	64QAM	25	12	22.98	22.79	22.76	23.03	22.84	24.5	
10	64QAM	25	25	23.03	22.86	22.70	22.87	22.50		
10	64QAM	50	0	22.75	22.68	22.68	22.96	22.62		
Channel				39613	40148	40620	41093	41565	Tune-up limit (dBm)	
Frequency (MHz)				2498.5	2545.8	2593	2640.30	2687.5		
5	QPSK	1	0	25.65	25.67	25.50	25.58	25.27	26.6	
5	QPSK	1	12	25.63	25.71	25.63	25.74	25.70		
5	QPSK	1	24	25.61	25.61	25.24	25.46	25.58		
5	QPSK	12	0	25.53	25.10	24.80	24.94	24.77	26.5	
5	QPSK	12	7	25.23	25.04	24.75	24.98	24.94		
5	QPSK	12	13	25.22	25.08	24.51	24.84	24.85		
5	QPSK	25	0	23.67	25.05	24.59	24.86	24.86	26.5	
5	16QAM	1	0	25.33	25.22	24.81	24.97	24.66		
5	16QAM	1	12	25.39	25.21	25.06	25.12	25.02		
5	16QAM	1	24	25.31	25.23	24.65	24.75	24.95	25.5	
5	16QAM	12	0	24.34	24.11	23.96	23.98	23.82		
5	16QAM	12	7	24.24	24.08	23.94	23.95	23.93		
5	16QAM	12	13	24.23	24.07	23.87	23.91	23.92	25.5	
5	16QAM	25	0	23.75	24.10	23.75	23.86	23.86		
5	64QAM	1	0	23.50	23.83	23.77	23.84	23.49		
5	64QAM	1	12	23.85	23.84	23.70	24.09	23.79	25.5	
5	64QAM	1	24	24.03	23.96	23.75	23.54	23.46		
5	64QAM	12	0	22.82	22.73	22.72	23.01	22.78		
5	64QAM	12	7	22.94	22.77	22.70	22.97	22.82	24.5	
5	64QAM	12	13	23.06	22.88	22.78	22.84	22.56		
5	64QAM	25	0	22.81	22.75	22.69	22.96	22.64		

Band 38							
Art 2							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				37850	38000	38150	
Frequency (MHz)				2580	2595	2610	
20	QPSK	1	0	19.60	19.60	19.54	20.2
20	QPSK	1	49	19.70	19.70	19.64	
20	QPSK	1	99	19.92	19.70	19.68	
20	QPSK	50	0	19.80	19.73	19.73	20.2
20	QPSK	50	24	19.90	19.76	19.74	
20	QPSK	50	50	19.91	19.81	19.80	
20	QPSK	100	0	19.87	19.75	19.74	20.2
20	16QAM	1	0	19.75	19.73	19.70	
20	16QAM	1	49	19.74	19.70	19.74	
20	16QAM	1	99	19.84	19.78	19.74	20.2
20	16QAM	50	0	19.79	19.75	19.73	
20	16QAM	50	24	19.88	19.74	19.72	
20	16QAM	50	50	19.90	19.83	19.83	20.2
20	16QAM	100	0	19.88	19.74	19.72	
20	64QAM	1	0	19.50	19.43	19.40	20.2
20	64QAM	1	49	19.55	19.49	19.50	
20	64QAM	1	99	19.64	19.54	19.48	
20	64QAM	50	0	19.62	19.77	19.75	20.2
20	64QAM	50	24	19.70	19.77	19.77	
20	64QAM	50	50	19.72	19.85	19.83	
20	64QAM	100	0	19.89	19.75	19.75	
Channel				37825	38000	38175	
Frequency (MHz)				2577.5	2595	2612.5	Tune-up limit (dBm)
15	QPSK	1	0	19.58	19.58	19.54	20.2
15	QPSK	1	37	19.68	19.66	19.59	
15	QPSK	1	74	19.73	19.69	19.58	
15	QPSK	36	0	19.77	19.72	19.72	20.2
15	QPSK	36	20	19.90	19.74	19.64	
15	QPSK	36	39	19.91	19.73	19.70	
15	QPSK	75	0	19.87	19.70	19.67	20.2
15	16QAM	1	0	19.74	19.70	19.64	
15	16QAM	1	37	19.65	19.62	19.71	
15	16QAM	1	74	19.79	19.76	19.65	20.2
15	16QAM	36	0	19.73	19.67	19.65	
15	16QAM	36	20	19.91	19.73	19.71	
15	16QAM	36	39	19.88	19.80	19.79	20.2
15	16QAM	75	0	19.84	19.67	19.69	
15	64QAM	1	0	19.46	19.39	19.34	
15	64QAM	1	37	19.50	19.39	19.42	20.2
15	64QAM	1	74	19.63	19.44	19.41	
15	64QAM	36	0	19.75	19.71	19.71	
15	64QAM	36	20	19.84	19.70	19.73	20.2
15	64QAM	36	39	19.84	19.84	19.83	
15	64QAM	75	0	19.79	19.66	19.66	
Channel				37800	38000	38200	Tune-up limit (dBm)
Frequency (MHz)				2574.5	2595	2615.5	
10	QPSK	1	0	19.56	19.55	19.50	20.2
10	QPSK	1	25	19.61	19.63	19.61	
10	QPSK	1	49	19.65	19.68	19.63	
10	QPSK	25	0	19.72	19.69	19.70	20.2
10	QPSK	25	12	19.82	19.68	19.73	
10	QPSK	25	25	19.86	19.72	19.72	
10	QPSK	50	0	19.87	19.65	19.66	20.2
10	16QAM	1	0	19.77	19.71	19.63	
10	16QAM	1	25	19.67	19.66	19.67	
10	16QAM	1	49	19.74	19.70	19.71	20.2
10	16QAM	25	0	19.70	19.72	19.66	
10	16QAM	25	12	19.85	19.73	19.67	
10	16QAM	25	25	19.86	19.79	19.81	20.2
10	16QAM	50	0	19.84	19.66	19.66	
10	64QAM	1	0	19.47	19.41	19.38	
10	64QAM	1	25	19.46	19.42	19.45	20.2
10	64QAM	1	49	19.61	19.45	19.42	
10	64QAM	25	0	19.75	19.69	19.71	
10	64QAM	25	12	19.84	19.67	19.72	20.2
10	64QAM	25	25	19.90	19.83	19.73	
10	64QAM	50	0	19.84	19.71	19.66	
Channel				3777.5	38000	38223	Tune-up limit (dBm)
Frequency (MHz)				2572.5	2595	2617.5	
5	QPSK	1	0	19.58	19.54	19.53	20.2
5	QPSK	1	12	19.61	19.67	19.56	
5	QPSK	1	24	19.66	19.68	19.67	
5	QPSK	12	0	19.71	19.73	19.69	20.2
5	QPSK	12	7	19.82	19.71	19.70	
5	QPSK	12	13	19.85	19.73	19.75	
5	QPSK	25	0	19.77	19.72	19.65	20.2
5	16QAM	1	0	19.72	19.64	19.62	
5	16QAM	1	12	19.72	19.67	19.65	
5	16QAM	1	24	19.78	19.71	19.72	20.2
5	16QAM	12	0	19.76	19.66	19.70	
5	16QAM	12	7	19.84	19.68	19.72	
5	16QAM	12	13	19.88	19.74	19.80	20.2
5	16QAM	25	0	19.79	19.72	19.66	
5	64QAM	1	0	19.47	19.41	19.35	
5	64QAM	1	12	19.49	19.45	19.42	20.2
5	64QAM	1	24	19.61	19.49	19.38	
5	64QAM	12	0	19.82	19.75	19.73	20.2
5	64QAM	12	7	19.87	19.77	19.76	
5	64QAM	12	13	19.91	19.76	19.75	
5	64QAM	25	0	19.91	19.72	19.70	



Band 38_HPUE							
Ant 2							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				37850	38000	38150	
Frequency (MHz)				2580	2595	2610	
20	QPSK	1	0	21.22	20.83	20.77	21.8
20	QPSK	1	49	20.96	20.84	20.80	
20	QPSK	1	99	21.16	20.85	20.87	
20	QPSK	50	0	21.13	20.87	21.03	21.8
20	QPSK	50	24	20.85	20.69	20.48	
20	QPSK	50	50	20.63	20.64	20.60	
20	QPSK	100	0	20.73	20.74	20.51	21.8
20	16QAM	1	0	20.90	20.97	20.87	
20	16QAM	1	49	21.02	21.02	20.84	
20	16QAM	1	99	20.96	20.98	21.00	21.8
20	16QAM	50	0	21.00	21.04	20.71	
20	16QAM	50	24	21.09	21.02	20.73	
20	16QAM	50	50	21.00	20.71	20.79	21.8
20	16QAM	100	0	21.20	20.88	20.68	
20	64QAM	1	0	20.99	20.82	20.75	21.8
20	64QAM	1	49	20.95	20.88	20.67	
20	64QAM	1	99	21.00	20.84	20.68	
20	64QAM	50	0	20.98	21.07	20.82	21.8
20	64QAM	50	24	21.10	21.04	20.77	
20	64QAM	50	50	20.98	20.84	20.80	
20	64QAM	100	0	20.95	20.93	20.76	
Channel				37825	38000	38175	14dB-csp limit (dBm)
Frequency (MHz)				2577.5	2592	2612.5	
15	QPSK	1	0	21.20	20.91	20.66	21.8
15	QPSK	1	37	20.89	20.78	20.69	
15	QPSK	1	74	20.94	20.98	20.65	
15	QPSK	36	0	20.99	20.92	20.96	21.8
15	QPSK	36	20	20.74	20.75	20.58	
15	QPSK	36	39	20.57	20.58	20.55	
15	QPSK	75	0	20.60	20.52	20.56	21.8
15	16QAM	1	0	21.04	20.97	20.55	
15	16QAM	1	37	20.77	20.97	20.95	
15	16QAM	1	74	20.90	21.07	20.90	21.8
15	16QAM	36	0	20.96	20.53	20.73	
15	16QAM	36	20	21.08	21.01	20.76	21.8
15	16QAM	36	39	20.85	20.76	20.69	
15	16QAM	75	0	20.96	20.93	20.86	
15	64QAM	1	0	20.88	20.62	20.69	21.8
15	64QAM	1	37	20.95	20.74	20.64	
15	64QAM	1	74	21.01	20.72	20.74	
15	64QAM	36	0	20.84	20.92	20.81	21.8
15	64QAM	36	20	21.06	20.85	20.83	
15	64QAM	36	39	20.84	20.79	20.76	
15	64QAM	75	0	20.87	20.85	20.69	
Channel				37800	38000	38200	14dB-csp limit (dBm)
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	21.12	20.81	20.54	21.8
10	QPSK	1	25	20.70	20.74	20.74	
10	QPSK	1	49	20.92	20.85	20.48	
10	QPSK	25	0	21.05	20.99	20.81	21.8
10	QPSK	25	12	20.73	20.58	20.50	
10	QPSK	25	25	20.68	20.54	20.39	
10	QPSK	50	0	20.63	20.52	20.54	21.8
10	16QAM	1	0	20.81	20.69	20.56	
10	16QAM	1	25	20.76	21.00	20.77	
10	16QAM	1	49	20.89	20.75	20.97	21.8
10	16QAM	25	0	20.85	20.92	20.64	
10	16QAM	25	12	20.92	20.92	20.69	
10	16QAM	25	25	20.90	20.52	20.82	21.8
10	16QAM	50	0	21.06	20.75	20.67	
10	64QAM	1	0	20.86	20.76	20.70	
10	64QAM	1	25	20.83	20.75	20.61	21.8
10	64QAM	1	49	20.92	20.53	20.56	
10	64QAM	25	0	20.98	20.95	20.61	
10	64QAM	25	12	20.97	20.86	20.69	21.8
10	64QAM	25	25	20.91	20.75	20.81	
10	64QAM	50	0	20.70	20.78	20.62	
Channel				3777.5	38000	38225	14dB-csp limit (dBm)
Frequency (MHz)				2572.5	2595	2617.5	
5	QPSK	1	0	20.90	20.62	20.70	21.8
5	QPSK	1	12	20.84	20.64	20.73	
5	QPSK	1	24	20.91	20.64	20.50	
5	QPSK	12	0	20.97	20.77	20.91	21.8
5	QPSK	12	7	20.61	20.66	20.31	
5	QPSK	12	13	20.45	20.59	20.34	
5	QPSK	25	0	20.58	20.47	20.48	21.8
5	16QAM	1	0	20.88	20.94	20.57	
5	16QAM	1	12	20.68	20.90	20.67	
5	16QAM	1	24	20.81	20.83	20.80	21.8
5	16QAM	12	0	20.87	20.79	20.52	
5	16QAM	12	7	20.98	20.85	20.48	
5	16QAM	12	13	20.79	20.74	20.58	21.8
5	16QAM	25	0	20.84	20.77	20.57	
5	64QAM	1	0	20.81	20.76	20.49	
5	64QAM	1	12	20.89	20.82	20.77	21.8
5	64QAM	1	24	20.82	20.78	20.55	
5	64QAM	12	0	20.94	20.89	20.74	
5	64QAM	12	7	21.04	20.74	20.54	21.8
5	64QAM	12	13	20.91	20.61	20.59	
5	64QAM	25	0	20.79	20.92	20.68	



Band 41										
Ant 2										
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Low Middle Ch. / Freq.	Power Middle Ch. / Freq.	Power High Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	
Channel				39750	40185	40620	41055	41490		
Frequency (MHz)				2506	2549.5	2593	2636.5	2680		
20	QPSK	1	0	19.70	19.53	19.52	19.43	19.36	20.2	
20	QPSK	1	49	19.68	19.46	19.43	19.39	19.32		
20	QPSK	1	99	19.64	19.47	19.40	19.26	19.29		
20	QPSK	50	0	19.66	19.45	19.41	19.29	19.21	20.2	
20	QPSK	50	24	19.39	19.18	19.12	18.96	19.13		
20	QPSK	50	50	19.37	19.18	19.15	19.21	18.96		
20	QPSK	100	0	19.32	19.21	19.20	18.61	19.02	20.2	
20	16QAM	1	0	19.59	19.49	19.47	19.18	18.76		
20	16QAM	1	49	19.59	19.45	19.41	19.43	19.19		
20	16QAM	1	99	19.57	19.49	19.48	18.95	19.22	20.2	
20	16QAM	50	0	19.69	19.53	19.41	19.40	19.13		
20	16QAM	50	24	19.62	19.47	19.44	19.37	19.29		
20	16QAM	50	50	19.61	19.47	19.53	19.24	19.28	20.2	
20	16QAM	100	0	19.63	19.46	19.43	19.27	19.19		
20	64QAM	1	0	19.54	19.35	19.36	19.08	18.74		
20	64QAM	1	49	19.50	19.37	19.30	19.33	19.16	20.2	
20	64QAM	1	99	19.48	19.36	19.43	18.88	19.08		
20	64QAM	50	0	19.68	19.52	19.38	19.38	19.12		
20	64QAM	50	24	19.59	19.46	19.40	19.35	19.29	20.2	
20	64QAM	50	50	19.58	19.44	19.49	19.22	19.26		
20	64QAM	100	0	19.59	19.44	19.41	19.24	19.19		
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	19.88	19.44	19.35	19.35	19.16	20.2	
15	QPSK	1	37	19.84	19.45	19.42	19.39	19.27		
15	QPSK	1	74	19.63	19.43	19.52	19.16	19.27		
15	QPSK	36	0	19.67	19.44	19.32	19.25	19.21	20.2	
15	QPSK	36	20	19.38	19.13	19.12	18.89	18.34		
15	QPSK	36	39	19.27	19.10	19.12	19.11	18.95		
15	QPSK	75	0	19.30	19.13	19.17	18.61	19.01	20.2	
15	16QAM	1	0	19.52	19.43	19.42	19.14	18.70		
15	16QAM	1	37	19.54	19.42	19.33	19.33	19.10		
15	16QAM	1	74	19.49	19.49	19.40	18.93	19.18	20.2	
15	16QAM	36	0	19.67	19.46	19.40	19.30	19.06		
15	16QAM	36	20	19.62	19.43	19.34	19.31	19.25		
15	16QAM	36	39	19.52	19.37	19.45	19.16	19.28	20.2	
15	16QAM	75	0	19.53	19.38	19.36	19.24	19.19		
15	64QAM	1	0	19.64	19.34	19.26	19.05	18.67		
15	64QAM	1	37	19.46	19.37	19.30	19.23	19.15	20.2	
15	64QAM	1	74	19.41	19.32	19.38	18.81	19.05		
15	64QAM	36	0	19.67	19.47	19.34	19.38	19.08		
15	64QAM	36	20	19.51	19.43	19.40	19.31	19.19	20.2	
15	64QAM	36	39	19.55	19.40	19.41	19.21	19.21		
15	64QAM	75	0	19.52	19.34	19.38	19.16	19.17		
Channel				39700	40160	40620	41080	41540	Tune-up limit (dBm)	
Frequency (MHz)				2501	2547	2593	2639	2685		
10	QPSK	1	0	19.89	19.53	19.35	19.33	19.09	20.2	
10	QPSK	1	25	19.59	19.44	19.43	19.36	19.24		
10	QPSK	1	49	19.64	19.37	19.52	19.21	19.22		
10	QPSK	25	0	19.64	19.43	19.37	19.27	19.18	20.2	
10	QPSK	25	12	19.34	19.13	19.10	18.95	18.35		
10	QPSK	25	25	19.31	19.15	19.15	19.19	18.92		
10	QPSK	50	0	19.28	19.13	19.19	18.55	19.00	20.2	
10	16QAM	1	0	19.56	19.43	19.39	19.08	18.71		
10	16QAM	1	25	19.49	19.38	19.36	19.39	19.09		
10	16QAM	1	49	19.67	19.44	19.43	18.88	19.14	20.2	
10	16QAM	25	0	19.64	19.51	19.39	19.32	19.03		
10	16QAM	25	12	19.58	19.37	19.34	19.37	19.29		
10	16QAM	25	25	19.61	19.46	19.46	19.16	19.22	20.2	
10	16QAM	50	0	19.65	19.43	19.35	19.22	19.19		
10	64QAM	1	0	19.44	19.30	19.36	18.99	18.68		
10	64QAM	1	25	19.50	19.36	19.27	19.30	19.16	20.2	
10	64QAM	1	49	19.44	19.28	19.33	18.81	19.02		
10	64QAM	25	0	19.64	19.42	19.33	19.37	19.09		
10	64QAM	25	12	19.50	19.42	19.34	19.33	19.20	20.2	
10	64QAM	25	25	19.56	19.38	19.49	19.13	19.19		
10	64QAM	50	0	19.53	19.36	19.38	19.20	19.10		
Channel				39515	40145	40620	41093	41555	Tune-up limit (dBm)	
Frequency (MHz)				2498.5	2545.8	2593	2640.30	2687.5		
5	QPSK	1	0	19.60	19.48	19.32	19.35	19.07	20.2	
5	QPSK	1	12	19.68	19.46	19.38	19.32	19.29		
5	QPSK	1	24	19.57	19.46	19.45	19.26	19.20		
5	QPSK	12	0	19.62	19.36	19.41	19.25	19.14	20.2	
5	QPSK	12	7	19.39	19.08	19.10	18.88	18.34		
5	QPSK	12	13	19.28	19.11	19.05	19.17	18.67		
5	QPSK	25	0	19.22	19.19	19.14	18.57	18.94	20.2	
5	16QAM	1	0	19.50	19.40	19.39	19.16	18.73		
5	16QAM	1	12	19.55	19.38	19.34	19.39	19.18		
5	16QAM	1	24	19.49	19.45	19.46	18.87	19.17	20.2	
5	16QAM	12	0	19.64	19.45	19.31	19.36	19.07		
5	16QAM	12	7	19.62	19.47	19.42	19.37	19.20		
5	16QAM	12	13	19.56	19.43	19.48	19.21	19.22	20.2	
5	16QAM	25	0	19.53	19.38	19.37	19.25	19.09		
5	64QAM	1	0	19.46	19.34	19.26	19.03	18.72		
5	64QAM	1	12	19.43	19.29	19.24	19.32	19.13	20.2	
5	64QAM	1	24	19.48	19.27	19.39	18.87	19.06		
5	64QAM	12	0	19.58	19.42	19.33	19.31	19.08		
5	64QAM	12	7	19.55	19.46	19.38	19.26	19.22	20.2	
5	64QAM	12	13	19.58	19.40	19.42	19.22	19.24		
5	64QAM	25	0	19.57	19.39	19.34	19.23	19.11		



Band 41_HPUE										
Ant 5										
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	21.24	21.03	20.90	20.95	20.78	21.8	
20	QPSK	1	49	21.05	20.97	20.96	20.77	20.77		
20	QPSK	1	99	21.18	21.02	20.80	20.76	20.64		
20	QPSK	50	0	21.15	21.07	21.10	20.73	20.52	21.8	
20	QPSK	50	24	20.84	20.78	20.65	20.50	20.19		
20	QPSK	50	50	20.79	20.79	20.63	20.68	20.63		
20	QPSK	100	0	20.84	20.74	20.70	20.29	20.29	21.8	
20	16QAM	1	0	21.08	21.02	20.80	20.83	20.81		
20	16QAM	1	49	21.02	21.17	21.02	21.02	20.89		
20	16QAM	1	99	21.15	21.14	21.06	20.53	20.86	21.8	
20	16QAM	50	0	21.14	21.10	20.84	20.79	20.66		
20	16QAM	50	24	21.19	21.11	20.84	20.94	20.80		
20	16QAM	50	50	21.08	20.90	20.96	20.73	20.85	21.8	
20	16QAM	100	0	21.22	21.02	20.87	20.78	20.66		
20	64QAM	1	0	21.08	20.90	20.80	20.56	20.24		
20	64QAM	1	49	21.09	20.94	20.84	20.95	20.73	21.8	
20	64QAM	1	99	21.06	20.91	20.87	20.40	20.63		
20	64QAM	50	0	21.09	21.08	20.90	20.89	20.66		
20	64QAM	50	24	21.15	21.05	20.93	20.89	20.75	21.8	
20	64QAM	50	50	21.05	20.94	20.90	20.72	20.85		
20	64QAM	100	0	20.95	21.01	20.92	20.79	20.72		
Channel				39700	40160	40620	41080	41540	Tune-up limit (dBm)	
Frequency (MHz)				2503.5	2548.3	2593	2637.8	2682.5		
15	QPSK	1	0	21.22	20.94	20.83	20.87	20.68	21.8	
15	QPSK	1	37	20.99	20.88	20.89	20.72	20.73		
15	QPSK	1	74	21.10	20.98	20.79	20.66	20.61		
15	QPSK	36	0	21.08	21.03	21.01	20.68	20.50	21.8	
15	QPSK	36	20	20.86	20.78	20.65	20.50	20.12		
15	QPSK	36	39	20.76	20.69	20.62	20.60	20.63		
15	QPSK	75	0	20.74	20.67	20.61	20.29	20.43	21.8	
15	16QAM	1	0	21.08	21.02	20.75	20.77	20.55		
15	16QAM	1	37	20.95	21.10	20.96	21.00	20.85		
15	16QAM	1	74	21.07	21.09	21.01	20.50	20.78	21.8	
15	16QAM	36	0	21.10	21.01	20.78	20.77	20.58		
15	16QAM	36	20	21.17	21.01	20.80	20.90	20.74		
15	16QAM	36	39	21.06	20.89	20.89	20.71	20.85	21.8	
15	16QAM	75	0	21.14	20.97	20.87	20.71	20.58		
15	64QAM	1	0	21.08	20.80	20.77	20.56	20.20		
15	64QAM	1	37	21.02	20.88	20.82	20.53	20.71	21.8	
15	64QAM	1	74	21.05	20.89	20.77	20.39	20.59		
15	64QAM	36	0	21.04	21.07	20.87	20.89	20.85		
15	64QAM	36	20	21.08	21.03	20.84	20.80	20.66	21.8	
15	64QAM	36	39	20.88	20.90	20.81	20.62	20.79		
15	64QAM	75	0	20.82	21.01	20.84	20.72	20.69		
Channel				39700	40160	40620	41080	41540	Tune-up limit (dBm)	
Frequency (MHz)				2501	2547	2593	2639	2685		
10	QPSK	1	0	21.20	20.91	20.81	20.87	20.63	21.8	
10	QPSK	1	25	20.89	20.85	20.82	20.75	20.66		
10	QPSK	1	49	21.11	20.90	20.62	20.68	20.52		
10	QPSK	25	0	21.09	20.99	20.97	20.65	20.39	21.8	
10	QPSK	25	12	20.82	20.72	20.59	20.42	20.09		
10	QPSK	25	25	20.69	20.74	20.50	20.64	20.50		
10	QPSK	50	0	20.73	20.64	20.66	20.18	20.36	21.8	
10	16QAM	1	0	20.99	20.88	20.74	20.72	20.47		
10	16QAM	1	25	20.86	21.09	20.95	20.96	20.75		
10	16QAM	1	49	21.06	20.95	20.97	20.41	20.78	21.8	
10	16QAM	25	0	21.02	20.99	20.75	20.78	20.60		
10	16QAM	25	12	21.11	21.06	20.71	20.80	20.66		
10	16QAM	25	25	20.97	20.72	20.86	20.60	20.72	21.8	
10	16QAM	50	0	21.15	20.85	20.79	20.74	20.59		
10	64QAM	1	0	20.89	20.62	20.77	20.49	20.15		
10	64QAM	1	25	20.97	20.82	20.72	20.87	20.62	21.8	
10	64QAM	1	49	21.06	20.73	20.71	20.40	20.44		
10	64QAM	25	0	21.05	20.99	20.79	20.89	20.50		
10	64QAM	25	12	21.02	21.02	20.85	20.78	20.73	21.8	
10	64QAM	25	25	21.00	20.92	20.81	20.57	20.80		
10	64QAM	50	0	20.88	20.92	20.88	20.65	20.67		
Channel				39515	40148	40620	41093	41555	Tune-up limit (dBm)	
Frequency (MHz)				2498.5	2545.8	2593	2640.30	2687.5		
5	QPSK	1	0	20.97	20.82	20.70	20.78	20.67	21.8	
5	QPSK	1	12	20.97	20.80	20.78	20.66	20.68		
5	QPSK	1	24	20.99	20.82	20.60	20.61	20.48		
5	QPSK	12	0	21.04	20.94	20.96	20.45	20.36	21.8	
5	QPSK	12	7	20.74	20.66	20.50	20.38	20.02		
5	QPSK	12	13	20.62	20.74	20.49	20.57	20.49		
5	QPSK	25	0	20.73	20.55	20.62	20.23	20.35	21.8	
5	16QAM	1	0	20.90	20.94	20.64	20.70	20.54		
5	16QAM	1	12	20.81	21.06	20.63	20.85	20.70		
5	16QAM	1	24	20.89	20.93	20.95	20.43	20.72	21.8	
5	16QAM	12	0	20.93	20.88	20.65	20.64	20.49		
5	16QAM	12	7	21.04	20.96	20.65	20.77	20.62		
5	16QAM	12	13	20.97	20.75	20.78	20.62	20.65	21.8	
5	16QAM	25	0	20.95	20.67	20.69	20.59	20.57		
5	64QAM	1	0	20.91	20.82	20.79	20.45	20.06		
5	64QAM	1	12	20.92	20.84	20.79	20.75	20.60	21.8	
5	64QAM	1	24	20.97	20.82	20.71	20.24	20.54		
5	64QAM	12	0	20.99	21.02	20.87	20.72	20.49		
5	64QAM	12	7	21.11	20.83	20.71	20.71	20.65	21.8	
5	64QAM	12	13	20.93	20.75	20.67	20.70	20.76		
5	64QAM	25	0	20.86	21.00	20.85	20.98	20.51		



Band 42							
Ant 7							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				43190	43340	43490	
Frequency (MHz)				3560	3575	3590	
20	QPSK	1	0	24.64	24.68	24.76	25
20	QPSK	1	49	24.61	24.66	24.74	
20	QPSK	1	99	24.59	24.62	24.66	
20	QPSK	50	0	23.79	23.86	23.94	24
20	QPSK	50	24	23.87	23.84	23.88	
20	QPSK	50	50	23.79	23.86	23.90	
20	QPSK	100	0	23.84	23.83	23.87	24
20	16QAM	1	0	23.94	23.92	23.90	
20	16QAM	1	49	23.93	23.95	23.90	
20	16QAM	1	99	23.96	23.98	23.99	23
20	16QAM	50	0	22.85	22.87	22.97	
20	16QAM	50	24	22.89	22.85	22.92	
20	16QAM	50	50	22.83	22.89	22.91	23
20	16QAM	100	0	22.88	22.85	22.90	
20	64QAM	1	0	22.79	22.82	22.90	
20	64QAM	1	49	22.81	22.88	22.85	22
20	64QAM	1	99	22.81	22.86	22.76	
20	64QAM	50	0	21.84	21.90	21.85	
20	64QAM	50	24	21.89	21.89	21.93	22
20	64QAM	50	50	21.84	21.89	21.84	
20	64QAM	100	0	21.88	21.85	21.84	
Channel				43165	43340	43515	Limit-up limit (dBm)
Frequency (MHz)				3527.5	3572	3592.5	
15	QPSK	1	0	24.63	24.61	24.75	25
15	QPSK	1	37	24.60	24.66	24.67	
15	QPSK	1	74	24.56	24.53	24.61	
15	QPSK	36	0	23.77	23.78	23.92	24
15	QPSK	36	20	23.61	23.77	23.84	
15	QPSK	36	39	23.69	23.76	23.86	
15	QPSK	75	0	23.76	23.77	23.78	24
15	16QAM	1	0	23.93	23.99	23.99	
15	16QAM	1	37	23.97	23.95	23.97	
15	16QAM	1	74	23.86	23.88	23.97	23
15	16QAM	36	0	22.78	22.77	22.97	
15	16QAM	36	20	22.80	22.94	22.96	
15	16QAM	36	39	22.74	22.89	22.91	23
15	16QAM	75	0	22.86	22.76	22.83	
15	64QAM	1	0	22.75	22.72	22.83	
15	64QAM	1	37	22.80	22.78	22.85	22
15	64QAM	1	74	22.80	22.78	22.74	
15	64QAM	36	0	21.84	21.88	21.85	
15	64QAM	36	20	21.83	21.85	21.92	22
15	64QAM	36	39	21.81	21.82	21.82	
15	64QAM	75	0	21.84	21.78	21.75	
Channel				43140	43340	43540	Limit-up limit (dBm)
Frequency (MHz)				3555	3576	3595	
10	QPSK	1	0	24.61	24.55	24.74	25
10	QPSK	1	25	24.58	24.56	24.68	
10	QPSK	1	49	24.59	24.52	24.61	
10	QPSK	25	0	23.74	23.79	23.88	24
10	QPSK	25	12	23.85	23.74	23.87	
10	QPSK	25	25	23.75	23.85	23.90	
10	QPSK	50	0	23.80	23.82	23.87	24
10	16QAM	1	0	23.94	23.96	23.96	
10	16QAM	1	25	23.90	23.96	23.90	
10	16QAM	1	49	23.92	23.88	23.98	23
10	16QAM	25	0	22.76	22.77	22.92	
10	16QAM	25	12	22.84	22.77	22.84	
10	16QAM	25	25	22.80	22.80	22.81	23
10	16QAM	50	0	22.85	22.77	22.87	
10	64QAM	1	0	22.79	22.81	22.90	
10	64QAM	1	25	22.71	22.80	22.79	22
10	64QAM	1	49	22.71	22.84	22.67	
10	64QAM	25	0	21.77	21.87	21.83	
10	64QAM	25	12	21.88	21.84	21.85	22
10	64QAM	25	25	21.74	21.80	21.81	
10	64QAM	50	0	21.88	21.80	21.76	
Channel				43115	43340	43565	Limit-up limit (dBm)
Frequency (MHz)				3552.5	3579	3597.5	
5	QPSK	1	0	24.63	24.60	24.62	25
5	QPSK	1	12	24.59	24.63	24.71	
5	QPSK	1	24	24.59	24.53	24.59	
5	QPSK	12	0	23.75	23.80	23.88	24
5	QPSK	12	7	23.86	23.80	23.87	
5	QPSK	12	13	23.72	23.86	23.86	
5	QPSK	25	0	23.82	23.82	23.86	24
5	16QAM	1	0	23.93	23.94	23.95	
5	16QAM	1	12	23.84	23.93	23.91	
5	16QAM	1	24	23.91	23.91	23.97	23
5	16QAM	12	0	22.79	22.86	22.94	
5	16QAM	12	7	22.80	22.81	22.82	
5	16QAM	12	13	22.77	22.89	22.81	23
5	16QAM	25	0	22.86	22.81	22.87	
5	64QAM	1	0	22.79	22.73	22.89	
5	64QAM	1	12	22.73	22.80	22.78	22
5	64QAM	1	24	22.76	22.79	22.70	
5	64QAM	12	0	21.84	21.86	21.85	
5	64QAM	12	7	21.82	21.89	21.93	22
5	64QAM	12	13	21.83	21.81	21.84	
5	64QAM	25	0	21.84	21.78	21.78	



