



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	31.70	32.18	31.85	33.70	22.70	23.18	22.85	24.70
GPRS 1 Tx slot	31.71	32.22	31.90	33.70	22.71	23.22	22.90	24.70
GPRS 2 Tx slots	30.44	30.86	30.42	32.00	24.44	24.86	24.42	26.00
GPRS 3 Tx slots	29.37	29.41	29.20	31.00	25.11	25.15	24.94	26.74
GPRS 4 Tx slots	28.26	28.31	28.08	30.00	25.26	25.31	25.08	27.00
EDGE 1 Tx slot	26.75	26.94	26.69	28.00	17.75	17.94	17.69	19.00
EDGE 2 Tx slots	25.49	25.69	25.57	27.00	19.49	19.69	19.57	21.00
EDGE 3 Tx slots	25.41	25.56	25.46	27.00	21.15	21.30	21.20	22.74
EDGE 4 Tx slots	23.61	23.75	23.36	25.00	20.61	20.75	20.36	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	29.85	30.11	29.94	31.00	20.85	21.11	20.94	22.00
GPRS 1 Tx slot	29.90	30.16	29.97	31.00	20.90	21.16	20.97	22.00
GPRS 2 Tx slots	28.60	28.65	28.49	29.50	22.60	22.65	22.49	23.50
GPRS 3 Tx slots	28.25	28.31	27.76	29.00	23.99	24.05	23.50	24.74
GPRS 4 Tx slots	26.63	27.03	26.33	28.00	23.63	24.03	23.33	25.00
EDGE 1 Tx slot	25.28	25.04	25.00	27.00	16.28	16.04	16.00	18.00
EDGE 2 Tx slots	25.16	24.72	24.73	26.00	19.16	18.72	18.73	20.00
EDGE 3 Tx slots	24.05	23.80	23.71	25.00	19.79	19.54	19.45	20.74
EDGE 4 Tx slots	22.97	22.97	22.28	24.00	19.97	19.97	19.28	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	32.69	32.71	32.73	33.70	23.59	23.86	23.55	24.70
GPRS 1 Tx slot	32.69	32.80	32.76	33.70	23.67	23.94	23.62	24.70
GPRS 2 Tx slots	31.06	31.11	30.73	32.00	25.11	25.12	24.76	26.00
GPRS 3 Tx slots	29.78	30.05	29.18	31.00	25.46	25.61	25.04	26.74
GPRS 4 Tx slots	28.61	28.90	28.01	30.00	25.60	25.74	25.15	27.00
EDGE 1 Tx slot	27.25	27.04	27.05	28.00	18.23	18.05	18.08	19.00
EDGE 2 Tx slots	25.78	25.90	25.77	27.00	19.77	19.99	19.86	21.00
EDGE 3 Tx slots	25.49	25.73	25.74	27.00	21.35	21.56	21.40	22.74
EDGE 4 Tx slots	24.68	24.91	24.55	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	30.13	30.36	30.13	31.00	21.07	21.28	21.09	22.00
GPRS 1 Tx slot	29.76	30.03	29.86	31.00	20.83	21.09	20.91	22.00
GPRS 2 Tx slots	28.63	28.52	28.38	29.50	22.53	22.58	22.43	23.50
GPRS 3 Tx slots	28.26	28.22	27.70	29.00	23.91	23.98	23.43	24.74
GPRS 4 Tx slots	26.51	27.04	26.15	28.00	23.55	23.94	23.23	25.00
EDGE 1 Tx slot	25.15	25.03	25.16	27.00	16.16	16.03	16.07	18.00
EDGE 2 Tx slots	25.10	24.95	24.66	26.00	19.05	18.86	18.70	20.00
EDGE 3 Tx slots	23.93	23.60	23.57	25.00	19.76	19.39	19.24	20.74
EDGE 4 Tx slots	23.05	22.84	22.20	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	32.55	32.83	32.49	33.70	23.59	23.86	23.55	24.70
GPRS 1 Tx slot	32.62	32.84	32.59	33.70	23.67	23.94	23.62	24.70
GPRS 2 Tx slots	31.01	31.11	30.69	32.00	25.11	25.12	24.76	26.00
GPRS 3 Tx slots	29.66	29.86	29.30	31.00	25.46	25.61	25.04	26.74
GPRS 4 Tx slots	28.59	28.65	28.06	30.00	25.60	25.74	25.15	27.00
EDGE 1 Tx slot	27.22	27.00	27.05	28.00	18.23	18.05	18.08	19.00
EDGE 2 Tx slots	25.77	25.94	25.84	27.00	19.77	19.99	19.86	21.00
EDGE 3 Tx slots	25.53	25.81	25.62	27.00	21.35	21.56	21.40	22.74
EDGE 4 Tx slots	24.58	24.75	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	29.80	30.53	30.24	31.00	20.80	21.53	21.24	22.00
GPRS 1 Tx slot	30.04	30.59	30.39	31.00	21.04	21.59	21.39	22.00
GPRS 2 Tx slots	28.68	29.13	28.68	29.50	22.68	23.13	22.68	23.50
GPRS 3 Tx slots	28.49	28.55	28.32	29.00	24.23	24.29	24.06	24.74
GPRS 4 Tx slots	26.98	27.40	27.12	28.00	23.98	24.40	24.12	25.00
EDGE 1 Tx slot	26.57	26.43	26.16	27.00	17.57	17.43	17.16	18.00
EDGE 2 Tx slots	25.28	25.15	25.03	26.00	19.28	19.15	19.03	20.00
EDGE 3 Tx slots	24.27	23.90	23.69	25.00	20.01	19.64	19.43	20.74
EDGE 4 Tx slots	23.16	23.17	22.51	24.00	20.16	20.17	19.51	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	32.55	32.83	32.49	33.70	23.59	23.86	23.55	24.70
GPRS 1 Tx slot	32.62	32.84	32.59	33.70	23.67	23.94	23.62	24.70
GPRS 2 Tx slots	31.01	31.11	30.69	32.00	25.11	25.12	24.76	26.00
GPRS 3 Tx slots	29.66	29.86	29.30	31.00	25.46	25.61	25.04	26.74
GPRS 4 Tx slots	28.59	28.65	28.06	30.00	25.60	25.74	25.15	27.00
EDGE 1 Tx slot	27.22	27.00	27.05	28.00	18.23	18.05	18.08	19.00
EDGE 2 Tx slots	25.77	25.94	25.84	27.00	19.77	19.99	19.86	21.00
EDGE 3 Tx slots	25.53	25.81	25.62	27.00	21.35	21.56	21.40	22.74
EDGE 4 Tx slots	24.58	24.75	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	29.98	30.26	30.08	31.00	20.98	21.26	21.08	22.00
GPRS 1 Tx slot	29.75	30.05	29.89	31.00	20.75	21.05	20.89	22.00
GPRS 2 Tx slots	28.48	28.51	28.39	29.50	22.48	22.51	22.39	23.50
GPRS 3 Tx slots	28.09	28.24	27.68	29.00	23.83	23.98	23.42	24.74
GPRS 4 Tx slots	26.68	26.85	26.19	28.00	23.68	23.85	23.19	25.00
EDGE 1 Tx slot	25.08	25.03	25.02	27.00	16.08	16.03	16.02	18.00
EDGE 2 Tx slots	24.96	24.82	24.66	26.00	18.96	18.82	18.66	20.00
EDGE 3 Tx slots	23.98	23.65	23.46	25.00	19.72	19.39	19.20	20.74
EDGE 4 Tx slots	22.89	22.73	22.13	24.00	19.89	19.73	19.13	21.00



		Ant 2				Ant 2				Ant 0			
Band		WCDMA II			Tune-up Limit (dBm)	WCDMA IV			Tune-up Limit (dBm)	WCDMA V			Tune-up Limit (dBm)
TX Channel		9262	9400	9538									
Rx Channel		9662	9800	9938									
Frequency (MHz)		1852.4	1880	1907.6									
3GPP Rel 99	AMR 12.2Kbps	24.39	24.37	24.13	25.00	24.21	24.28	24.20	25.00	24.91	24.89	24.08	25.00
3GPP Rel 99	RMC 12.2Kbps	24.42	24.47	24.23	25.00	24.24	24.31	24.28	25.00	24.93	24.91	24.13	25.00
3GPP Rel 6	HSDPA Subtest-1	23.44	23.50	23.30	24.00	23.17	23.27	23.24	24.00	23.88	23.89	23.06	24.00
3GPP Rel 6	HSDPA Subtest-2	23.44	23.51	23.31	24.00	23.17	23.29	23.28	24.00	23.85	23.84	23.05	24.00
3GPP Rel 6	HSDPA Subtest-3	23.01	23.05	22.82	23.50	22.71	22.80	22.79	23.50	23.33	23.39	22.71	23.50
3GPP Rel 6	HSDPA Subtest-4	23.02	23.07	22.82	23.50	22.70	22.81	22.78	23.50	23.41	23.42	22.72	23.50
3GPP Rel 8	DC-HSDPA Subtest-1	23.41	23.48	23.28	24.00	23.15	23.24	23.21	24.00	23.85	23.84	23.01	24.00
3GPP Rel 8	DC-HSDPA Subtest-2	23.42	23.49	23.26	24.00	23.16	23.25	23.22	24.00	23.81	23.81	23.02	24.00
3GPP Rel 8	DC-HSDPA Subtest-3	23.05	23.02	22.86	23.50	22.69	22.80	22.76	23.50	23.35	23.32	22.68	23.50
3GPP Rel 8	DC-HSDPA Subtest-4	23.03	23.04	22.81	23.50	22.78	22.78	22.75	23.50	23.36	23.31	22.66	23.50
3GPP Rel 6	HSUPA Subtest-1	23.62	23.68	23.48	24.00	23.17	23.26	23.25	24.00	23.76	23.78	23.11	24.00
3GPP Rel 6	HSUPA Subtest-2	21.62	21.69	21.49	22.00	21.30	21.43	21.43	22.00	21.62	21.67	21.33	22.00
3GPP Rel 6	HSUPA Subtest-3	22.63	22.69	22.48	23.00	22.29	22.43	22.39	23.00	22.71	22.83	22.15	23.00
3GPP Rel 6	HSUPA Subtest-4	21.65	21.71	21.49	22.00	21.31	21.45	21.43	22.00	21.58	21.60	21.29	22.00
3GPP Rel 6	HSUPA Subtest-5	23.52	23.55	23.33	24.00	23.24	23.32	23.30	24.00	23.68	23.81	23.20	24.00



Band		Ant 0				Ant 0				Ant 1			
		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	24.91	24.90	24.85	25.00	24.73	24.80	24.83	25.00	24.70	24.79	24.85	25.00
3GPP Rel 99	RMC 12.2Kbps	24.95	24.91	24.88	25.00	24.77	24.84	24.87	25.00	24.72	24.83	25.00	25.00
3GPP Rel 6	HSDPA Subtest-1	23.80	23.77	23.66	24.00	23.53	23.55	23.54	24.00	23.78	23.73	23.93	24.00
3GPP Rel 6	HSDPA Subtest-2	23.78	23.79	23.60	24.00	23.51	23.59	23.50	24.00	23.83	23.74	23.82	24.00
3GPP Rel 6	HSDPA Subtest-3	23.26	23.34	23.21	23.50	23.00	23.08	23.06	23.50	23.18	23.36	23.49	23.50
3GPP Rel 6	HSDPA Subtest-4	23.29	23.40	23.29	23.50	23.00	23.12	23.08	23.50	23.30	23.37	23.49	23.50
3GPP Rel 8	DC-HSDPA Subtest-1	23.74	23.74	23.56	24.00	23.38	23.58	23.47	24.00	23.73	23.72	23.76	24.00
3GPP Rel 8	DC-HSDPA Subtest-2	23.67	23.75	23.52	24.00	23.43	23.52	23.57	24.00	23.69	23.79	23.79	24.00
3GPP Rel 8	DC-HSDPA Subtest-3	23.18	23.23	23.15	23.50	23.08	23.20	23.05	23.50	23.27	23.27	23.48	23.50
3GPP Rel 8	DC-HSDPA Subtest-4	23.30	23.22	23.26	23.50	23.04	23.10	23.01	23.50	23.30	23.23	23.46	23.50
3GPP Rel 6	HSUPA Subtest-1	23.64	23.67	23.70	24.00	23.43	23.63	23.48	24.00	23.66	23.74	23.91	24.00
3GPP Rel 6	HSUPA Subtest-2	21.56	21.48	21.90	22.00	21.58	21.66	21.69	22.00	21.52	21.53	21.97	22.00
3GPP Rel 6	HSUPA Subtest-3	22.63	22.72	22.77	23.00	22.62	22.74	22.72	23.00	22.66	22.65	22.95	23.00
3GPP Rel 6	HSUPA Subtest-4	21.47	21.58	21.75	22.00	21.55	21.72	21.76	22.00	21.48	21.52	21.96	22.00
3GPP Rel 6	HSUPA Subtest-5	23.55	23.65	23.70	24.00	23.56	23.61	23.70	24.00	23.51	23.73	23.95	24.00



		Ant 2				Ant 2				Ant 0			
Band		WCDMA II			Tune-up Limit (dBm)	WCDMA IV			Tune-up Limit (dBm)	WCDMA V			Tune-up Limit (dBm)
TX Channel		9262	9400	9538		1312	1413	1513		4132	4182	4233	
Rx Channel		9662	9800	9938		1537	1638	1738		4357	4407	4458	
Frequency (MHz)		1852.4	1880	1907.6		1712.4	1732.6	1752.6		826.4	836.4	846.6	
3GPP Rel 99	AMR 12.2Kbps	24.73	24.65	24.43	25.00	24.08	24.08	23.97	25.00	24.79	24.64	23.77	25.00
3GPP Rel 99	RMC 12.2Kbps	24.86	24.72	24.52	25.00	24.08	24.10	24.04	25.00	24.84	24.68	23.95	25.00
3GPP Rel 6	HSDPA Subtest-1	23.57	23.62	23.65	24.00	22.70	22.90	22.71	24.00	23.87	23.62	22.51	24.00
3GPP Rel 6	HSDPA Subtest-2	23.62	23.78	23.48	24.00	22.94	22.93	22.93	24.00	23.80	23.61	22.61	24.00
3GPP Rel 6	HSDPA Subtest-3	23.30	23.21	23.09	23.50	22.37	22.47	22.45	23.50	23.25	23.38	22.15	23.50
3GPP Rel 6	HSDPA Subtest-4	23.23	23.42	22.99	23.50	22.28	22.55	22.38	23.50	23.34	23.35	22.29	23.50
3GPP Rel 8	DC-HSDPA Subtest-1	23.59	23.63	23.42	24.00	22.81	22.97	22.89	24.00	23.77	23.70	22.39	24.00
3GPP Rel 8	DC-HSDPA Subtest-2	23.57	23.78	23.53	24.00	22.69	22.91	22.96	24.00	23.71	23.78	22.54	24.00
3GPP Rel 8	DC-HSDPA Subtest-3	23.23	23.29	23.03	23.50	22.26	22.45	22.42	23.50	23.27	23.37	22.15	23.50
3GPP Rel 8	DC-HSDPA Subtest-4	23.13	23.21	22.97	23.50	22.50	22.47	22.35	23.50	23.36	23.33	22.19	23.50
3GPP Rel 6	HSUPA Subtest-1	23.82	23.60	23.74	24.00	22.80	22.96	22.76	24.00	23.59	23.74	22.60	24.00
3GPP Rel 6	HSUPA Subtest-2	21.78	21.73	21.66	22.00	20.90	21.09	21.16	22.00	21.65	21.66	20.72	22.00
3GPP Rel 6	HSUPA Subtest-3	22.84	22.81	22.75	23.00	22.07	22.04	22.03	23.00	22.73	22.77	21.76	23.00
3GPP Rel 6	HSUPA Subtest-4	21.76	21.92	21.68	22.00	20.96	21.03	21.05	22.00	21.52	21.58	20.60	22.00
3GPP Rel 6	HSUPA Subtest-5	23.74	23.85	23.52	24.00	22.80	23.02	22.96	24.00	23.62	23.59	22.71	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	24.83	24.80	24.73	25.00	24.59	24.60	24.65	25.00	24.56	24.63	23.70	25.00		
3GPP Rel 99	RMC 12.2Kbps	24.91	24.87	24.73	25.00	24.63	24.66	24.62	25.00	24.67	24.68	23.75	25.00		
3GPP Rel 6	HSDPA Subtest-1	23.85	23.85	23.67	24.00	23.54	23.58	23.45	24.00	23.73	23.89	22.67	24.00		
3GPP Rel 6	HSDPA Subtest-2	23.85	23.87	23.70	24.00	23.55	23.60	23.49	24.00	23.79	23.76	22.48	24.00		
3GPP Rel 6	HSDPA Subtest-3	23.33	23.32	23.28	23.50	23.05	23.05	22.99	23.50	23.36	23.39	22.23	23.50		
3GPP Rel 6	HSDPA Subtest-4	23.33	23.42	23.20	23.50	22.93	23.21	23.02	23.50	23.31	23.46	22.15	23.50		
3GPP Rel 8	DC-HSDPA Subtest-1	23.80	23.85	23.56	24.00	23.47	23.60	23.54	24.00	23.73	23.71	22.50	24.00		
3GPP Rel 8	DC-HSDPA Subtest-2	23.63	23.83	23.50	24.00	23.42	23.59	23.59	24.00	23.75	23.82	22.51	24.00		
3GPP Rel 8	DC-HSDPA Subtest-3	23.36	23.23	23.09	23.50	23.14	23.18	22.99	23.50	23.21	23.26	22.03	23.50		
3GPP Rel 8	DC-HSDPA Subtest-4	23.42	23.25	23.01	23.50	23.11	23.01	23.15	23.50	23.20	23.23	22.18	23.50		
3GPP Rel 6	HSUPA Subtest-1	23.96	23.73	23.71	24.00	23.41	23.68	23.64	24.00	23.70	23.76	22.58	24.00		
3GPP Rel 6	HSUPA Subtest-2	21.79	21.95	21.86	22.00	21.57	21.58	21.77	22.00	21.61	21.45	20.89	22.00		
3GPP Rel 6	HSUPA Subtest-3	22.84	22.77	22.89	23.00	22.67	22.71	22.72	23.00	22.61	22.83	21.65	23.00		
3GPP Rel 6	HSUPA Subtest-4	21.77	21.90	21.85	22.00	21.63	21.60	21.74	22.00	21.45	21.63	20.73	22.00		
3GPP Rel 6	HSUPA Subtest-5	23.94	23.78	23.65	24.00	23.45	23.59	23.68	24.00	23.47	23.59	22.73	24.00		



		Ant 2				Ant 2				Ant 0			
Band		WCDMA II			Tune-up Limit (dBm)	WCDMA IV			Tune-up Limit (dBm)	WCDMA V			Tune-up Limit (dBm)
TX Channel		9262	9400	9538		1312	1413	1513		4132	4182	4233	
Rx Channel		9662	9800	9938		1537	1638	1738		4357	4407	4458	
Frequency (MHz)		1852.4	1880	1907.6		1712.4	1732.6	1752.6		826.4	836.4	846.6	
3GPP Rel 99	AMR 12.2Kbps	23.61	23.74	23.62	24.70	24.00	24.06	23.98	25.00	24.69	24.67	23.82	25.00
3GPP Rel 99	RMC 12.2Kbps	23.70	23.85	23.82	24.70	23.98	24.12	23.99	25.00	24.76	24.75	23.97	25.00
3GPP Rel 6	HSDPA Subtest-1	22.40	22.44	22.35	23.70	22.75	22.90	22.73	24.00	23.84	23.72	22.61	24.00
3GPP Rel 6	HSDPA Subtest-2	22.56	22.40	22.53	23.70	22.79	22.92	22.96	24.00	23.89	23.67	22.48	24.00
3GPP Rel 6	HSDPA Subtest-3	22.13	22.09	21.82	23.20	22.35	22.47	22.33	23.50	23.13	23.28	22.23	23.50
3GPP Rel 6	HSDPA Subtest-4	22.05	22.15	21.96	23.20	22.25	22.54	22.51	23.50	23.30	23.39	22.10	23.50
3GPP Rel 8	DC-HSDPA Subtest-1	22.48	22.40	22.25	23.70	22.70	22.98	22.80	24.00	23.72	23.80	22.51	24.00
3GPP Rel 8	DC-HSDPA Subtest-2	22.51	22.55	22.28	23.70	22.67	22.95	22.86	24.00	23.67	23.80	22.43	24.00
3GPP Rel 8	DC-HSDPA Subtest-3	22.20	21.98	21.82	23.20	22.33	22.57	22.33	23.50	23.24	23.20	22.25	23.50
3GPP Rel 8	DC-HSDPA Subtest-4	22.03	22.07	21.87	23.20	22.54	22.33	22.47	23.50	23.26	23.29	22.14	23.50
3GPP Rel 6	HSUPA Subtest-1	22.60	22.50	22.43	23.70	22.65	23.00	22.86	24.00	23.65	23.78	22.51	24.00
3GPP Rel 6	HSUPA Subtest-2	20.67	20.47	20.55	21.70	20.94	20.91	21.11	22.00	21.68	21.48	20.91	22.00
3GPP Rel 6	HSUPA Subtest-3	21.57	21.53	21.51	22.70	21.87	22.16	22.07	23.00	22.81	22.78	21.81	23.00
3GPP Rel 6	HSUPA Subtest-4	20.66	20.65	20.55	21.70	20.91	21.07	21.03	22.00	21.48	21.55	20.71	22.00
3GPP Rel 6	HSUPA Subtest-5	22.69	22.56	22.37	23.70	22.81	22.87	22.97	24.00	23.51	23.74	22.70	24.00



		Ant 0				Ant 0				Ant 1			
Band		WCDMA II			Tune-up Limit (dBm)	WCDMA IV			Tune-up Limit (dBm)	WCDMA V			Tune-up Limit (dBm)
TX Channel		9262	9400	9538		1312	1413	1513		4132	4182	4233	
Rx Channel		9662	9800	9938		1537	1638	1738		4357	4407	4458	
Frequency (MHz)		1852.4	1880	1907.6		1712.4	1732.6	1752.6		826.4	836.4	846.6	
3GPP Rel 99	AMR 12.2Kbps	24.80	24.75	24.72	25.00	21.41	21.34	21.31	22.20	24.62	24.60	23.59	25.00
3GPP Rel 99	RMC 12.2Kbps	24.92	24.91	24.83	25.00	21.38	21.51	21.42	22.20	24.68	24.69	23.74	25.00
3GPP Rel 6	HSDPA Subtest-1	23.83	23.90	23.64	24.00	20.18	20.15	20.29	21.20	23.85	23.87	22.67	24.00
3GPP Rel 6	HSDPA Subtest-2	23.85	23.92	23.68	24.00	20.21	20.29	20.10	21.20	23.72	23.63	22.53	24.00
3GPP Rel 6	HSDPA Subtest-3	23.36	23.40	23.27	23.50	19.62	19.79	19.67	20.70	23.17	23.33	22.16	23.50
3GPP Rel 6	HSDPA Subtest-4	23.35	23.41	23.22	23.50	19.65	19.82	19.73	20.70	23.22	23.46	22.22	23.50
3GPP Rel 8	DC-HSDPA Subtest-1	23.65	23.87	23.59	24.00	20.08	20.27	20.10	21.20	23.81	23.71	22.54	24.00
3GPP Rel 8	DC-HSDPA Subtest-2	23.63	23.81	23.56	24.00	20.10	20.26	20.25	21.20	23.58	23.84	22.64	24.00
3GPP Rel 8	DC-HSDPA Subtest-3	23.32	23.39	23.10	23.50	19.80	19.82	19.64	20.70	23.22	23.31	22.20	23.50
3GPP Rel 8	DC-HSDPA Subtest-4	23.38	23.37	23.02	23.50	19.85	19.87	19.74	20.70	23.28	23.23	22.21	23.50
3GPP Rel 6	HSUPA Subtest-1	23.95	23.74	23.72	24.00	20.39	20.46	20.34	21.20	23.73	23.72	22.78	24.00
3GPP Rel 6	HSUPA Subtest-2	21.86	21.74	21.89	22.00	18.39	18.40	18.31	19.20	21.52	21.43	20.79	22.00
3GPP Rel 6	HSUPA Subtest-3	22.94	22.74	22.90	23.00	19.34	19.45	19.35	20.20	22.66	22.73	21.61	23.00
3GPP Rel 6	HSUPA Subtest-4	21.91	21.91	21.71	22.00	18.34	18.40	18.38	19.20	21.52	21.50	20.67	22.00
3GPP Rel 6	HSUPA Subtest-5	23.76	23.78	23.51	24.00	20.37	20.42	20.33	21.20	23.64	23.60	22.68	24.00



		Ant 2				Ant 2				Ant 0			
Band		WCDMA II			Tune-up Limit (dBm)	WCDMA IV			Tune-up Limit (dBm)	WCDMA V			Tune-up Limit (dBm)
TX Channel		9262	9400	9538		1312	1413	1513		4132	4182	4233	
Rx Channel		9662	9800	9938		1537	1638	1738		4357	4407	4458	
Frequency (MHz)		1852.4	1880	1907.6		1712.4	1732.6	1752.6		826.4	836.4	846.6	
3GPP Rel 99	AMR 12.2Kbps	23.29	23.26	23.14	24.20	23.58	23.63	23.62	24.80	24.69	24.67	23.82	25.00
3GPP Rel 99	RMC 12.2Kbps	23.26	23.32	23.03	24.20	23.62	23.63	23.73	24.80	24.76	24.75	23.97	25.00
3GPP Rel 6	HSDPA Subtest-1	22.30	22.24	22.11	23.20	22.46	22.53	22.54	23.80	23.84	23.72	22.61	24.00
3GPP Rel 6	HSDPA Subtest-2	22.27	22.11	22.03	23.20	22.50	22.55	22.57	23.80	23.89	23.67	22.48	24.00
3GPP Rel 6	HSDPA Subtest-3	21.70	21.84	21.63	22.70	21.97	22.02	22.08	23.30	23.13	23.28	22.23	23.50
3GPP Rel 6	HSDPA Subtest-4	21.74	21.80	21.69	22.70	22.06	22.08	22.15	23.30	23.30	23.39	22.10	23.50
3GPP Rel 8	DC-HSDPA Subtest-1	22.24	22.19	22.13	23.20	22.45	22.50	22.52	23.80	23.72	23.80	22.51	24.00
3GPP Rel 8	DC-HSDPA Subtest-2	22.12	22.29	21.98	23.20	22.36	22.55	22.45	23.80	23.67	23.80	22.43	24.00
3GPP Rel 8	DC-HSDPA Subtest-3	21.88	21.74	21.65	22.70	21.95	21.99	22.05	23.30	23.24	23.20	22.25	23.50
3GPP Rel 8	DC-HSDPA Subtest-4	21.85	21.74	21.51	22.70	22.05	21.98	21.94	23.30	23.26	23.29	22.14	23.50
3GPP Rel 6	HSUPA Subtest-1	22.43	22.25	22.25	23.20	22.36	22.51	22.57	23.80	23.65	23.78	22.51	24.00
3GPP Rel 6	HSUPA Subtest-2	20.26	20.23	20.25	21.20	20.61	20.51	20.67	21.80	21.68	21.48	20.91	22.00
3GPP Rel 6	HSUPA Subtest-3	21.39	21.40	21.26	22.20	21.69	21.73	21.70	22.80	22.81	22.78	21.81	23.00
3GPP Rel 6	HSUPA Subtest-4	20.40	20.34	20.33	21.20	20.54	20.60	20.80	21.80	21.48	21.55	20.71	22.00
3GPP Rel 6	HSUPA Subtest-5	22.24	22.38	22.13	23.20	22.45	22.64	22.64	23.80	23.51	23.74	22.70	24.00



		Ant 0				Ant 0				Ant 1			
Band		WCDMA II			Tune-up Limit (dBm)	WCDMA IV			Tune-up Limit (dBm)	WCDMA V			Tune-up Limit (dBm)
TX Channel		9262	9400	9538		1312	1413	1513		4132	4182	4233	
Rx Channel		9662	9800	9938		1537	1638	1738		4357	4407	4458	
Frequency (MHz)		1852.4	1880	1907.6		1712.4	1732.6	1752.6		826.4	836.4	846.6	
3GPP Rel 99	AMR 12.2Kbps	24.80	24.75	24.72	25.00	21.13	21.28	21.21	21.90	24.62	24.60	23.59	25.00
3GPP Rel 99	RMC 12.2Kbps	24.92	24.91	24.83	25.00	20.99	21.31	21.20	21.90	24.68	24.69	23.74	25.00
3GPP Rel 6	HSDPA Subtest-1	23.83	23.90	23.64	24.00	20.03	20.18	20.09	20.90	23.85	23.87	22.67	24.00
3GPP Rel 6	HSDPA Subtest-2	23.85	23.92	23.68	24.00	20.02	20.17	20.05	20.90	23.72	23.63	22.53	24.00
3GPP Rel 6	HSDPA Subtest-3	23.36	23.40	23.27	23.50	19.56	19.59	19.66	20.40	23.17	23.33	22.16	23.50
3GPP Rel 6	HSDPA Subtest-4	23.35	23.41	23.22	23.50	19.55	19.56	19.69	20.40	23.22	23.46	22.22	23.50
3GPP Rel 8	DC-HSDPA Subtest-1	23.65	23.87	23.59	24.00	19.99	20.23	20.07	20.90	23.81	23.71	22.54	24.00
3GPP Rel 8	DC-HSDPA Subtest-2	23.63	23.81	23.56	24.00	19.97	20.28	20.10	20.90	23.58	23.84	22.64	24.00
3GPP Rel 8	DC-HSDPA Subtest-3	23.32	23.39	23.10	23.50	19.45	19.68	19.54	20.40	23.22	23.31	22.20	23.50
3GPP Rel 8	DC-HSDPA Subtest-4	23.38	23.37	23.02	23.50	19.68	19.65	19.59	20.40	23.28	23.23	22.21	23.50
3GPP Rel 6	HSUPA Subtest-1	23.95	23.74	23.72	24.00	20.03	20.11	20.07	20.90	23.73	23.72	22.78	24.00
3GPP Rel 6	HSUPA Subtest-2	21.86	21.74	21.89	22.00	17.99	18.27	18.36	18.90	21.52	21.43	20.79	22.00
3GPP Rel 6	HSUPA Subtest-3	22.94	22.74	22.90	23.00	19.14	19.45	19.14	19.90	22.66	22.73	21.61	23.00
3GPP Rel 6	HSUPA Subtest-4	21.91	21.91	21.71	22.00	18.03	18.15	18.28	18.90	21.52	21.50	20.67	22.00
3GPP Rel 6	HSUPA Subtest-5	23.76	23.78	23.51	24.00	20.04	20.14	20.19	20.90	23.64	23.60	22.68	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)
TX Channel	1013	384	777		25	600	1175		476	580	684	
Frequency (MHz)	824.7	836.52	848.31		1851.25	1880	1908.75		817.9	820.5	823.1	
RC1 SO55	24.59	24.75	24.10	25.00	24.65	24.68	24.63	25.00	24.72	24.71	24.68	25.00
RC3 SO55	24.75	24.76	24.11	25.00	24.69	24.71	24.65	25.00	24.72	24.73	24.72	25.00
RC3 SO32 (F+SCH)	24.73	24.76	24.10	25.00	24.70	24.72	24.67	25.00	24.76	24.78	24.74	25.00
RC3 SO32 (+SCH)	24.70	24.72	24.09	25.00	24.69	24.70	24.66	25.00	24.68	24.73	24.70	25.00
RTAP 153.6Kbps	24.73	24.77	24.08	25.00	24.70	24.73	24.68	25.00	24.78	24.80	24.77	25.00
RETAP 4096Bits	24.68	24.75	24.08	25.00	24.68	24.70	24.65	25.00	24.76	24.79	24.75	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)
TX Channel	1013	384	777		25	600	1175		476	580	684	
Frequency (MHz)	824.7	836.52	848.31		1851.25	1880	1908.75		817.9	820.5	823.1	
RC1 SO55	24.59	24.41	24.51	25.00	24.65	24.70	24.52	25.00	24.61	24.43	24.49	25.00
RC3 SO55	24.73	24.44	24.48	25.00	24.65	24.71	24.58	25.00	24.69	24.65	24.67	25.00
RC3 SO32 (F+SCH)	24.68	24.50	24.55	25.00	24.60	24.62	24.48	25.00	24.70	24.50	24.55	25.00
RC3 SO32 (+SCH)	24.74	24.44	24.47	25.00	24.72	24.71	24.49	25.00	24.65	24.41	24.44	25.00
RTAP 153.6Kbps	24.58	24.48	24.45	25.00	24.62	24.64	24.50	25.00	24.59	24.44	24.47	25.00
RETAP 4096Bits	24.64	24.46	24.56	25.00	24.67	24.67	24.50	25.00	24.61	24.43	24.50	25.00



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)	24.59	24.75	24.10	25.00	24.65	24.68	24.63	25.00	24.72	24.71	24.68	25.00
RC1 SO55	24.75	24.76	24.11	25.00	24.69	24.71	24.65	25.00	24.72	24.73	24.72	25.00
RC3 SO55	24.73	24.76	24.10	25.00	24.70	24.72	24.67	25.00	24.76	24.78	24.74	25.00
RC3 SO32 (F+SCH)	24.70	24.72	24.09	25.00	24.69	24.70	24.66	25.00	24.68	24.73	24.70	25.00
RC3 SO32 (+SCH)	24.73	24.77	24.08	25.00	24.70	24.73	24.68	25.00	24.78	24.80	24.77	25.00
RTAP 153.6Kbps	24.68	24.75	24.08	25.00	24.68	24.70	24.65	25.00	24.76	24.79	24.75	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)	24.59	24.74	24.52	25.00	24.71	24.72	24.57	25.00	24.73	24.49	24.55	25.00
RC1 SO55	24.76	24.77	24.56	25.00	24.72	24.75	24.59	25.00	24.77	24.53	24.58	25.00
RC3 SO55	24.72	24.73	24.51	25.00	24.68	24.71	24.58	25.00	24.73	24.51	24.56	25.00
RC3 SO32 (F+SCH)	24.71	24.75	24.53	25.00	24.67	24.69	24.55	25.00	24.71	24.50	24.52	25.00
RC3 SO32 (+SCH)	24.68	24.71	24.55	25.00	24.69	24.74	24.60	25.00	24.68	24.48	24.53	25.00
RTAP 153.6Kbps	24.71	24.76	24.52	25.00	24.73	24.73	24.57	25.00	24.75	24.53	24.57	25.00
RETAP 4096Bits												



	Ant 2			
Band	CDMA BC1			Tune-up Limit (dBm)
TX Channel	25	600	1175	
Frequency (MHz)	1851.25	1880	1908.75	
RC1 SO55	23.98	23.90	23.71	24.70
RC3 SO55	23.96	23.95	23.72	24.70
RC3 SO32 (F+SCH)	23.94	23.95	23.64	24.70
RC3 SO32 (+SCH)	23.97	23.90	23.70	24.70
RTAP 153.6Kbps	23.98	24.00	23.74	24.70
RETAP 4096Bits	23.95	23.98	23.73	24.70



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)	24.59	24.68	24.45	25.00	24.64	24.66	24.49	25.00	24.63	24.46	24.51	25.00
RC1 SO55	24.66	24.70	24.46	25.00	24.65	24.73	24.51	25.00	24.72	24.48	24.57	25.00
RC3 SO55	24.72	24.73	24.41	25.00	24.68	24.64	24.58	25.00	24.65	24.45	24.53	25.00
RC3 SO32 (F+SCH)	24.66	24.70	24.45	25.00	24.66	24.64	24.52	25.00	24.61	24.50	24.43	25.00
RC3 SO32 (+SCH)	24.59	24.67	24.53	25.00	24.67	24.74	24.60	25.00	24.65	24.46	24.43	25.00
RTAP 153.6Kbps	24.61	24.75	24.47	25.00	24.64	24.63	24.47	25.00	24.69	24.51	24.50	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)												
RC1 SO55	24.59	24.53	24.76	25.00	22.90	22.98	22.63	23.70	24.73	24.58	24.67	25.00
RC3 SO55	24.69	24.54	24.74	25.00	22.97	22.94	22.75	23.70	24.72	24.69	24.69	25.00
RC3 SO32 (F+SCH)	24.73	24.76	24.60	25.00	22.94	22.96	22.70	23.70	24.64	24.78	24.68	25.00
RC3 SO32 (+SCH)	24.63	24.69	24.65	25.00	22.95	22.87	22.69	23.70	24.60	24.72	24.65	25.00
RTAP 153.6Kbps	24.73	24.77	24.73	25.00	22.97	23.03	22.82	23.70	24.61	24.84	24.71	25.00
RETAP 4096Bits	24.70	24.75	24.59	25.00	23.00	22.86	22.73	23.70	24.60	24.64	24.70	25.00



	Ant 1			Ant 0					Ant 1			
Band	CDMA BC0			Tune-up Limit (dBm)	CDMA BC1			Tune-up Limit (dBm)	CDMA BC10			Tune-up Limit (dBm)
TX Channel	1013	384	777		25	600	1175		476	580	684	
Frequency (MHz)	824.7	836.52	848.31		1851.25	1880	1908.75		817.9	820.5	823.1	
RC1 SO55	24.59	24.61	24.39	25.00	23.39	23.36	23.40	24.10	24.64	24.36	24.62	25.00
RC3 SO55	24.62	24.76	24.55	25.00	23.23	23.49	23.44	24.10	24.74	24.44	24.58	25.00
RC3 SO32 (F+SCH)	24.66	24.72	24.47	25.00	23.35	23.37	23.45	24.10	24.72	24.53	24.42	25.00
RC3 SO32 (+SCH)	24.75	24.64	24.52	25.00	23.30	23.24	23.52	24.10	24.68	24.54	24.54	25.00
RTAP 153.6Kbps	24.56	24.58	24.49	25.00	23.41	23.50	23.56	24.10	24.64	24.45	24.51	25.00
RETAP 4096Bits	24.66	24.70	24.61	25.00	23.41	23.38	23.47	24.10	24.71	24.37	24.52	25.00



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)												
RC1 SO55	24.59	24.65	24.09	25.00	24.59	24.70	24.56	25.00	24.72	24.69	24.77	25.00
RC3 SO55	24.70	24.76	24.11	25.00	24.72	24.66	24.68	25.00	24.71	24.54	24.59	25.00
RC3 SO32 (F+SCH)	24.72	24.70	24.08	25.00	24.56	24.65	24.49	25.00	24.60	24.82	24.70	25.00
RC3 SO32 (+SCH)	24.62	24.77	24.08	25.00	24.69	24.66	24.48	25.00	24.67	24.68	24.53	25.00
RTAP 153.6Kbps	24.69	24.86	23.99	25.00	24.55	24.70	24.57	25.00	24.66	24.81	24.79	25.00
RETAP 4096Bits	24.65	24.82	23.91	25.00	24.74	24.76	24.39	25.00	24.76	24.69	24.79	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	
Frequency (MHz)	824.7	836.52	848.31		1851.25	1880	1908.75		817.9	820.5	823.1	
RC1 SO55	24.59	24.64	24.49	25.00	24.71	24.60	24.50	25.00	24.72	24.46	24.59	25.00
RC3 SO55	24.63	24.84	24.56	25.00	24.62	24.80	24.68	25.00	24.73	24.43	24.55	25.00
RC3 SO32 (F+SCH)	24.67	24.66	24.46	25.00	24.62	24.75	24.56	25.00	24.67	24.53	24.36	25.00
RC3 SO32 (+SCH)	24.68	24.78	24.55	25.00	24.59	24.74	24.53	25.00	24.69	24.51	24.52	25.00
RTAP 153.6Kbps	24.64	24.67	24.41	25.00	24.60	24.59	24.65	25.00	24.60	24.46	24.48	25.00
RETAP 4096Bits	24.56	24.74	24.48	25.00	24.64	24.71	24.50	25.00	24.66	24.51	24.51	25.00



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	
Frequency (MHz)	824.7	836.52	848.31		1851.25	1880	1908.75		817.9	820.5	823.1	
RC1 SO55	24.59	24.64	23.96	25.00	23.24	23.23	23.06	23.90	24.59	24.55	24.68	25.00
RC3 SO55	24.68	24.76	24.14	25.00	23.09	23.36	22.94	23.90	24.56	24.56	24.69	25.00
RC3 SO32 (F+SCH)	24.76	24.67	24.06	25.00	23.02	23.21	23.04	23.90	24.59	24.65	24.67	25.00
RC3 SO32 (+SCH)	24.68	24.76	24.01	25.00	23.16	23.32	22.95	23.90	24.61	24.71	24.59	25.00
RTAP 153.6Kbps	24.69	24.80	24.00	25.00	23.18	23.15	23.12	23.90	24.68	24.81	24.76	25.00
RETAP 4096Bits	24.52	24.69	23.91	25.00	23.16	23.21	22.95	23.90	24.63	24.63	24.67	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)												
RC1 SO55	24.59	24.75	24.53	25.00	24.53	24.69	24.51	25.00	24.63	24.51	24.50	25.00
RC3 SO55	24.73	24.76	24.59	25.00	24.73	24.79	24.64	25.00	24.78	24.49	24.60	25.00
RC3 SO32 (F+SCH)	24.59	24.67	24.51	25.00	24.58	24.62	24.51	25.00	24.64	24.45	24.55	25.00
RC3 SO32 (+SCH)	24.62	24.70	24.50	25.00	24.75	24.67	24.39	25.00	24.66	24.38	24.48	25.00
RTAP 153.6Kbps	24.70	24.62	24.56	25.00	24.67	24.58	24.61	25.00	24.58	24.47	24.41	25.00
RETAP 4096Bits	24.61	24.70	24.52	25.00	24.56	24.72	24.46	25.00	24.72	24.54	24.38	25.00



Band 2							
Ann 2							
RFW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)
Channel				16700	16900	19100	
Frequency (MHz)				16600	16800	19000	
20	QPSK	1	0	24.57	24.60	24.51	25
20	QPSK	1	49	24.49	24.56	24.41	
20	QPSK	1	99	24.50	24.48	24.34	
20	QPSK	50	0	23.62	23.65	23.56	24
20	QPSK	50	24	23.68	23.68	23.59	
20	QPSK	50	50	23.70	23.63	23.56	
20	QPSK	100	0	23.70	23.64	23.59	23
20	16QAM	1	0	23.97	23.96	23.82	
20	16QAM	1	49	23.89	23.93	23.77	
20	16QAM	1	99	23.83	23.86	23.69	23
20	16QAM	50	0	22.64	22.65	22.61	
20	16QAM	50	24	22.70	22.69	22.59	
20	16QAM	50	50	22.71	22.66	22.57	23
20	16QAM	100	0	22.70	22.64	22.60	
20	64QAM	1	0	22.81	22.81	22.73	
20	64QAM	1	49	22.79	22.79	22.55	23
20	64QAM	1	99	22.71	22.71	22.51	
20	64QAM	50	0	21.65	21.68	21.61	
20	64QAM	50	24	21.74	21.71	21.62	22
20	64QAM	50	50	21.74	21.68	21.60	
20	64QAM	100	0	21.72	21.68	21.61	
Channel				16675	16900	19125	Tune-up limit (dBm)
Frequency (MHz)				16575	16800	19025	
15	QPSK	1	0	24.54	24.53	24.47	25
15	QPSK	1	37	24.49	24.46	24.37	
15	QPSK	1	74	24.50	24.44	24.34	
15	QPSK	36	0	23.57	23.57	23.56	24
15	QPSK	36	20	23.65	23.58	23.50	
15	QPSK	36	39	23.70	23.59	23.51	
15	QPSK	75	0	23.67	23.57	23.53	24
15	16QAM	1	0	23.97	23.93	23.78	
15	16QAM	1	37	23.82	23.87	23.67	
15	16QAM	1	74	23.74	23.86	23.66	23
15	16QAM	36	0	22.59	22.57	22.59	
15	16QAM	36	20	22.67	22.61	22.59	
15	16QAM	36	39	22.68	22.66	22.54	23
15	16QAM	75	0	22.62	22.63	22.52	
15	64QAM	1	0	22.72	22.79	22.67	
15	64QAM	1	37	22.74	22.76	22.49	23
15	64QAM	1	74	22.70	22.70	22.48	
15	64QAM	36	0	21.64	21.64	21.51	
15	64QAM	36	20	21.73	21.63	21.58	22
15	64QAM	36	39	21.74	21.63	21.50	
15	64QAM	75	0	21.70	21.65	21.59	
Channel				16650	16900	19150	Tune-up limit (dBm)
Frequency (MHz)				16550	16800	19050	
10	QPSK	1	0	24.56	24.53	24.41	25
10	QPSK	1	25	24.48	24.53	24.37	
10	QPSK	1	49	24.46	24.43	24.33	
10	QPSK	25	0	23.52	23.57	23.50	24
10	QPSK	25	12	23.67	23.61	23.57	
10	QPSK	25	25	23.65	23.59	23.51	
10	QPSK	50	0	23.69	23.60	23.53	24
10	16QAM	1	0	23.93	23.89	23.79	
10	16QAM	1	25	23.87	23.87	23.74	
10	16QAM	1	49	23.73	23.80	23.68	23
10	16QAM	25	0	22.63	22.57	22.57	
10	16QAM	25	12	22.64	22.65	22.59	
10	16QAM	25	25	22.66	22.66	22.54	23
10	16QAM	50	0	22.65	22.58	22.58	
10	64QAM	1	0	22.75	22.75	22.71	
10	64QAM	1	25	22.76	22.76	22.45	23
10	64QAM	1	49	22.64	22.62	22.48	
10	64QAM	25	0	21.56	21.67	21.54	
10	64QAM	25	12	21.67	21.64	21.59	22
10	64QAM	25	25	21.65	21.68	21.50	
10	64QAM	50	0	21.70	21.60	21.59	
Channel				16625	16900	19175	Tune-up limit (dBm)
Frequency (MHz)				16525	16800	19075	
5	QPSK	1	0	24.52	24.50	24.48	25
5	QPSK	1	12	24.48	24.51	24.39	
5	QPSK	1	24	24.42	24.47	24.27	
5	QPSK	12	0	23.55	23.64	23.58	24
5	QPSK	12	7	23.64	23.66	23.59	
5	QPSK	12	13	23.61	23.58	23.48	
5	QPSK	25	0	23.70	23.59	23.56	24
5	16QAM	1	0	23.93	23.94	23.74	
5	16QAM	1	12	23.89	23.85	23.68	
5	16QAM	1	24	23.80	23.81	23.65	23
5	16QAM	12	0	22.64	22.59	22.51	
5	16QAM	12	7	22.65	22.61	22.54	
5	16QAM	12	13	22.66	22.57	22.56	23
5	16QAM	25	0	22.64	22.55	22.55	
5	64QAM	1	0	22.72	22.75	22.67	
5	64QAM	1	12	22.74	22.73	22.52	23
5	64QAM	1	24	22.70	22.61	22.48	
5	64QAM	12	0	21.63	21.68	21.56	
5	64QAM	12	7	21.73	21.66	21.57	22
5	64QAM	12	13	21.74	21.62	21.56	
5	64QAM	25	0	21.66	21.60	21.59	
Channel				16615	16900	19185	Tune-up limit (dBm)
Frequency (MHz)				16515	16800	19085	
3	QPSK	1	0	24.55	24.50	24.51	25
3	QPSK	1	8	24.45	24.48	24.39	
3	QPSK	1	14	24.48	24.48	24.33	
3	QPSK	8	0	23.58	23.57	23.53	24
3	QPSK	8	4	23.68	23.58	23.55	
3	QPSK	8	7	23.69	23.58	23.54	
3	QPSK	15	0	23.65	23.64	23.59	24
3	16QAM	1	0	23.91	23.96	23.78	
3	16QAM	1	8	23.80	23.86	23.71	
3	16QAM	1	14	23.80	23.82	23.65	23
3	16QAM	8	0	22.63	22.65	22.59	
3	16QAM	8	4	22.64	22.61	22.54	
3	16QAM	8	7	22.64	22.56	22.57	23
3	16QAM	15	0	22.66	22.58	22.50	
3	64QAM	1	0	22.74	22.77	22.68	
3	64QAM	1	8	22.78	22.79	22.53	23
3	64QAM	1	14	22.62	22.64	22.43	
3	64QAM	8	0	21.59	21.61	21.52	
3	64QAM	8	4	21.74	21.62	21.54	22
3	64QAM	8	7	21.71	21.65	21.56	
3	64QAM	15	0	21.70	21.67	21.51	
Channel				16607	16900	19193	Tune-up limit (dBm)
Frequency (MHz)				16507	16800	19093	
1.4	QPSK	1	0	24.53	24.59	24.49	25
1.4	QPSK	1	3	24.39	24.48	24.39	
1.4	QPSK	1	5	24.41	24.40	24.28	
1.4	QPSK	3	0	24.56	24.50	24.42	24
1.4	QPSK	3	1	24.48	24.53	24.32	
1.4	QPSK	3	3	24.41	24.46	24.29	
1.4	QPSK	6	0	23.64	23.55	23.59	24
1.4	16QAM	1	0	23.94	23.92	23.72	
1.4	16QAM	1	3	23.88	23.85	23.75	
1.4	16QAM	1	5	23.83	23.80	23.69	24
1.4	16QAM	3	0	23.87	23.89	23.77	
1.4	16QAM	3	1	23.85	23.86	23.70	
1.4	16QAM	3	3	23.83	23.83	23.63	23
1.4	16QAM	6	0	22.62	22.56	22.57	
1.4	64QAM	1	0	22.72	22.71	22.65	
1.4	64QAM	1	3	22.74	22.73	22.46	23
1.4	64QAM	1	5	22.65	22.64	22.47	
1.4	64QAM	3	0	22.73	22.81	22.72	
1.4	64QAM	3	1	22.72	22.78	22.53	23
1.4	64QAM	3	3	22.64	22.66	22.44	
1.4	64QAM	6	0	21.66	21.61	21.54	