Band 48									
Ant 7									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Low Middle Ch. / Freq.	Power High Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	
Channel				55340	55830	56150	56640		
Frequency (MHz)				3560	3609	3641	3690		
20	QPSK	1	0	20.89	24.38	24.55	20.93	25	
20	QPSK	1	49	20.78	24.21	24.18	20.75		
20	QPSK	1	99	20.77	24.20	24.13	20.67		
20	QPSK	50	0	19.97	23.52	23.58	19.96	24	
20	QPSK	50	24	19.92	23.53	23.50	19.90		
20	QPSK	50	50	19.88	23.47	23.44	19.80		
20	QPSK	100	0	19.93	23.52	23.51	19.87	24	
20	16QAM	1	0	19.91	23.68	23.68	19.92		
20	16QAM	1	49	19.84	23.46	23.46	19.80		
20	16QAM	1	99	19.89	23.47	23.46	19.76	23	
20	16QAM	50	0	19.00	22.54	22.52	19.00		
20	16QAM	50	24	18.97	22.57	22.56	18.94		
20	16QAM	50	50	18.89	22.51	22.48	18.82	23	
20	16QAM	100	0	18.95	22.58	22.53	18.90		
20	64QAM	1	0	18.74	22.36	22.11	18.87		
20	64QAM	1	49	18.60	22.23	22.09	18.61	23	
20	64QAM	1	99	18.67	22.27	22.01	18.55		
20	64QAM	50	0	17.99	21.56	21.43	17.99		
20	64QAM	50	24	17.96	21.59	21.46	17.94	22	
20	64QAM	50	50	17.90	21.52	21.35	17.82		
20	64QAM	100	0	17.95	21.57	21.36	17.91		
Channel				55315	55820	56160	56665	Tune-up limit (dBm)	
Frequency (MHz)				3557.5	3608	3642	3692.5		
15	QPSK	1	0	20.82	24.38	24.36	20.87	25	
15	QPSK	1	37	20.76	24.16	24.10	20.75		
15	QPSK	1	74	20.75	24.20	24.08	20.65		
15	QPSK	36	0	19.91	23.50	23.48	19.87	24	
15	QPSK	36	20	19.87	23.45	23.43	19.86		
15	QPSK	36	39	19.78	23.42	23.40	19.71		
15	QPSK	75	0	19.87	23.43	23.41	19.80	24	
15	16QAM	1	0	19.96	23.61	23.60	19.96		
15	16QAM	1	37	19.76	23.44	23.42	19.70		
15	16QAM	1	74	19.80	23.44	23.45	19.71	23	
15	16QAM	36	0	18.98	22.47	22.60	18.99		
15	16QAM	36	20	18.96	22.56	22.46	18.89		
15	16QAM	36	39	18.81	22.49	22.39	18.72	23	
15	16QAM	75	0	18.88	22.51	22.48	18.84		
15	64QAM	1	0	18.73	22.26	22.07	18.82		
15	64QAM	1	37	18.55	22.19	22.00	18.57	23	
15	64QAM	1	74	18.57	22.19	21.93	18.47		
15	64QAM	36	0	17.82	21.53	21.41	17.89		
15	64QAM	36	20	17.88	21.52	21.37	17.90	22	
15	64QAM	36	39	17.83	21.48	21.30	17.72		
15	64QAM	75	0	17.95	21.48	21.33	17.83		
Channel				55290	55815	56165	56690	Tune-up limit (dBm)	
Frequency (MHz)				3552.5	3607.5	3642.5	3695		
10	QPSK	1	0	20.81	24.30	24.32	20.92	25	
10	QPSK	1	25	20.76	24.18	24.14	20.70		
10	QPSK	1	49	20.72	24.16	24.12	20.66		
10	QPSK	25	0	19.90	23.51	23.58	19.89	24	
10	QPSK	25	12	19.90	23.46	23.48	19.86		
10	QPSK	25	25	19.87	23.45	23.38	19.72		
10	QPSK	50	0	19.91	23.42	23.51	19.84	24	
10	16QAM	1	0	19.94	23.59	23.66	19.96		
10	16QAM	1	25	19.83	23.44	23.40	19.72		
10	16QAM	1	49	19.89	23.46	23.45	19.74	23	
10	16QAM	25	0	18.94	22.53	22.59	19.00		
10	16QAM	25	12	18.87	22.57	22.54	18.88		
10	16QAM	25	25	18.84	22.51	22.40	18.80	23	
10	16QAM	50	0	18.92	22.55	22.50	18.82		
10	64QAM	1	0	18.67	22.31	22.05	18.82		
10	64QAM	1	25	18.60	22.22	22.06	18.60	23	
10	64QAM	1	49	18.61	22.26	21.99	18.47		
10	64QAM	25	0	17.95	21.50	21.33	17.89		
10	64QAM	25	12	17.92	21.54	21.43	17.84	22	
10	64QAM	25	25	17.89	21.42	21.25	17.77		
10	64QAM	50	0	17.87	21.56	21.36	17.81		
Channel				55265	55810	56170	56715	Tune-up limit (dBm)	
Frequency (MHz)				3552.5	3607	3643	3697.5		
5	QPSK	1	0	20.81	24.33	24.39	20.92	25	
5	QPSK	1	12	20.72	24.19	24.13	20.67		
5	QPSK	1	24	20.76	24.20	24.10	20.61		
5	QPSK	12	0	19.94	23.52	23.54	19.92	24	
5	QPSK	12	7	19.87	23.46	23.40	19.84		
5	QPSK	12	13	19.83	23.41	23.43	19.71		
5	QPSK	25	0	19.88	23.50	23.43	19.77	24	
5	16QAM	1	0	19.99	23.66	23.67	19.91		
5	16QAM	1	12	19.80	23.36	23.40	19.80		
5	16QAM	1	24	19.94	23.43	23.39	19.75	23	
5	16QAM	12	0	18.90	22.54	22.62	18.93		
5	16QAM	12	7	18.97	22.54	22.55	18.89		
5	16QAM	12	13	18.83	22.41	22.48	18.75	23	
5	16QAM	25	0	18.92	22.54	22.48	18.87		
5	64QAM	1	0	18.73	22.28	22.03	18.77		
5	64QAM	1	12	18.60	22.15	22.01	18.52	23	
5	64QAM	1	24	18.57	22.19	21.95	18.47		
5	64QAM	12	0	18.01	21.49	21.39	17.92		
5	64QAM	12	7	17.95	21.50	21.46	17.94	22	
5	64QAM	12	13	17.83	21.42	21.30	17.75		
5	64QAM	25	0	17.89	21.53	21.33	17.91		



Band 38									
Ant 0									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)		
Channel				37850	38000	38150			
Frequency (MHz)				2580	2595	2610			
20	QPSK	1	0	24.93	24.94	24.98	25		
20	QPSK	1	49	24.99	24.91	24.93			
20	QPSK	1	99	24.94	24.97	24.96			
20	QPSK	50	0	23.94	23.99	23.99			
20	QPSK	50	24	23.99	23.92	23.92	24		
20	QPSK	50	50	23.88	23.84	23.82			
20	QPSK	100	0	23.89	23.88	23.82			
20	16QAM	1	0	23.83	23.86	23.86			
20	16QAM	1	49	23.86	23.87	23.80	24		
20	16QAM	1	99	23.82	23.83	23.83			
20	16QAM	50	0	22.86	22.81	22.81			
20	16QAM	50	24	22.89	22.86	22.83			
20	16QAM	50	50	22.80	22.86	22.80	23		
20	16QAM	100	0	22.88	22.83	22.82			
20	64QAM	1	0	22.80	22.81	22.81			
20	64QAM	1	49	22.79	22.81	22.83			
20	64QAM	1	99	22.85	22.80	22.79	23		
20	64QAM	50	0	21.89	21.80	21.91			
20	64QAM	50	24	21.90	21.76	21.84			
20	64QAM	50	50	21.81	21.88	21.85			
20	64QAM	100	0	21.89	21.84	21.82	Tune-up limit (dBm)		
Channel				37825	38000	38175			
Frequency (MHz)				2577.5	2595	2612.5			
15	QPSK	1	0	24.91	24.94	24.97		25	
15	QPSK	1	37	24.90	24.82	24.91			
15	QPSK	1	74	24.91	24.87	24.96			
15	QPSK	36	0	23.84	23.97	23.92			
15	QPSK	36	20	23.96	23.87	23.83	24		
15	QPSK	36	39	23.79	23.80	23.72			
15	QPSK	75	0	23.81	23.87	23.78			
15	16QAM	1	0	23.74	23.83	23.81			
15	16QAM	1	37	23.86	23.81	23.71	24		
15	16QAM	1	74	23.72	23.73	23.77			
15	16QAM	36	0	22.85	22.77	22.82			
15	16QAM	36	20	22.81	22.86	22.79			
15	16QAM	36	39	22.75	22.85	22.76	23		
15	16QAM	75	0	22.88	22.74	22.79			
15	64QAM	1	0	22.71	22.80	22.73			
15	64QAM	1	37	22.71	22.79	22.79			
15	64QAM	1	74	22.85	22.70	22.75	22		
15	64QAM	36	0	21.80	21.78	21.89			
15	64QAM	36	20	21.87	21.70	21.80			
15	64QAM	36	39	21.77	21.82	21.83			
15	64QAM	75	0	21.89	21.84	21.79	Tune-up limit (dBm)		
Channel				37800	38000	38200			
Frequency (MHz)				2575	2595	2615			
10	QPSK	1	0	24.92	24.89	24.91		25	
10	QPSK	1	25	24.90	24.90	24.83			
10	QPSK	1	49	24.91	24.97	24.87			
10	QPSK	25	0	23.90	23.97	23.99			
10	QPSK	25	12	23.95	23.89	23.89	24		
10	QPSK	25	25	23.84	23.77	23.72			
10	QPSK	50	0	23.82	23.82	23.74			
10	16QAM	1	0	23.74	23.76	23.84			
10	16QAM	1	25	23.77	23.84	23.70	24		
10	16QAM	1	49	23.75	23.78	23.82			
10	16QAM	25	0	22.84	22.71	22.80			
10	16QAM	25	12	22.87	22.81	22.82			
10	16QAM	25	25	22.70	22.77	22.75	23		
10	16QAM	50	0	22.86	22.75	22.74			
10	64QAM	1	0	22.80	22.74	22.74			
10	64QAM	1	25	22.72	22.71	22.75			
10	64QAM	1	49	22.77	22.75	22.73	23		
10	64QAM	25	0	21.81	21.75	21.89			
10	64QAM	25	12	21.83	21.73	21.77			
10	64QAM	25	25	21.79	21.79	21.83			
10	64QAM	50	0	21.80	21.79	21.83	22		
Channel				37775	38000	38225		Tune-up limit (dBm)	
Frequency (MHz)				2572.5	2595	2617.5			
5	QPSK	1	0	24.95	24.92	24.94		25	
5	QPSK	1	12	24.96	24.90	24.92			
5	QPSK	1	24	24.94	24.94	24.95			
5	QPSK	12	0	23.86	23.97	23.93			
5	QPSK	12	7	23.91	23.82	23.83	24		
5	QPSK	12	13	23.88	23.82	23.81			
5	QPSK	25	0	23.79	23.82	23.72			
5	16QAM	1	0	23.74	23.76	23.86			
5	16QAM	1	12	23.79	23.83	23.76	24		
5	16QAM	1	24	23.72	23.80	23.79			
5	16QAM	12	0	22.82	22.73	22.79			
5	16QAM	12	7	22.86	22.82	22.73			
5	16QAM	12	13	22.77	22.83	22.79	23		
5	16QAM	25	0	22.84	22.78	22.79			
5	64QAM	1	0	22.77	22.77	22.79			
5	64QAM	1	12	22.74	22.71	22.76			
5	64QAM	1	24	22.82	22.70	22.73	23		
5	64QAM	12	0	21.88	21.71	21.87			
5	64QAM	12	7	21.88	21.71	21.84			
5	64QAM	12	13	21.80	21.83	21.80			
5	64QAM	25	0	21.84	21.77	21.72	22		



Band 38_HPUE							
Ant 0							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				37850	38000	38150	
Frequency (MHz)				2580	2595	2610	
20	QPSK	1	0	26.87	26.91	26.95	27.5
20	QPSK	1	49	26.62	26.98	26.99	
20	QPSK	1	99	26.60	27.01	27.00	
20	QPSK	50	0	25.73	25.88	26.11	26.5
20	QPSK	50	24	25.81	25.94	26.26	
20	QPSK	50	50	25.74	25.89	26.00	
20	QPSK	100	0	25.84	25.91	26.07	26.5
20	16QAM	1	0	26.20	26.33	26.32	
20	16QAM	1	49	25.96	26.26	26.32	
20	16QAM	1	99	25.96	26.37	26.34	25.5
20	16QAM	50	0	24.94	25.08	25.29	
20	16QAM	50	24	24.97	25.22	25.32	
20	16QAM	50	50	25.07	25.23	25.34	25.5
20	16QAM	100	0	24.92	25.04	25.16	
20	64QAM	1	0	24.31	24.35	24.44	
20	64QAM	1	49	24.04	24.31	24.74	24.5
20	64QAM	1	99	24.04	24.55	24.68	
20	64QAM	50	0	23.16	23.14	23.43	
20	64QAM	50	24	23.14	23.29	23.50	24.5
20	64QAM	50	50	23.13	23.34	23.43	
20	64QAM	100	0	23.10	23.14	23.24	
Channel				37825	38000	38175	Tune-up limit (dBm)
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	26.62	26.82	26.94	27.5
15	QPSK	1	37	26.58	26.91	26.95	
15	QPSK	1	74	26.58	26.99	26.98	
15	QPSK	36	0	25.63	25.85	26.01	26.5
15	QPSK	36	20	25.81	25.86	26.19	
15	QPSK	36	39	25.65	25.83	25.94	
15	QPSK	75	0	25.82	25.82	26.01	26.5
15	16QAM	1	0	26.11	26.23	26.28	
15	16QAM	1	37	25.93	26.20	26.22	
15	16QAM	1	74	25.90	26.27	26.33	25.5
15	16QAM	36	0	24.90	25.06	25.27	
15	16QAM	36	20	24.90	25.13	25.27	
15	16QAM	36	39	24.97	25.15	25.29	25.5
15	16QAM	75	0	24.85	24.98	25.13	
15	64QAM	1	0	24.30	24.33	24.38	
15	64QAM	1	37	23.99	24.25	24.74	24.5
15	64QAM	1	74	24.04	24.55	24.66	
15	64QAM	36	0	23.12	23.11	23.43	
15	64QAM	36	20	23.05	23.21	23.44	24.5
15	64QAM	36	39	23.08	23.29	23.38	
15	64QAM	75	0	23.05	23.12	23.16	
Channel				37800	38000	38200	Tune-up limit (dBm)
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	26.80	26.89	26.94	27.5
10	QPSK	1	25	26.58	26.90	26.93	
10	QPSK	1	49	26.52	27.00	26.98	
10	QPSK	25	0	25.68	25.80	26.06	26.5
10	QPSK	25	12	25.78	25.85	26.19	
10	QPSK	25	25	25.73	25.89	25.91	
10	QPSK	50	0	25.74	25.87	25.99	26.5
10	16QAM	1	0	26.13	26.30	26.25	
10	16QAM	1	25	25.86	26.19	26.23	
10	16QAM	1	49	25.90	26.32	26.31	25.5
10	16QAM	25	0	24.90	25.07	25.22	
10	16QAM	25	12	24.92	25.17	25.22	
10	16QAM	25	25	25.04	25.14	25.34	25.5
10	16QAM	50	0	24.91	24.98	25.15	
10	64QAM	1	0	24.24	24.37	24.36	
10	64QAM	1	25	23.97	24.24	24.64	24.5
10	64QAM	1	49	24.04	24.53	24.65	
10	64QAM	25	0	23.07	23.12	23.33	
10	64QAM	25	12	23.05	23.19	23.43	24.5
10	64QAM	25	25	23.12	23.31	23.35	
10	64QAM	50	0	23.10	23.10	23.24	
Channel				37775	38000	38225	Tune-up limit (dBm)
Frequency (MHz)				2572.5	2595	2617.5	
5	QPSK	1	0	26.80	26.90	26.94	27.5
5	QPSK	1	12	26.59	26.97	26.91	
5	QPSK	1	24	26.53	26.96	26.91	
5	QPSK	12	0	25.64	25.85	26.04	26.5
5	QPSK	12	7	25.77	25.90	26.20	
5	QPSK	12	13	25.71	25.86	26.00	
5	QPSK	25	0	25.78	25.83	26.04	26.5
5	16QAM	1	0	26.17	26.32	26.31	
5	16QAM	1	12	25.96	26.21	26.27	
5	16QAM	1	24	25.93	26.32	26.28	25.5
5	16QAM	12	0	24.84	25.07	25.19	
5	16QAM	12	7	24.92	25.22	25.31	
5	16QAM	12	13	24.99	25.13	25.34	25.5
5	16QAM	25	0	24.82	24.99	25.12	
5	64QAM	1	0	24.28	24.33	24.43	
5	64QAM	1	12	23.96	24.28	24.67	24.5
5	64QAM	1	24	23.95	24.49	24.64	
5	64QAM	12	0	23.06	23.09	23.41	
5	64QAM	12	7	23.10	23.22	23.41	24.5
5	64QAM	12	13	23.11	23.29	23.42	
5	64QAM	25	0	23.03	23.05	23.20	



Band 41										
Ant 0										
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Low Middle Ch. / Freq.	Power Middle Ch. / Freq.	Power High Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	
Channel				39750	40185	40620	41055	41490		
Frequency (MHz)				2506	2549.5	2593	2636.5	2680		
20	QPSK	1	0	24.63	24.82	24.91	24.89	24.45	25	
20	QPSK	1	49	24.67	24.87	24.94	24.95	24.81		
20	QPSK	1	99	24.73	24.95	24.96	24.75	24.68		
20	QPSK	50	0	23.81	23.99	23.90	23.98	23.79	24	
20	QPSK	50	24	23.83	23.93	23.93	23.94	23.92		
20	QPSK	50	50	23.84	23.90	23.94	23.94	23.81		
20	QPSK	100	0	23.84	23.95	23.91	23.97	23.85	24	
20	16QAM	1	0	23.73	23.94	23.99	24.00	23.55		
20	16QAM	1	49	23.75	23.96	23.91	23.99	23.88		
20	16QAM	1	99	23.84	23.93	23.92	23.86	23.75	23	
20	16QAM	50	0	22.81	22.83	22.82	22.80	22.81		
20	16QAM	50	24	22.83	22.86	22.83	22.87	22.86		
20	16QAM	50	50	22.88	22.88	22.87	22.89	22.85	23	
20	16QAM	100	0	22.84	22.85	22.84	22.89	22.87		
20	64QAM	1	0	22.50	22.67	22.79	22.77	22.25		
20	64QAM	1	49	22.44	22.70	22.71	22.88	22.62	23	
20	64QAM	1	99	22.56	22.77	22.73	22.54	22.41		
20	64QAM	50	0	21.81	21.94	21.85	21.81	21.81		
20	64QAM	50	24	21.88	21.91	21.86	21.80	21.98	22	
20	64QAM	50	50	21.86	21.91	21.86	21.89	21.87		
20	64QAM	100	0	21.87	21.98	21.84	21.81	21.86		
Channel				39725	40173	40620	41068	41515		
Frequency (MHz)				2503.5	2548.3	2593	2637.8	2682.5	Tune-up limit (dBm)	
15	QPSK	1	0	24.59	24.78	24.84	24.84	24.40	25	
15	QPSK	1	37	24.57	24.78	24.88	24.85	24.75		
15	QPSK	1	74	24.72	24.95	24.94	24.71	24.65		
15	QPSK	36	0	23.81	23.91	23.83	23.98	23.75	24	
15	QPSK	36	20	23.76	23.89	23.85	23.91	23.85		
15	QPSK	36	39	23.79	23.80	23.84	23.87	23.71		
15	QPSK	75	0	23.81	23.88	23.88	23.94	23.82	24	
15	16QAM	1	0	23.71	23.84	23.90	23.94	23.47		
15	16QAM	1	37	23.71	23.97	23.86	23.99	23.83		
15	16QAM	1	74	23.82	23.89	23.89	23.83	23.65	23	
15	16QAM	36	0	22.74	22.81	22.77	22.70	22.80		
15	16QAM	36	20	22.84	22.84	22.78	22.86	22.87		
15	16QAM	36	39	22.79	22.85	22.77	22.82	22.84	23	
15	16QAM	75	0	22.75	22.83	22.82	22.85	22.82		
15	64QAM	1	0	22.40	22.59	22.78	22.77	22.16		
15	64QAM	1	37	22.42	22.61	22.63	22.82	22.53	23	
15	64QAM	1	74	22.49	22.77	22.69	22.51	22.39		
15	64QAM	36	0	21.77	21.91	21.76	21.78	21.80		
15	64QAM	36	20	21.85	21.85	21.82	21.73	21.95	22	
15	64QAM	36	39	21.80	21.91	21.81	21.84	21.80		
15	64QAM	75	0	21.81	21.88	21.75	21.78	21.84		
Channel				39700	40160	40620	41080	41540		
Frequency (MHz)				2501	2547	2593	2639	2685	Tune-up limit (dBm)	
10	QPSK	1	0	24.59	24.72	24.82	24.82	24.45	25	
10	QPSK	1	25	24.80	24.81	24.85	24.93	24.80		
10	QPSK	1	49	24.67	24.90	24.92	24.68	24.58		
10	QPSK	25	0	23.74	23.97	23.84	23.89	23.75	24	
10	QPSK	25	12	23.81	23.87	23.85	23.88	23.83		
10	QPSK	25	25	23.80	23.88	23.89	23.85	23.78		
10	QPSK	50	0	23.76	23.95	23.81	23.96	23.77	24	
10	16QAM	1	0	23.71	23.87	23.96	23.97	23.51		
10	16QAM	1	25	23.64	23.93	23.82	23.95	23.86		
10	16QAM	1	49	23.81	23.91	23.86	23.84	23.75	23	
10	16QAM	25	0	22.76	22.75	22.75	22.76	22.80		
10	16QAM	25	12	22.79	22.81	22.82	22.79	22.93		
10	16QAM	25	25	22.85	22.87	22.85	22.81	22.82	23	
10	16QAM	50	0	22.77	22.81	22.77	22.80	22.82		
10	64QAM	1	0	22.44	22.63	22.76	22.76	22.21		
10	64QAM	1	25	22.40	22.68	22.64	22.86	22.54	23	
10	64QAM	1	49	22.51	22.70	22.63	22.50	22.31		
10	64QAM	25	0	21.75	21.87	21.78	21.77	21.79		
10	64QAM	25	12	21.82	21.90	21.79	21.78	21.98	22	
10	64QAM	25	25	21.80	21.83	21.80	21.81	21.86		
10	64QAM	50	0	21.79	21.86	21.83	21.79	21.78		
Channel				39675	40148	40620	41093	41565		
Frequency (MHz)				2498.5	2545.8	2593	2640.30	2687.5	Tune-up limit (dBm)	
5	QPSK	1	0	24.51	24.80	24.90	24.84	24.38	25	
5	QPSK	1	12	24.60	24.85	24.87	24.89	24.79		
5	QPSK	1	24	24.71	24.94	24.96	24.71	24.65		
5	QPSK	12	0	23.77	23.92	23.85	23.97	23.74	24	
5	QPSK	12	7	23.80	23.93	23.90	23.87	23.82		
5	QPSK	12	13	23.81	23.94	23.93	23.87	23.71		
5	QPSK	25	0	23.82	23.91	23.81	23.90	23.79	24	
5	16QAM	1	0	23.73	23.92	23.93	23.95	23.47		
5	16QAM	1	12	23.73	23.96	23.85	23.97	23.84		
5	16QAM	1	24	23.82	23.91	23.86	23.82	23.71	23	
5	16QAM	12	0	22.71	22.78	22.75	22.72	22.73		
5	16QAM	12	7	22.87	22.78	22.81	22.83	22.94		
5	16QAM	12	13	22.88	22.83	22.79	22.79	22.84	23	
5	16QAM	25	0	22.78	22.81	22.74	22.85	22.85		
5	64QAM	1	0	22.41	22.67	22.75	22.73	22.17		
5	64QAM	1	12	22.41	22.65	22.69	22.85	22.54	23	
5	64QAM	1	24	22.48	22.76	22.72	22.45	22.40		
5	64QAM	12	0	21.75	21.86	21.81	21.75	21.80		
5	64QAM	12	7	21.88	21.87	21.77	21.74	21.98	22	
5	64QAM	12	13	21.76	21.88	21.77	21.84	21.84		
5	64QAM	25	0	21.87	21.96	21.80	21.77	21.79		



Band 41_HPUE										
Ant 0										
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Low Middle Ch. / Freq.	Power Middle Ch. / Freq.	Power High Middle Ch. / Freq.	Power High Ch. / Freq.		Tune-up limit (dBm)
Channel				39750	40185	40620	41055	41490		
Frequency (MHz)				2506	2549.5	2593	2636.5	2680		
20	QPSK	1	0	25.02	26.05	26.68	26.59	26.20	27.5	
20	QPSK	1	49	26.31	25.86	26.67	26.86	26.46		
20	QPSK	1	99	26.48	25.87	26.66	26.44	26.13		
20	QPSK	50	0	25.18	25.01	25.91	25.59	25.62		
20	QPSK	50	24	25.39	24.93	25.93	26.08	25.77		
20	QPSK	50	50	25.69	24.79	25.95	25.88	25.47	26.5	
20	QPSK	100	0	24.56	24.86	25.95	25.88	25.63		
20	16QAM	1	0	25.24	25.30	26.07	25.97	25.51		
20	16QAM	1	49	25.68	25.14	26.00	26.25	25.81		
20	16QAM	1	99	25.80	25.03	26.06	25.77	25.50		
20	16QAM	50	0	24.35	24.12	24.93	25.01	24.65	25.5	
20	16QAM	50	24	24.68	24.08	24.96	25.11	24.79		
20	16QAM	50	50	24.74	23.98	24.98	24.88	24.66		
20	16QAM	100	0	24.22	23.92	24.95	24.91	24.70		
20	64QAM	1	0	23.58	23.66	24.29	24.63	24.10		
20	64QAM	1	49	23.58	23.60	24.45	25.12	23.82	25.5	
20	64QAM	1	99	24.03	23.66	24.09	24.62	23.50		
20	64QAM	50	0	22.56	22.52	23.29	24.04	23.14		
20	64QAM	50	24	22.67	22.54	23.35	24.12	23.03		
20	64QAM	50	50	22.80	22.56	23.42	23.90	22.78		
20	64QAM	100	0	22.55	22.54	23.35	23.92	22.93		
Channel				39725	40173	40620	41068	41515		
Frequency (MHz)				2503.5	2548.3	2593	2637.8	2682.5		Tune-up limit (dBm)
15	QPSK	1	0	25.88	25.95	26.64	26.49	26.14	27.5	
15	QPSK	1	37	26.21	25.80	26.62	26.79	26.44		
15	QPSK	1	74	26.44	25.77	26.65	26.42	26.07		
15	QPSK	36	0	25.18	24.91	25.82	25.90	25.60		
15	QPSK	36	20	25.35	24.83	25.88	26.03	25.67		
15	QPSK	36	39	25.66	24.72	25.87	25.78	25.37	26.5	
15	QPSK	75	0	24.51	24.80	25.86	25.86	25.55		
15	16QAM	1	0	25.24	25.21	26.05	25.97	25.50		
15	16QAM	1	37	25.66	25.08	25.99	26.15	25.81		
15	16QAM	1	74	25.73	24.96	26.05	25.76	25.50		
15	16QAM	36	0	24.29	24.06	24.84	24.97	24.56	25.5	
15	16QAM	36	20	24.62	24.08	24.86	25.04	24.73		
15	16QAM	36	39	24.70	23.89	24.93	24.89	24.94		
15	16QAM	75	0	24.17	23.82	24.87	24.82	24.61		
15	64QAM	1	0	23.55	23.56	24.25	24.79	24.07		
15	64QAM	1	37	23.58	23.60	24.41	25.03	23.75	25.5	
15	64QAM	1	74	24.00	23.61	24.08	24.55	23.49		
15	64QAM	36	0	22.56	22.48	23.23	23.99	23.10		
15	64QAM	36	20	22.85	22.47	23.34	24.11	23.02		
15	64QAM	36	39	22.84	22.59	23.32	23.88	22.78		
15	64QAM	75	0	22.53	22.51	23.26	23.85	22.90		
Channel				39700	40160	40620	41080	41540		Tune-up limit (dBm)
Frequency (MHz)				2501	2547	2593	2639	2685		
10	QPSK	1	0	25.82	26.03	26.58	26.55	26.10	27.5	
10	QPSK	1	25	26.21	25.77	26.66	26.80	26.39		
10	QPSK	1	49	26.46	25.83	26.64	26.34	26.09		
10	QPSK	25	0	25.14	24.99	25.81	25.95	25.62		
10	QPSK	25	12	25.33	24.85	25.85	26.05	25.75		
10	QPSK	25	25	25.59	24.78	25.94	25.80	25.45	26.5	
10	QPSK	50	0	24.56	24.77	25.96	25.82	25.54		
10	16QAM	1	0	25.15	25.22	25.99	25.94	25.44		
10	16QAM	1	25	25.68	25.08	25.99	26.20	25.81		
10	16QAM	1	49	25.75	25.00	25.99	25.75	25.48		
10	16QAM	25	0	24.26	24.04	24.83	24.92	24.61	25.5	
10	16QAM	25	12	24.68	24.00	24.91	25.10	24.74		
10	16QAM	25	25	24.72	23.97	24.98	24.81	24.61		
10	16QAM	50	0	24.21	23.82	24.95	24.82	24.61		
10	64QAM	1	0	23.54	23.61	24.28	24.75	24.02		
10	64QAM	1	25	23.50	23.56	24.35	25.10	23.76	25.5	
10	64QAM	1	49	24.03	23.56	24.05	24.62	23.41		
10	64QAM	25	0	22.50	22.50	23.28	24.01	23.13		
10	64QAM	25	12	22.83	22.48	23.29	24.10	22.99		
10	64QAM	25	25	22.87	22.49	23.34	23.87	22.71		
10	64QAM	50	0	22.46	22.53	23.27	23.89	22.84		
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	25.82	25.95	26.66	26.59	26.19	27.5	
5	QPSK	1	12	26.27	25.76	26.61	26.83	26.45		
5	QPSK	1	24	26.38	25.79	26.60	26.41	26.04		
5	QPSK	12	0	25.17	25.00	25.91	25.97	25.60		
5	QPSK	12	7	25.33	24.91	25.87	26.06	25.72		
5	QPSK	12	13	25.65	24.78	25.95	25.83	25.41	26.5	
5	QPSK	25	0	24.54	24.77	25.94	25.87	25.59		
5	16QAM	1	0	25.19	25.24	26.05	25.89	25.45		
5	16QAM	1	12	25.68	25.06	25.92	26.15	25.75		
5	16QAM	1	24	25.72	24.96	25.99	25.71	25.49		
5	16QAM	12	0	24.28	24.10	24.92	24.99	24.58	25.5	
5	16QAM	12	7	24.84	24.06	24.87	25.06	24.75		
5	16QAM	12	13	24.84	23.96	24.94	24.79	24.62		
5	16QAM	25	0	24.16	23.90	24.91	24.88	24.68		
5	64QAM	1	0	23.48	23.60	24.24	24.80	24.04		
5	64QAM	1	12	23.54	23.56	24.37	25.11	23.77	25.5	
5	64QAM	1	24	24.00	23.56	24.09	24.61	23.46		
5	64QAM	12	0	22.49	22.43	23.21	23.99	23.08		
5	64QAM	12	7	22.66	22.44	23.33	24.04	22.99		
5	64QAM	12	13	22.80	22.53	23.37	23.83	22.72		



Band 42							
Ant 2							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				43190	43340	43490	
Frequency (MHz)				3560	3575	3590	
20	QPSK	1	0	22.94	23.03	23.03	23.5
20	QPSK	1	49	22.98	23.01	23.06	
20	QPSK	1	99	22.89	22.94	22.97	
20	QPSK	50	0	22.03	22.08	22.12	
20	QPSK	50	24	22.08	22.04	22.08	22.5
20	QPSK	50	50	22.03	22.06	22.08	
20	QPSK	100	0	22.07	22.02	22.07	
20	16QAM	1	0	22.09	22.11	22.17	
20	16QAM	1	49	22.04	22.08	22.12	22.5
20	16QAM	1	99	22.00	22.04	22.07	
20	16QAM	50	0	21.04	21.09	21.14	
20	16QAM	50	24	21.10	21.07	21.10	
20	16QAM	50	50	21.04	21.09	21.10	21.5
20	16QAM	100	0	21.07	21.03	21.09	
20	64QAM	1	0	20.70	20.81	20.75	
20	64QAM	1	49	20.75	20.84	20.86	
20	64QAM	1	99	20.79	20.79	20.58	20.5
20	64QAM	50	0	20.06	20.11	20.02	
20	64QAM	50	24	20.11	20.08	20.06	
20	64QAM	50	50	20.05	20.08	19.95	
20	64QAM	100	0	20.09	20.03	19.94	tune-up limit (dBm)
Channel				43165	43340	43515	
Frequency (MHz)				3557.5	3575	3592.5	
15	QPSK	1	0	22.85	22.94	22.94	23.5
15	QPSK	1	37	22.96	22.95	22.98	
15	QPSK	1	74	22.89	22.89	22.87	
15	QPSK	36	0	21.99	21.99	22.10	
15	QPSK	36	20	21.98	21.97	22.04	22.5
15	QPSK	36	39	22.00	22.04	22.05	
15	QPSK	75	0	22.01	22.00	21.98	
15	16QAM	1	0	22.04	22.09	22.13	
15	16QAM	1	37	21.95	22.05	22.11	22.5
15	16QAM	1	74	21.94	21.99	22.01	
15	16QAM	36	0	20.99	21.07	21.12	
15	16QAM	36	20	21.08	20.97	21.06	
15	16QAM	36	39	20.97	21.01	21.07	21.5
15	16QAM	75	0	21.02	21.00	21.01	
15	64QAM	1	0	20.61	20.78	20.73	
15	64QAM	1	37	20.65	20.76	20.83	
15	64QAM	1	74	20.79	20.75	20.48	20.5
15	64QAM	36	0	20.03	20.03	19.92	
15	64QAM	36	20	20.05	20.08	20.03	
15	64QAM	36	39	20.00	20.00	19.86	
15	64QAM	75	0	20.05	20.01	19.92	tune-up limit (dBm)
Channel				43140	43340	43540	
Frequency (MHz)				3555	3575	3595	
10	QPSK	1	0	22.92	22.95	22.96	23.5
10	QPSK	1	25	22.93	22.93	23.05	
10	QPSK	1	49	22.80	22.87	22.94	
10	QPSK	25	0	21.96	22.02	22.09	
10	QPSK	25	12	22.08	21.96	22.05	22.5
10	QPSK	25	25	21.99	21.98	22.05	
10	QPSK	50	0	21.98	21.95	22.02	
10	16QAM	1	0	22.01	22.02	22.10	
10	16QAM	1	25	21.99	22.06	22.10	22.5
10	16QAM	1	49	21.96	21.98	21.98	
10	16QAM	25	0	20.94	21.07	21.07	
10	16QAM	25	12	21.03	20.99	21.05	
10	16QAM	25	25	20.97	21.02	21.06	21.5
10	16QAM	50	0	21.05	20.94	20.99	
10	64QAM	1	0	20.70	20.79	20.67	
10	64QAM	1	25	20.73	20.76	20.58	
10	64QAM	1	49	20.79	20.69	20.52	20.5
10	64QAM	25	0	19.99	20.06	20.00	
10	64QAM	25	12	20.10	20.05	20.05	
10	64QAM	25	25	19.98	20.02	19.89	
10	64QAM	50	0	20.09	19.94	19.89	tune-up limit (dBm)
Channel				43115	43340	43565	
Frequency (MHz)				3552.5	3575	3597.5	
5	QPSK	1	0	22.92	23.01	22.97	23.5
5	QPSK	1	12	22.90	23.00	22.96	
5	QPSK	1	24	22.83	22.92	22.96	
5	QPSK	12	0	22.00	21.99	22.04	
5	QPSK	12	7	22.05	22.00	22.01	22.5
5	QPSK	12	13	21.99	21.96	22.02	
5	QPSK	25	0	22.03	21.93	22.02	
5	16QAM	1	0	22.05	22.02	22.15	
5	16QAM	1	12	21.98	22.03	22.06	22.5
5	16QAM	1	24	21.90	21.95	22.06	
5	16QAM	12	0	21.04	21.02	21.09	
5	16QAM	12	7	21.08	21.00	21.04	
5	16QAM	12	13	20.98	21.05	21.10	21.5
5	16QAM	25	0	20.98	20.96	21.03	
5	64QAM	1	0	20.61	20.80	20.72	
5	64QAM	1	12	20.71	20.75	20.66	
5	64QAM	1	24	20.75	20.72	20.52	20.5
5	64QAM	12	0	19.96	20.02	19.99	
5	64QAM	12	7	20.05	20.00	19.98	
5	64QAM	12	13	20.00	19.98	19.90	
5	64QAM	25	0	20.02	19.94	19.93	



Band 48										
Ant 2										
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Low Middle Ch. / Freq.	Power High Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)		
Channel				55340	55830	56150	56640			
Frequency (MHz)				3560	3609	3641	3690			
20	QPSK	1	0	19.65	23.27	23.37	19.53	23.5		
20	QPSK	1	49	19.47	23.06	23.02	19.31			
20	QPSK	1	99	19.50	23.04	22.96	19.22			
20	QPSK	50	0	18.70	22.22	22.33	18.51	22.5		
20	QPSK	50	24	18.68	22.25	22.18	18.45			
20	QPSK	50	50	18.61	22.18	22.09	18.34			
20	QPSK	100	0	18.65	22.24	22.17	18.44	22.5		
20	16QAM	1	0	18.74	22.39	22.38	18.67			
20	16QAM	1	49	18.57	22.18	22.11	18.39			
20	16QAM	1	99	18.63	22.16	22.05	18.30	21.5		
20	16QAM	50	0	17.74	21.24	21.26	17.57			
20	16QAM	50	24	17.72	21.27	21.20	17.46			
20	16QAM	50	50	17.65	21.20	21.12	17.40	21.5		
20	16QAM	100	0	17.68	21.24	21.20	17.48			
20	64QAM	1	0	17.45	21.06	20.77	17.44			
20	64QAM	1	49	17.36	20.91	20.75	17.13	21.5		
20	64QAM	1	99	17.39	20.93	20.67	17.09			
20	64QAM	50	0	16.74	20.25	20.09	16.54			
20	64QAM	50	24	16.70	20.26	20.10	16.48	20.5		
20	64QAM	50	50	16.64	20.19	19.99	16.38			
20	64QAM	100	0	16.69	20.27	20.03	16.47			
Channel				55315	55820	56160	56665	Tune-up limit (dBm)		
Frequency (MHz)				3557.5	3608	3642	3692.5			
15	QPSK	1	0	19.62	23.17	23.26	19.50	23.5		
15	QPSK	1	37	19.41	23.02	23.02	19.27			
15	QPSK	1	74	19.47	22.94	22.86	19.20			
15	QPSK	36	0	18.68	22.21	22.20	18.48	22.5		
15	QPSK	36	20	18.58	22.21	22.16	18.40			
15	QPSK	36	39	18.58	22.14	22.09	18.28			
15	QPSK	75	0	18.55	22.15	22.08	18.43	22.5		
15	16QAM	1	0	18.64	22.30	22.36	18.59			
15	16QAM	1	37	18.55	22.17	22.05	18.33			
15	16QAM	1	74	18.56	22.10	21.96	18.20	21.5		
15	16QAM	36	0	17.67	21.22	21.26	17.47			
15	16QAM	36	20	17.72	21.18	21.17	17.46			
15	16QAM	36	39	17.57	21.15	21.09	17.39	21.5		
15	16QAM	75	0	17.62	21.20	21.11	17.38			
15	64QAM	1	0	17.36	20.98	20.68	17.35			
15	64QAM	1	37	17.28	20.86	20.72	17.10	21.5		
15	64QAM	1	74	17.36	20.83	20.66	17.00			
15	64QAM	36	0	16.71	20.20	20.00	16.44			
15	64QAM	36	20	16.68	20.23	20.03	16.38	20.5		
15	64QAM	36	39	16.62	20.13	19.91	16.36			
15	64QAM	75	0	16.69	20.25	20.03	16.47			
Channel				55290	55815	56165	56690	Tune-up limit (dBm)		
Frequency (MHz)				3555	3607.5	3642.5	3695			
10	QPSK	1	0	19.64	23.22	23.18	19.43	23.5		
10	QPSK	1	25	19.46	23.00	22.97	19.21			
10	QPSK	1	49	19.42	23.01	22.86	19.21			
10	QPSK	25	0	18.60	22.20	22.19	18.48	22.5		
10	QPSK	25	12	18.58	22.21	22.11	18.38			
10	QPSK	25	25	18.60	22.18	22.04	18.30			
10	QPSK	50	0	18.55	22.17	22.07	18.38	22.5		
10	16QAM	1	0	18.73	22.31	22.33	18.61			
10	16QAM	1	25	18.54	22.17	22.02	18.34			
10	16QAM	1	49	18.62	22.09	21.96	18.28	21.5		
10	16QAM	25	0	17.66	21.19	21.24	17.48			
10	16QAM	25	12	17.64	21.24	21.11	17.36			
10	16QAM	25	25	17.60	21.16	21.03	17.35	21.5		
10	16QAM	50	0	17.63	21.18	21.14	17.46			
10	64QAM	1	0	17.38	21.02	20.74	17.39			
10	64QAM	1	25	17.27	20.89	20.75	17.08	21.5		
10	64QAM	1	49	17.32	20.92	20.62	17.05			
10	64QAM	25	0	16.69	20.20	20.09	16.47			
10	64QAM	25	12	16.70	20.20	20.07	16.41	20.5		
10	64QAM	25	25	16.60	20.18	19.95	16.29			
10	64QAM	50	0	16.67	20.19	20.01	16.41			
Channel				55265	55810	56170	56715	Tune-up limit (dBm)		
Frequency (MHz)				3552.5	3607	3643	3697.5			
5	QPSK	1	0	19.56	23.20	23.23	19.52	23.5		
5	QPSK	1	12	19.40	22.99	23.01	19.22			
5	QPSK	1	24	19.50	22.96	22.96	19.17			
5	QPSK	12	0	18.62	22.19	22.17	18.48	22.5		
5	QPSK	12	7	18.68	22.15	22.13	18.40			
5	QPSK	12	13	18.56	22.10	22.09	18.31			
5	QPSK	25	0	18.62	22.15	22.15	18.37	22.5		
5	16QAM	1	0	18.73	22.37	22.31	18.62			
5	16QAM	1	12	18.56	22.16	22.05	18.35			
5	16QAM	1	24	18.63	22.15	21.98	18.23	22.5		
5	16QAM	12	0	17.67	21.14	21.16	17.52			
5	16QAM	12	7	17.71	21.26	21.13	17.38			
5	16QAM	12	13	17.60	21.13	21.06	17.35	21.5		
5	16QAM	25	0	17.61	21.15	21.10	17.41			
5	64QAM	1	0	17.43	21.01	20.67	17.37			
5	64QAM	1	12	17.31	20.86	20.73	17.08	21.5		
5	64QAM	1	24	17.33	20.87	20.64	17.03			
5	64QAM	12	0	16.68	20.17	20.03	16.48			
5	64QAM	12	7	16.65	20.24	20.10	16.45	20.5		
5	64QAM	12	13	16.55	20.13	19.89	16.35			
5	64QAM	25	0	16.59	20.19	19.97	16.40			

Band 38							
Art 2							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				37850	38000	38150	
Frequency (MHz)				2580	2595	2610	
20	QPSK	1	0	23.41	23.19	23.16	24.2
20	QPSK	1	49	23.34	23.15	23.14	
20	QPSK	1	99	23.26	23.17	23.13	
20	QPSK	50	0	23.26	23.01	23.05	24
20	QPSK	50	24	23.23	23.08	23.03	
20	QPSK	50	50	23.22	23.07	23.17	
20	QPSK	100	0	23.34	23.18	23.14	24
20	16QAM	1	0	23.35	23.16	23.21	
20	16QAM	1	49	23.34	23.09	23.03	
20	16QAM	1	99	23.25	23.17	23.21	23
20	16QAM	50	0	22.80	22.42	22.29	
20	16QAM	50	24	22.54	22.34	22.30	
20	16QAM	50	50	22.50	22.35	22.36	23
20	16QAM	100	0	22.47	22.38	22.34	
20	64QAM	1	0	22.26	22.02	22.04	23
20	64QAM	1	49	22.26	22.06	22.02	
20	64QAM	1	99	22.20	22.08	22.17	
20	64QAM	50	0	21.66	21.48	21.32	22
20	64QAM	50	24	21.57	21.39	21.29	
20	64QAM	50	50	21.46	21.36	21.36	
20	64QAM	100	0	21.51	21.37	21.27	
Channel				37825	38000	38175	
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	23.41	23.23	23.20	24.2
15	QPSK	1	37	23.33	23.09	23.11	
15	QPSK	1	74	23.30	23.11	23.06	
15	QPSK	36	0	23.26	23.02	23.12	24
15	QPSK	36	20	23.20	23.06	23.01	
15	QPSK	36	39	23.16	23.00	23.15	
15	QPSK	75	0	23.33	23.09	23.05	24
15	16QAM	1	0	23.37	23.18	23.23	
15	16QAM	1	37	23.34	23.15	23.07	
15	16QAM	1	74	23.22	23.19	23.19	23
15	16QAM	36	0	22.60	22.38	22.27	
15	16QAM	36	20	22.52	22.41	22.36	
15	16QAM	36	39	22.46	22.40	22.38	23
15	16QAM	75	0	22.47	22.40	22.28	
15	64QAM	1	0	22.25	22.03	22.09	
15	64QAM	1	37	22.23	22.05	22.09	23
15	64QAM	1	74	22.17	22.06	22.11	
15	64QAM	36	0	21.59	21.48	21.34	
15	64QAM	36	20	21.57	21.35	21.32	22
15	64QAM	36	39	21.56	21.33	21.45	
15	64QAM	75	0	21.47	21.41	21.36	
Channel				37800	38000	38200	
Frequency (MHz)				2572.5	2595	2617.5	
10	QPSK	1	0	23.34	23.20	23.24	24.2
10	QPSK	1	25	23.28	23.15	23.14	
10	QPSK	1	49	23.27	23.15	23.07	
10	QPSK	25	0	23.24	23.05	23.12	24
10	QPSK	25	12	23.26	23.07	23.02	
10	QPSK	25	25	23.12	23.00	23.11	
10	QPSK	50	0	23.26	23.18	23.11	24
10	16QAM	1	0	23.28	23.19	23.15	
10	16QAM	1	25	23.24	23.19	23.08	
10	16QAM	1	49	23.23	23.17	23.23	23
10	16QAM	25	0	22.62	22.45	22.33	
10	16QAM	25	12	22.51	22.37	22.36	
10	16QAM	25	25	22.53	22.35	22.41	23
10	16QAM	50	0	22.53	22.32	22.26	
10	64QAM	1	0	22.28	22.05	22.07	
10	64QAM	1	25	22.20	22.02	22.02	23
10	64QAM	1	49	22.12	22.01	22.17	
10	64QAM	25	0	21.65	21.44	21.34	
10	64QAM	25	12	21.51	21.34	21.32	22
10	64QAM	25	25	21.49	21.32	21.46	
10	64QAM	50	0	21.55	21.37	21.29	
Channel				3777.5	38000	38225	
Frequency (MHz)				2572.5	2595	2617.5	
5	QPSK	1	0	23.39	23.25	23.22	24.2
5	QPSK	1	12	23.25	23.09	23.14	
5	QPSK	1	24	23.23	23.15	23.12	
5	QPSK	12	0	23.17	23.02	23.12	24
5	QPSK	12	7	23.20	23.08	23.06	
5	QPSK	12	13	23.18	23.07	23.18	
5	QPSK	25	0	23.25	23.15	23.10	24
5	16QAM	1	0	23.35	23.11	23.23	
5	16QAM	1	12	23.27	23.17	23.09	
5	16QAM	1	24	23.32	23.21	23.17	23
5	16QAM	12	0	22.56	22.38	22.28	
5	16QAM	12	7	22.47	22.37	22.34	
5	16QAM	12	13	22.49	22.35	22.40	23
5	16QAM	25	0	22.51	22.34	22.26	
5	64QAM	1	0	22.23	22.01	22.05	
5	64QAM	1	12	22.19	22.03	22.03	23
5	64QAM	1	24	22.21	22.02	22.09	
5	64QAM	12	0	21.62	21.40	21.28	
5	64QAM	12	7	21.49	21.44	21.35	22
5	64QAM	12	13	21.55	21.33	21.45	
5	64QAM	25	0	21.56	21.38	21.35	



Band 38_HPUE							
Ant 2							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				37850	38000	38150	
Frequency (MHz)				2580	2595	2610	
20	QPSK	1	0	25.72	25.69	25.44	25.8
20	QPSK	1	49	25.67	25.61	25.67	
20	QPSK	1	99	25.62	25.58	25.26	
20	QPSK	50	0	25.55	25.16	24.79	25.8
20	QPSK	50	24	25.18	25.09	24.72	
20	QPSK	50	50	25.16	25.07	24.53	
20	QPSK	100	0	23.71	23.06	24.63	25.8
20	16QAM	1	0	25.41	25.24	24.85	
20	16QAM	1	49	25.33	25.21	25.07	
20	16QAM	1	99	25.36	25.14	24.63	25.5
20	16QAM	50	0	24.34	24.15	23.96	
20	16QAM	50	24	24.30	24.06	23.97	
20	16QAM	50	50	24.19	24.05	23.88	25.5
20	16QAM	100	0	23.74	24.03	23.78	
20	64QAM	1	0	23.54	23.80	23.77	25.5
20	64QAM	1	49	23.88	23.81	23.72	
20	64QAM	1	99	23.94	23.99	23.76	
20	64QAM	50	0	22.76	22.73	22.70	24.5
20	64QAM	50	24	22.96	22.83	22.73	
20	64QAM	50	50	22.98	22.93	22.75	
20	64QAM	100	0	22.77	22.69	22.70	
Channel				37825	38000	38175	Tune-up limit (dBm)
Frequency (MHz)				2377.5	2395	2412.5	
15	QPSK	1	0	25.69	25.66	25.47	25.8
15	QPSK	1	37	25.60	25.61	25.67	
15	QPSK	1	74	25.57	25.61	25.28	
15	QPSK	36	0	25.58	25.08	24.79	25.8
15	QPSK	36	20	25.21	25.10	24.71	
15	QPSK	36	39	25.19	25.03	24.52	
15	QPSK	75	0	23.74	23.06	24.68	25.8
15	16QAM	1	0	25.42	25.24	24.85	
15	16QAM	1	37	25.34	25.20	25.08	
15	16QAM	1	74	25.32	25.19	24.60	25.5
15	16QAM	36	0	24.29	24.10	24.05	
15	16QAM	36	20	24.30	24.10	23.96	
15	16QAM	36	39	24.22	24.12	23.97	25.5
15	16QAM	75	0	23.75	24.07	23.76	
15	64QAM	1	0	23.60	23.83	23.72	25.5
15	64QAM	1	37	23.87	23.83	23.75	
15	64QAM	1	74	23.99	23.98	23.71	
15	64QAM	36	0	22.78	22.67	22.69	24.5
15	64QAM	36	20	22.94	22.81	22.70	
15	64QAM	36	39	23.06	22.93	22.77	
15	64QAM	75	0	22.77	22.71	22.75	
Channel				37800	38000	38200	Tune-up limit (dBm)
Frequency (MHz)				2375	2395	2415	
10	QPSK	1	0	25.66	25.65	25.48	25.8
10	QPSK	1	25	25.69	25.69	25.68	
10	QPSK	1	49	25.60	25.63	25.32	
10	QPSK	25	0	25.60	25.16	24.84	25.8
10	QPSK	25	12	25.23	25.03	24.77	
10	QPSK	25	25	25.22	25.04	24.52	
10	QPSK	50	0	23.70	25.06	24.59	25.8
10	16QAM	1	0	25.35	25.26	24.79	
10	16QAM	1	25	25.37	25.24	25.10	
10	16QAM	1	49	25.33	25.22	24.64	25.5
10	16QAM	25	0	24.31	24.15	24.00	
10	16QAM	25	12	24.22	24.05	23.98	
10	16QAM	25	25	24.25	24.11	23.93	25.5
10	16QAM	50	0	23.74	24.06	23.81	
10	64QAM	1	0	23.52	23.84	23.73	25.5
10	64QAM	1	25	23.62	23.83	23.74	
10	64QAM	1	49	24.03	24.04	23.75	
10	64QAM	25	0	22.77	22.69	22.74	24.5
10	64QAM	25	12	22.96	22.83	22.76	
10	64QAM	25	25	23.05	22.87	22.72	
10	64QAM	50	0	22.76	22.72	22.70	
Channel				37775	38000	38225	Tune-up limit (dBm)
Frequency (MHz)				2572.5	2595	2617.5	
5	QPSK	1	0	25.65	25.69	25.45	25.8
5	QPSK	1	12	25.66	25.71	25.71	
5	QPSK	1	24	25.55	25.68	25.25	
5	QPSK	12	0	25.60	25.13	24.78	25.8
5	QPSK	12	7	25.18	25.10	24.79	
5	QPSK	12	13	25.21	25.07	24.55	
5	QPSK	25	0	23.76	25.10	24.65	25.8
5	16QAM	1	0	25.35	25.26	24.78	
5	16QAM	1	12	25.37	25.28	25.03	
5	16QAM	1	24	25.36	25.14	24.58	25.5
5	16QAM	12	0	24.32	24.15	24.03	
5	16QAM	12	7	24.24	24.12	23.96	
5	16QAM	12	13	24.21	24.03	23.89	25.5
5	16QAM	25	0	23.73	24.05	23.73	
5	64QAM	1	0	23.60	23.86	23.73	25.5
5	64QAM	1	12	23.87	23.89	23.72	
5	64QAM	1	24	24.01	23.96	23.67	
5	64QAM	12	0	22.78	22.75	22.70	24.5
5	64QAM	12	7	22.99	22.76	22.70	
5	64QAM	12	13	23.05	22.93	22.73	
5	64QAM	25	0	22.79	22.75	22.73	



Band 41										
Ant 2										
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Low Middle Ch. / Freq.	Power Middle Ch. / Freq.	Power High Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	
Channel				39750	40185	40620	41055	41490		
Frequency (MHz)				2506	2549.5	2593	2636.5	2680		
20	QPSK	1	0	23.41	23.25	23.24	23.14	23.15	24.2	
20	QPSK	1	49	23.34	23.19	23.15	23.05	23.13		
20	QPSK	1	99	23.33	23.17	23.13	23.04	23.03		
20	QPSK	50	0	23.27	23.07	23.13	23.09	23.13		
20	QPSK	50	24	23.26	23.09	23.07	23.05	23.02	24	
20	QPSK	50	50	23.22	23.08	23.18	23.12	23.09		
20	QPSK	100	0	23.35	23.19	23.14	23.04	23.13		
20	16QAM	1	0	23.38	23.21	23.23	23.20	23.16		
20	16QAM	1	49	23.34	23.19	23.13	23.08	23.12	24	
20	16QAM	1	99	23.32	23.23	23.26	23.26	23.20		
20	16QAM	50	0	22.63	22.47	22.37	22.32	22.30		
20	16QAM	50	24	22.56	22.42	22.39	22.30	22.30		
20	16QAM	50	50	22.54	22.41	22.45	22.43	22.37	23	
20	16QAM	100	0	22.54	22.42	22.36	22.36	22.34		
20	64QAM	1	0	22.32	22.09	22.09	22.08	22.08		
20	64QAM	1	49	22.27	22.11	22.10	22.02	22.08	23	
20	64QAM	1	99	22.21	22.11	22.17	22.15	22.09		
20	64QAM	50	0	21.66	21.49	21.37	21.32	21.29		
20	64QAM	50	24	21.58	21.44	21.38	21.33	21.37		
20	64QAM	50	50	21.56	21.42	21.48	21.39	21.44	22	
20	64QAM	100	0	21.55	21.41	21.37	21.29	21.27		
Channel				39725	40173	40620	41068	41515	Tune-up limit (dBm)	
Frequency (MHz)				2503.5	2548.3	2593	2637.5	2682.5		
15	QPSK	1	0	23.23	23.07	23.21	23.04	23.09	24.2	
15	QPSK	1	37	23.26	23.05	23.16	23.02	23.00		
15	QPSK	1	74	23.18	23.03	23.14	23.15	23.17		
15	QPSK	36	0	23.33	23.21	23.33	23.12	23.11		
15	QPSK	36	20	23.34	23.16	23.28	23.10	23.10	24	
15	QPSK	36	36	23.26	23.16	23.31	23.21	23.16		
15	QPSK	75	0	23.30	23.16	23.32	23.06	23.06		
15	16QAM	1	0	23.32	23.21	23.30	23.21	23.14		
15	16QAM	1	37	23.24	23.09	23.27	23.08	23.10	24	
15	16QAM	1	74	23.22	23.15	23.31	23.16	23.18		
15	16QAM	36	0	22.62	22.39	22.53	22.28	22.34		
15	16QAM	36	20	22.47	22.41	22.53	22.30	22.37		
15	16QAM	36	36	22.50	22.35	22.44	22.36	22.43	23	
15	16QAM	75	0	22.45	22.37	22.47	22.36	22.35		
15	64QAM	1	0	22.30	22.03	22.22	22.03	22.00		
15	64QAM	1	37	22.20	22.08	22.17	22.09	22.09	23	
15	64QAM	1	74	22.19	22.01	22.12	22.14	22.15		
15	64QAM	36	0	21.56	21.39	21.57	21.28	21.27		
15	64QAM	36	20	21.50	21.38	21.49	21.33	21.32		
15	64QAM	36	36	21.48	21.33	21.46	21.46	21.37	22	
15	64QAM	75	0	21.51	21.34	21.53	21.36	21.32		
Channel				39700	40160	40620	41080	41540	Tune-up limit (dBm)	
Frequency (MHz)				2501	2547	2593	2639	2685		
10	QPSK	1	0	23.21	23.01	23.15	23.07	23.13	24.2	
10	QPSK	1	25	23.21	23.09	23.16	23.08	23.00		
10	QPSK	1	49	23.14	23.08	23.18	23.15	23.10		
10	QPSK	25	0	23.36	23.20	23.31	23.07	23.11		
10	QPSK	25	12	23.32	23.16	23.34	23.12	23.08	24	
10	QPSK	25	25	23.26	23.07	23.24	23.20	23.17		
10	QPSK	50	0	23.33	23.15	23.31	23.11	23.11		
10	16QAM	1	0	23.34	23.11	23.30	23.21	23.17		
10	16QAM	1	25	23.32	23.17	23.30	23.11	23.08	24	
10	16QAM	1	49	23.32	23.23	23.30	23.17	23.16		
10	16QAM	25	0	22.63	22.42	22.57	22.30	22.29		
10	16QAM	25	12	22.49	22.32	22.49	22.39	22.33		
10	16QAM	25	25	22.46	22.32	22.51	22.38	22.40	23	
10	16QAM	50	0	22.62	22.42	22.50	22.28	22.34		
10	64QAM	1	0	22.26	22.00	22.22	22.05	22.06		
10	64QAM	1	25	22.25	22.01	22.17	22.10	22.01	23	
10	64QAM	1	49	22.17	22.08	22.15	22.09	22.12		
10	64QAM	25	0	21.63	21.46	21.64	21.29	21.36		
10	64QAM	25	12	21.58	21.36	21.58	21.34	21.37		
10	64QAM	25	25	21.54	21.32	21.51	21.44	21.39	22	
10	64QAM	50	0	21.45	21.41	21.54	21.36	21.30		
Channel				39513	40143	40680	41093	41655	Tune-up limit (dBm)	
Frequency (MHz)				2498.5	2545.8	2593	2640.30	2687.5		
5	QPSK	1	0	23.24	23.05	23.18	23.03	23.03	24.2	
5	QPSK	1	12	23.18	23.06	23.19	23.05	23.03		
5	QPSK	1	24	23.21	23.04	23.17	23.09	23.18		
5	QPSK	12	0	23.21	23.20	23.40	23.04	23.05		
5	QPSK	12	7	23.32	23.19	23.31	23.09	23.10	24	
5	QPSK	12	13	23.32	23.11	23.31	23.14	23.15		
5	QPSK	25	0	23.32	23.19	23.26	23.04	23.10		
5	16QAM	1	0	23.37	23.20	23.33	23.15	23.18		
5	16QAM	1	12	23.31	23.09	23.33	23.04	23.10	24	
5	16QAM	1	24	23.22	23.13	23.27	23.16	23.20		
5	16QAM	12	0	22.60	22.45	22.57	22.37	22.36		
5	16QAM	12	7	22.49	22.33	22.47	22.33	22.32		
5	16QAM	12	13	22.49	22.40	22.51	22.44	22.43	23	
5	16QAM	25	0	22.51	22.40	22.53	22.29	22.30		
5	64QAM	1	0	22.30	22.06	22.27	21.99	22.01		
5	64QAM	1	12	22.18	22.07	22.20	22.00	22.01	23	
5	64QAM	1	24	22.14	22.07	22.12	22.14	22.14		
5	64QAM	12	0	21.69	21.47	21.65	21.34	21.36		
5	64QAM	12	7	21.54	21.40	21.52	21.31	21.30		
5	64QAM	12	13	21.51	21.34	21.46	21.36	21.40	22	
5	64QAM	25	0	21.59	21.33	21.47	21.33	21.34		