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				20450	20525	20600	
Frequency (MHz)				825	836.5	848	
10	QPSK	1	0	24.63	24.63	24.62	25
10	QPSK	1	25	24.55	24.55	24.55	
10	QPSK	1	49	24.57	24.55	24.49	
10	QPSK	25	0	23.69	23.66	23.67	24
10	QPSK	25	12	23.75	23.66	23.66	
10	QPSK	25	25	23.71	23.71	23.69	
10	QPSK	50	0	23.74	23.74	23.64	23
10	16QAM	1	0	23.95	23.98	23.98	
10	16QAM	1	25	23.95	23.89	23.92	
10	16QAM	1	49	23.95	23.94	23.86	24
10	16QAM	25	0	22.67	22.64	22.66	
10	16QAM	25	12	22.75	22.67	22.67	
10	16QAM	25	25	22.69	22.72	22.71	23
10	16QAM	50	0	22.77	22.73	22.66	
10	64QAM	1	0	22.91	22.78	22.82	
10	64QAM	1	25	22.86	22.82	22.77	23
10	64QAM	1	49	22.85	22.82	22.38	
10	64QAM	25	0	21.71	21.70	21.70	
10	64QAM	25	12	21.81	21.73	21.72	22
10	64QAM	25	25	21.74	21.74	21.39	
10	64QAM	50	0	21.77	21.78	21.62	
Channel				20425	20525	20625	Tune-up limit (dBm)
Frequency (MHz)				825.5	836.5	846.5	
5	QPSK	1	0	24.55	24.53	24.57	25
5	QPSK	1	12	24.50	24.48	24.45	
5	QPSK	1	24	24.52	24.53	24.41	
5	QPSK	12	0	23.63	23.65	23.60	24
5	QPSK	12	7	23.67	23.56	23.58	
5	QPSK	12	13	23.69	23.70	23.66	
5	QPSK	25	0	23.69	23.72	23.62	24
5	16QAM	1	0	23.85	23.98	23.88	
5	16QAM	1	12	23.95	23.81	23.85	
5	16QAM	1	24	23.86	23.93	23.80	23
5	16QAM	12	0	22.57	22.55	22.60	
5	16QAM	12	7	22.65	22.57	22.56	
5	16QAM	12	13	22.67	22.65	22.64	23
5	16QAM	25	0	22.69	22.64	22.59	
5	64QAM	1	0	22.85	22.71	22.76	
5	64QAM	1	12	22.85	22.80	22.68	23
5	64QAM	1	24	22.83	22.74	22.37	
5	64QAM	12	0	21.69	21.64	21.64	
5	64QAM	12	7	21.76	21.70	21.64	22
5	64QAM	12	13	21.68	21.65	21.37	
5	64QAM	25	0	21.70	21.73	21.62	
Channel				20415	20525	20635	Tune-up limit (dBm)
Frequency (MHz)				825.5	836.5	847.5	
3	QPSK	1	0	24.55	24.55	24.56	25
3	QPSK	1	4	24.51	24.52	24.50	
3	QPSK	1	14	24.50	24.51	24.44	
3	QPSK	8	0	23.62	23.61	23.62	24
3	QPSK	8	4	23.74	23.57	23.66	
3	QPSK	8	7	23.67	23.63	23.59	
3	QPSK	15	0	23.69	23.73	23.61	24
3	16QAM	1	0	23.94	23.97	23.93	
3	16QAM	1	8	23.94	23.86	23.84	
3	16QAM	1	14	23.90	23.92	23.76	23
3	16QAM	8	0	22.58	22.54	22.65	
3	16QAM	8	4	22.74	22.66	22.59	
3	16QAM	8	7	22.59	22.64	22.66	23
3	16QAM	15	0	22.68	22.67	22.64	
3	64QAM	1	0	22.81	22.68	22.74	
3	64QAM	1	8	22.78	22.78	22.74	23
3	64QAM	1	14	22.81	22.72	22.37	
3	64QAM	8	0	21.69	21.65	21.64	
3	64QAM	8	4	21.76	21.65	21.70	22
3	64QAM	8	7	21.64	21.64	21.35	
3	64QAM	15	0	21.74	21.73	21.59	
Channel				20407	20525	20643	Tune-up limit (dBm)
Frequency (MHz)				824.7	836.5	848.3	
1.4	QPSK	1	0	24.55	24.51	24.57	25
1.4	QPSK	1	3	24.51	24.50	24.53	
1.4	QPSK	1	5	24.53	24.49	24.39	
1.4	QPSK	3	0	24.55	24.51	24.80	24
1.4	QPSK	3	1	24.49	24.47	24.54	
1.4	QPSK	3	3	24.49	24.47	24.40	
1.4	QPSK	6	0	23.64	23.65	23.57	24
1.4	16QAM	1	0	23.87	23.90	23.93	
1.4	16QAM	1	3	23.85	23.81	23.90	
1.4	16QAM	1	5	23.92	23.88	23.82	24
1.4	16QAM	3	0	23.87	23.89	23.94	
1.4	16QAM	3	1	23.92	23.89	23.86	
1.4	16QAM	3	3	23.86	23.87	23.78	23
1.4	16QAM	6	0	22.69	22.68	22.57	
1.4	64QAM	1	0	22.86	22.75	22.82	
1.4	64QAM	1	3	22.81	22.79	22.69	23
1.4	64QAM	1	5	22.81	22.82	22.34	
1.4	64QAM	3	0	22.82	22.69	22.73	
1.4	64QAM	3	1	22.85	22.81	22.75	22
1.4	64QAM	3	3	22.80	22.75	22.30	
1.4	64QAM	6	0	21.73	21.73	21.59	



Band 7									
Art 2									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Freq (dBm)	Power Middle Freq (dBm)	Power High Freq (dBm)	Tune-up limit (dBm)		
Channel				20850	21100	21350			
Frequency (MHz)				2510	2535	2560			
20	QPSK	1	0	24.32	24.22	24.25	25		
20	QPSK	1	49	24.34	24.29	24.28			
20	QPSK	1	99	24.37	24.38	24.34			
20	QPSK	50	0	23.50	23.37	23.42	24		
20	QPSK	50	24	23.55	23.49	23.44			
20	QPSK	50	50	23.47	23.49	23.46			
20	QPSK	100	0	23.52	23.39	23.43	23		
20	16QAM	1	0	23.68	23.59	23.60			
20	16QAM	1	49	23.70	23.68	23.64			
20	16QAM	1	99	23.72	23.74	23.65	23		
20	16QAM	50	0	22.51	22.35	22.44			
20	16QAM	50	24	22.56	22.50	22.44			
20	16QAM	50	50	22.48	22.52	22.47	23		
20	16QAM	100	0	22.52	22.41	22.46			
20	64QAM	1	0	22.58	22.42	22.36			
20	64QAM	1	49	22.60	22.51	22.31	23		
20	64QAM	1	99	22.59	22.63	22.19			
20	64QAM	50	0	21.52	21.39	21.14			
20	64QAM	50	24	21.57	21.51	21.23	22		
20	64QAM	50	50	21.50	21.51	21.32			
20	64QAM	100	0	21.54	21.41	21.14			
Channel				20825	21100	21375	Tune-up limit (dBm)		
Frequency (MHz)				2507.5	2535	2562.5			
15	QPSK	1	0	24.23	24.22	24.25	25		
15	QPSK	1	37	24.32	24.29	24.21			
15	QPSK	1	74	24.34	24.33	24.33			
15	QPSK	36	0	23.43	23.37	23.34	24		
15	QPSK	36	20	23.45	23.43	23.40			
15	QPSK	36	39	23.37	23.41	23.45			
15	QPSK	75	0	23.47	23.29	23.43	24		
15	16QAM	1	0	23.59	23.51	23.52			
15	16QAM	1	37	23.62	23.67	23.60			
15	16QAM	1	74	23.63	23.67	23.64	23		
15	16QAM	36	0	22.43	22.35	22.44			
15	16QAM	36	20	22.48	22.42	22.36			
15	16QAM	36	39	22.42	22.43	22.46	23		
15	16QAM	75	0	22.49	22.33	22.42			
15	64QAM	1	0	22.58	22.34	22.34			
15	64QAM	1	37	22.58	22.51	22.23	23		
15	64QAM	1	74	22.51	22.63	22.09			
15	64QAM	36	0	21.51	21.39	21.09			
15	64QAM	36	20	21.52	21.46	21.23	22		
15	64QAM	36	39	21.42	21.50	21.25			
15	64QAM	75	0	21.54	21.39	21.12			
Channel				20800	21100	21400	Tune-up limit (dBm)		
Frequency (MHz)				2505	2535	2565			
10	QPSK	1	0	24.23	24.14	24.24	25		
10	QPSK	1	25	24.25	24.29	24.19			
10	QPSK	1	49	24.32	24.32	24.28			
10	QPSK	25	0	23.40	23.30	23.34	24		
10	QPSK	25	12	23.52	23.45	23.42			
10	QPSK	25	25	23.46	23.47	23.43			
10	QPSK	50	0	23.50	23.29	23.33	24		
10	16QAM	1	0	23.66	23.51	23.56			
10	16QAM	1	25	23.70	23.65	23.62			
10	16QAM	1	49	23.68	23.72	23.59	23		
10	16QAM	25	0	22.42	22.25	22.42			
10	16QAM	25	12	22.53	22.41	22.44			
10	16QAM	25	25	22.41	22.42	22.41	23		
10	16QAM	50	0	22.49	22.36	22.43			
10	64QAM	1	0	22.58	22.33	22.28			
10	64QAM	1	25	22.58	22.46	22.24	23		
10	64QAM	1	49	22.50	22.54	22.09			
10	64QAM	25	0	21.46	21.34	21.04			
10	64QAM	25	12	21.49	21.41	21.23	22		
10	64QAM	25	25	21.42	21.51	21.28			
10	64QAM	50	0	21.54	21.40	21.08			
Channel				20775	21100	21425	Tune-up limit (dBm)		
Frequency (MHz)				2502.5	2535	2567.5			
5	QPSK	1	0	24.25	24.14	24.20	25		
5	QPSK	1	12	24.25	24.19	24.26			
5	QPSK	1	24	24.37	24.31	24.32			
5	QPSK	12	0	23.45	23.32	23.36	24		
5	QPSK	12	7	23.49	23.39	23.43			
5	QPSK	12	13	23.37	23.39	23.36			
5	QPSK	25	0	23.48	23.35	23.37	24		
5	16QAM	1	0	23.64	23.56	23.60			
5	16QAM	1	12	23.64	23.64	23.61			
5	16QAM	1	24	23.70	23.69	23.58	23		
5	16QAM	12	0	22.44	22.25	22.34			
5	16QAM	12	7	22.56	22.49	22.43			
5	16QAM	12	13	22.46	22.52	22.37	23		
5	16QAM	25	0	22.46	22.36	22.45			
5	64QAM	1	0	22.55	22.32	22.36			
5	64QAM	1	12	22.60	22.50	22.30	23		
5	64QAM	1	24	22.51	22.53	22.14			
5	64QAM	12	0	21.40	21.38	21.12			
5	64QAM	12	7	21.48	21.50	21.19	22		
5	64QAM	12	13	21.44	21.51	21.28			
5	64QAM	25	0	21.52	21.35	21.04			



Band 12									
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				23060	23095	23130			
Frequency (MHz)				704	707.5	711			
10	QPSK	1	0	24.55	24.51	24.51	25		
10	QPSK	1	25	24.51	24.52	24.49			
10	QPSK	1	49	24.62	24.61	24.53			
10	QPSK	25	0	23.65	23.68	23.66	24		
10	QPSK	25	12	23.74	23.67	23.65			
10	QPSK	25	25	23.72	23.73	23.72			
10	QPSK	50	0	23.74	23.67	23.65	24		
10	16QAM	1	0	23.94	23.91	23.87			
10	16QAM	1	25	23.92	23.95	23.94			
10	16QAM	1	49	23.99	23.94	23.93	23		
10	16QAM	25	0	22.86	22.88	22.86			
10	16QAM	25	12	22.76	22.88	22.85			
10	16QAM	25	25	22.86	22.72	22.86	23		
10	16QAM	50	0	22.73	22.67	22.65			
10	64QAM	1	0	22.76	22.71	22.75			
10	64QAM	1	25	22.84	22.87	22.83	23		
10	64QAM	1	49	22.89	22.84	22.85			
10	64QAM	25	0	21.69	21.72	21.70			
10	64QAM	25	12	21.74	21.71	21.69	22		
10	64QAM	25	25	21.73	21.75	21.75			
10	64QAM	50	0	21.76	21.70	21.70			
Channel				23035	23095	23155	Tune-up limit (dBm)		
Frequency (MHz)				701.5	707.5	713.5			
5	QPSK	1	0	24.46	24.42	24.44	25		
5	QPSK	1	12	24.42	24.46	24.42			
5	QPSK	1	24	24.57	24.57	24.44			
5	QPSK	12	0	23.60	23.62	23.56	24		
5	QPSK	12	7	23.67	23.63	23.65			
5	QPSK	12	13	23.65	23.66	23.72			
5	QPSK	25	0	23.70	23.57	23.61	24		
5	16QAM	1	0	23.88	23.88	23.81			
5	16QAM	1	12	23.92	23.89	23.93			
5	16QAM	1	24	23.95	23.90	23.90	24		
5	16QAM	12	0	22.86	22.58	22.56			
5	16QAM	12	7	22.76	22.58	22.55			
5	16QAM	12	13	22.56	22.71	22.63	23		
5	16QAM	25	0	22.71	22.57	22.63			
5	64QAM	1	0	22.70	22.62	22.69			
5	64QAM	1	12	22.76	22.79	22.77	23		
5	64QAM	1	24	22.83	22.79	22.76			
5	64QAM	12	0	21.62	21.72	21.65			
5	64QAM	12	7	21.71	21.66	21.61	22		
5	64QAM	12	13	21.71	21.68	21.66			
5	64QAM	25	0	21.70	21.62	21.69			
Channel				23025	23095	23165	Tune-up limit (dBm)		
Frequency (MHz)				700.5	707.5	714.5			
3	QPSK	1	0	24.46	24.50	24.43	25		
3	QPSK	1	4	24.46	24.48	24.46			
3	QPSK	1	14	24.54	24.51	24.48			
3	QPSK	8	0	23.67	23.65	23.58	24		
3	QPSK	8	4	23.66	23.65	23.61			
3	QPSK	8	7	23.67	23.68	23.67			
3	QPSK	15	0	23.71	23.61	23.57	24		
3	16QAM	1	0	23.89	23.85	23.81			
3	16QAM	1	8	23.88	23.89	23.92			
3	16QAM	1	14	23.91	23.86	23.93	24		
3	16QAM	8	0	22.60	22.61	22.58			
3	16QAM	8	4	22.74	22.65	22.63			
3	16QAM	8	7	22.60	22.66	22.56	23		
3	16QAM	15	0	22.64	22.63	22.65			
3	64QAM	1	0	22.67	22.66	22.75			
3	64QAM	1	8	22.80	22.82	22.73	23		
3	64QAM	1	14	22.89	22.80	22.78			
3	64QAM	8	0	21.62	21.63	21.63			
3	64QAM	8	4	21.64	21.68	21.68	22		
3	64QAM	8	7	21.70	21.68	21.73			
3	64QAM	15	0	21.74	21.69	21.64			
Channel				23017	23095	23173	Tune-up limit (dBm)		
Frequency (MHz)				699.7	707.5	715.3			
1.4	QPSK	1	0	24.52	24.42	24.47	25		
1.4	QPSK	1	3	24.41	24.50	24.47			
1.4	QPSK	1	5	24.60	24.52	24.48			
1.4	QPSK	3	0	24.47	24.41	24.49	24		
1.4	QPSK	3	1	24.47	24.48	24.47			
1.4	QPSK	3	3	24.56	24.59	24.48			
1.4	QPSK	6	0	23.70	23.62	23.61	24		
1.4	16QAM	1	0	23.91	23.91	23.83			
1.4	16QAM	1	3	23.90	23.87	23.94			
1.4	16QAM	1	5	23.90	23.84	23.84	24		
1.4	16QAM	3	0	23.90	23.89	23.79			
1.4	16QAM	3	1	23.89	23.92	23.90			
1.4	16QAM	3	3	23.98	23.94	23.94	23		
1.4	16QAM	6	0	22.64	22.65	22.61			
1.4	64QAM	1	0	22.70	22.71	22.73			
1.4	64QAM	1	3	22.79	22.84	22.81	23		
1.4	64QAM	1	5	22.83	22.82	22.81			
1.4	64QAM	3	0	22.72	22.69	22.67			
1.4	64QAM	3	1	22.76	22.81	22.73	23		
1.4	64QAM	3	3	22.82	22.77	22.85			
1.4	64QAM	6	0	21.69	21.67	21.69			



Band 13							
Ann 0							
9W (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)
Channel				23230	762		
10	QPSK	1	0		24.66		25
10	QPSK	1	25		24.09		
10	QPSK	1	49		24.68		
10	QPSK	25	0		23.80		24
10	QPSK	25	12		23.78		
10	QPSK	25	25		23.84		
10	QPSK	50	0		23.83		24
10	16QAM	1	0		23.94		
10	16QAM	1	25		23.94		
10	16QAM	1	49		23.92		23
10	16QAM	25	0		22.79		
10	16QAM	25	12		22.83		
10	16QAM	25	25		22.84		23
10	16QAM	50	0		22.82		
10	64QAM	1	0		22.93		
10	64QAM	1	25		22.99		23
10	64QAM	1	49		22.95		
10	64QAM	25	0		21.81		
10	64QAM	25	12		21.84		22
10	64QAM	25	25		21.87		
10	64QAM	50	0		21.85		
Channel				23205	23230	23255	Tune-up limit (dBm)
Frequency (MHz)				779.5	762	784.5	
5	QPSK	1	0	24.64	24.63	24.61	25
5	QPSK	1	12	24.66	24.60	24.61	
5	QPSK	1	24	24.62	24.63	24.64	
5	QPSK	12	0	23.74	23.75	23.72	24
5	QPSK	12	7	23.75	23.71	23.72	
5	QPSK	12	13	23.75	23.83	23.81	
5	QPSK	25	0	23.75	23.83	23.80	24
5	16QAM	1	0	23.92	23.86	23.93	
5	16QAM	1	12	23.90	23.88	23.85	
5	16QAM	1	24	23.82	23.82	23.91	23
5	16QAM	12	0	22.76	22.77	22.88	
5	16QAM	12	7	22.81	22.79	22.78	
5	16QAM	12	13	22.75	22.84	22.82	23
5	16QAM	25	0	22.81	22.78	22.80	
5	64QAM	1	0	22.88	22.83	22.91	
5	64QAM	1	12	22.93	22.97	22.98	23
5	64QAM	1	24	22.90	22.93	22.95	
5	64QAM	12	0	21.71	21.80	21.80	
5	64QAM	12	7	21.79	21.81	21.84	22
5	64QAM	12	13	21.80	21.87	21.80	
5	64QAM	25	0	21.79	21.75	21.84	



Band 14							
Ann 0							
9W (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)
Channel				23305	23330		
Frequency (MHz)				760.5	763	765.5	
10	QPSK	1	0	24.69	24.63	24.63	25
10	QPSK	1	25	24.67	24.67	24.63	
10	QPSK	1	49	24.63	24.63	24.63	
10	QPSK	25	0	23.72	23.72	23.72	
10	QPSK	25	12	23.73	23.73	23.73	24
10	QPSK	25	25	23.77	23.77	23.77	
10	QPSK	50	0	23.71	23.71	23.71	
10	16QAM	1	0	23.79	23.79	23.79	
10	16QAM	1	25	23.74	23.74	23.74	24
10	16QAM	1	49	24.00	24.00	24.00	
10	16QAM	25	0	22.71	22.71	22.71	
10	16QAM	25	12	22.73	22.73	22.73	
10	16QAM	25	25	22.78	22.78	22.78	23
10	16QAM	50	0	22.73	22.73	22.73	
10	64QAM	1	0	22.96	22.96	22.96	
10	64QAM	1	25	23.00	23.00	23.00	
10	64QAM	1	49	22.92	22.92	22.92	23
10	64QAM	25	0	21.74	21.74	21.74	
10	64QAM	25	12	21.75	21.75	21.75	
10	64QAM	25	25	21.80	21.80	21.80	
10	64QAM	50	0	21.75	21.75	21.75	22
Channel				23305	23330	23355	
Frequency (MHz)				760.5	763	765.5	Tune-up limit (dBm)
5	QPSK	1	0	24.69	24.63	24.63	25
5	QPSK	1	12	24.67	24.61	24.63	
5	QPSK	1	24	24.61	24.57	24.54	
5	QPSK	12	0	23.67	23.70	23.67	
5	QPSK	12	7	23.73	23.67	23.69	24
5	QPSK	12	13	23.71	23.75	23.77	
5	QPSK	25	0	23.69	23.70	23.70	
5	16QAM	1	0	23.73	23.79	23.74	
5	16QAM	1	12	23.66	23.68	23.68	24
5	16QAM	1	24	23.93	23.91	23.90	
5	16QAM	12	0	22.71	22.67	22.64	
5	16QAM	12	7	22.63	22.72	22.67	
5	16QAM	12	13	22.77	22.77	22.75	23
5	16QAM	25	0	22.68	22.70	22.70	
5	64QAM	1	0	22.90	22.94	22.93	
5	64QAM	1	12	22.98	22.99	22.98	
5	64QAM	1	24	22.90	22.87	22.90	23
5	64QAM	12	0	21.71	21.69	21.73	
5	64QAM	12	7	21.69	21.74	21.67	
5	64QAM	12	13	21.73	21.78	21.75	
5	64QAM	25	0	21.70	21.65	21.72	22



Band 17							
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				23760	23790	23800	
Frequency (MHz)				705	710	711	
10	QPSK	1	0	24.50	24.48	24.49	25
10	QPSK	1	25	24.50	24.54	24.55	
10	QPSK	1	49	24.57	24.57	24.57	
10	QPSK	25	0	23.57	23.58	23.59	24
10	QPSK	25	12	23.74	23.66	23.65	
10	QPSK	25	25	23.75	23.76	23.75	
10	QPSK	50	0	23.73	23.67	23.64	24
10	16QAM	1	0	23.86	23.85	23.85	
10	16QAM	1	25	23.94	23.93	23.94	
10	16QAM	1	49	23.97	23.95	23.94	23
10	16QAM	25	0	22.62	22.60	22.60	
10	16QAM	25	12	22.75	22.66	22.66	
10	16QAM	25	25	22.75	22.76	22.72	23
10	16QAM	50	0	22.72	22.64	22.62	
10	64QAM	1	0	22.80	22.73	22.73	23
10	64QAM	1	25	22.85	22.86	22.85	
10	64QAM	1	49	22.85	22.83	22.85	
10	64QAM	25	0	21.61	21.62	21.65	22
10	64QAM	25	12	21.79	21.72	21.71	
10	64QAM	25	25	21.78	21.80	21.77	
10	64QAM	50	0	21.76	21.68	21.68	
Channel				23755	23790	23805	Tune-up limit (dBm)
Frequency (MHz)				706.5	710	713.5	
5	QPSK	1	0	24.44	24.47	24.41	25
5	QPSK	1	12	24.55	24.50	24.52	
5	QPSK	1	24	24.50	24.57	24.55	
5	QPSK	12	0	23.56	23.55	23.54	24
5	QPSK	12	7	23.71	23.56	23.57	
5	QPSK	12	13	23.75	23.72	23.71	
5	QPSK	25	0	23.67	23.61	23.60	24
5	16QAM	1	0	23.76	23.76	23.76	
5	16QAM	1	12	23.93	23.91	23.94	
5	16QAM	1	24	23.92	23.89	23.90	23
5	16QAM	12	0	22.56	22.54	22.52	
5	16QAM	12	7	22.67	22.59	22.60	
5	16QAM	12	13	22.66	22.72	22.70	23
5	16QAM	25	0	22.69	22.55	22.54	
5	64QAM	1	0	22.72	22.64	22.63	
5	64QAM	1	12	22.84	22.78	22.85	23
5	64QAM	1	24	22.82	22.73	22.82	
5	64QAM	12	0	21.60	21.52	21.59	
5	64QAM	12	7	21.76	21.67	21.64	22
5	64QAM	12	13	21.78	21.79	21.69	
5	64QAM	25	0	21.71	21.66	21.66	



Band 26							
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				26765	26865	26965	
Frequency (MHz)				821.5	831.5	841.5	
15	QPSK	1	0	24.64	24.52	24.55	25
15	QPSK	1	37	24.54	24.54	24.51	
15	QPSK	1	74	24.57	24.54	24.41	
15	QPSK	36	0	23.72	23.66	23.67	24
15	QPSK	36	20	23.75	23.66	23.70	
15	QPSK	36	39	23.74	23.72	23.65	
15	QPSK	75	0	23.73	23.65	23.66	23
15	16QAM	1	0	23.95	23.85	23.83	
15	16QAM	1	37	23.87	23.87	23.86	
15	16QAM	1	74	23.88	23.84	23.70	23
15	16QAM	36	0	22.72	22.69	22.68	
15	16QAM	36	20	22.74	22.69	22.70	
15	16QAM	36	39	22.71	22.68	22.65	23
15	16QAM	75	0	22.77	22.68	22.65	
15	64QAM	1	0	22.76	22.69	22.74	23
15	64QAM	1	37	22.76	22.79	22.78	
15	64QAM	1	74	22.80	22.74	22.37	
15	64QAM	36	0	21.75	21.74	21.73	22
15	64QAM	36	20	21.77	21.69	21.76	
15	64QAM	36	39	21.78	21.77	21.71	
15	64QAM	75	0	21.77	21.68	21.67	
Channel				26740	26865	26960	Tune-up limit (dBm)
Frequency (MHz)				819	831.5	844	
10	QPSK	1	0	24.55	24.45	24.51	25
10	QPSK	1	25	24.52	24.52	24.45	
10	QPSK	1	49	24.57	24.51	24.35	
10	QPSK	25	0	23.69	23.62	23.57	24
10	QPSK	25	12	23.68	23.59	23.63	
10	QPSK	25	25	23.70	23.72	23.62	
10	QPSK	50	0	23.66	23.57	23.57	24
10	16QAM	1	0	23.86	23.80	23.79	
10	16QAM	1	25	23.83	23.84	23.80	
10	16QAM	1	49	23.78	23.78	23.63	23
10	16QAM	25	0	22.65	22.69	22.63	
10	16QAM	25	12	22.72	22.69	22.64	
10	16QAM	25	25	22.64	22.64	22.65	23
10	16QAM	50	0	22.73	22.60	22.61	
10	64QAM	1	0	22.74	22.62	22.69	23
10	64QAM	1	25	22.76	22.71	22.71	
10	64QAM	1	49	22.75	22.72	22.27	
10	64QAM	25	0	21.71	21.73	21.64	22
10	64QAM	25	12	21.71	21.65	21.70	
10	64QAM	25	25	21.75	21.73	21.61	
10	64QAM	50	0	21.71	21.67	21.67	
Channel				26715	26865	27015	Tune-up limit (dBm)
Frequency (MHz)				816.5	831.5	846.5	
5	QPSK	1	0	24.63	24.45	24.46	25
5	QPSK	1	12	24.45	24.51	24.41	
5	QPSK	1	24	24.54	24.54	24.34	
5	QPSK	12	0	23.66	23.63	23.62	24
5	QPSK	12	7	23.75	23.63	23.70	
5	QPSK	12	13	23.67	23.69	23.63	
5	QPSK	25	0	23.66	23.62	23.62	24
5	16QAM	1	0	23.95	23.76	23.75	
5	16QAM	1	12	23.86	23.81	23.82	
5	16QAM	1	24	23.87	23.74	23.63	23
5	16QAM	12	0	22.67	22.68	22.59	
5	16QAM	12	7	22.69	22.66	22.62	
5	16QAM	12	13	22.66	22.58	22.61	23
5	16QAM	25	0	22.69	22.68	22.61	
5	64QAM	1	0	22.69	22.63	22.70	23
5	64QAM	1	12	22.72	22.72	22.77	
5	64QAM	1	24	22.76	22.65	22.29	
5	64QAM	12	0	21.70	21.73	21.70	22
5	64QAM	12	7	21.77	21.68	21.67	
5	64QAM	12	13	21.75	21.67	21.69	
5	64QAM	25	0	21.69	21.61	21.63	
Channel				26705	26865	27025	Tune-up limit (dBm)
Frequency (MHz)				815.5	831.5	847.5	
3	QPSK	1	0	24.64	24.47	24.46	25
3	QPSK	1	8	24.50	24.51	24.48	
3	QPSK	1	14	24.54	24.45	24.37	
3	QPSK	8	0	23.67	23.64	23.67	24
3	QPSK	8	4	23.65	23.66	23.63	
3	QPSK	8	7	23.72	23.69	23.65	
3	QPSK	15	0	23.71	23.62	23.60	24
3	16QAM	1	0	23.93	23.80	23.79	
3	16QAM	1	8	23.82	23.79	23.79	
3	16QAM	1	14	23.78	23.84	23.65	23
3	16QAM	8	0	22.71	22.61	22.60	
3	16QAM	8	4	22.68	22.67	22.65	
3	16QAM	8	7	22.61	22.59	22.59	23
3	16QAM	15	0	22.74	22.65	22.58	
3	64QAM	1	0	22.67	22.62	22.64	
3	64QAM	1	8	22.71	22.70	22.74	23
3	64QAM	1	14	22.75	22.74	22.36	
3	64QAM	8	0	21.67	21.69	21.63	
3	64QAM	8	4	21.72	21.61	21.67	22
3	64QAM	8	7	21.76	21.71	21.64	
3	64QAM	15	0	21.74	21.59	21.60	
Channel				26697	26865	27033	Tune-up limit (dBm)
Frequency (MHz)				814.7	831.5	848.3	
1.4	QPSK	1	0	24.59	24.52	24.52	25
1.4	QPSK	1	3	24.45	24.44	24.42	
1.4	QPSK	1	5	24.48	24.50	24.37	
1.4	QPSK	3	0	24.54	24.50	24.52	24
1.4	QPSK	3	1	24.44	24.47	24.51	
1.4	QPSK	3	3	24.54	24.53	24.41	
1.4	QPSK	6	0	23.67	23.64	23.62	24
1.4	16QAM	1	0	23.86	23.76	23.82	
1.4	16QAM	1	3	23.84	23.78	23.79	
1.4	16QAM	1	5	23.80	23.78	23.68	24
1.4	16QAM	3	0	23.95	23.76	23.82	
1.4	16QAM	3	1	23.83	23.80	23.77	
1.4	16QAM	3	3	23.83	23.78	23.65	23
1.4	16QAM	6	0	22.70	22.67	22.59	
1.4	64QAM	1	0	22.74	22.60	22.64	
1.4	64QAM	1	3	22.69	22.73	22.75	23
1.4	64QAM	1	5	22.75	22.68	22.29	
1.4	64QAM	3	0	22.75	22.68	22.67	
1.4	64QAM	3	1	22.71	22.75	22.68	22
1.4	64QAM	3	3	22.74	22.67	22.27	
1.4	64QAM	6	0	21.76	21.63	21.65	



Band 30							
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				27710			
Frequency (MHz)				2310			
10	QPSK	1	0		24.32		25
10	QPSK	1	25		24.31		
10	QPSK	1	49		24.27		
10	QPSK	25	0		23.34		
10	QPSK	25	12		23.40		24
10	QPSK	25	25		23.40		
10	QPSK	50	0		23.38		
10	16QAM	1	0		23.71		
10	16QAM	1	25		23.72		24
10	16QAM	1	49		23.67		
10	16QAM	25	0		22.35		
10	16QAM	25	12		22.41		
10	16QAM	25	25		22.36		23
10	16QAM	50	0		22.39		
10	64QAM	1	0		22.54		
10	64QAM	1	25		22.64		
10	64QAM	1	49		22.50		23
10	64QAM	25	0		21.40		
10	64QAM	25	12		21.46		
10	64QAM	25	25		21.47		
10	64QAM	50	0		21.44		22
Channel				27685	27710	27735	
Frequency (MHz)				2307.5	2310	2312.5	
5	QPSK	1	0	24.26	24.29	24.29	25
5	QPSK	1	12	24.29	24.25	24.26	
5	QPSK	1	24	24.18	24.25	24.25	
5	QPSK	12	0	23.34	23.24	23.33	
5	QPSK	12	7	23.31	23.39	23.32	24
5	QPSK	12	13	23.38	23.32	23.34	
5	QPSK	25	0	23.38	23.32	23.33	
5	16QAM	1	0	23.65	23.70	23.71	
5	16QAM	1	12	23.69	23.67	23.65	24
5	16QAM	1	24	23.58	23.64	23.58	
5	16QAM	12	0	22.28	22.29	22.33	
5	16QAM	12	7	22.41	22.35	22.40	
5	16QAM	12	13	22.33	22.31	22.30	23
5	16QAM	25	0	22.31	22.32	22.37	
5	64QAM	1	0	22.47	22.52	22.53	
5	64QAM	1	12	22.59	22.59	22.58	
5	64QAM	1	24	22.46	22.50	22.40	23
5	64QAM	12	0	21.30	21.40	21.38	
5	64QAM	12	7	21.44	21.37	21.39	
5	64QAM	12	13	21.40	21.48	21.39	
5	64QAM	25	0	21.41	21.37	21.34	22



Band 71									
Ann 0									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Freq. Ch	Power Middle Freq. Ch	Power High Freq. Ch	Tune-up limit (dBm)		
Channel				133222	133322	133372			
Frequency (MHz)				675	683	688			
20	QPSK	1	0	24.63	24.51	24.51	25		
20	QPSK	1	49	24.52	24.56	24.55			
20	QPSK	1	99	24.55	24.57	24.50			
20	QPSK	50	0	23.66	23.63	23.59	24		
20	QPSK	50	24	23.76	23.68	23.67			
20	QPSK	50	50	23.72	23.76	23.73			
20	QPSK	100	0	23.68	23.63	23.72	23		
20	16QAM	1	0	23.95	23.87	23.86			
20	16QAM	1	49	23.87	23.89	23.89			
20	16QAM	1	99	23.91	23.91	23.83	24		
20	16QAM	50	0	22.88	22.84	22.80			
20	16QAM	50	24	22.72	22.70	22.87			
20	16QAM	50	50	22.75	22.77	22.76	23		
20	16QAM	100	0	22.72	22.83	22.71			
20	64QAM	1	0	22.84	22.72	22.72			
20	64QAM	1	49	22.78	22.80	22.76	23		
20	64QAM	1	99	22.82	22.83	22.78			
20	64QAM	50	0	21.73	21.67	21.84			
20	64QAM	50	24	21.77	21.71	21.69	22		
20	64QAM	50	50	21.75	21.75	21.77			
20	64QAM	100	0	21.79	21.68	21.73			
Channel				133197	133297	133397	Tune-up limit (dBm)		
Frequency (MHz)				670.5	680.5	690.5			
15	QPSK	1	0	24.59	24.48	24.48	25		
15	QPSK	1	37	24.46	24.48	24.52			
15	QPSK	1	74	24.48	24.47	24.47			
15	QPSK	36	0	23.58	23.58	23.50	24		
15	QPSK	36	20	23.70	23.66	23.59			
15	QPSK	36	39	23.69	23.68	23.68			
15	QPSK	75	0	23.63	23.61	23.68	24		
15	16QAM	1	0	23.89	23.78	23.86			
15	16QAM	1	37	23.80	23.80	23.81			
15	16QAM	1	74	23.91	23.83	23.82	23		
15	16QAM	36	0	22.86	22.59	22.54			
15	16QAM	36	20	22.66	22.64	22.87			
15	16QAM	36	39	22.70	22.67	22.74	23		
15	16QAM	75	0	22.69	22.53	22.68			
15	64QAM	1	0	22.83	22.64	22.71			
15	64QAM	1	37	22.76	22.75	22.68	23		
15	64QAM	1	74	22.74	22.74	22.74			
15	64QAM	36	0	21.72	21.60	21.80			
15	64QAM	36	20	21.72	21.68	21.62	22		
15	64QAM	36	39	21.71	21.75	21.74			
15	64QAM	75	0	21.69	21.66	21.63			
Channel				133172	133272	133422	Tune-up limit (dBm)		
Frequency (MHz)				688	678	693			
10	QPSK	1	0	24.53	24.49	24.46	25		
10	QPSK	1	25	24.51	24.52	24.49			
10	QPSK	1	49	24.52	24.53	24.43			
10	QPSK	25	0	23.66	23.54	23.57	24		
10	QPSK	25	12	23.72	23.62	23.66			
10	QPSK	25	25	23.71	23.73	23.70			
10	QPSK	50	0	23.61	23.60	23.87	24		
10	16QAM	1	0	23.91	23.80	23.83			
10	16QAM	1	25	23.81	23.83	23.81			
10	16QAM	1	49	23.87	23.83	23.74	23		
10	16QAM	25	0	22.59	22.54	22.56			
10	16QAM	25	12	22.63	22.61	22.80			
10	16QAM	25	25	22.69	22.76	22.73	23		
10	16QAM	50	0	22.69	22.61	22.70			
10	64QAM	1	0	22.79	22.69	22.67			
10	64QAM	1	25	22.74	22.70	22.71	23		
10	64QAM	1	49	22.75	22.76	22.74			
10	64QAM	25	0	21.68	21.64	21.57			
10	64QAM	25	12	21.67	21.68	21.84	22		
10	64QAM	25	25	21.72	21.74	21.75			
10	64QAM	50	0	21.71	21.58	21.66			
Channel				133147	133247	133447	Tune-up limit (dBm)		
Frequency (MHz)				685.5	675.5	695.5			
5	QPSK	1	0	24.53	24.50	24.45	25		
5	QPSK	1	12	24.47	24.56	24.51			
5	QPSK	1	24	24.46	24.49	24.47			
5	QPSK	12	0	23.62	23.57	23.56	24		
5	QPSK	12	7	23.66	23.64	23.59			
5	QPSK	12	13	23.68	23.70	23.66			
5	QPSK	25	0	23.59	23.63	23.71	24		
5	16QAM	1	0	23.95	23.86	23.81			
5	16QAM	1	12	23.78	23.85	23.86			
5	16QAM	1	24	23.82	23.91	23.75	23		
5	16QAM	12	0	22.59	22.62	22.55			
5	16QAM	12	7	22.63	22.66	22.63			
5	16QAM	12	13	22.74	22.69	22.69	23		
5	16QAM	25	0	22.63	22.63	22.68			
5	64QAM	1	0	22.75	22.65	22.67			
5	64QAM	1	12	22.71	22.74	22.67	23		
5	64QAM	1	24	22.75	22.75	22.69			
5	64QAM	12	0	21.70	21.59	21.84			
5	64QAM	12	7	21.67	21.61	21.67	22		
5	64QAM	12	13	21.67	21.72	21.73			
5	64QAM	25	0	21.76	21.63	21.70			



Band 5									
Ver 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	24.50	24.48	24.46	25		
10	QPSK	1	25	24.43	24.37	24.37			
10	QPSK	49	24	24.40	24.37	24.37			
10	QPSK	25	0	23.52	23.53	23.51	24		
10	QPSK	25	12	23.59	23.54	23.52			
10	QPSK	25	25	23.57	23.57	23.56			
10	QPSK	50	0	23.63	23.60	23.51	24		
10	16QAM	1	0	23.84	23.85	23.84			
10	16QAM	1	25	23.80	23.79	23.77			
10	16QAM	1	49	23.78	23.76	23.73	23		
10	16QAM	25	0	22.50	22.53	22.49			
10	16QAM	25	12	22.62	22.49	22.52			
10	16QAM	25	25	22.55	22.55	22.56	23		
10	16QAM	50	0	22.61	22.61	22.52			
10	64QAM	1	0	22.72	22.66	22.73			
10	64QAM	1	25	22.73	22.71	22.71	23		
10	64QAM	1	49	22.68	22.68	21.90			
10	64QAM	25	0	21.56	21.55	21.53			
10	64QAM	25	12	21.63	21.56	21.55	22		
10	64QAM	25	25	21.61	21.59	21.24			
10	64QAM	50	0	21.66	21.60	21.37			
Channel				20450	20525	20625	Tune-up limit (dBm)		
Frequency (MHz)				826.5	836.5	846.5			
5	QPSK	1	0	24.50	24.43	24.44	25		
5	QPSK	1	12	24.36	24.33	24.37			
5	QPSK	1	24	24.41	24.31	24.35			
5	QPSK	12	0	23.42	23.48	23.42	24		
5	QPSK	12	7	23.59	23.45	23.49			
5	QPSK	12	13	23.51	23.48	23.55			
5	QPSK	25	0	23.57	23.53	23.44	24		
5	16QAM	1	0	23.75	23.83	23.84			
5	16QAM	1	12	23.70	23.74	23.72			
5	16QAM	1	24	23.70	23.72	23.63	23		
5	16QAM	12	0	22.49	22.44	22.45			
5	16QAM	12	7	22.59	22.39	22.50			
5	16QAM	12	13	22.46	22.55	22.52	23		
5	16QAM	25	0	22.53	22.56	22.42			
5	64QAM	1	0	22.70	22.66	22.73			
5	64QAM	1	12	22.63	22.61	22.63	23		
5	64QAM	1	24	22.65	22.66	21.85			
5	64QAM	12	0	21.46	21.47	21.47			
5	64QAM	12	7	21.58	21.48	21.45	22		
5	64QAM	12	13	21.58	21.55	21.16			
5	64QAM	25	0	21.63	21.57	21.27			
Channel				20415	20525	20635	Tune-up limit (dBm)		
Frequency (MHz)				825.5	836.5	847.5			
3	QPSK	1	0	24.48	24.46	24.46	25		
3	QPSK	1	4	24.33	24.35	24.31			
3	QPSK	1	14	24.37	24.30	24.37			
3	QPSK	8	0	23.45	23.52	23.43	24		
3	QPSK	8	4	23.58	23.47	23.42			
3	QPSK	8	7	23.52	23.53	23.47			
3	QPSK	15	0	23.58	23.55	23.46	24		
3	16QAM	1	0	23.75	23.79	23.75			
3	16QAM	1	8	23.80	23.71	23.74			
3	16QAM	1	14	23.75	23.68	23.71	23		
3	16QAM	8	0	22.44	22.48	22.40			
3	16QAM	8	4	22.59	22.49	22.46			
3	16QAM	8	7	22.45	22.53	22.55	23		
3	16QAM	15	0	22.54	22.56	22.50			
3	64QAM	1	0	22.65	22.64	22.71			
3	64QAM	1	8	22.71	22.65	22.64	23		
3	64QAM	1	14	22.66	22.62	21.80			
3	64QAM	8	0	21.52	21.51	21.43			
3	64QAM	8	4	21.62	21.51	21.55	22		
3	64QAM	8	7	21.57	21.49	21.24			
3	64QAM	15	0	21.59	21.55	21.34			
Channel				20407	20525	20643	Tune-up limit (dBm)		
Frequency (MHz)				824.7	836.5	848.3			
1.4	QPSK	1	0	24.47	24.39	24.46	25		
1.4	QPSK	1	3	24.36	24.36	24.27			
1.4	QPSK	1	5	24.44	24.40	24.34			
1.4	QPSK	3	0	24.48	24.42	24.38	24		
1.4	QPSK	3	1	24.34	24.33	24.31			
1.4	QPSK	3	3	24.35	24.36	24.32			
1.4	QPSK	6	0	23.62	23.50	23.47	24		
1.4	16QAM	1	0	23.77	23.76	23.80			
1.4	16QAM	1	3	23.75	23.75	23.71			
1.4	16QAM	1	5	23.75	23.67	23.67	24		
1.4	16QAM	3	0	23.73	23.67	23.71			
1.4	16QAM	3	1	23.69	23.70	23.61			
1.4	16QAM	3	3	23.67	23.62	23.61	23		
1.4	16QAM	6	0	22.52	22.60	22.50			
1.4	64QAM	1	0	22.68	22.56	22.68			
1.4	64QAM	1	3	22.72	22.70	22.68	23		
1.4	64QAM	1	5	22.59	22.67	21.80			
1.4	64QAM	3	0	22.61	22.50	22.67			
1.4	64QAM	3	1	22.69	22.64	22.68	22		
1.4	64QAM	3	3	22.53	22.67	21.83			
1.4	64QAM	6	0	21.66	21.55	21.28			



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				20850	21100	21350	25
Frequency (MHz)				2510	2535	2560	
20	QPSK	1	0	24.73	24.65	24.65	25
20	QPSK	1	49	24.53	24.65	23.54	
20	QPSK	1	99	24.87	23.83	24.63	
20	QPSK	50	0	23.94	23.96	22.29	24
20	QPSK	50	24	23.99	23.84	22.71	
20	QPSK	50	50	23.52	23.80	23.72	
20	QPSK	100	0	23.81	23.85	22.93	24
20	16QAM	1	0	23.86	23.84	22.98	
20	16QAM	1	49	23.88	23.80	22.74	
20	16QAM	1	99	23.94	23.85	23.82	23
20	16QAM	50	0	22.95	22.88	21.38	
20	16QAM	50	24	22.81	22.84	21.74	
20	16QAM	50	50	22.96	22.81	22.99	23
20	16QAM	100	0	22.98	22.83	22.03	
20	64QAM	1	0	22.81	22.68	21.17	
20	64QAM	1	49	22.86	22.83	21.82	22
20	64QAM	1	99	22.74	22.85	21.91	
20	64QAM	50	0	21.95	21.98	20.39	
20	64QAM	50	24	21.92	20.15	20.71	22
20	64QAM	50	50	21.64	21.84	20.85	
20	64QAM	100	0	21.66	21.90	20.03	
Channel				20825	21100	21375	25
Frequency (MHz)				2507.5	2535	2562.5	
15	QPSK	1	0	24.67	24.64	24.73	25
15	QPSK	1	37	24.53	24.81	24.82	
15	QPSK	1	74	24.78	24.80	24.81	
15	QPSK	36	0	23.84	23.86	23.86	24
15	QPSK	36	20	23.98	23.96	23.93	
15	QPSK	36	39	23.82	23.84	23.87	
15	QPSK	75	0	23.74	23.77	23.75	24
15	16QAM	1	0	23.80	23.81	23.84	
15	16QAM	1	37	23.86	23.87	23.78	
15	16QAM	1	74	23.81	23.76	23.83	23
15	16QAM	36	0	22.95	22.90	22.89	
15	16QAM	36	20	22.80	22.75	22.76	
15	16QAM	36	39	22.87	22.93	22.94	23
15	16QAM	75	0	22.94	22.98	22.98	
15	64QAM	1	0	22.72	22.71	22.77	
15	64QAM	1	37	22.79	22.78	22.79	22
15	64QAM	1	74	22.67	22.68	22.71	
15	64QAM	36	0	21.85	21.88	21.88	
15	64QAM	36	20	21.85	21.91	21.85	22
15	64QAM	36	39	21.58	21.58	21.55	
15	64QAM	75	0	21.66	21.76	21.76	
Channel				20800	21100	21400	25
Frequency (MHz)				2505	2535	2565	
10	QPSK	1	0	24.65	24.65	24.72	25
10	QPSK	1	25	24.75	24.83	24.74	
10	QPSK	1	49	24.78	24.84	24.79	
10	QPSK	25	0	23.86	23.93	23.84	24
10	QPSK	25	12	23.98	23.90	23.95	
10	QPSK	25	25	23.82	23.87	23.83	
10	QPSK	50	0	23.78	23.80	23.81	24
10	16QAM	1	0	23.84	23.76	23.83	
10	16QAM	1	25	23.88	23.84	23.83	
10	16QAM	1	49	23.82	23.77	23.76	23
10	16QAM	25	0	22.90	22.90	22.91	
10	16QAM	25	12	22.78	22.78	22.80	
10	16QAM	25	25	22.89	22.90	22.94	23
10	16QAM	50	0	22.94	22.89	22.93	
10	64QAM	1	0	22.79	22.77	22.81	
10	64QAM	1	25	22.84	22.82	22.82	22
10	64QAM	1	49	22.66	22.64	22.70	
10	64QAM	25	0	21.85	21.85	21.83	
10	64QAM	25	12	21.86	21.85	21.88	22
10	64QAM	25	25	21.61	21.59	21.55	
10	64QAM	50	0	21.64	21.80	21.82	
Channel				20775	21100	21425	25
Frequency (MHz)				2502.5	2535	2567.5	
5	QPSK	1	0	24.66	24.73	24.65	25
5	QPSK	1	12	24.83	24.77	24.74	
5	QPSK	1	24	24.82	24.77	24.79	
5	QPSK	12	0	23.86	23.91	23.93	24
5	QPSK	12	7	23.95	23.89	23.94	
5	QPSK	12	13	23.82	23.91	23.89	
5	QPSK	25	0	23.77	23.75	23.75	24
5	16QAM	1	0	23.80	23.84	23.82	
5	16QAM	1	12	23.83	23.87	23.86	
5	16QAM	1	24	23.77	23.76	23.77	23
5	16QAM	12	0	22.95	22.88	22.93	
5	16QAM	12	7	22.78	22.80	22.73	
5	16QAM	12	13	22.87	22.93	22.87	23
5	16QAM	25	0	22.97	22.89	22.98	
5	64QAM	1	0	22.73	22.78	22.73	
5	64QAM	1	12	22.81	22.82	22.76	22
5	64QAM	1	24	22.73	22.73	22.65	
5	64QAM	12	0	21.90	21.91	21.87	
5	64QAM	12	7	21.87	21.86	21.90	22
5	64QAM	12	13	21.56	21.62	21.55	
5	64QAM	25	0	21.78	21.81	21.84	