Band 41_HPUE										
Ant 2										
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Low Middle Ch. / Freq.	Power Middle Ch. / Freq.	Power High Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	
Channel				39750	40185	40620	41055	41490		
Frequency (MHz)				2506	2549.5	2593	2636.5	2680		
20	QPSK	1	0	25.72	25.73	25.53	25.63	25.36	25.8	
20	QPSK	1	49	25.69	25.71	25.73	25.76	25.74		
20	QPSK	1	99	25.84	25.71	25.32	25.46	25.64		
20	QPSK	50	0	25.63	25.16	24.85	25.01	24.81		
20	QPSK	50	24	25.27	25.10	24.79	24.98	24.96	25.8	
20	QPSK	50	50	25.22	25.09	24.57	24.88	24.94		
20	QPSK	100	0	23.76	25.11	24.68	24.91	24.86		
20	16QAM	1	0	25.42	25.26	24.88	24.99	24.68		
20	16QAM	1	49	25.40	25.30	25.11	25.21	25.05	25.8	
20	16QAM	1	99	25.40	25.23	24.65	24.79	25.01		
20	16QAM	50	0	24.39	24.19	24.05	24.05	23.82		
20	16QAM	50	24	24.31	24.15	24.00	24.04	23.99		
20	16QAM	50	50	24.28	24.12	23.97	23.91	23.97	25.5	
20	16QAM	100	0	23.79	24.13	23.83	23.93	23.89		
20	64QAM	1	0	23.82	23.87	23.78	23.87	23.51		
20	64QAM	1	49	23.89	23.89	23.75	24.14	23.81		
20	64QAM	1	99	24.04	24.05	23.76	23.59	23.50	25.5	
20	64QAM	50	0	22.82	22.77	22.79	23.07	22.85		
20	64QAM	50	24	23.04	22.83	22.78	23.04	22.89		
20	64QAM	50	50	23.08	22.93	22.79	22.94	22.57		
20	64QAM	100	0	22.82	22.75	22.76	22.96	22.68	24.5	
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	25.83	25.71	25.45	25.59	25.33		25.8
15	QPSK	1	37	25.59	25.70	25.69	25.70	25.72		
15	QPSK	1	74	25.62	25.63	25.26	25.42	25.54		
15	QPSK	36	0	25.54	25.12	24.78	24.96	24.78		
15	QPSK	36	20	25.27	25.10	24.72	24.91	24.88	25.8	
15	QPSK	36	39	25.13	25.05	24.49	24.83	24.87		
15	QPSK	75	0	23.68	25.01	24.59	24.84	24.78		
15	16QAM	1	0	25.37	25.17	24.83	24.89	24.61		
15	16QAM	1	37	25.38	25.24	25.06	25.19	25.05	25.8	
15	16QAM	1	74	25.33	25.14	24.64	24.78	25.01		
15	16QAM	36	0	24.33	24.13	24.02	23.97	23.80		
15	16QAM	36	20	24.25	24.13	23.98	23.95	23.89		
15	16QAM	36	39	24.23	24.12	23.89	23.82	23.90	25.5	
15	16QAM	75	0	23.76	24.08	23.73	23.90	23.79		
15	64QAM	1	0	23.64	23.83	23.70	23.84	23.49		
15	64QAM	1	37	23.84	23.85	23.66	24.06	23.80		
15	64QAM	1	74	23.99	24.04	23.72	23.56	23.48	24.5	
15	64QAM	36	0	22.75	22.75	22.69	23.05	22.81		
15	64QAM	36	20	23.03	22.80	22.71	22.98	22.67		
15	64QAM	36	39	23.05	22.93	22.72	22.87	22.53		
15	64QAM	75	0	22.74	22.67	22.70	22.91	22.68	Tune-up limit (dBm)	
Channel				39700	40160	40620	41080	41540		
Frequency (MHz)				2501 <th>2547<th>2593<th>2639<th>2685</th><th></th></th></th></th>	2547 <th>2593<th>2639<th>2685</th><th></th></th></th>	2593 <th>2639<th>2685</th><th></th></th>	2639 <th>2685</th> <th></th>	2685		
10	QPSK	1	0	25.89	25.72	25.44	25.58	25.28		25.8
10	QPSK	1	25	25.66	25.71	25.65	25.70	25.64		
10	QPSK	1	49	25.63	25.66	25.22	25.38	25.63		
10	QPSK	25	0	25.55	25.16	24.84	24.97	24.79		
10	QPSK	25	12	25.21	25.06	24.73	24.94	24.88	25.8	
10	QPSK	25	25	25.12	25.01	24.55	24.80	24.89		
10	QPSK	50	0	23.76	25.02	24.59	24.86	24.80		
10	16QAM	1	0	25.36	25.19	24.85	24.91	24.67		
10	16QAM	1	25	25.37	25.29	25.06	25.16	25.02	25.8	
10	16QAM	1	49	25.32	25.17	24.62	24.78	24.91		
10	16QAM	25	0	24.29	24.17	24.04	24.05	23.76		
10	16QAM	25	12	24.29	24.05	23.97	23.98	23.91		
10	16QAM	25	25	24.19	24.06	23.93	23.89	23.92	25.5	
10	16QAM	50	0	23.75	24.05	23.75	23.90	23.81		
10	64QAM	1	0	23.53	23.61	23.68	23.77	23.49		
10	64QAM	1	25	23.88	23.80	23.74	24.11	23.71		
10	64QAM	1	49	23.95	24.00	23.71	23.52	23.50	24.5	
10	64QAM	25	0	22.76	22.75	22.73	23.03	22.80		
10	64QAM	25	12	22.98	22.79	22.76	23.03	22.84		
10	64QAM	25	25	23.03	22.86	22.70	22.87	22.50		
10	64QAM	50	0	22.75	22.69	22.68	22.96	22.62	Tune-up limit (dBm)	
Channel				39513	40143	40620	41093	41555		
Frequency (MHz)				2498.5	2545.8	2593	2640.30	2687.5		
5	QPSK	1	0	25.65	25.67	25.50	25.58	25.27		25.8
5	QPSK	1	12	25.63	25.71	25.63	25.74	25.70		
5	QPSK	1	24	25.61	25.61	25.24	25.46	25.58		
5	QPSK	12	0	25.53	25.10	24.80	24.94	24.77		
5	QPSK	12	7	25.23	25.04	24.75	24.98	24.94	25.8	
5	QPSK	12	13	25.22	25.08	24.51	24.84	24.85		
5	QPSK	25	0	23.67	25.05	24.59	24.86	24.86		
5	16QAM	1	0	25.33	25.22	24.81	24.97	24.66		
5	16QAM	1	12	25.39	25.21	25.06	25.12	25.02	25.8	
5	16QAM	1	24	25.31	25.23	24.65	24.75	24.95		
5	16QAM	12	0	24.34	24.11	23.96	23.98	23.82		
5	16QAM	12	7	24.24	24.08	23.94	23.95	23.93		
5	16QAM	12	13	24.23	24.07	23.87	23.91	23.92	25.5	
5	16QAM	25	0	23.75	24.10	23.75	23.86	23.86		
5	64QAM	1	0	23.50	23.83	23.77	23.84	23.49		
5	64QAM	1	12	23.85	23.84	23.70	24.09	23.79		
5	64QAM	1	24	24.03	23.96	23.75	23.54	23.46	24.5	
5	64QAM	12	0	22.82	22.73	22.72	23.01	22.78		
5	64QAM	12	7	22.94	22.77	22.70	22.97	22.82		
5	64QAM	12	13	23.06	22.88	22.78	22.84	22.56		
5	64QAM	25	0	22.81	22.75	22.69	22.96	22.64	Tune-up limit (dBm)	



Band 42							
Ant 7							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				43190	43340	43490	
Frequency (MHz)				3560	3575	3590	
20	QPSK	1	0	24.64	24.68	24.76	25
20	QPSK	1	49	24.61	24.66	24.74	
20	QPSK	1	99	24.59	24.62	24.66	
20	QPSK	50	0	23.79	23.86	23.94	24
20	QPSK	50	24	23.87	23.84	23.88	
20	QPSK	50	50	23.79	23.86	23.90	
20	QPSK	100	0	23.84	23.83	23.87	24
20	16QAM	1	0	23.94	23.92	23.90	
20	16QAM	1	49	23.93	23.95	23.90	
20	16QAM	1	99	23.96	23.98	23.99	23
20	16QAM	50	0	22.85	22.87	22.97	
20	16QAM	50	24	22.89	22.85	22.92	
20	16QAM	50	50	22.83	22.89	22.91	23
20	16QAM	100	0	22.88	22.85	22.90	
20	64QAM	1	0	22.79	22.82	22.90	
20	64QAM	1	49	22.81	22.88	22.85	22
20	64QAM	1	99	22.81	22.86	22.76	
20	64QAM	50	0	21.84	21.90	21.85	
20	64QAM	50	24	21.89	21.89	21.93	22
20	64QAM	50	50	21.84	21.89	21.84	
20	64QAM	100	0	21.88	21.85	21.84	
Channel				43165	43340	43515	Limit-up limit (dBm)
Frequency (MHz)				3527.5	3572	3592.5	
15	QPSK	1	0	24.63	24.61	24.75	25
15	QPSK	1	37	24.60	24.66	24.67	
15	QPSK	1	74	24.56	24.53	24.61	
15	QPSK	36	0	23.77	23.78	23.92	24
15	QPSK	36	20	23.61	23.77	23.84	
15	QPSK	36	39	23.69	23.76	23.86	
15	QPSK	75	0	23.76	23.77	23.78	24
15	16QAM	1	0	23.93	23.99	23.99	
15	16QAM	1	37	23.97	23.95	23.97	
15	16QAM	1	74	23.86	23.88	23.97	23
15	16QAM	36	0	22.78	22.77	22.97	
15	16QAM	36	20	22.80	22.94	22.96	
15	16QAM	36	39	22.74	22.89	22.91	23
15	16QAM	75	0	22.86	22.76	22.83	
15	64QAM	1	0	22.75	22.72	22.83	23
15	64QAM	1	37	22.80	22.78	22.85	
15	64QAM	1	74	22.80	22.78	22.74	
15	64QAM	36	0	21.84	21.88	21.85	22
15	64QAM	36	20	21.83	21.85	21.92	
15	64QAM	36	39	21.81	21.82	21.82	
15	64QAM	75	0	21.84	21.78	21.75	Limit-up limit (dBm)
Channel				43140	43340	43540	
Frequency (MHz)				3655	3676	3695	
10	QPSK	1	0	24.61	24.55	24.74	25
10	QPSK	1	25	24.58	24.56	24.68	
10	QPSK	1	49	24.59	24.52	24.61	
10	QPSK	25	0	23.74	23.79	23.88	24
10	QPSK	25	12	23.85	23.74	23.87	
10	QPSK	25	25	23.75	23.85	23.90	
10	QPSK	50	0	23.80	23.82	23.87	24
10	16QAM	1	0	23.94	23.96	23.96	
10	16QAM	1	25	23.90	23.96	23.90	
10	16QAM	1	49	23.92	23.88	23.98	23
10	16QAM	25	0	22.76	22.77	22.92	
10	16QAM	25	12	22.84	22.77	22.84	
10	16QAM	25	25	22.80	22.80	22.81	23
10	16QAM	50	0	22.85	22.77	22.87	
10	64QAM	1	0	22.79	22.81	22.90	
10	64QAM	1	25	22.71	22.80	22.79	22
10	64QAM	1	49	22.71	22.84	22.67	
10	64QAM	25	0	21.77	21.87	21.83	
10	64QAM	25	12	21.88	21.84	21.85	22
10	64QAM	25	25	21.74	21.80	21.81	
10	64QAM	50	0	21.88	21.80	21.76	
Channel				43115	43340	43565	Limit-up limit (dBm)
Frequency (MHz)				3552.5	3679	3697.5	
5	QPSK	1	0	24.63	24.60	24.62	25
5	QPSK	1	12	24.59	24.63	24.71	
5	QPSK	1	24	24.59	24.53	24.59	
5	QPSK	12	0	23.75	23.80	23.88	24
5	QPSK	12	7	23.86	23.80	23.87	
5	QPSK	12	13	23.72	23.86	23.86	
5	QPSK	25	0	23.82	23.82	23.86	24
5	16QAM	1	0	23.93	23.94	23.95	
5	16QAM	1	12	23.84	23.93	23.91	
5	16QAM	1	24	23.91	23.91	23.97	23
5	16QAM	12	0	22.79	22.86	22.94	
5	16QAM	12	7	22.80	22.81	22.82	
5	16QAM	12	13	22.77	22.89	22.81	23
5	16QAM	25	0	22.86	22.81	22.87	
5	64QAM	1	0	22.79	22.73	22.89	
5	64QAM	1	12	22.73	22.80	22.78	22
5	64QAM	1	24	22.76	22.79	22.70	
5	64QAM	12	0	21.84	21.86	21.85	
5	64QAM	12	7	21.82	21.89	21.93	22
5	64QAM	12	13	21.83	21.81	21.84	
5	64QAM	25	0	21.84	21.78	21.78	



Band 48									
Ant 7									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Low Middle Ch. / Freq.	Power High Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	
Channel				55340	55830	56150	56640		
Frequency (MHz)				3560	3609	3641	3690		
20	QPSK	1	0	20.89	24.38	24.55	20.93	25	
20	QPSK	1	49	20.78	24.21	24.18	20.75		
20	QPSK	1	99	20.77	24.20	24.13	20.67		
20	QPSK	50	0	19.97	23.52	23.58	19.96	24	
20	QPSK	50	24	19.92	23.53	23.50	19.90		
20	QPSK	50	50	19.88	23.47	23.44	19.80		
20	QPSK	100	0	19.93	23.52	23.51	19.87	24	
20	16QAM	1	0	19.91	23.68	23.68	19.92		
20	16QAM	1	49	19.84	23.46	23.46	19.80		
20	16QAM	1	99	19.89	23.47	23.46	19.76	23	
20	16QAM	50	0	19.00	22.54	22.52	19.00		
20	16QAM	50	24	18.97	22.57	22.56	18.94		
20	16QAM	50	50	18.89	22.51	22.48	18.82	23	
20	16QAM	100	0	18.95	22.58	22.53	18.90		
20	64QAM	1	0	18.74	22.36	22.11	18.87		
20	64QAM	1	49	18.60	22.23	22.09	18.61	23	
20	64QAM	1	99	18.67	22.27	22.01	18.55		
20	64QAM	50	0	17.99	21.56	21.43	17.99		
20	64QAM	50	24	17.96	21.59	21.46	17.94	22	
20	64QAM	50	50	17.90	21.52	21.35	17.82		
20	64QAM	100	0	17.95	21.57	21.36	17.91		
Channel				55315	55820	56160	56665	Tune-up limit (dBm)	
Frequency (MHz)				3557.5	3608	3642	3692.5		
15	QPSK	1	0	20.82	24.38	24.36	20.87	25	
15	QPSK	1	37	20.76	24.16	24.10	20.75		
15	QPSK	1	74	20.75	24.20	24.08	20.65		
15	QPSK	36	0	19.91	23.50	23.48	19.87	24	
15	QPSK	36	20	19.87	23.45	23.43	19.86		
15	QPSK	36	39	19.78	23.42	23.40	19.71		
15	QPSK	75	0	19.87	23.43	23.41	19.80	24	
15	16QAM	1	0	19.96	23.61	23.60	19.96		
15	16QAM	1	37	19.76	23.44	23.42	19.70		
15	16QAM	1	74	19.80	23.44	23.45	19.71	23	
15	16QAM	36	0	18.98	22.47	22.60	18.99		
15	16QAM	36	20	18.96	22.56	22.46	18.89		
15	16QAM	36	39	18.81	22.49	22.39	18.72	23	
15	16QAM	75	0	18.88	22.51	22.48	18.84		
15	64QAM	1	0	18.73	22.26	22.07	18.82		
15	64QAM	1	37	18.55	22.19	22.00	18.57	23	
15	64QAM	1	74	18.57	22.19	21.93	18.47		
15	64QAM	36	0	17.82	21.53	21.41	17.89		
15	64QAM	36	20	17.88	21.52	21.37	17.90	22	
15	64QAM	36	39	17.83	21.48	21.30	17.72		
15	64QAM	75	0	17.95	21.48	21.33	17.83		
Channel				55290	55815	56165	56690	Tune-up limit (dBm)	
Frequency (MHz)				3552.5	3607.5	3642.5	3695		
10	QPSK	1	0	20.81	24.30	24.32	20.92	25	
10	QPSK	1	25	20.76	24.18	24.14	20.70		
10	QPSK	1	49	20.72	24.16	24.12	20.66		
10	QPSK	25	0	19.90	23.51	23.58	19.89	24	
10	QPSK	25	12	19.90	23.46	23.48	19.86		
10	QPSK	25	25	19.87	23.45	23.38	19.72		
10	QPSK	50	0	19.91	23.42	23.51	19.84	24	
10	16QAM	1	0	19.94	23.59	23.66	19.96		
10	16QAM	1	25	19.83	23.44	23.40	19.72		
10	16QAM	1	49	19.89	23.46	23.45	19.74	23	
10	16QAM	25	0	18.94	22.53	22.59	19.00		
10	16QAM	25	12	18.87	22.57	22.54	18.88		
10	16QAM	25	25	18.84	22.51	22.40	18.80	23	
10	16QAM	50	0	18.92	22.55	22.50	18.82		
10	64QAM	1	0	18.67	22.31	22.05	18.82		
10	64QAM	1	25	18.60	22.22	22.06	18.60	23	
10	64QAM	1	49	18.61	22.26	21.99	18.47		
10	64QAM	25	0	17.95	21.50	21.33	17.89		
10	64QAM	25	12	17.92	21.54	21.43	17.84	22	
10	64QAM	25	25	17.89	21.42	21.25	17.77		
10	64QAM	50	0	17.87	21.56	21.36	17.81		
Channel				55265	55810	56170	56715	Tune-up limit (dBm)	
Frequency (MHz)				3552.5	3607	3643	3697.5		
5	QPSK	1	0	20.81	24.33	24.39	20.92	25	
5	QPSK	1	12	20.72	24.19	24.13	20.67		
5	QPSK	1	24	20.76	24.20	24.10	20.61		
5	QPSK	12	0	19.94	23.52	23.54	19.92	24	
5	QPSK	12	7	19.87	23.46	23.40	19.84		
5	QPSK	12	13	19.83	23.41	23.43	19.71		
5	QPSK	25	0	19.88	23.50	23.43	19.77	24	
5	16QAM	1	0	19.99	23.66	23.67	19.91		
5	16QAM	1	12	19.80	23.36	23.40	19.80		
5	16QAM	1	24	19.94	23.43	23.39	19.75	23	
5	16QAM	12	0	18.90	22.54	22.62	18.93		
5	16QAM	12	7	18.97	22.54	22.55	18.89		
5	16QAM	12	13	18.83	22.41	22.48	18.75	23	
5	16QAM	25	0	18.92	22.54	22.48	18.87		
5	64QAM	1	0	18.73	22.28	22.03	18.77		
5	64QAM	1	12	18.60	22.15	22.01	18.52	23	
5	64QAM	1	24	18.57	22.19	21.95	18.47		
5	64QAM	12	0	18.01	21.49	21.39	17.92		
5	64QAM	12	7	17.95	21.50	21.46	17.94	22	
5	64QAM	12	13	17.83	21.42	21.30	17.75		
5	64QAM	25	0	17.89	21.53	21.33	17.91		

Band 38							
Art.0							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				37850	38000	38150	
Frequency (MHz)				2550	2595	2610	
20	QPSK	1	0	24.93	24.94	24.98	25
20	QPSK	1	49	24.99	24.91	24.93	
20	QPSK	1	99	24.94	24.97	24.96	
20	QPSK	50	0	23.94	23.99	23.99	
20	QPSK	50	24	23.99	23.92	23.92	24
20	QPSK	50	50	23.88	23.84	23.82	
20	QPSK	100	0	23.89	23.88	23.82	
20	16QAM	1	0	23.83	23.86	23.86	
20	16QAM	1	49	23.86	23.87	23.80	24
20	16QAM	1	99	23.82	23.83	23.83	
20	16QAM	50	0	22.86	22.81	22.81	
20	16QAM	50	24	22.89	22.86	22.83	
20	16QAM	50	50	22.80	22.86	22.80	23
20	16QAM	100	0	22.88	22.83	22.82	
20	64QAM	1	0	22.80	22.81	22.81	
20	64QAM	1	49	22.79	22.81	22.83	
20	64QAM	1	99	22.85	22.80	22.79	23
20	64QAM	50	0	21.89	21.80	21.81	
20	64QAM	50	24	21.90	21.76	21.84	
20	64QAM	50	50	21.81	21.88	21.85	
20	64QAM	100	0	21.89	21.84	21.82	22
Channel				37825	38000	38175	
Frequency (MHz)				2571.5	2595	2612.5	Tune-up limit (dBm)
15	QPSK	1	0	24.91	24.94	24.97	25
15	QPSK	1	37	24.90	24.82	24.91	
15	QPSK	1	74	24.91	24.87	24.96	
15	QPSK	36	0	23.84	23.97	23.92	
15	QPSK	36	20	23.96	23.87	23.83	24
15	QPSK	36	39	23.79	23.80	23.72	
15	QPSK	75	0	23.81	23.87	23.76	
15	16QAM	1	0	23.74	23.83	23.81	
15	16QAM	1	37	23.86	23.81	23.71	24
15	16QAM	1	74	23.72	23.73	23.77	
15	16QAM	36	0	22.85	22.77	22.80	
15	16QAM	36	20	22.81	22.86	22.75	
15	16QAM	36	39	22.75	22.85	22.76	23
15	16QAM	75	0	22.86	22.74	22.79	
15	64QAM	1	0	22.71	22.80	22.73	
15	64QAM	1	37	22.71	22.79	22.78	
15	64QAM	1	74	22.85	22.70	22.75	23
15	64QAM	36	0	21.80	21.78	21.89	
15	64QAM	36	20	21.87	21.70	21.80	
15	64QAM	36	39	21.77	21.82	21.83	
15	64QAM	75	0	21.89	21.84	21.79	22
Channel				37800	38000	38200	
Frequency (MHz)				2575	2595	2615	Tune-up limit (dBm)
10	QPSK	1	0	24.92	24.89	24.91	25
10	QPSK	1	25	24.90	24.90	24.83	
10	QPSK	1	49	24.91	24.97	24.87	
10	QPSK	25	0	23.90	23.97	23.99	
10	QPSK	25	12	23.95	23.89	23.89	24
10	QPSK	25	25	23.84	23.77	23.72	
10	QPSK	50	0	23.82	23.82	23.74	
10	16QAM	1	0	23.74	23.76	23.84	
10	16QAM	1	25	23.77	23.84	23.70	24
10	16QAM	1	49	23.75	23.76	23.82	
10	16QAM	25	0	22.84	22.71	22.80	
10	16QAM	25	12	22.87	22.81	22.82	
10	16QAM	25	25	22.70	22.77	22.75	23
10	16QAM	50	0	22.86	22.75	22.74	
10	64QAM	1	0	22.80	22.74	22.74	
10	64QAM	1	25	22.72	22.71	22.75	
10	64QAM	1	49	22.77	22.75	22.73	23
10	64QAM	25	0	21.81	21.75	21.89	
10	64QAM	25	12	21.83	21.73	21.77	
10	64QAM	25	25	21.79	21.79	21.83	
10	64QAM	50	0	21.80	21.79	21.75	22
Channel				37775	38000	38225	
Frequency (MHz)				2572.5	2595	2617.5	Tune-up limit (dBm)
5	QPSK	1	0	24.86	24.92	24.94	25
5	QPSK	1	12	24.96	24.90	24.92	
5	QPSK	1	24	24.94	24.94	24.95	
5	QPSK	12	0	23.86	23.97	23.93	
5	QPSK	12	7	23.91	23.82	23.83	24
5	QPSK	12	13	23.88	23.82	23.81	
5	QPSK	25	0	23.79	23.82	23.72	
5	16QAM	1	0	23.74	23.76	23.86	
5	16QAM	1	12	23.79	23.83	23.76	24
5	16QAM	1	24	23.72	23.80	23.79	
5	16QAM	12	0	22.82	22.73	22.79	
5	16QAM	12	7	22.86	22.82	22.73	
5	16QAM	12	13	22.77	22.83	22.79	23
5	16QAM	25	0	22.84	22.78	22.79	
5	64QAM	1	0	22.77	22.77	22.79	
5	64QAM	1	12	22.74	22.71	22.76	
5	64QAM	1	24	22.82	22.70	22.73	23
5	64QAM	12	0	21.88	21.71	21.87	
5	64QAM	12	7	21.88	21.71	21.84	
5	64QAM	12	13	21.80	21.83	21.80	
5	64QAM	25	0	21.84	21.77	21.72	22



Band 38_HPUE							
Ant 0							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				37850	38000	38150	
Frequency (MHz)				2500	2595	2610	
20	QPSK	1	0	26.87	26.91	26.95	27.5
20	QPSK	1	49	26.82	26.98	26.99	
20	QPSK	1	99	26.60	27.01	27.00	
20	QPSK	50	0	25.73	25.88	26.11	26.5
20	QPSK	50	24	25.81	25.94	26.26	
20	QPSK	50	50	25.74	25.89	26.00	
20	QPSK	100	0	25.84	25.91	26.07	26.5
20	16QAM	1	0	26.20	26.33	26.32	
20	16QAM	1	49	25.96	26.26	26.32	
20	16QAM	1	99	25.96	26.37	26.34	25.5
20	16QAM	50	0	24.94	25.08	25.29	
20	16QAM	50	24	24.97	25.22	25.32	
20	16QAM	50	50	25.07	25.23	25.34	24.5
20	16QAM	100	0	24.92	25.04	25.16	
20	64QAM	1	0	24.31	24.38	24.44	
20	64QAM	1	49	24.04	24.31	24.74	24.5
20	64QAM	1	99	24.04	24.55	24.68	
20	64QAM	50	0	23.16	23.14	23.43	
20	64QAM	50	24	23.14	23.29	23.50	24.5
20	64QAM	50	50	23.13	23.34	23.43	
20	64QAM	100	0	23.10	23.14	23.24	
Channel				37825	38000	38175	Tune-up limit (dBm)
Frequency (MHz)				2677.5	2695	2612.5	
15	QPSK	1	0	26.82	26.82	26.94	27.5
15	QPSK	1	37	26.58	26.91	26.95	
15	QPSK	1	74	26.58	26.99	26.98	
15	QPSK	36	0	25.63	25.85	26.01	26.5
15	QPSK	36	20	25.81	25.86	26.19	
15	QPSK	36	39	25.65	25.83	25.94	
15	QPSK	75	0	25.82	25.82	26.01	26.5
15	16QAM	1	0	26.11	26.23	26.28	
15	16QAM	1	37	25.93	26.20	26.22	
15	16QAM	1	74	25.90	26.27	26.33	25.5
15	16QAM	36	0	24.90	25.06	25.27	
15	16QAM	36	20	24.90	25.13	25.27	
15	16QAM	36	39	24.97	25.15	25.29	24.5
15	16QAM	75	0	24.85	24.96	25.13	
15	64QAM	1	0	24.30	24.33	24.38	
15	64QAM	1	37	23.99	24.25	24.74	24.5
15	64QAM	1	74	24.04	24.55	24.66	
15	64QAM	36	0	23.12	23.11	23.43	
15	64QAM	36	20	23.05	23.21	23.44	24.5
15	64QAM	36	39	23.08	23.29	23.38	
15	64QAM	75	0	23.05	23.12	23.16	
Channel				37800	38000	38200	Tune-up limit (dBm)
Frequency (MHz)				2675	2695	2615	
10	QPSK	1	0	26.80	26.89	26.94	27.5
10	QPSK	1	25	26.58	26.90	26.93	
10	QPSK	1	49	26.52	27.00	26.98	
10	QPSK	25	0	25.68	25.80	26.06	26.5
10	QPSK	25	12	25.78	25.85	26.19	
10	QPSK	25	25	25.73	25.89	25.91	
10	QPSK	50	0	25.74	25.87	25.99	26.5
10	16QAM	1	0	26.13	26.30	26.25	
10	16QAM	1	25	25.86	26.19	26.23	
10	16QAM	1	49	25.90	26.32	26.31	25.5
10	16QAM	25	0	24.90	25.07	25.22	
10	16QAM	25	12	24.92	25.17	25.22	
10	16QAM	25	25	25.04	25.14	25.34	24.5
10	16QAM	50	0	24.91	24.96	25.15	
10	64QAM	1	0	24.24	24.37	24.36	
10	64QAM	1	25	23.97	24.24	24.64	24.5
10	64QAM	1	49	24.04	24.53	24.65	
10	64QAM	25	0	23.07	23.12	23.33	
10	64QAM	25	12	23.05	23.19	23.43	24.5
10	64QAM	25	25	23.12	23.31	23.35	
10	64QAM	50	0	23.10	23.10	23.24	
Channel				37775	38000	38225	Tune-up limit (dBm)
Frequency (MHz)				2572.5	2595	2617.5	
5	QPSK	1	0	26.80	26.90	26.94	27.5
5	QPSK	1	12	26.59	26.97	26.91	
5	QPSK	1	24	26.53	26.96	26.91	
5	QPSK	12	0	25.64	25.85	26.04	26.5
5	QPSK	12	7	25.77	25.90	26.20	
5	QPSK	12	13	25.71	25.88	26.00	
5	QPSK	25	0	25.78	25.83	26.04	26.5
5	16QAM	1	0	26.17	26.32	26.31	
5	16QAM	1	12	25.96	26.21	26.27	
5	16QAM	1	24	25.93	26.32	26.28	25.5
5	16QAM	12	0	24.84	25.07	25.19	
5	16QAM	12	7	24.92	25.22	25.31	
5	16QAM	12	13	24.99	25.13	25.34	24.5
5	16QAM	25	0	24.82	24.99	25.12	
5	64QAM	1	0	24.28	24.33	24.43	
5	64QAM	1	12	23.96	24.28	24.67	24.5
5	64QAM	1	24	23.95	24.49	24.64	
5	64QAM	12	0	23.06	23.09	23.41	
5	64QAM	12	7	23.10	23.22	23.41	24.5
5	64QAM	12	13	23.11	23.25	23.42	
5	64QAM	25	0	23.03	23.05	23.20	



Band 41										
Airt 0										
BW [MHz]	Modulation	RB Size	BW [MHz]	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				39650	40135	40620	41105	41590		
Frequency (MHz)				2486	2544.5	2593	2641.5	2690		
20	QPSK	1	0	24.63	24.82	24.91	24.89	24.45	25	
20	QPSK	1	49	24.67	24.87	24.94	24.95	24.81		
20	QPSK	1	99	24.73	24.95	24.96	24.75	24.68		
20	QPSK	50	0	23.81	23.99	23.90	23.98	23.79	24	
20	QPSK	50	24	23.83	23.93	23.93	23.94	23.92		
20	QPSK	50	50	23.84	23.90	23.94	23.94	23.81		
20	QPSK	100	0	23.84	23.95	23.91	23.97	23.85	23	
20	16QAM	1	0	23.73	23.94	23.99	24.00	23.55		
20	16QAM	1	49	23.73	23.98	23.91	23.99	23.88		
20	16QAM	1	99	23.84	23.93	23.92	23.86	23.75	23	
20	16QAM	50	0	22.81	22.83	22.82	22.80	22.81		
20	16QAM	50	24	22.87	22.86	22.83	22.87	22.86		
20	16QAM	50	50	22.88	22.88	22.87	22.89	22.85	23	
20	16QAM	100	0	22.84	22.85	22.84	22.89	22.87		
20	64QAM	1	0	22.50	22.67	22.79	22.77	22.25		
20	64QAM	1	49	22.44	22.70	22.71	22.68	22.62	23	
20	64QAM	1	99	22.56	22.77	22.73	22.54	22.41		
20	64QAM	50	0	21.81	21.94	21.85	21.81	21.81		
20	64QAM	50	24	21.88	21.91	21.86	21.80	21.98	22	
20	64QAM	50	50	21.86	21.91	21.86	21.89	21.87		
20	64QAM	100	0	21.87	21.98	21.84	21.81	21.86		
Channel				39650	40135.5	40620	41105.5	41590	Tune-up limit (dBm)	
Frequency (MHz)				2486	2544.55	2593	2641.55	2690		
15	QPSK	1	0	24.59	24.78	24.84	24.84	24.40	25	
15	QPSK	1	37	24.57	24.78	24.88	24.85	24.75		
15	QPSK	1	74	24.72	24.95	24.94	24.71	24.65		
15	QPSK	36	0	23.81	23.91	23.83	23.98	23.75	24	
15	QPSK	36	20	23.76	23.89	23.85	23.91	23.85		
15	QPSK	36	39	23.79	23.80	23.84	23.87	23.71		
15	QPSK	75	0	23.81	23.88	23.88	23.94	23.82	24	
15	16QAM	1	0	23.71	23.84	23.90	23.94	23.47		
15	16QAM	1	37	23.71	23.97	23.86	23.99	23.83		
15	16QAM	1	74	23.82	23.89	23.89	23.83	23.65	23	
15	16QAM	36	0	22.74	22.81	22.77	22.70	22.80		
15	16QAM	36	20	22.84	22.84	22.76	22.86	22.87		
15	16QAM	36	39	22.79	22.85	22.77	22.82	22.84	23	
15	16QAM	75	0	22.75	22.83	22.82	22.85	22.82		
15	64QAM	1	0	22.40	22.59	22.78	22.77	22.16		
15	64QAM	1	37	22.42	22.61	22.63	22.62	22.53	23	
15	64QAM	1	74	22.49	22.77	22.69	22.61	22.39		
15	64QAM	36	0	21.77	21.91	21.76	21.78	21.80		
15	64QAM	36	20	21.85	21.85	21.82	21.73	21.95	22	
15	64QAM	36	39	21.80	21.91	21.81	21.84	21.80		
15	64QAM	75	0	21.81	21.88	21.75	21.78	21.84		
Channel				39650	40135.5	40620	41105.5	41590	Tune-up limit (dBm)	
Frequency (MHz)				2486	2544.5	2593	2641.5	2690		
10	QPSK	1	0	24.59	24.72	24.82	24.82	24.45	25	
10	QPSK	1	25	24.60	24.81	24.85	24.93	24.80		
10	QPSK	1	49	24.67	24.90	24.92	24.68	24.58		
10	QPSK	25	0	23.74	23.97	23.84	23.89	23.75	24	
10	QPSK	25	12	23.81	23.87	23.85	23.88	23.83		
10	QPSK	25	25	23.80	23.88	23.89	23.85	23.78		
10	QPSK	50	0	23.76	23.95	23.81	23.96	23.77	24	
10	16QAM	1	0	23.71	23.87	23.96	23.97	23.51		
10	16QAM	1	25	23.64	23.93	23.82	23.95	23.86		
10	16QAM	1	49	23.81	23.91	23.96	23.84	23.75	23	
10	16QAM	25	0	22.76	22.75	22.75	22.76	22.80		
10	16QAM	25	12	22.79	22.81	22.82	22.79	22.93		
10	16QAM	25	25	22.85	22.87	22.85	22.81	22.82	23	
10	16QAM	50	0	22.77	22.81	22.77	22.80	22.82		
10	64QAM	1	0	22.44	22.63	22.76	22.76	22.21		
10	64QAM	1	25	22.40	22.68	22.64	22.66	22.54	23	
10	64QAM	1	49	22.51	22.70	22.63	22.50	22.31		
10	64QAM	25	0	21.75	21.87	21.78	21.77	21.79		
10	64QAM	25	12	21.82	21.90	21.79	21.78	21.98	22	
10	64QAM	25	25	21.80	21.83	21.80	21.81	21.86		
10	64QAM	50	0	21.79	21.98	21.83	21.79	21.76		
Channel				39650	40135.5	40620	41105.5	41590	Tune-up limit (dBm)	
Frequency (MHz)				2486	2544.55	2593	2641.55	2690		
5	QPSK	1	0	24.61	24.80	24.90	24.84	24.38	25	
5	QPSK	1	12	24.60	24.85	24.87	24.89	24.79		
5	QPSK	1	24	24.71	24.94	24.96	24.71	24.65		
5	QPSK	12	0	23.77	23.92	23.85	23.97	23.74	24	
5	QPSK	12	7	23.80	23.93	23.90	23.87	23.82		
5	QPSK	12	13	23.81	23.84	23.93	23.87	23.71		
5	QPSK	25	0	23.82	23.91	23.81	23.90	23.79	24	
5	16QAM	1	0	23.73	23.92	23.93	23.95	23.47		
5	16QAM	1	12	23.73	23.96	23.85	23.97	23.84		
5	16QAM	1	24	23.82	23.91	23.86	23.82	23.71	23	
5	16QAM	12	0	22.71	22.78	22.75	22.72	22.73		
5	16QAM	12	7	22.87	22.78	22.81	22.83	22.94		
5	16QAM	12	13	22.88	22.83	22.79	22.79	22.84	23	
5	16QAM	25	0	22.78	22.81	22.74	22.85	22.85		
5	64QAM	1	0	22.41	22.67	22.75	22.73	22.17		
5	64QAM	1	12	22.41	22.65	22.69	22.65	22.54	23	
5	64QAM	1	24	22.48	22.76	22.72	22.45	22.40		
5	64QAM	12	0	21.75	21.89	21.81	21.75	21.80		
5	64QAM	12	7	21.88	21.87	21.77	21.74	21.98	22	
5	64QAM	12	13	21.76	21.88	21.77	21.84	21.84		
5	64QAM	25	0	21.87	21.96	21.80	21.77	21.78		



Band 41 HPUE										
Airt 0										
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Low Middle Ch / Freq	Power Middle Ch / Freq	Power High Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	
Channel				39750	40185	40620	41055	41490		
Frequency (MHz)				2506	2549.5	2593	2636.5	2680		
20	QPSK	1	0	25.92	26.05	26.68	26.59	26.20	27.5	
20	QPSK	1	49	26.31	25.86	26.67	26.86	26.46		
20	QPSK	1	99	26.48	25.87	26.66	26.44	26.13		
20	QPSK	50	0	25.18	25.01	25.91	25.99	25.62	26.5	
20	QPSK	50	24	25.39	24.93	25.93	26.08	25.77		
20	QPSK	50	50	25.69	24.79	25.95	25.88	25.47		
20	QPSK	100	0	24.56	24.66	25.95	25.88	25.63	26.5	
20	16QAM	1	0	25.24	25.30	26.07	25.97	25.51		
20	16QAM	1	49	25.88	25.14	26.00	26.25	25.81		
20	16QAM	1	99	25.80	25.03	26.06	25.77	25.50	25.5	
20	16QAM	50	0	24.35	24.12	24.93	25.01	24.65		
20	16QAM	50	24	24.88	24.08	24.96	25.11	24.79		
20	16QAM	50	50	24.74	23.98	24.98	24.89	24.66	25.5	
20	16QAM	100	0	24.22	23.92	24.95	24.91	24.70		
20	64QAM	1	0	23.58	23.66	24.29	24.83	24.10		
20	64QAM	1	49	23.58	23.60	24.45	24.45	25.12	25.5	
20	64QAM	1	99	24.03	23.66	24.09	24.62	23.50		
20	64QAM	50	0	22.56	22.52	23.29	24.04	23.14		
20	64QAM	50	24	22.67	22.54	23.35	24.12	23.03	24.5	
20	64QAM	50	50	22.90	22.59	23.42	23.90	22.78		
20	64QAM	100	0	22.55	22.54	23.35	23.92	22.93		
Channel				39725	40173	40620	41068	41515	Tune-up limit (dBm)	
Frequency (MHz)				2503.5	2548.3	2593	2637.8	2682.5		
15	QPSK	1	0	25.88	25.95	26.64	26.49	26.14	27.5	
15	QPSK	1	37	26.21	25.80	26.62	26.79	26.44		
15	QPSK	1	74	26.44	25.77	26.65	26.42	26.07		
15	QPSK	36	0	25.18	24.91	25.82	25.90	25.60	26.5	
15	QPSK	36	20	25.35	24.83	25.88	26.03	25.67		
15	QPSK	36	39	25.66	24.72	25.87	25.78	25.37		
15	QPSK	75	0	24.51	24.80	25.86	25.86	25.55	26.5	
15	16QAM	1	0	25.24	25.21	26.05	25.97	25.50		
15	16QAM	1	37	25.66	25.08	25.99	26.15	25.81		
15	16QAM	1	74	25.73	24.96	26.05	25.76	25.50	25.5	
15	16QAM	36	0	24.29	24.06	24.94	24.97	24.56		
15	16QAM	36	20	24.62	24.08	24.86	25.04	24.73		
15	16QAM	36	39	24.70	23.89	24.93	24.89	24.64	25.5	
15	16QAM	75	0	24.17	23.82	24.87	24.82	24.61		
15	64QAM	1	0	23.55	23.56	24.25	24.79	24.07		
15	64QAM	1	37	23.58	23.60	24.41	25.03	23.75	25.5	
15	64QAM	1	74	24.00	23.61	24.08	24.55	23.49		
15	64QAM	36	0	22.56	22.48	23.23	23.99	23.10		
15	64QAM	36	20	22.85	22.47	23.34	24.11	23.02	24.5	
15	64QAM	36	39	22.84	22.59	23.32	23.88	22.78		
15	64QAM	75	0	22.53	22.51	23.28	23.85	22.90		
Channel				39700	40160	40600	41050	41500	Tune-up limit (dBm)	
Frequency (MHz)				2501	2547	2593	2639	2686		
10	QPSK	1	0	25.82	26.03	26.58	26.55	26.10	27.5	
10	QPSK	1	25	26.21	25.77	26.66	26.80	26.39		
10	QPSK	1	49	26.46	25.83	26.64	26.34	26.09		
10	QPSK	25	0	25.14	24.99	25.81	25.95	25.62	26.5	
10	QPSK	25	12	25.33	24.85	25.85	26.05	25.75		
10	QPSK	25	25	25.59	24.78	25.94	25.80	25.45		
10	QPSK	50	0	24.66	24.77	25.86	25.82	25.54	26.5	
10	16QAM	1	0	25.15	25.22	25.99	25.94	25.44		
10	16QAM	1	25	25.68	25.08	25.99	26.20	25.81		
10	16QAM	1	49	25.75	25.00	25.99	25.75	25.48	25.5	
10	16QAM	25	0	24.26	24.04	24.83	24.92	24.61		
10	16QAM	25	12	24.68	24.00	24.91	25.10	24.74		
10	16QAM	25	25	24.72	23.97	24.98	24.81	24.61	25.5	
10	16QAM	50	0	24.21	23.82	24.95	24.82	24.61		
10	64QAM	1	0	23.54	23.61	24.26	24.75	24.02		
10	64QAM	1	25	23.50	23.56	24.35	25.10	23.76	25.5	
10	64QAM	1	49	24.03	23.95	24.05	24.82	23.41		
10	64QAM	25	0	22.50	22.50	23.28	24.01	23.13		
10	64QAM	25	12	22.63	22.49	23.29	24.10	22.99	24.5	
10	64QAM	25	25	22.87	22.49	23.34	23.87	22.71		
10	64QAM	50	0	22.46	22.53	23.27	23.69	22.84		
Channel				39675	40148	40600	41063	41565	Tune-up limit (dBm)	
Frequency (MHz)				2498.5	2545.8	2593	2640.30	2687.5		
5	QPSK	1	0	25.82	25.95	26.66	26.59	26.19	27.5	
5	QPSK	1	12	26.27	25.76	26.61	26.83	26.45		
5	QPSK	1	24	26.38	25.79	26.60	26.41	26.04		
5	QPSK	12	0	25.17	25.00	25.91	25.97	25.60	26.5	
5	QPSK	12	7	25.33	24.91	25.87	26.06	25.72		
5	QPSK	12	13	25.65	24.78	25.95	25.83	25.41		
5	QPSK	25	0	24.64	24.77	25.94	25.87	25.59	26.5	
5	16QAM	1	0	25.19	25.24	26.05	25.89	25.45		
5	16QAM	1	12	25.58	25.06	25.92	26.15	25.75		
5	16QAM	1	24	25.72	24.96	25.99	25.71	25.49	25.5	
5	16QAM	12	0	24.28	24.10	24.92	24.99	24.58		
5	16QAM	12	7	24.64	24.06	24.87	25.06	24.75		
5	16QAM	12	13	24.64	23.96	24.94	24.79	24.62	25.5	
5	16QAM	25	0	24.16	23.90	24.91	24.88	24.68		
5	64QAM	1	0	23.48	23.60	24.24	24.80	24.04		
5	64QAM	1	12	23.54	23.56	24.37	25.11	23.77	25.5	
5	64QAM	1	24	24.00	23.56	24.09	24.61	23.46		
5	64QAM	12	0	22.49	22.43	23.21	23.99	23.08		
5	64QAM	12	7	22.66	22.44	23.33	24.04	22.99	24.5	
5	64QAM	12	13	22.80	22.53	23.37	23.83	22.72		
5	64QAM	25	0	22.52	22.54	23.29	23.92	22.93		



Band 42 (3.5GHz Band)							
Ant 2							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				43190	43340	43490	
Frequency (MHz)				3550	3575	3590	
20	QPSK	1	0	22.94	23.03	23.03	23.5
20	QPSK	1	49	22.98	23.01	23.06	
20	QPSK	1	99	22.89	22.94	22.97	
20	QPSK	50	0	22.03	22.08	22.12	22.5
20	QPSK	50	24	22.08	22.04	22.08	
20	QPSK	50	50	22.03	22.06	22.08	
20	QPSK	100	0	22.07	22.02	22.07	22.5
20	16QAM	1	0	22.09	22.11	22.17	
20	16QAM	1	49	22.04	22.08	22.12	
20	16QAM	1	99	22.00	22.04	22.07	21.5
20	16QAM	50	0	21.04	21.09	21.14	
20	16QAM	50	24	21.10	21.07	21.10	
20	16QAM	50	50	21.04	21.09	21.10	21.5
20	16QAM	100	0	21.07	21.03	21.09	
20	64QAM	1	0	20.70	20.81	20.75	
20	64QAM	1	49	20.75	20.84	20.66	21.5
20	64QAM	1	99	20.79	20.79	20.58	
20	64QAM	50	0	20.06	20.11	20.02	
20	64QAM	50	24	20.11	20.08	20.06	20.5
20	64QAM	50	50	20.05	20.08	19.95	
20	64QAM	100	0	20.09	20.03	19.94	
Channel				43165	43340	43515	Tune-up limit (dBm)
Frequency (MHz)				3557.5	3575	3592.5	
15	QPSK	1	0	22.85	22.94	22.94	23.5
15	QPSK	1	37	22.96	22.95	22.96	
15	QPSK	1	74	22.89	22.86	22.87	
15	QPSK	36	0	21.99	21.99	22.10	22.5
15	QPSK	36	20	21.98	21.97	22.04	
15	QPSK	36	39	22.00	22.04	22.05	
15	QPSK	75	0	22.01	22.00	21.98	22.5
15	16QAM	1	0	22.04	22.09	22.13	
15	16QAM	1	37	21.95	22.05	22.11	
15	16QAM	1	74	21.94	21.99	22.01	21.5
15	16QAM	36	0	20.99	21.07	21.12	
15	16QAM	36	20	21.08	20.97	21.06	
15	16QAM	36	39	20.97	21.01	21.07	21.5
15	16QAM	75	0	21.02	21.00	21.01	
15	64QAM	1	0	20.61	20.78	20.73	
15	64QAM	1	37	20.65	20.76	20.63	21.5
15	64QAM	1	74	20.79	20.75	20.48	
15	64QAM	36	0	20.03	20.03	19.92	
15	64QAM	36	20	20.05	20.08	20.03	20.5
15	64QAM	36	39	20.00	20.00	19.86	
15	64QAM	75	0	20.05	20.01	19.92	
Channel				43140	43340	43540	Tune-up limit (dBm)
Frequency (MHz)				3555	3575	3595	
10	QPSK	1	0	22.92	22.95	22.96	23.5
10	QPSK	1	25	22.93	22.93	23.05	
10	QPSK	1	49	22.80	22.87	22.94	
10	QPSK	25	0	21.96	22.02	22.09	22.5
10	QPSK	25	12	22.08	21.96	22.05	
10	QPSK	25	25	21.99	21.96	22.05	
10	QPSK	50	0	21.98	21.95	22.02	22.5
10	16QAM	1	0	22.01	22.02	22.10	
10	16QAM	1	25	21.99	22.06	22.10	
10	16QAM	1	49	21.96	21.96	21.88	21.5
10	16QAM	25	0	20.94	21.07	21.07	
10	16QAM	25	12	21.03	20.99	21.05	
10	16QAM	25	25	20.97	21.02	21.06	21.5
10	16QAM	50	0	21.05	20.94	20.99	
10	64QAM	1	0	20.70	20.79	20.67	
10	64QAM	1	25	20.73	20.76	20.58	21.5
10	64QAM	1	49	20.79	20.69	20.52	
10	64QAM	25	0	19.99	20.06	20.00	
10	64QAM	25	12	20.10	20.05	20.05	20.5
10	64QAM	25	25	19.98	20.02	19.89	
10	64QAM	50	0	20.09	19.94	19.89	
Channel				43115	43340	43565	Tune-up limit (dBm)
Frequency (MHz)				3562.5	3575	3597.5	
5	QPSK	1	0	22.92	23.01	22.97	23.5
5	QPSK	1	12	22.90	23.00	22.96	
5	QPSK	1	24	22.83	22.92	22.96	
5	QPSK	12	0	22.00	21.99	22.04	22.5
5	QPSK	12	7	22.05	22.00	22.01	
5	QPSK	12	13	21.99	21.96	22.02	
5	QPSK	25	0	22.03	21.93	22.02	22.5
5	16QAM	1	0	22.05	22.02	22.15	
5	16QAM	1	12	21.98	22.03	22.06	
5	16QAM	1	24	21.90	21.95	22.06	21.5
5	16QAM	12	0	21.04	21.02	21.09	
5	16QAM	12	7	21.08	21.00	21.04	
5	16QAM	12	13	20.98	21.05	21.10	21.5
5	16QAM	25	0	20.98	20.96	21.03	
5	64QAM	1	0	20.61	20.80	20.72	
5	64QAM	1	12	20.71	20.75	20.66	21.5
5	64QAM	1	24	20.75	20.72	20.52	
5	64QAM	12	0	19.96	20.02	19.99	
5	64QAM	12	7	20.05	20.00	19.98	20.5
5	64QAM	12	13	20.00	19.96	19.80	
5	64QAM	25	0	20.02	19.94	19.93	



Band 48 (3.5G Band)									
Ant.2									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Low Middle Ch. / Freq.	Power High Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	
Channel				55340	55830	56150	56640		
Frequency (MHz)				3560	3609	3641	3690		
20	QPSK	1	0	19.65	23.27	23.37	19.53	23.5	
20	QPSK	1	49	19.47	23.06	23.02	19.31		
20	QPSK	1	99	19.50	23.04	22.96	19.22		
20	QPSK	50	0	18.70	22.22	22.33	18.51	22.5	
20	QPSK	50	24	18.68	22.25	22.18	18.45		
20	QPSK	50	50	18.61	22.18	22.09	18.34		
20	QPSK	100	0	18.65	22.24	22.17	18.44	22.5	
20	16QAM	1	0	18.74	22.39	22.38	18.67		
20	16QAM	1	49	18.57	22.18	22.11	18.39		
20	16QAM	1	99	18.63	22.16	22.05	18.30	21.5	
20	16QAM	50	0	17.74	21.24	21.26	17.57		
20	16QAM	50	24	17.72	21.27	21.20	17.46		
20	16QAM	50	50	17.65	21.20	21.12	17.40	21.5	
20	16QAM	100	0	17.68	21.24	21.20	17.48		
20	64QAM	1	0	17.45	21.06	20.77	17.44		
20	64QAM	1	49	17.36	20.91	20.75	17.13	21.5	
20	64QAM	1	99	17.39	20.93	20.67	17.09		
20	64QAM	50	0	16.74	20.25	20.09	16.54		
20	64QAM	50	24	16.70	20.26	20.10	16.48	20.5	
20	64QAM	50	50	16.64	20.19	19.99	16.38		
20	64QAM	100	0	16.69	20.27	20.03	16.47		
Channel				55315	55820	56160	56665	Tune-up limit (dBm)	
Frequency (MHz)				3557.5	3608	3642	3692.5		
15	QPSK	1	0	19.62	23.17	23.26	19.50	23.5	
15	QPSK	1	37	19.41	23.02	23.02	19.27		
15	QPSK	1	74	19.47	22.94	22.86	19.20		
15	QPSK	36	0	18.68	22.21	22.20	18.48	22.5	
15	QPSK	36	20	18.58	22.21	22.16	18.40		
15	QPSK	36	39	18.58	22.14	22.09	18.28		
15	QPSK	75	0	18.55	22.15	22.08	18.43	22.5	
15	16QAM	1	0	18.64	22.30	22.36	18.59		
15	16QAM	1	37	18.55	22.17	22.05	18.33		
15	16QAM	1	74	18.56	22.10	21.96	18.20	21.5	
15	16QAM	36	0	17.67	21.22	21.26	17.47		
15	16QAM	36	20	17.72	21.18	21.17	17.46		
15	16QAM	36	39	17.57	21.15	21.09	17.39	21.5	
15	16QAM	75	0	17.62	21.20	21.11	17.38		
15	64QAM	1	0	17.36	20.98	20.68	17.35		
15	64QAM	1	37	17.28	20.86	20.72	17.10	21.5	
15	64QAM	1	74	17.35	20.93	20.66	17.00		
15	64QAM	36	0	16.71	20.20	20.00	16.44		
15	64QAM	36	20	16.68	20.23	20.03	16.38	20.5	
15	64QAM	36	39	16.62	20.13	19.91	16.36		
15	64QAM	75	0	16.69	20.25	20.03	16.47		
Channel				55290	55815	56163	56669	Tune-up limit (dBm)	
Frequency (MHz)				3555	3607.5	3642.5	3693		
10	QPSK	1	0	19.64	23.22	23.18	19.43	23.5	
10	QPSK	1	25	19.46	23.00	22.97	19.21		
10	QPSK	1	49	19.42	23.01	22.86	19.21		
10	QPSK	25	0	18.60	22.20	22.19	18.48	22.5	
10	QPSK	25	12	18.58	22.21	22.11	18.38		
10	QPSK	25	25	18.60	22.18	22.04	18.30		
10	QPSK	50	0	18.55	22.17	22.07	18.38	22.5	
10	16QAM	1	0	18.73	22.31	22.33	18.61		
10	16QAM	1	25	18.54	22.17	22.02	18.34		
10	16QAM	1	49	18.62	22.09	21.98	18.28	21.5	
10	16QAM	25	0	17.66	21.19	21.24	17.48		
10	16QAM	25	12	17.64	21.24	21.11	17.36		
10	16QAM	25	25	17.60	21.16	21.03	17.35	21.5	
10	16QAM	50	0	17.63	21.18	21.14	17.46		
10	64QAM	1	0	17.38	21.02	20.74	17.39		
10	64QAM	1	25	17.27	20.89	20.75	17.08	21.5	
10	64QAM	1	49	17.32	20.92	20.62	17.05		
10	64QAM	25	0	16.69	20.20	20.09	16.47		
10	64QAM	25	12	16.70	20.20	20.07	16.41	20.5	
10	64QAM	25	25	16.60	20.18	19.95	16.29		
10	64QAM	50	0	16.67	20.19	20.01	16.41		
Channel				55285	55810	56170	56715	Tune-up limit (dBm)	
Frequency (MHz)				3552.5	3607	3643	3697.5		
5	QPSK	1	0	19.56	23.20	23.23	19.52	23.5	
5	QPSK	1	12	19.40	22.99	23.01	19.22		
5	QPSK	1	24	19.50	22.96	22.96	19.17		
5	QPSK	12	0	18.62	22.19	22.17	18.48	22.5	
5	QPSK	12	7	18.68	22.15	22.13	18.40		
5	QPSK	12	13	18.56	22.10	22.09	18.31		
5	QPSK	25	0	18.62	22.15	22.15	18.37	22.5	
5	16QAM	1	0	18.73	22.37	22.31	18.62		
5	16QAM	1	12	18.56	22.16	22.05	18.35		
5	16QAM	1	24	18.63	22.15	21.98	18.23	21.5	
5	16QAM	12	0	17.67	21.14	21.16	17.52		
5	16QAM	12	7	17.71	21.26	21.13	17.38		
5	16QAM	12	13	17.60	21.13	21.06	17.35	21.5	
5	16QAM	25	0	17.61	21.15	21.10	17.41		
5	64QAM	1	0	17.43	21.01	20.67	17.37		
5	64QAM	1	12	17.31	20.86	20.73	17.08	21.5	
5	64QAM	1	24	17.33	20.87	20.64	17.03		
5	64QAM	12	0	16.68	20.17	20.03	16.48		
5	64QAM	12	7	16.65	20.24	20.10	16.45	20.5	
5	64QAM	12	13	16.55	20.13	19.89	16.35		
5	64QAM	25	0	16.59	20.19	19.97	16.40		



n2							
Art 2							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				372000	376000	380000	
Frequency (MHz)				1860	1880	1900	
20	PI/2 BPSK	1	1	24.98	24.94	24.94	25.0
20	PI/2 BPSK	1	53	24.87	24.92	24.92	
20	PI/2 BPSK	1	104	24.94	24.88	24.95	
20	PI/2 BPSK	50	0	24.35	24.41	24.35	25.0
20	PI/2 BPSK	50	28	24.88	24.95	24.87	
20	PI/2 BPSK	50	56	24.78	24.79	24.82	
20	PI/2 BPSK	100	0	24.44	24.40	24.40	24.5
20	QPSK	1	1	24.95	24.93	24.93	25.0
20	QPSK	1	53	24.88	24.89	24.93	
20	QPSK	1	104	24.84	24.81	24.87	
20	QPSK	50	0	24.32	24.31	24.26	25.0
20	QPSK	50	28	24.92	24.95	24.97	
20	QPSK	50	56	24.25	24.24	24.29	
20	QPSK	100	0	23.90	23.94	23.94	24.0
20	16QAM	1	1	23.90	23.88	23.93	24.0
20	64QAM	1	1	22.40	22.45	22.37	22.5
20	256QAM	1	1	20.38	20.39	20.38	20.5
Channel				371500	376000	380500	Power-up limit (dBm)
Frequency (MHz)				1857.5	1880	1902.5	
15	PI/2 BPSK	1	1	24.90	24.95	24.88	25.0
Channel				371000	376000	381000	Power-up limit (dBm)
Frequency (MHz)				1855	1880	1905	
10	PI/2 BPSK	1	1	24.81	24.85	24.84	25.0
Channel				370500	376000	381500	Power-up limit (dBm)
Frequency (MHz)				1852.5	1880	1907.5	
5	PI/2 BPSK	1	1	24.90	24.93	24.89	25.0



n5							
Ant 0							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				165900	167300	167600	
Frequency (MHz)				834	836.5	839	
20	PI/2 BPSK	1	1	24.72	24.80	24.72	25.0
20	PI/2 BPSK	1	53	24.63	24.60	24.58	
20	PI/2 BPSK	1	104	24.45	24.38	24.43	
20	PI/2 BPSK	50	0	24.55	24.51	24.46	25.0
20	PI/2 BPSK	50	28	24.46	24.33	24.42	
20	PI/2 BPSK	50	56	24.41	24.43	24.45	
20	PI/2 BPSK	100	0	22.58	22.58	22.51	24.5
20	QPSK	1	1	24.74	24.76	24.74	25.0
20	QPSK	1	53	24.66	24.60	24.66	
20	QPSK	1	104	24.51	24.51	24.56	
20	QPSK	50	0	24.34	24.34	24.28	25.0
20	QPSK	50	28	24.52	24.51	24.53	
20	QPSK	50	56	24.35	24.31	24.38	
20	QPSK	100	0	23.90	23.98	23.93	24.0
20	16QAM	1	1	23.54	23.75	23.72	24.0
20	64QAM	1	1	22.45	22.49	22.41	22.5
20	256QAM	1	1	20.44	20.37	20.43	20.5
Channel				166300	167300	168300	limit (dBm)
Frequency (MHz)				831.5	836.5	841.5	
15	PI/2 BPSK	1	1	24.55	24.61	24.60	25.0
Channel				165900	167300	168600	limit (dBm)
Frequency (MHz)				829	836.5	844	
10	PI/2 BPSK	1	1	24.38	24.34	24.38	25.0
Channel				165300	167300	169300	limit (dBm)
Frequency (MHz)				826.5	836.5	846.5	
5	PI/2 BPSK	1	1	24.43	24.44	24.36	25.0