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				23060	23095	23130	
Frequency (MHz)				704	707.5	711	
10	QPSK	1	0	24.46	24.44	24.39	25
10	QPSK	1	25	24.46	24.47	24.45	
10	QPSK	1	49	24.55	24.53	24.47	
10	QPSK	25	0	23.59	23.60	23.58	24
10	QPSK	25	12	23.66	23.61	23.58	
10	QPSK	25	25	23.66	23.66	23.65	
10	QPSK	50	0	23.67	23.54	23.60	24
10	16QAM	1	0	23.86	23.81	23.78	
10	16QAM	1	25	23.83	23.85	23.84	
10	16QAM	1	49	23.91	23.84	23.85	23
10	16QAM	25	0	22.58	22.62	22.58	
10	16QAM	25	12	22.67	22.59	22.58	
10	16QAM	25	25	22.65	22.62	22.60	23
10	16QAM	50	0	22.65	22.57	22.58	
10	64QAM	1	0	22.69	22.66	22.67	
10	64QAM	1	25	22.78	22.81	22.77	23
10	64QAM	1	49	22.82	22.79	22.75	
10	64QAM	25	0	21.63	21.63	21.63	
10	64QAM	25	12	21.72	21.63	21.63	22
10	64QAM	25	25	21.65	21.67	21.67	
10	64QAM	50	0	21.72	21.64	21.63	
Channel				23035	23095	23155	Tune-up limit (dBm)
Frequency (MHz)				701.5	707.5	713.5	
5	QPSK	1	0	24.46	24.36	24.34	25
5	QPSK	1	12	24.36	24.39	24.39	
5	QPSK	1	24	24.51	24.48	24.47	
5	QPSK	12	0	23.53	23.56	23.48	24
5	QPSK	12	7	23.62	23.54	23.51	
5	QPSK	12	13	23.63	23.65	23.62	
5	QPSK	25	0	23.63	23.54	23.57	24
5	16QAM	1	0	23.85	23.72	23.71	
5	16QAM	1	12	23.73	23.83	23.83	
5	16QAM	1	24	23.86	23.84	23.84	23
5	16QAM	12	0	22.54	22.53	22.51	
5	16QAM	12	7	22.63	22.52	22.52	
5	16QAM	12	13	22.58	22.55	22.56	23
5	16QAM	25	0	22.58	22.51	22.57	
5	64QAM	1	0	22.66	22.63	22.69	
5	64QAM	1	12	22.68	22.73	22.72	23
5	64QAM	1	24	22.76	22.74	22.70	
5	64QAM	12	0	21.58	21.60	21.60	
5	64QAM	12	7	21.69	21.55	21.54	22
5	64QAM	12	13	21.57	21.63	21.57	
5	64QAM	25	0	21.64	21.56	21.60	
Channel				23025	23095	23165	Tune-up limit (dBm)
Frequency (MHz)				700.5	707.5	714.5	
3	QPSK	1	0	24.46	24.38	24.29	25
3	QPSK	1	4	24.39	24.38	24.44	
3	QPSK	1	14	24.49	24.48	24.39	
3	QPSK	8	0	23.52	23.53	23.50	24
3	QPSK	8	4	23.59	23.61	23.50	
3	QPSK	8	7	23.61	23.65	23.65	
3	QPSK	15	0	23.58	23.58	23.53	24
3	16QAM	1	0	23.76	23.71	23.76	
3	16QAM	1	8	23.76	23.84	23.81	
3	16QAM	1	14	23.88	23.80	23.80	23
3	16QAM	8	0	22.52	22.62	22.49	
3	16QAM	8	4	22.61	22.50	22.52	
3	16QAM	8	7	22.65	22.59	22.58	23
3	16QAM	15	0	22.57	22.55	22.51	
3	64QAM	1	0	22.61	22.64	22.57	
3	64QAM	1	8	22.73	22.78	22.68	23
3	64QAM	1	14	22.79	22.75	22.69	
3	64QAM	8	0	21.58	21.61	21.54	
3	64QAM	8	4	21.63	21.60	21.58	22
3	64QAM	8	7	21.65	21.58	21.60	
3	64QAM	15	0	21.72	21.55	21.60	
Channel				23017	23095	23173	Tune-up limit (dBm)
Frequency (MHz)				699.7	707.5	715.3	
1.4	QPSK	1	0	24.49	24.43	24.34	25
1.4	QPSK	1	3	24.38	24.46	24.43	
1.4	QPSK	1	5	24.55	24.47	24.37	
1.4	QPSK	3	0	24.47	24.42	24.38	24
1.4	QPSK	3	1	24.46	24.43	24.45	
1.4	QPSK	3	3	24.51	24.49	24.42	
1.4	QPSK	6	0	23.64	23.56	23.56	24
1.4	16QAM	1	0	23.78	23.71	23.73	
1.4	16QAM	1	3	23.79	23.76	23.76	
1.4	16QAM	1	5	23.81	23.77	23.84	24
1.4	16QAM	3	0	23.68	23.68	23.73	
1.4	16QAM	3	1	23.75	23.69	23.71	
1.4	16QAM	3	3	23.76	23.70	23.76	23
1.4	16QAM	6	0	22.60	22.53	22.49	
1.4	64QAM	1	0	22.69	22.58	22.61	
1.4	64QAM	1	3	22.68	22.77	22.77	23
1.4	64QAM	1	5	22.73	22.78	22.71	
1.4	64QAM	3	0	22.59	22.51	22.59	
1.4	64QAM	3	1	22.62	22.76	22.75	22
1.4	64QAM	3	3	22.71	22.73	22.69	
1.4	64QAM	6	0	21.63	21.64	21.57	



Band 13							
Ann 1							
9W (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)				762			
10	QPSK	1	0	24.57	24.57	24.57	25
10	QPSK	1	25	24.60	24.60	24.60	
10	QPSK	1	49	24.69	24.69	24.69	
10	QPSK	25	0	23.64	23.64	23.64	
10	QPSK	25	12	23.69	23.69	23.69	24
10	QPSK	25	25	23.72	23.72	23.72	
10	QPSK	50	0	23.72	23.72	23.72	
10	16QAM	1	0	23.94	23.94	23.94	
10	16QAM	1	25	23.93	23.93	23.93	24
10	16QAM	1	49	23.93	23.93	23.93	
10	16QAM	25	0	22.87	22.87	22.87	
10	16QAM	25	12	22.75	22.75	22.75	
10	16QAM	25	25	22.75	22.75	22.75	23
10	16QAM	50	0	22.86	22.86	22.86	
10	64QAM	1	0	22.81	22.81	22.81	
10	64QAM	1	25	22.87	22.87	22.87	
10	64QAM	1	49	22.88	22.88	22.88	23
10	64QAM	25	0	21.72	21.72	21.72	
10	64QAM	25	12	21.74	21.74	21.74	
10	64QAM	25	25	21.76	21.76	21.76	
10	64QAM	50	0	21.73	21.73	21.73	22
Channel				23205	23230	23255	
Frequency (MHz)				779.5	762	784.5	Tune-up limit (dBm)
5	QPSK	1	0	24.55	24.51	24.48	25
5	QPSK	1	12	24.55	24.51	24.50	
5	QPSK	1	24	24.63	24.67	24.69	
5	QPSK	12	0	23.63	23.54	23.57	
5	QPSK	12	7	23.65	23.59	23.60	24
5	QPSK	12	13	23.71	23.70	23.64	
5	QPSK	25	0	23.69	23.54	23.54	
5	16QAM	1	0	23.90	23.93	23.89	
5	16QAM	1	12	23.92	23.84	23.86	24
5	16QAM	1	24	23.85	23.85	23.84	
5	16QAM	12	0	22.84	22.60	22.86	
5	16QAM	12	7	22.70	22.70	22.75	
5	16QAM	12	13	22.74	22.71	22.73	23
5	16QAM	25	0	22.60	22.58	22.60	
5	64QAM	1	0	22.79	22.80	22.78	
5	64QAM	1	12	22.80	22.80	22.78	
5	64QAM	1	24	22.82	22.86	22.86	23
5	64QAM	12	0	21.65	21.70	21.65	
5	64QAM	12	7	21.64	21.64	21.64	
5	64QAM	12	13	21.69	21.67	21.74	
5	64QAM	25	0	21.69	21.71	21.69	22



Band 14							
Ann 1							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)
Channel				23305	760		
10	QPSK	1	0		24.57		25
10	QPSK	1	25		24.51		
10	QPSK	1	49		24.48		
10	QPSK	25	0		23.81		
10	QPSK	25	12		23.81		24
10	QPSK	25	25		23.85		
10	QPSK	50	0		23.59		
10	16QAM	1	0		23.96		
10	16QAM	1	25		23.91		24
10	16QAM	1	49		23.89		
10	16QAM	25	0		22.59		
10	16QAM	25	12		22.58		
10	16QAM	25	25		22.60		23
10	16QAM	50	0		22.58		
10	64QAM	1	0		22.82		
10	64QAM	1	25		22.85		
10	64QAM	1	49		22.79		23
10	64QAM	25	0		21.65		
10	64QAM	25	12		21.66		
10	64QAM	25	25		21.68		
10	64QAM	50	0		21.65		22
Channel				23305	23330	23365	Tune-up limit (dBm)
Frequency (MHz)				760.5	760	760.5	
5	QPSK	1	0	24.50	24.55	24.51	25
5	QPSK	1	12	24.41	24.47	24.46	
5	QPSK	1	24	24.48	24.42	24.47	
5	QPSK	12	0	23.60	23.60	23.51	
5	QPSK	12	7	23.56	23.59	23.52	24
5	QPSK	12	13	23.64	23.57	23.65	
5	QPSK	25	0	23.53	23.52	23.59	
5	16QAM	1	0	23.90	23.93	23.86	
5	16QAM	1	12	23.91	23.82	23.86	24
5	16QAM	1	24	23.89	23.85	23.80	
5	16QAM	12	0	22.58	22.55	22.56	
5	16QAM	12	7	22.52	22.58	22.55	
5	16QAM	12	13	22.50	22.54	22.55	23
5	16QAM	25	0	22.56	22.56	22.48	
5	64QAM	1	0	22.73	22.82	22.73	
5	64QAM	1	12	22.77	22.81	22.76	
5	64QAM	1	24	22.77	22.76	22.76	23
5	64QAM	12	0	21.62	21.56	21.56	
5	64QAM	12	7	21.56	21.56	21.59	
5	64QAM	12	13	21.66	21.58	21.68	
5	64QAM	25	0	21.64	21.65	21.65	22



Band 17							
Ann 1							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)
Channel				23780	23790	23800	
Frequency (MHz)				708	710	711	
10	QPSK	1	0	24.43	24.41	24.42	25
10	QPSK	1	25	24.43	24.45	24.42	
10	QPSK	1	49	24.49	24.48	24.48	
10	QPSK	25	0	23.51	23.51	23.52	24
10	QPSK	25	12	23.65	23.60	23.58	
10	QPSK	25	25	23.66	23.66	23.66	
10	QPSK	50	0	23.64	23.57	23.56	24
10	16QAM	1	0	23.79	23.81	23.79	
10	16QAM	1	25	23.86	23.85	23.87	
10	16QAM	1	49	23.88	23.87	23.89	23
10	16QAM	25	0	22.53	22.55	22.53	
10	16QAM	25	12	22.67	22.58	22.59	
10	16QAM	25	25	22.68	22.68	22.65	23
10	16QAM	50	0	22.66	22.57	22.57	
10	64QAM	1	0	22.68	22.65	22.61	23
10	64QAM	1	25	22.77	22.78	22.77	
10	64QAM	1	49	22.80	22.76	22.77	
10	64QAM	25	0	21.55	21.50	21.53	22
10	64QAM	25	12	21.62	21.62	21.62	
10	64QAM	25	25	21.69	21.68	21.69	
10	64QAM	50	0	21.68	21.60	21.59	
Channel				23755	23790	23805	Tune-up limit (dBm)
Frequency (MHz)				708.5	710	713.5	
5	QPSK	1	0	24.36	24.40	24.42	25
5	QPSK	1	12	24.41	24.39	24.34	
5	QPSK	1	24	24.43	24.38	24.39	
5	QPSK	12	0	23.44	23.44	23.45	24
5	QPSK	12	7	23.55	23.58	23.48	
5	QPSK	12	13	23.57	23.58	23.60	
5	QPSK	25	0	23.55	23.49	23.54	24
5	16QAM	1	0	23.69	23.75	23.79	
5	16QAM	1	12	23.76	23.79	23.77	
5	16QAM	1	24	23.85	23.85	23.88	23
5	16QAM	12	0	22.50	22.52	22.51	
5	16QAM	12	7	22.66	22.50	22.56	
5	16QAM	12	13	22.63	22.61	22.60	23
5	16QAM	25	0	22.56	22.54	22.55	
5	64QAM	1	0	22.61	22.63	22.56	
5	64QAM	1	12	22.76	22.78	22.69	23
5	64QAM	1	24	22.71	22.74	22.70	
5	64QAM	12	0	21.45	21.48	21.45	
5	64QAM	12	7	21.60	21.62	21.57	22
5	64QAM	12	13	21.67	21.58	21.68	
5	64QAM	25	0	21.62	21.51	21.66	



Band 26							
Ann 1							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)
Channel				26765	26865	26965	
Frequency (MHz)				831.5	831.5	841.5	
15	QPSK	1	0	24.49	24.38	24.38	25
15	QPSK	1	37	24.38	24.41	24.34	
15	QPSK	1	74	24.43	24.40	24.28	
15	QPSK	36	0	23.56	23.51	23.53	24
15	QPSK	36	20	23.63	23.51	23.56	
15	QPSK	36	39	23.62	23.52	23.52	
15	QPSK	75	0	23.60	23.49	23.50	23
15	16QAM	1	0	23.81	23.72	23.72	
15	16QAM	1	37	23.71	23.74	23.71	
15	16QAM	1	74	23.71	23.69	23.67	23
15	16QAM	36	0	22.58	22.54	22.52	
15	16QAM	36	20	22.59	22.50	22.56	
15	16QAM	36	39	22.59	22.55	22.46	23
15	16QAM	75	0	22.64	22.51	22.51	
15	64QAM	1	0	22.69	22.55	22.58	23
15	64QAM	1	37	22.65	22.63	22.62	
15	64QAM	1	74	22.65	22.60	21.82	
15	64QAM	36	0	21.61	21.58	21.59	22
15	64QAM	36	20	21.64	21.55	21.59	
15	64QAM	36	39	21.63	21.63	21.62	
15	64QAM	75	0	21.63	21.55	21.51	
Channel				26740	26865	26960	Tune-up limit (dBm)
Frequency (MHz)				819	831.5	844	
10	QPSK	1	0	24.42	24.33	24.38	25
10	QPSK	1	25	24.29	24.38	24.29	
10	QPSK	1	49	24.37	24.38	24.28	
10	QPSK	25	0	23.49	23.45	23.48	24
10	QPSK	25	12	23.60	23.41	23.56	
10	QPSK	25	25	23.59	23.45	23.49	
10	QPSK	50	0	23.55	23.42	23.50	24
10	16QAM	1	0	23.74	23.63	23.62	
10	16QAM	1	25	23.70	23.71	23.64	
10	16QAM	1	49	23.65	23.68	23.57	23
10	16QAM	25	0	22.54	22.53	22.45	
10	16QAM	25	12	22.59	22.50	22.56	
10	16QAM	25	25	22.55	22.47	22.41	23
10	16QAM	50	0	22.59	22.46	22.41	
10	64QAM	1	0	22.60	22.45	22.58	
10	64QAM	1	25	22.61	22.53	22.61	23
10	64QAM	1	49	22.60	22.60	21.83	
10	64QAM	25	0	21.58	21.48	21.58	
10	64QAM	25	12	21.58	21.53	21.54	22
10	64QAM	25	25	21.59	21.54	21.57	
10	64QAM	50	0	21.58	21.53	21.50	
Channel				26715	26865	27015	Tune-up limit (dBm)
Frequency (MHz)				816.5	831.5	846.5	
5	QPSK	1	0	24.39	24.31	24.36	25
5	QPSK	1	12	24.33	24.35	24.26	
5	QPSK	1	24	24.41	24.38	24.18	
5	QPSK	12	0	23.53	23.51	23.49	24
5	QPSK	12	7	23.56	23.47	23.55	
5	QPSK	12	13	23.56	23.50	23.62	
5	QPSK	25	0	23.53	23.41	23.44	24
5	16QAM	1	0	23.80	23.70	23.63	
5	16QAM	1	12	23.67	23.71	23.67	
5	16QAM	1	24	23.66	23.60	23.48	23
5	16QAM	12	0	22.52	22.50	22.42	
5	16QAM	12	7	22.57	22.49	22.56	
5	16QAM	12	13	22.57	22.47	22.42	23
5	16QAM	25	0	22.60	22.51	22.43	
5	64QAM	1	0	22.67	22.50	22.56	
5	64QAM	1	12	22.60	22.59	22.58	23
5	64QAM	1	24	22.64	22.55	21.83	
5	64QAM	12	0	21.58	21.49	21.58	
5	64QAM	12	7	21.54	21.55	21.56	22
5	64QAM	12	13	21.54	21.57	21.60	
5	64QAM	25	0	21.54	21.53	21.42	
Channel				26705	26865	27025	Tune-up limit (dBm)
Frequency (MHz)				815.5	831.5	847.5	
3	QPSK	1	0	24.44	24.35	24.28	25
3	QPSK	1	8	24.36	24.35	24.32	
3	QPSK	1	14	24.35	24.33	24.27	
3	QPSK	8	0	23.49	23.48	23.46	24
3	QPSK	8	4	23.56	23.46	23.53	
3	QPSK	8	7	23.57	23.49	23.49	
3	QPSK	15	0	23.54	23.47	23.50	24
3	16QAM	1	0	23.76	23.72	23.71	
3	16QAM	1	8	23.68	23.68	23.63	
3	16QAM	1	14	23.61	23.65	23.52	23
3	16QAM	8	0	22.56	22.51	22.50	
3	16QAM	8	4	22.50	22.45	22.47	
3	16QAM	8	7	22.53	22.55	22.42	23
3	16QAM	15	0	22.63	22.47	22.50	
3	64QAM	1	0	22.69	22.47	22.48	
3	64QAM	1	8	22.65	22.60	22.52	23
3	64QAM	1	14	22.64	22.59	21.88	
3	64QAM	8	0	21.56	21.54	21.52	
3	64QAM	8	4	21.61	21.54	21.53	22
3	64QAM	8	7	21.63	21.54	21.56	
3	64QAM	15	0	21.56	21.50	21.46	
Channel				26697	26865	27033	Tune-up limit (dBm)
Frequency (MHz)				814.7	831.5	848.3	
1.4	QPSK	1	0	24.39	24.30	24.33	25
1.4	QPSK	1	3	24.36	24.41	24.25	
1.4	QPSK	1	5	24.43	24.38	24.27	
1.4	QPSK	3	0	24.39	24.35	24.32	24
1.4	QPSK	3	1	24.37	24.36	24.25	
1.4	QPSK	3	3	24.43	24.39	24.23	
1.4	QPSK	6	0	23.57	23.59	23.47	24
1.4	16QAM	1	0	23.72	23.72	23.64	
1.4	16QAM	1	3	23.70	23.67	23.68	
1.4	16QAM	1	5	23.61	23.66	23.56	24
1.4	16QAM	3	0	23.70	23.64	23.62	
1.4	16QAM	3	1	23.61	23.58	23.58	
1.4	16QAM	3	3	23.53	23.56	23.50	23
1.4	16QAM	6	0	22.57	22.48	22.46	
1.4	64QAM	1	0	22.67	22.45	22.57	
1.4	64QAM	1	3	22.57	22.57	22.62	23
1.4	64QAM	1	5	22.63	22.53	21.89	
1.4	64QAM	3	0	22.61	22.35	22.49	
1.4	64QAM	3	1	22.56	22.50	22.57	22
1.4	64QAM	3	3	22.60	22.46	21.82	
1.4	64QAM	6	0	21.55	21.53	21.42	



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				27710			
Frequency (MHz)				2310			
10	QPSK	1	0	24.70			25
10	QPSK	1	25	24.71			
10	QPSK	1	49	24.73			
10	QPSK	25	0	23.72			
10	QPSK	25	12	23.77			24
10	QPSK	25	25	23.82			
10	QPSK	50	0	23.80			
10	16QAM	1	0	23.88			
10	16QAM	1	25	23.81			24
10	16QAM	1	49	23.80			
10	16QAM	25	0	22.72			
10	16QAM	25	12	22.81			
10	16QAM	25	25	22.79			23
10	16QAM	50	0	22.78			
10	64QAM	1	0	22.94			
10	64QAM	1	25	23.00			
10	64QAM	1	49	22.94			23
10	64QAM	25	0	21.78			
10	64QAM	25	12	21.84			
10	64QAM	25	25	21.83			
10	64QAM	50	0	21.84			22
Channel				27685	27710	27735	
Frequency (MHz)				2307.5	2310	2312.5	Tune-up limit (dBm)
5	QPSK	1	0	24.60	24.69	24.81	25
5	QPSK	1	12	24.62	24.68	24.86	
5	QPSK	1	24	24.65	24.72	24.71	
5	QPSK	12	0	23.70	23.63	23.63	
5	QPSK	12	7	23.68	23.72	23.73	24
5	QPSK	12	13	23.79	23.72	23.72	
5	QPSK	25	0	23.71	23.80	23.74	
5	16QAM	1	0	23.87	23.81	23.87	
5	16QAM	1	12	23.81	23.80	23.74	24
5	16QAM	1	24	23.79	23.74	23.73	
5	16QAM	12	0	22.88	22.70	22.85	
5	16QAM	12	7	22.71	22.77	22.79	
5	16QAM	12	13	22.77	22.70	22.75	23
5	16QAM	25	0	22.72	22.70	22.70	
5	64QAM	1	0	22.88	22.91	22.92	
5	64QAM	1	12	22.90	22.99	22.95	
5	64QAM	1	24	22.84	22.90	22.85	23
5	64QAM	12	0	21.77	21.89	21.72	
5	64QAM	12	7	21.77	21.83	21.75	
5	64QAM	12	13	21.82	21.82	21.74	
5	64QAM	25	0	21.76	21.81	21.77	22



Band 71									
Art 1									
9W (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	24.60	24.49	24.46	25		
20	QPSK	1	49	24.47	24.51	24.46			
20	QPSK	1	99	24.50	24.53	24.46			
20	QPSK	50	0	23.64	23.56	23.54	24		
20	QPSK	50	24	23.70	23.63	23.61			
20	QPSK	100	0	23.68	23.60	23.65			
20	16QAM	1	0	23.94	23.82	23.79	24		
20	16QAM	1	49	23.85	23.87	23.85			
20	16QAM	1	99	23.86	23.86	23.78			
20	16QAM	50	0	22.85	22.54	22.53	23		
20	16QAM	50	24	22.69	22.63	22.61			
20	16QAM	50	50	22.70	22.70	22.70			
20	16QAM	100	0	22.67	22.59	22.65	22		
20	64QAM	1	0	22.77	22.66	22.66			
20	64QAM	1	49	22.70	22.73	22.73			
20	64QAM	1	99	22.74	22.75	22.72	23		
20	64QAM	50	0	21.69	21.62	21.59			
20	64QAM	50	24	21.73	21.66	21.63			
20	64QAM	50	50	21.70	21.72	21.69	22		
20	64QAM	100	0	21.67	21.63	21.68			
Channel				133197	133297	133397			Tune-up limit (dBm)
Frequency (MHz)				670.5	680.5	690.5			
15	QPSK	1	0	24.50	24.40	24.43	25		
15	QPSK	1	37	24.46	24.43	24.42			
15	QPSK	1	74	24.48	24.43	24.40			
15	QPSK	36	0	23.64	23.56	23.45	24		
15	QPSK	36	20	23.69	23.61	23.58			
15	QPSK	36	39	23.67	23.69	23.65			
15	QPSK	75	0	23.60	23.51	23.50	24		
15	16QAM	1	0	23.94	23.78	23.75			
15	16QAM	1	37	23.83	23.79	23.84			
15	16QAM	1	74	23.83	23.83	23.77	24		
15	16QAM	36	0	22.63	22.44	22.51			
15	16QAM	36	20	22.62	22.62	22.55			
15	16QAM	36	39	22.62	22.62	22.65	23		
15	16QAM	75	0	22.61	22.51	22.57			
15	64QAM	1	0	22.70	22.63	22.56			
15	64QAM	1	37	22.68	22.63	22.65	23		
15	64QAM	1	74	22.68	22.73	22.70			
15	64QAM	36	0	21.62	21.55	21.55			
15	64QAM	36	20	21.70	21.57	21.61	22		
15	64QAM	36	39	21.67	21.71	21.60			
15	64QAM	75	0	21.61	21.54	21.60			
Channel				133172	133272	133422	Tune-up limit (dBm)		
Frequency (MHz)				688	678	693			
10	QPSK	1	0	24.50	24.48	24.39	25		
10	QPSK	1	25	24.39	24.47	24.39			
10	QPSK	1	49	24.44	24.49	24.38			
10	QPSK	25	0	23.58	23.53	23.47	24		
10	QPSK	25	12	23.65	23.58	23.51			
10	QPSK	25	25	23.67	23.61	23.59			
10	QPSK	50	0	23.62	23.50	23.58	24		
10	16QAM	1	0	23.91	23.72	23.73			
10	16QAM	1	25	23.75	23.84	23.75			
10	16QAM	1	49	23.83	23.76	23.71	23		
10	16QAM	25	0	22.63	22.47	22.46			
10	16QAM	25	12	22.68	22.54	22.56			
10	16QAM	25	25	22.62	22.69	22.63	23		
10	16QAM	50	0	22.57	22.50	22.56			
10	64QAM	1	0	22.72	22.64	22.59			
10	64QAM	1	25	22.61	22.71	22.67	23		
10	64QAM	1	49	22.71	22.72	22.68			
10	64QAM	25	0	21.69	21.56	21.56			
10	64QAM	25	12	21.68	21.57	21.54	22		
10	64QAM	25	25	21.65	21.68	21.61			
10	64QAM	50	0	21.63	21.63	21.62			
Channel				133147	133247	133447	Tune-up limit (dBm)		
Frequency (MHz)				685.5	675.5	695.5			
5	QPSK	1	0	24.50	24.43	24.41	25		
5	QPSK	1	12	24.40	24.49	24.45			
5	QPSK	1	24	24.41	24.52	24.41			
5	QPSK	12	0	23.61	23.53	23.48	24		
5	QPSK	12	7	23.63	23.60	23.53			
5	QPSK	12	13	23.69	23.62	23.68			
5	QPSK	25	0	23.68	23.59	23.60	24		
5	16QAM	1	0	23.87	23.74	23.74			
5	16QAM	1	12	23.78	23.83	23.82			
5	16QAM	1	24	23.81	23.83	23.73	23		
5	16QAM	12	0	22.61	22.44	22.50			
5	16QAM	12	7	22.68	22.59	22.55			
5	16QAM	12	13	22.68	22.68	22.68	23		
5	16QAM	25	0	22.63	22.54	22.65			
5	64QAM	1	0	22.70	22.64	22.64			
5	64QAM	1	12	22.67	22.71	22.72	23		
5	64QAM	1	24	22.71	22.70	22.65			
5	64QAM	12	0	21.62	21.62	21.57			
5	64QAM	12	7	21.68	21.64	21.60	22		
5	64QAM	12	13	21.62	21.69	21.62			
5	64QAM	25	0	21.57	21.61	21.59			



Band 2							
Ant 2							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)
Channel				18700	18900	19100	
Frequency (MHz)				1860	1880	1900	
20	QPSK	1	0	24.54	24.65	24.54	25
20	QPSK	1	49	24.58	24.62	24.47	
20	QPSK	1	99	24.47	24.51	24.45	
20	QPSK	50	0	23.72	23.74	23.68	24
20	QPSK	50	24	23.82	23.65	23.60	
20	QPSK	50	50	23.78	23.68	23.50	
20	QPSK	100	0	23.71	23.83	23.95	23
20	16QAM	1	0	23.85	23.96	23.92	
20	16QAM	1	49	23.93	23.99	23.75	
20	16QAM	1	99	23.86	23.87	23.62	24
20	16QAM	50	0	22.60	22.75	22.71	
20	16QAM	50	24	22.73	22.73	22.58	
20	16QAM	50	50	22.63	22.73	22.54	23
20	16QAM	100	0	22.73	22.80	22.69	
20	64QAM	1	0	22.69	22.83	22.85	
20	64QAM	1	49	22.87	22.74	22.66	23
20	64QAM	1	99	22.81	22.64	22.58	
20	64QAM	50	0	21.70	21.71	21.53	
20	64QAM	50	24	21.71	21.78	21.58	22
20	64QAM	50	50	21.80	21.65	21.65	
20	64QAM	100	0	21.69	21.78	21.54	
Channel				18675	18900	19125	Tune-up limit (dBm)
Frequency (MHz)				1857.5	1880	1902.5	
15	QPSK	1	0	24.63	24.62	24.40	25
15	QPSK	1	37	24.62	24.62	24.45	
15	QPSK	1	74	24.47	24.43	24.30	
15	QPSK	36	0	23.56	23.73	23.64	24
15	QPSK	36	20	23.64	23.76	23.58	
15	QPSK	36	39	23.71	23.58	23.61	
15	QPSK	75	0	23.65	23.73	23.69	24
15	16QAM	1	0	24.00	23.92	23.93	
15	16QAM	1	37	23.84	23.84	23.74	
15	16QAM	1	74	23.82	23.96	23.69	23
15	16QAM	36	0	22.77	22.75	22.71	
15	16QAM	36	20	22.81	22.71	22.62	
15	16QAM	36	39	22.84	22.87	22.54	23
15	16QAM	75	0	22.68	22.74	22.60	
15	64QAM	1	0	22.88	22.86	22.81	
15	64QAM	1	37	22.84	22.91	22.69	23
15	64QAM	1	74	22.76	22.79	22.42	
15	64QAM	36	0	21.64	21.83	21.53	
15	64QAM	36	20	21.85	21.85	21.74	22
15	64QAM	36	39	21.78	21.74	21.64	
15	64QAM	75	0	21.69	21.80	21.69	
Channel				18650	18900	19150	Tune-up limit (dBm)
Frequency (MHz)				1855	1880	1905	
10	QPSK	1	0	24.60	24.64	24.59	25
10	QPSK	1	25	24.47	24.64	24.51	
10	QPSK	1	49	24.40	24.50	24.34	
10	QPSK	25	0	23.70	23.62	23.59	24
10	QPSK	25	12	23.82	23.64	23.52	
10	QPSK	25	25	23.75	23.74	23.53	
10	QPSK	50	0	23.71	23.73	23.65	24
10	16QAM	1	0	23.90	23.85	23.88	
10	16QAM	1	25	23.91	23.88	23.75	
10	16QAM	1	49	23.89	23.90	23.62	23
10	16QAM	25	0	22.70	22.74	22.53	
10	16QAM	25	12	22.85	22.73	22.67	
10	16QAM	25	25	22.65	22.78	22.57	23
10	16QAM	50	0	22.70	22.68	22.53	
10	64QAM	1	0	22.77	22.72	22.72	
10	64QAM	1	25	22.75	22.86	22.55	23
10	64QAM	1	49	22.69	22.70	22.53	
10	64QAM	25	0	21.77	21.71	21.53	
10	64QAM	25	12	21.67	21.75	21.56	22
10	64QAM	25	25	21.84	21.77	21.55	
10	64QAM	50	0	21.79	21.59	21.71	
Channel				18625	18900	19175	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1880	1907.5	
5	QPSK	1	0	24.61	24.67	24.55	25
5	QPSK	1	12	24.60	24.62	24.46	
5	QPSK	1	24	24.48	24.53	24.35	
5	QPSK	12	0	23.69	23.70	23.63	24
5	QPSK	12	7	23.65	23.61	23.70	
5	QPSK	12	13	23.77	23.68	23.47	
5	QPSK	25	0	23.67	23.61	23.56	24
5	16QAM	1	0	23.91	23.81	23.85	
5	16QAM	1	12	23.87	23.82	23.68	
5	16QAM	1	24	23.78	23.89	23.73	23
5	16QAM	12	0	22.60	22.61	22.60	
5	16QAM	12	7	22.82	22.68	22.59	
5	16QAM	12	13	22.75	22.84	22.52	23
5	16QAM	25	0	22.80	22.84	22.69	
5	64QAM	1	0	22.76	22.89	22.68	
5	64QAM	1	12	22.82	22.80	22.53	23
5	64QAM	1	24	22.78	22.61	22.60	
5	64QAM	12	0	21.74	21.70	21.53	
5	64QAM	12	7	21.77	21.70	21.56	22
5	64QAM	12	13	21.77	21.63	21.60	
5	64QAM	25	0	21.70	21.84	21.54	
Channel				18615	18900	19185	Tune-up limit (dBm)
Frequency (MHz)				1851.5	1880	1908.5	
3	QPSK	1	0	24.51	23.80	24.59	25
3	QPSK	1	8	24.57	24.80	24.46	
3	QPSK	1	14	24.45	24.50	24.42	
3	QPSK	8	0	23.54	23.66	23.60	24
3	QPSK	8	4	23.64	23.61	23.61	
3	QPSK	8	7	23.61	23.67	23.57	
3	QPSK	15	0	23.75	23.70	23.64	24
3	16QAM	1	0	23.91	23.88	23.83	
3	16QAM	1	8	23.84	23.90	23.68	
3	16QAM	1	14	23.80	23.80	23.73	23
3	16QAM	8	0	22.75	22.64	22.62	
3	16QAM	8	4	22.77	22.63	22.50	
3	16QAM	8	7	22.69	22.89	22.51	23
3	16QAM	15	0	22.75	22.55	22.62	
3	64QAM	1	0	22.82	22.72	22.85	
3	64QAM	1	8	22.83	22.68	22.66	23
3	64QAM	1	14	22.73	22.73	22.58	
3	64QAM	8	0	21.69	21.77	21.54	
3	64QAM	8	4	21.81	21.71	21.67	22
3	64QAM	8	7	21.83	21.77	21.70	
3	64QAM	15	0	21.84	21.77	21.62	
Channel				18607	18900	19193	Tune-up limit (dBm)
Frequency (MHz)				1850.7	1880	1909.3	
1.4	QPSK	1	0	24.58	24.59	24.50	25
1.4	QPSK	1	3	24.52	24.40	24.31	
1.4	QPSK	1	5	24.52	24.47	24.36	
1.4	QPSK	3	0	24.56	24.52	24.39	24
1.4	QPSK	3	1	24.52	24.60	24.29	
1.4	QPSK	3	3	24.35	24.52	24.40	
1.4	QPSK	6	0	23.66	23.64	23.60	24
1.4	16QAM	1	0	23.81	23.89	23.76	
1.4	16QAM	1	3	23.85	23.95	23.71	
1.4	16QAM	1	5	23.83	23.73	23.78	24
1.4	16QAM	3	0	23.74	23.68	23.54	
1.4	16QAM	3	1	23.65	23.62	23.46	
1.4	16QAM	3	3	23.77	23.85	23.53	23
1.4	16QAM	6	0	22.79	22.54	22.67	
1.4	64QAM	1	0	22.76	22.82	22.68	
1.4	64QAM	1	3	22.70	22.85	22.57	23
1.4	64QAM	1	5	22.73	22.52	22.51	
1.4	64QAM	3	0	22.83	22.64	22.51	
1.4	64QAM	3	1	22.67	22.64	22.52	22
1.4	64QAM	3	3	22.67	22.77	22.69	
1.4	64QAM	6	0	21.61	21.71	21.68	



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				20450	20525	20600					
Frequency (MHz)				829	836.5	844					
10	QPSK	1	0	24.41	24.46	24.42	25				
10	QPSK	1	25	24.34	24.37	24.38					
10	QPSK	1	49	24.28	24.43	24.26					
10	QPSK	1	0	23.36	23.47	23.30	24				
10	QPSK	25	12	23.49	23.42	23.46					
10	QPSK	25	25	23.44	23.47	23.48					
10	QPSK	50	0	23.92	23.54	23.46	24				
10	16QAM	1	0	23.67	23.81	23.75					
10	16QAM	1	25	23.78	23.60	23.58					
10	16QAM	1	49	23.62	23.73	23.63	23				
10	16QAM	25	0	22.38	22.51	22.30					
10	16QAM	25	12	22.52	22.44	22.48					
10	16QAM	25	25	22.36	22.50	22.34	23				
10	16QAM	50	0	22.52	22.46	22.48					
10	64QAM	1	0	22.49	22.54	22.51					
10	64QAM	1	25	22.73	22.69	22.49	23				
10	64QAM	1	49	22.64	22.62	22.13					
10	64QAM	25	0	21.47	21.39	21.37					
10	64QAM	25	12	21.61	21.34	21.55	22				
10	64QAM	25	25	21.52	21.56	21.08					
10	64QAM	50	0	21.61	21.58	21.24					
Channel				20425	20525	20625	Tune-up limit (dBm)				
Frequency (MHz)				826.5	836.5	846.5					
5	QPSK	1	0	24.37	24.39	24.36	25				
5	QPSK	1	12	24.33	24.30	24.32					
5	QPSK	1	24	24.27	24.29	24.24					
5	QPSK	12	0	23.52	23.41	23.31	24				
5	QPSK	12	7	23.45	23.44	23.50					
5	QPSK	12	13	23.43	23.39	23.41					
5	QPSK	25	0	23.47	23.56	23.32	24				
5	16QAM	1	0	23.81	23.81	23.74					
5	16QAM	1	12	23.66	23.77	23.63					
5	16QAM	1	24	23.79	23.75	23.57	23				
5	16QAM	12	0	22.51	22.51	22.36					
5	16QAM	12	7	22.43	22.49	22.38					
5	16QAM	12	13	22.40	22.42	22.31	23				
5	16QAM	25	0	22.56	22.45	22.34					
5	64QAM	1	0	22.62	22.60	22.63					
5	64QAM	1	12	22.72	22.66	22.49	23				
5	64QAM	1	24	22.64	22.67	22.12					
5	64QAM	12	0	21.52	21.37	21.36					
5	64QAM	12	7	21.45	21.52	21.36	22				
5	64QAM	12	13	21.49	21.57	21.06					
5	64QAM	25	0	21.65	21.60	21.24					
Channel				20415	20525	20635	Tune-up limit (dBm)				
Frequency (MHz)				825.5	836.5	847.5					
3	QPSK	1	0	24.38	24.33	24.41	25				
3	QPSK	1	8	24.29	24.24	24.37					
3	QPSK	1	14	24.42	24.37	24.16					
3	QPSK	8	0	23.53	23.40	23.50	24				
3	QPSK	8	4	23.39	23.50	23.37					
3	QPSK	8	7	23.38	23.38	23.54					
3	QPSK	15	0	23.56	23.59	23.35	24				
3	16QAM	1	0	23.67	23.69	23.66					
3	16QAM	1	8	23.65	23.74	23.72					
3	16QAM	1	14	23.63	23.70	23.65	23				
3	16QAM	8	0	22.35	22.39	22.30					
3	16QAM	8	4	22.51	22.48	22.49					
3	16QAM	8	7	22.55	22.38	22.35	23				
3	16QAM	15	0	22.56	22.52	22.47					
3	64QAM	1	0	22.56	22.49	22.61					
3	64QAM	1	8	22.63	22.70	22.48	23				
3	64QAM	1	14	22.50	22.62	22.10					
3	64QAM	8	0	21.36	21.35	21.54					
3	64QAM	8	4	21.61	21.44	21.55	22				
3	64QAM	8	7	21.52	21.54	21.00					
3	64QAM	15	0	21.59	21.47	21.36					
Channel				20407	20525	20643	Tune-up limit (dBm)				
Frequency (MHz)				824.7	836.5	848.3					
1.4	QPSK	1	0	24.21	24.32	24.41	25				
1.4	QPSK	1	3	24.17	24.34	24.32					
1.4	QPSK	1	5	24.23	24.35	24.16					
1.4	QPSK	3	0	24.16	24.26	24.29	24				
1.4	QPSK	3	1	24.00	24.31	24.32					
1.4	QPSK	3	3	24.31	24.26	24.26					
1.4	QPSK	6	0	23.50	23.50	23.28	24				
1.4	16QAM	1	0	23.81	23.70	23.68					
1.4	16QAM	1	3	23.67	23.71	23.61					
1.4	16QAM	1	5	23.67	23.66	23.62	24				
1.4	16QAM	3	0	23.60	23.69	23.70					
1.4	16QAM	3	1	23.50	23.45	23.41					
1.4	16QAM	3	3	23.65	23.59	23.44	23				
1.4	16QAM	6	0	22.53	22.38	22.38					
1.4	64QAM	1	0	22.57	22.43	22.60					
1.4	64QAM	1	3	22.45	22.58	22.39	23				
1.4	64QAM	1	5	22.47	22.53	22.04					
1.4	64QAM	3	0	22.47	22.41	22.42					
1.4	64QAM	3	1	22.57	22.54	22.39	23				
1.4	64QAM	3	3	22.45	22.44	21.87					
1.4	64QAM	6	0	21.50	21.52	21.24	22				



Band 7											
Art 2											
RBW (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	24.44	24.20	24.24	25				
20	QPSK	1	49	24.39	24.33	24.30					
20	QPSK	1	99	24.47	24.38	24.35					
20	QPSK	50	0	23.44	23.33	23.34	24				
20	QPSK	50	24	23.62	23.50	23.53					
20	QPSK	50	50	23.47	23.58	23.53					
20	QPSK	100	0	23.46	23.36	23.51	24				
20	16QAM	1	0	23.75	23.64	23.57					
20	16QAM	1	49	23.72	23.79	23.72					
20	16QAM	1	99	23.75	23.77	23.66	23				
20	16QAM	50	0	22.55	22.35	22.47					
20	16QAM	50	24	22.53	22.41	22.48					
20	16QAM	50	50	22.51	22.46	22.46	22				
20	16QAM	100	0	22.50	22.37	22.44					
20	64QAM	1	0	22.71	22.38	22.46					
20	64QAM	1	49	22.64	22.56	22.43	23				
20	64QAM	1	99	22.48	22.64	22.30					
20	64QAM	50	0	21.64	21.35	21.13					
20	64QAM	50	24	21.60	21.50	21.27	22				
20	64QAM	50	50	21.42	21.50	21.46					
20	64QAM	100	0	21.54	21.35	21.22					
Channel				20825	21100	21375	Tune-up limit (dBm)				
Frequency (MHz)				2507.5	2535	2562.5					
15	QPSK	1	0	24.29	24.22	24.19	25				
15	QPSK	1	37	24.40	24.40	24.29					
15	QPSK	1	74	24.44	24.42	24.43					
15	QPSK	36	0	23.46	23.45	23.46	24				
15	QPSK	36	20	23.51	23.58	23.48					
15	QPSK	36	39	23.51	23.57	23.40					
15	QPSK	75	0	23.62	23.41	23.41	24				
15	16QAM	1	0	23.78	23.57	23.74					
15	16QAM	1	37	23.76	23.77	23.76					
15	16QAM	1	74	23.78	23.77	23.71	23				
15	16QAM	36	0	22.60	22.41	22.49					
15	16QAM	36	20	22.53	22.50	22.45					
15	16QAM	36	39	22.53	22.53	22.36	22				
15	16QAM	75	0	22.57	22.35	22.55					
15	64QAM	1	0	22.71	22.48	22.47					
15	64QAM	1	37	22.57	22.60	22.44	23				
15	64QAM	1	74	22.61	22.58	22.35					
15	64QAM	36	0	21.58	21.47	21.27					
15	64QAM	36	20	21.52	21.58	21.37	22				
15	64QAM	36	39	21.58	21.59	21.36					
15	64QAM	75	0	21.64	21.48	21.21					
Channel				20800	21100	21400	Tune-up limit (dBm)				
Frequency (MHz)				2505	2535	2565					
10	QPSK	1	0	24.29	24.34	24.17	25				
10	QPSK	1	25	24.35	24.29	24.28					
10	QPSK	1	49	24.36	24.44	24.40					
10	QPSK	25	0	23.63	23.47	23.43	24				
10	QPSK	25	12	23.45	23.43	23.56					
10	QPSK	25	25	23.52	23.48	23.47					
10	QPSK	50	0	23.55	23.41	23.43	24				
10	16QAM	1	0	23.60	23.64	23.67					
10	16QAM	1	25	23.81	23.60	23.69					
10	16QAM	1	49	23.70	23.78	23.81	23				
10	16QAM	25	0	22.63	22.39	22.52					
10	16QAM	25	12	22.66	22.42	22.41					
10	16QAM	25	25	22.49	22.53	22.38	22				
10	16QAM	50	0	22.52	22.45	22.53					
10	64QAM	1	0	22.57	22.42	22.45					
10	64QAM	1	25	22.62	22.49	22.39	23				
10	64QAM	1	49	22.56	22.73	22.19					
10	64QAM	25	0	21.45	21.38	21.30					
10	64QAM	25	12	21.62	21.51	21.35	22				
10	64QAM	25	25	21.52	21.54	21.51					
10	64QAM	50	0	21.60	21.44	21.28					
Channel				20775	21100	21425	Tune-up limit (dBm)				
Frequency (MHz)				2502.5	2535	2567.5					
5	QPSK	1	0	24.36	24.28	24.34	25				
5	QPSK	1	12	24.39	24.20	24.19					
5	QPSK	1	24	24.43	24.41	24.41					
5	QPSK	12	0	23.58	23.30	23.47	24				
5	QPSK	12	7	23.51	23.43	23.59					
5	QPSK	12	13	23.42	23.55	23.54					
5	QPSK	25	0	23.58	23.32	23.55	24				
5	16QAM	1	0	23.64	23.69	23.71					
5	16QAM	1	12	23.80	23.73	23.72					
5	16QAM	1	24	23.84	23.70	23.68	23				
5	16QAM	12	0	22.62	22.40	22.51					
5	16QAM	12	7	22.61	22.60	22.46					
5	16QAM	12	13	22.54	22.47	22.57	22				
5	16QAM	25	0	22.59	22.44	22.50					
5	64QAM	1	0	22.70	22.54	22.33					
5	64QAM	1	12	22.72	22.49	22.28	23				
5	64QAM	1	24	22.53	22.67	22.39					
5	64QAM	12	0	21.54	21.47	21.24					
5	64QAM	12	7	21.54	21.45	21.33	22				
5	64QAM	12	13	21.52	21.54	21.42					
5	64QAM	25	0	21.58	21.43	21.19					



Band 12									
Ant 0									
SRV (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)		
Channel				23060	23095	23130			
Frequency (MHz)				704	707.5	711			
10	QPSK	1	0	24.22	24.17	24.26	25		
10	QPSK	1	25	24.35	24.34	24.24			
10	QPSK	1	49	24.42	24.43	24.38			
10	QPSK	25	0	23.36	23.54	23.39	24		
10	QPSK	25	12	23.40	23.39	23.51			
10	QPSK	25	25	23.42	23.63	23.59			
10	QPSK	50	0	23.48	23.44	23.37	24		
10	16QAM	1	0	23.65	23.73	23.57			
10	16QAM	1	25	23.70	23.70	23.72			
10	16QAM	1	49	23.68	23.71	23.77	23		
10	16QAM	25	0	22.45	22.39	22.42			
10	16QAM	25	12	22.58	22.53	22.40			
10	16QAM	25	25	22.59	22.44	22.54	23		
10	16QAM	50	0	22.52	22.35	22.51			
10	64QAM	1	0	22.52	22.54	22.48			
10	64QAM	1	25	22.67	22.60	22.53	23		
10	64QAM	1	49	22.66	22.61	22.59			
10	64QAM	25	0	21.54	21.47	21.42			
10	64QAM	25	12	21.58	21.45	21.56	22		
10	64QAM	25	25	21.45	21.49	21.58			
10	64QAM	50	0	21.52	21.39	21.57			
Channel				23035	23095	23155	Tune-up limit (dBm)		
Frequency (MHz)				701.5	707.5	713.5			
5	QPSK	1	0	24.31	24.37	24.17	25		
5	QPSK	1	12	24.27	24.37	24.29			
5	QPSK	1	24	24.27	24.38	24.29			
5	QPSK	12	0	23.38	23.50	23.34	24		
5	QPSK	12	7	23.55	23.40	23.46			
5	QPSK	12	13	23.52	23.51	23.40			
5	QPSK	25	0	23.59	23.41	23.39	24		
5	16QAM	1	0	23.79	23.65	23.63			
5	16QAM	1	12	23.65	23.72	23.79			
5	16QAM	1	24	23.83	23.69	23.75	23		
5	16QAM	12	0	22.40	22.41	22.38			
5	16QAM	12	7	22.45	22.43	22.37			
5	16QAM	12	13	22.47	22.41	22.36	23		
5	16QAM	25	0	22.47	22.51	22.40			
5	64QAM	1	0	22.63	22.54	22.51			
5	64QAM	1	12	22.61	22.73	22.68	23		
5	64QAM	1	24	22.59	22.65	22.68			
5	64QAM	12	0	21.51	21.42	21.58			
5	64QAM	12	7	21.61	21.57	21.41	22		
5	64QAM	12	13	21.45	21.61	21.47			
5	64QAM	25	0	21.65	21.47	21.41			
Channel				23025	23095	23165	Tune-up limit (dBm)		
Frequency (MHz)				700.5	707.5	714.5			
3	QPSK	1	0	24.32	24.24	24.37	25		
3	QPSK	1	8	24.40	24.33	24.29			
3	QPSK	1	14	24.34	24.34	24.26			
3	QPSK	8	0	23.39	23.44	23.36	24		
3	QPSK	8	4	23.51	23.42	23.36			
3	QPSK	8	7	23.48	23.48	23.48			
3	QPSK	15	0	23.59	23.37	23.49	24		
3	16QAM	1	0	23.67	23.55	23.59			
3	16QAM	1	8	23.60	23.70	23.79			
3	16QAM	1	14	23.83	23.84	23.88	23		
3	16QAM	8	0	22.53	22.53	22.43			
3	16QAM	8	4	22.56	22.42	22.43			
3	16QAM	8	7	22.42	22.54	22.51	22		
3	16QAM	15	0	22.48	22.54	22.50			
3	64QAM	1	0	22.54	22.54	22.45			
3	64QAM	1	8	22.54	22.61	22.59	23		
3	64QAM	1	14	22.66	22.52	22.61			
3	64QAM	8	0	21.53	21.42	21.57			
3	64QAM	8	4	21.53	21.54	21.47	22		
3	64QAM	8	7	21.60	21.45	21.59			
3	64QAM	15	0	21.52	21.46	21.39			
Channel				23017	23095	23173	Tune-up limit (dBm)		
Frequency (MHz)				699.7	707.5	715.3			
1.4	QPSK	1	0	24.32	24.12	24.29	25		
1.4	QPSK	1	3	24.23	24.23	24.31			
1.4	QPSK	1	5	24.21	24.24	24.31			
1.4	QPSK	3	0	24.25	24.17	24.08	24		
1.4	QPSK	3	1	24.11	24.18	24.15			
1.4	QPSK	3	3	24.24	24.22	24.28			
1.4	QPSK	6	0	23.55	23.30	23.46	24		
1.4	16QAM	1	0	23.75	23.64	23.65			
1.4	16QAM	1	3	23.70	23.67	23.55			
1.4	16QAM	1	5	23.84	23.62	23.89	24		
1.4	16QAM	3	0	23.63	23.52	23.67			
1.4	16QAM	3	1	23.56	23.66	23.56			
1.4	16QAM	3	3	23.62	23.62	23.52	23		
1.4	16QAM	6	0	22.37	22.53	22.38			
1.4	64QAM	1	0	22.53	22.50	22.50			
1.4	64QAM	1	3	22.46	22.66	22.57	23		
1.4	64QAM	1	5	22.48	22.62	22.50			
1.4	64QAM	3	0	22.36	22.45	22.49			
1.4	64QAM	3	1	22.43	22.50	22.57	22		
1.4	64QAM	3	3	22.49	22.51	22.57			
1.4	64QAM	6	0	21.50	21.47	21.46			