n7							
Ant. 2							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				505000	507000	512000	
Frequency (MHz)				2510	2535	2560	
20	PI/2 BPSK	1	1	24.99	24.98	24.93	25.0
20	PI/2 BPSK	1	53	24.89	24.94	24.85	
20	PI/2 BPSK	1	104	24.93	24.95	24.96	
20	PI/2 BPSK	50	0	24.62	24.55	24.43	25.0
20	PI/2 BPSK	50	28	24.44	24.50	24.36	
20	PI/2 BPSK	50	56	24.29	24.30	24.32	
20	PI/2 BPSK	100	0	24.26	24.11	24.18	24.5
20	QPSK	1	1	24.90	24.95	24.91	25.0
20	QPSK	1	53	24.86	24.92	24.92	
20	QPSK	1	104	24.94	24.86	24.91	
20	QPSK	50	0	23.97	23.91	23.87	25.0
20	QPSK	50	28	24.90	24.87	24.89	
20	QPSK	50	56	23.93	23.85	23.90	
20	QPSK	100	0	23.77	23.77	23.77	24.0
20	16QAM	1	1	23.87	23.95	23.95	24.0
20	64QAM	1	1	22.47	22.41	22.39	22.5
20	256QAM	1	1	20.05	20.02	19.99	20.5
Channel				501500	507000	512500	limit (dBm)
Frequency (MHz)				2507.5	2535	2562.5	
15	PI/2 BPSK	1	1	24.31	24.36	24.36	25.0
Channel				501000	507000	513000	limit (dBm)
Frequency (MHz)				2505	2535	2565	
10	PI/2 BPSK	1	1	24.43	24.36	24.36	25.0
Channel				500500	507000	513500	limit (dBm)
Frequency (MHz)				2502.5	2535	2567.5	
5	PI/2 BPSK	1	1	24.83	24.91	24.85	25.0



n25							
Ant. 2							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				375000	376500	381000	
Frequency (MHz)				1860	1882.5	1905	
20	PI/2 BPSK	1	1	24.95	24.99	24.95	25.0
20	PI/2 BPSK	1	53	24.93	24.94	24.91	
20	PI/2 BPSK	1	104	24.90	24.83	24.83	
20	PI/2 BPSK	50	0	24.75	24.84	24.77	25.0
20	PI/2 BPSK	50	28	24.67	24.79	24.79	
20	PI/2 BPSK	50	56	24.65	24.68	24.66	
20	PI/2 BPSK	100	0	24.44	24.52	24.43	24.5
20	QPSK	1	1	24.97	24.94	24.90	25.0
20	QPSK	1	53	24.91	24.94	24.83	
20	QPSK	1	104	24.88	24.85	24.90	
20	QPSK	50	0	24.18	24.26	24.16	25.0
20	QPSK	50	28	24.80	24.79	24.85	
20	QPSK	50	56	24.22	24.19	24.19	
20	QPSK	100	0	23.62	23.86	23.90	24.0
20	16QAM	1	1	23.95	23.93	23.97	24.0
20	64QAM	1	1	22.40	22.38	22.43	22.5
20	256QAM	1	1	20.39	20.35	20.42	20.5
Channel				371500	376000	381500	limit (dBm)
Frequency (MHz)				1857.5	1880	1907.5	
15	PI/2 BPSK	1	1	24.91	24.85	24.92	25.0
Channel				371000	376000	382000	limit (dBm)
Frequency (MHz)				1855	1880	1910	
10	PI/2 BPSK	1	1	24.90	24.91	24.86	25.0
Channel				370500	376000	382500	limit (dBm)
Frequency (MHz)				1852.5	1880	1912.5	
5	PI/2 BPSK	1	1	24.82	24.80	24.81	25.0



n71							
Ant 0							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				134500	136100	137600	
Frequency (MHz)				673	680.5	688	
20	PI/2 BPSK	1	1	24.86	24.97	24.89	25.0
20	PI/2 BPSK	1	53	24.74	24.75	24.77	
20	PI/2 BPSK	1	104	24.65	24.69	24.71	
20	PI/2 BPSK	50	0	24.55	24.61	24.62	25.0
20	PI/2 BPSK	50	28	24.49	24.55	24.61	
20	PI/2 BPSK	50	56	24.44	24.43	24.46	
20	PI/2 BPSK	100	0	24.43	24.48	24.40	24.5
20	QPSK	1	1	24.89	24.86	24.87	25.0
20	QPSK	1	53	24.80	24.78	24.84	
20	QPSK	1	104	24.67	24.63	24.67	
20	QPSK	50	0	24.07	24.11	24.11	25.0
20	QPSK	50	28	24.79	24.80	24.76	
20	QPSK	50	56	23.95	23.93	23.96	
20	QPSK	100	0	23.84	23.88	23.90	24.0
20	16QAM	1	1	23.94	23.91	23.93	24.0
20	64QAM	1	1	22.36	22.48	22.39	22.5
20	256QAM	1	1	20.31	20.39	20.31	20.5
Channel				134100	136100	138100	limit
Frequency (MHz)				670.5	680.5	690.5	limit
15	PI/2 BPSK	1	1	24.78	24.95	24.79	25.0
Channel				133600	136100	138600	limit
Frequency (MHz)				668	680.5	693	limit
10	PI/2 BPSK	1	1	24.64	24.65	24.68	25.0
Channel				133100	136100	139100	limit
Frequency (MHz)				665.5	680.5	695.5	limit
5	PI/2 BPSK	1	1	24.74	24.78	24.78	25.0



n12							
Act 0							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				141300	141500	141700	
Frequency (MHz)				705.5	707.5	709.5	
15	PI/2 BPSK	1	1	24.56	24.64	24.64	25.0
15	PI/2 BPSK	1	40	24.35	24.31	24.26	
15	PI/2 BPSK	1	77	24.19	24.23	24.26	
15	PI/2 BPSK	36	0	24.19	24.24	24.16	25.0
15	PI/2 BPSK	36	22	24.10	24.17	24.11	
15	PI/2 BPSK	36	43	24.10	24.10	24.09	
15	PI/2 BPSK	75	0	24.17	24.18	24.12	24.5
15	QPSK	1	1	24.63	24.63	24.59	25.0
15	QPSK	1	40	24.38	24.40	24.44	
15	QPSK	1	77	24.32	24.28	24.25	
15	QPSK	36	0	24.04	24.10	24.11	25.0
15	QPSK	36	22	24.20	24.19	24.12	
15	QPSK	36	43	24.05	24.06	24.06	
15	QPSK	75	0	23.91	23.82	23.89	24.0
15	16QAM	1	1	23.86	23.95	23.96	24.0
15	64QAM	1	1	22.45	22.39	22.44	22.5
15	256QAM	1	1	20.34	20.40	20.37	20.5
Channel				140800	141500	142200	Tune-up limit (dBm)
Frequency (MHz)				704	707.5	711	
10	PI/2 BPSK	1	1	24.24	24.22	24.22	25.0
Channel				140300	141500	142700	Tune-up limit (dBm)
Frequency (MHz)				701.5	707.5	713.5	
5	PI/2 BPSK	1	1	24.29	24.26	24.30	25.0



n66								
Art 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				346000	349000	352000		
Frequency (MHz)				1730	1745	1760		
40	PI/2 BPSK	1	1	24.95	24.97	24.93	25.0	
40	PI/2 BPSK	1	108	24.94	24.89	24.91		
40	PI/2 BPSK	1	214	24.85	24.88	24.84		
40	PI/2 BPSK	108	0	24.67	24.74	24.66	25.0	
40	PI/2 BPSK	108	54	24.64	24.69	24.62		
40	PI/2 BPSK	108	108	24.57	24.67	24.62		
40	PI/2 BPSK	216	0	24.41	24.42	24.34	24.5	
40	QPSK	1	1	24.91	24.93	24.90	25.0	
40	QPSK	1	108	24.45	24.44	24.39		
40	QPSK	1	214	24.45	24.47	24.45		
40	QPSK	108	0	24.61	24.59	24.60	25.0	
40	QPSK	108	54	24.72	24.69	24.72		
40	QPSK	108	108	24.57	24.56	24.60		
40	QPSK	216	0	23.51	23.53	23.51	24.0	
40	16QAM	1	1	23.89	23.90	23.91	24.0	
40	64QAM	1	1	22.41	22.37	22.34	22.5	
40	256QAM	1	1	20.39	20.35	20.34	20.5	
Channel				344000	349000	354000	Tune-up limit (dBm)	
Frequency (MHz)				1720	1745	1770		
20	PI/2 BPSK	1	1	24.48	24.55	24.58	25.0	
Channel				343500	349000	355000	Tune-up limit (dBm)	
Frequency (MHz)				1717.5	1745	1772.5		
15	PI/2 BPSK	1	1	24.33	24.28	24.38	25.0	
Channel				343000	349000	355000	Tune-up limit (dBm)	
Frequency (MHz)				1715	1745	1775		
10	PI/2 BPSK	1	1	24.29	24.34	24.28	25.0	
Channel				342500	349000	355500	Tune-up limit (dBm)	
Frequency (MHz)				1712.5	1745	1777.5		
5	PI/2 BPSK	1	1	24.29	24.29	24.34	25.0	



n2							
Act 0							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				372000	376000	380000	
Frequency (MHz)				1880	1880	1900	
20	Pl/2 BPSK	1	1	24.89	24.97	24.88	25.0
20	Pl/2 BPSK	1	53	24.89	24.81	24.91	
20	Pl/2 BPSK	1	104	24.70	24.74	24.76	
20	Pl/2 BPSK	50	0	24.65	24.69	24.69	25.0
20	Pl/2 BPSK	50	28	24.89	24.87	24.93	
20	Pl/2 BPSK	50	56	24.61	24.62	24.69	
20	Pl/2 BPSK	100	0	24.40	24.32	24.32	24.5
20	QPSK	1	1	24.76	24.85	24.82	25.0
20	QPSK	1	53	24.86	24.86	24.84	
20	QPSK	1	104	24.78	24.79	24.75	
20	QPSK	50	0	24.62	24.57	24.63	25.0
20	QPSK	50	28	24.72	24.70	24.74	
20	QPSK	50	56	24.64	24.62	24.58	
20	QPSK	100	0	23.50	23.57	23.53	24.0
20	16QAM	1	1	23.95	23.96	23.94	24.0
20	64QAM	1	1	22.47	22.43	22.45	22.5
20	256QAM	1	1	20.43	20.43	20.46	20.5
Channel				371500	376000	380500	Tune-up limit (dBm)
Frequency (MHz)				1857.5	1880	1902.5	
15	Pl/2 BPSK	1	1	24.83	24.80	24.76	25.0
Channel				371000	376000	381000	Tune-up limit (dBm)
Frequency (MHz)				1855	1880	1905	
10	Pl/2 BPSK	1	1	24.67	24.68	24.75	25.0
Channel				370500	376000	381500	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1880	1907.5	
5	Pl/2 BPSK	1	1	24.61	24.58	24.62	25.0



n5							
Ant. 1							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				166300	167300	167800	
Frequency (MHz)				834	836.5	839	
20	PI/2 BPSK	1	1	24.84	24.97	24.77	25.0
20	PI/2 BPSK	1	53	24.48	24.50	24.48	
20	PI/2 BPSK	1	104	24.24	24.23	24.23	
20	PI/2 BPSK	50	0	24.72	24.75	24.69	25.0
20	PI/2 BPSK	50	28	24.50	24.55	24.52	
20	PI/2 BPSK	50	56	24.20	24.18	24.16	
20	PI/2 BPSK	100	0	22.55	22.55	22.57	24.5
20	QPSK	1	1	24.62	24.64	24.58	25.0
20	QPSK	1	53	24.51	24.61	24.62	
20	QPSK	1	104	24.27	24.36	24.36	
20	QPSK	50	0	24.54	24.54	24.45	25.0
20	QPSK	50	28	24.38	24.45	24.46	
20	QPSK	50	56	24.14	24.11	24.09	
20	QPSK	100	0	23.95	23.85	23.89	24.0
20	16QAM	1	1	23.93	23.85	23.86	24.0
20	64QAM	1	1	22.32	22.38	22.36	22.5
20	256QAM	1	1	20.36	20.38	20.34	20.5
Channel				166300	167300	168300	limit (dBm)
Frequency (MHz)				831.5	836.5	841.5	
15	PI/2 BPSK	1	1	24.26	24.27	24.32	25.0
Channel				165800	167200	168000	limit (dBm)
Frequency (MHz)				829	836.5	844	
10	PI/2 BPSK	1	1	24.33	24.31	24.26	25.0
Channel				165300	167300	169300	limit (dBm)
Frequency (MHz)				826.5	836.5	846.5	
5	PI/2 BPSK	1	1	24.26	24.34	24.35	25.0



n7							
Ant 0							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				50000	50700	51200	
Frequency (MHz)				2510	2535	2560	
20	PI/2 BPSK	1	1	24.67	24.67	24.77	25.0
20	PI/2 BPSK	1	53	24.67	24.58	24.64	
20	PI/2 BPSK	1	104	24.63	24.62	24.64	
20	PI/2 BPSK	50	0	24.53	24.55	24.55	25.0
20	PI/2 BPSK	50	28	24.45	24.43	24.44	
20	PI/2 BPSK	50	56	24.47	24.50	24.53	
20	PI/2 BPSK	100	0	24.35	24.38	24.40	24.5
20	QPSK	1	1	24.57	24.59	24.64	25.0
20	QPSK	1	53	24.61	24.59	24.63	
20	QPSK	1	104	24.82	24.61	24.59	
20	QPSK	50	0	24.17	24.11	24.20	25.0
20	QPSK	50	28	24.55	24.54	24.52	
20	QPSK	50	56	24.26	24.22	24.22	
20	QPSK	100	0	23.90	23.91	23.91	24.0
20	16QAM	1	1	23.83	23.85	23.85	24.0
20	64QAM	1	1	22.46	22.48	22.41	22.5
20	256QAM	1	1	20.43	20.48	20.41	20.5
Channel				501500	507000	512500	limit
Frequency (MHz)				2507.5	2535	2562.5	(dBm)
15	PI/2 BPSK	1	1	24.58	24.68	24.65	25.0
Channel				501000	507000	513000	limit
Frequency (MHz)				2505	2535	2565	(dBm)
10	PI/2 BPSK	1	1	24.36	24.32	24.35	25.0
Channel				500500	507000	513500	limit
Frequency (MHz)				2502.5	2535	2567.5	(dBm)
5	PI/2 BPSK	1	1	24.44	24.41	24.45	25.0



n25							
Ant 0							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				370000	376000	381000	
Frequency (MHz)				1860	1880	1905	
20	PI/2 BPSK	1	1	24.91	24.91	24.90	25.0
20	PI/2 BPSK	1	53	24.77	24.77	24.78	
20	PI/2 BPSK	1	104	24.75	24.75	24.74	
20	PI/2 BPSK	50	0	24.65	24.65	24.67	25.0
20	PI/2 BPSK	50	28	24.60	24.57	24.60	
20	PI/2 BPSK	50	56	24.53	24.54	24.57	
20	PI/2 BPSK	100	0	24.33	24.47	24.43	24.5
20	QPSK	1	1	24.27	24.29	24.27	25.0
20	QPSK	1	53	24.75	24.75	24.74	
20	QPSK	1	104	24.67	24.66	24.70	
20	QPSK	50	0	24.59	24.55	24.51	25.0
20	QPSK	50	28	24.62	24.62	24.62	
20	QPSK	50	56	24.54	24.57	24.56	
20	QPSK	100	0	23.91	23.96	23.90	24.0
20	16QAM	1	1	23.80	23.82	23.81	24.0
20	64QAM	1	1	22.35	22.39	22.45	22.5
20	256QAM	1	1	20.43	20.47	20.46	20.5
Channel				371500	376000	381500	limit (dBm)
Frequency (MHz)				1837.5	1880	1907.5	
15	PI/2 BPSK	1	1	24.74	24.70	24.76	25.0
Channel				371000	376000	382000	limit (dBm)
Frequency (MHz)				1855	1880	1910	
10	PI/2 BPSK	1	1	24.65	24.70	24.62	25.0
Channel				370500	376000	382500	limit (dBm)
Frequency (MHz)				1832.5	1880	1912.5	
5	PI/2 BPSK	1	1	24.59	24.61	24.57	25.0



n71							
Ant. 1							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				134500	136100	137600	
Frequency (MHz)				673	680.5	688	
20	PI/2 BPSK	1	1	24.81	24.88	24.86	25.0
20	PI/2 BPSK	1	53	24.67	24.66	24.74	
20	PI/2 BPSK	1	104	24.62	24.68	24.61	
20	PI/2 BPSK	50	0	24.57	24.65	24.55	25.0
20	PI/2 BPSK	50	28	24.57	24.60	24.48	
20	PI/2 BPSK	50	56	24.43	24.43	24.47	
20	PI/2 BPSK	100	0	22.67	22.74	22.56	24.5
20	QPSK	1	1	24.84	24.85	24.84	25.0
20	QPSK	1	53	24.63	24.63	24.66	
20	QPSK	1	104	24.74	24.80	24.78	
20	QPSK	50	0	24.11	24.12	24.20	25.0
20	QPSK	50	28	24.79	24.81	24.75	
20	QPSK	50	56	23.98	24.06	24.00	
20	QPSK	100	0	23.83	23.77	23.83	24.0
20	16QAM	1	1	23.89	23.97	23.90	24.0
20	64QAM	1	1	22.38	22.40	22.42	22.5
20	256QAM	1	1	20.35	20.35	20.33	20.5
Channel				134100	136100	138100	limit (dBm)
Frequency (MHz)				670.5	680.5	690.5	
15	PI/2 BPSK	1	1	24.83	24.81	24.79	25.0
Channel				133600	136100	138600	limit (dBm)
Frequency (MHz)				668	680.5	693	
10	PI/2 BPSK	1	1	24.79	24.80	24.81	25.0
Channel				133100	136100	139100	limit (dBm)
Frequency (MHz)				665.5	680.5	695.5	
5	PI/2 BPSK	1	1	24.74	24.78	24.79	25.0



n12							
Act 1							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				141300	141500	141700	
Frequency (MHz)				705.5	707.5	709.5	
15	PI/2 BPSK	1	1	24.43	24.44	24.41	25.0
15	PI/2 BPSK	1	40	24.28	24.24	24.28	
15	PI/2 BPSK	1	77	24.14	24.10	24.14	
15	PI/2 BPSK	36	0	24.24	24.25	24.20	25.0
15	PI/2 BPSK	36	22	24.22	24.17	24.19	
15	PI/2 BPSK	36	43	24.11	24.10	24.18	
15	PI/2 BPSK	75	0	24.17	24.18	24.09	24.5
15	QPSK	1	1	24.34	24.34	24.29	25.0
15	QPSK	1	40	24.33	24.34	24.33	
15	QPSK	1	77	24.18	24.09	24.13	
15	QPSK	36	0	24.09	24.06	24.10	25.0
15	QPSK	36	22	24.15	24.14	24.23	
15	QPSK	36	43	24.05	24.00	24.04	
15	QPSK	75	0	23.87	23.88	23.88	24.0
15	16QAM	1	1	23.90	23.91	23.87	24.0
15	64QAM	1	1	22.45	22.42	22.40	22.5
15	256QAM	1	1	20.38	20.36	20.41	20.5
Channel				140800	141500	142200	Tune-up limit (dBm)
Frequency (MHz)				704	707.5	711	
10	PI/2 BPSK	1	1	24.25	24.18	24.18	25.0
Channel				140300	141500	142700	Tune-up limit (dBm)
Frequency (MHz)				701.5	707.5	713.5	
5	PI/2 BPSK	1	1	24.31	24.32	24.22	25.0



n66								
Act 0								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	
Channel				346000	349000	352000		
Frequency (MHz)				1730	1745	1760		
40	PI/2 BPSK	1	1	24.80	24.85	24.86	25.0	
40	PI/2 BPSK	1	108	23.78	23.81	23.80		
40	PI/2 BPSK	1	214	23.77	23.75	23.75		
40	PI/2 BPSK	108	0	24.72	24.77	24.79		
40	PI/2 BPSK	108	54	23.69	23.69	23.66	25.0	
40	PI/2 BPSK	108	108	23.83	23.83	23.83		
40	PI/2 BPSK	216	0	24.42	24.48	24.44		24.5
40	QPSK	1	1	23.79	23.81	23.86	25.0	
40	QPSK	1	108	23.72	23.82	23.82		
40	QPSK	1	214	23.73	23.72	23.71		
40	QPSK	108	0	23.76	23.85	23.80		
40	QPSK	108	54	24.57	24.64	24.63	25.0	
40	QPSK	108	108	24.77	24.82	24.84		
40	QPSK	216	0	23.23	23.29	23.20		24.0
40	16QAM	1	1	22.74	22.74	22.69	25.0	
40	64QAM	1	1	22.41	22.39	22.34		22.5
40	256QAM	1	1	21.45	21.45	21.39		20.5
Channel				344000	349000	354000	Tune-up limit (dBm)	
Frequency (MHz)				1720	1745	1770		
20	PI/2 BPSK	1	1	23.94	24.00	24.00	25.0	
Channel				343500	349000	354500		
Frequency (MHz)				1717.5	1745	1772.5		
15	PI/2 BPSK	1	1	24.09	24.09	24.08	25.0	
Channel				343000	349000	355000		
Frequency (MHz)				1715	1745	1775		
10	PI/2 BPSK	1	1	23.93	23.99	23.91	25.0	
Channel				342500	349000	355500		
Frequency (MHz)				1712.5	1745	1777.5		
5	PI/2 BPSK	1	1	24.27	24.30	24.23		25.0



n2							
Art 2							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				372000	376000	380000	
Frequency (MHz)				1860	1880	1900	
20	PI/2 BPSK	1	1	22.96	22.94	22.91	24.9
20	PI/2 BPSK	1	53	22.94	22.94	22.90	
20	PI/2 BPSK	1	104	22.92	22.94	22.90	
20	PI/2 BPSK	50	0	22.91	22.90	22.92	
20	PI/2 BPSK	50	28	22.92	22.90	22.91	24.9
20	PI/2 BPSK	50	56	22.93	22.90	22.91	
20	PI/2 BPSK	100	0	22.90	22.90	22.90	
20	QPSK	1	1	22.76	22.64	22.56	
20	QPSK	1	53	22.68	22.66	22.54	24.0
20	QPSK	1	104	22.71	22.73	22.58	
20	QPSK	50	0	22.75	22.63	22.49	
20	QPSK	50	28	22.68	22.69	22.56	
20	QPSK	50	56	22.71	22.76	22.53	24.0
20	QPSK	100	0	22.72	22.70	22.55	
20	16QAM	1	1	22.76	22.75	22.67	
20	64QAM	1	1	21.16	21.10	21.14	
20	256QAM	1	1	19.29	19.11	19.15	20.5
Channel				371500	376000	380500	Power-up limit (dBm)
Frequency (MHz)				1857.5	1880	1902.5	
15	PI/2 BPSK	1	1	22.96	22.94	22.93	24.9
Channel				371000	376000	381000	Power-up limit (dBm)
Frequency (MHz)				1855	1880	1905	
10	PI/2 BPSK	1	1	22.95	22.94	22.91	24.9
Channel				370500	376000	381500	Power-up limit (dBm)
Frequency (MHz)				1852.5	1880	1907.5	
5	PI/2 BPSK	1	1	22.95	22.93	22.91	24.9



n7							
Ant. 2							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				50000	50700	51200	
Frequency (MHz)				2510	2535	2560	
20	PI/2 BPSK	1	1	20.82	20.76	20.66	22.6
20	PI/2 BPSK	1	53	20.81	20.75	20.66	
20	PI/2 BPSK	1	104	20.80	20.75	20.62	
20	PI/2 BPSK	50	0	20.78	20.73	20.64	22.6
20	PI/2 BPSK	50	28	20.77	20.72	20.63	
20	PI/2 BPSK	50	56	20.77	20.71	20.61	
20	PI/2 BPSK	100	0	20.75	20.71	20.63	22.6
20	QPSK	1	1	20.74	20.69	20.60	22.6
20	QPSK	1	53	20.75	20.70	20.64	
20	QPSK	1	104	20.74	20.68	20.63	
20	QPSK	50	0	20.75	20.72	20.65	22.6
20	QPSK	50	28	20.75	20.70	20.61	
20	QPSK	50	56	20.76	20.71	20.63	
20	QPSK	100	0	20.65	20.60	20.54	22.6
20	16QAM	1	1	20.63	20.65	20.52	22.6
20	64QAM	1	1	20.62	20.61	20.54	22.5
20	256QAM	1	1	19.29	19.15	19.05	20.5
Channel				501500	507000	512500	tune-up limit (dBm)
Frequency (MHz)				2507.5	2535	2562.5	
15	PI/2 BPSK	1	1	20.74	20.67	20.68	22.6
Channel				501000	507000	513000	tune-up limit (dBm)
Frequency (MHz)				2505	2535	2565	
10	PI/2 BPSK	1	1	20.74	20.68	20.60	22.6
Channel				500500	507000	513500	tune-up limit (dBm)
Frequency (MHz)				2502.5	2535	2567.5	
5	PI/2 BPSK	1	1	20.69	20.67	20.61	22.6



n25							
Ant. 2							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				375000	376000	381000	
Frequency (MHz)				1860	1880	1905	
20	PI/2 BPSK	1	1	22.98	22.93	22.95	24.9
20	PI/2 BPSK	1	53	22.96	22.92	22.92	
20	PI/2 BPSK	1	104	22.94	22.90	22.94	
20	PI/2 BPSK	50	0	22.97	22.91	22.93	24.9
20	PI/2 BPSK	50	28	22.94	22.91	22.92	
20	PI/2 BPSK	50	56	22.92	22.90	22.92	
20	PI/2 BPSK	100	0	22.91	22.90	22.90	24.9
20	QPSK	1	1	22.95	22.92	22.92	24.9
20	QPSK	1	53	22.94	22.92	22.90	
20	QPSK	1	104	22.93	22.91	22.91	
20	QPSK	50	0	22.87	22.72	22.57	24.0
20	QPSK	50	28	22.78	22.81	22.58	
20	QPSK	50	56	22.83	22.76	22.55	
20	QPSK	100	0	22.73	22.67	22.54	24.0
20	16QAM	1	1	22.89	22.85	22.76	24.0
20	64QAM	1	1	21.33	21.24	21.17	22.5
20	256QAM	1	1	19.34	19.25	19.17	20.5
Channel				371500	376000	381500	limit (dBm)
Frequency (MHz)				1857.5	1880	1907.5	
15	PI/2 BPSK	1	1	22.94	22.94	22.90	24.9
Channel				371000	376000	382000	limit (dBm)
Frequency (MHz)				1855	1880	1910	
10	PI/2 BPSK	1	1	22.90	22.93	22.91	24.9
Channel				370500	376000	382500	limit (dBm)
Frequency (MHz)				1852.5	1880	1912.5	
5	PI/2 BPSK	1	1	22.92	22.93	22.92	24.9



n7							
Act 0							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				50200	50700	51200	
Frequency (MHz)				2510	2535	2560	
20	PI/2 BPSK	1	1	23.88	23.84	23.75	25.0
20	PI/2 BPSK	1	53	23.86	23.83	23.72	
20	PI/2 BPSK	1	104	23.84	23.82	23.71	
20	PI/2 BPSK	50	0	23.84	23.76	23.75	25.0
20	PI/2 BPSK	50	28	23.82	23.79	23.74	
20	PI/2 BPSK	50	56	23.80	23.77	23.70	
20	PI/2 BPSK	100	0	23.80	23.76	23.70	24.5
20	QPSK	1	1	23.86	23.82	23.67	25.0
20	QPSK	1	53	23.85	23.83	23.71	
20	QPSK	1	104	23.82	23.80	23.66	
20	QPSK	50	0	23.80	23.77	23.72	25.0
20	QPSK	50	28	23.81	23.81	23.74	
20	QPSK	50	56	23.83	23.79	23.71	
20	QPSK	100	0	22.79	22.76	22.62	24.0
20	16QAM	1	1	22.85	22.81	22.74	24.0
20	64QAM	1	1	21.39	21.34	21.26	22.5
20	256QAM	1	1	19.41	19.30	19.26	20.5
Channel				501500	507000	512500	Power-up limit (dBm)
Frequency (MHz)				2507.5	2535	2562.5	
15	PI/2 BPSK	1	1	23.81	23.81	23.68	25.0
Channel				501000	507000	513000	Power-up limit (dBm)
Frequency (MHz)				2505	2535	2565	
10	PI/2 BPSK	1	1	23.83	23.74	23.73	25.0
Channel				500500	507000	513500	Power-up limit (dBm)
Frequency (MHz)				2502.5	2535	2567.5	
5	PI/2 BPSK	1	1	23.88	23.75	23.68	25.0



n2							
Art 2							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch / Freq. 372000	Power Middle Ch / Freq. 376000	Power High Ch / Freq. 380000	Tune up limit (dBm)
Channel				372000	376000	380000	
Frequency (MHz)				1860	1880	1900	
20	PI/2 BPSK	1	1	22.86	22.77	22.71	24.1
20	PI/2 BPSK	1	53	22.84	22.74	22.65	
20	PI/2 BPSK	1	104	22.77	22.74	22.66	
20	PI/2 BPSK	50	0	22.79	22.66	22.59	24.1
20	PI/2 BPSK	50	28	22.77	22.65	22.52	
20	PI/2 BPSK	50	56	22.73	22.60	22.52	
20	PI/2 BPSK	100	0	22.69	22.68	22.58	24.1
20	QPSK	1	1	22.76	22.64	22.56	24.0
20	QPSK	1	53	22.68	22.66	22.54	
20	QPSK	1	104	22.71	22.73	22.58	
20	QPSK	50	0	22.75	22.63	22.49	24.0
20	QPSK	50	28	22.68	22.69	22.56	
20	QPSK	50	56	22.71	22.76	22.53	
20	QPSK	100	0	22.72	22.70	22.55	24.0
20	16QAM	1	1	22.75	22.75	22.67	24.0
20	64QAM	1	1	21.16	21.10	21.14	22.5
20	256QAM	1	1	19.29	19.11	19.15	20.5
Channel				371500	376000	380500	
Frequency (MHz)				1857.5	1880	1902.5	Power-up limit (dBm)
15	PI/2 BPSK	1	1	22.86	22.78	22.76	24.1
Channel				371000	376000	381000	
Frequency (MHz)				1885	1880	1905	Power-up limit (dBm)
10	PI/2 BPSK	1	1	22.67	22.59	22.71	24.1
Channel				370500	376000	381500	
Frequency (MHz)				1882.5	1880	1907.5	Power-up limit (dBm)
5	PI/2 BPSK	1	1	22.70	22.60	22.64	24.1



n7							
Ant. 2							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq. 50000	Power Middle Ch. / Freq. 50700	Power High Ch. / Freq. 51200	Tune-up limit (dBm)
Channel				2510	2535	2560	
Frequency (MHz)							
20	PI/2 BPSK	1	1	18.22	18.01	17.77	19.2
20	PI/2 BPSK	1	53	18.20	18.00	17.74	
20	PI/2 BPSK	1	104	18.18	17.94	17.72	
20	PI/2 BPSK	50	0	17.88	17.75	17.65	
20	PI/2 BPSK	50	28	17.88	17.77	17.62	19.2
20	PI/2 BPSK	50	56	17.88	17.78	17.63	
20	PI/2 BPSK	100	0	17.88	17.77	17.64	
20	QPSK	1	1	18.20	17.91	17.77	
20	QPSK	1	53	18.16	17.95	17.68	19.2
20	QPSK	1	104	18.18	17.94	17.67	
20	QPSK	50	0	17.88	17.78	17.69	
20	QPSK	50	28	17.84	17.79	17.65	
20	QPSK	50	56	17.80	17.75	17.67	19.2
20	QPSK	100	0	17.82	17.73	17.68	
20	16QAM	1	1	17.85	17.74	17.62	
20	64QAM	1	1	17.55	17.70	17.71	
20	256QAM	1	1	17.29	17.20	17.54	19.2
Channel				501500	507000	512500	tune-up limit (dBm)
Frequency (MHz)				2507.5	2535	2562.5	
15	PI/2 BPSK	1	1	18.20	17.83	17.72	19.2
Channel				501000	507000	513000	tune-up limit (dBm)
Frequency (MHz)				2505	2535	2565	
10	PI/2 BPSK	1	1	18.12	18.00	17.73	19.2
Channel				500500	507000	513500	tune-up limit (dBm)
Frequency (MHz)				2502.5	2535	2567.5	
5	PI/2 BPSK	1	1	18.13	18.00	17.72	19.2



n25							
Ant. 2							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				375000	376000	381000	
Frequency (MHz)				1860	1880	1905	
20	PI/2 BPSK	1	1	22.98	22.93	22.80	24.1
20	PI/2 BPSK	1	53	22.96	22.92	22.78	
20	PI/2 BPSK	1	104	22.94	22.90	22.74	
20	PI/2 BPSK	50	0	22.87	22.81	22.59	24.1
20	PI/2 BPSK	50	28	22.84	22.81	22.64	
20	PI/2 BPSK	50	56	22.86	22.78	22.62	
20	PI/2 BPSK	100	0	22.81	22.76	22.55	24.1
20	QPSK	1	1	22.89	22.85	22.75	24.0
20	QPSK	1	53	22.94	22.82	22.70	
20	QPSK	1	104	22.93	22.86	22.71	
20	QPSK	50	0	22.87	22.72	22.57	24.0
20	QPSK	50	28	22.78	22.81	22.58	
20	QPSK	50	56	22.83	22.76	22.55	
20	QPSK	100	0	22.73	22.67	22.54	24.0
20	16QAM	1	1	22.89	22.85	22.76	24.0
20	64QAM	1	1	21.33	21.24	21.17	22.5
20	256QAM	1	1	19.34	19.25	19.17	20.5
Channel				371500	376000	381500	limit (dBm)
Frequency (MHz)				1857.5	1880	1907.5	
15	PI/2 BPSK	1	1	22.94	22.84	22.72	24.1
Channel				371000	376000	382000	limit (dBm)
Frequency (MHz)				1855	1880	1910	
10	PI/2 BPSK	1	1	22.90	22.89	22.80	24.1
Channel				370500	376000	382500	limit (dBm)
Frequency (MHz)				1852.5	1880	1912.5	
5	PI/2 BPSK	1	1	22.89	22.93	22.72	24.1



n7								
Act 0								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	
Channel				50200	50700	51200		
Frequency (MHz)				2510	2535	2560		
20	PI/2 BPSK	1	1	23.88	23.84	23.75	24.8	
20	PI/2 BPSK	1	53	23.86	23.83	23.72		
20	PI/2 BPSK	1	104	23.84	23.82	23.71		
20	PI/2 BPSK	50	0	23.84	23.76	23.75		
20	PI/2 BPSK	50	28	23.82	23.79	23.74	24.8	
20	PI/2 BPSK	50	56	23.80	23.77	23.70		
20	PI/2 BPSK	100	0	23.80	23.76	23.70		
20	QPSK	1	1	23.86	23.82	23.67	24.8	
20	QPSK	1	53	23.85	23.83	23.71		
20	QPSK	1	104	23.82	23.80	23.66		
20	QPSK	50	0	23.80	23.77	23.72		
20	QPSK	50	28	23.81	23.81	23.74	24.8	
20	QPSK	50	56	23.83	23.79	23.71		
20	QPSK	100	0	22.79	22.76	22.62		
20	16QAM	1	1	22.85	22.81	22.74	24.0	
20	64QAM	1	1	21.39	21.34	21.26		
20	256QAM	1	1	19.41	19.30	19.26		
Channel				501500	507000	512500	Tune-up limit (dBm)	
Frequency (MHz)				2507.5	2535	2562.5		
15	PI/2 BPSK	1	1	23.82	23.80	23.64	24.8	
15	QPSK	1	1	23.84	23.78	23.64		
15	16QAM	1	1	22.85	22.73	22.66		
15	64QAM	1	1	21.31	21.30	21.21		
15	256QAM	1	1	19.39	19.24	19.25	20.5	
Channel				501000	507000	513000	Tune-up limit (dBm)	
Frequency (MHz)				2505	2535	2565		
10	PI/2 BPSK	1	1	23.85	23.81	23.67	24.8	
10	QPSK	1	1	23.79	23.76	23.71		
10	16QAM	1	1	22.76	22.72	22.71		
10	64QAM	1	1	21.29	21.31	21.24		
10	256QAM	1	1	19.31	19.28	19.24	20.5	
Channel				500500	507000	513500	Tune-up limit (dBm)	
Frequency (MHz)				2502.5	2535	2567.5		
5	PI/2 BPSK	1	1	23.83	23.74	23.74	24.8	
5	QPSK	1	1	23.78	23.80	23.64		
5	16QAM	1	1	22.85	22.78	22.73		
5	64QAM	1	1	21.32	21.24	21.20		
5	256QAM	1	1	19.32	19.23	19.23	20.5	



n2							
Art 2							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				372000	376000	380000	
Frequency (MHz)				1860	1880	1900	
20	PI/2 BPSK	1	1	22.96	22.94	22.91	24.1
20	PI/2 BPSK	1	53	22.94	22.94	22.90	
20	PI/2 BPSK	1	104	22.92	22.94	22.90	
20	PI/2 BPSK	50	0	22.91	22.90	22.92	
20	PI/2 BPSK	50	28	22.92	22.90	22.91	24.1
20	PI/2 BPSK	50	56	22.93	22.90	22.91	
20	PI/2 BPSK	100	0	22.90	22.90	22.90	
20	QPSK	1	1	22.76	22.64	22.56	24.0
20	QPSK	1	53	22.68	22.66	22.54	
20	QPSK	1	104	22.71	22.73	22.58	
20	QPSK	50	0	22.75	22.63	22.49	
20	QPSK	50	28	22.68	22.69	22.56	24.0
20	QPSK	50	56	22.71	22.76	22.53	
20	QPSK	100	0	22.72	22.70	22.55	
20	16QAM	1	1	22.76	22.75	22.67	24.0
20	64QAM	1	1	21.16	21.10	21.14	
20	256QAM	1	1	19.29	19.11	19.15	
Channel				371500	376000	380500	
Frequency (MHz)				1857.5	1880	1902.5	
15	PI/2 BPSK	1	1	22.96	22.94	22.93	24.1
15	QPSK	1	1	22.92	22.93	22.92	
15	16QAM	1	1	22.73	22.68	22.71	
15	64QAM	1	1	21.19	21.12	21.15	
15	256QAM	1	1	19.24	19.12	19.23	20.5
Channel				371000	376000	381000	
Frequency (MHz)				1855	1880	1905	
10	PI/2 BPSK	1	1	22.96	22.94	22.91	24.1
10	QPSK	1	1	22.95	22.93	22.91	
10	16QAM	1	1	22.71	22.62	22.67	
10	64QAM	1	1	21.10	21.02	21.12	
10	256QAM	1	1	19.14	19.06	19.17	20.5
Channel				370500	376000	381500	
Frequency (MHz)				1852.5	1880	1907.5	
5	PI/2 BPSK	1	1	22.95	22.93	22.91	24.1
5	QPSK	1	1	22.93	22.91	22.90	
5	16QAM	1	1	22.65	22.62	22.63	
5	64QAM	1	1	21.17	21.02	21.06	
5	256QAM	1	1	19.24	19.02	19.17	20.5



n7							
Ant. 2							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				505000	507000	512000	
Frequency (MHz)				2510	2535	2560	
20	PI/2 BPSK	1	1	20.82	20.76	20.66	21.8
20	PI/2 BPSK	1	53	20.81	20.75	20.66	
20	PI/2 BPSK	1	104	20.80	20.75	20.62	
20	PI/2 BPSK	50	0	20.78	20.73	20.64	21.8
20	PI/2 BPSK	50	28	20.77	20.72	20.63	
20	PI/2 BPSK	50	56	20.77	20.71	20.61	
20	PI/2 BPSK	100	0	20.75	20.71	20.63	21.8
20	QPSK	1	1	20.74	20.69	20.60	21.8
20	QPSK	1	53	20.75	20.70	20.64	
20	QPSK	1	104	20.74	20.68	20.63	
20	QPSK	50	0	20.75	20.72	20.65	21.8
20	QPSK	50	28	20.75	20.70	20.61	
20	QPSK	50	56	20.76	20.71	20.63	
20	QPSK	100	0	20.65	20.60	20.54	21.8
20	16QAM	1	1	20.63	20.65	20.52	21.8
20	64QAM	1	1	20.62	20.61	20.54	21.8
20	256QAM	1	1	19.29	19.15	19.05	20.5
Channel				501500	507000	512500	limit
Frequency (MHz)				2507.5	2535	2562.5	(dBm)
15	PI/2 BPSK	1	1	20.74	20.67	20.68	21.8
15	QPSK	1	1	20.69	20.61	20.67	21.8
15	16QAM	1	1	20.61	20.65	20.69	21.8
15	64QAM	1	1	20.62	20.51	20.51	21.8
15	256QAM	1	1	19.27	19.15	19.05	20.5
Channel				501000	507000	513000	limit
Frequency (MHz)				2495	2535	2565	(dBm)
10	PI/2 BPSK	1	1	20.74	20.68	20.60	21.8
10	QPSK	1	1	20.67	20.68	20.68	21.8
10	16QAM	1	1	20.65	20.68	20.65	21.8
10	64QAM	1	1	20.67	20.53	20.58	21.8
10	256QAM	1	1	19.26	19.08	19.01	20.5
Channel				500500	507000	513500	limit
Frequency (MHz)				2502.5	2535	2567.5	(dBm)
5	PI/2 BPSK	1	1	20.69	20.67	20.61	21.8
5	QPSK	1	1	20.72	20.61	20.67	21.8
5	16QAM	1	1	20.62	20.62	20.64	21.8
5	64QAM	1	1	20.60	20.59	20.58	21.8
5	256QAM	1	1	19.27	19.13	19.03	20.5



n25							
Ant. 2							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				375000	376000	381000	
Frequency (MHz)				1860	1880	1905	
20	PI/2 BPSK	1	1	22.98	22.93	22.95	24.1
20	PI/2 BPSK	1	53	22.96	22.92	22.92	
20	PI/2 BPSK	1	104	22.94	22.90	22.94	
20	PI/2 BPSK	50	0	22.97	22.91	22.93	24.1
20	PI/2 BPSK	50	28	22.94	22.91	22.92	
20	PI/2 BPSK	50	56	22.92	22.90	22.92	
20	PI/2 BPSK	100	0	22.91	22.90	22.90	24.1
20	QPSK	1	1	22.95	22.92	22.92	24.9
20	QPSK	1	53	22.94	22.92	22.90	
20	QPSK	1	104	22.93	22.91	22.91	
20	QPSK	50	0	22.87	22.72	22.57	24.0
20	QPSK	50	28	22.78	22.81	22.58	
20	QPSK	50	56	22.83	22.76	22.55	
20	QPSK	100	0	22.73	22.67	22.54	24.0
20	16QAM	1	1	22.89	22.85	22.76	24.0
20	64QAM	1	1	21.33	21.24	21.17	22.5
20	256QAM	1	1	19.34	19.25	19.17	20.5
Channel				371500	376000	381500	Tune-up limit (dBm)
Frequency (MHz)				1857.5	1880	1907.5	
15	PI/2 BPSK	1	1	22.94	22.94	22.90	24.1
15	QPSK	1	1	22.92	22.92	22.91	24.9
15	16QAM	1	1	22.76	22.75	22.54	24.0
15	64QAM	1	1	21.26	21.22	21.10	22.5
15	256QAM	1	1	19.24	19.16	19.07	20.5
Channel				371000	376000	382000	Tune-up limit (dBm)
Frequency (MHz)				1855	1880	1910	
10	PI/2 BPSK	1	1	22.90	22.93	22.91	24.1
10	QPSK	1	1	22.93	22.92	22.93	24.1
10	16QAM	1	1	22.80	22.71	22.50	24.0
10	64QAM	1	1	21.27	21.18	21.16	22.5
10	256QAM	1	1	19.30	19.16	19.15	20.5
Channel				370500	376000	382500	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1880	1912.5	
5	PI/2 BPSK	1	1	22.92	22.95	22.92	24.1
5	QPSK	1	1	22.92	22.93	22.91	24.1
5	16QAM	1	1	22.77	22.68	22.45	24.0
5	64QAM	1	1	21.33	21.22	21.07	22.5
5	256QAM	1	1	19.29	19.17	19.08	20.5



n7							
Act 0							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dB)
Channel				502000	507000	512000	
Frequency (MHz)				2510	2535	2560	
20	PI/2 BPSK	1	1	23.88	23.84	23.75	24.8
20	PI/2 BPSK	1	53	23.86	23.83	23.72	
20	PI/2 BPSK	1	104	23.84	23.82	23.71	
20	PI/2 BPSK	50	0	23.84	23.76	23.75	
20	PI/2 BPSK	50	28	23.82	23.79	23.74	24.8
20	PI/2 BPSK	50	56	23.80	23.77	23.70	
20	PI/2 BPSK	100	0	23.80	23.76	23.70	
20	QPSK	1	1	23.86	23.82	23.67	24.8
20	QPSK	1	53	23.85	23.83	23.71	
20	QPSK	1	104	23.82	23.80	23.66	
20	QPSK	50	0	23.80	23.77	23.72	
20	QPSK	50	28	23.81	23.81	23.74	24.8
20	QPSK	50	56	23.83	23.79	23.71	
20	QPSK	100	0	22.79	22.76	22.62	
20	16QAM	1	1	22.85	22.81	22.74	24.0
20	64QAM	1	1	21.39	21.34	21.26	
20	256QAM	1	1	19.41	19.30	19.26	
Channel				501500	507000	512500	Tune-up limit (dB)
Frequency (MHz)				2507.5	2535	2562.5	
15	PI/2 BPSK	1	1	23.81	23.81	23.68	24.8
15	QPSK	1	1	23.79	23.74	23.69	
15	16QAM	1	1	22.66	22.73	22.60	
15	64QAM	1	1	21.22	21.09	21.06	
15	256QAM	1	1	19.30	19.20	19.03	20.5
Channel				501000	507000	513000	Tune-up limit (dB)
Frequency (MHz)				2505	2535	2565	
10	PI/2 BPSK	1	1	23.83	23.74	23.73	24.8
10	QPSK	1	1	23.85	23.76	23.65	
10	16QAM	1	1	22.76	22.69	22.62	
10	64QAM	1	1	21.17	21.15	21.11	
10	256QAM	1	1	19.35	19.25	19.06	20.5
Channel				500500	507000	513500	Tune-up limit (dB)
Frequency (MHz)				2502.5 <th>2535</th> <th>2567.5</th> <th></th>	2535	2567.5	
5	PI/2 BPSK	1	1	23.88	23.75	23.66	24.8
5	QPSK	1	1	23.80	23.83	23.69	
5	16QAM	1	1	22.73	22.77	22.52	
5	64QAM	1	1	21.18	21.18	21.02	
5	256QAM	1	1	19.36	19.24	19.01	20.5

n41							
Art 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				505202	518598	529200	
Frequency (MHz)				2546.01	2592.99	2640	
100	PI/2 BPSK	1	1	24.57	24.45	24.36	25.0
100	PI/2 BPSK	1	137	24.56	24.43	24.33	
100	PI/2 BPSK	1	271	24.55	24.36	24.37	
100	PI/2 BPSK	135	0	24.47	24.44	24.30	25.0
100	PI/2 BPSK	135	69	24.46	24.41	24.31	
100	PI/2 BPSK	135	138	24.46	24.42	24.29	
100	PI/2 BPSK	270	0	24.47	24.38	24.29	24.5
100	QPSK	1	1	24.50	24.36	24.29	25.0
100	QPSK	1	137	24.54	24.36	24.26	
100	QPSK	1	271	24.52	24.35	24.31	
100	QPSK	135	0	24.51	24.43	24.29	25.0
100	QPSK	135	69	24.52	24.39	24.25	
100	QPSK	135	138	24.55	24.29	24.35	
100	QPSK	270	0	23.56	23.45	23.39	24.0
100	16QAM	1	1	23.51	23.44	23.36	24.0
100	64QAM	1	1	21.46	21.34	21.26	22.5
100	256QAM	1	1	20.44	20.35	20.27	20.5
Channel				508200	518598	528996	Tune-up limit (dBm)
Frequency (MHz)				2541	2592.99	2644.96	
90	PI/2 BPSK	1	1	24.57	24.40	24.32	25.0
Channel				507204	518598	528996	Tune-up limit (dBm)
Frequency (MHz)				2636.02	2592.99	2649.99	
80	PI/2 BPSK	1	1	24.51	24.41	24.28	25.0
Channel				505200	518598	531996	Tune-up limit (dBm)
Frequency (MHz)				2599	2592.99	2659.98	
80	PI/2 BPSK	1	1	24.57	24.35	24.34	25.0
Channel				504204	518598	532998	Tune-up limit (dBm)
Frequency (MHz)				2621.02	2592.99	2664.99	
50	PI/2 BPSK	1	1	24.56	24.36	24.36	25.0
Channel				503202	518598	534000	Tune-up limit (dBm)
Frequency (MHz)				2616.01	2592.99	2670	
40	PI/2 BPSK	1	1	24.52	24.39	24.32	25.0
Channel				501204	518598	535998	Tune-up limit (dBm)
Frequency (MHz)				2606.02	2592.99	2679.99	
20	PI/2 BPSK	1	1	24.52	24.40	24.30	25.0
Channel				500700	518598	536496	Tune-up limit (dBm)
Frequency (MHz)				2603.5	2592.99	2682.48	
15	PI/2 BPSK	1	1	24.51	24.43	24.35	25.0
Channel				500202	518598	537000	Tune-up limit (dBm)
Frequency (MHz)				2501.01	2592.99	2685	
10	PI/2 BPSK	1	1	24.51	24.43	24.29	25.0

n41 HPUE							
Ant. 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				500202	518598	536993	
Frequency (MHz)				2546.01	2592.99	2640	
100	PI/2 BPSK	1	1	27.17	27.25	26.24	27.5
100	PI/2 BPSK	1	137	27.13	27.17	26.21	
100	PI/2 BPSK	1	271	27.12	27.16	26.15	
100	PI/2 BPSK	135	0	27.09	27.11	26.23	27.5
100	PI/2 BPSK	135	69	27.05	27.07	26.19	
100	PI/2 BPSK	135	138	27.06	27.09	26.22	
100	PI/2 BPSK	270	0	27.01	27.05	26.20	27.0
100	QPSK	1	1	27.10	27.24	26.16	27.5
100	QPSK	1	137	27.13	27.20	26.16	
100	QPSK	1	271	27.07	27.16	26.16	
100	QPSK	135	0	27.16	27.19	26.23	27.5
100	QPSK	135	69	27.13	27.17	26.24	
100	QPSK	135	138	27.16	27.24	26.19	
100	QPSK	270	0	26.15	26.24	25.19	26.5
100	16QAM	1	1	26.14	26.20	25.16	26.5
100	64QAM	1	1	25.17	25.16	24.17	25.0
100	256QAM	1	1	23.19	23.14	22.19	23.0
Channel				508200	518598	528996	limit (dBm)
Frequency (MHz)				2541	2592.99	2644.98	
90	PI/2 BPSK	1	1	27.05	27.19	26.20	27.5
Channel				507204	518598	529998	limit (dBm)
Frequency (MHz)				2536.02	2592.99	2649.99	
80	PI/2 BPSK	1	1	27.14	27.17	26.15	27.5
Channel				505200	518598	531996	limit (dBm)
Frequency (MHz)				2526	2592.99	2659.98	
60	PI/2 BPSK	1	1	27.09	27.20	26.24	27.5
Channel				504204	518598	532998	limit (dBm)
Frequency (MHz)				2521.02	2592.99	2664.99	
50	PI/2 BPSK	1	1	27.06	27.21	26.15	27.5
Channel				503202	518598	534000	limit (dBm)
Frequency (MHz)				2516.01	2592.99	2670	
40	PI/2 BPSK	1	1	27.03	27.16	26.21	27.5
Channel				501204	518598	535998	limit (dBm)
Frequency (MHz)				2506.02	2592.99	2679.99	
20	PI/2 BPSK	1	1	27.07	27.18	26.19	27.5
Channel				500700	518598	536998	limit (dBm)
Frequency (MHz)				2503.5	2592.99	2682.48	
15	PI/2 BPSK	1	1	27.03	27.23	26.15	27.5
Channel				500202	518598	537000	limit (dBm)
Frequency (MHz)				2501.01	2592.99	2685	
10	PI/2 BPSK	1	1	27.04	27.20	26.18	27.5

n41							
Act 0							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				509202	518598	528000	
Frequency (MHz)				2546.01	2592.99	2640	
100	PI/2 BPSK	1	1	24.62	24.75	24.47	25.0
100	PI/2 BPSK	1	137	24.58	24.71	24.43	
100	PI/2 BPSK	1	271	24.60	24.68	24.46	
100	PI/2 BPSK	135	0	24.55	24.69	24.42	
100	PI/2 BPSK	135	69	24.54	24.66	24.39	25.0
100	PI/2 BPSK	135	138	24.55	24.67	24.42	
100	PI/2 BPSK	270	0	24.32	24.46	24.27	
100	QPSK	1	1	24.61	24.67	24.47	
100	QPSK	1	137	24.48	24.70	24.40	25.0
100	QPSK	1	271	24.52	24.61	24.37	
100	QPSK	135	0	24.58	24.71	24.46	
100	QPSK	135	69	24.58	24.69	24.39	
100	QPSK	135	138	24.58	24.61	24.39	24.0
100	QPSK	270	0	23.55	23.69	23.48	
100	16QAM	1	1	23.54	23.66	23.42	
100	64QAM	1	1	22.04	22.14	21.97	
100	256QAM	1	1	20.08	20.14	19.94	20.5
Channel				508200	518598	528998	Tune-up limit (dBm)
Frequency (MHz)				2541	2592.99	2644.98	
90	PI/2 BPSK	1	1	24.60	24.72	24.39	25.0
Channel				507204	518598	528998	Tune-up limit (dBm)
Frequency (MHz)				2636.02	2592.99	2649.99	
80	PI/2 BPSK	1	1	24.56	24.71	24.45	25.0
Channel				505200	518598	531998	Tune-up limit (dBm)
Frequency (MHz)				2599	2592.99	2659.98	
80	PI/2 BPSK	1	1	24.60	24.71	24.44	25.0
Channel				504204	518598	532998	Tune-up limit (dBm)
Frequency (MHz)				2621.02	2592.99	2664.99	
50	PI/2 BPSK	1	1	24.54	24.75	24.41	25.0
Channel				503202	518598	534000	Tune-up limit (dBm)
Frequency (MHz)				2616.01	2592.99	2670	
40	PI/2 BPSK	1	1	24.58	24.75	24.44	25.0
Channel				501204	518598	535998	Tune-up limit (dBm)
Frequency (MHz)				2606.02	2592.99	2679.99	
20	PI/2 BPSK	1	1	24.52	24.75	24.41	25.0
Channel				500700	518598	536498	Tune-up limit (dBm)
Frequency (MHz)				2603.5	2592.99	2682.48	
15	PI/2 BPSK	1	1	24.58	24.74	24.46	25.0
Channel				500202	518598	537000	Tune-up limit (dBm)
Frequency (MHz)				2501.01	2592.99	2685	
10	PI/2 BPSK	1	1	24.53	24.68	24.44	25.0

n41 HPUE							
Act 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				505202	518598	529200	
Frequency (MHz)				2546.01	2592.99	2640	
100	PI/2 BPSK	1	1	24.14	24.03	23.96	25.2
100	PI/2 BPSK	1	137	24.13	24.01	23.92	
100	PI/2 BPSK	1	271	24.11	23.99	23.91	
100	PI/2 BPSK	135	0	23.96	23.90	23.77	25.2
100	PI/2 BPSK	135	69	23.94	23.79	23.74	
100	PI/2 BPSK	135	138	23.93	23.77	23.71	
100	PI/2 BPSK	270	0	23.91	23.77	23.64	25.2
100	QPSK	1	1	24.12	24.01	24.07	25.2
100	QPSK	1	137	24.11	23.96	24.06	
100	QPSK	1	271	24.11	23.93	24.05	
100	QPSK	135	0	24.11	24.00	24.05	25.2
100	QPSK	135	69	24.06	23.97	24.09	
100	QPSK	135	138	24.08	23.88	24.07	
100	QPSK	270	0	23.95	23.97	24.06	25.0
100	16QAM	1	1	23.92	23.96	24.05	25.0
100	64QAM	1	1	23.42	23.49	23.59	25.0
100	256QAM	1	1	21.70	21.73	22.02	23.5
Channel				508200	518598	528998	Tune-up limit (dBm)
Frequency (MHz)				2541	2592.99	2644.98	
90	PI/2 BPSK	0	0	23.41	23.27	23.35	25.2
Channel				507204	518598	528998	Tune-up limit (dBm)
Frequency (MHz)				2636.02	2592.99	2649.99	
80	PI/2 BPSK	1	1	23.39	23.26	23.35	25.2
Channel				505200	518598	531996	Tune-up limit (dBm)
Frequency (MHz)				2599	2592.99	2659.98	
80	PI/2 BPSK	1	1	23.40	23.25	23.34	25.2
Channel				504204	518598	532998	Tune-up limit (dBm)
Frequency (MHz)				2621.02	2592.99	2664.99	
50	PI/2 BPSK	1	1	23.39	23.31	23.35	25.2
Channel				503202	518598	534000	Tune-up limit (dBm)
Frequency (MHz)				2616.01	2592.99	2670	
40	PI/2 BPSK	1	1	23.38	23.28	23.35	25.2
Channel				501204	518598	535998	Tune-up limit (dBm)
Frequency (MHz)				2606.02	2592.99	2679.99	
20	PI/2 BPSK	1	1	23.38	23.22	23.40	25.2
Channel				500700	518598	536498	Tune-up limit (dBm)
Frequency (MHz)				2601.5	2592.99	2682.48	
15	PI/2 BPSK	1	1	23.39	23.30	23.35	25.2
Channel				500202	518598	537000	Tune-up limit (dBm)
Frequency (MHz)				2501.01	2592.99	2685	
10	PI/2 BPSK	1	1	23.41	23.24	23.39	25.2

n41 HPUE							
Act 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				505002	518598	529200	
Frequency (MHz)				2546.01	2592.99	2640	
100	PI/2 BPSK	1	1	24.14	24.03	23.96	24.4
100	PI/2 BPSK	1	137	24.13	24.01	23.92	
100	PI/2 BPSK	1	271	24.11	23.99	23.91	
100	PI/2 BPSK	135	0	23.96	23.90	23.77	
100	PI/2 BPSK	135	69	23.94	23.79	23.74	24.4
100	PI/2 BPSK	135	138	23.93	23.77	23.71	
100	PI/2 BPSK	270	0	23.91	23.77	23.64	
100	QPSK	1	1	24.12	24.01	24.07	
100	QPSK	1	137	24.11	23.96	24.06	24.4
100	QPSK	1	271	24.11	23.93	24.05	
100	QPSK	135	0	24.11	24.00	24.05	
100	QPSK	135	69	24.06	23.97	24.09	
100	QPSK	135	138	24.08	23.88	24.07	24.4
100	QPSK	270	0	23.95	23.97	24.06	
100	16QAM	1	1	23.92	23.96	24.05	
100	64QAM	1	1	23.42	23.49	23.59	
100	256QAM	1	1	21.70	21.73	22.02	23.5
Channel				508200	518598	528998	tune-up limit (dBm)
Frequency (MHz)				2541	2592.99	2644.98	
90	PI/2 BPSK	0	0	23.41	23.27	23.35	24.4
Channel				507204	518598	528998	tune-up limit (dBm)
Frequency (MHz)				2636.02	2592.99	2649.99	
80	PI/2 BPSK	1	1	23.39	23.26	23.35	24.4
Channel				505200	518598	531996	tune-up limit (dBm)
Frequency (MHz)				2599	2592.99	2659.98	
80	PI/2 BPSK	1	1	23.40	23.25	23.34	24.4
Channel				504204	518598	532998	tune-up limit (dBm)
Frequency (MHz)				2621.02	2592.99	2684.99	
50	PI/2 BPSK	1	1	23.39	23.31	23.35	24.4
Channel				503202	518598	534000	tune-up limit (dBm)
Frequency (MHz)				2616.01	2592.99	2670	
40	PI/2 BPSK	1	1	23.38	23.28	23.35	24.4
Channel				501204	518598	535998	tune-up limit (dBm)
Frequency (MHz)				2606.02	2592.99	2679.99	
20	PI/2 BPSK	1	1	23.38	23.22	23.40	24.4
Channel				500700	518598	536496	tune-up limit (dBm)
Frequency (MHz)				2603.5	2592.99	2682.48	
15	PI/2 BPSK	1	1	23.39	23.30	23.35	24.4
Channel				500202	518598	537000	tune-up limit (dBm)
Frequency (MHz)				2501.01	2592.99	2685	
10	PI/2 BPSK	1	1	23.41	23.24	23.39	24.4



Transmit Antenna							Ant 4			Ant 3			Ant 4+3(4)		Ant 4+3(3)		Ant 4+3	
Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %		Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit
2.4GHz WLAN	802.11b 1Mbps	1	2412	22.90	23.00	100.00	22.20	23.00	100.00	22.90	23.00	100.00	22.90	23.00	22.20	23.00	25.57	26.0
		6	2437	22.80	23.00		22.10	23.00		22.80	23.00		22.80	23.00	22.10	23.00	25.47	26.0
		11	2462	22.50	23.00		21.70	23.00		22.50	23.00		22.50	23.00	21.70	23.00	25.13	26.0
		12	2467	17.80	18.50		18.20	18.50		17.80	18.50		17.80	18.50	18.20	18.50	21.01	21.5
		13	2472	13.60	14.00		13.70	14.00		13.60	14.00		13.60	14.00	13.70	14.00	16.66	17.0
	802.11g 6Mbps	1	2412		18.50	97.64		18.50	98.11		18.50	98.11		18.50		18.50		21.5
		6	2437		22.00			22.00			22.00			22.00		22.00		25.0
		11	2462		18.00			18.00			18.00			18.00		18.00		21.0
		12	2467		12.50			12.50			12.50			12.50		12.50		15.5
		13	2472		2.00			-2.00			2.00			-2.00		-2.00		3.5
	802.11n-HT20 MCS0	1	2412		18.00	97.73		18.00	97.72		18.00	97.72		18.00		18.00		21.0
		6	2437	Not Required	22.50			22.50			22.50			22.50	Not Required	22.50		25.5
		11	2462	Not Required	17.50		Not Required	17.50		Not Required	17.50		Not Required	17.50	Not Required	17.50	Not Required	20.5
		12	2467	Not Required	10.50			10.50			10.50			10.50	Not Required	10.50		13.5
		13	2472	Not Required	2.00			-2.00			2.00			-2.00	Not Required	-2.00		3.5
	802.11ac-VHT20 MCS0	1	2412		18.00	97.98		18.00	97.97		18.00	97.97		18.00		18.00		21.0
		6	2437		22.50			22.50			22.50			22.50		22.50		25.5
		11	2462		17.50			17.50			17.50			17.50		17.50		20.5
		12	2467		10.50			10.50			10.50			10.50		10.50		13.5
		13	2472		2.00			-2.00			2.00			-2.00		-2.00		3.5