Band 13							
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				23205			
Frequency (MHz)				782			
10	QPSK	1	0	24.56			25
10	QPSK	1	25	24.40			
10	QPSK	1	49	24.45			
10	QPSK	25	0	23.48			24
10	QPSK	25	12	23.52			
10	QPSK	25	25	23.58			
10	QPSK	50	0	23.67			24
10	16QAM	1	0	23.81			
10	16QAM	1	25	23.72			
10	16QAM	1	49	23.72			24
10	16QAM	25	0	22.58			
10	16QAM	25	12	22.71			
10	16QAM	25	25	22.65			23
10	16QAM	50	0	22.85			
10	64QAM	1	0	22.75			
10	64QAM	1	25	22.72			23
10	64QAM	1	49	22.74			
10	64QAM	25	0	21.65			
10	64QAM	25	12	21.68			22
10	64QAM	25	25	21.60			
10	64QAM	50	0	21.61			
Channel				23205	23230	23255	Tune-up limit (dBm)
Frequency (MHz)				779.5	782	784.5	
5	QPSK	1	0	24.42	24.30	24.39	25
5	QPSK	1	12	24.38	24.44	24.43	
5	QPSK	1	24	24.41	24.54	24.41	
5	QPSK	12	0	23.61	23.46	23.59	24
5	QPSK	12	7	23.48	23.54	23.48	
5	QPSK	12	13	23.48	23.62	23.48	
5	QPSK	25	0	23.53	23.54	23.49	24
5	16QAM	1	0	23.72	23.75	23.78	
5	16QAM	1	12	23.89	23.62	23.68	
5	16QAM	1	24	23.90	23.70	23.75	23
5	16QAM	12	0	22.58	22.59	22.55	
5	16QAM	12	7	22.61	22.62	22.52	
5	16QAM	12	13	22.61	22.49	22.84	23
5	16QAM	25	0	22.50	22.82	22.83	
5	64QAM	1	0	22.81	22.70	22.72	
5	64QAM	1	12	22.71	22.76	22.56	23
5	64QAM	1	24	22.78	22.68	22.59	
5	64QAM	12	0	21.58	21.43	21.46	
5	64QAM	12	7	21.49	21.68	21.51	22
5	64QAM	12	13	21.58	21.55	21.58	
5	64QAM	25	0	21.63	21.50	21.88	



Band 14							
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				23330			
Frequency (MHz)				793			
10	QPSK	1	0	24.44			25
10	QPSK	1	25	24.41			
10	QPSK	1	49	24.40			
10	QPSK	25	0	23.49			24
10	QPSK	25	12	23.57			
10	QPSK	25	25	23.60			
10	QPSK	50	0	23.51			24
10	16QAM	1	0	23.85			
10	16QAM	1	25	23.86			
10	16QAM	1	49	23.87			24
10	16QAM	25	0	22.51			
10	16QAM	25	12	22.60			
10	16QAM	25	25	22.53			23
10	16QAM	50	0	22.55			
10	64QAM	1	0	22.66			
10	64QAM	1	25	22.72			23
10	64QAM	1	49	22.62			
10	64QAM	25	0	21.56			
10	64QAM	25	12	21.51			22
10	64QAM	25	25	21.51			
10	64QAM	50	0	21.41			
Channel				23305	23330	23355	Tune-up limit (dBm)
Frequency (MHz)				790.5	793	795.5	
5	QPSK	1	0	24.28	24.39	24.38	25
5	QPSK	1	12	24.36	24.33	24.34	
5	QPSK	1	24	24.26	24.28	24.37	
5	QPSK	12	0	23.36	23.49	23.49	24
5	QPSK	12	7	23.42	23.38	23.51	
5	QPSK	12	13	23.63	23.48	23.65	
5	QPSK	25	0	23.36	23.44	23.56	24
5	16QAM	1	0	23.77	23.85	23.90	
5	16QAM	1	12	23.71	23.78	23.70	
5	16QAM	1	24	23.79	23.72	23.69	23
5	16QAM	12	0	22.47	22.37	22.49	
5	16QAM	12	7	22.58	22.43	22.46	
5	16QAM	12	13	22.60	22.42	22.41	23
5	16QAM	25	0	22.48	22.35	22.46	
5	64QAM	1	0	22.61	22.67	22.69	
5	64QAM	1	12	22.72	22.73	22.76	23
5	64QAM	1	24	22.57	22.63	22.47	
5	64QAM	12	0	21.46	21.46	21.36	
5	64QAM	12	7	21.34	21.40	21.50	22
5	64QAM	12	13	21.56	21.46	21.59	
5	64QAM	25	0	21.45	21.52	21.49	



Band 17							
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				23780	23790	23800	
Frequency (MHz)				709	710	711	
10	QPSK	1	0	24.37	24.39	24.25	25
10	QPSK	1	25	24.37	24.30	24.24	
10	QPSK	1	49	24.40	24.38	24.31	
10	QPSK	25	0	23.37	23.45	23.38	24
10	QPSK	25	12	23.61	23.37	23.64	
10	QPSK	25	25	23.56	23.50	23.63	
10	QPSK	50	0	23.48	23.48	23.52	24
10	16QAM	1	0	23.62	23.64	23.58	
10	16QAM	1	25	23.72	23.78	23.72	
10	16QAM	1	49	23.62	23.68	23.61	23
10	16QAM	25	0	22.37	22.34	22.49	
10	16QAM	25	12	22.55	22.55	22.55	
10	16QAM	25	25	22.40	22.57	22.47	23
10	16QAM	50	0	22.58	22.35	22.38	
10	64QAM	1	0	22.51	22.59	22.61	
10	64QAM	1	25	22.68	22.65	22.72	23
10	64QAM	1	49	22.64	22.65	22.61	
10	64QAM	25	0	21.38	21.34	21.45	
10	64QAM	25	12	21.67	21.56	21.58	22
10	64QAM	25	25	21.58	21.54	21.66	
10	64QAM	50	0	21.47	21.55	21.45	
Channel				23755	23790	23825	Tune-up limit (dBm)
Frequency (MHz)				708.5	710	711.5	
5	QPSK	1	0	24.30	24.25	24.20	25
5	QPSK	1	12	24.30	24.32	24.28	
5	QPSK	1	24	24.45	24.31	24.35	
5	QPSK	12	0	23.40	23.34	23.35	24
5	QPSK	12	7	23.58	23.37	23.43	
5	QPSK	12	13	23.63	23.59	23.55	
5	QPSK	25	0	23.42	23.33	23.52	24
5	16QAM	1	0	23.59	23.64	23.57	
5	16QAM	1	12	23.60	23.63	23.68	
5	16QAM	1	24	23.65	23.74	23.80	23
5	16QAM	12	0	22.44	22.33	22.32	
5	16QAM	12	7	22.46	22.42	22.41	
5	16QAM	12	13	22.56	22.51	22.45	23
5	16QAM	25	0	22.58	22.35	22.40	
5	64QAM	1	0	22.52	22.52	22.55	
5	64QAM	1	12	22.59	22.54	22.64	23
5	64QAM	1	24	22.62	22.58	22.63	
5	64QAM	12	0	21.34	21.52	21.39	
5	64QAM	12	7	21.40	21.52	21.59	22
5	64QAM	12	13	21.47	21.65	21.53	
5	64QAM	25	0	21.45	21.52	21.42	



Band 25											
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				26140	26340	26590					
Frequency (MHz)				1860	1880	1905					
20	QPSK	1	0	24.65	24.67	24.58	25				
20	QPSK	1	49	24.61	24.49	24.32					
20	QPSK	1	99	24.54	24.51	24.27					
20	QPSK	50	0	23.57	23.74	23.55	24				
20	QPSK	50	24	23.64	23.86	23.61					
20	QPSK	50	50	23.62	23.72	23.55					
20	QPSK	100	0	23.76	23.62	23.59	24				
20	16QAM	1	0	23.89	23.90	23.89					
20	16QAM	1	49	23.79	23.96	23.70					
20	16QAM	1	99	23.82	23.96	23.59	23				
20	16QAM	50	0	22.86	22.71	22.52					
20	16QAM	50	24	22.54	22.89	22.53					
20	16QAM	50	50	22.72	22.72	22.44	23				
20	16QAM	100	0	22.80	22.64	22.57					
20	64QAM	1	0	22.68	22.79	22.86					
20	64QAM	1	49	22.83	22.71	22.83	23				
20	64QAM	1	99	22.60	22.84	22.32					
20	64QAM	50	0	21.65	21.76	21.58					
20	64QAM	50	24	21.78	21.87	21.71	22				
20	64QAM	50	50	21.59	21.65	21.54					
20	64QAM	100	0	21.79	21.64	21.47					
Channel				26090	26340	26640	Tune-up limit (dBm)				
Frequency (MHz)				1867.5	1880	1907.5					
15	QPSK	1	0	24.65	24.54	24.58	25				
15	QPSK	1	37	24.49	24.49	24.44					
15	QPSK	1	74	24.44	24.48	24.23					
15	QPSK	36	0	23.61	23.64	23.66	24				
15	QPSK	36	20	23.65	23.81	23.48					
15	QPSK	36	39	23.68	23.69	23.44					
15	QPSK	75	0	23.81	23.57	23.81	24				
15	16QAM	1	0	23.89	23.96	23.84					
15	16QAM	1	37	23.83	23.92	23.66					
15	16QAM	1	74	23.72	23.86	23.59	23				
15	16QAM	36	0	22.71	22.74	22.71					
15	16QAM	36	20	22.72	22.87	22.55					
15	16QAM	36	39	22.66	22.68	22.59	23				
15	16QAM	75	0	22.81	22.74	22.52					
15	64QAM	1	0	22.71	22.93	22.76					
15	64QAM	1	37	22.71	22.70	22.66	23				
15	64QAM	1	74	22.79	22.85	22.29					
15	64QAM	36	0	21.66	21.76	21.58					
15	64QAM	36	20	21.66	21.81	21.53	22				
15	64QAM	36	39	21.59	21.73	21.53					
15	64QAM	75	0	21.64	21.80	21.56					
Channel				26090	26340	26640	Tune-up limit (dBm)				
Frequency (MHz)				1865	1880	1910					
10	QPSK	1	0	24.66	24.52	24.44	25				
10	QPSK	1	25	24.47	24.66	24.40					
10	QPSK	1	49	24.51	24.45	24.35					
10	QPSK	25	0	23.74	23.75	23.58	24				
10	QPSK	25	12	23.71	23.84	23.48					
10	QPSK	25	25	23.56	23.63	23.43					
10	QPSK	50	0	23.62	23.57	23.81	24				
10	16QAM	1	0	23.82	23.81	23.92					
10	16QAM	1	25	23.90	23.81	23.77					
10	16QAM	1	49	23.85	23.94	23.86	23				
10	16QAM	25	0	22.65	22.75	22.58					
10	16QAM	25	12	22.61	22.83	22.58					
10	16QAM	25	25	22.63	22.90	22.49	23				
10	16QAM	50	0	22.79	22.72	22.56					
10	64QAM	1	0	22.88	22.90	22.76					
10	64QAM	1	25	22.71	22.72	22.72	23				
10	64QAM	1	49	22.76	22.86	22.28					
10	64QAM	25	0	21.72	21.79	21.62					
10	64QAM	25	12	21.75	21.78	21.68	22				
10	64QAM	25	25	21.62	21.68	21.51					
10	64QAM	50	0	21.63	21.73	21.59					
Channel				26095	26340	26665	Tune-up limit (dBm)				
Frequency (MHz)				1862.5	1880	1912.5					
5	QPSK	1	0	24.60	24.63	24.50	25				
5	QPSK	1	12	24.57	24.55	24.36					
5	QPSK	1	24	24.56	24.09	24.36					
5	QPSK	12	0	23.67	23.73	23.67	24				
5	QPSK	12	7	23.70	23.62	23.55					
5	QPSK	12	13	23.66	23.77	23.60					
5	QPSK	25	0	23.75	23.60	23.53	24				
5	16QAM	1	0	23.92	23.92	23.86					
5	16QAM	1	12	23.78	23.85	23.66					
5	16QAM	1	24	23.91	23.90	23.86	23				
5	16QAM	12	0	22.73	22.75	22.63					
5	16QAM	12	7	22.71	22.71	22.59					
5	16QAM	12	13	22.72	22.73	22.44	23				
5	16QAM	25	0	22.61	22.58	22.66					
5	64QAM	1	0	22.88	22.84	22.71					
5	64QAM	1	12	22.79	22.76	22.57	23				
5	64QAM	1	24	22.66	22.89	22.28					
5	64QAM	12	0	21.66	21.69	21.59					
5	64QAM	12	7	21.70	21.74	21.53	22				
5	64QAM	12	13	21.63	21.76	21.62					
5	64QAM	25	0	21.63	21.73	21.63					
Channel				26095	26340	26675	Tune-up limit (dBm)				
Frequency (MHz)				1861.5	1880	1913.5					
3	QPSK	1	0	24.59	24.59	24.44	25				
3	QPSK	1	8	24.56	24.48	24.35					
3	QPSK	1	14	24.45	24.57	24.23					
3	QPSK	8	0	23.73	23.70	23.65	24				
3	QPSK	8	4	23.65	23.71	23.62					
3	QPSK	8	7	23.59	23.62	23.54					
3	QPSK	15	0	23.81	23.56	23.58	24				
3	16QAM	1	0	23.87	23.85	23.86					
3	16QAM	1	8	23.87	23.84	23.73					
3	16QAM	1	14	23.85	23.93	23.70	23				
3	16QAM	8	0	22.74	22.76	22.64					
3	16QAM	8	4	22.80	22.84	22.50					
3	16QAM	8	7	22.72	22.71	22.46	23				
3	16QAM	15	0	22.75	22.57	22.53					
3	64QAM	1	0	22.70	22.79	22.73					
3	64QAM	1	8	22.67	22.79	22.71	23				
3	64QAM	1	14	22.70	22.80	22.30					
3	64QAM	8	0	21.77	21.72	21.64					
3	64QAM	8	4	21.70	21.78	21.62	22				
3	64QAM	8	7	21.60	21.83	21.57					
3	64QAM	15	0	21.66	21.78	21.62					
Channel				26047	26340	26683	Tune-up limit (dBm)				
Frequency (MHz)				1860.7	1880	1914.3					
1.4	QPSK	1	0	24.45	24.58	24.48	25				
1.4	QPSK	1	3	24.56	24.49	24.49					
1.4	QPSK	1	6	24.29	24.48	24.26					
1.4	QPSK	3	0	24.55	24.53	24.35	24				
1.4	QPSK	3	1	24.54	24.47	24.34					
1.4	QPSK	3	3	24.50	24.50	24.35					
1.4	QPSK	6	0	23.65	23.51	23.59	24				
1.4	16QAM	1	0	23.86	23.78	23.73					
1.4	16QAM	1	3	23.71	23.91	23.74					
1.4	16QAM	1	6	23.71	23.93	23.71	24				
1.4	16QAM	3	0	23.71	23.82	23.68					
1.4	16QAM	3	1	23.70	23.90	23.69					
1.4	16QAM	3	3	23.79	23.50	23.59	23				
1.4	16QAM	6	0	22.79	22.65	22.57					
1.4	16QAM	6	1	22.72	22.76	22.52					
1.4	64QAM	1	0	22.64	22.78	22.62	23				
1.4	64QAM	3	0	22.66	22.68	22.51					
1.4	64QAM	3	1	22.62	22.73	22.57					
1.4	64QAM	3	3	22.66	22.68	22.51	23				
1.4	64QAM	6	0	22.64	22.66	22.49					
1.4	64QAM	6	1	22.62	22.68	22.51					



Band 26									
Ann 0									
SRV (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)		
Channel				26765	26865	26965			
Frequency (MHz)				821.5	831.5	841.5			
15	QPSK	1	0	24.35	24.39	24.31	25		
15	QPSK	1	37	24.34	24.22	24.33			
15	QPSK	1	74	24.32	24.35	24.21			
15	QPSK	36	0	23.36	23.39	23.44	24		
15	QPSK	36	20	23.50	23.51	23.50			
15	QPSK	36	39	23.48	23.47	23.46			
15	QPSK	75	0	23.55	23.97	23.45	24		
15	16QAM	1	0	23.60	23.63	23.53			
15	16QAM	1	37	23.62	23.54	23.64			
15	16QAM	1	74	23.66	23.60	23.45	23		
15	16QAM	36	0	22.50	22.41	22.40			
15	16QAM	36	20	22.47	22.38	22.50			
15	16QAM	36	39	22.42	22.48	22.34	23		
15	16QAM	75	0	22.48	22.40	22.52			
15	64QAM	1	0	22.45	22.56	22.58	23		
15	64QAM	1	37	22.50	22.57	22.44			
15	64QAM	1	74	22.48	22.62	22.67			
15	64QAM	36	0	21.52	21.45	21.50	22		
15	64QAM	36	20	21.56	21.39	21.54			
15	64QAM	36	39	21.56	21.45	21.52			
15	64QAM	75	0	21.63	21.52	21.49	Tune-up limit (dBm)		
Channel				26740	26865	26990			
Frequency (MHz)				819	831.5	844			
10	QPSK	1	0	24.35	24.34	24.18	25		
10	QPSK	1	25	24.34	24.36	24.30			
10	QPSK	1	49	24.33	24.27	24.22			
10	QPSK	25	0	23.47	23.42	23.39	24		
10	QPSK	25	12	23.48	23.54	23.48			
10	QPSK	25	25	23.40	23.53	23.48			
10	QPSK	50	0	23.41	23.38	23.31	24		
10	16QAM	1	0	23.66	23.67	23.55			
10	16QAM	1	25	23.66	23.70	23.56			
10	16QAM	1	49	23.59	23.55	23.38	23		
10	16QAM	25	0	22.48	22.48	22.47			
10	16QAM	25	12	22.41	22.35	22.54			
10	16QAM	25	25	22.39	22.56	22.33	23		
10	16QAM	50	0	22.53	22.46	22.32			
10	64QAM	1	0	22.61	22.52	22.54			
10	64QAM	1	25	22.68	22.47	22.61	23		
10	64QAM	1	49	22.53	22.61	22.15			
10	64QAM	25	0	21.50	21.54	21.49			
10	64QAM	25	12	21.56	21.52	21.49	22		
10	64QAM	25	25	21.52	21.43	21.57			
10	64QAM	50	0	21.65	21.35	21.53		Tune-up limit (dBm)	
Channel				26715	26865	27015			
Frequency (MHz)				816.5	831.5	846.5			
5	QPSK	1	0	24.34	24.28	24.38	25		
5	QPSK	1	12	24.22	24.35	24.30			
5	QPSK	1	24	24.28	24.19	24.25			
5	QPSK	12	0	23.43	23.47	23.45	24		
5	QPSK	12	7	23.52	23.40	23.47			
5	QPSK	12	13	23.50	23.34	23.43			
5	QPSK	25	0	23.51	23.42	23.40	24		
5	16QAM	1	0	23.75	23.52	23.53			
5	16QAM	1	12	23.62	23.59	23.62			
5	16QAM	1	24	23.68	23.65	23.48	23		
5	16QAM	12	0	22.54	22.45	22.51			
5	16QAM	12	7	22.50	22.48	22.40			
5	16QAM	12	13	22.52	22.50	22.41	23		
5	16QAM	25	0	22.49	22.51	22.36			
5	64QAM	1	0	22.51	22.57	22.43			
5	64QAM	1	12	22.66	22.57	22.58	23		
5	64QAM	1	24	22.59	22.49	22.13			
5	64QAM	12	0	21.51	21.48	21.46			
5	64QAM	12	7	21.51	21.50	21.60	22		
5	64QAM	12	13	21.60	21.44	21.41			
5	64QAM	25	0	21.50	21.40	21.53		Tune-up limit (dBm)	
Channel				26705	26865	27025			
Frequency (MHz)				815.5	831.5	847.5			
3	QPSK	1	0	24.26	24.30	24.38	25		
3	QPSK	1	8	24.39	24.24	24.37			
3	QPSK	1	14	24.24	24.38	24.23			
3	QPSK	8	0	23.39	23.50	23.43	24		
3	QPSK	8	4	23.50	23.36	23.39			
3	QPSK	8	7	23.55	23.36	23.46			
3	QPSK	15	0	23.56	23.40	23.43	24		
3	16QAM	1	0	23.74	23.51	23.62			
3	16QAM	1	8	23.68	23.68	23.70			
3	16QAM	1	14	23.54	23.63	23.47	23		
3	16QAM	8	0	22.55	22.40	22.49			
3	16QAM	8	4	22.53	22.52	22.43			
3	16QAM	8	7	22.59	22.43	22.35	23		
3	16QAM	15	0	22.46	22.36	22.52			
3	64QAM	1	0	22.54	22.44	22.41			
3	64QAM	1	8	22.51	22.64	22.60	23		
3	64QAM	1	14	22.50	22.51	22.00			
3	64QAM	8	0	21.54	21.52	21.51			
3	64QAM	8	4	21.52	21.51	21.50	22		
3	64QAM	8	7	21.51	21.53	21.40			
3	64QAM	15	0	21.58	21.36	21.55		Tune-up limit (dBm)	
Channel				26697	26865	27033			
Frequency (MHz)				814.7	831.5	848.3			
1.4	QPSK	1	0	24.18	24.30	24.29	25		
1.4	QPSK	1	3	24.32	24.17	24.16			
1.4	QPSK	1	5	24.34	24.22	24.17			
1.4	QPSK	3	0	24.35	24.05	24.12	24		
1.4	QPSK	3	1	24.14	24.17	24.21			
1.4	QPSK	3	3	24.25	24.32	24.00			
1.4	QPSK	6	0	23.53	23.41	23.36	24		
1.4	16QAM	1	0	23.72	23.52	23.66			
1.4	16QAM	1	3	23.60	23.73	23.54			
1.4	16QAM	1	5	23.65	23.55	23.41	24		
1.4	16QAM	3	0	23.62	23.48	23.44			
1.4	16QAM	3	1	23.63	23.67	23.70			
1.4	16QAM	3	3	23.62	23.51	23.34	23		
1.4	16QAM	6	0	22.49	22.41	22.42			
1.4	64QAM	1	0	22.32	22.39	22.45			
1.4	64QAM	1	3	22.55	22.43	22.49	23		
1.4	64QAM	1	5	22.46	22.60	22.07			
1.4	64QAM	3	0	22.26	22.50	22.41			
1.4	64QAM	3	1	22.37	22.42	22.43	22		
1.4	64QAM	3	3	22.40	22.38	21.99			
1.4	64QAM	6	0	21.56	21.39	21.47			



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)				2315			
10	QPSK	1	0	24.52			25
10	QPSK	1	25	24.37			
10	QPSK	1	49	24.41			
10	QPSK	25	0	23.51			24
10	QPSK	25	12	23.43			
10	QPSK	25	25	23.58			
10	QPSK	50	0	23.37			24
10	16QAM	1	0	23.78			
10	16QAM	1	25	23.87			
10	16QAM	1	49	23.68			23
10	16QAM	25	0	22.37			
10	16QAM	25	12	22.49			
10	16QAM	25	25	22.59			23
10	16QAM	50	0	22.37			
10	64QAM	1	0	22.55			
10	64QAM	1	25	22.74			23
10	64QAM	1	49	22.55			
10	64QAM	25	0	21.39			
10	64QAM	25	12	21.45			22
10	64QAM	25	25	21.51			
10	64QAM	50	0	21.49			
Channel				27685	27710	27735	Tune-up limit (dBm)
Frequency (MHz)				2307.5	2310	2312.5	
5	QPSK	1	0	24.48	24.43	24.40	25
5	QPSK	1	12	24.45	24.38	24.38	
5	QPSK	1	24	24.34	24.23	24.31	
5	QPSK	12	0	23.38	23.43	23.40	24
5	QPSK	12	7	23.28	23.39	23.38	
5	QPSK	12	13	23.33	23.44	23.53	
5	QPSK	25	0	23.90	23.48	23.35	24
5	16QAM	1	0	23.71	23.75	23.84	
5	16QAM	1	12	23.80	23.78	23.72	
5	16QAM	1	24	23.76	23.70	23.65	23
5	16QAM	12	0	22.35	22.40	22.25	
5	16QAM	12	7	22.46	22.53	22.49	
5	16QAM	12	13	22.51	22.35	22.34	23
5	16QAM	25	0	22.34	22.43	22.31	
5	64QAM	1	0	22.56	22.55	22.59	
5	64QAM	1	12	22.63	22.66	22.68	23
5	64QAM	1	24	22.34	22.55	22.54	
5	64QAM	12	0	21.32	21.40	21.46	
5	64QAM	12	7	21.50	21.45	21.48	22
5	64QAM	12	13	21.37	21.46	21.38	
5	64QAM	25	0	21.66	21.51	21.45	



Band 66											
Ann 2											
BSW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up (dBm)				
Channel				132072	132322	132572					
Frequency (MHz)				1745	1765	1785					
20	QPSK	1	0	23.82	23.86	23.87	25				
20	QPSK	1	49	23.78	23.89	23.77					
20	QPSK	1	99	23.73	23.84	23.82					
20	QPSK	50	0	23.11	23.23	23.27	24				
20	QPSK	50	24	23.35	23.34	23.35					
20	QPSK	50	50	23.19	23.31	23.33					
20	QPSK	100	0	23.16	23.15	23.41	24				
20	16QAM	1	0	23.47	23.52	23.67					
20	16QAM	1	49	23.44	23.51	23.58					
20	16QAM	1	99	23.39	23.49	23.32	23				
20	16QAM	50	0	22.18	22.38	22.31					
20	16QAM	50	24	22.15	22.31	22.34					
20	16QAM	50	50	22.24	22.38	22.34	22				
20	16QAM	100	0	22.23	22.26	22.41					
20	64QAM	1	0	22.35	22.47	22.51					
20	64QAM	1	49	22.19	22.38	22.41	23				
20	64QAM	1	99	22.24	22.33	22.57					
20	64QAM	50	0	21.27	21.26	21.27					
20	64QAM	50	24	21.21	21.38	21.42	22				
20	64QAM	50	50	21.30	21.27	21.25					
20	64QAM	100	0	21.22	21.22	21.24					
Channel				132022	132322	132597	Tune-up (dBm)				
Frequency (MHz)				1717.5	1745	1772.5					
15	QPSK	1	0	23.93	23.91	23.86	25				
15	QPSK	1	37	23.71	23.80	23.79					
15	QPSK	1	74	23.87	23.92	23.72					
15	QPSK	36	0	23.29	23.32	23.21	24				
15	QPSK	36	20	23.35	23.18	23.31					
15	QPSK	36	39	23.26	23.21	23.15					
15	QPSK	75	0	23.16	23.19	23.31	24				
15	16QAM	1	0	23.45	23.69	23.53					
15	16QAM	1	37	23.38	23.54	23.49					
15	16QAM	1	74	23.42	23.43	23.32	23				
15	16QAM	36	0	22.17	22.40	22.38					
15	16QAM	36	20	22.22	22.27	22.39					
15	16QAM	36	39	22.20	22.26	22.34	22				
15	16QAM	75	0	22.17	22.16	22.40					
15	64QAM	1	0	22.32	22.38	22.35					
15	64QAM	1	37	22.18	22.28	22.28	23				
15	64QAM	1	74	22.32	22.38	22.20					
15	64QAM	36	0	21.13	21.23	21.22					
15	64QAM	36	20	21.28	21.28	21.38	22				
15	64QAM	36	39	21.16	21.30	21.29					
15	64QAM	75	0	21.31	21.38	21.42					
Channel				132022	132322	132622	Tune-up (dBm)				
Frequency (MHz)				1715	1745	1775					
10	QPSK	1	0	23.84	23.94	23.90	25				
10	QPSK	1	25	23.75	23.84	23.86					
10	QPSK	1	49	23.74	23.89	23.78					
10	QPSK	25	0	23.13	23.32	23.26	24				
10	QPSK	25	12	23.18	23.36	23.25					
10	QPSK	25	25	23.10	23.22	23.26					
10	QPSK	50	0	23.26	23.25	23.39	24				
10	16QAM	1	0	23.44	23.66	23.57					
10	16QAM	1	25	23.42	23.45	23.45					
10	16QAM	1	49	23.56	23.43	23.32	23				
10	16QAM	25	0	22.28	22.20	22.31					
10	16QAM	25	12	22.21	22.21	22.37					
10	16QAM	25	25	22.24	22.25	22.34	22				
10	16QAM	50	0	22.24	22.19	22.29					
10	64QAM	1	0	22.33	22.47	22.40					
10	64QAM	1	25	22.27	22.32	22.38	23				
10	64QAM	1	49	22.30	22.32	22.18					
10	64QAM	25	0	21.16	21.07	21.27					
10	64QAM	25	12	21.29	21.38	21.25	22				
10	64QAM	25	25	21.20	21.25	21.15					
10	64QAM	50	0	21.24	21.19	21.32					
Channel				131997	132322	132647	Tune-up (dBm)				
Frequency (MHz)				1712.5	1745	1777.5					
5	QPSK	1	0	23.85	23.85	23.89	25				
5	QPSK	1	12	23.77	23.92	23.77					
5	QPSK	1	24	23.68	23.87	23.66					
5	QPSK	12	0	23.26	23.25	23.31	24				
5	QPSK	12	7	23.16	23.19	23.23					
5	QPSK	12	13	23.21	23.22	23.26					
5	QPSK	25	0	23.20	23.13	23.37	24				
5	16QAM	1	0	23.46	23.58	23.70					
5	16QAM	1	12	23.31	23.51	23.44					
5	16QAM	1	24	23.52	23.51	23.44	23				
5	16QAM	12	0	22.15	22.23	22.32					
5	16QAM	12	7	22.33	22.18	22.33					
5	16QAM	12	13	22.28	22.38	22.31	22				
5	16QAM	25	0	22.17	22.33	22.29					
5	64QAM	1	0	22.37	22.35	22.41					
5	64QAM	1	12	22.25	22.32	22.38	23				
5	64QAM	1	24	22.33	22.42	22.17					
5	64QAM	12	0	21.26	21.07	21.33					
5	64QAM	12	7	21.29	21.38	21.41	22				
5	64QAM	12	13	21.25	21.30	21.17					
5	64QAM	25	0	21.17	21.20	21.35					
Channel				131987	132322	132657	Tune-up (dBm)				
Frequency (MHz)				1710.5	1745	1778.5					
3	QPSK	1	0	23.81	23.84	23.91	25				
3	QPSK	1	8	23.68	23.85	23.85					
3	QPSK	1	14	23.76	23.75	23.69					
3	QPSK	8	0	23.16	23.25	23.33	24				
3	QPSK	8	4	23.15	23.19	23.22					
3	QPSK	8	7	23.30	23.37	23.21					
3	QPSK	15	0	23.26	23.17	23.32	24				
3	16QAM	1	0	23.31	23.59	23.57					
3	16QAM	1	8	23.50	23.48	23.43					
3	16QAM	1	14	23.51	23.37	23.42	23				
3	16QAM	8	0	22.26	22.34	22.19					
3	16QAM	8	4	22.24	22.21	22.23					
3	16QAM	8	7	22.31	22.26	22.32	22				
3	16QAM	15	0	22.17	22.32	22.26					
3	64QAM	1	0	22.31	22.54	22.47					
3	64QAM	1	8	22.35	22.37	22.31	23				
3	64QAM	1	14	22.36	22.35	22.13					
3	64QAM	8	0	21.14	21.10	21.32					
3	64QAM	8	4	21.25	21.28	21.24	22				
3	64QAM	8	7	21.30	21.36	21.24					
3	64QAM	15	0	21.28	21.29	21.43					
Channel				131979	132322	132665	Tune-up (dBm)				
Frequency (MHz)				1710.7	1745	1778.3					
1.4	QPSK	1	0	23.77	23.78	23.81	25				
1.4	QPSK	1	3	23.76	23.83	23.87					
1.4	QPSK	1	5	23.84	23.78	23.84					
1.4	QPSK	3	0	23.83	23.86	23.90	24				
1.4	QPSK	3	1	23.76	23.69	23.69					
1.4	QPSK	3	3	23.58	23.73	23.78					
1.4	QPSK	6	0	23.12	23.22	23.22	24				
1.4	16QAM	1	0	23.41	23.57	23.45					
1.4	16QAM	1	3	23.48	23.51	23.48					
1.4	16QAM	1	5	23.46	23.49	23.49	24				
1.4	16QAM	3	0	23.29	23.47	23.36					
1.4	16QAM	3	3	23.48	23.42	23.34					
1.4	16QAM	3	5	23.48	23.23	23.20	23				
1.4	16QAM	6	0	22.21	22.27	22.35					
1.4	16QAM	6	3	22.22	22.45	22.42					
1.4	64QAM	1	3	22.18	22.14	22.19	23				
1.4	64QAM	1	5	22.23	22.34	22.07					
1.4	64QAM	3	1	22.13	22.10	22.22					
1.4	64QAM	3	3	22.16	22.32	22.17	22				
1.4	64QAM	6	1	22.14	22.19	22.19					
1.4	64QAM	6	3	22.15	22.15	22.15					



Band 71											
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				133222	133322	133372					
Frequency (MHz)				673	683	686					
20	QPSK	1	0	24.51	24.44	24.43	25				
20	QPSK	1	49	24.30	24.42	24.23					
20	QPSK	1	99	24.43	24.41	24.37					
20	QPSK	50	0	23.67	23.54	23.53	24				
20	QPSK	50	24	23.56	23.36	23.35					
20	QPSK	50	50	23.53	23.34	23.31					
20	QPSK	100	0	23.96	23.48	23.46	24				
20	16QAM	1	0	23.73	23.76	23.65					
20	16QAM	1	49	23.59	23.70	23.62					
20	16QAM	1	99	23.65	23.65	23.50	23				
20	16QAM	50	0	22.44	22.42	22.41					
20	16QAM	50	24	22.51	22.33	22.39					
20	16QAM	50	50	22.49	22.56	22.53	23				
20	16QAM	100	0	22.41	22.34	22.58					
20	64QAM	1	0	22.67	22.37	22.51					
20	64QAM	1	49	22.52	22.63	22.52	23				
20	64QAM	1	99	22.67	22.54	22.55					
20	64QAM	50	0	21.45	21.49	21.36					
20	64QAM	50	24	21.54	21.54	21.53	22				
20	64QAM	50	50	21.44	21.48	21.63					
20	64QAM	100	0	21.48	21.33	21.55					
Channel				133197	133297	133367	Tune-up limit (dBm)				
Frequency (MHz)				670.5	680.5	680.5					
15	QPSK	1	0	24.44	24.37	24.37	25				
15	QPSK	1	37	24.39	24.27	24.36					
15	QPSK	1	74	24.38	24.25	24.30					
15	QPSK	36	0	23.67	23.55	23.53	24				
15	QPSK	36	20	23.50	23.35	23.52					
15	QPSK	36	39	23.56	23.44	23.31					
15	QPSK	75	0	23.44	23.46	23.46	24				
15	16QAM	1	0	23.75	23.69	23.63					
15	16QAM	1	37	23.57	23.77	23.67					
15	16QAM	1	74	23.57	23.75	23.50	23				
15	16QAM	36	0	22.50	22.48	22.30					
15	16QAM	36	20	22.47	22.39	22.46					
15	16QAM	36	39	22.44	22.56	22.50	23				
15	16QAM	75	0	22.50	22.47	22.48					
15	64QAM	1	0	22.63	22.48	22.44					
15	64QAM	1	37	22.57	22.52	22.60	23				
15	64QAM	1	74	22.60	22.63	22.55					
15	64QAM	36	0	21.53	21.46	21.31					
15	64QAM	36	20	21.51	21.54	21.52	22				
15	64QAM	36	39	21.52	21.60	21.45					
15	64QAM	75	0	21.46	21.44	21.58					
Channel				133172	133272	133422	Tune-up limit (dBm)				
Frequency (MHz)				668	678	683					
10	QPSK	1	0	24.37	24.26	24.38	25				
10	QPSK	1	25	24.33	24.27	24.26					
10	QPSK	1	49	24.44	24.23	24.26					
10	QPSK	25	0	23.59	23.55	23.42	24				
10	QPSK	25	12	23.49	23.52	23.36					
10	QPSK	25	25	23.41	23.37	23.49					
10	QPSK	50	0	23.51	23.41	23.48	24				
10	16QAM	1	0	23.82	23.60	23.57					
10	16QAM	1	25	23.69	23.76	23.76					
10	16QAM	1	49	23.74	23.70	23.55	23				
10	16QAM	25	0	22.37	22.50	22.31					
10	16QAM	25	12	22.46	22.51	22.37					
10	16QAM	25	25	22.50	22.42	22.35	23				
10	16QAM	50	0	22.56	22.40	22.55					
10	64QAM	1	0	22.65	22.45	22.55					
10	64QAM	1	25	22.53	22.49	22.58	23				
10	64QAM	1	49	22.66	22.48	22.41					
10	64QAM	25	0	21.57	21.51	21.46					
10	64QAM	25	12	21.43	21.47	21.48	22				
10	64QAM	25	25	21.39	21.47	21.65					
10	64QAM	50	0	21.57	21.31	21.43					
Channel				133147	133247	133447	Tune-up limit (dBm)				
Frequency (MHz)				665.5	675.5	685.5					
5	QPSK	1	0	24.46	24.29	24.21	25				
5	QPSK	1	12	24.31	24.41	24.42					
5	QPSK	1	24	24.32	24.26	24.22					
5	QPSK	12	0	23.59	23.57	23.50	24				
5	QPSK	12	7	23.46	23.35	23.54					
5	QPSK	12	13	23.39	23.46	23.30					
5	QPSK	25	0	23.42	23.41	23.48	24				
5	16QAM	1	0	23.70	23.75	23.59					
5	16QAM	1	12	23.66	23.68	23.58					
5	16QAM	1	24	23.69	23.79	23.58	23				
5	16QAM	12	0	22.45	22.40	22.47					
5	16QAM	12	7	22.57	22.34	22.39					
5	16QAM	12	13	22.56	22.45	22.49	23				
5	16QAM	25	0	22.56	22.33	22.54					
5	64QAM	1	0	22.63	22.47	22.46					
5	64QAM	1	12	22.49	22.58	22.50	23				
5	64QAM	1	24	22.54	22.51	22.52					
5	64QAM	12	0	21.40	21.31	21.49					
5	64QAM	12	7	21.62	21.43	21.39	22				
5	64QAM	12	13	21.50	21.50	21.51					
5	64QAM	25	0	21.44	21.46	21.47					



Band 2							
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				18700	18900	19100	
Frequency (MHz)				1860	1880	1900	
20	QPSK	1	0	24.87	24.84	24.89	25
20	QPSK	1	49	24.83	24.68	24.69	
20	QPSK	1	99	24.74	24.68	24.70	
20	QPSK	50	0	23.88	23.72	23.69	24
20	QPSK	50	24	23.80	23.76	23.71	
20	QPSK	50	50	23.99	23.80	23.82	
20	QPSK	100	0	23.80	23.96	23.87	24
20	16QAM	1	0	23.93	23.90	23.87	
20	16QAM	1	49	23.87	23.83	23.93	
20	16QAM	1	99	23.79	23.76	23.81	23
20	16QAM	50	0	22.95	22.83	22.78	
20	16QAM	50	24	22.85	22.97	22.77	
20	16QAM	50	50	22.73	22.99	22.77	23
20	16QAM	100	0	22.91	22.84	22.85	
20	64QAM	1	0	22.94	22.88	22.92	
20	64QAM	1	49	22.79	22.94	21.95	23
20	64QAM	1	99	22.26	22.80	22.86	
20	64QAM	50	0	21.82	21.83	21.18	
20	64QAM	50	24	21.92	21.86	21.09	22
20	64QAM	50	50	21.44	21.73	21.81	
20	64QAM	100	0	21.81	21.91	21.40	
Channel				18675	18900	19125	Tune-up limit (dBm)
Frequency (MHz)				1857.5	1880	1902.5	
15	QPSK	1	0	24.77	24.86	24.78	25
15	QPSK	1	37	24.74	24.79	24.84	
15	QPSK	1	74	24.69	24.78	24.69	
15	QPSK	36	0	23.75	23.85	23.77	24
15	QPSK	36	20	23.85	23.80	23.84	
15	QPSK	36	39	23.85	23.81	23.86	
15	QPSK	75	0	23.88	23.79	23.85	24
15	16QAM	1	0	23.92	23.84	23.74	
15	16QAM	1	37	23.87	23.99	23.95	
15	16QAM	1	74	23.79	23.79	23.90	23
15	16QAM	36	0	22.80	22.84	22.75	
15	16QAM	36	20	22.75	22.96	22.75	
15	16QAM	36	39	22.77	23.80	22.92	23
15	16QAM	75	0	22.91	22.79	22.72	
15	64QAM	1	0	22.88	22.85	22.89	
15	64QAM	1	37	22.86	22.81	21.96	23
15	64QAM	1	74	22.25	22.86	22.93	
15	64QAM	36	0	21.90	21.77	21.09	
15	64QAM	36	20	21.85	21.75	21.02	22
15	64QAM	36	39	21.42	21.87	21.71	
15	64QAM	75	0	21.81	21.82	21.35	
Channel				18650	18900	19150	Tune-up limit (dBm)
Frequency (MHz)				1855	1880	1905	
10	QPSK	1	0	24.70	24.82	24.78	25
10	QPSK	1	25	24.84	24.75	24.68	
10	QPSK	1	49	24.66	24.75	24.71	
10	QPSK	25	0	23.92	23.75	23.69	24
10	QPSK	25	12	23.77	23.69	23.76	
10	QPSK	25	25	23.87	23.98	23.89	
10	QPSK	50	0	23.91	23.90	23.84	24
10	16QAM	1	0	23.92	23.95	23.78	
10	16QAM	1	25	23.84	23.97	23.91	
10	16QAM	1	49	23.97	23.91	23.80	23
10	16QAM	25	0	22.79	22.78	22.84	
10	16QAM	25	12	22.76	22.92	22.77	
10	16QAM	25	25	22.86	22.81	22.78	23
10	16QAM	50	0	22.78	22.92	22.83	
10	64QAM	1	0	22.90	22.87	22.93	
10	64QAM	1	25	22.79	22.76	21.89	23
10	64QAM	1	49	22.31	22.87	22.89	
10	64QAM	25	0	21.85	21.80	21.24	
10	64QAM	25	12	21.84	21.89	21.07	22
10	64QAM	25	25	21.42	21.75	21.69	
10	64QAM	50	0	21.97	21.97	21.39	
Channel				18625	18900	19175	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1880	1907.5	
5	QPSK	1	0	24.88	24.77	24.83	25
5	QPSK	1	12	24.82	24.83	24.65	
5	QPSK	1	24	24.80	24.81	24.81	
5	QPSK	12	0	23.89	23.84	23.76	24
5	QPSK	12	7	23.89	23.77	23.86	
5	QPSK	12	13	23.91	23.90	23.86	
5	QPSK	25	0	23.88	23.83	23.89	24
5	16QAM	1	0	23.98	23.98	23.84	
5	16QAM	1	12	23.84	23.97	23.90	
5	16QAM	1	24	23.79	23.84	23.86	23
5	16QAM	12	0	22.92	22.72	22.83	
5	16QAM	12	7	22.89	22.87	22.84	
5	16QAM	12	13	22.99	22.89	22.78	23
5	16QAM	25	0	22.78	22.93	22.72	
5	64QAM	1	0	22.79	22.77	22.91	
5	64QAM	1	12	22.86	22.86	21.87	23
5	64QAM	1	24	22.34	22.80	22.99	
5	64QAM	12	0	21.83	21.85	21.07	
5	64QAM	12	7	21.86	21.77	21.10	22
5	64QAM	12	13	21.33	21.72	21.75	
5	64QAM	25	0	21.91	21.89	21.33	
Channel				18615	18900	19185	Tune-up limit (dBm)
Frequency (MHz)				1851.5	1880	1908.5	
3	QPSK	1	0	24.88	24.69	24.76	25
3	QPSK	1	8	24.86	24.76	24.52	
3	QPSK	1	14	24.87	24.82	24.54	
3	QPSK	8	0	23.73	23.81	23.72	24
3	QPSK	8	4	23.94	23.89	23.74	
3	QPSK	8	7	23.81	23.80	23.79	
3	QPSK	15	0	23.84	23.87	23.88	24
3	16QAM	1	0	23.80	23.81	23.78	
3	16QAM	1	8	23.82	23.81	23.97	
3	16QAM	1	14	23.78	23.86	23.80	23
3	16QAM	8	0	22.91	22.71	22.91	
3	16QAM	8	4	22.77	22.94	22.78	
3	16QAM	8	7	22.83	22.80	22.72	23
3	16QAM	15	0	22.87	22.91	22.88	
3	64QAM	1	0	22.90	22.92	22.91	
3	64QAM	1	8	22.77	22.92	21.84	23
3	64QAM	1	14	22.29	22.81	22.82	
3	64QAM	8	0	21.85	21.73	21.20	
3	64QAM	8	4	21.83	21.83	21.14	22
3	64QAM	8	7	21.45	21.80	21.82	
3	64QAM	15	0	21.83	21.87	21.34	
Channel				18607	18900	19193	Tune-up limit (dBm)
Frequency (MHz)				1850.7	1880	1909.3	
1.4	QPSK	1	0	24.85	24.67	24.85	25
1.4	QPSK	1	3	24.69	24.66	24.52	
1.4	QPSK	1	5	24.75	24.68	24.76	
1.4	QPSK	3	0	24.74	24.76	24.89	24
1.4	QPSK	3	1	24.70	24.62	24.46	
1.4	QPSK	3	3	24.56	24.61	24.62	
1.4	QPSK	6	0	23.91	23.93	23.78	24
1.4	16QAM	1	0	23.71	23.74	23.67	
1.4	16QAM	1	3	23.83	23.82	23.72	
1.4	16QAM	1	5	23.76	23.93	23.85	24
1.4	16QAM	3	0	23.86	23.92	23.70	
1.4	16QAM	3	1	23.83	23.84	23.86	
1.4	16QAM	3	3	23.73	23.85	23.72	23
1.4	16QAM	6	0	22.79	22.93	22.85	
1.4	64QAM	1	0	22.73	22.89	22.78	
1.4	64QAM	1	3	22.69	22.86	21.94	23
1.4	64QAM	1	5	22.25	22.74	22.90	
1.4	64QAM	3	0	22.89	22.89	22.95	
1.4	64QAM	3	1	22.68	22.88	21.77	23
1.4	64QAM	3	3	22.19	22.84	22.76	
1.4	64QAM	6	0	21.83	21.79	21.35	



Band 4											
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				20550	20175	20300					
Frequency (MHz)				1720	1732.5	1745					
20	QPSK	1	0	24.39	24.94	23.25	25				
20	QPSK	1	49	24.70	23.55	23.89					
20	QPSK	1	99	24.67	23.11	24.89					
20	QPSK	50	0	23.89	23.75	22.57	24				
20	QPSK	50	24	23.90	22.46	23.25					
20	QPSK	50	50	23.84	22.38	23.93					
20	QPSK	100	0	23.86	22.77	23.91	24				
20	16QAM	1	0	23.66	23.95	22.36					
20	16QAM	1	49	23.83	22.92	23.30					
20	16QAM	1	99	23.96	22.01	23.86	23				
20	16QAM	50	0	22.90	22.84	21.72					
20	16QAM	50	24	22.86	22.00	22.27					
20	16QAM	50	50	22.91	21.71	22.86	22				
20	16QAM	100	0	22.98	22.21	22.29					
20	64QAM	1	0	21.49	22.98	21.74					
20	64QAM	1	49	22.91	21.11	21.43	23				
20	64QAM	1	99	22.34	21.36	22.95					
20	64QAM	50	0	21.62	21.22	20.96					
20	64QAM	50	24	21.91	20.07	20.63	22				
20	64QAM	50	50	21.95	20.12	21.45					
20	64QAM	100	0	21.81	20.56	20.32					
Channel				20000	20175	20300	Tune-up limit (dBm)				
Frequency (MHz)				1717.5	1732.5	1747.5					
15	QPSK	1	0	24.32	24.87	23.23	25				
15	QPSK	1	37	24.73	23.56	23.30					
15	QPSK	1	74	24.77	23.09	24.79					
15	QPSK	36	0	23.96	23.63	22.71	24				
15	QPSK	36	20	23.95	22.49	23.24					
15	QPSK	36	39	23.94	22.44	23.84					
15	QPSK	75	0	22.85	22.85	23.82	24				
15	16QAM	1	0	23.70	23.90	22.47					
15	16QAM	1	37	23.87	22.76	23.29					
15	16QAM	1	74	23.96	22.96	23.81	23				
15	16QAM	36	0	22.85	22.96	21.86					
15	16QAM	36	20	23.00	21.89	22.40					
15	16QAM	36	39	22.92	21.55	22.81	22				
15	16QAM	75	0	22.81	22.37	22.31					
15	64QAM	1	0	21.45	22.91	21.76					
15	64QAM	1	37	22.91	21.01	21.45	23				
15	64QAM	1	74	22.40	21.26	22.86					
15	64QAM	36	0	21.73	21.26	20.95					
15	64QAM	36	20	21.84	20.26	20.54	22				
15	64QAM	36	39	21.95	20.26	21.06					
15	64QAM	75	0	21.75	20.56	20.32					
Channel				20000	20175	20350	Tune-up limit (dBm)				
Frequency (MHz)				1715	1732.5	1750					
10	QPSK	1	0	24.29	24.86	23.19	25				
10	QPSK	1	25	24.69	23.54	23.82					
10	QPSK	1	49	24.59	23.16	24.82					
10	QPSK	25	0	23.85	23.70	22.65	24				
10	QPSK	25	12	23.89	22.55	23.18					
10	QPSK	25	25	23.86	22.36	23.92					
10	QPSK	50	0	24.00	22.70	22.94	24				
10	16QAM	1	0	23.81	23.86	22.36					
10	16QAM	1	25	23.97	22.91	23.38					
10	16QAM	1	49	23.93	22.03	24.00	23				
10	16QAM	25	0	22.85	22.84	21.80					
10	16QAM	25	12	22.99	21.91	22.43					
10	16QAM	25	25	22.92	21.55	22.85	22				
10	16QAM	50	0	22.92	22.35	22.42					
10	64QAM	1	0	21.41	22.77	21.76					
10	64QAM	1	25	22.90	21.06	21.49	23				
10	64QAM	1	49	22.23	21.36	22.87					
10	64QAM	25	0	21.61	21.14	20.81					
10	64QAM	25	12	21.80	20.03	20.59	22				
10	64QAM	25	25	21.83	20.20	21.32					
10	64QAM	50	0	21.75	20.39	20.45					
Channel				19975 <th>20175</th> <th>20375</th> <th colspan="3">Tune-up limit (dBm)</th>	20175	20375	Tune-up limit (dBm)				
Frequency (MHz)				1712.5 <th>1732.5<th>1752.5</th><th colspan="3"></th></th>	1732.5 <th>1752.5</th> <th colspan="3"></th>	1752.5					
5	QPSK	1	0	24.35	24.87	23.09	25				
5	QPSK	1	12	24.67	23.53	23.94					
5	QPSK	1	24	24.67	23.11	24.82					
5	QPSK	12	0	23.86	23.75	22.73	24				
5	QPSK	12	7	23.96	22.38	23.32					
5	QPSK	12	13	23.93	22.44	22.70					
5	QPSK	25	0	23.75	22.71	22.96	24				
5	16QAM	1	0	23.69	23.94	22.36					
5	16QAM	1	12	23.90	22.82	23.33					
5	16QAM	1	24	23.95	22.08	23.94	23				
5	16QAM	12	0	22.95	22.84	21.74					
5	16QAM	12	7	22.95	21.96	22.39					
5	16QAM	12	13	22.90	21.52	22.86	22				
5	16QAM	25	0	22.23	22.25	22.32					
5	64QAM	1	0	21.47	22.75	21.75					
5	64QAM	1	12	22.90	21.00	21.53	23				
5	64QAM	1	24	22.33	21.35	22.93					
5	64QAM	12	0	21.71	21.21	20.80					
5	64QAM	12	7	21.85	20.88	20.69	22				
5	64QAM	12	13	21.89	20.26	21.33					
5	64QAM	25	0	21.78	20.56	20.41					
Channel				19965	20175	20365	Tune-up limit (dBm)				
Frequency (MHz)				1711.5	1732.5	1753.5					
3	QPSK	1	0	24.40	24.92	23.13	25				
3	QPSK	1	8	24.72	23.66	23.94					
3	QPSK	1	14	24.75	23.10	24.69					
3	QPSK	8	0	23.70	23.78	22.57	24				
3	QPSK	8	4	23.95	22.46	23.51					
3	QPSK	8	7	23.93	22.49	23.81					
3	QPSK	15	0	23.91	22.75	22.86	24				
3	16QAM	1	0	23.71	24.00	22.47					
3	16QAM	1	8	23.94	22.75	23.35					
3	16QAM	1	14	23.96	22.04	23.85	23				
3	16QAM	8	0	22.90	22.92	21.86					
3	16QAM	8	4	22.84	21.60	22.36					
3	16QAM	8	7	22.90	21.60	22.86	22				
3	16QAM	15	0	22.91	22.37	22.29					
3	64QAM	1	0	21.47	22.99	21.69					
3	64QAM	1	8	22.86	21.00	21.34	23				
3	64QAM	1	14	22.40	21.27	22.94					
3	64QAM	8	0	21.69	21.34	20.80					
3	64QAM	8	4	21.91	20.01	20.57	22				
3	64QAM	8	7	21.92	20.26	21.36					
3	64QAM	15	0	21.75	20.40	20.47					
Channel				19967	20175	20363	Tune-up limit (dBm)				
Frequency (MHz)				1710.7	1732.5	1754.3					
1.4	QPSK	1	0	24.40	24.91	23.22	25				
1.4	QPSK	1	3	24.62	23.48	23.94					
1.4	QPSK	1	5	24.61	23.95	24.71					
1.4	QPSK	3	0	24.77	24.77	24.56	24				
1.4	QPSK	3	1	24.67	23.50	23.23					
1.4	QPSK	3	3	23.89	23.41	23.92					
1.4	QPSK	6	0	23.95	22.72	23.91	24				
1.4	16QAM	1	0	23.69	23.80	22.26					
1.4	16QAM	1	3	23.95	22.78	23.39					
1.4	16QAM	1	5	23.94	22.31	23.84	24				
1.4	16QAM	3	0	22.91	22.95	22.29					
1.4	16QAM	3	1	22.85	22.81	22.28					
1.4	16QAM	3	3	22.91	22.82	22.28	23				
1.4	16QAM	6	0	22.91	22.12	22.23					
1.4	16QAM	6	1	22.84	21.66	21.58					
1.4	64QAM	3	0	22.80	21.05	21.39	23				
1.4	64QAM	3	1	21.91	21.89	21.61					
1.4	64QAM	3	3	22.01	21.92	21.35					



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)				829	836.5	844			
10	QPSK	1	0	24.27	24.18	24.24	25		
10	QPSK	1	25	24.09	24.19	24.29			
10	QPSK	1	49	24.20	24.21	24.07			
10	QPSK	25	0	23.30	23.34	23.40	24		
10	QPSK	25	12	23.38	23.40	23.31			
10	QPSK	25	25	23.25	23.48	23.35			
10	QPSK	50	0	23.49	23.51	23.35	24		
10	16QAM	1	0	23.65	23.70	23.57			
10	16QAM	1	25	23.52	23.57	23.54			
10	16QAM	1	49	23.57	23.60	23.58	23		
10	16QAM	25	0	22.26	22.28	22.29			
10	16QAM	25	12	22.39	22.20	22.22			
10	16QAM	25	25	22.42	22.42	22.48	23		
10	16QAM	50	0	22.29	22.35	22.27			
10	64QAM	1	0	22.51	22.51	22.47			
10	64QAM	1	25	22.55	22.61	22.50	23		
10	64QAM	1	49	22.49	22.55	21.76			
10	64QAM	25	0	21.29	21.37	21.40			
10	64QAM	25	12	21.37	21.29	21.31	22		
10	64QAM	25	25	21.33	21.31	21.12			
10	64QAM	50	0	21.35	21.50	21.15			
Channel				20425	20525	20625	Tune-up limit (dBm)		
Frequency (MHz)				826.5	836.5	846.5			
5	QPSK	1	0	24.39	24.25	24.25	25		
5	QPSK	1	12	24.13	24.18	24.13			
5	QPSK	1	24	24.15	24.24	24.08			
5	QPSK	12	0	23.35	23.41	23.33	24		
5	QPSK	12	7	23.46	23.27	23.24			
5	QPSK	12	13	23.39	23.40	23.39			
5	QPSK	25	0	23.49	23.36	23.33	24		
5	16QAM	1	0	23.56	23.68	23.54			
5	16QAM	1	12	23.55	23.50	23.66			
5	16QAM	1	24	23.55	23.65	23.60	23		
5	16QAM	12	0	22.36	22.23	22.19			
5	16QAM	12	7	22.54	22.21	22.21			
5	16QAM	12	13	22.37	22.29	22.32	23		
5	16QAM	25	0	22.32	22.45	22.26			
5	64QAM	1	0	22.40	22.50	22.44			
5	64QAM	1	12	22.64	22.49	22.59	23		
5	64QAM	1	24	22.43	22.58	21.84			
5	64QAM	12	0	21.43	21.44	21.25			
5	64QAM	12	7	21.37	21.34	21.38	22		
5	64QAM	12	13	21.28	21.30	21.23			
5	64QAM	25	0	21.51	21.38	21.26			
Channel				20415	20525	20635	Tune-up limit (dBm)		
Frequency (MHz)				825.5	836.5	847.5			
3	QPSK	1	0	24.34	24.21	24.33	25		
3	QPSK	1	8	24.08	24.19	24.24			
3	QPSK	1	14	24.17	24.18	24.07			
3	QPSK	8	0	23.28	23.25	23.25	24		
3	QPSK	8	4	23.46	23.43	23.24			
3	QPSK	8	7	23.26	23.36	23.37			
3	QPSK	15	0	23.47	23.29	23.29	24		
3	16QAM	1	0	23.67	23.60	23.56			
3	16QAM	1	8	23.66	23.67	23.62			
3	16QAM	1	14	23.63	23.49	23.61	23		
3	16QAM	8	0	22.28	22.32	22.36			
3	16QAM	8	4	22.29	22.30	22.27			
3	16QAM	8	7	22.29	22.43	22.45	23		
3	16QAM	15	0	22.42	22.42	22.40			
3	64QAM	1	0	22.54	22.58	22.37			
3	64QAM	1	8	22.48	22.54	22.43	23		
3	64QAM	1	14	22.54	22.55	21.66			
3	64QAM	8	0	21.34	21.42	21.28			
3	64QAM	8	4	21.44	21.32	21.26	22		
3	64QAM	8	7	21.33	21.31	21.17			
3	64QAM	15	0	21.43	21.39	21.27			
Channel				20407	20525	20643	Tune-up limit (dBm)		
Frequency (MHz)				824.7	836.5	848.3			
1.4	QPSK	1	0	24.17	24.19	24.29	25		
1.4	QPSK	1	3	24.17	24.14	24.30			
1.4	QPSK	1	5	24.10	24.10	24.11			
1.4	QPSK	3	0	24.28	24.31	24.02	24		
1.4	QPSK	3	1	24.11	24.02	24.04			
1.4	QPSK	3	3	24.09	24.16	24.03			
1.4	QPSK	6	0	23.42	23.32	23.33	24		
1.4	16QAM	1	0	23.69	23.60	23.52			
1.4	16QAM	1	3	23.41	23.54	23.47			
1.4	16QAM	1	5	23.53	23.53	23.53	24		
1.4	16QAM	3	0	23.65	23.53	23.41			
1.4	16QAM	3	1	23.49	23.42	23.32			
1.4	16QAM	3	3	23.39	23.38	23.35	23		
1.4	16QAM	6	0	22.24	22.38	22.39			
1.4	64QAM	1	0	22.41	22.56	22.47			
1.4	64QAM	1	3	22.53	22.54	22.62	23		
1.4	64QAM	1	5	22.44	22.39	21.73			
1.4	64QAM	3	0	22.51	22.31	22.31			
1.4	64QAM	3	1	22.46	22.54	22.44	22		
1.4	64QAM	3	3	22.28	22.38	21.56			
1.4	64QAM	6	0	21.43	21.41	21.05			



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				20850	21100	21350					
Frequency (MHz)				2510	2535	2560					
20	QPSK	1	0	24.61	24.76	23.48	25				
20	QPSK	1	49	24.69	24.89	23.51					
20	QPSK	1	99	24.90	24.93	24.46					
20	QPSK	50	0	23.83	24.00	22.26	24				
20	QPSK	50	24	23.90	24.10	22.64					
20	QPSK	100	0	23.90	24.00	22.77					
20	16QAM	1	0	23.93	23.90	22.87	24				
20	16QAM	1	49	23.84	23.84	22.87					
20	16QAM	1	99	23.88	23.90	23.69					
20	16QAM	50	0	22.86	22.97	21.34	23				
20	16QAM	50	24	22.96	22.91	21.78					
20	16QAM	50	50	22.90	22.85	22.83					
20	16QAM	100	0	22.81	22.86	21.87	22				
20	64QAM	1	0	22.86	22.63	21.00					
20	64QAM	1	49	22.73	22.96	21.72					
20	64QAM	1	99	22.73	22.75	21.88	23				
20	64QAM	50	0	21.91	22.00	20.41					
20	64QAM	50	24	21.87	21.85	20.65					
20	64QAM	50	50	21.41	21.93	20.54	22				
20	64QAM	100	0	21.69	21.88	20.10					
Channel				20825	21100	21375				Tune-up limit (dBm)	
Frequency (MHz)				2507.5	2535	2562.5					
15	QPSK	1	0	24.61	24.68	23.47	25				
15	QPSK	1	37	24.69	24.89	23.41					
15	QPSK	1	74	24.80	24.88	24.58					
15	QPSK	36	0	23.81	23.99	22.15	24				
15	QPSK	36	20	23.95	23.88	22.61					
15	QPSK	36	39	23.97	23.96	23.59					
15	QPSK	75	0	23.90	23.89	22.80	24				
15	16QAM	1	0	23.95	23.94	22.74					
15	16QAM	1	37	23.97	23.95	22.64					
15	16QAM	1	74	23.74	23.83	23.82	23				
15	16QAM	36	0	22.97	22.89	21.23					
15	16QAM	36	20	22.90	22.93	21.71					
15	16QAM	36	39	22.90	22.78	22.75	22				
15	16QAM	75	0	22.90	22.86	21.97					
15	64QAM	1	0	22.86	22.55	21.10					
15	64QAM	1	37	22.89	22.83	21.67	23				
15	64QAM	1	74	22.63	22.71	21.72					
15	64QAM	36	0	21.92	21.85	20.31					
15	64QAM	36	20	21.92	21.91	20.99	22				
15	64QAM	36	39	21.53	21.81	20.65					
15	64QAM	75	0	21.85	21.72	20.15					
Channel				20800	21100	21400	Tune-up limit (dBm)				
Frequency (MHz)				2505	2535	2565					
10	QPSK	1	0	24.60	24.79	23.51	25				
10	QPSK	1	25	24.67	24.79	23.43					
10	QPSK	1	49	24.89	24.90	24.48					
10	QPSK	25	0	23.91	23.98	22.13	24				
10	QPSK	25	12	23.87	23.98	22.66					
10	QPSK	25	25	23.98	23.94	23.86					
10	QPSK	50	0	23.95	23.97	22.95	24				
10	16QAM	1	0	23.96	23.95	22.90					
10	16QAM	1	25	23.82	23.85	22.58					
10	16QAM	1	49	23.70	23.84	23.85	23				
10	16QAM	25	0	22.82	22.91	21.37					
10	16QAM	25	12	22.85	22.89	21.60					
10	16QAM	25	25	22.83	22.90	22.85	22				
10	16QAM	50	0	22.88	22.90	21.92					
10	64QAM	1	0	22.85	22.53	21.99					
10	64QAM	1	25	22.79	22.76	21.75	23				
10	64QAM	1	49	22.70	22.67	21.78					
10	64QAM	25	0	21.93	21.96	20.42					
10	64QAM	25	12	21.89	21.99	20.65	22				
10	64QAM	25	25	21.51	21.98	20.66					
10	64QAM	50	0	21.73	21.83	20.19					
Channel				20775	21100	21425	Tune-up limit (dBm)				
Frequency (MHz)				2502.5	2535	2567.5					
5	QPSK	1	0	24.63	24.64	23.54	25				
5	QPSK	1	12	24.72	24.61	23.38					
5	QPSK	1	24	24.86	24.88	24.45					
5	QPSK	12	0	23.80	23.93	22.19	24				
5	QPSK	12	7	24.00	23.99	22.71					
5	QPSK	12	13	23.86	23.80	23.61					
5	QPSK	25	0	23.92	23.99	22.83	24				
5	16QAM	1	0	23.91	23.85	22.90					
5	16QAM	1	12	23.91	23.88	22.66					
5	16QAM	1	24	23.86	23.79	23.76	23				
5	16QAM	12	0	22.84	22.86	21.23					
5	16QAM	12	7	22.94	22.99	21.59					
5	16QAM	12	13	22.96	22.90	22.72	22				
5	16QAM	25	0	22.94	22.89	22.01					
5	64QAM	1	0	22.98	22.65	21.95					
5	64QAM	1	12	22.78	22.82	21.64	23				
5	64QAM	1	24	22.60	22.76	21.87					
5	64QAM	12	0	21.92	21.95	20.42					
5	64QAM	12	7	21.92	21.88	20.65	22				
5	64QAM	12	13	21.41	22.00	20.54					
5	64QAM	25	0	21.78	21.89	20.21					



Band 12									
Art.1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq. (dBm)	Power Middle Ch. / Freq. (dBm)	Power High Ch. / Freq. (dBm)	Tune-up limit (dBm)		
Channel				23060	23095	23130			
Frequency (MHz)				704	707.5	711			
10	QPSK	1	0	24.33	24.30	24.28	25		
10	QPSK	1	25	24.17	24.27	24.25			
10	QPSK	1	49	24.45	24.34	24.26			
10	QPSK	25	0	23.37	23.48	23.39	24		
10	QPSK	25	12	23.48	23.55	23.35			
10	QPSK	25	25	23.50	23.33	23.38			
10	QPSK	50	0	23.54	23.40	23.37	24		
10	16QAM	1	0	23.68	23.54	23.58			
10	16QAM	1	25	23.52	23.63	23.58			
10	16QAM	1	49	23.71	23.75	23.70	23		
10	16QAM	25	0	22.43	22.31	22.47			
10	16QAM	25	12	22.45	22.48	22.51			
10	16QAM	25	25	22.41	22.37	22.42	22		
10	16QAM	50	0	22.38	22.31	22.48			
10	64QAM	1	0	22.45	22.37	22.50			
10	64QAM	1	25	22.62	22.57	22.51	23		
10	64QAM	1	49	22.70	22.48	22.44			
10	64QAM	25	0	21.47	21.48	21.40			
10	64QAM	25	12	21.52	21.44	21.55	22		
10	64QAM	25	25	21.52	21.55	21.44			
10	64QAM	50	0	21.50	21.50	21.50			
Channel				23035	23095	23155	Tune-up limit (dBm)		
Frequency (MHz)				701.5	707.5	713.5			
5	QPSK	1	0	24.41	24.21	24.19	25		
5	QPSK	1	12	24.10	24.22	24.27			
5	QPSK	1	24	24.34	24.24	24.18			
5	QPSK	12	0	23.41	23.37	23.38	24		
5	QPSK	12	7	23.52	23.49	23.55			
5	QPSK	12	13	23.34	23.44	23.49			
5	QPSK	25	0	23.49	23.47	23.35	24		
5	16QAM	1	0	23.55	23.63	23.53			
5	16QAM	1	12	23.70	23.76	23.72			
5	16QAM	1	24	23.74	23.62	23.76	23		
5	16QAM	12	0	22.47	22.38	22.45			
5	16QAM	12	7	22.58	22.36	22.41			
5	16QAM	12	13	22.46	22.55	22.48	22		
5	16QAM	25	0	22.55	22.43	22.39			
5	64QAM	1	0	22.62	22.43	22.51			
5	64QAM	1	12	22.51	22.53	22.57	23		
5	64QAM	1	24	22.63	22.64	22.51			
5	64QAM	12	0	21.41	21.35	21.40			
5	64QAM	12	7	21.53	21.50	21.51	22		
5	64QAM	12	13	21.39	21.50	21.56			
5	64QAM	25	0	21.45	21.49	21.39			
Channel				23025	23095	23165	Tune-up limit (dBm)		
Frequency (MHz)				700.5	707.5	714.5			
3	QPSK	1	0	24.29	24.30	24.30	25		
3	QPSK	1	8	24.24	24.35	24.34			
3	QPSK	1	14	24.30	24.41	24.25			
3	QPSK	8	0	23.37	23.43	23.48	24		
3	QPSK	8	4	23.46	23.36	23.48			
3	QPSK	8	7	23.40	23.34	23.42			
3	QPSK	15	0	23.44	23.46	23.31	24		
3	16QAM	1	0	23.75	23.55	23.67			
3	16QAM	1	8	23.64	23.63	23.74			
3	16QAM	1	14	23.63	23.62	23.67	23		
3	16QAM	8	0	22.37	22.47	22.42			
3	16QAM	8	4	22.43	22.40	22.51			
3	16QAM	8	7	22.47	22.38	22.42	22		
3	16QAM	15	0	22.50	22.38	22.37			
3	64QAM	1	0	22.47	22.38	22.56			
3	64QAM	1	8	22.61	22.57	22.60	23		
3	64QAM	1	14	22.62	22.47	22.56			
3	64QAM	8	0	21.46	21.48	21.37			
3	64QAM	8	4	21.63	21.43	21.52	22		
3	64QAM	8	7	21.57	21.50	21.42			
3	64QAM	15	0	21.53	21.42	21.43			
Channel				23017	23095	23173	Tune-up limit (dBm)		
Frequency (MHz)				699.7	707.5	715.3			
1.4	QPSK	1	0	24.27	24.25	24.22	25		
1.4	QPSK	1	3	24.16	24.23	24.18			
1.4	QPSK	1	5	24.28	24.21	24.19			
1.4	QPSK	3	0	24.24	24.08	24.12	24		
1.4	QPSK	3	1	24.05	24.19	24.12			
1.4	QPSK	3	3	24.24	24.27	24.25			
1.4	QPSK	6	0	23.38	23.32	23.32	24		
1.4	16QAM	1	0	23.54	23.55	23.51			
1.4	16QAM	1	3	23.45	23.65	23.49			
1.4	16QAM	1	5	23.73	23.75	23.69	24		
1.4	16QAM	3	0	23.47	23.60	23.67			
1.4	16QAM	3	1	23.61	23.60	23.44			
1.4	16QAM	3	3	23.72	23.63	23.53	23		
1.4	16QAM	6	0	22.41	22.25	22.28			
1.4	64QAM	1	0	22.58	22.48	22.28			
1.4	64QAM	1	3	22.46	22.42	22.62	23		
1.4	64QAM	1	5	22.67	22.49	22.38			
1.4	64QAM	3	0	22.52	22.41	22.42			
1.4	64QAM	3	1	22.41	22.48	22.53	22		
1.4	64QAM	3	3	22.66	22.43	22.32			
1.4	64QAM	6	0	21.50	21.39	21.38	22		



Band 13							
Art 1							
BW (kHz)	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	24.37			25
10	QPSK	1	25	24.45			
10	QPSK	1	49	24.56			
10	QPSK	25	0	23.51			24
10	QPSK	25	12	23.52			
10	QPSK	25	25	23.43			
10	QPSK	50	0	23.49			24
10	16QAM	1	0	23.72			
10	16QAM	1	25	23.81			
10	16QAM	1	49	23.84			23
10	16QAM	25	0	22.53			
10	16QAM	25	12	22.46			
10	16QAM	25	25	22.60			23
10	16QAM	50	0	22.53			
10	64QAM	1	0	22.75			
10	64QAM	1	25	22.88			23
10	64QAM	1	49	22.81			
10	64QAM	25	0	21.57			
10	64QAM	25	12	21.56			22
10	64QAM	25	25	21.51			
10	64QAM	50	0	21.57			
Channel				23205	23230	23255	Tune-up limit (dBm)
Frequency (MHz)				779.5	782	784.5	
5	QPSK	1	0	24.28	24.28	24.28	25
5	QPSK	1	12	24.29	24.33	24.33	
5	QPSK	1	24	24.52	24.40	24.41	
5	QPSK	12	0	23.33	23.48	23.38	24
5	QPSK	12	7	23.41	23.49	23.41	
5	QPSK	12	13	23.50	23.51	23.48	
5	QPSK	25	0	23.43	23.41	23.44	24
5	16QAM	1	0	23.65	23.57	23.60	
5	16QAM	1	12	23.73	23.65	23.69	
5	16QAM	1	24	23.62	23.76	23.59	23
5	16QAM	12	0	22.46	22.52	22.47	
5	16QAM	12	7	22.47	22.61	22.59	
5	16QAM	12	13	22.46	22.56	22.49	23
5	16QAM	25	0	22.38	22.46	22.54	
5	64QAM	1	0	22.55	22.60	22.49	
5	64QAM	1	12	22.59	22.61	22.70	23
5	64QAM	1	24	22.63	22.56	22.48	
5	64QAM	12	0	21.59	21.52	21.56	
5	64QAM	12	7	21.51	21.45	21.55	22
5	64QAM	12	13	21.56	21.49	21.64	
5	64QAM	25	0	21.39	21.44	21.43	



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				2330			
Frequency (MHz)				793			
10	QPSK	1	0	24.47			25
10	QPSK	1	25	24.39			
10	QPSK	1	49	24.21			
10	QPSK	25	0	23.38			24
10	QPSK	25	12	23.32			
10	QPSK	25	25	23.54			
10	QPSK	50	0	23.48			24
10	16QAM	1	0	23.66			
10	16QAM	1	25	23.74			
10	16QAM	1	49	23.69			23
10	16QAM	25	0	22.38			
10	16QAM	25	12	22.49			
10	16QAM	25	25	22.37			23
10	16QAM	50	0	22.46			
10	64QAM	1	0	22.63			
10	64QAM	1	25	22.72			23
10	64QAM	1	49	22.60			
10	64QAM	25	0	21.43			
10	64QAM	25	12	21.55			22
10	64QAM	25	25	21.50			
10	64QAM	50	0	21.37			
Channel				2305	2330	2355	Tune-up limit (dBm)
Frequency (MHz)				790.5	793	795.5	
5	QPSK	1	0	24.45	24.32	24.27	25
5	QPSK	1	12	24.15	24.25	24.23	
5	QPSK	1	24	24.21	24.26	24.29	
5	QPSK	12	0	23.36	23.34	23.32	24
5	QPSK	12	7	23.27	23.38	23.43	
5	QPSK	12	13	23.34	23.42	23.49	
5	QPSK	25	0	23.46	23.38	23.29	24
5	16QAM	1	0	23.64	23.76	23.80	
5	16QAM	1	12	23.63	23.72	23.78	
5	16QAM	1	24	23.68	23.59	23.53	23
5	16QAM	12	0	22.24	22.38	22.37	
5	16QAM	12	7	22.46	22.35	22.44	
5	16QAM	12	13	22.36	22.33	22.43	23
5	16QAM	25	0	22.27	22.42	22.34	
5	64QAM	1	0	22.64	22.50	22.60	
5	64QAM	1	12	22.53	22.51	22.71	23
5	64QAM	1	24	22.55	22.52	22.59	
5	64QAM	12	0	21.48	21.44	21.36	
5	64QAM	12	7	21.44	21.44	21.38	22
5	64QAM	12	13	21.49	21.43	21.51	
5	64QAM	25	0	21.40	21.51	21.31	



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)				709	710	711	
10	QPSK	1	0	24.17	24.16	24.23	25
10	QPSK	1	25	24.20	24.23	24.20	
10	QPSK	1	49	24.34	24.22	24.23	
10	QPSK	25	0	23.40	23.43	23.33	24
10	QPSK	25	12	23.43	23.48	23.35	
10	QPSK	25	25	23.39	23.40	23.55	
10	QPSK	50	0	23.52	23.53	23.47	24
10	16QAM	1	0	23.69	23.55	23.60	
10	16QAM	1	25	23.73	23.76	23.73	
10	16QAM	1	49	23.66	23.61	23.68	23
10	16QAM	25	0	22.24	22.33	22.35	
10	16QAM	25	12	22.42	22.41	22.42	
10	16QAM	25	25	22.44	22.58	22.54	23
10	16QAM	50	0	22.49	22.32	22.43	
10	64QAM	1	0	22.52	22.38	22.57	23
10	64QAM	1	25	22.53	22.69	22.51	
10	64QAM	1	49	22.51	22.69	22.58	
10	64QAM	25	0	21.42	21.51	21.35	22
10	64QAM	25	12	21.36	21.46	21.36	
10	64QAM	25	25	21.45	21.52	21.58	
10	64QAM	50	0	21.55	21.43	21.47	
Channel				23755	23790	23825	
Frequency (MHz)				708.5	710	711.5	Tune up limit (dBm)
5	QPSK	1	0	24.30	24.21	24.32	25
5	QPSK	1	12	24.32	24.18	24.24	
5	QPSK	1	24	24.32	24.33	24.27	
5	QPSK	12	0	23.29	23.32	23.33	24
5	QPSK	12	7	23.39	23.43	23.40	
5	QPSK	12	13	23.53	23.53	23.46	
5	QPSK	25	0	23.53	23.47	23.42	24
5	16QAM	1	0	23.69	23.60	23.58	
5	16QAM	1	12	23.57	23.75	23.59	
5	16QAM	1	24	23.64	23.73	23.62	23
5	16QAM	12	0	22.24	22.35	22.29	
5	16QAM	12	7	22.54	22.49	22.35	
5	16QAM	12	13	22.45	22.42	22.49	23
5	16QAM	25	0	22.45	22.44	22.40	
5	64QAM	1	0	22.57	22.45	22.39	
5	64QAM	1	12	22.57	22.50	22.62	23
5	64QAM	1	24	22.64	22.63	22.51	
5	64QAM	12	0	21.42	21.54	21.37	
5	64QAM	12	7	21.52	21.39	21.53	22
5	64QAM	12	13	21.60	21.58	21.59	
5	64QAM	25	0	21.56	21.40	21.34	



Band 25											
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				26140	26340	26590					
Frequency (MHz)				1860	1865	1905					
20	QPSK	1	0	24.95	24.71	24.63	25				
20	QPSK	1	49	24.70	24.64	24.52					
20	QPSK	1	99	24.53	24.73	23.98					
20	QPSK	50	0	23.90	23.78	23.73	24				
20	QPSK	50	24	23.75	23.72	23.71					
20	QPSK	50	50	23.77	23.67	23.76					
20	QPSK	100	0	23.79	23.92	23.84	24				
20	16QAM	1	0	23.50	23.78	23.84					
20	16QAM	1	49	23.83	23.75	23.84					
20	16QAM	1	99	23.94	23.78	23.23	23				
20	16QAM	50	0	22.85	22.84	22.79					
20	16QAM	50	24	22.56	22.85	22.75					
20	16QAM	50	50	22.92	22.81	22.88	23				
20	16QAM	100	0	22.84	22.80	22.71					
20	64QAM	1	0	22.80	22.35	21.94					
20	64QAM	1	49	22.53	22.86	22.87	23				
20	64QAM	1	99	21.96	22.85	21.41					
20	64QAM	50	0	21.92	21.62	20.35					
20	64QAM	50	24	21.51	21.73	21.24	22				
20	64QAM	50	50	21.12	21.75	21.19					
20	64QAM	100	0	21.60	21.73	21.01					
Channel				26090	26340	26640	Tune-up limit (dBm)				
Frequency (MHz)				1857.5	1865	1907.5					
15	QPSK	1	0	24.79	24.70	24.63	25				
15	QPSK	1	37	24.70	24.73	24.54					
15	QPSK	1	74	24.59	24.63	23.99					
15	QPSK	36	0	23.94	23.90	23.73	24				
15	QPSK	36	20	23.81	23.70	23.74					
15	QPSK	36	39	23.82	23.67	23.72					
15	QPSK	75	0	23.89	23.90	23.84	24				
15	16QAM	1	0	23.78	23.86	23.89					
15	16QAM	1	37	23.80	23.78	23.94					
15	16QAM	1	74	23.87	23.75	23.34	23				
15	16QAM	36	0	22.89	22.78	22.76					
15	16QAM	36	20	22.66	22.86	22.86					
15	16QAM	36	39	22.76	22.83	22.86	23				
15	16QAM	75	0	22.56	22.87	22.73					
15	64QAM	1	0	22.77	22.53	22.00					
15	64QAM	1	37	22.53	22.84	22.73	23				
15	64QAM	1	74	22.00	22.81	21.32					
15	64QAM	36	0	21.92	21.63	20.35					
15	64QAM	36	20	21.54	21.78	21.41	22				
15	64QAM	36	39	21.16	21.92	21.25					
15	64QAM	75	0	21.51	21.81	21.02					
Channel				26090	26340	26640	Tune-up limit (dBm)				
Frequency (MHz)				1855	1865	1910					
10	QPSK	1	0	24.79	24.80	24.63	25				
10	QPSK	1	25	24.69	24.71	24.56					
10	QPSK	1	49	24.64	24.78	23.93					
10	QPSK	25	0	23.76	23.86	23.73	24				
10	QPSK	25	12	23.88	23.75	23.71					
10	QPSK	25	25	23.74	23.70	23.84					
10	QPSK	50	0	23.84	23.68	23.73	24				
10	16QAM	1	0	23.74	23.93	24.00					
10	16QAM	1	25	23.81	23.86	23.84					
10	16QAM	1	49	23.85	23.81	23.27	23				
10	16QAM	25	0	22.76	22.90	22.78					
10	16QAM	25	12	22.92	22.89	22.74					
10	16QAM	25	25	22.87	22.92	22.79	23				
10	16QAM	50	0	22.77	22.97	22.78					
10	64QAM	1	0	22.73	22.40	21.91					
10	64QAM	1	25	22.64	22.88	22.54	23				
10	64QAM	1	49	22.01	22.93	21.31					
10	64QAM	25	0	21.79	21.64	20.97					
10	64QAM	25	12	21.69	21.79	21.38	22				
10	64QAM	25	25	21.15	21.91	21.33					
10	64QAM	50	0	21.62	21.87	20.91					
Channel				26095	26340	26665	Tune-up limit (dBm)				
Frequency (MHz)				1852.5	1865	1912.5					
5	QPSK	1	0	24.93	24.78	24.71	25				
5	QPSK	1	12	24.79	24.68	24.80					
5	QPSK	1	24	24.68	24.80	23.85					
5	QPSK	12	0	23.84	23.83	23.83	24				
5	QPSK	12	7	23.81	23.79	23.67					
5	QPSK	12	13	23.74	23.74	23.66					
5	QPSK	25	0	23.88	23.90	23.77	24				
5	16QAM	1	0	23.87	23.80	23.92					
5	16QAM	1	12	23.96	23.86	23.80					
5	16QAM	1	24	23.86	23.77	23.24	23				
5	16QAM	12	0	22.83	22.82	22.85					
5	16QAM	12	7	22.83	22.87	22.80					
5	16QAM	12	13	22.85	22.92	22.82	23				
5	16QAM	25	0	22.85	22.90	22.71					
5	64QAM	1	0	22.93	22.35	22.02					
5	64QAM	1	12	22.58	22.91	22.74	23				
5	64QAM	1	24	22.05	22.88	21.29					
5	64QAM	12	0	21.86	21.53	21.02					
5	64QAM	12	7	21.59	21.79	21.24	22				
5	64QAM	12	13	21.14	21.92	21.32					
5	64QAM	25	0	21.54	21.83	21.05					
Channel				26095	26340	26675	Tune-up limit (dBm)				
Frequency (MHz)				1851.5	1865	1913.5					
3	QPSK	1	0	24.88	24.88	24.81	25				
3	QPSK	1	8	24.81	24.81	24.86					
3	QPSK	1	14	24.58	24.75	23.91					
3	QPSK	8	0	23.92	23.87	23.73	24				
3	QPSK	8	4	23.86	23.61	23.57					
3	QPSK	8	7	23.79	23.85	23.69					
3	QPSK	15	0	23.82	23.69	23.88	24				
3	16QAM	1	0	23.87	23.91	23.86					
3	16QAM	1	8	23.87	23.75	23.84					
3	16QAM	1	14	23.86	23.77	23.16	23				
3	16QAM	8	0	22.85	22.80	22.69					
3	16QAM	8	4	22.99	22.82	22.77					
3	16QAM	8	7	22.82	22.86	22.87	23				
3	16QAM	15	0	22.79	22.87	22.87					
3	64QAM	1	0	22.92	22.40	21.89					
3	64QAM	1	8	22.47	22.93	22.61	23				
3	64QAM	1	14	22.02	22.74	21.27					
3	64QAM	8	0	21.88	21.53	21.04					
3	64QAM	8	4	21.60	21.79	21.22	22				
3	64QAM	8	7	21.18	21.80	21.15					
3	64QAM	15	0	21.50	21.81	20.88					
Channel				26047	26340	26683	Tune-up limit (dBm)				
Frequency (MHz)				1850.7	1865	1914.3					
1.4	QPSK	1	0	24.78	24.67	24.53	25				
1.4	QPSK	1	3	24.75	24.55	24.85					
1.4	QPSK	1	5	24.66	24.61	23.89					
1.4	QPSK	3	0	24.62	24.75	24.55	24				
1.4	QPSK	3	1	24.74	24.57	24.51					
1.4	QPSK	3	3	24.68	24.55	23.83					
1.4	QPSK	6	0	23.94	23.74	23.72	24				
1.4	16QAM	1	0	23.86	23.89	23.76					
1.4	16QAM	1	3	23.88	23.93	23.89					
1.4											



Band 26									
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				26765	26865	26965			
Frequency (MHz)				821.5	831.5	841.5			
15	QPSK	1	0	24.36	24.21	24.28	25		
15	QPSK	1	37	24.20	24.24	24.14			
15	QPSK	1	74	24.15	24.13	24.17			
15	QPSK	36	0	23.30	23.34	23.28	24		
15	QPSK	36	20	23.50	23.33	23.23			
15	QPSK	36	39	23.44	23.39	23.40			
15	QPSK	75	0	23.47	23.26	23.26	24		
15	16QAM	1	0	23.56	23.42	23.53			
15	16QAM	1	37	23.48	23.53	23.57			
15	16QAM	1	74	23.56	23.53	23.33	23		
15	16QAM	36	0	22.45	22.31	22.36			
15	16QAM	36	20	22.41	22.42	22.31			
15	16QAM	36	39	22.41	22.38	22.36	23		
15	16QAM	75	0	22.40	22.34	22.23			
15	64QAM	1	0	22.46	22.43	22.38			
15	64QAM	1	37	22.51	22.48	22.41	23		
15	64QAM	1	74	22.50	22.35	21.74			
15	64QAM	36	0	21.37	21.50	21.46			
15	64QAM	36	20	21.46	21.42	21.37	22		
15	64QAM	36	39	21.45	21.42	21.37			
15	64QAM	75	0	21.40	21.38	21.29			
Channel				26740	26865	26990	Tune-up limit (dBm)		
Frequency (MHz)				819	831.5	844			
10	QPSK	1	0	24.23	24.22	24.15	25		
10	QPSK	1	25	24.11	24.24	24.11			
10	QPSK	1	49	24.14	24.27	23.99			
10	QPSK	25	0	23.46	23.35	23.35	24		
10	QPSK	25	12	23.44	23.33	23.33			
10	QPSK	25	25	23.50	23.40	23.34			
10	QPSK	50	0	23.46	23.26	23.25	24		
10	16QAM	1	0	23.69	23.43	23.53			
10	16QAM	1	25	23.52	23.48	23.55			
10	16QAM	1	49	23.63	23.41	23.27	23		
10	16QAM	25	0	22.33	22.30	22.41			
10	16QAM	25	12	22.38	22.22	22.34			
10	16QAM	25	25	22.36	22.32	22.36	23		
10	16QAM	50	0	22.52	22.22	22.24			
10	64QAM	1	0	22.42	22.40	22.39			
10	64QAM	1	49	22.38	22.39	21.81	23		
10	64QAM	25	0	21.33	21.38	21.36			
10	64QAM	25	12	21.44	21.28	21.44			
10	64QAM	25	25	21.34	21.41	21.37	22		
10	64QAM	50	0	21.38	21.36	21.24			
Channel				26715	26865	27015		Tune-up limit (dBm)	
Frequency (MHz)				816.5	831.5	846.5			
5	QPSK	1	0	24.31	24.14	24.12	25		
5	QPSK	1	12	24.13	24.28	24.12			
5	QPSK	1	24	24.30	24.17	24.07			
5	QPSK	12	0	23.38	23.34	23.25	24		
5	QPSK	12	7	23.38	23.35	23.38			
5	QPSK	12	13	23.42	23.20	23.31			
5	QPSK	25	0	23.42	23.24	23.28	24		
5	16QAM	1	0	23.53	23.59	23.49			
5	16QAM	1	12	23.52	23.46	23.58			
5	16QAM	1	24	23.45	23.54	23.37	23		
5	16QAM	12	0	22.30	22.41	22.28			
5	16QAM	12	7	22.44	22.27	22.43			
5	16QAM	12	13	22.37	22.26	22.24	23		
5	16QAM	25	0	22.45	22.30	22.42			
5	64QAM	1	0	22.38	22.40	22.34			
5	64QAM	1	12	22.51	22.47	22.37	23		
5	64QAM	1	24	22.32	22.48	21.68			
5	64QAM	12	0	21.32	21.44	21.46			
5	64QAM	12	7	21.50	21.38	21.34	22		
5	64QAM	12	13	21.45	21.35	21.38			
5	64QAM	25	0	21.37	21.31	21.38			
Channel				26705	26865	27025	Tune-up limit (dBm)		
Frequency (MHz)				815.5	831.5	847.5			
3	QPSK	1	0	24.32	24.23	24.11	25		
3	QPSK	1	8	24.16	24.21	24.17			
3	QPSK	1	14	24.22	24.12	24.04			
3	QPSK	8	0	23.47	23.38	23.43	24		
3	QPSK	8	4	23.44	23.35	23.35			
3	QPSK	8	7	23.38	23.35	23.35			
3	QPSK	15	0	23.51	23.27	23.24	24		
3	16QAM	1	0	23.60	23.43	23.50			
3	16QAM	1	8	23.60	23.46	23.44			
3	16QAM	1	14	23.55	23.46	23.42	23		
3	16QAM	8	0	22.41	22.38	22.26			
3	16QAM	8	4	22.46	22.34	22.37			
3	16QAM	8	7	22.39	22.35	22.37	23		
3	16QAM	15	0	22.39	22.40	22.24			
3	64QAM	1	0	22.38	22.36	22.42			
3	64QAM	1	8	22.57	22.44	22.38	23		
3	64QAM	1	14	22.49	22.46	21.74			
3	64QAM	8	0	21.38	21.38	21.48			
3	64QAM	8	4	21.40	21.38	21.31	22		
3	64QAM	8	7	21.43	21.49	21.35			
3	64QAM	15	0	21.33	21.35	21.42			
Channel				26697	26865	27033	Tune-up limit (dBm)		
Frequency (MHz)				814.7	831.5	848.3			
1.4	QPSK	1	0	24.32	24.07	24.15	25		
1.4	QPSK	1	3	24.26	24.12	24.04			
1.4	QPSK	1	5	24.25	24.27	24.03			
1.4	QPSK	3	0	24.13	24.03	24.13	24		
1.4	QPSK	3	1	24.16	24.05	23.96			
1.4	QPSK	3	3	24.02	24.24	23.90			
1.4	QPSK	6	0	23.33	23.22	23.23	24		
1.4	16QAM	1	0	23.63	23.40	23.45			
1.4	16QAM	1	3	23.47	23.47	23.58			
1.4	16QAM	1	5	23.55	23.54	23.28	24		
1.4	16QAM	3	0	23.49	23.33	23.36			
1.4	16QAM	3	1	23.34	23.32	23.37			
1.4	16QAM	3	3	23.40	23.55	23.38	23		
1.4	16QAM	6	0	22.38	22.22	22.31			
1.4	64QAM	1	0	22.32	22.40	22.34			
1.4	64QAM	1	3	22.39	22.36	22.43	23		
1.4	64QAM	1	5	22.48	22.29	21.55			
1.4	64QAM	3	0	22.32	22.19	22.23			
1.4	64QAM	3	1	22.41	22.27	22.33	23		
1.4	64QAM	3	3	22.48	22.22	21.64			
1.4	64QAM	6	0	21.45	21.41	21.21			



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				27710			
Frequency (MHz)				2315			
10	QPSK	1	0	24.69			25
10	QPSK	1	25	24.71			
10	QPSK	1	49	24.62			
10	QPSK	25	0	23.52			24
10	QPSK	25	12	23.62			
10	QPSK	25	25	23.68			
10	QPSK	50	0	23.76			24
10	16QAM	1	0	23.99			
10	16QAM	1	25	23.97			
10	16QAM	1	49	23.96			23
10	16QAM	25	0	22.73			
10	16QAM	25	12	22.84			
10	16QAM	25	25	22.72			23
10	16QAM	50	0	22.70			
10	64QAM	1	0	22.90			
10	64QAM	1	25	23.00			23
10	64QAM	1	49	22.74			
10	64QAM	25	0	21.63			
10	64QAM	25	12	21.77			22
10	64QAM	25	25	21.79			
10	64QAM	50	0	21.67			
Channel				27685	27710	27735	Tune-up limit (dBm)
Frequency (MHz)				2307.5	2310	2312.5	
5	QPSK	1	0	24.51	24.43	24.64	25
5	QPSK	1	12	24.69	24.49	24.52	
5	QPSK	1	24	24.51	24.63	24.66	
5	QPSK	12	0	23.58	23.63	23.65	24
5	QPSK	12	7	23.69	23.68	23.52	
5	QPSK	12	13	23.68	23.73	23.74	
5	QPSK	25	0	23.62	23.56	23.71	24
5	16QAM	1	0	23.86	23.81	23.72	
5	16QAM	1	12	23.89	23.86	23.82	
5	16QAM	1	24	23.83	23.96	23.87	23
5	16QAM	12	0	22.52	22.58	22.59	
5	16QAM	12	7	22.75	22.75	22.63	
5	16QAM	12	13	22.56	22.72	22.82	23
5	16QAM	25	0	22.54	22.66	22.57	
5	64QAM	1	0	22.90	22.77	22.71	
5	64QAM	1	12	22.90	22.93	22.84	23
5	64QAM	1	24	22.72	22.78	22.84	
5	64QAM	12	0	21.70	21.56	21.66	
5	64QAM	12	7	21.69	21.57	21.71	22
5	64QAM	12	13	21.69	21.80	21.77	
5	64QAM	25	0	21.64	21.75	21.81	



Band 66											
Ann 0											
BSW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)				
Channel				132072	132322	132572					
Frequency (MHz)				1720	1745	1770					
20	QPSK	1	0	24.70	24.05	24.97	25				
20	QPSK	1	49	24.79	24.28	24.58					
20	QPSK	1	99	24.88	24.94	24.85					
20	QPSK	50	0	23.92	23.29	23.99	24				
20	QPSK	50	24	23.94	23.81	23.69					
20	QPSK	50	50	23.83	23.76	23.76					
20	QPSK	100	0	23.82	23.88	23.85	24				
20	16QAM	1	0	23.95	23.43	23.97					
20	16QAM	1	49	23.73	23.60	23.74					
20	16QAM	1	99	23.81	23.94	23.74	23				
20	16QAM	50	0	22.90	22.32	22.85					
20	16QAM	50	24	22.92	22.91	22.86					
20	16QAM	50	50	22.90	22.78	22.83	23				
20	16QAM	100	0	22.90	22.96	22.88					
20	64QAM	1	0	21.55	21.61	22.92					
20	64QAM	1	49	22.92	21.79	21.91	23				
20	64QAM	1	99	22.85	22.76	22.51					
20	64QAM	50	0	21.81	20.37	21.25					
20	64QAM	50	24	21.80	21.11	20.78	22				
20	64QAM	50	50	21.91	21.75	21.28					
20	64QAM	100	0	21.85	21.06	21.44					
Channel				132022	132322	132597	Tune-up limit (dBm)				
Frequency (MHz)				1717.5	1745	1772.5					
15	QPSK	1	0	24.59	24.03	24.96	25				
15	QPSK	1	37	24.89	24.30	24.54					
15	QPSK	1	74	24.92	24.93	24.93					
15	QPSK	36	0	23.74	23.22	23.88	24				
15	QPSK	36	20	23.84	23.84	23.68					
15	QPSK	36	39	23.89	23.83	23.78					
15	QPSK	75	0	23.82	23.91	23.88	24				
15	16QAM	1	0	23.92	23.32	23.77					
15	16QAM	1	37	23.74	23.68	23.63					
15	16QAM	1	74	23.70	23.84	23.89	23				
15	16QAM	36	0	22.91	22.34	22.82					
15	16QAM	36	20	22.97	22.85	22.81					
15	16QAM	36	39	22.97	22.71	22.88	23				
15	16QAM	75	0	22.97	22.88	22.92					
15	64QAM	1	0	21.71	21.61	22.95					
15	64QAM	1	37	22.76	21.74	21.89	23				
15	64QAM	1	74	22.73	22.88	22.56					
15	64QAM	36	0	21.68	20.37	21.24					
15	64QAM	36	20	21.87	20.92	20.90	22				
15	64QAM	36	39	21.82	21.86	21.37					
15	64QAM	75	0	21.94	21.08	21.36					
Channel				132022	132322	132622	Tune-up limit (dBm)				
Frequency (MHz)				1712.5	1745	1777.5					
5	QPSK	1	0	24.70	23.97	24.95	25				
5	QPSK	1	12	24.94	24.29	24.54					
5	QPSK	1	24	24.93	24.90	24.81					
5	QPSK	12	0	23.91	23.19	23.86	24				
5	QPSK	12	7	23.93	23.84	23.73					
5	QPSK	12	13	23.85	23.90	23.84					
5	QPSK	25	0	23.74	23.85	23.85	24				
5	16QAM	1	0	23.85	23.49	23.96					
5	16QAM	1	12	23.71	23.69	23.63					
5	16QAM	1	24	23.72	23.79	23.77	23				
5	16QAM	12	0	22.83	22.29	22.85					
5	16QAM	12	7	22.86	22.97	22.73					
5	16QAM	12	13	22.91	22.91	22.88	22				
5	16QAM	25	0	22.91	22.94	22.89					
5	64QAM	1	0	21.54	21.53	22.86					
5	64QAM	1	12	22.92	21.60	21.82	23				
5	64QAM	1	24	22.66	22.88	22.55					
5	64QAM	12	0	21.91	20.46	21.30					
5	64QAM	12	7	22.00	21.01	20.72	22				
5	64QAM	12	13	21.84	21.95	21.37					
5	64QAM	25	0	21.90	21.09	21.31					
Channel				131987	132322	132647	Tune-up limit (dBm)				
Frequency (MHz)				1711.5	1745	1778.5					
3	QPSK	1	0	24.65	24.06	24.92	25				
3	QPSK	1	8	24.87	24.33	24.42					
3	QPSK	1	14	24.96	24.93	24.90					
3	QPSK	8	0	23.72	23.21	23.89	24				
3	QPSK	8	4	23.97	23.72	23.69					
3	QPSK	8	7	23.81	23.81	23.75					
3	QPSK	15	0	23.81	23.83	23.83	24				
3	16QAM	1	0	24.00	23.46	23.90					
3	16QAM	1	8	23.71	23.69	23.73					
3	16QAM	1	14	23.65	23.77	23.75	23				
3	16QAM	8	0	23.00	22.26	22.92					
3	16QAM	8	4	22.71	22.84	22.87					
3	16QAM	8	7	22.94	22.91	22.85	22				
3	16QAM	15	0	22.97	22.91	22.85					
3	64QAM	1	0	21.67	21.47	22.78					
3	64QAM	1	8	22.80	21.78	21.79	23				
3	64QAM	1	14	22.81	22.91	22.50					
3	64QAM	8	0	21.80	20.44	21.20					
3	64QAM	8	4	22.00	20.97	20.90	22				
3	64QAM	8	7	21.85	21.83	21.28					
3	64QAM	15	0	21.85	20.96	21.27					
Channel				131979	132322	132665	Tune-up limit (dBm)				
Frequency (MHz)				1710.7	1745	1778.3					
1.4	QPSK	1	0	24.67	24.18	24.91	25				
1.4	QPSK	1	3	24.88	24.33	24.42					
1.4	QPSK	1	5	24.92	24.92	24.79					
1.4	QPSK	3	0	24.78	24.08	24.75	24				
1.4	QPSK	3	1	24.81	24.88	24.64					
1.4	QPSK	3	3	24.82	24.83	24.68					
1.4	QPSK	6	0	23.82	23.83	23.82	24				
1.4	16QAM	1	0	23.91	23.42	23.82					
1.4	16QAM	1	3	23.75	23.56	23.83					
1.4	16QAM	1	5	23.75	23.77	23.74	23				
1.4	16QAM	3	0	23.90	23.31	23.77					
1.4	16QAM	3	1	23.84	23.89	23.88					
1.4	16QAM	3	3	23.90	23.71	23.81	23				
1.4	16QAM	6	0	23.00	22.84	22.94					
1.4	16QAM	6	1	23.00	22.82	22.85					
1.4	16QAM	3	3	22.91	22.67	22.28	22				
1.4	64QAM	1	0	22.78	21.79	22.21					
1.4	64QAM	3	1	22.82	21.95	21.79					
1.4	64QAM	3	3	22.80	21.75	21.79	23				
1.4	64QAM	6	0	22.81	21.41	21.41					
1.4	64QAM	6	1	22.81	21.41	21.41					