Transmit Antenna							Ant 4			Ant 3			Ant 4+3(4)		Ant 4+3(3)		Ant 4+3	
Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %		Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit
5.2GHz WLAN	802.11a 6Mbps	36	5180		18.50	98.11		18.50	97.88		18.50	97.88		18.50		18.50		21.5
		40	5200		18.50			18.50			18.50			18.50		18.50		21.5
		44	5220		18.50			18.50			18.50			18.50		18.50		21.5
		48	5240	Not Required	17.50		Not Required	17.50		Not Required	17.50		Not Required	17.50	Not Required	17.50	Not Required	20.5
	802.11n-HT20 MCS0	36	5180		18.50	97.47		18.50	97.97		18.50	97.97		18.50		18.50		21.5
		40	5200		18.50			18.50			18.50			18.50		18.50		21.5
		44	5220		18.50			18.50			18.50			18.50		18.50		21.5
		48	5240		18.50			18.50			18.50			18.50		18.50		21.5
	802.11n-HT40 MCS0	36	5190	12.00	13.00	95.45	12.70	13.00	95.45	12.00	13.00	95.45	12.00	13.00	12.70	13.00	15.37	16.0
		46	5230	20.30	21.00		19.90	21.00		20.30	21.00		20.30	21.00	19.90	21.00	23.11	24.0
	802.11ac-VHT20 MCS0	36	5180		18.50	97.93		18.50	97.49		18.50	97.49		18.50		18.50		21.5
		40	5200		18.50			18.50			18.50			18.50		18.50		21.5
		44	5220		18.50			18.50			18.50			18.50		18.50		21.5
		48	5240	Not Required	18.50		Not Required	18.50		Not Required	18.50		Not Required	18.50	Not Required	18.50	Not Required	21.5
	802.11ac-VHT40 MCS0	38	5190		13.00	95.48		13.00	95.96		13.00	95.96		13.00		13.00		16.0
		46	5230		21.00			21.00			21.00			21.00		21.00		24.0
	802.11ac-VHT80 MCS0	42	5210		12.50	92.06		12.50	92.06		12.50	92.06		12.50		12.50		15.5

Transmit Antenna							Ant 4			Ant 3			Ant 4+3(4)		Ant 4+3(3)		Ant 4+3	
Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %		Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit
5.3GHz WLAN	802.11a 6Mbps	52	5260		17.50	98.11		17.50	97.88		17.50	97.88		17.50		17.50		20.5
		56	5280		17.50			17.50			17.50			17.50		17.50		20.5
		60	5300		17.50			17.50			17.50			17.50		17.50		20.5
		64	5320		17.50			17.50			17.50			17.50		17.50		20.5
	802.11n-HT20 MCS0	52	5260		18.00	97.47		18.00	97.97		18.00	97.97		18.00		18.00		21.0
		56	5280		18.00			18.00			18.00			18.00		18.00		21.0
		60	5300		18.00			18.00			18.00			18.00		18.00		21.0
		64	5320		18.00			18.00			18.00			18.00		18.00		21.0
	802.11n-HT40 MCS0	54	5270	20.30	21.00	95.45	19.90	21.00	95.45	20.30	21.00	95.45	20.30	21.00	19.90	21.00	23.11	24.0
		62	5310	13.50	13.50		12.50	13.50		13.50	13.50		13.50	13.50	12.50	13.50	16.04	16.5
	802.11ac-VHT20 MCS0	52	5260		18.00	97.93		18.00	97.49		18.00	97.49		18.00		18.00		21.0
		56	5280		18.00			18.00			18.00			18.00		18.00		21.0
		60	5300		18.00			18.00			18.00			18.00		18.00		21.0
		64	5320	Not Required	18.00		Not Required	18.00		Not Required	18.00		Not Required	18.00	Not Required	18.00	Not Required	21.0
	802.11ac-VHT40 MCS0	54	5270		21.00	95.48		21.00	95.96		21.00	95.96		21.00		21.00		24.0
		62	5310		13.50			13.50			13.50			13.50		13.50		16.5
	802.11ac-VHT80 MCS0	58	5290		12.00	92.06		12.00	92.06		12.00	92.06		12.00		12.00		15.0



	Transmit Antenna				Ant 4		Ant 3		Ant 4+3(4)		Ant 4+3(3)		Ant 4+3								
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %					
5 GHz WLAN	802.11a 6Mbps	100	5500	Not Required	18.00	97.88	Not Required	18.00	97.88	Not Required	18.00	Not Required	18.00	98.11							
		116	5580		18.00			18.00			18.00		18.00		18.00						
		124	5620		18.00			18.00			18.00		18.00		18.00						
		132	5660		18.00			18.00			18.00		18.00		18.00						
		140	5700		18.00			18.00			18.00		18.00		18.00						
		144	5720		18.00			18.00			18.00		18.00		18.00						
	802.11n-HT20 MCS0	100	5500	Not Required	18.00	97.97		18.00	97.97		18.00	97.97		18.00	97.72						
		116	5580		18.00			18.00			18.00			18.00		18.00					
		124	5620		18.00			18.00			18.00			18.00		18.00					
		132	5660		18.00			18.00			18.00			18.00		18.00					
		140	5700		18.00			18.00			18.00			18.00		18.00					
		144	5720		18.00			18.00			18.00			18.00		18.00					
	802.11n-HT40 MCS0	102	5510	Not Required	16.00	95.45		16.00	95.45		16.00	95.45		16.00	94.95						
		110	5550		21.00			21.00			21.00			21.00		21.00					
		126	5630		21.00			21.00			21.00			21.00		21.00					
		134	5670		21.00			21.00			21.00			21.00		21.00					
	802.11ac-VHT20 MCS0	142	5710	Not Required	20.50	97.49		20.50	97.49		20.50	97.49		20.50	97.98						
		100	5500		18.00			18.00			18.00			18.00		18.00					
		116	5580		18.00			18.00			18.00			18.00		18.00					
		124	5620		18.00			18.00			18.00			18.00		18.00					
		132	5660		18.00			18.00			18.00			18.00		18.00					
		140	5700		18.00			18.00			18.00			18.00		18.00					
	802.11ac-VHT40 MCS0	144	5720	Not Required	18.00	95.96		18.00	95.96		18.00	95.96		18.00	95.48						
		102	5510		16.00			16.00			16.00			16.00		16.00					
		110	5550		21.00			21.00			21.00			21.00		21.00					
		126	5630		21.00			21.00			21.00			21.00		21.00					
		134	5670		20.50			20.50			20.50			20.50		20.50					
		142	5710		20.50			20.50			20.50			20.50		20.50					
	802.11ac-VHT80 MCS0	106	5530	12.80	13.00	92.06		12.90	92.06		13.00	92.06		12.80	13.00	12.90	13.00	15.86	16.0		
		122	5610	19.90	21.00			20.80			21.00			23.38	24.0						
		138	5690	19.80	20.50			20.20			20.50			19.80	20.50	20.20	20.50	23.01	23.5		

Transmit Antenna				Ant 4			Ant 3			Ant 4+3(4)		Ant 4+3(3)		Ant 4+3		
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.8GHz WLAN	802.11a 6Mbps	149	5745	Not Required	21.00	98.11	Not Required	21.00	97.88	Not Required	21.00	Not Required	21.00	Not Required	24.00	98.11
		157	5785		21.00			21.00			21.00		24.00			
		165	5825		21.00			21.00			21.00		24.00			
	802.11n-HT20 MCS0	149	5745	21.00	21.00	21.00		24.00	97.72							
		157	5785	20.50	20.50	20.50		23.5								
		165	5825	20.50	20.50	20.50		23.5								
	802.11n-HT40 MCS0	151	5755	Not Required	21.00	95.45		21.00	95.45		Not Required	21.00	Not Required	24.00	94.95	
		159	5795		21.00	21.00		21.00	24.00							
	802.11ac-VHT20 MCS0	149	5745	Not Required	21.00	97.93		21.00	97.49		21.00	97.49	21.00	97.98		
		157	5785		20.50			20.50			20.50		23.5			
		165	5825		20.50			20.50			20.50		23.5			
	802.11ac-VHT40 MCS0	151	5755	Not Required	21.00	95.48		21.00	95.96		21.00	95.96	21.00	95.48		
		159	5795		21.00			21.00			21.00		24.00			
	802.11ac-VHT80 MCS0	155	5775	20.40	21.00	92.06		20.10	21.00		92.06	20.40	21.00	20.10	21.00	23.26



Transmit Antenna							Ant 4			Ant 3			Ant 4+3(4)		Ant 4+3(3)		Ant 4+3	
Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %		Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit
2.4GHz WLAN	802.11b 1Mbps	1	2412	15.80	16.00	100.00	17.30	17.50	100.00	Not Required	16.00	16.00	Not Required	17.50	17.50	Not Required	19.8	100.00
		6	2437	15.80	16.00		17.10	17.50			16.00			17.50			19.8	
		11	2462	15.80	16.00		17.30	17.50			16.00			17.50			19.8	
		12	2467	15.50	16.00		17.00	17.50			16.00			17.50			19.8	
		13	2472	15.80	16.00		17.40	17.50			16.00			17.50			19.8	
	802.11g 6Mbps	1	2412	Not Required	16.00	97.64	Not Required	17.50	98.11	Not Required	16.00	16.00	Not Required	17.50	17.50	Not Required	19.8	98.11
		6	2437		16.00			17.50			16.00			17.50			19.8	
		11	2462		16.00			17.50			16.00			17.50			19.8	
		12	2467		12.50			12.50			12.50			12.50			15.5	
		13	2472		2.00			0.00			2.00			0.00			4.1	
	802.11n-HT20 MCS0	1	2412	Not Required	16.00	97.73	Not Required	17.50	97.72	Not Required	16.00	16.00	Not Required	17.50	17.50	Not Required	19.8	97.96
		6	2437		16.00			17.50			16.00			17.50			19.8	
		11	2462		16.00			17.50			16.00			17.50			19.8	
		12	2467		11.00			10.50			11.00			10.50			13.8	
		13	2472		2.00			0.00			2.00			0.00			4.1	
	802.11ac-VHT20 MCS0	1	2412	Not Required	16.00	97.98	Not Required	17.50	97.97	Not Required	16.00	16.00	Not Required	17.50	17.50	Not Required	19.8	97.97
		6	2437		16.00			17.50			16.00			17.50			19.8	
		11	2462		16.00			17.50			16.00			17.50			19.8	
		12	2467		11.00			11.00			11.00			11.00			14.0	
		13	2472		2.00			0.00			2.00			0.00			4.1	

Transmit Antenna							Ant 4			Ant 3			Ant 4+3(4)		Ant 4+3(3)		Ant 4+3	
Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %		Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit
5.2GHz WLAN	802.11a 6Mbps	36	5180	Not Required	9.50	97.87	Not Required	11.50	97.87	Not Required	9.50	9.50	Not Required	11.50	11.50	Not Required	13.6	97.87
		40	5200		9.50			11.50			9.50			11.50			13.6	
		44	5220		9.50			11.50			9.50			11.50			13.6	
	802.11n-HT20 MCS0	48	5240	Not Required	9.50	96.96	Not Required	11.50	96.96	Not Required	9.50	9.50	Not Required	11.50	11.50	Not Required	13.6	96.96
		36	5180		9.50			11.50			9.50			11.50			13.6	
		40	5200		9.50			11.50			9.50			11.50			13.6	
	802.11n-HT40 MCS0	44	5220	Not Required	9.50	95.95	Not Required	11.50	95.95	Not Required	9.50	9.50	Not Required	11.50	11.50	Not Required	13.6	95.95
		36	5180		9.50			11.50			9.50			11.50			13.6	
		46	5230		9.50			11.50			9.50			11.50			13.6	
	802.11ac-VHT20 MCS0	36	5180	Not Required	9.50	97.22	Not Required	11.50	97.22	Not Required	9.50	9.50	Not Required	11.50	11.50	Not Required	13.6	97.22
		40	5200		9.50			11.50			9.50			11.50			13.6	
		44	5220		9.50			11.50			9.50			11.50			13.6	
	802.11ac-VHT40 MCS0	48	5240	Not Required	9.50	95.47	Not Required	11.50	95.47	Not Required	9.50	9.50	Not Required	11.50	11.50	Not Required	13.6	95.47
		38	5190		9.50			11.50			9.50			11.50			13.6	
		46	5230		9.50			11.50			9.50			11.50			13.6	
	802.11ac-VHT80 MCS0	42	5210	9.00	9.50	92.07	11.31	11.50	92.00	Not Required	9.50	9.50	Not Required	11.50	11.50	Not Required	13.6	92.00

Transmit Antenna							Ant 4			Ant 3			Ant 4+3(4)		Ant 4+3(3)		Ant 4+3	
Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %		Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit
5.3GHz WLAN	802.11a 6Mbps	52	5260	Not Required	9.50	97.87	Not Required	11.50	97.87	Not Required	9.50	9.50	Not Required	11.50	11.50	Not Required	13.6	97.87
		56	5280		9.50			11.50			9.50			11.50			13.6	
		60	5300		9.50			11.50			9.50			11.50			13.6	
		64	5320		9.50			11.50			9.50			11.50			13.6	
	802.11n-HT20 MCS0	52	5260	Not Required	9.50	96.96	Not Required	11.50	96.96	Not Required	9.50	9.50	Not Required	11.50	11.50	Not Required	13.6	96.96
		56	5280		9.50			11.50			9.50			11.50			13.6	
		60	5300		9.50			11.50			9.50			11.50			13.6	
		64	5320		9.50			11.50			9.50			11.50			13.6	
	802.11n-HT40 MCS0	54	5270	Not Required	9.50	95.95	Not Required	11.50	95.95	Not Required	9.50	9.50	Not Required	11.50	11.50	Not Required	13.6	95.95
		62	5310		9.50			11.50			9.50			11.50			13.6	
		52	5260		9.50			11.50			9.50			11.50			13.6	
		56	5280		9.50			11.50			9.50			11.50			13.6	
	802.11ac-VHT20 MCS0	60	5300	Not Required	9.50	97.22	Not Required	11.50	97.22	Not Required	9.50	9.50	Not Required	11.50	11.50	Not Required	13.6	97.22
		64	5320		9.50			11.50			9.50			11.50			13.6	
		54	5270		9.50			11.50			9.50			11.50			13.6	
		62	5310		9.50			11.50			9.50			11.50			13.6	
	802.11ac-VHT40 MCS0	54	5270	Not Required	9.50	95.47	Not Required	11.50	95.47	Not Required	9.50	9.50	Not Required	11.50	11.50	Not Required	13.6	95.47
		62	5310		9.50			11.50			9.50			11.50			13.6	
	802.11ac-VHT80 MCS0	58	5290	9.30	9.50	92.07	11.49	11.50	92.00	Not Required	9.50	9.50	Not Required	11.50	11.50	Not Required	13.6	92.00



5.5GHz WLAN	Transmit Antenna				Ant 4		Ant 3			Ant 4+3(4)		Ant 4+3(3)		Ant 4+3					
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %			
	802.11a 6Mbps	100	5500	Not Required	9.00	97.87	Not Required	12.00	97.87	Not Required	9.00	12.00	Not Required	12.00	13.8	97.87			
		116	5580		9.00			12.00			9.00			12.00			13.8		
		124	5620		9.00			12.00			9.00			12.00			13.8		
		132	5660		9.00			12.00			9.00			12.00			13.8		
		140	5700		9.00			12.00			9.00			12.00			13.8		
		144	5720		9.00			12.00			9.00			12.00			13.8		
	802.11n-HT20 MCS0	100	5500		9.00	96.96		12.00	96.96		9.00	12.00		12.00	13.8	96.96			
		116	5580		9.00			12.00			9.00			12.00	13.8				
		124	5620		9.00			12.00			9.00			12.00	13.8				
		132	5660		9.00			12.00			9.00			12.00	13.8				
		140	5700		9.00			12.00			9.00			12.00	13.8				
		144	5720		9.00			12.00			9.00			12.00	13.8				
	802.11n-HT40 MCS0	102	5510		9.00	95.95		12.00	95.95		9.00	12.00		12.00	13.8	95.95			
		110	5550		9.00			12.00			9.00			12.00	13.8				
		126	5630		9.00			12.00			9.00			12.00	13.8				
		134	5670		9.00			12.00			9.00			12.00	13.8				
	802.11ac-VHT20 MCS0	142	5710		9.00	97.22		12.00	97.22		9.00	12.00		12.00	13.8	97.22			
		100	5500		9.00			12.00			9.00			12.00	13.8				
		116	5580		9.00			12.00			9.00			12.00	13.8				
		124	5620		9.00			12.00			9.00			12.00	13.8				
		132	5660		9.00			12.00			9.00			12.00	13.8				
		140	5700		9.00			12.00			9.00			12.00	13.8				
	802.11ac-VHT40 MCS0	144	5720		9.00	95.47		12.00	95.47		9.00	12.00		12.00	13.8	95.47			
		102	5510		9.00			12.00			9.00			12.00	13.8				
		110	5550		9.00			12.00			9.00			12.00	13.8				
		126	5630		9.00			12.00			9.00			12.00	13.8				
	802.11ac-VHT80 MCS0	134	5670		9.00	92.07		12.00	92.07		9.00	12.00		12.00	13.8	90.19			
		142	5710		9.00			12.00			9.00			12.00	13.8				
		106	5530	8.50	9.00	11.88	12.00	9.00	12.00	12.00	13.8								
		122	5610	8.90	9.00	11.68	12.00	9.00	12.00	12.00	13.8								
138		5690	8.90	9.00	11.04	12.00	9.00	12.00	12.00	13.8									

5.8GHz WLAN	Transmit Antenna				Ant 4		Ant 3			Ant 4+3(4)		Ant 4+3(3)		Ant 4+3				
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %		
	802.11a 6Mbps	149	5745	Not Required	9.00	97.87	Not Required	12.50	97.87	Not Required	9.00	12.50		12.50	14.1	97.87		
		157	5785		9.00			12.50			9.00			12.50			14.1	
		165	5825		9.00			12.50			9.00			12.50			14.1	
	802.11n-HT20 MCS0	149	5745		9.00	96.96		12.50	96.96		9.00	12.50		12.50	14.1	96.96		
		157	5785		9.00			12.50			9.00			12.50	14.1			
		165	5825		9.00			12.50			9.00			12.50	14.1			
	802.11n-HT40 MCS0	151	5755		9.00	95.95		12.50	95.95		9.00	12.50		12.50	14.1	95.95		
		159	5795		9.00			12.50			9.00			12.50	14.1			
		149	5745		9.00			12.50			9.00			12.50	14.1			
	802.11ac-VHT20 MCS0	157	5785		9.00	97.22		12.50	97.22		9.00	12.50		12.50	14.1	97.22		
		165	5825		9.00			12.50			9.00			12.50	14.1			
		151	5755		9.00			12.50			9.00			12.50	14.1			
	802.11ac-VHT40 MCS0	159	5795		9.00	95.47		12.50	95.47		9.00	12.50		12.50	14.1	95.47		
		151	5755		9.00			12.50			9.00			12.50	14.1			
		149	5745		9.00			12.50			9.00			12.50	14.1			
	802.11ac-VHT80 MCS0	155	5775	8.88	9.00	92.07		12.12	12.50		92.00	9.00	12.50		12.50	14.1	90.19	



Transmit Antenna							Ant 4			Ant 3			Ant 4+3(4)		Ant 4+3(3)		Ant 4+3	
Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %
2.4GHz WLAN	802.11b 1Mbps	1	2412	22.90	23.00	100.00	22.20	23.00	100.00	22.90	23.00	22.20	23.00	22.20	23.00	25.57	26.0	100.00
		6	2437	22.80	23.00													
		11	2462	22.50	23.00													
		12	2467	17.80	18.50													
		13	2472	13.60	14.00													
	802.11g 6Mbps	1	2412	Not Required	18.50	97.64	18.50	18.50	98.11	18.50	18.50	18.50	18.50	18.50	18.50	21.5	25.0	98.11
		6	2437		22.00													
		11	2462		18.00													
		12	2467		12.50													
		13	2472		2.00													
	802.11n-HT20 MCS0	1	2412	Not Required	18.00	97.73	22.50	18.00	97.72	22.50	18.00	Not Required	18.00	Not Required	18.00	21.0	25.5	97.96
		6	2437		22.50													
		11	2462		17.50													
		12	2467		10.50													
		13	2472		2.00													
	802.11ac-VHT20 MCS0	1	2412	Not Required	18.00	97.98	22.50	18.00	97.97	22.50	18.00	Not Required	22.50	Not Required	22.50	25.5	26.0	97.97
		6	2437		22.50													
		11	2462		17.50													
		12	2467		10.50													
		13	2472		2.00													

Transmit Antenna							Ant 4			Ant 3			Ant 4+3(4)		Ant 4+3(3)		Ant 4+3	
Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.2GHz WLAN	802.11a 6Mbps	36	5180	Not Required	18.50	98.11	18.50	18.50	97.88	18.50	18.50	18.50	18.50	18.50	18.50	21.5	25.5	98.11
		40	5200		18.50													
		44	5220		18.50													
		48	5240		17.50													
	802.11n-HT20 MCS0	36	5180	Not Required	18.50	97.47	18.50	18.50	97.97	18.50	18.50	18.50	18.50	18.50	18.50	21.5	25.5	97.72
		40	5200		18.50													
		44	5220		18.50													
		48	5240		18.50													
	802.11n-HT40 MCS0	36	5190	Not Required	12.00	95.45	12.70	13.00	95.45	12.70	13.00	12.70	13.00	12.70	13.00	15.37	16.0	94.95
		46	5230		20.30													
	802.11ac-VHT20 MCS0	36	5180	Not Required	18.50	97.93	18.50	18.50	97.49	18.50	18.50	18.50	18.50	18.50	18.50	21.5	25.5	97.98
		40	5200		18.50													
		44	5220		18.50													
		48	5240		18.50													
	802.11ac-VHT40 MCS0	38	5190	Not Required	13.00	95.48	13.00	20.50	95.96	13.00	20.50	13.00	20.50	13.00	20.50	16.0	23.8	95.48
		46	5230		21.00													
	802.11ac-VHT80 MCS0	42	5210	Not Required	12.50	92.06	12.50	12.50	92.06	12.50	12.50	12.50	12.50	12.50	12.50	15.5	22.00	

	Transmit Antenna				Ant 4		Ant 3			Ant 4+3(4)		Ant 4+3(3)		Ant 4+3		
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.3GHz WLAN	802.11a 6Mbps	52	5260	Not Required	17.50	98.11	17.50	17.50	97.88	17.50	17.50	17.50	17.50	17.50	20.5	98.11
		56	5280		17.50											
		60	5300		17.50											
		64	5320		17.50											
	802.11n-HT20 MCS0	52	5260	Not Required	18.00	97.47	18.00	18.00	97.97	18.00	18.00	18.00	18.00	18.00	21.0	97.72
		56	5280		18.00											
		60	5300		18.00											
		64	5320		18.00											
	802.11n-HT40 MCS0	54	5270	20.30	21.00	95.45	19.90	21.00	95.45	20.30	21.00	19.90	21.00	23.11	24.0	94.95
		62	5310	13.50	13.50		12.50	13.50		13.50	12.50	13.50	16.04	16.5		
	802.11ac-VHT20 MCS0	52	5260	Not Required	18.00	97.93	18.00	18.00	97.49	18.00	18.00	18.00	18.00	18.00	21.0	97.98
		56	5280		18.00											
		60	5300		18.00											
		64	5320		18.00											
	802.11ac-VHT40 MCS0	54	5270	Not Required	21.00	95.48	21.00	21.00	95.96	21.00	21.00	21.00	21.00	21.00	24.0	95.48
		62	5310		13.50		13.50	13.50		13.50	13.50	16.5				
802.11ac-VHT80 MCS0	58	5290	12.00	92.06	12.00	92.06	12.00	92.06	12.00	92.06	12.00	92.06	12.00	15.0	92.00	



Transmit Antenna				Ant 4			Ant 3			Ant 4+3(4)		Ant 4+3(3)		Ant 4+3					
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %			
5.5GHz WLAN	802.11a 6Mbps	100	5500	Not Required	18.00	97.88	18.00	97.88	18.00	97.88	18.00	Not Required	18.00	Not Required	18.00	98.11			
		116	5580		18.00		18.00		18.00		18.00		18.00		21.0				
		124	5620		18.00		18.00		18.00		18.00		18.00		21.0				
		132	5660		18.00		18.00		18.00		18.00		18.00		21.0				
		140	5700		18.00		18.00		18.00		18.00		18.00		21.0				
		144	5720		18.00		18.00		18.00		18.00		18.00		21.0				
	802.11n-HT20 MCS0	100	5500		18.00	97.97		18.00	97.97		18.00	97.97		18.00	Not Required	18.00	Not Required	21.0	97.72
		116	5580		18.00			18.00			18.00			18.00		18.00		21.0	
		124	5620		18.00			18.00			18.00			18.00		18.00		21.0	
		132	5660		18.00			18.00			18.00			18.00		18.00		21.0	
		140	5700		18.00			18.00			18.00			18.00		18.00		21.0	
		144	5720		18.00			18.00			18.00			18.00		18.00		21.0	
	802.11n-HT40 MCS0	102	5510		16.00	95.45		16.00	95.45		16.00	95.45		16.00	Not Required	16.00	Not Required	19.0	94.95
		110	5550		20.00			20.00			20.00			20.00		20.00		23.5	
		126	5630		20.00			20.00			20.00			20.00		20.00		23.5	
		134	5670		20.00			20.00			20.00			20.00		20.00		23.5	
		142	5710		20.00			20.00			20.00			20.00		20.00		23.3	
		100	5500		18.00			18.00			18.00			18.00		18.00		21.0	
	802.11ac-VHT20 MCS0	116	5580		18.00	97.49		18.00	97.49		18.00	97.49		18.00	Not Required	18.00	Not Required	21.0	97.98
		124	5620		18.00			18.00			18.00			18.00		18.00		21.0	
		132	5660		18.00			18.00			18.00			18.00		18.00		21.0	
		140	5700		18.00			18.00			18.00			18.00		18.00		21.0	
		144	5720		18.00			18.00			18.00			18.00		18.00		21.0	
		102	5510		16.00			16.00			16.00			16.00		16.00		19.0	
	802.11ac-VHT40 MCS0	110	5550		20.00	95.96		20.00	95.96		20.00	95.96		20.00	Not Required	20.00	Not Required	23.5	95.48
		126	5630		20.00			20.00			20.00			20.00		20.00		23.5	
		134	5670		20.00			20.00			20.00			20.00		20.00		23.3	
		142	5710		20.00			20.00			20.00			20.00		20.00		23.3	
	802.11ac-VHT80 MCS0	106	5530		12.80	13.00	12.90	13.00	92.06	12.80	13.00	12.90	13.00	15.86	16.0	92.00			
		122	5610		19.90	20.00	20.80	21.00		19.90	20.00	20.80	21.00	23.38	23.5				
			138		5690	19.80	20.00	20.20	20.50		19.80	20.00	20.20	20.50	23.01	23.3			
Transmit Antenna				Ant 4			Ant 3			Ant 4+3(4)		Ant 4+3(3)		Ant 4+3					
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %			
5.8GHz WLAN	802.11a 6Mbps	149	5745	Not Required	21.00	98.11	21.00	97.88	21.00	97.88	21.00	Not Required	21.00	Not Required	21.00	98.11			
		157	5785		21.00		21.00		21.00		21.00		21.00		24.0				
		165	5825		21.00		21.00		21.00		21.00		21.00		24.0				
	802.11n-HT20 MCS0	149	5745		21.00	97.47		21.00	97.97		21.00	97.97		21.00	Not Required	21.00	Not Required	24.0	97.72
		157	5785		20.50			20.50			20.50			20.50		20.50		23.5	
		165	5825		20.50			20.50			20.50			20.50		20.50		23.5	
	802.11n-HT40 MCS0	151	5755		21.00	95.45		21.00	95.45		21.00	95.45		21.00	Not Required	21.00	Not Required	24.0	94.95
		159	5795		21.00			21.00			21.00			21.00		21.00		24.0	
	802.11ac-VHT20 MCS0	149	5745		21.00	97.93		21.00	97.49		21.00	97.49		21.00	Not Required	21.00	Not Required	24.0	97.98
		157	5785		20.50			20.50			20.50			20.50		20.50		23.5	
		165	5825		20.50			20.50			20.50			20.50		20.50		23.5	
	802.11ac-VHT40 MCS0	151	5755		21.00	95.48		21.00	95.96		21.00	95.96		21.00	Not Required	21.00	Not Required	24.0	95.48
		159	5795		21.00			21.00			21.00			21.00		21.00		24.0	
	802.11ac-VHT80 MCS0	155	5775		20.40	92.06		20.10	92.06		20.40	92.06		20.10	Not Required	20.40	Not Required	23.26	92.00



Mode	Channel	Frequency (MHz)	Average power (dBm)		
			1Mbps	2Mbps	3Mbps
BR / EDR	CH 00	2402	18.30	17.53	17.50
	CH 39	2441	18.00	17.64	17.50
	CH 78	2480	18.03	18.36	18.31
Tune-up Limit			19.5	19.5	19.5

Mode	Channel	Frequency (MHz)	Average power (dBm)	
			1Mbps	2Mbps
LE	CH 00	2402	18.10	17.85
	CH 19	2440	17.60	17.67
	CH 39	2480	17.80	17.90
Tune-up Limit			19	19



Mode	Channel	Frequency (MHz)	Average power (dBm)		
			1Mbps	2Mbps	3Mbps
BR / EDR	CH 00	2402	11.75	11.76	11.62
	CH 39	2441	11.86	11.79	11.71
	CH 78	2480	11.72	11.68	11.74
Tune-up Limit			12	12	12

Mode	Channel	Frequency (MHz)	Average power (dBm)	
			1Mbps	2Mbps
LE	CH 00	2402	11.70	11.50
	CH 19	2440	11.90	11.80
	CH 39	2480	11.90	11.80
Tune-up Limit			12	12



Mode	Channel	Frequency (MHz)	Average power (dBm)		
			1Mbps	2Mbps	3Mbps
BR / EDR	CH 00	2402	18.30	17.53	17.50
	CH 39	2441	18.00	17.64	17.50
	CH 78	2480	18.03	18.36	18.31
Tune-up Limit			19.5	19.5	19.5

Mode	Channel	Frequency (MHz)	Average power (dBm)	
			1Mbps	2Mbps
LE	CH 00	2402	18.10	17.85
	CH 19	2440	17.60	17.67
	CH 39	2480	17.80	17.90
Tune-up Limit			19	19