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	133322	133372					
Frequency (MHz)				673	683	686					
20	QPSK	1	0	24.39	24.45	24.35	25				
20	QPSK	1	49	24.20	24.41	24.22					
20	QPSK	1	99	24.36	24.28	24.23					
20	QPSK	50	0	23.45	23.61	23.37	24				
20	QPSK	50	24	23.36	23.50	23.56					
20	QPSK	50	50	23.42	23.55	23.60					
20	QPSK	100	0	23.45	23.42	23.52	24				
20	16QAM	1	0	23.75	23.69	23.66					
20	16QAM	1	49	23.62	23.64	23.75					
20	16QAM	1	99	23.72	23.74	23.64	23				
20	16QAM	50	0	22.41	22.48	22.30					
20	16QAM	50	24	22.50	22.44	22.46					
20	16QAM	50	50	22.55	22.62	22.50	23				
20	16QAM	100	0	22.46	22.47	22.50					
20	64QAM	1	0	22.61	22.57	22.55					
20	64QAM	1	49	22.43	22.49	22.46	23				
20	64QAM	1	99	22.49	22.68	22.59					
20	64QAM	50	0	21.49	21.35	21.44					
20	64QAM	50	24	21.60	21.41	21.46	22				
20	64QAM	50	50	21.44	21.58	21.60					
20	64QAM	100	0	21.44	21.43	21.57					
Channel				133197	133297	133397	Tune-up limit (dBm)				
Frequency (MHz)				670.5	680.5	680.5					
15	QPSK	1	0	24.34	24.43	24.19	25				
15	QPSK	1	37	24.38	24.36	24.26					
15	QPSK	1	74	24.39	24.27	24.25					
15	QPSK	36	0	23.50	23.61	23.44	24				
15	QPSK	36	20	23.46	23.44	23.40					
15	QPSK	36	39	23.54	23.48	23.52					
15	QPSK	75	0	23.46	23.37	23.54	24				
15	16QAM	1	0	23.79	23.65	23.74					
15	16QAM	1	37	23.65	23.60	23.58					
15	16QAM	1	74	23.68	23.70	23.67	23				
15	16QAM	36	0	22.52	22.47	22.46					
15	16QAM	36	20	22.57	22.49	22.45					
15	16QAM	36	39	22.46	22.54	22.49	23				
15	16QAM	75	0	22.42	22.46	22.40					
15	64QAM	1	0	22.67	22.50	22.52					
15	64QAM	1	37	22.54	22.50	22.62	23				
15	64QAM	1	74	22.67	22.69	22.50					
15	64QAM	36	0	21.57	21.51	21.36					
15	64QAM	36	20	21.55	21.42	21.49	22				
15	64QAM	36	39	21.48	21.46	21.55					
15	64QAM	75	0	21.62	21.34	21.55					
Channel				133172	133272	133422	Tune-up limit (dBm)				
Frequency (MHz)				668	678	683					
10	QPSK	1	0	24.34	24.41	24.24	25				
10	QPSK	1	25	24.28	24.37	24.21					
10	QPSK	1	49	24.35	24.35	24.29					
10	QPSK	25	0	23.40	23.58	23.46	24				
10	QPSK	25	12	23.50	23.51	23.50					
10	QPSK	25	25	23.54	23.54	23.41					
10	QPSK	50	0	23.52	23.53	23.55	24				
10	16QAM	1	0	23.82	23.60	23.74					
10	16QAM	1	25	23.62	23.59	23.64					
10	16QAM	1	49	23.71	23.69	23.54	23				
10	16QAM	25	0	22.54	22.37	22.39					
10	16QAM	25	12	22.62	22.55	22.32					
10	16QAM	25	25	22.61	22.49	22.41	23				
10	16QAM	50	0	22.46	22.47	22.37					
10	64QAM	1	0	22.51	22.47	22.49					
10	64QAM	1	25	22.46	22.53	22.56	23				
10	64QAM	1	49	22.51	22.62	22.56					
10	64QAM	25	0	21.55	21.46	21.41					
10	64QAM	25	12	21.53	21.47	21.44	22				
10	64QAM	25	25	21.56	21.47	21.49					
10	64QAM	50	0	21.63	21.40	21.47					
Channel				133147	133247	133447	Tune-up limit (dBm)				
Frequency (MHz)				665.5	675.5	685.5					
5	QPSK	1	0	24.39	24.39	24.35	25				
5	QPSK	1	12	24.22	24.36	24.35					
5	QPSK	1	24	24.37	24.28	24.17					
5	QPSK	12	0	23.41	23.54	23.48	24				
5	QPSK	12	7	23.45	23.35	23.51					
5	QPSK	12	13	23.45	23.48	23.42					
5	QPSK	25	0	23.51	23.44	23.51	24				
5	16QAM	1	0	23.81	23.58	23.67					
5	16QAM	1	12	23.63	23.78	23.59					
5	16QAM	1	24	23.55	23.61	23.52	23				
5	16QAM	12	0	22.53	22.44	22.33					
5	16QAM	12	7	22.52	22.38	22.40					
5	16QAM	12	13	22.41	22.61	22.51	23				
5	16QAM	25	0	22.53	22.42	22.57					
5	64QAM	1	0	22.68	22.58	22.51					
5	64QAM	1	12	22.46	22.60	22.54	23				
5	64QAM	1	24	22.49	22.51	22.52					
5	64QAM	12	0	21.53	21.48	21.42					
5	64QAM	12	7	21.46	21.43	21.50	22				
5	64QAM	12	13	21.58	21.61	21.57					
5	64QAM	25	0	21.55	21.46	21.58					



Band 2							
Ant 2							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)
Channel				18700	18900	19100	
Frequency (MHz)				1860	1880	1900	
20	QPSK	1	0	23.57	23.63	23.79	24.2
20	QPSK	1	49	23.54	23.72	23.85	
20	QPSK	1	99	23.57	23.45	23.61	
20	QPSK	50	0	23.32	23.32	23.37	24
20	QPSK	50	24	23.44	23.47	23.20	
20	QPSK	50	50	23.47	23.30	23.27	
20	QPSK	100	0	23.39	23.40	23.39	24
20	16QAM	1	0	23.75	23.56	23.54	
20	16QAM	1	49	23.59	23.62	23.40	
20	16QAM	1	99	23.46	23.45	23.26	23
20	16QAM	50	0	22.71	22.72	22.89	
20	16QAM	50	24	22.71	22.76	22.69	
20	16QAM	50	50	22.80	22.73	22.59	23
20	16QAM	100	0	22.73	22.59	22.57	
20	64QAM	1	0	22.76	22.83	22.68	
20	64QAM	1	49	22.77	22.88	22.61	23
20	64QAM	1	99	22.71	22.85	22.51	
20	64QAM	50	0	21.75	21.75	21.55	
20	64QAM	50	24	21.69	21.71	21.60	22
20	64QAM	50	50	21.80	21.68	21.66	
20	64QAM	100	0	21.70	21.69	21.71	
Channel				18675	18900	19125	Tune-up limit (dBm)
Frequency (MHz)				1857.5	1880	1902.5	
15	QPSK	1	0	23.61	23.55	23.72	24.2
15	QPSK	1	37	23.52	23.54	23.49	
15	QPSK	1	74	23.54	23.48	23.50	
15	QPSK	36	0	23.33	23.33	23.21	24
15	QPSK	36	20	23.41	23.34	23.24	
15	QPSK	36	39	23.41	23.27	23.26	
15	QPSK	75	0	23.53	23.30	23.32	24
15	16QAM	1	0	23.65	23.77	23.63	
15	16QAM	1	37	23.69	23.65	23.50	
15	16QAM	1	74	23.63	23.55	23.35	23
15	16QAM	36	0	22.70	22.62	22.59	
15	16QAM	36	20	22.73	22.71	22.60	
15	16QAM	36	39	22.82	22.58	22.51	23
15	16QAM	75	0	22.75	22.70	22.66	
15	64QAM	1	0	22.85	22.77	22.68	
15	64QAM	1	37	22.77	22.80	22.72	23
15	64QAM	1	74	22.64	22.82	22.63	
15	64QAM	36	0	21.61	21.64	21.74	
15	64QAM	36	20	21.77	21.70	21.59	22
15	64QAM	36	39	21.77	21.61	21.66	
15	64QAM	75	0	21.84	21.82	21.68	
Channel				18650	18900	19150	Tune-up limit (dBm)
Frequency (MHz)				1855	1880	1905	
10	QPSK	1	0	23.71	23.59	23.65	24.2
10	QPSK	1	8	23.53	23.53	23.59	
10	QPSK	1	49	23.46	23.54	23.59	
10	QPSK	25	0	23.37	23.29	23.21	24
10	QPSK	25	12	23.50	23.29	23.22	
10	QPSK	25	25	23.35	23.33	23.34	
10	QPSK	50	0	23.36	23.34	23.31	24
10	16QAM	1	0	23.74	23.64	23.58	
10	16QAM	1	25	23.61	23.61	23.45	
10	16QAM	1	49	23.45	23.63	23.28	23
10	16QAM	25	0	22.74	22.71	22.65	
10	16QAM	25	12	22.83	22.70	22.59	
10	16QAM	25	25	22.74	22.67	22.57	23
10	16QAM	50	0	22.71	22.74	22.71	
10	64QAM	1	0	22.85	22.77	22.71	
10	64QAM	1	25	22.72	22.80	22.75	23
10	64QAM	1	49	22.74	22.79	22.61	
10	64QAM	25	0	21.64	21.76	21.57	
10	64QAM	25	12	21.79	21.79	21.65	22
10	64QAM	25	25	21.74	21.75	21.51	
10	64QAM	50	0	21.82	21.87	21.70	
Channel				18625	18900	19175	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1880	1907.5	
5	QPSK	1	0	23.52	23.64	23.76	24.2
5	QPSK	1	12	23.57	23.61	23.56	
5	QPSK	1	24	23.49	23.49	23.53	
5	QPSK	12	0	23.33	23.47	23.39	24
5	QPSK	12	7	23.54	23.35	23.36	
5	QPSK	12	13	23.35	23.46	23.29	
5	QPSK	25	0	23.52	23.47	23.23	24
5	16QAM	1	0	23.62	23.76	23.53	
5	16QAM	1	12	23.55	23.73	23.47	
5	16QAM	1	24	23.45	23.46	23.34	23
5	16QAM	12	0	22.59	22.66	22.67	
5	16QAM	12	7	22.82	22.75	22.53	
5	16QAM	12	13	22.76	22.71	22.66	23
5	16QAM	25	0	22.76	22.65	22.56	
5	64QAM	1	0	22.80	22.78	22.79	
5	64QAM	1	12	22.71	22.67	22.66	23
5	64QAM	1	24	22.75	22.71	22.52	
5	64QAM	12	0	21.65	21.60	21.72	
5	64QAM	12	7	21.77	21.79	21.65	22
5	64QAM	12	13	21.63	21.66	21.66	
5	64QAM	25	0	21.79	21.87	21.51	
Channel				18615	18900	19185	Tune-up limit (dBm)
Frequency (MHz)				1851.5	1880	1908.5	
3	QPSK	1	0	23.72	23.60	23.71	24.2
3	QPSK	1	8	23.65	23.56	23.61	
3	QPSK	1	14	23.55	23.54	23.58	
3	QPSK	8	0	23.44	23.29	23.36	24
3	QPSK	8	4	23.45	23.33	23.25	
3	QPSK	8	7	23.39	23.28	23.33	
3	QPSK	15	0	23.39	23.32	23.34	24
3	16QAM	1	0	23.76	23.62	23.65	
3	16QAM	1	8	23.65	23.67	23.53	
3	16QAM	1	14	23.55	23.45	23.42	23
3	16QAM	8	0	22.87	22.70	22.56	
3	16QAM	8	4	22.80	22.71	22.58	
3	16QAM	8	7	22.81	22.75	22.51	23
3	16QAM	15	0	22.70	22.57	22.60	
3	64QAM	1	0	22.89	22.73	22.72	
3	64QAM	1	8	22.86	22.79	22.75	23
3	64QAM	1	14	22.71	22.67	22.59	
3	64QAM	8	0	21.69	21.66	21.73	
3	64QAM	8	4	21.81	21.67	21.59	22
3	64QAM	8	7	21.73	21.68	21.51	
3	64QAM	15	0	21.64	21.62	21.62	
Channel				18607	18900	19193	Tune-up limit (dBm)
Frequency (MHz)				1850.7	1880	1909.3	
1.4	QPSK	1	0	23.25	23.38	23.39	24.2
1.4	QPSK	1	5	23.23	23.15	23.16	
1.4	QPSK	1	5	23.07	23.03	23.19	
1.4	QPSK	3	0	23.30	23.38	23.27	24
1.4	QPSK	3	1	23.39	23.28	23.35	
1.4	QPSK	3	3	23.47	23.36	23.35	
1.4	QPSK	6	0	23.43	23.36	23.28	24
1.4	16QAM	1	0	23.69	23.60	23.60	
1.4	16QAM	1	3	23.50	23.54	23.49	
1.4	16QAM	1	5	23.34	23.52	23.41	24
1.4	16QAM	3	0	23.60	23.74	23.72	
1.4	16QAM	3	1	23.54	23.58	23.74	
1.4	16QAM	3	3	23.64	23.66	23.61	23
1.4	16QAM	6	0	22.70	22.56	22.56	
1.4	64QAM	1	0	22.66	22.91	22.79	
1.4	64QAM	1	3	22.71	22.78	22.66	23
1.4	64QAM	1	5	22.70	22.58	22.57	
1.4	64QAM	3	0	22.67	22.60	22.50	
1.4	64QAM	3	1	22.77	22.68	22.72	22
1.4	64QAM	3	3	22.68	22.72	22.60	
1.4	64QAM	6	0	21.70	21.62	21.67	



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				20550	20175	20300					
Frequency (MHz)				1720	1732.5	1745					
20	QPSK	1	0	23.99	23.92	23.90	25				
20	QPSK	1	49	23.64	23.71	23.80					
20	QPSK	1	99	23.70	23.81	23.81					
20	QPSK	50	0	23.24	23.21	23.41	24				
20	QPSK	50	24	23.29	23.16	23.26					
20	QPSK	50	50	23.26	23.13	23.33					
20	QPSK	100	0	23.19	23.34	23.40	24				
20	16QAM	1	0	23.52	23.50	23.67					
20	16QAM	1	49	23.45	23.34	23.42					
20	16QAM	1	99	23.42	23.44	23.44	23				
20	16QAM	50	0	22.30	22.32	22.39					
20	16QAM	50	24	22.23	22.27	22.21					
20	16QAM	50	50	22.22	22.13	22.20	23				
20	16QAM	100	0	22.25	22.24	22.28					
20	64QAM	1	0	22.39	22.46	22.57					
20	64QAM	1	49	22.28	22.37	22.24	23				
20	64QAM	1	99	22.29	22.36	22.22					
20	64QAM	50	0	21.19	21.34	21.40					
20	64QAM	50	24	21.33	21.29	21.33	22				
20	64QAM	50	50	21.15	21.23	21.19					
20	64QAM	100	0	21.24	21.15	21.26					
Channel				20000	20175	20300	Tune-up limit (dBm)				
Frequency (MHz)				1717.5	1732.5	1747.5					
15	QPSK	1	0	23.81	23.89	23.87	25				
15	QPSK	1	37	23.64	23.70	23.89					
15	QPSK	1	74	23.70	23.72	23.79					
15	QPSK	36	0	23.26	23.38	23.23	24				
15	QPSK	36	20	23.18	23.15	23.35					
15	QPSK	36	39	23.25	23.15	23.33					
15	QPSK	75	0	23.26	23.30	23.32	24				
15	16QAM	1	0	23.64	23.59	23.64					
15	16QAM	1	37	23.49	23.33	23.45					
15	16QAM	1	74	23.40	23.39	23.30	23				
15	16QAM	36	0	22.21	22.37	22.39					
15	16QAM	36	20	22.36	22.20	22.41					
15	16QAM	36	39	22.22	22.22	22.31	23				
15	16QAM	75	0	22.19	22.17	22.30					
15	64QAM	1	0	22.38	22.42	22.46					
15	64QAM	1	37	22.20	22.37	22.34	23				
15	64QAM	1	74	22.41	22.32	22.36					
15	64QAM	36	0	21.17	21.32	21.27					
15	64QAM	36	20	21.30	21.34	21.34	22				
15	64QAM	36	39	21.21	21.15	21.28					
15	64QAM	75	0	21.29	21.24	21.23					
Channel				20000	20175	20350	Tune-up limit (dBm)				
Frequency (MHz)				1715	1732.5	1750					
10	QPSK	1	0	23.95	23.94	23.98	25				
10	QPSK	1	25	23.68	23.66	23.75					
10	QPSK	1	49	23.69	23.67	23.70					
10	QPSK	25	0	23.24	23.23	23.30	24				
10	QPSK	25	12	23.36	23.30	23.27					
10	QPSK	25	25	23.18	23.17	23.14					
10	QPSK	50	0	23.20	23.23	23.26	24				
10	16QAM	1	0	23.56	23.67	23.57					
10	16QAM	1	25	23.38	23.38	23.39					
10	16QAM	1	49	23.48	23.39	23.46	23				
10	16QAM	25	0	22.23	22.34	22.24					
10	16QAM	25	12	22.36	22.26	22.35					
10	16QAM	25	25	22.22	22.26	22.24	23				
10	16QAM	50	0	22.16	22.15	22.32					
10	64QAM	1	0	22.35	22.46	22.39					
10	64QAM	1	25	22.40	22.42	22.29	23				
10	64QAM	1	49	22.32	22.39	22.29					
10	64QAM	25	0	21.17	21.38	21.28					
10	64QAM	25	12	21.19	21.16	21.26	22				
10	64QAM	25	25	21.13	21.17	21.30					
10	64QAM	50	0	21.20	21.26	21.39					
Channel				19975	20175	20375	Tune-up limit (dBm)				
Frequency (MHz)				1712.5	1732.5	1752.5					
5	QPSK	1	0	23.88	23.95	23.96	25				
5	QPSK	1	12	23.68	23.67	23.74					
5	QPSK	1	24	23.79	23.83	23.78					
5	QPSK	12	0	23.34	23.28	23.34	24				
5	QPSK	12	7	23.16	23.13	23.33					
5	QPSK	12	13	23.12	23.21	23.29					
5	QPSK	25	0	23.18	23.16	23.32	24				
5	16QAM	1	0	23.59	23.54	23.53					
5	16QAM	1	12	23.46	23.47	23.38					
5	16QAM	1	24	23.37	23.30	23.31	23				
5	16QAM	12	0	22.35	22.22	22.25					
5	16QAM	12	7	22.28	22.25	22.26					
5	16QAM	12	13	22.27	22.26	22.27	23				
5	16QAM	25	0	22.14	22.11	22.34					
5	64QAM	1	0	22.40	22.45	22.37					
5	64QAM	1	12	22.24	22.38	22.27	23				
5	64QAM	1	24	22.29	22.43	22.31					
5	64QAM	12	0	21.32	21.37	21.31					
5	64QAM	12	7	21.34	21.19	21.40	22				
5	64QAM	12	13	21.17	21.30	21.20					
5	64QAM	25	0	21.32	21.20	21.25					
Channel				19965	20175	20385	Tune-up limit (dBm)				
Frequency (MHz)				1711.5	1732.5	1753.5					
3	QPSK	1	0	23.91	24.03	23.92	25				
3	QPSK	1	8	23.75	23.69	23.76					
3	QPSK	1	14	23.65	23.79	23.69					
3	QPSK	8	0	23.27	23.21	23.39	24				
3	QPSK	8	4	23.16	23.20	23.31					
3	QPSK	8	7	23.14	23.26	23.17					
3	QPSK	15	0	23.24	23.17	23.24	24				
3	16QAM	1	0	23.60	23.59	23.66					
3	16QAM	1	8	23.36	23.46	23.54					
3	16QAM	1	14	23.37	23.30	23.30	23				
3	16QAM	8	0	22.26	22.25	22.36					
3	16QAM	8	4	22.20	22.18	22.36					
3	16QAM	8	7	22.17	22.19	22.26	23				
3	16QAM	15	0	22.27	22.21	22.37					
3	64QAM	1	0	22.35	22.43	22.44					
3	64QAM	1	8	22.34	22.27	22.30	23				
3	64QAM	1	14	22.22	22.26	22.33					
3	64QAM	8	0	21.30	21.35	21.35					
3	64QAM	8	4	21.31	21.26	21.36	22				
3	64QAM	8	7	21.25	21.33	21.33					
3	64QAM	15	0	21.32	21.14	21.36					
Channel				19967	20175	20393	Tune-up limit (dBm)				
Frequency (MHz)				1710.7	1732.5	1754.3					
1.4	QPSK	1	0	23.74	23.88	24.02	25				
1.4	QPSK	1	3	23.71	23.69	23.76					
1.4	QPSK	1	5	23.79	23.73	23.65					
1.4	QPSK	3	0	23.70	23.85	24.01	24				
1.4	QPSK	3	1	23.66	23.69	23.57					
1.4	QPSK	3	3	23.77	23.79	23.70					
1.4	QPSK	6	0	23.23	23.31	23.19	24				
1.4	16QAM	1	0	23.51	23.59	23.48					
1.4	16QAM	1	3	23.43	23.35	23.45					
1.4	16QAM	1	5	23.45	23.34	23.45	23				
1.4	16QAM	3	0	23.54	23.39	23.45					
1.4	16QAM	3	1	23.41	23.33	23.32					
1.4	16QAM	3	3	23.23	23.17	23.23	23				
1.4	16QAM	6	0	22.25	22.23	22.26					
1.4	16QAM	6	2	22.22	22.23	22.24					
1.4	64QAM	1	0	22.33	22.42	22.44	23				
1.4	64QAM	1	3	22.29	22.17	22.35					
1.4	64QAM	1	5	22.21	22.34	22.31					
1.4	64QAM	3	0	22.25	22.34	22.33	23				
1.4	64QAM	3	1	22.21	22.34	22.25					
1.4	64QAM	3	3	22.24	22.36	22.28					
1.4	64QAM	3	5	21.30	21.36	21.36	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				20450	20525	20600					
Frequency (MHz)				829	836.5	844					
10	QPSK	1	0	24.46	24.46	24.44	25				
10	QPSK	1	25	24.10	24.33	24.22					
10	QPSK	1	49	24.27	24.39	24.20					
10	QPSK	25	0	23.45	23.44	23.49	24				
10	QPSK	25	12	23.43	23.25	23.45					
10	QPSK	25	25	23.36	23.48	23.50					
10	QPSK	50	0	23.49	23.56	23.36	24				
10	16QAM	1	0	23.82	23.82	23.83					
10	16QAM	1	25	23.78	23.65	23.89					
10	16QAM	1	49	23.76	23.75	23.55	23				
10	16QAM	25	0	22.43	22.33	22.36					
10	16QAM	25	12	22.53	22.49	22.29					
10	16QAM	25	25	22.41	22.46	22.39	23				
10	16QAM	50	0	22.58	22.57	22.36					
10	16QAM	1	0	22.61	22.59	22.48					
10	64QAM	1	25	22.66	22.53	22.47	23				
10	64QAM	1	49	22.53	22.64	22.18					
10	64QAM	25	0	21.47	21.38	21.37					
10	64QAM	25	12	21.48	21.53	21.46	22				
10	64QAM	25	25	21.52	21.53	21.02					
10	64QAM	50	0	21.50	21.62	21.33					
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	23.75	23.68	23.71					
5	16QAM	1	12	23.68	23.70	23.59					
5	16QAM	1	24	23.64	23.56	23.59	24				
5	16QAM	12	0	22.37	22.37	22.33					
5	16QAM	12	7	22.46	22.41	22.33					
5	16QAM	12	13	22.36	22.36	22.33	23				
5	16QAM	25	0	22.48	22.38	22.39					
5	84QAM	1	0	22.48	22.58	22.50					
5	84QAM	1	12	22.61	22.58	22.41	22				
5	84QAM	1	24	22.54	22.52	22.57					
5	84QAM	12	0	21.36	21.34	21.44					
5	84QAM	12	7	21.55	21.40	21.43	22				
5	84QAM	12	13	21.45	21.48	21.05					
5	84QAM	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	24.41	24.40	24.24	25				
3	QPSK	1	8	24.21	24.27	24.20					
3	QPSK	1	14	24.27	24.30	24.19					
3	QPSK	8	0	23.31	23.36	23.30	24				
3	QPSK	8	4	23.36	23.33	23.43					
3	QPSK	8	7	23.42	23.41	23.31					
3	QPSK	15	0	23.44	23.48	23.21	24				
3	16QAM	1	0	23.64	23.68	23.73					
3	16QAM	1	8	23.66	23.68	23.66					
3	16QAM	1	14	23.68	23.53	23.67	24				
3	16QAM	8	0	22.46	22.34	22.26					
3	16QAM	8	4	22.43	22.38	22.29					
3	16QAM	8	7	22.44	22.33	22.27	23				
3	16QAM	15	0	22.49	22.42	22.34					
3	84QAM	1	0	22.43	22.63	22.57					
3	84QAM	1	8	22.69	22.52	22.34	23				
3	84QAM	1	14	22.56	22.53	21.97					
3	84QAM	8	0	21.35	21.25	21.54					
3	84QAM	8	4	21.47	21.48	21.35	22				
3	84QAM	8	7	21.39	21.41	21.05					
3	84QAM	15	0	21.40	21.54	21.33					
Channel				20407	20525	20643	Tune-up limit (dBm)				
Frequency (MHz)				824.7	836.5	848.3					
1.4	QPSK	1	0	24.38	24.31	24.42	25				
1.4	QPSK	1	3	24.23	24.31	24.22					
1.4	QPSK	1	5	24.28	24.36	24.33					
1.4	QPSK	3	0	24.26	24.35	24.28	24				
1.4	QPSK	3	1	24.10	24.19	24.17					
1.4	QPSK	3	3	24.19	24.11	24.14					
1.4	QPSK	6	0	23.49	23.46	23.31	24				
1.4	16QAM	1	0	23.70	23.69	23.75					
1.4	16QAM	1	3	23.54	23.65	23.47					
1.4	16QAM	1	5	23.59	23.55	23.64	24				
1.4	16QAM	3	0	23.81	23.55	23.69					
1.4	16QAM	3	1	23.50	23.53	23.50					
1.4	16QAM	3	3	23.56	23.45	23.53	23				
1.4	16QAM	6	0	22.45	22.48	22.44					
1.4	84QAM	1	0	22.52	22.54	22.58					
1.4	84QAM	1	3	22.50	22.50	22.36	23				
1.4	84QAM	1	5	22.44	22.50	22.10					
1.4	84QAM	3	0	22.50	22.44	22.44					
1.4	84QAM	3	1	22.49	22.44	22.44	22				
1.4	84QAM	3	3	22.62	22.40	21.96					
1.4	84QAM	6	0	21.57	21.47	21.29	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	21.33	21.55	21.50	22.3		
20	QPSK	1	49	21.31	21.39	21.30			
20	QPSK	1	99	21.36	21.17	21.24			
20	QPSK	50	0	21.35	21.48	21.46	22.3		
20	QPSK	50	24	21.26	21.29	21.29			
20	QPSK	50	50	21.25	21.35	21.33			
20	QPSK	100	0	21.35	21.23	21.31	22.3		
20	16QAM	1	0	21.43	21.14	21.33			
20	16QAM	1	49	21.39	21.35	21.16			
20	16QAM	1	99	21.31	21.32	21.29	22.3		
20	16QAM	50	0	21.29	21.36	21.29			
20	16QAM	50	24	21.22	21.25	21.25			
20	16QAM	50	50	21.26	21.42	21.31	22.3		
20	16QAM	100	0	21.35	21.25	21.31			
20	64QAM	1	0	21.36	21.37	21.42			
20	64QAM	1	49	21.28	21.26	21.38	22.3		
20	64QAM	1	99	21.15	21.18	21.23			
20	64QAM	50	0	21.17	20.92	21.27			
20	64QAM	50	24	21.13	21.13	21.27	22		
20	64QAM	50	50	21.22	21.17	21.11			
20	64QAM	100	0	21.18	21.26	20.90			
Channel				20825	21100	21375	Tune-up limit (dBm)		
Frequency (MHz)				2507.5	2535	2562.5			
15	QPSK	1	0	21.33	21.37	21.26	22.3		
15	QPSK	1	37	21.22	21.45	21.24			
15	QPSK	1	74	21.31	21.08	21.27			
15	QPSK	36	0	21.29	21.33	21.37	22.3		
15	QPSK	36	20	21.31	21.23	21.26			
15	QPSK	36	39	21.36	21.19	21.31			
15	QPSK	75	0	21.25	21.24	21.30	22.3		
15	16QAM	1	0	21.40	21.22	21.14			
15	16QAM	1	37	21.37	21.12	21.18			
15	16QAM	1	74	21.17	21.42	21.25	22.3		
15	16QAM	36	0	21.30	21.24	21.24			
15	16QAM	36	20	21.02	21.19	21.33			
15	16QAM	36	39	21.34	21.46	21.15	22.3		
15	16QAM	75	0	21.39	21.12	21.18			
15	64QAM	1	0	21.24	21.33	21.36			
15	64QAM	1	37	21.12	21.15	21.35	22.3		
15	64QAM	1	74	21.37	21.04	21.25			
15	64QAM	36	0	21.13	20.94	21.10			
15	64QAM	36	20	21.12	20.98	21.24	22		
15	64QAM	36	39	21.13	21.14	21.17			
15	64QAM	75	0	21.15	21.06	21.07			
Channel				20800	21100	21400	Tune-up limit (dBm)		
Frequency (MHz)				2505	2535	2565			
10	QPSK	1	0	21.50	21.35	21.25	22.3		
10	QPSK	1	25	21.16	21.38	21.23			
10	QPSK	1	49	21.35	21.04	21.21			
10	QPSK	25	0	21.36	21.24	21.32	22.3		
10	QPSK	25	12	21.30	21.26	21.20			
10	QPSK	25	25	21.20	21.39	21.31			
10	QPSK	50	0	21.25	21.40	21.35	22.3		
10	16QAM	1	0	21.31	21.11	21.26			
10	16QAM	1	25	21.38	21.24	21.29			
10	16QAM	1	49	21.20	21.42	21.36	22.3		
10	16QAM	25	0	21.40	21.18	21.11			
10	16QAM	25	12	21.22	21.17	21.17			
10	16QAM	25	25	21.25	21.28	21.36	22.3		
10	16QAM	50	0	21.25	21.11	21.22			
10	64QAM	1	0	21.26	21.37	21.23			
10	64QAM	1	25	21.20	21.17	21.22	22.3		
10	64QAM	1	49	21.24	21.19	21.07			
10	64QAM	25	0	21.03	21.01	21.07			
10	64QAM	25	12	21.15	21.04	21.26	22		
10	64QAM	25	25	21.00	21.20	21.06			
10	64QAM	50	0	21.16	21.17	20.95			
Channel				20775	21100	21425	Tune-up limit (dBm)		
Frequency (MHz)				2502.5	2535	2567.5			
5	QPSK	1	0	21.41	21.42	21.27	22.3		
5	QPSK	1	12	21.27	21.30	21.21			
5	QPSK	1	24	21.39	21.21	21.16			
5	QPSK	12	0	21.24	21.32	21.43	22.3		
5	QPSK	12	7	21.27	21.30	21.27			
5	QPSK	12	13	21.23	21.19	21.35			
5	QPSK	25	0	21.32	21.32	21.33	22.3		
5	16QAM	1	0	21.29	21.22	21.22			
5	16QAM	1	12	21.37	21.08	21.15			
5	16QAM	1	24	21.21	21.38	21.30	22.3		
5	16QAM	12	0	21.36	21.13	21.07			
5	16QAM	12	7	21.10	21.13	21.21			
5	16QAM	12	13	21.36	21.36	21.18	22.3		
5	16QAM	25	0	21.34	21.26	21.16			
5	64QAM	1	0	21.34	21.21	21.23			
5	64QAM	1	12	21.18	21.16	21.40	22.3		
5	64QAM	1	24	21.32	21.10	21.17			
5	64QAM	12	0	21.04	21.07	21.05			
5	64QAM	12	7	21.11	20.99	21.12	22		
5	64QAM	12	13	21.04	21.13	21.06			
5	64QAM	25	0	21.13	21.19	20.89			



Band 12										
				Ant 0						
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq. (dBm)	Power Middle Ch. / Freq. (dBm)	Power High Ch. / Freq. (dBm)	Tune-up limit (dBm)			
Channel				23060	23095	23130				
Frequency (MHz)				704	707.5	711				
10	QPSK	1	0	24.21	24.25	24.18	25			
10	QPSK	1	25	24.23	24.25	24.30				
10	QPSK	1	49	24.38	24.31	24.34				
10	QPSK	25	0	23.36	23.36	23.38	24			
10	QPSK	25	12	23.34	23.42	23.39				
10	QPSK	25	25	23.49	23.48	23.47				
10	QPSK	50	0	23.39	23.46	23.36	24			
10	16QAM	1	0	23.63	23.58	23.59				
10	16QAM	1	25	23.66	23.67	23.63				
10	16QAM	1	49	23.69	23.67	23.64	23			
10	16QAM	25	0	22.36	22.37	22.36				
10	16QAM	25	12	22.39	22.47	22.37				
10	16QAM	25	25	22.45	22.44	22.47	23			
10	16QAM	50	0	22.39	22.35	22.47				
10	64QAM	1	0	22.38	22.43	22.40	23			
10	64QAM	1	25	22.61	22.62	22.61				
10	64QAM	1	49	22.51	22.50	22.54				
10	64QAM	25	0	21.48	21.41	21.47	22			
10	64QAM	25	12	21.43	21.48	21.46				
10	64QAM	25	25	21.54	21.48	21.49				
10	64QAM	50	0	21.38	21.45	21.44	25			
Channel				23035	23095	23155				
Frequency (MHz)				701.5	707.5	713.5				
5	QPSK	1	0	24.20	24.17	24.18	25			
5	QPSK	1	12	24.21	24.15	24.26				
5	QPSK	1	24	24.30	24.21	24.33				
5	QPSK	12	0	23.45	23.31	23.36	24			
5	QPSK	12	7	23.33	23.41	23.36				
5	QPSK	12	13	23.53	23.47	23.52				
5	QPSK	25	0	23.37	23.42	23.39	24			
5	16QAM	1	0	23.55	23.53	23.64				
5	16QAM	1	12	23.62	23.58	23.62				
5	16QAM	1	24	23.70	23.59	23.72	23			
5	16QAM	12	0	22.41	22.28	22.42				
5	16QAM	12	7	22.47	22.37	22.47				
5	16QAM	12	13	22.50	22.37	22.50	23			
5	16QAM	25	0	22.46	22.36	22.41				
5	64QAM	1	0	22.47	22.35	22.44				
5	64QAM	1	12	22.63	22.60	22.61	23			
5	64QAM	1	24	22.57	22.45	22.54				
5	64QAM	12	0	21.44	21.41	21.45				
5	64QAM	12	7	21.39	21.48	21.41	22			
5	64QAM	12	13	21.47	21.40	21.53				
5	64QAM	25	0	21.48	21.42	21.38				
Channel				23025	23095	23165	Tune-up limit (dBm)			
Frequency (MHz)				700.5	707.5	714.5				
3	QPSK	1	0	24.28	24.15	24.19	25			
3	QPSK	1	8	24.20	24.15	24.29				
3	QPSK	1	14	24.32	24.28	24.35				
3	QPSK	8	0	23.40	23.27	23.37	24			
3	QPSK	8	4	23.44	23.38	23.36				
3	QPSK	8	7	23.41	23.43	23.52				
3	QPSK	15	0	23.42	23.38	23.43	24			
3	16QAM	1	0	23.71	23.53	23.59				
3	16QAM	1	8	23.61	23.57	23.67				
3	16QAM	1	14	23.73	23.62	23.88	23			
3	16QAM	8	0	22.41	22.31	22.40				
3	16QAM	8	4	22.42	22.40	22.38				
3	16QAM	8	7	22.46	22.40	22.46	23			
3	16QAM	15	0	22.51	22.35	22.44				
3	64QAM	1	0	22.46	22.36	22.40				
3	64QAM	1	8	22.56	22.56	22.57	23			
3	64QAM	1	14	22.59	22.44	22.52				
3	64QAM	8	0	21.40	21.35	21.40				
3	64QAM	8	4	21.46	21.39	21.48	22			
3	64QAM	8	7	21.51	21.41	21.55				
3	64QAM	15	0	21.54	21.40	21.41				
Channel				23017	23095	23173	Tune-up limit (dBm)			
Frequency (MHz)				699.7	707.5	715.3				
1.4	QPSK	1	0	24.27	24.19	24.21	25			
1.4	QPSK	1	3	24.22	24.17	24.12				
1.4	QPSK	1	5	24.20	24.28	24.17				
1.4	QPSK	3	0	24.21	24.16	24.15	24			
1.4	QPSK	3	1	24.06	24.10	23.97				
1.4	QPSK	3	3	24.19	24.17	24.17				
1.4	QPSK	6	0	23.43	23.48	23.39	24			
1.4	16QAM	1	0	23.61	23.60	23.51				
1.4	16QAM	1	3	23.65	23.65	23.64				
1.4	16QAM	1	5	23.66	23.73	23.63	24			
1.4	16QAM	3	0	23.65	23.62	23.56				
1.4	16QAM	3	1	23.58	23.62	23.52				
1.4	16QAM	3	3	23.59	23.58	23.52	23			
1.4	16QAM	6	0	22.36	22.42	22.32				
1.4	64QAM	1	0	22.47	22.40	22.47				
1.4	64QAM	1	3	22.48	22.45	22.41	23			
1.4	64QAM	1	5	22.49	22.52	22.49				
1.4	64QAM	3	0	22.33	22.38	22.25				
1.4	64QAM	3	1	22.44	22.42	22.44	22			
1.4	64QAM	3	3	22.55	22.57	22.48				
1.4	64QAM	6	0	21.47	21.40	21.43				



Band 13							
Ant 0							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				23230			Tune-up limit (dBm)
Frequency (MHz)				782			
10	QPSK	1	0	24.51			25
10	QPSK	1	25	24.40			
10	QPSK	1	49	24.40			
10	QPSK	25	0	23.48			24
10	QPSK	25	12	23.56			
10	QPSK	25	25	23.57			
10	QPSK	50	0	23.56			24
10	16QAM	1	0	23.75			
10	16QAM	1	25	23.75			
10	16QAM	1	49	23.81			24
10	16QAM	25	0	22.56			
10	16QAM	25	12	22.53			
10	16QAM	25	25	22.57			23
10	16QAM	50	0	22.55			
10	64QAM	1	0	22.70			
10	64QAM	1	25	22.65			23
10	64QAM	1	49	22.71			
10	64QAM	25	0	21.54			
10	64QAM	25	12	21.55			22
10	64QAM	25	25	21.62			
10	64QAM	50	0	21.55			
Channel				23205	23230	23255	Tune-up limit (dBm)
Frequency (MHz)				779.5	782	784.5	
5	QPSK	1	0	24.50	24.48	24.41	25
5	QPSK	1	12	24.39	24.36	24.31	
5	QPSK	1	24	24.33	24.34	24.33	
5	QPSK	12	0	23.48	23.48	23.47	24
5	QPSK	12	7	23.51	23.52	23.51	
5	QPSK	12	13	23.51	23.48	23.53	
5	QPSK	25	0	23.91	23.54	23.49	24
5	16QAM	1	0	23.72	23.76	23.76	
5	16QAM	1	12	23.74	23.71	23.68	
5	16QAM	1	24	23.80	23.71	23.79	23
5	16QAM	12	0	22.50	22.56	22.56	
5	16QAM	12	7	22.51	22.49	22.45	
5	16QAM	12	13	22.52	22.50	22.55	23
5	16QAM	25	0	22.52	22.53	22.47	
5	64QAM	1	0	22.64	22.60	22.68	
5	64QAM	1	12	22.57	22.56	22.65	23
5	64QAM	1	24	22.62	22.62	22.69	
5	64QAM	12	0	21.51	21.51	21.46	
5	64QAM	12	7	21.46	21.52	21.52	22
5	64QAM	12	13	21.56	21.53	21.61	
5	64QAM	25	0	21.54	21.49	21.55	



Band 14							
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				23330			
Frequency (MHz)				793			
10	QPSK	1	0	24.37			25
10	QPSK	1	25	24.30			
10	QPSK	1	49	24.30			
10	QPSK	25	0	23.48			24
10	QPSK	25	12	23.51			
10	QPSK	25	25	23.54			
10	QPSK	50	0	23.43			24
10	16QAM	1	0	23.75			
10	16QAM	1	25	23.66			
10	16QAM	1	49	23.72			24
10	16QAM	25	0	22.44			
10	16QAM	25	12	22.41			
10	16QAM	25	25	22.48			23
10	16QAM	50	0	22.40			
10	64QAM	1	0	22.64			
10	64QAM	1	25	22.66			23
10	64QAM	1	49	22.58			
10	64QAM	25	0	21.50			
10	64QAM	25	12	21.44			22
10	64QAM	25	25	21.52			
10	64QAM	50	0	21.44			
Channel				23305	23330	23355	Tune-up limit (dBm)
Frequency (MHz)				790.5	793	795.5	
5	QPSK	1	0	24.33	24.27	24.32	25
5	QPSK	1	12	24.21	24.27	24.23	
5	QPSK	1	24	24.22	24.26	24.25	
5	QPSK	12	0	23.39	23.41	23.43	24
5	QPSK	12	7	23.48	23.48	23.42	
5	QPSK	12	13	23.47	23.50	23.50	
5	QPSK	25	0	23.41	23.36	23.34	24
5	16QAM	1	0	23.77	23.75	23.72	
5	16QAM	1	12	23.62	23.61	23.56	
5	16QAM	1	24	23.67	23.66	23.64	23
5	16QAM	12	0	22.38	22.41	22.34	
5	16QAM	12	7	22.38	22.36	22.33	
5	16QAM	12	13	22.43	22.45	22.47	23
5	16QAM	25	0	22.34	22.33	22.39	
5	64QAM	1	0	22.64	22.55	22.59	
5	64QAM	1	12	22.65	22.66	22.64	23
5	64QAM	1	24	22.53	22.52	22.53	
5	64QAM	12	0	21.40	21.40	21.44	
5	64QAM	12	7	21.35	21.42	21.37	22
5	64QAM	12	13	21.49	21.49	21.45	
5	64QAM	25	0	21.37	21.40	21.35	



Band 17							
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				23780	23790	23800	
Frequency (MHz)				709	710	711	
10	QPSK	1	0	24.33	24.22	24.34	25
10	QPSK	1	25	24.35	24.23	24.23	
10	QPSK	1	49	24.43	24.39	24.42	
10	QPSK	25	0	23.30	23.34	23.30	24
10	QPSK	25	12	23.49	23.51	23.47	
10	QPSK	25	25	23.60	23.58	23.63	
10	QPSK	50	0	23.57	23.41	23.49	24
10	16QAM	1	0	23.60	23.58	23.57	
10	16QAM	1	25	23.76	23.61	23.61	
10	16QAM	1	49	23.83	23.64	23.65	23
10	16QAM	25	0	22.34	22.35	22.49	
10	16QAM	25	12	22.53	22.44	22.43	
10	16QAM	25	25	22.57	22.66	22.51	23
10	16QAM	50	0	22.46	22.44	22.44	
10	64QAM	1	0	22.66	22.59	22.51	
10	64QAM	1	25	22.55	22.62	22.61	23
10	64QAM	1	49	22.59	22.69	22.53	
10	64QAM	25	0	21.50	21.51	21.40	
10	64QAM	25	12	21.63	21.54	21.46	22
10	64QAM	25	25	21.66	21.48	21.50	
10	64QAM	50	0	21.51	21.36	21.46	
Channel				23755	23790	23825	Tune-up limit (dBm)
Frequency (MHz)				708.5	710	713.5	
5	QPSK	1	0	24.28	24.19	24.22	25
5	QPSK	1	12	24.30	24.35	24.35	
5	QPSK	1	24	24.34	24.45	24.40	
5	QPSK	12	0	23.41	23.43	23.28	24
5	QPSK	12	7	23.57	23.47	23.38	
5	QPSK	12	13	23.53	23.53	23.45	
5	QPSK	25	0	23.53	23.57	23.40	24
5	16QAM	1	0	23.64	23.64	23.57	
5	16QAM	1	12	23.75	23.77	23.77	
5	16QAM	1	24	23.66	23.83	23.62	23
5	16QAM	12	0	22.45	22.35	22.35	
5	16QAM	12	7	22.47	22.36	22.39	
5	16QAM	12	13	22.49	22.57	22.54	23
5	16QAM	25	0	22.50	22.45	22.32	
5	64QAM	1	0	22.54	22.48	22.44	
5	64QAM	1	12	22.59	22.65	22.63	23
5	64QAM	1	24	22.56	22.61	22.57	
5	64QAM	12	0	21.41	21.44	21.46	
5	64QAM	12	7	21.49	21.57	21.53	22
5	64QAM	12	13	21.55	21.54	21.64	
5	64QAM	25	0	21.60	21.48	21.36	



Band 25											
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				26140	26340	26560					
Frequency (MHz)				1860	1865	1905					
20	QPSK	1	0	23.58	23.70	23.80	24.2				
20	QPSK	1	49	23.37	23.69	23.35					
20	QPSK	1	99	23.30	23.57	23.40					
20	QPSK	50	0	23.32	23.47	23.30	24				
20	QPSK	50	24	23.39	23.29	23.17					
20	QPSK	50	50	23.40	23.45	23.19					
20	QPSK	100	0	23.12	23.41	23.24	24				
20	16QAM	1	0	23.26	23.20	23.21					
20	16QAM	1	49	23.11	23.31	22.97					
20	16QAM	1	99	23.13	23.21	22.92	23				
20	16QAM	50	0	22.83	22.73	22.53					
20	16QAM	50	24	22.75	22.73	22.50					
20	16QAM	50	50	22.52	22.60	22.45	23				
20	16QAM	100	0	22.74	22.55	22.54					
20	64QAM	1	0	22.76	22.76	22.72					
20	64QAM	1	49	22.64	22.85	22.81	23				
20	64QAM	1	99	22.80	22.69	22.00					
20	64QAM	50	0	21.67	21.69	21.57					
20	64QAM	50	24	21.72	21.74	21.66	22				
20	64QAM	50	50	21.71	21.60	21.49					
20	64QAM	100	0	21.71	21.72	21.44					
Channel				26090 <th>26340</th> <th>26640</th> <th colspan="3">Tune-up limit (dBm)</th>	26340	26640	Tune-up limit (dBm)				
Frequency (MHz)				1857.5	1860	1907.5					
15	QPSK	1	0	23.43	23.56	23.43	24.2				
15	QPSK	1	37	23.33	23.56	23.43					
15	QPSK	1	74	23.25	23.51	23.23					
15	QPSK	36	0	23.38	23.37	23.19	24				
15	QPSK	36	20	23.33	23.32	23.13					
15	QPSK	36	39	23.41	23.33	23.16					
15	QPSK	75	0	23.24	23.30	23.16	24				
15	16QAM	1	0	23.21	23.21	23.06					
15	16QAM	1	37	23.10	23.23	22.99					
15	16QAM	1	74	23.12	23.29	23.00	23				
15	16QAM	36	0	22.52	22.74	22.62					
15	16QAM	36	20	22.58	22.76	22.45					
15	16QAM	36	39	22.50	22.58	22.48	23				
15	16QAM	75	0	22.71	22.53	22.57					
15	64QAM	1	0	22.61	22.75	22.70					
15	64QAM	1	37	22.65	22.79	22.56	23				
15	64QAM	1	74	22.63	22.81	22.66					
15	64QAM	36	0	21.70	21.76	21.56					
15	64QAM	36	20	21.69	21.69	21.50	22				
15	64QAM	36	39	21.73	21.65	21.42					
15	64QAM	75	0	21.74	21.72	21.42					
Channel				26090 <th>26340</th> <th>26640</th> <th colspan="3">Tune-up limit (dBm)</th>	26340	26640	Tune-up limit (dBm)				
Frequency (MHz)				1855	1860	1910					
10	QPSK	1	0	23.53	23.57	23.48	24.2				
10	QPSK	1	25	23.40	23.56	23.34					
10	QPSK	1	49	23.36	23.56	23.24					
10	QPSK	25	0	23.33	23.47	23.23	24				
10	QPSK	25	12	23.20	23.31	23.28					
10	QPSK	25	25	23.29	23.35	23.27					
10	QPSK	50	0	23.23	23.23	23.34	24				
10	16QAM	1	0	23.36	23.38	23.21					
10	16QAM	1	25	23.18	23.28	23.08					
10	16QAM	1	49	23.15	23.27	22.97	23				
10	16QAM	25	0	22.55	22.57	22.46					
10	16QAM	25	12	22.59	22.77	22.62					
10	16QAM	25	25	22.66	22.58	22.44	23				
10	16QAM	50	0	22.63	22.71	22.56					
10	64QAM	1	0	22.66	22.84	22.77					
10	64QAM	1	25	22.69	22.88	22.48	23				
10	64QAM	1	49	22.59	22.71	22.14					
10	64QAM	25	0	21.68	21.68	21.51					
10	64QAM	25	12	21.59	21.67	21.67	22				
10	64QAM	25	25	21.68	21.67	21.48					
10	64QAM	50	0	21.71	21.61	21.41					
Channel				26065 <th>26340</th> <th>26665</th> <th colspan="3">Tune-up limit (dBm)</th>	26340	26665	Tune-up limit (dBm)				
Frequency (MHz)				1852.5	1860	1912.5					
5	QPSK	1	0	23.58	23.66	23.52	24.2				
5	QPSK	1	12	23.40	23.65	23.45					
5	QPSK	1	24	23.33	23.49	23.32					
5	QPSK	12	0	23.34	23.49	23.24	24				
5	QPSK	12	7	23.29	23.36	23.15					
5	QPSK	12	13	23.33	23.47	23.18					
5	QPSK	25	0	23.09	23.30	23.17	24				
5	16QAM	1	0	23.33	23.40	23.25					
5	16QAM	1	12	23.28	23.21	23.12					
5	16QAM	1	24	23.06	23.19	22.97	23				
5	16QAM	12	0	22.67	22.55	22.62					
5	16QAM	12	7	22.70	22.81	22.60					
5	16QAM	12	13	22.70	22.75	22.44	23				
5	16QAM	25	0	22.59	22.63	22.50					
5	64QAM	1	0	22.79	22.71	22.63					
5	64QAM	1	12	22.65	22.80	22.57	23				
5	64QAM	1	24	22.58	22.71	22.13					
5	64QAM	12	0	21.62	21.65	21.61					
5	64QAM	12	7	21.61	21.67	21.61	22				
5	64QAM	12	13	21.57	21.79	21.53					
5	64QAM	25	0	21.68	21.65	21.34					
Channel				26065 <th>26340</th> <th>26675</th> <th colspan="3">Tune-up limit (dBm)</th>	26340	26675	Tune-up limit (dBm)				
Frequency (MHz)				1851.5	1860	1913.5					
3	QPSK	1	0	22.85	22.85	22.76	24.2				
3	QPSK	1	8	22.87	22.96	22.76					
3	QPSK	1	14	22.90	22.87	22.66					
3	QPSK	8	0	23.05	23.19	22.96	24				
3	QPSK	8	4	23.09	23.11	22.86					
3	QPSK	8	7	23.17	23.17	22.81					
3	QPSK	15	0	23.06	23.09	22.84	24				
3	16QAM	1	0	23.35	23.34	23.14					
3	16QAM	1	8	23.15	23.40	23.18					
3	16QAM	1	14	23.23	23.34	23.03	23				
3	16QAM	8	0	22.24	22.29	22.21					
3	16QAM	8	4	22.30	22.38	22.29					
3	16QAM	8	7	22.44	22.31	22.20	23				
3	16QAM	15	0	22.43	22.25	22.21					
3	64QAM	1	0	22.41	22.55	22.53					
3	64QAM	1	8	22.54	22.54	22.30	23				
3	64QAM	1	14	22.31	22.47	21.80					
3	64QAM	8	0	21.47	21.25	21.35					
3	64QAM	8	4	21.49	21.55	21.30	22				
3	64QAM	8	7	21.38	21.45	21.28					
3	64QAM	15	0	21.38	21.40	21.05					
Channel				26047	26340	26683	Tune-up limit (dBm)				
Frequency (MHz)				1850.7	1860	1914.3					
1.4	QPSK	1	0	23.02	23.00	22.96	24.2				
1.4	QPSK	1	3	22.87	22.96	22.76					
1.4	QPSK	1	5	22.89	22.98	22.87					
1.4	QPSK	3	0	22.98	22.88	22.96	24				
1.4	QPSK	3	1	22.79	23.04	22.60					
1.4	QPSK	3	3	22.73	22.95	22.61					
1.4	QPSK	6	0	23.15	23.01	23.01	24				
1.4	16QAM	1	0	23.26	23.43	23.35					
1.4	16QAM	1	3	23.28	23.25	23.11					
1.4	16QAM	3	0	23.22	23.29	23.11	24				
1.4	16QAM	3	1	23.23	23.33	23.12					
1.4	16QAM	3	3	23.22	23.35	23.23					
1.4	16QAM	3	1	23.22	23.24	23.16	23				
1.4	16QAM	3	3	23.13	23.31	23.10					
1.4	16QAM	6	0	23.25	23.27	23.27					
1.4	16QAM	6	1	23.22	23.53	23.42	23				
1.4	16QAM	1	3	22.47	22.45	22.27					
1.4	64QAM	3	0	23.30	22.50	21.68					
1.4	64QAM	3	1	23.27	22.43	22.34	23				
1.4	64QAM	3	1	22.29	22.48	22.26					
1.4	64QAM	3	3	22.46	22.32	21.69					



Band 26									
Ver 0									
SRV (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)		
Channel				26765	26865	26965			
Frequency (MHz)				821.5	831.5	841.5			
15	QPSK	1	0	24.46	24.48	24.40	25		
15	QPSK	1	37	24.29	24.28	24.38			
15	QPSK	1	74	24.33	24.34	24.27			
15	QPSK	36	0	23.51	23.53	23.50	24		
15	QPSK	36	20	23.40	23.46	23.46			
15	QPSK	36	39	23.44	23.45	23.46			
15	QPSK	75	0	23.45	23.50	23.38	24		
15	16QAM	1	0	23.70	23.74	23.66			
15	16QAM	1	37	23.64	23.58	23.62			
15	16QAM	1	74	23.79	23.85	23.69	23		
15	16QAM	36	0	22.48	22.56	22.47			
15	16QAM	36	20	22.61	22.63	22.53			
15	16QAM	36	39	22.62	22.64	22.57	23		
15	16QAM	75	0	22.52	22.57	22.51			
15	64QAM	1	0	22.67	22.68	22.60	23		
15	64QAM	1	37	22.69	22.62	22.77			
15	64QAM	1	74	22.62	22.62	22.64			
15	64QAM	36	0	21.62	21.68	21.58	22		
15	64QAM	36	20	21.59	21.53	21.49			
15	64QAM	36	39	21.57	21.53	21.67			
15	64QAM	75	0	21.52	21.55	21.56	Tune-up limit (dBm)		
Channel				26740	26865	26990			
Frequency (MHz)				819	831.5	844			
10	QPSK	1	0	24.44	24.47	24.36	25		
10	QPSK	1	25	24.25	24.30	24.19			
10	QPSK	1	49	24.40	24.42	24.25			
10	QPSK	25	0	23.41	23.41	23.58	24		
10	QPSK	25	12	23.40	23.37	23.31			
10	QPSK	25	25	23.44	23.48	23.54			
10	QPSK	50	0	23.45	23.41	23.41	24		
10	16QAM	1	0	23.69	23.79	23.77			
10	16QAM	1	25	23.68	23.60	23.67			
10	16QAM	1	49	23.86	23.87	23.81	23		
10	16QAM	25	0	22.58	22.48	22.50			
10	16QAM	25	12	22.52	22.64	22.59			
10	16QAM	25	25	22.70	22.55	22.87	23		
10	16QAM	50	0	22.59	22.48	22.58			
10	64QAM	1	0	22.71	22.66	22.74	23		
10	64QAM	1	25	22.73	22.78	22.67			
10	64QAM	1	49	22.53	22.59	22.53			
10	64QAM	25	0	21.70	21.54	21.58	22		
10	64QAM	25	12	21.62	21.52	21.49			
10	64QAM	25	25	21.61	21.58	21.58			
10	64QAM	50	0	21.57	21.51	21.57	Tune-up limit (dBm)		
Channel				26715	26865	27015			
Frequency (MHz)				816.5	831.5	846.5			
5	QPSK	1	0	24.39	24.48	24.37	25		
5	QPSK	1	12	24.29	24.22	24.22			
5	QPSK	1	24	24.31	24.37	24.30			
5	QPSK	12	0	23.44	23.57	23.60	24		
5	QPSK	12	7	23.35	23.33	23.40			
5	QPSK	12	13	23.45	23.42	23.53			
5	QPSK	25	0	23.54	23.41	23.50	24		
5	16QAM	1	0	23.73	23.67	23.75			
5	16QAM	1	12	23.74	23.70	23.68			
5	16QAM	1	24	23.83	23.76	23.89	23		
5	16QAM	12	0	22.58	22.45	22.53			
5	16QAM	12	7	22.53	22.64	22.51			
5	16QAM	12	13	22.53	22.71	22.85	23		
5	16QAM	25	0	22.57	22.55	22.49			
5	64QAM	1	0	22.58	22.66	22.57	23		
5	64QAM	1	12	22.66	22.70	22.78			
5	64QAM	1	24	22.68	22.53	22.72			
5	64QAM	12	0	21.69	21.70	21.70	22		
5	64QAM	12	7	21.62	21.50	21.62			
5	64QAM	12	13	21.56	21.65	21.59			
5	64QAM	25	0	21.48	21.52	21.45	Tune-up limit (dBm)		
Channel				26705	26865	27025			
Frequency (MHz)				815.5	831.5	847.5			
3	QPSK	1	0	24.47	24.38	24.40	25		
3	QPSK	1	8	24.31	24.31	24.20			
3	QPSK	1	14	24.38	24.42	24.42			
3	QPSK	8	0	23.53	23.47	23.49	24		
3	QPSK	8	4	23.41	23.40	23.40			
3	QPSK	8	7	23.40	23.36	23.45			
3	QPSK	15	0	23.46	23.35	23.41	24		
3	16QAM	1	0	23.73	23.73	23.60			
3	16QAM	1	8	23.72	23.72	23.68			
3	16QAM	1	14	23.74	23.88	23.85	23		
3	16QAM	8	0	22.56	22.42	22.47			
3	16QAM	8	4	22.64	22.56	22.55			
3	16QAM	8	7	22.59	22.69	22.54	23		
3	16QAM	15	0	22.43	22.53	22.49			
3	64QAM	1	0	22.64	22.67	22.71	23		
3	64QAM	1	8	22.78	22.70	22.59			
3	64QAM	1	14	22.57	22.52	22.56			
3	64QAM	8	0	21.68	21.59	21.56	22		
3	64QAM	8	4	21.56	21.62	21.59			
3	64QAM	8	7	21.50	21.49	21.53			
3	64QAM	15	0	21.51	21.42	21.43	Tune-up limit (dBm)		
Channel				26697	26865	27033			
Frequency (MHz)				814.7	831.5	848.3			
1.4	QPSK	1	0	24.31	24.36	24.35	25		
1.4	QPSK	1	3	24.22	24.12	24.24			
1.4	QPSK	1	5	24.27	24.24	24.24			
1.4	QPSK	3	0	24.30	24.20	24.40	24		
1.4	QPSK	3	1	24.26	24.16	24.22			
1.4	QPSK	3	3	24.37	24.43	24.47			
1.4	QPSK	6	0	23.44	23.37	23.35	24		
1.4	16QAM	1	0	23.75	23.78	23.66			
1.4	16QAM	1	3	23.68	23.71	23.70			
1.4	16QAM	1	5	23.63	23.67	23.67	24		
1.4	16QAM	3	0	23.62	23.68	23.69			
1.4	16QAM	3	1	23.63	23.65	23.71			
1.4	16QAM	3	3	23.59	23.52	23.84	23		
1.4	16QAM	6	0	22.41	22.32	22.48			
1.4	64QAM	1	0	22.33	22.31	22.32			
1.4	64QAM	1	3	22.61	22.70	22.55	23		
1.4	64QAM	1	5	22.49	22.53	22.39			
1.4	64QAM	3	0	22.29	22.28	22.23			
1.4	64QAM	3	1	22.36	22.35	22.32	23		
1.4	64QAM	3	3	22.33	22.40	22.37			
1.4	64QAM	6	0	21.59	21.50	21.57			



Band 30							
Ant 2							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				27710			
Frequency (MHz)							
10	QPSK	1	0	21.06			22.1
10	QPSK	1	25	21.17			
10	QPSK	1	49	21.09			
10	QPSK	25	0	20.95			22.1
10	QPSK	25	12	20.92			
10	QPSK	25	25	21.03			
10	QPSK	50	0	21.16			22.1
10	16QAM	1	0	20.86			
10	16QAM	1	25	20.95			
10	16QAM	1	49	20.68			22.1
10	16QAM	25	0	20.85			
10	16QAM	25	12	20.82			
10	16QAM	25	25	20.92			22.1
10	16QAM	50	0	20.84			
10	64QAM	1	0	21.02			
10	64QAM	1	25	21.12			22.1
10	64QAM	1	49	20.89			
10	64QAM	25	0	20.84			
10	64QAM	25	12	20.93			22
10	64QAM	25	25	20.86			
10	64QAM	50	0	20.95			
Channel				27685	27710	27735	Tune-up limit (dBm)
Frequency (MHz)				2307.5	2310	2312.5	
5	QPSK	1	0	20.69	20.79	20.75	22.1
5	QPSK	1	12	20.69	20.67	20.74	
5	QPSK	1	24	20.83	20.75	20.75	
5	QPSK	12	0	20.75	20.80	20.86	22.1
5	QPSK	12	7	20.89	20.97	20.87	
5	QPSK	12	13	20.99	20.91	20.95	
5	QPSK	25	0	20.91	20.97	20.93	22.1
5	16QAM	1	0	20.67	20.89	20.82	
5	16QAM	1	12	20.72	20.84	20.84	
5	16QAM	1	24	20.80	20.85	20.76	22.1
5	16QAM	12	0	20.86	20.87	20.94	
5	16QAM	12	7	20.67	20.76	20.98	
5	16QAM	12	13	20.85	20.72	20.84	22.1
5	16QAM	25	0	20.53	20.78	20.90	
5	64QAM	1	0	20.96	20.97	20.99	
5	64QAM	1	12	21.09	21.08	21.08	22.1
5	64QAM	1	24	21.01	21.05	20.95	
5	64QAM	12	0	20.75	20.84	20.92	
5	64QAM	12	7	20.96	20.92	20.85	22
5	64QAM	12	13	20.85	20.91	20.85	
5	64QAM	25	0	20.84	20.91	21.05	



Band 66											
Ant 2											
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)				
Channel				132072	132322	132572					
Frequency (MHz)				1720	1745	1770					
20	QPSK	1	0	23.82	23.85	24.04	25				
20	QPSK	1	49	23.76	23.98	23.75					
20	QPSK	1	99	23.71	23.80	23.69					
20	QPSK	50	0	23.11	23.37	23.29	24				
20	QPSK	50	24	23.24	23.27	23.38					
20	QPSK	50	50	23.14	23.26	23.26					
20	QPSK	100	0	23.15	23.23	23.33	24				
20	16QAM	1	0	23.38	23.68	23.56					
20	16QAM	1	49	23.47	23.52	23.49					
20	16QAM	1	99	23.52	23.46	23.44	23				
20	16QAM	50	0	22.13	22.37	22.21					
20	16QAM	50	24	22.31	22.35	22.27					
20	16QAM	50	50	22.22	22.38	22.27	23				
20	16QAM	100	0	22.27	22.26	22.42					
20	64QAM	1	0	22.34	22.45	22.47					
20	64QAM	1	49	22.18	22.38	22.41	23				
20	64QAM	1	99	22.28	22.30	22.11					
20	64QAM	50	0	21.15	21.19	21.21					
20	64QAM	50	24	21.23	21.35	21.33	22				
20	64QAM	50	50	21.19	21.35	21.25					
20	64QAM	100	0	21.35	21.34	21.33					
Channel				132022	132322	132567	Tune-up limit (dBm)				
Frequency (MHz)				1717.5	1745	1772.5					
15	QPSK	1	0	23.91	23.96	23.88	25				
15	QPSK	1	37	23.67	23.96	23.86					
15	QPSK	1	74	23.70	23.76	23.79					
15	QPSK	36	0	23.20	23.24	23.16	24				
15	QPSK	36	20	23.18	23.20	23.28					
15	QPSK	36	39	23.25	23.40	23.20					
15	QPSK	75	0	23.27	23.30	23.39	24				
15	16QAM	1	0	23.33	23.58	23.60					
15	16QAM	1	37	23.39	23.42	23.44					
15	16QAM	1	74	23.49	23.40	23.43	23				
15	16QAM	36	0	22.15	22.32	22.37					
15	16QAM	36	20	22.35	22.36	22.36					
15	16QAM	36	39	22.25	22.32	22.18	23				
15	16QAM	75	0	22.12	22.25	22.25					
15	64QAM	1	0	22.23	22.52	22.43					
15	64QAM	1	37	22.35	22.32	22.43	23				
15	64QAM	1	74	22.35	22.28	22.12					
15	64QAM	36	0	21.25	21.12	21.36					
15	64QAM	36	20	21.33	21.35	21.35	22				
15	64QAM	36	39	21.18	21.26	21.28					
15	64QAM	75	0	21.33	21.18	21.36					
Channel				132022	132322	132622	Tune-up limit (dBm)				
Frequency (MHz)				1715	1745	1775					
10	QPSK	1	0	23.90	24.01	23.82	25				
10	QPSK	1	25	23.79	23.91	23.79					
10	QPSK	1	49	23.83	23.87	23.69					
10	QPSK	25	0	23.15	23.36	23.17	24				
10	QPSK	25	12	23.16	23.25	23.37					
10	QPSK	25	25	23.10	23.31	23.21					
10	QPSK	50	0	23.11	23.23	23.25	24				
10	16QAM	1	0	23.49	23.59	23.67					
10	16QAM	1	25	23.32	23.43	23.49					
10	16QAM	1	49	23.55	23.37	23.41	24				
10	16QAM	25	0	22.23	22.34	22.38					
10	16QAM	25	12	22.24	22.21	22.34					
10	16QAM	25	25	22.25	22.29	22.32	23				
10	16QAM	50	0	22.11	22.18	22.40					
10	64QAM	1	0	22.41	22.37	22.46					
10	64QAM	1	25	22.29	22.30	22.31	23				
10	64QAM	1	49	22.26	22.29	22.11					
10	64QAM	25	0	21.25	21.11	21.35					
10	64QAM	25	12	21.25	21.37	21.24	22				
10	64QAM	25	25	21.27	21.35	21.22					
10	64QAM	50	0	21.24	21.29	21.39					
Channel				131997	132322	132647	Tune-up limit (dBm)				
Frequency (MHz)				1712.5	1745	1777.5					
5	QPSK	1	0	23.74	23.88	23.80	25				
5	QPSK	1	12	23.71	23.99	23.85					
5	QPSK	1	24	23.75	23.77	23.75					
5	QPSK	12	0	23.12	23.35	23.24	24				
5	QPSK	12	7	23.21	23.34	23.27					
5	QPSK	12	13	23.24	23.20	23.16					
5	QPSK	25	0	23.23	23.24	23.28	24				
5	16QAM	1	0	23.42	23.59	23.63					
5	16QAM	1	12	23.40	23.42	23.58					
5	16QAM	1	24	23.54	23.48	23.25	23				
5	16QAM	12	0	22.22	22.20	22.23					
5	16QAM	12	7	22.18	22.28	22.37					
5	16QAM	12	13	22.17	22.31	22.18	23				
5	16QAM	25	0	22.14	22.31	22.40					
5	64QAM	1	0	22.32	22.47	22.49					
5	64QAM	1	12	22.28	22.37	22.33	23				
5	64QAM	1	24	22.38	22.35	22.05					
5	64QAM	12	0	21.14	21.09	21.33					
5	64QAM	12	7	21.22	21.30	21.39	22				
5	64QAM	12	13	21.13	21.22	21.35					
5	64QAM	25	0	21.18	21.18	21.28					
Channel				131987	132322	132657	Tune-up limit (dBm)				
Frequency (MHz)				1711.5	1745	1778.5					
3	QPSK	1	0	23.85	24.02	23.86	25				
3	QPSK	1	8	23.85	23.95	23.85					
3	QPSK	1	14	23.77	23.89	23.79					
3	QPSK	8	0	23.12	23.32	23.17	24				
3	QPSK	8	4	23.20	23.35	23.39					
3	QPSK	8	7	23.21	23.31	23.22					
3	QPSK	15	0	23.25	23.30	23.39	24				
3	16QAM	1	0	23.41	23.68	23.58					
3	16QAM	1	8	23.41	23.60	23.45					
3	16QAM	1	14	23.48	23.48	23.35	23				
3	16QAM	8	0	22.13	22.40	22.25					
3	16QAM	8	4	22.29	22.25	22.42					
3	16QAM	8	7	22.25	22.28	22.29	23				
3	16QAM	15	0	22.23	22.15	22.39					
3	64QAM	1	0	22.39	22.50	22.34					
3	64QAM	1	8	22.24	22.30	22.40	23				
3	64QAM	1	14	22.22	22.25	22.12					
3	64QAM	8	0	21.25	21.27	21.27					
3	64QAM	8	4	21.29	21.29	21.42	22				
3	64QAM	8	7	21.17	21.21	21.35					
3	64QAM	15	0	21.20	21.35	21.32					
Channel				131979	132322	132665	Tune-up limit (dBm)				
Frequency (MHz)				1710.7	1745	1779.3					
1.4	QPSK	1	0	23.72	23.90	23.85	25				
1.4	QPSK	1	3	23.65	23.95	23.85					
1.4	QPSK	1	5	23.66	23.79	23.74					
1.4	QPSK	3	0	23.81	23.86	23.82	24				
1.4	QPSK	3	1	23.69	23.85	23.83					
1.4	QPSK	3	3	23.72	23.65	23.68					
1.4	QPSK	6	0	23.07	23.21	23.27	24				
1.4	16QAM	1	0	23.41	23.60	23.67					
1.4	16QAM	1	3	23.48	23.61	23.49					
1.4	16QAM	1	5	23.48	23.52	23.43	23				
1.4	16QAM	3	0	23.30	23.50	23.37					
1.4	16QAM	3	3	23.28	23.45	23.32					
1.4	16QAM	6	0	22.11	22.25	22.32	23				
1.4	16QAM	6	3	22.24	22.22	22.23					
1.4	64QAM	1	0	22.13	22.35	22.20					
1.4	64QAM	3	0	22.20	22.21	22.44	23				
1.4	64QAM	3	1	22.23	22.29	22.15					
1.4	64QAM	3	3	22.12	22.33	22.27					



Band 71									
Ann 0									
RBW (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	686			
20	QPSK	1	0	24.49	24.43	24.37	25		
20	QPSK	1	49	24.26	24.31	24.23			
20	QPSK	1	99	24.30	24.39	24.42			
20	QPSK	50	0	23.52	23.56	23.57	24		
20	QPSK	50	24	23.62	23.55	23.43			
20	QPSK	50	50	23.50	23.44	23.50			
20	QPSK	100	0	23.57	23.46	23.52	24		
20	16QAM	1	0	23.75	23.73	23.73			
20	16QAM	1	49	23.55	23.61	23.69			
20	16QAM	1	99	23.74	23.60	23.76	23		
20	16QAM	50	0	22.45	22.50	22.51			
20	16QAM	50	24	22.57	22.50	22.53			
20	16QAM	50	50	22.44	22.46	22.38	22		
20	16QAM	100	0	22.43	22.44	22.47			
20	64QAM	1	0	22.55	22.66	22.57			
20	64QAM	1	49	22.55	22.58	22.50	23		
20	64QAM	1	99	22.58	22.53	22.57			
20	64QAM	50	0	21.51	21.43	21.39			
20	64QAM	50	24	21.48	21.44	21.53	22		
20	64QAM	50	50	21.47	21.43	21.46			
20	64QAM	100	0	21.43	21.49	21.52			
Channel				133197	133297	133397	Tune-up limit (dBm)		
Frequency (MHz)				670.5	680.5	680.5			
15	QPSK	1	0	24.42	24.34	24.34	25		
15	QPSK	1	37	24.17	24.33	24.26			
15	QPSK	1	74	24.40	24.24	24.43			
15	QPSK	36	0	23.54	23.57	23.49	24		
15	QPSK	36	20	23.57	23.52	23.49			
15	QPSK	36	39	23.59	23.40	23.54			
15	QPSK	75	0	23.47	23.55	23.46	24		
15	16QAM	1	0	23.73	23.78	23.67			
15	16QAM	1	37	23.61	23.60	23.55			
15	16QAM	1	74	23.68	23.59	23.75	24		
15	16QAM	36	0	22.41	22.38	22.44			
15	16QAM	36	20	22.66	22.58	22.45			
15	16QAM	36	39	22.37	22.57	22.49	23		
15	16QAM	75	0	22.43	22.52	22.44			
15	64QAM	1	0	22.64	22.52	22.51			
15	64QAM	1	37	22.46	22.64	22.54	23		
15	64QAM	1	74	22.59	22.59	22.54			
15	64QAM	36	0	21.57	21.46	21.47			
15	64QAM	36	20	21.57	21.57	21.58	22		
15	64QAM	36	39	21.56	21.41	21.44			
15	64QAM	75	0	21.34	21.49	21.57			
Channel				133172	133272	133422	Tune-up limit (dBm)		
Frequency (MHz)				668	678	683			
10	QPSK	1	0	24.46	24.36	24.33	25		
10	QPSK	1	25	24.23	24.35	24.26			
10	QPSK	1	49	24.34	24.26	24.24			
10	QPSK	25	0	23.56	23.48	23.49	24		
10	QPSK	25	12	23.71	23.59	23.55			
10	QPSK	25	25	23.53	23.57	23.56			
10	QPSK	50	0	23.66	23.59	23.52	24		
10	16QAM	1	0	23.76	23.69	23.77			
10	16QAM	1	25	23.64	23.69	23.61			
10	16QAM	1	49	23.71	23.61	23.74	24		
10	16QAM	25	0	22.45	22.38	22.37			
10	16QAM	25	12	22.60	22.52	22.43			
10	16QAM	25	25	22.40	22.46	22.40	23		
10	16QAM	50	0	22.34	22.49	22.52			
10	64QAM	1	0	22.50	22.58	22.50			
10	64QAM	1	25	22.46	22.61	22.56	23		
10	64QAM	1	49	22.64	22.62	22.53			
10	64QAM	25	0	21.59	21.57	21.47			
10	64QAM	25	12	21.55	21.58	21.43	22		
10	64QAM	25	25	21.44	21.48	21.51			
10	64QAM	50	0	21.42	21.43	21.56			
Channel				133147	133247	133447	Tune-up limit (dBm)		
Frequency (MHz)				665.5	675.5	685.5			
5	QPSK	1	0	24.50	24.42	24.37	25		
5	QPSK	1	12	24.16	24.24	24.33			
5	QPSK	1	24	24.24	24.27	24.27			
5	QPSK	12	0	23.50	23.54	23.49	24		
5	QPSK	12	7	23.56	23.63	23.49			
5	QPSK	12	13	23.59	23.55	23.49			
5	QPSK	25	0	23.65	23.52	23.56	24		
5	16QAM	1	0	23.84	23.66	23.79			
5	16QAM	1	12	23.58	23.73	23.59			
5	16QAM	1	24	23.84	23.74	23.70	23		
5	16QAM	12	0	22.35	22.54	22.39			
5	16QAM	12	7	22.54	22.50	22.46			
5	16QAM	12	13	22.43	22.52	22.45	23		
5	16QAM	25	0	22.49	22.51	22.48			
5	64QAM	1	0	22.45	22.59	22.53			
5	64QAM	1	12	22.54	22.54	22.47	22		
5	64QAM	1	24	22.59	22.51	22.54			
5	64QAM	12	0	21.51	21.39	21.47			
5	64QAM	12	7	21.40	21.58	21.49	22		
5	64QAM	12	13	21.48	21.43	21.57			
5	64QAM	25	0	21.47	21.57	21.48			



Band 2							
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				18700	18900	19100	
Frequency (MHz)				1860	1880	1900	
20	QPSK	1	0	24.81	24.80	24.82	25
20	QPSK	1	49	24.81	24.77	24.57	
20	QPSK	1	99	24.74	24.80	24.64	
20	QPSK	50	0	23.75	23.73	23.78	24
20	QPSK	50	24	23.92	23.76	23.89	
20	QPSK	50	50	23.87	23.81	23.83	
20	QPSK	100	0	23.80	23.99	23.78	23
20	16QAM	1	0	23.80	23.85	23.75	
20	16QAM	1	49	23.99	23.92	23.90	
20	16QAM	1	99	23.92	23.84	23.76	24
20	16QAM	50	0	22.96	22.88	22.92	
20	16QAM	50	24	22.91	22.80	22.86	
20	16QAM	50	50	22.90	23.00	22.84	23
20	16QAM	100	0	22.77	22.94	22.89	
20	64QAM	1	0	22.88	22.90	22.81	
20	64QAM	1	49	22.91	22.87	21.94	23
20	64QAM	1	99	22.25	22.85	22.91	
20	64QAM	50	0	21.77	21.85	21.13	
20	64QAM	50	24	21.79	21.88	21.05	22
20	64QAM	50	50	21.44	21.89	21.72	
20	64QAM	100	0	21.95	21.84	21.45	
Channel				18675	18900	19125	Tune-up limit (dBm)
Frequency (MHz)				1857.5	1880	1902.5	
15	QPSK	1	0	24.69	24.79	24.88	25
15	QPSK	1	37	24.77	24.70	24.67	
15	QPSK	1	74	24.64	24.66	24.64	
15	QPSK	36	0	23.90	23.83	23.87	24
15	QPSK	36	20	23.90	23.85	23.86	
15	QPSK	36	39	23.93	23.85	23.81	
15	QPSK	75	0	23.90	23.94	23.79	24
15	16QAM	1	0	23.96	23.96	23.75	
15	16QAM	1	37	23.81	23.88	23.90	
15	16QAM	1	74	23.96	23.94	23.82	23
15	16QAM	36	0	22.89	22.73	22.81	
15	16QAM	36	20	22.80	22.95	22.75	
15	16QAM	36	39	22.74	22.87	22.74	23
15	16QAM	75	0	22.91	22.78	22.79	
15	64QAM	1	0	22.96	22.92	22.84	
15	64QAM	1	37	22.83	22.94	22.01	23
15	64QAM	1	74	22.24	22.85	22.85	
15	64QAM	36	0	21.94	21.76	21.11	
15	64QAM	36	20	21.92	21.89	21.00	22
15	64QAM	36	39	21.35	21.83	21.75	
15	64QAM	75	0	21.97	22.00	21.40	
Channel				18650	18900	19150	Tune-up limit (dBm)
Frequency (MHz)				1855	1880	1905	
10	QPSK	1	0	24.68	24.85	24.88	25
10	QPSK	1	25	24.73	24.76	24.55	
10	QPSK	1	49	24.63	24.70	24.73	
10	QPSK	25	0	23.83	23.78	23.79	24
10	QPSK	25	12	23.80	23.77	23.85	
10	QPSK	25	25	23.98	23.81	23.91	
10	QPSK	50	0	23.89	23.94	23.87	24
10	16QAM	1	0	24.00	23.95	23.87	
10	16QAM	1	25	24.00	23.83	23.93	
10	16QAM	1	49	23.78	23.88	23.77	23
10	16QAM	25	0	22.81	22.81	22.83	
10	16QAM	25	12	22.82	22.92	22.90	
10	16QAM	25	25	22.86	22.87	22.74	23
10	16QAM	50	0	22.85	22.90	22.89	
10	64QAM	1	0	22.91	22.85	22.88	
10	64QAM	1	25	22.88	22.89	21.85	23
10	64QAM	1	49	22.31	22.80	22.83	
10	64QAM	25	0	21.90	21.92	21.13	
10	64QAM	25	12	21.80	21.74	21.00	22
10	64QAM	25	25	21.31	21.82	21.78	
10	64QAM	50	0	21.79	21.83	21.36	
Channel				18625	18900	19175	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1880	1907.5	
5	QPSK	1	0	24.82	24.80	24.82	25
5	QPSK	1	12	24.87	24.87	24.71	
5	QPSK	1	24	24.72	24.82	24.80	
5	QPSK	12	0	23.84	23.73	23.68	24
5	QPSK	12	7	23.80	23.76	23.91	
5	QPSK	12	13	23.88	23.97	23.89	
5	QPSK	25	0	23.88	23.92	23.80	24
5	16QAM	1	0	23.85	23.85	23.89	
5	16QAM	1	12	24.00	23.81	23.82	
5	16QAM	1	24	23.84	23.92	23.79	23
5	16QAM	12	0	22.84	22.89	22.86	
5	16QAM	12	7	22.85	22.96	22.78	
5	16QAM	12	13	22.75	22.86	22.83	23
5	16QAM	25	0	22.90	22.83	22.87	
5	64QAM	1	0	22.81	22.76	22.86	
5	64QAM	1	12	22.85	22.81	21.94	23
5	64QAM	1	24	22.30	22.83	22.95	
5	64QAM	12	0	21.83	21.80	21.09	
5	64QAM	12	7	21.88	21.90	21.20	22
5	64QAM	12	13	21.43	21.88	21.73	
5	64QAM	25	0	21.87	21.99	21.43	
Channel				18615	18900	19185	Tune-up limit (dBm)
Frequency (MHz)				1851.5	1880	1908.5	
3	QPSK	1	0	24.82	24.73	24.75	25
3	QPSK	1	8	24.71	24.80	24.65	
3	QPSK	1	14	24.77	24.90	24.73	
3	QPSK	8	0	23.90	23.76	23.79	24
3	QPSK	8	4	23.79	23.82	23.76	
3	QPSK	8	7	23.90	23.96	23.86	
3	QPSK	15	0	23.90	23.91	23.86	24
3	16QAM	1	0	23.80	23.80	23.83	
3	16QAM	1	8	23.99	23.96	23.97	
3	16QAM	1	14	23.91	23.75	23.87	23
3	16QAM	8	0	22.77	22.75	22.90	
3	16QAM	8	4	22.82	22.92	22.77	
3	16QAM	8	7	22.76	22.80	22.83	23
3	16QAM	15	0	22.80	22.78	22.85	
3	64QAM	1	0	22.87	22.84	22.96	
3	64QAM	1	8	22.90	22.85	22.00	23
3	64QAM	1	14	22.17	22.95	22.91	
3	64QAM	8	0	21.88	21.80	21.07	
3	64QAM	8	4	21.97	21.82	21.19	22
3	64QAM	8	7	21.29	21.87	21.80	
3	64QAM	15	0	21.82	21.91	21.51	
Channel				18607	18900	19193	Tune-up limit (dBm)
Frequency (MHz)				1850.7	1880	1909.3	
1.4	QPSK	1	0	24.77	24.76	24.75	25
1.4	QPSK	1	5	24.78	24.71	24.47	
1.4	QPSK	1	5	24.77	24.56	24.72	
1.4	QPSK	3	0	24.73	24.81	24.88	24
1.4	QPSK	3	1	24.75	24.69	24.42	
1.4	QPSK	3	3	24.60	24.69	24.67	
1.4	QPSK	6	0	23.90	23.80	23.73	24
1.4	16QAM	1	0	23.83	23.91	23.77	
1.4	16QAM	1	3	23.86	23.84	23.83	
1.4	16QAM	1	5	23.84	23.94	23.89	24
1.4	16QAM	3	0	23.79	23.78	23.71	
1.4	16QAM	3	1	23.75	23.79	23.75	
1.4	16QAM	3	3	23.73	23.81	23.75	23
1.4	16QAM	6	0	22.97	22.88	22.75	
1.4	64QAM	1	0	22.72	22.69	22.75	
1.4	64QAM	1	3	22.84	22.90	21.95	23
1.4	64QAM	1	5	22.15	22.80	22.96	
1.4	64QAM	3	0	22.84	22.77	22.76	
1.4	64QAM	3	1	22.73	22.81	21.70	23
1.4	64QAM	3	3	22.29	22.84	22.89	
1.4	64QAM	6	0	21.94	21.86	21.30	



Band 4											
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				20550	20175	20300					
Frequency (MHz)				1720	1732.5	1745					
20	QPSK	1	0	21.64	21.69	21.77	22.2				
20	QPSK	1	49	21.55	21.53	21.65					
20	QPSK	1	99	21.72	21.50	21.47					
20	QPSK	50	0	21.29	21.50	21.46	22.2				
20	QPSK	50	24	21.32	21.19	21.32					
20	QPSK	50	50	21.17	21.27	21.28					
20	QPSK	100	0	21.39	21.46	21.37	22.2				
20	16QAM	1	0	21.56	21.42	21.52					
20	16QAM	1	49	21.41	21.42	21.35					
20	16QAM	1	99	21.40	21.60	21.40	22.2				
20	16QAM	50	24	21.59	21.46	21.51					
20	16QAM	50	50	21.34	21.38	21.41					
20	16QAM	100	0	21.37	21.52	21.55	22				
20	64QAM	1	0	21.27	21.72	21.46					
20	64QAM	1	49	21.48	21.25	21.16					
20	64QAM	1	99	21.54	21.66	21.51	22.2				
20	64QAM	50	0	21.41	21.04	21.13					
20	64QAM	50	24	21.55	21.13	21.12					
20	64QAM	50	50	21.38	21.11	21.21	22				
20	64QAM	100	0	21.49	20.96	21.09					
Channel				20000	20175	20350		Tune-up limit (dBm)			
Frequency (MHz)				1717.5	1732.5	1747.5					
15	QPSK	1	0	21.66	21.72	21.72	22.2				
15	QPSK	1	37	21.50	21.65	21.62					
15	QPSK	1	74	21.63	21.48	21.44					
15	QPSK	36	0	21.45	21.48	21.51	22.2				
15	QPSK	36	20	21.31	21.28	21.15					
15	QPSK	36	39	21.24	21.33	21.32					
15	QPSK	75	0	21.42	21.44	21.39	22.2				
15	16QAM	1	0	21.55	21.38	21.41					
15	16QAM	1	37	21.30	21.26	21.29					
15	16QAM	1	74	21.47	21.52	21.50	22.2				
15	16QAM	36	0	21.37	21.49	21.58					
15	16QAM	36	20	21.51	21.31	21.54					
15	16QAM	36	39	21.36	21.36	21.32	22.2				
15	16QAM	75	0	21.33	21.56	21.50					
15	64QAM	1	0	21.19	21.71	21.45					
15	64QAM	1	37	21.45	21.40	21.16	22.2				
15	64QAM	1	74	21.48	21.52	21.65					
15	64QAM	36	0	21.47	21.16	21.10					
15	64QAM	36	20	21.56	21.04	21.09	22				
15	64QAM	36	39	21.38	21.00	21.07					
15	64QAM	75	0	21.45	21.15	21.14					
Channel				20000	20175	20350	Tune-up limit (dBm)				
Frequency (MHz)				1715	1732.5	1750					
10	QPSK	1	0	21.66	21.67	21.77	22.2				
10	QPSK	1	25	21.51	21.63	21.52					
10	QPSK	1	49	21.65	21.52	21.59					
10	QPSK	25	0	21.37	21.51	21.42	22.2				
10	QPSK	25	12	21.19	21.26	21.33					
10	QPSK	25	25	21.35	21.17	21.17					
10	QPSK	50	0	21.40	21.39	21.42	22.2				
10	16QAM	1	0	21.51	21.32	21.37					
10	16QAM	1	25	21.36	21.33	21.33					
10	16QAM	1	49	21.37	21.55	21.38	22.2				
10	16QAM	25	0	21.39	21.56	21.51					
10	16QAM	25	12	21.39	21.41	21.42					
10	16QAM	25	25	21.43	21.44	21.34	22.2				
10	16QAM	50	0	21.36	21.52	21.56					
10	64QAM	1	0	21.24	21.67	21.43					
10	64QAM	1	25	21.52	21.28	21.16	22.2				
10	64QAM	1	49	21.56	21.53	21.61					
10	64QAM	25	0	21.39	21.10	21.12					
10	64QAM	25	12	21.50	21.14	21.17	22				
10	64QAM	25	25	21.47	20.96	21.24					
10	64QAM	50	0	21.42	21.03	21.14					
Channel				19975	20175	20375	Tune-up limit (dBm)				
Frequency (MHz)				1712.5	1732.5	1752.5					
5	QPSK	1	0	21.77	21.63	21.87	22.2				
5	QPSK	1	12	21.64	21.53	21.63					
5	QPSK	1	24	21.57	21.47	21.52					
5	QPSK	12	0	21.34	21.47	21.46	22.2				
5	QPSK	12	7	21.27	21.16	21.15					
5	QPSK	12	13	21.36	21.29	21.15					
5	QPSK	25	0	21.44	21.53	21.38	22.2				
5	16QAM	1	0	21.53	21.39	21.37					
5	16QAM	1	12	21.48	21.39	21.36					
5	16QAM	1	24	21.35	21.57	21.34	22.2				
5	16QAM	12	0	21.49	21.41	21.47					
5	16QAM	12	7	21.52	21.31	21.58					
5	16QAM	12	13	21.46	21.42	21.42	22.2				
5	16QAM	25	0	21.52	21.58	21.43					
5	64QAM	1	0	21.34	21.58	21.53					
5	64QAM	1	12	21.48	21.29	21.16	22.2				
5	64QAM	1	24	21.47	21.55	21.57					
5	64QAM	12	0	21.36	21.00	21.06					
5	64QAM	12	7	21.51	21.04	21.20	22				
5	64QAM	12	13	21.38	21.05	21.23					
5	64QAM	25	0	21.41	21.02	21.20					
Channel				19965	20175	20385	Tune-up limit (dBm)				
Frequency (MHz)				1711.5	1732.5	1753.5					
3	QPSK	1	0	21.74	21.65	21.79	22.2				
3	QPSK	1	6	21.67	21.54	21.63					
3	QPSK	1	14	21.70	21.44	21.46					
3	QPSK	8	0	21.41	21.34	21.47	22.2				
3	QPSK	8	4	21.32	21.19	21.16					
3	QPSK	8	7	21.28	21.27	21.26					
3	QPSK	15	0	21.39	21.50	21.50	22.2				
3	16QAM	1	0	21.57	21.40	21.52					
3	16QAM	1	8	21.34	21.30	21.40					
3	16QAM	1	14	21.34	21.66	21.43	22.2				
3	16QAM	8	0	21.41	21.44	21.53					
3	16QAM	8	4	21.42	21.49	21.58					
3	16QAM	8	7	21.36	21.43	21.32	22.2				
3	16QAM	15	0	21.52	21.60	21.46					
3	64QAM	1	0	21.18	21.71	21.50					
3	64QAM	1	8	21.56	21.42	21.20	22.2				
3	64QAM	1	14	21.60	21.63	21.52					
3	64QAM	8	0	21.44	21.07	21.13					
3	64QAM	8	4	21.55	21.15	21.13	22				
3	64QAM	8	7	21.50	21.06	21.09					
3	64QAM	15	0	21.55	21.10	21.27					
Channel				19967	20175	20393	Tune-up limit (dBm)				
Frequency (MHz)				1710.7	1732.5	1754.3					
1.4	QPSK	1	0	21.77	21.66	21.77	22.2				
1.4	QPSK	1	3	21.54	21.61	21.50					
1.4	QPSK	1	5	21.69	21.48	21.50					
1.4	QPSK	3	0	21.33	21.38	21.51	22.2				
1.4	QPSK	3	1	21.19	21.10	21.31					
1.4	QPSK	3	3	21.22	21.27	21.30					
1.4	QPSK	6	0	21.54	21.36	21.43	22.2				
1.4	QPSK	6	0	21.35	21.40	21.26					
1.4	QPSK	1	3	21.26	21.31	21.34					
1.4	16QAM	1	3	21.30	21.44	21.32	22.2				
1.4	16QAM	3	0	21.51	21.51	21.36					
1.4	16QAM	3	1	21.38	21.41	21.49					
1.4	16QAM	6	0	21.40	21.43	21.40	22.2				
1.4	16QAM	6	0	21.56	21.40	21.49					
1.4	16QAM	3	3	21.51	21.26	21.19					
1.4	64QAM	1	5	21.60	21.64	21.41	22.2				
1.4	64QAM	3	0	21.38	21.62	21.22					
1.4	64QAM	3	1	21.55	21.03	21.11					
1.4	64QAM	3	3	21.32	20.88	20.99					



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	24.32	24.31	24.28	25				
10	QPSK	1	25	24.28	24.22	24.25					
10	QPSK	1	49	24.28	24.24	24.18					
10	QPSK	25	0	23.20	23.38	23.31	24				
10	QPSK	25	12	23.44	23.32	23.36					
10	QPSK	25	25	23.34	23.30	23.28					
10	QPSK	50	0	23.39	23.34	23.30	24				
10	16QAM	1	0	23.69	23.57	23.54					
10	16QAM	1	25	23.54	23.52	23.47					
10	16QAM	1	49	23.52	23.68	23.60	23				
10	16QAM	25	0	22.30	22.33	22.35					
10	16QAM	25	12	22.42	22.34	22.27					
10	16QAM	25	25	22.46	22.33	22.31	23				
10	16QAM	50	0	22.30	22.38	22.38					
10	64QAM	1	0	22.51	22.58	22.49					
10	64QAM	1	25	22.50	22.63	22.45	23				
10	64QAM	1	49	22.55	22.55	21.76					
10	64QAM	25	0	21.30	21.25	21.27					
10	64QAM	25	12	21.48	21.44	21.37	22				
10	64QAM	25	25	21.35	21.35	21.20					
10	64QAM	50	0	21.50	21.45	21.20					
Channel				20425	20525	20625	Tune-up limit (dBm)				
Frequency (MHz)				826.5	836.5	846.5					
5	QPSK	1	0	24.31	24.30	24.36	25				
5	QPSK	1	12	24.29	24.24	24.24					
5	QPSK	1	24	24.27	24.20	24.21					
5	QPSK	12	0	23.29	23.30	23.38	24				
5	QPSK	12	7	23.48	23.40	23.35					
5	QPSK	12	13	23.34	23.28	23.30					
5	QPSK	25	0	23.39	23.34	23.28	24				
5	16QAM	1	0	23.59	23.68	23.69					
5	16QAM	1	12	23.51	23.58	23.59					
5	16QAM	1	24	23.69	23.50	23.45	23				
5	16QAM	12	0	22.30	22.24	22.19					
5	16QAM	12	7	22.51	22.32	22.20					
5	16QAM	12	13	22.43	22.45	22.48	23				
5	16QAM	25	0	22.33	22.30	22.24					
5	64QAM	1	0	22.48	22.41	22.48					
5	64QAM	1	12	22.49	22.56	22.48	23				
5	64QAM	1	24	22.55	22.61	21.80					
5	64QAM	12	0	21.30	21.32	21.28					
5	64QAM	12	7	21.36	21.37	21.29	22				
5	64QAM	12	13	21.30	21.33	21.21					
5	64QAM	25	0	21.42	21.35	21.17					
Channel				20415	20525	20635	Tune-up limit (dBm)				
Frequency (MHz)				825.5	836.5	847.5					
3	QPSK	1	0	24.22	24.23	24.24	25				
3	QPSK	1	8	24.13	24.18	24.22					
3	QPSK	1	14	24.16	24.25	24.22					
3	QPSK	8	0	23.29	23.34	23.29	24				
3	QPSK	8	4	23.31	23.29	23.28					
3	QPSK	8	7	23.40	23.36	23.41					
3	QPSK	15	0	23.44	23.43	23.37	24				
3	16QAM	1	0	23.59	23.62	23.68					
3	16QAM	1	8	23.63	23.63	23.57					
3	16QAM	1	14	23.51	23.57	23.59	23				
3	16QAM	8	0	22.38	22.23	22.33					
3	16QAM	8	4	22.47	22.34	22.35					
3	16QAM	8	7	22.42	22.26	22.48	23				
3	16QAM	15	0	22.34	22.27	22.26					
3	64QAM	1	0	22.42	22.48	22.50					
3	64QAM	1	8	22.57	22.50	22.45	23				
3	64QAM	1	14	22.52	22.59	21.76					
3	64QAM	8	0	21.35	21.39	21.34					
3	64QAM	8	4	21.37	21.43	21.42	22				
3	64QAM	8	7	21.29	21.49	21.16					
3	64QAM	15	0	21.39	21.34	21.19					
Channel				20407	20525	20643	Tune-up limit (dBm)				
Frequency (MHz)				824.7	836.5	848.3					
1.4	QPSK	1	0	24.30	24.35	24.15	25				
1.4	QPSK	1	3	24.08	24.19	24.14					
1.4	QPSK	1	5	24.07	24.21	24.15					
1.4	QPSK	3	0	24.28	24.21	24.13	24				
1.4	QPSK	3	1	24.11	24.03	24.03					
1.4	QPSK	3	3	24.12	24.15	24.10					
1.4	QPSK	6	0	23.38	23.38	23.27	24				
1.4	16QAM	1	0	23.65	23.63	23.54					
1.4	16QAM	1	3	23.50	23.43	23.46					
1.4	16QAM	1	5	23.48	23.48	23.44	24				
1.4	16QAM	3	0	23.66	23.55	23.49					
1.4	16QAM	3	1	23.40	23.46	23.47					
1.4	16QAM	3	3	23.44	23.37	23.43	23				
1.4	16QAM	6	0	22.33	22.20	22.28					
1.4	64QAM	1	0	22.49	22.38	22.45					
1.4	64QAM	1	3	22.50	22.62	22.59	23				
1.4	64QAM	1	5	22.35	22.53	21.69					
1.4	64QAM	3	0	22.39	22.45	22.44					
1.4	64QAM	3	1	22.47	22.38	22.45	22				
1.4	64QAM	3	3	22.30	22.42	21.55					
1.4	64QAM	6	0	21.39	21.48	21.08					



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				20850	21100	21350					
Frequency (MHz)				2510	2535	2560					
20	QPSK	1	0	24.26	24.22	23.34	24.7				
20	QPSK	1	49	24.26	24.37	23.39					
20	QPSK	1	99	24.28	24.38	23.39					
20	QPSK	50	0	23.63	23.54	23.45	24				
20	QPSK	50	24	23.70	23.68	23.47					
20	QPSK	50	50	23.59	23.48	23.44					
20	QPSK	100	0	23.63	23.52	23.45	24				
20	16QAM	1	0	23.58	23.61	23.10					
20	16QAM	1	49	23.35	23.65	22.72					
20	16QAM	1	99	23.46	23.78	23.69	23				
20	16QAM	50	0	22.60	22.62	21.43					
20	16QAM	50	24	22.62	22.71	21.68					
20	16QAM	50	50	22.66	22.50	22.73	23				
20	16QAM	100	0	22.75	22.62	21.97					
20	64QAM	1	0	22.60	22.75	21.14					
20	64QAM	1	49	22.50	22.57	21.77	23				
20	64QAM	1	99	22.51	22.54	21.77					
20	64QAM	50	0	21.73	21.64	21.32					
20	64QAM	50	24	21.65	21.63	21.02	22				
20	64QAM	50	50	21.71	21.55	20.64					
20	64QAM	100	0	20.83	20.96	20.05					
Channel				20825	21100	21375	Tune-up limit (dBm)				
Frequency (MHz)				2507.5	2535	2562.5					
15	QPSK	1	0	24.33	24.16	23.32	24.7				
15	QPSK	1	37	24.29	24.31	23.36					
15	QPSK	1	74	24.26	24.18	24.31					
15	QPSK	36	0	23.67	23.61	23.54	24				
15	QPSK	36	20	23.73	23.72	23.60					
15	QPSK	36	39	23.52	23.42	23.46					
15	QPSK	75	0	23.73	23.69	23.50	24				
15	16QAM	1	0	23.75	23.54	23.07					
15	16QAM	1	37	23.48	23.67	22.82					
15	16QAM	1	74	23.51	23.65	23.60	23				
15	16QAM	36	0	22.69	22.58	21.42					
15	16QAM	36	20	22.57	22.73	21.67					
15	16QAM	36	39	22.56	22.45	22.69	23				
15	16QAM	75	0	22.76	22.71	21.93					
15	64QAM	1	0	22.58	22.59	21.21					
15	64QAM	1	37	22.43	22.38	21.66	22				
15	64QAM	1	74	22.53	22.46	21.87					
15	64QAM	36	0	21.75	21.65	21.36					
15	64QAM	36	20	21.55	21.58	21.17	22				
15	64QAM	36	39	21.78	21.73	20.76					
15	64QAM	75	0	20.90	20.96	20.00					
Channel				20800	21100	21400	Tune-up limit (dBm)				
Frequency (MHz)				2505	2535	2565					
10	QPSK	1	0	24.33	24.14	23.44	24.7				
10	QPSK	1	25	24.23	24.26	23.21					
10	QPSK	1	49	24.22	24.11	24.33					
10	QPSK	25	0	23.58	23.60	23.42	24				
10	QPSK	25	12	23.77	23.58	23.50					
10	QPSK	25	25	23.44	23.49	23.41					
10	QPSK	50	0	23.70	23.57	23.45	24				
10	16QAM	1	0	23.65	23.54	23.05					
10	16QAM	1	25	23.31	23.63	22.71					
10	16QAM	1	49	23.55	23.78	23.61	23				
10	16QAM	25	0	22.54	22.75	21.29					
10	16QAM	25	12	22.64	22.69	21.63					
10	16QAM	25	25	22.66	22.47	22.72	23				
10	16QAM	50	0	22.66	22.57	21.98					
10	64QAM	1	0	22.64	22.75	21.19					
10	64QAM	1	25	22.34	22.49	21.74	23				
10	64QAM	1	49	22.51	22.64	21.82					
10	64QAM	25	0	21.61	21.66	21.01					
10	64QAM	25	12	21.55	21.65	21.15	22				
10	64QAM	25	25	21.61	21.55	20.56					
10	64QAM	50	0	20.89	20.86	20.00					
Channel				20775	21100	21425	Tune-up limit (dBm)				
Frequency (MHz)				2502.5	2535	2567.5					
5	QPSK	1	0	24.26	24.26	23.35	24.7				
5	QPSK	1	12	24.35	24.25	23.22					
5	QPSK	1	24	24.09	24.13	24.31					
5	QPSK	12	0	23.58	23.67	23.59	24				
5	QPSK	12	7	23.67	23.62	23.41					
5	QPSK	12	13	23.57	23.47	23.45					
5	QPSK	25	0	23.59	23.58	23.45	24				
5	16QAM	1	0	23.62	23.68	23.00					
5	16QAM	1	12	23.48	23.56	22.80					
5	16QAM	1	24	23.53	23.75	23.70	23				
5	16QAM	12	0	22.69	22.72	21.39					
5	16QAM	12	7	22.64	22.56	21.69					
5	16QAM	12	13	22.52	22.58	22.80	23				
5	16QAM	25	0	22.65	22.61	21.99					
5	64QAM	1	0	22.73	22.59	21.11					
5	64QAM	1	12	22.45	22.38	21.75	23				
5	64QAM	1	24	22.50	22.60	21.93					
5	64QAM	12	0	21.71	21.69	21.10					
5	64QAM	12	7	21.69	21.60	21.15	22				
5	64QAM	12	13	21.78	21.68	20.72					
5	64QAM	25	0	20.88	21.02	20.19					



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				23060	23095	23130					
Frequency (MHz)				704	707.5	711					
10	QPSK	1	0	24.35	24.29	24.28	25				
10	QPSK	1	25	24.33	24.36	24.17					
10	QPSK	1	49	24.40	24.39	24.21					
10	QPSK	25	0	23.29	23.47	23.40	24				
10	QPSK	25	12	23.40	23.50	23.45					
10	QPSK	25	25	23.41	23.39	23.47					
10	QPSK	50	0	23.47	23.55	23.44	24				
10	16QAM	1	0	23.59	23.61	23.54					
10	16QAM	1	25	23.64	23.59	23.69					
10	16QAM	1	49	23.81	23.65	23.60	23				
10	16QAM	25	0	22.35	22.32	22.49					
10	16QAM	25	12	22.57	22.35	22.31					
10	16QAM	25	25	22.42	22.56	22.41	23				
10	16QAM	50	0	22.49	22.36	22.33					
10	64QAM	1	0	22.56	22.39	22.40					
10	64QAM	1	25	22.57	22.70	22.64	23				
10	64QAM	1	49	22.66	22.65	22.48					
10	64QAM	25	0	21.43	21.50	21.33					
10	64QAM	25	12	21.61	21.43	21.47	22				
10	64QAM	25	25	21.50	21.41	21.47					
10	64QAM	50	0	21.44	21.49	21.46					
Channel				23035	23095	23155	Tune-up limit (dBm)				
Frequency (MHz)				701.5	707.5	713.5					
5	QPSK	1	0	24.39	24.31	24.18	25				
5	QPSK	1	12	24.29	24.25	24.27					
5	QPSK	1	24	24.25	24.27	24.37					
5	QPSK	12	0	23.31	23.37	23.29	24				
5	QPSK	12	7	23.42	23.52	23.49					
5	QPSK	12	13	23.35	23.31	23.30					
5	QPSK	25	0	23.48	23.41	23.36	24				
5	16QAM	1	0	23.59	23.60	23.63					
5	16QAM	1	12	23.67	23.75	23.58					
5	16QAM	1	24	23.79	23.62	23.63	23				
5	16QAM	12	0	22.43	22.39	22.37					
5	16QAM	12	7	22.58	22.46	22.33					
5	16QAM	12	13	22.40	22.38	22.41	23				
5	16QAM	25	0	22.44	22.32	22.40					
5	64QAM	1	0	22.57	22.48	22.44					
5	64QAM	1	12	22.61	22.63	22.50	23				
5	64QAM	1	24	22.56	22.46	22.60					
5	64QAM	12	0	21.37	21.36	21.37					
5	64QAM	12	7	21.47	21.48	21.40	22				
5	64QAM	12	13	21.54	21.46	21.52					
5	64QAM	25	0	21.68	21.40	21.35					
Channel				23025	23095	23165	Tune-up limit (dBm)				
Frequency (MHz)				700.5	707.5	714.5					
3	QPSK	1	0	24.38	24.29	24.17	25				
3	QPSK	1	8	24.26	24.39	24.17					
3	QPSK	1	14	24.35	24.32	24.22					
3	QPSK	8	0	23.29	23.49	23.32	24				
3	QPSK	8	4	23.59	23.50	23.48					
3	QPSK	8	7	23.41	23.44	23.39					
3	QPSK	15	0	23.39	23.42	23.44	24				
3	16QAM	1	0	23.59	23.71	23.60					
3	16QAM	1	8	23.68	23.73	23.67					
3	16QAM	1	14	23.80	23.77	23.59	24				
3	16QAM	8	0	22.47	22.42	22.40					
3	16QAM	8	4	22.56	22.39	22.41					
3	16QAM	8	7	22.39	22.52	22.46	23				
3	16QAM	15	0	22.54	22.32	22.31					
3	64QAM	1	0	22.55	22.50	22.36					
3	64QAM	1	8	22.54	22.68	22.54	23				
3	64QAM	1	14	22.63	22.61	22.57					
3	64QAM	8	0	21.39	21.40	21.35					
3	64QAM	8	4	21.57	21.37	21.45	22				
3	64QAM	8	7	21.51	21.52	21.48					
3	64QAM	15	0	21.47	21.39	21.36					
Channel				23017	23095	23173	Tune-up limit (dBm)				
Frequency (MHz)				699.7	707.5	715.3					
1.4	QPSK	1	0	24.30	24.30	24.22	25				
1.4	QPSK	1	3	24.26	24.28	24.26					
1.4	QPSK	1	5	24.31	24.33	24.22					
1.4	QPSK	3	0	23.35	23.43	23.34	24				
1.4	QPSK	3	1	23.60	23.39	23.53					
1.4	QPSK	3	3	23.40	23.44	23.33					
1.4	QPSK	6	0	23.45	23.43	23.36	24				
1.4	16QAM	1	0	23.65	23.67	23.52					
1.4	16QAM	1	3	23.71	23.61	23.56					
1.4	16QAM	1	5	23.75	23.60	23.60	24				
1.4	16QAM	3	0	22.40	22.37	22.33					
1.4	16QAM	3	1	22.41	22.32	22.50					
1.4	16QAM	3	3	22.40	22.41	22.48	23				
1.4	16QAM	6	0	22.37	22.50	22.50					
1.4	64QAM	1	0	22.48	22.44	22.55					
1.4	64QAM	1	3	22.50	22.67	22.48	23				
1.4	64QAM	1	5	22.54	22.47	22.58					
1.4	64QAM	3	0	21.53	21.50	21.53					
1.4	64QAM	3	1	21.60	21.53	21.41	22				
1.4	64QAM	3	3	21.40	21.56	21.51					
1.4	64QAM	6	0	21.46	21.42	21.51	22				



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				23205			Tune-up limit (dBm)
Frequency (MHz)				782			
10	QPSK	1	0	24.33			25
10	QPSK	1	25	24.28			
10	QPSK	1	49	24.47			
10	QPSK	25	0	23.36			24
10	QPSK	25	12	23.53			
10	QPSK	25	25	23.52			
10	QPSK	50	0	23.45			24
10	16QAM	1	0	23.77			
10	16QAM	1	25	23.77			
10	16QAM	1	49	23.78			24
10	16QAM	25	0	22.57			
10	16QAM	25	12	22.53			
10	16QAM	25	25	22.52			23
10	16QAM	50	0	22.59			
10	64QAM	1	0	22.55			
10	64QAM	1	25	22.87			23
10	64QAM	1	49	22.71			
10	64QAM	25	0	21.58			
10	64QAM	25	12	21.53			22
10	64QAM	25	25	21.50			
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	24.36	24.44	24.30	25
5	QPSK	1	12	24.32	24.45	24.35	
5	QPSK	1	24	24.44	24.41	24.29	
5	QPSK	12	0	23.43	23.35	23.50	24
5	QPSK	12	7	23.45	23.53	23.56	
5	QPSK	12	13	23.49	23.50	23.54	
5	QPSK	25	0	23.61	23.61	23.56	24
5	16QAM	1	0	23.63	23.64	23.66	
5	16QAM	1	12	23.64	23.67	23.74	
5	16QAM	1	24	23.68	23.78	23.65	23
5	16QAM	12	0	22.39	22.41	22.58	
5	16QAM	12	7	22.59	22.47	22.50	
5	16QAM	12	13	22.64	22.46	22.52	23
5	16QAM	25	0	22.58	22.51	22.52	
5	64QAM	1	0	22.74	22.68	22.67	
5	64QAM	1	12	22.76	22.68	22.75	23
5	64QAM	1	24	22.70	22.69	22.72	
5	64QAM	12	0	21.42	21.59	21.50	
5	64QAM	12	7	21.56	21.81	21.49	22
5	64QAM	12	13	21.49	21.49	21.56	
5	64QAM	25	0	21.50	21.43	21.59	



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	24.49			25
10	QPSK	1	25	24.35			
10	QPSK	1	49	24.36			
10	QPSK	25	0	23.41			24
10	QPSK	25	12	23.42			
10	QPSK	25	25	23.57			
10	QPSK	50	0	23.34			24
10	16QAM	1	0	23.80			
10	16QAM	1	25	23.69			
10	16QAM	1	49	23.70			23
10	16QAM	25	0	22.40			
10	16QAM	25	12	22.35			
10	16QAM	25	25	22.38			23
10	16QAM	50	0	22.35			
10	64QAM	1	0	22.69			
10	64QAM	1	25	22.68			23
10	64QAM	1	49	22.54			
10	64QAM	25	0	21.50			
10	64QAM	25	12	21.41			22
10	64QAM	25	25	21.54			
10	64QAM	50	0	21.43			
Channel				23305	23330	23355	Tune-up limit (dBm)
Frequency (MHz)				790.5	793	795.5	
5	QPSK	1	0	24.41	24.44	24.33	25
5	QPSK	1	12	24.38	24.37	24.29	
5	QPSK	1	24	24.33	24.23	24.27	
5	QPSK	12	0	23.38	23.43	23.45	24
5	QPSK	12	7	23.35	23.38	23.36	
5	QPSK	12	13	23.51	23.48	23.50	
5	QPSK	25	0	23.45	23.42	23.41	24
5	16QAM	1	0	23.72	23.65	23.75	
5	16QAM	1	12	23.85	23.72	23.68	
5	16QAM	1	24	23.59	23.73	23.68	23
5	16QAM	12	0	22.38	22.38	22.41	
5	16QAM	12	7	22.53	22.54	22.48	
5	16QAM	12	13	22.40	22.38	22.48	23
5	16QAM	25	0	22.38	22.42	22.38	
5	64QAM	1	0	22.60	22.58	22.58	
5	64QAM	1	12	22.61	22.59	22.73	23
5	64QAM	1	24	22.49	22.62	22.59	
5	64QAM	12	0	21.43	21.47	21.55	
5	64QAM	12	7	21.41	21.58	21.58	22
5	64QAM	12	13	21.53	21.52	21.51	
5	64QAM	25	0	21.47	21.49	21.45	



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)				709	710	711	
10	QPSK	1	0	24.19	24.10	24.17	25
10	QPSK	1	25	24.10	24.28	24.20	
10	QPSK	1	49	24.29	24.26	24.35	
10	QPSK	25	0	23.29	23.36	23.36	24
10	QPSK	25	12	23.43	23.42	23.43	
10	QPSK	25	25	23.49	23.45	23.51	
10	QPSK	50	0	23.46	23.46	23.43	24
10	16QAM	1	0	23.51	23.52	23.59	
10	16QAM	1	25	23.66	23.72	23.64	
10	16QAM	1	49	23.67	23.74	23.69	23
10	16QAM	25	0	22.30	22.27	22.30	
10	16QAM	25	12	22.41	22.31	22.47	
10	16QAM	25	25	22.53	22.43	22.40	23
10	16QAM	50	0	22.43	22.34	22.37	
10	64QAM	1	0	22.51	22.48	22.55	23
10	64QAM	1	25	22.62	22.66	22.66	
10	64QAM	1	49	22.45	22.53	22.64	
10	64QAM	25	0	21.37	21.27	21.41	22
10	64QAM	25	12	21.38	21.48	21.44	
10	64QAM	25	25	21.45	21.41	21.43	
10	64QAM	50	0	21.56	21.43	21.36	
Channel				23755	23790	23825	Tune-up limit (dBm)
Frequency (MHz)				708.5	710	711.5	
5	QPSK	1	0	24.17	24.07	24.18	25
5	QPSK	1	12	24.21	24.15	24.38	
5	QPSK	1	24	24.35	24.33	24.31	
5	QPSK	12	0	23.27	23.43	23.45	24
5	QPSK	12	7	23.51	23.39	23.44	
5	QPSK	12	13	23.56	23.53	23.50	
5	QPSK	25	0	23.47	23.52	23.31	24
5	16QAM	1	0	23.69	23.60	23.66	
5	16QAM	1	12	23.64	23.59	23.76	
5	16QAM	1	24	23.76	23.77	23.79	23
5	16QAM	12	0	22.36	22.36	22.38	
5	16QAM	12	7	22.46	22.49	22.43	
5	16QAM	12	13	22.37	22.41	22.44	23
5	16QAM	25	0	22.39	22.36	22.36	
5	64QAM	1	0	22.52	22.45	22.48	
5	64QAM	1	12	22.60	22.61	22.68	23
5	64QAM	1	24	22.45	22.66	22.57	
5	64QAM	12	0	21.34	21.51	21.44	
5	64QAM	12	7	21.55	21.51	21.48	22
5	64QAM	12	13	21.48	21.59	21.45	
5	64QAM	25	0	21.46	21.34	21.50	



Band 25											
Ann. 0											
SRV (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)				
Channel				26140	26340	26560					
Frequency (MHz)				1860	1865	1905					
20	QPSK	1	0	24.89	24.80	24.70	25				
20	QPSK	1	49	24.77	24.68	24.59					
20	QPSK	1	99	24.57	24.79	23.95					
20	QPSK	50	0	23.88	23.87	23.75	24				
20	QPSK	50	24	23.75	23.66	23.58					
20	QPSK	50	50	23.77	23.80	23.75					
20	QPSK	100	0	23.77	23.75	23.72	24				
20	16QAM	1	0	23.85	23.87	23.92					
20	16QAM	1	49	23.81	23.82	23.81					
20	16QAM	1	99	23.96	23.84	23.25	23				
20	16QAM	50	0	22.81	22.82	22.73					
20	16QAM	50	24	23.00	22.91	22.83					
20	16QAM	50	50	22.83	22.75	22.81	23				
20	16QAM	100	0	22.78	22.83	22.82					
20	84QAM	1	0	22.91	22.54	21.95					
20	84QAM	1	49	22.60	22.95	22.87	23				
20	84QAM	1	99	21.98	22.84	21.45					
20	84QAM	50	0	21.94	21.59	20.32					
20	84QAM	50	24	21.67	21.89	21.39	22				
20	84QAM	50	50	21.06	21.82	21.24					
20	84QAM	100	0	21.62	21.76	21.01					
Channel				26115	26340	26615	Tune-up limit (dBm)				
Frequency (MHz)				1867.5	1865	1907.5					
15	QPSK	1	0	24.85	24.72	24.58	25				
15	QPSK	1	37	24.61	24.68	24.52					
15	QPSK	1	74	24.71	24.78	23.85					
15	QPSK	36	0	23.90	23.82	23.68	24				
15	QPSK	36	20	23.81	23.78	23.57					
15	QPSK	36	39	23.91	23.75	23.67					
15	QPSK	75	0	23.76	23.75	23.89	24				
15	16QAM	1	0	23.89	23.85	23.88					
15	16QAM	1	37	23.95	23.89	23.90					
15	16QAM	1	74	23.86	23.89	23.22	23				
15	16QAM	36	0	22.80	22.88	22.89					
15	16QAM	36	20	22.62	22.78	22.80					
15	16QAM	36	39	22.86	22.81	22.89	23				
15	16QAM	75	0	22.95	22.78	22.83					
15	84QAM	1	0	22.81	22.54	21.99					
15	84QAM	1	37	22.50	22.87	22.85	23				
15	84QAM	1	74	21.97	22.81	21.42					
15	84QAM	36	0	21.91	21.65	20.34					
15	84QAM	36	20	21.64	21.78	21.39	22				
15	84QAM	36	39	21.21	21.88	21.17					
15	84QAM	75	0	21.63	21.85	21.03					
Channel				26090	26340	26640	Tune-up limit (dBm)				
Frequency (MHz)				1865	1865	1910					
10	QPSK	1	0	24.88	24.87	24.89	25				
10	QPSK	1	25	24.79	24.80	24.57					
10	QPSK	1	49	24.72	24.63	23.89					
10	QPSK	25	0	23.79	23.70	23.84	24				
10	QPSK	25	12	23.76	23.74	23.73					
10	QPSK	25	25	23.72	23.76	23.85					
10	QPSK	50	0	23.82	23.83	23.80	24				
10	16QAM	1	0	23.89	23.87	23.84					
10	16QAM	1	25	23.81	23.86	23.84					
10	16QAM	1	49	23.81	23.84	23.29	23				
10	16QAM	25	0	22.76	22.73	22.76					
10	16QAM	25	12	22.96	22.90	22.88					
10	16QAM	25	25	22.87	22.92	22.78	23				
10	16QAM	50	0	22.94	22.95	22.79					
10	84QAM	1	0	22.76	22.39	21.98					
10	84QAM	1	25	22.55	22.93	22.57	23				
10	84QAM	1	49	21.99	22.90	21.38					
10	84QAM	25	0	21.75	21.51	21.06					
10	84QAM	25	12	21.70	21.81	21.40	22				
10	84QAM	25	25	21.22	21.76	21.25					
10	84QAM	50	0	21.52	21.76	20.98					
Channel				26095	26340	26665	Tune-up limit (dBm)				
Frequency (MHz)				1862.5	1865	1912.5					
5	QPSK	1	0	24.88	24.85	24.59	25				
5	QPSK	1	12	24.76	24.68	24.70					
5	QPSK	1	24	24.66	24.71	23.84					
5	QPSK	12	0	23.74	23.90	23.87	24				
5	QPSK	12	7	23.84	23.75	23.73					
5	QPSK	12	13	23.76	23.71	23.62					
5	QPSK	25	0	23.79	23.83	23.75	24				
5	16QAM	1	0	23.73	23.91	23.97					
5	16QAM	1	12	23.96	23.80	23.88					
5	16QAM	1	24	23.98	23.82	23.17	23				
5	16QAM	12	0	22.90	22.79	22.82					
5	16QAM	12	7	22.82	22.81	22.75					
5	16QAM	12	13	22.83	22.89	22.82	23				
5	16QAM	25	0	22.88	22.97	22.90					
5	84QAM	1	0	22.85	22.37	22.00					
5	84QAM	1	12	22.63	22.86	22.61	23				
5	84QAM	1	24	22.11	22.82	21.36					
5	84QAM	12	0	21.89	21.70	20.89					
5	84QAM	12	7	21.69	21.79	21.33	22				
5	84QAM	12	13	21.20	21.89	21.24					
5	84QAM	25	0	21.52	21.76	20.93					
Channel				26095	26340	26675	Tune-up limit (dBm)				
Frequency (MHz)				1861.5	1865	1913.5					
3	QPSK	1	0	24.83	24.67	24.58	25				
3	QPSK	1	8	24.75	24.68	24.58					
3	QPSK	1	14	24.62	24.67	23.94					
3	QPSK	8	0	23.89	23.73	23.72	24				
3	QPSK	8	4	23.86	23.60	23.69					
3	QPSK	8	7	23.91	23.85	23.68					
3	QPSK	15	0	23.82	23.81	23.77	24				
3	16QAM	1	0	23.77	23.94	23.99					
3	16QAM	1	8	23.82	23.90	23.85					
3	16QAM	1	14	23.93	23.74	23.18	23				
3	16QAM	8	0	22.73	22.78	22.73					
3	16QAM	8	4	22.88	22.73	22.89					
3	16QAM	8	7	22.81	22.88	22.81	23				
3	16QAM	15	0	22.95	22.87	22.90					
3	84QAM	1	0	22.74	22.50	21.92					
3	84QAM	1	8	22.56	22.85	22.69	23				
3	84QAM	1	14	21.98	22.83	21.40					
3	84QAM	8	0	21.80	21.57	21.06					
3	84QAM	8	4	21.70	21.87	21.38	22				
3	84QAM	8	7	21.20	21.93	21.35					
3	84QAM	15	0	21.52	21.85	20.94					
Channel				26047	26340	26683	Tune-up limit (dBm)				
Frequency (MHz)				1860.7	1865	1914.3					
1.4	QPSK	1	0	24.85	24.69	24.83	25				
1.4	QPSK	1	3	24.63	24.59	24.58					
1.4	QPSK	1	5	24.67	24.64	23.88					
1.4	QPSK	3	0	24.76	24.58	24.46	24				
1.4	QPSK	3	1	24.54	24.69	24.63					
1.4	QPSK	3	3	24.54	24.58	23.91					
1.4	QPSK	6	0	23.87	23.88	23.71	24				
1.4	16QAM	1	0	23.97	23.79	23.80					
1.4	16QAM	1	3	23.80	23.75	23.97					
1.4	16										



Band 26											
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				26765	26865	26965					
Frequency (MHz)				821.5	831.5	841.5					
15	QPSK	1	0	24.31	24.22	24.23	25				
15	QPSK	1	37	24.14	24.21	24.14					
15	QPSK	1	74	24.11	24.09	24.09					
15	QPSK	36	0	23.29	23.28	23.40	24				
15	QPSK	36	20	23.38	23.37	23.34					
15	QPSK	36	39	23.48	23.35	23.27					
15	QPSK	75	0	23.42	23.27	23.36	24				
15	16QAM	1	0	23.61	23.56	23.53					
15	16QAM	1	37	23.60	23.60	23.46					
15	16QAM	1	74	23.45	23.54	23.30	23				
15	16QAM	36	0	22.31	22.30	22.45					
15	16QAM	36	20	22.38	22.23	22.33					
15	16QAM	36	39	22.37	22.31	22.25	23				
15	16QAM	75	0	22.32	22.35	22.41					
15	64QAM	1	0	22.54	22.30	22.46					
15	64QAM	1	37	22.45	22.48	22.48	23				
15	64QAM	1	74	22.35	22.36	21.62					
15	64QAM	36	0	21.42	21.42	21.43					
15	64QAM	36	20	21.53	21.41	21.41	22				
15	64QAM	36	39	21.32	21.43	21.37					
15	64QAM	75	0	21.46	21.33	21.30					
Channel				26740	26865	26990	Tune-up limit (dBm)				
Frequency (MHz)				819	831.5	844					
10	QPSK	1	0	24.28	24.20	24.16	25				
10	QPSK	1	25	24.29	24.26	24.08					
10	QPSK	1	49	24.27	24.20	24.02					
10	QPSK	25	0	23.48	23.29	23.26	24				
10	QPSK	25	12	23.37	23.38	23.48					
10	QPSK	25	25	23.36	23.40	23.34					
10	QPSK	50	0	23.46	23.22	23.24	24				
10	16QAM	1	0	23.69	23.57	23.47					
10	16QAM	1	25	23.61	23.60	23.42					
10	16QAM	1	49	23.56	23.42	23.45	23				
10	16QAM	25	0	22.33	22.41	22.31					
10	16QAM	25	12	22.52	22.41	22.30					
10	16QAM	25	25	22.46	22.27	22.29	23				
10	16QAM	50	0	22.32	22.27	22.32					
10	64QAM	1	0	22.36	22.36	22.46					
10	64QAM	1	49	22.45	22.40	21.77	22				
10	64QAM	25	0	21.39	21.30	21.34					
10	64QAM	25	12	21.47	21.24	21.50					
10	64QAM	25	25	21.44	21.44	21.42	22				
10	64QAM	50	0	21.33	21.33	21.29					
Channel				26715	26865	27015				Tune-up limit (dBm)	
Frequency (MHz)				816.5	831.5	846.5					
5	QPSK	1	0	24.27	24.23	24.23	25				
5	QPSK	1	12	24.28	24.09	24.08					
5	QPSK	1	24	24.12	24.14	24.19					
5	QPSK	12	0	23.47	23.29	23.32	24				
5	QPSK	12	7	23.47	23.41	23.43					
5	QPSK	12	13	23.31	23.30	23.45					
5	QPSK	25	0	23.46	23.28	23.27	24				
5	16QAM	1	0	23.64	23.49	23.49					
5	16QAM	1	12	23.59	23.46	23.61					
5	16QAM	1	24	23.56	23.58	23.36	23				
5	16QAM	12	0	22.35	22.30	22.42					
5	16QAM	12	7	22.37	22.40	22.47					
5	16QAM	12	13	22.50	22.34	22.26	23				
5	16QAM	25	0	22.38	22.38	22.41					
5	64QAM	1	0	22.52	22.30	22.42					
5	64QAM	1	12	22.41	22.43	22.43	22				
5	64QAM	1	24	22.34	22.47	21.82					
5	64QAM	12	0	21.44	21.48	21.36					
5	64QAM	12	7	21.44	21.27	21.41	22				
5	64QAM	12	13	21.41	21.38	21.50					
5	64QAM	25	0	21.34	21.32	21.30					
Channel				26705	26865	27025	Tune-up limit (dBm)				
Frequency (MHz)				815.5	831.5	847.5					
3	QPSK	1	0	24.30	24.22	24.12	25				
3	QPSK	1	8	24.10	24.13	24.06					
3	QPSK	1	14	24.15	24.27	24.14					
3	QPSK	8	0	23.33	23.43	23.27	24				
3	QPSK	8	4	23.30	23.41	23.45					
3	QPSK	8	7	23.40	23.34	23.28					
3	QPSK	15	0	23.36	23.39	23.40	24				
3	16QAM	1	0	23.70	23.41	23.60					
3	16QAM	1	8	23.53	23.53	23.54					
3	16QAM	1	14	23.58	23.57	23.42	23				
3	16QAM	8	0	22.32	22.46	22.29					
3	16QAM	8	4	22.45	22.28	22.47					
3	16QAM	8	7	22.46	22.41	22.36	23				
3	16QAM	15	0	22.36	22.23	22.36					
3	64QAM	1	0	22.37	22.34	22.33					
3	64QAM	1	8	22.51	22.46	22.55	22				
3	64QAM	1	14	22.50	22.42	21.73					
3	64QAM	8	0	21.39	21.41	21.45					
3	64QAM	8	4	21.46	21.27	21.45	22				
3	64QAM	8	7	21.52	21.50	21.41					
3	64QAM	15	0	21.47	21.27	21.30					
Channel				26697	26865	27033	Tune-up limit (dBm)				
Frequency (MHz)				814.7	831.5	848.3					
1.4	QPSK	1	0	24.30	24.15	24.05	25				
1.4	QPSK	1	3	24.24	24.26	24.16					
1.4	QPSK	1	5	24.15	24.12	23.91					
1.4	QPSK	3	0	24.26	24.16	24.11	24				
1.4	QPSK	3	1	24.09	24.11	24.04					
1.4	QPSK	3	3	24.18	24.16	24.10					
1.4	QPSK	6	0	23.45	23.27	23.20	24				
1.4	16QAM	1	0	23.69	23.37	23.42					
1.4	16QAM	1	3	23.39	23.48	23.61					
1.4	16QAM	1	5	23.44	23.59	23.30	24				
1.4	16QAM	3	0	23.41	23.42	23.32					
1.4	16QAM	3	1	23.41	23.48	23.45					
1.4	16QAM	3	3	23.37	23.43	23.35	23				
1.4	16QAM	6	0	22.34	22.23	22.25					
1.4	64QAM	1	0	22.29	22.38	22.26					
1.4	64QAM	1	3	22.39	22.38	22.36	23				
1.4	64QAM	1	5	22.38	22.38	21.52					
1.4	64QAM	3	0	22.27	22.32	22.26					
1.4	64QAM	3	1	22.30	22.40	22.36	22				
1.4	64QAM	3	3	22.39	22.23	21.64					
1.4	64QAM	6	0	21.45	21.41	21.22					



Band 30							
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				27710			
Frequency (MHz)				2315			
10	QPSK	1	0	24.53			25
10	QPSK	1	25	24.72			
10	QPSK	1	49	24.71			
10	QPSK	25	0	23.61			24
10	QPSK	25	12	23.59			
10	QPSK	25	25	23.72			
10	QPSK	50	0	23.77			
10	16QAM	1	0	23.95			24
10	16QAM	1	25	23.90			
10	16QAM	1	49	23.89			
10	16QAM	25	0	22.89			23
10	16QAM	25	12	22.77			
10	16QAM	25	25	22.69			
10	16QAM	50	0	22.80			
10	64QAM	1	0	22.85			23
10	64QAM	1	25	22.99			
10	64QAM	1	49	22.90			
10	64QAM	25	0	21.79			22
10	64QAM	25	12	21.63			
10	64QAM	25	25	21.67			
10	64QAM	50	0	21.70			
Channel				27685	27710	27735	Tune-up limit (dBm)
Frequency (MHz)				2307.5	2315	2312.5	
5	QPSK	1	0	24.53	24.55	24.63	25
5	QPSK	1	12	24.64	24.69	24.59	
5	QPSK	1	24	24.50	24.55	24.61	
5	QPSK	12	0	23.57	23.64	23.63	24
5	QPSK	12	7	23.61	23.69	23.63	
5	QPSK	12	13	23.73	23.70	23.71	
5	QPSK	25	0	23.63	23.57	23.60	
5	16QAM	1	0	23.93	23.98	23.85	24
5	16QAM	1	12	23.98	23.89	23.89	
5	16QAM	1	24	23.84	23.91	23.87	
5	16QAM	12	0	22.44	22.69	22.52	23
5	16QAM	12	7	22.74	22.64	22.75	
5	16QAM	12	13	22.56	22.66	22.62	
5	16QAM	25	0	22.55	22.55	22.71	
5	64QAM	1	0	22.83	22.79	22.72	23
5	64QAM	1	12	22.71	22.93	22.81	
5	64QAM	1	24	22.78	22.83	22.71	
5	64QAM	12	0	21.61	21.66	21.70	22
5	64QAM	12	7	21.62	21.63	21.58	
5	64QAM	12	13	21.60	21.69	21.74	
5	64QAM	25	0	21.70	21.71	21.58	



Band 66											
Ann 0											
BSW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)				
Channel				132072	132322	132572					
Frequency (MHz)				1720	1745	1770					
20	QPSK	1	0	21.68	21.63	21.78	22.2				
20	QPSK	1	49	21.65	21.68	21.68					
20	QPSK	1	99	21.68	21.49	21.55					
20	QPSK	50	0	21.30	21.34	21.39	22.2				
20	QPSK	50	24	21.42	21.48	21.52					
20	QPSK	50	50	21.44	21.37	21.53					
20	QPSK	100	0	21.41	21.38	21.43	22.2				
20	16QAM	1	0	21.40	21.10	21.53					
20	16QAM	1	49	21.45	21.12	21.59					
20	16QAM	1	99	21.49	21.50	21.64	22.2				
20	16QAM	50	0	21.39	21.59	21.93					
20	16QAM	50	24	21.47	21.41	21.54					
20	16QAM	50	50	21.36	21.27	21.41	22.2				
20	16QAM	100	0	21.53	21.38	21.33					
20	64QAM	1	0	21.39	21.34	21.37					
20	64QAM	1	49	21.16	21.33	21.36	22.2				
20	64QAM	1	99	21.25	21.33	21.33					
20	64QAM	50	0	21.31	21.29	21.40					
20	64QAM	50	24	21.40	21.31	21.41	22				
20	64QAM	50	50	21.42	21.45	21.55					
20	64QAM	100	0	21.46	21.25	21.47					
Channel				132047	132322	132597	Tune-up limit (dBm)				
Frequency (MHz)				1717.5	1745	1772.5					
15	QPSK	1	0	21.67	21.63	21.75	22.2				
15	QPSK	1	37	21.63	21.60	21.74					
15	QPSK	1	74	21.53	21.63	21.67					
15	QPSK	36	0	21.44	21.43	21.37	22.2				
15	QPSK	36	20	21.43	21.40	21.55					
15	QPSK	36	39	21.35	21.43	21.80					
15	QPSK	75	0	21.29	21.36	21.53	22.2				
15	16QAM	1	0	21.42	20.95	21.68					
15	16QAM	1	37	21.38	21.10	21.51					
15	16QAM	1	74	21.52	21.51	21.53	22.2				
15	16QAM	36	0	21.40	21.52	20.88					
15	16QAM	36	20	21.35	21.51	21.44					
15	16QAM	36	39	21.40	21.38	21.43	22.2				
15	16QAM	75	0	21.49	21.54	21.40					
15	64QAM	1	0	21.28	21.44	21.38					
15	64QAM	1	37	21.28	21.24	21.39	22.2				
15	64QAM	1	74	21.26	21.28	21.41					
15	64QAM	36	0	21.42	21.37	21.46					
15	64QAM	36	20	21.41	21.29	21.47	22				
15	64QAM	36	39	21.40	21.43	21.43					
15	64QAM	75	0	21.44	21.23	21.39					
Channel				132022	132322	132622	Tune-up limit (dBm)				
Frequency (MHz)				1715	1745	1775					
10	QPSK	1	0	21.73	21.68	21.74	22.2				
10	QPSK	1	25	21.69	21.53	21.71					
10	QPSK	1	49	21.71	21.64	21.49					
10	QPSK	25	0	21.25	21.35	21.45	22.2				
10	QPSK	25	12	21.32	21.45	21.40					
10	QPSK	25	25	21.48	21.48	21.48					
10	QPSK	50	0	21.29	21.30	21.43	22.2				
10	16QAM	1	0	21.46	20.94	21.54					
10	16QAM	1	25	21.39	21.20	21.65					
10	16QAM	1	49	21.41	21.56	21.70	22.2				
10	16QAM	25	0	21.33	21.59	20.99					
10	16QAM	25	12	21.35	21.57	21.43					
10	16QAM	25	25	21.47	21.30	21.52	22.2				
10	16QAM	50	0	21.51	21.42	21.43					
10	64QAM	1	0	21.36	21.32	21.33					
10	64QAM	1	25	21.21	21.30	21.34	22.2				
10	64QAM	1	49	21.12	21.29	21.23					
10	64QAM	25	0	21.38	21.44	21.43					
10	64QAM	25	12	21.41	21.30	21.52	22				
10	64QAM	25	25	21.36	21.31	21.39					
10	64QAM	50	0	21.41	21.32	21.39					
Channel				131997	132322	132647	Tune-up limit (dBm)				
Frequency (MHz)				1712.5	1745	1777.5					
5	QPSK	1	0	21.63	21.69	21.70	22.2				
5	QPSK	1	12	21.59	21.53	21.75					
5	QPSK	1	24	21.68	21.50	21.64					
5	QPSK	12	0	21.37	21.38	21.54	22.2				
5	QPSK	12	7	21.43	21.43	21.51					
5	QPSK	12	13	21.47	21.47	21.47					
5	QPSK	25	0	21.34	21.35	21.53	22.2				
5	16QAM	1	0	21.44	20.98	21.60					
5	16QAM	1	12	21.47	21.07	21.54					
5	16QAM	1	24	21.44	21.54	21.73	22.2				
5	16QAM	12	0	21.30	21.68	20.93					
5	16QAM	12	7	21.38	21.44	21.54					
5	16QAM	12	13	21.39	21.33	21.47	22.2				
5	16QAM	25	0	21.48	21.54	21.46					
5	64QAM	1	0	21.31	21.30	21.40					
5	64QAM	1	12	21.26	21.36	21.36	22.2				
5	64QAM	1	24	21.12	21.33	21.38					
5	64QAM	12	0	21.30	21.38	21.35					
5	64QAM	12	7	21.44	21.28	21.37	22				
5	64QAM	12	13	21.39	21.39	21.49					
5	64QAM	25	0	21.35	21.19	21.37					
Channel				131997	132322	132657	Tune-up limit (dBm)				
Frequency (MHz)				1711.5	1745	1778.5					
3	QPSK	1	0	21.61	21.69	21.74	22.2				
3	QPSK	1	8	21.56	21.52	21.69					
3	QPSK	1	14	21.57	21.58	21.56					
3	QPSK	8	0	21.30	21.44	21.40	22.2				
3	QPSK	8	4	21.30	21.29	21.44					
3	QPSK	8	7	21.37	21.35	21.51					
3	QPSK	15	0	21.47	21.34	21.54	22.2				
3	16QAM	1	0	21.52	20.98	21.69					
3	16QAM	1	8	21.39	21.24	21.51					
3	16QAM	1	14	21.49	21.48	21.62	22.2				
3	16QAM	8	0	21.41	21.54	20.98					
3	16QAM	8	4	21.42	21.52	21.40					
3	16QAM	8	7	21.46	21.31	21.48	22.2				
3	16QAM	15	0	21.37	21.55	21.45					
3	64QAM	1	0	21.41	21.31	21.37					
3	64QAM	1	8	21.18	21.21	21.28	22.2				
3	64QAM	1	14	21.24	21.25	21.26					
3	64QAM	8	0	21.43	21.39	21.50					
3	64QAM	8	4	21.36	21.28	21.44	22				
3	64QAM	8	7	21.36	21.49	21.45					
3	64QAM	15	0	21.47	21.28	21.42					
Channel				131979	132322	132665	Tune-up limit (dBm)				
Frequency (MHz)				1710.7	1745	1779.3					
1.4	QPSK	1	0	21.56	21.73	21.77	22.2				
1.4	QPSK	1	3	21.56	21.50	21.71					
1.4	QPSK	1	5	21.56	21.47	21.54					
1.4	QPSK	3	0	21.40	21.32	21.41	22.2				
1.4	QPSK	3	1	21.41	21.34	21.52					
1.4	QPSK	3	3	21.38	21.24	21.47					



Band 71									
Art.1									
RBW (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	686			
20	QPSK	1	0	24.33	24.42	24.18	25		
20	QPSK	1	49	24.28	24.41	24.31			
20	QPSK	1	99	24.24	24.29	24.33			
20	QPSK	50	0	23.52	23.61	23.47	24		
20	QPSK	50	24	23.50	23.55	23.37			
20	QPSK	50	50	23.50	23.51	23.58			
20	QPSK	100	0	23.96	23.45	23.36	24		
20	16QAM	1	0	23.68	23.56	23.55			
20	16QAM	1	49	23.71	23.77	23.71			
20	16QAM	1	99	23.70	23.59	23.69	23		
20	16QAM	50	0	22.45	22.38	22.47			
20	16QAM	50	24	22.62	22.45	22.34			
20	16QAM	50	50	22.56	22.52	22.45	22		
20	16QAM	100	0	22.36	22.42	22.43			
20	64QAM	1	0	22.52	22.43	22.44			
20	64QAM	1	49	22.59	22.51	22.50	23		
20	64QAM	1	99	22.67	22.49	22.58			
20	64QAM	50	0	21.41	21.32	21.42			
20	64QAM	50	24	21.50	21.53	21.42	22		
20	64QAM	50	50	21.45	21.63	21.49			
20	64QAM	100	0	21.51	21.31	21.49			
Channel				133197	133297	133397	Tune-up limit (dBm)		
Frequency (MHz)				670.5	680.5	680.5			
15	QPSK	1	0	24.40	24.41	24.32	25		
15	QPSK	1	37	24.31	24.27	24.24			
15	QPSK	1	74	24.32	24.36	24.28			
15	QPSK	36	0	23.47	23.53	23.42	24		
15	QPSK	36	20	23.33	23.32	23.53			
15	QPSK	36	39	23.57	23.51	23.53			
15	QPSK	75	0	23.43	23.41	23.53	24		
15	16QAM	1	0	23.63	23.71	23.72			
15	16QAM	1	37	23.70	23.69	23.65			
15	16QAM	1	74	23.62	23.70	23.59	24		
15	16QAM	36	0	22.39	22.41	22.49			
15	16QAM	36	20	22.53	22.41	22.51			
15	16QAM	36	39	22.42	22.46	22.52	22		
15	16QAM	75	0	22.46	22.45	22.53			
15	64QAM	1	0	22.59	22.59	22.44			
15	64QAM	1	37	22.51	22.58	22.59	23		
15	64QAM	1	74	22.61	22.55	22.42			
15	64QAM	36	0	21.54	21.46	21.32			
15	64QAM	36	20	21.61	21.55	21.36	22		
15	64QAM	36	39	21.54	21.44	21.58			
15	64QAM	75	0	21.62	21.45	21.49			
Channel				133172	133272	133422	Tune-up limit (dBm)		
Frequency (MHz)				668	678	683			
10	QPSK	1	0	24.50	24.36	24.30	25		
10	QPSK	1	25	24.24	24.29	24.40			
10	QPSK	1	49	24.22	24.28	24.19			
10	QPSK	25	0	23.37	23.52	23.49	24		
10	QPSK	25	12	23.47	23.50	23.54			
10	QPSK	25	25	23.53	23.55	23.43			
10	QPSK	50	0	23.43	23.47	23.41	24		
10	16QAM	1	0	23.71	23.71	23.66			
10	16QAM	1	25	23.60	23.59	23.59			
10	16QAM	1	49	23.60	23.59	23.62	24		
10	16QAM	25	0	22.51	22.45	22.46			
10	16QAM	25	12	22.43	22.37	22.42			
10	16QAM	25	25	22.42	22.56	22.55	22		
10	16QAM	50	0	22.54	22.41	22.49			
10	64QAM	1	0	22.50	22.58	22.55			
10	64QAM	1	25	22.48	22.49	22.52	23		
10	64QAM	1	49	22.54	22.53	22.58			
10	64QAM	25	0	21.56	21.30	21.45			
10	64QAM	25	12	21.45	21.40	21.54	22		
10	64QAM	25	25	21.56	21.55	21.62			
10	64QAM	50	0	21.58	21.35	21.44			
Channel				133147	133247	133447	Tune-up limit (dBm)		
Frequency (MHz)				665.5	675.5	685.5			
5	QPSK	1	0	24.45	24.25	24.30	25		
5	QPSK	1	12	24.28	24.24	24.25			
5	QPSK	1	24	24.26	24.23	24.30			
5	QPSK	12	0	23.35	23.45	23.49	24		
5	QPSK	12	7	23.32	23.50	23.39			
5	QPSK	12	13	23.42	23.55	23.48			
5	QPSK	25	0	23.41	23.36	23.50	24		
5	16QAM	1	0	23.80	23.68	23.73			
5	16QAM	1	12	23.60	23.63	23.62			
5	16QAM	1	24	23.66	23.70	23.55	23		
5	16QAM	12	0	22.39	22.47	22.45			
5	16QAM	12	7	22.50	22.42	22.42			
5	16QAM	12	13	22.59	22.45	22.52	22		
5	16QAM	25	0	22.43	22.36	22.49			
5	64QAM	1	0	22.66	22.51	22.44			
5	64QAM	1	12	22.57	22.53	22.45	23		
5	64QAM	1	24	22.50	22.51	22.40			
5	64QAM	12	0	21.53	21.40	21.44			
5	64QAM	12	7	21.42	21.57	21.43	22		
5	64QAM	12	13	21.53	21.46	21.45			
5	64QAM	25	0	21.62	21.39	21.49			



Band 2							
Ant 2							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)
Channel				18700	18900	19100	
Frequency (MHz)				1860	1880	1900	
20	QPSK	1	0	23.40	23.50	23.35	24.2
20	QPSK	1	49	23.40	23.30	23.27	
20	QPSK	1	99	23.32	23.36	23.23	
20	QPSK	50	0	22.88	22.90	22.90	24
20	QPSK	50	24	22.91	23.01	22.78	
20	QPSK	50	50	22.77	22.74	22.72	
20	QPSK	100	0	22.81	22.72	22.77	24
20	16QAM	1	0	23.05	23.12	22.99	
20	16QAM	1	49	23.04	22.94	22.92	
20	16QAM	1	99	23.02	22.95	23.00	23
20	16QAM	50	0	22.38	22.34	22.32	
20	16QAM	50	24	22.55	22.59	22.45	
20	16QAM	50	50	22.44	22.46	22.41	23
20	16QAM	100	0	22.39	22.48	22.38	
20	64QAM	1	0	22.53	22.46	22.43	
20	64QAM	1	49	22.46	22.43	22.46	23
20	64QAM	1	99	22.52	22.52	22.42	
20	64QAM	50	0	21.35	21.28	21.28	22
20	64QAM	50	24	21.45	21.55	21.52	
20	64QAM	50	50	21.50	21.40	21.60	
20	64QAM	100	0	21.40	21.47	21.48	Tune-up limit (dBm)
Channel				18675	18900	19125	
Frequency (MHz)				1857.5	1880	1902.5	
15	QPSK	1	0	23.33	23.44	23.28	24.2
15	QPSK	1	37	23.37	23.29	23.15	
15	QPSK	1	74	23.31	23.26	23.23	
15	QPSK	36	0	22.86	22.89	22.90	24
15	QPSK	36	20	22.85	22.93	22.68	
15	QPSK	36	39	22.69	22.68	22.63	
15	QPSK	75	0	22.75	22.70	22.70	24
15	16QAM	1	0	23.03	23.03	22.94	
15	16QAM	1	37	23.00	22.88	22.86	
15	16QAM	1	74	23.01	22.87	22.92	23
15	16QAM	36	0	22.28	22.30	22.24	
15	16QAM	36	20	22.45	22.55	22.42	
15	16QAM	36	39	22.42	22.40	22.37	23
15	16QAM	75	0	22.34	22.39	22.35	
15	64QAM	1	0	22.44	22.36	22.42	23
15	64QAM	1	37	22.44	22.40	22.41	
15	64QAM	1	74	22.45	22.52	22.41	
15	64QAM	36	0	21.51	21.26	21.28	22
15	64QAM	36	20	21.37	21.52	21.45	
15	64QAM	36	39	21.40	21.39	21.51	
15	64QAM	75	0	21.38	21.42	21.38	Tune-up limit (dBm)
Channel				18650	18900	19150	
Frequency (MHz)				1855	1880	1905	
10	QPSK	1	0	23.31	23.42	23.32	24.2
10	QPSK	1	0	23.35	23.30	23.22	
10	QPSK	1	49	23.31	23.36	23.17	
10	QPSK	25	0	22.85	22.85	22.84	24
10	QPSK	25	12	22.91	22.99	22.75	
10	QPSK	25	25	22.73	22.70	22.64	
10	QPSK	50	0	22.73	22.63	22.72	24
10	16QAM	1	0	22.99	23.09	22.98	
10	16QAM	1	25	23.03	22.84	22.90	
10	16QAM	1	49	23.02	22.85	22.90	23
10	16QAM	25	0	22.35	22.34	22.27	
10	16QAM	25	12	22.53	22.58	22.36	
10	16QAM	25	25	22.39	22.36	22.41	23
10	16QAM	50	0	22.31	22.48	22.28	
10	64QAM	1	0	22.48	22.41	22.33	23
10	64QAM	1	25	22.45	22.37	22.46	
10	64QAM	1	49	22.51	22.44	22.35	
10	64QAM	25	0	21.27	21.22	21.32	22
10	64QAM	25	12	21.45	21.48	21.45	
10	64QAM	25	25	21.43	21.31	21.52	
10	64QAM	50	0	21.31	21.41	21.38	Tune-up limit (dBm)
Channel				18625	18900	19175	
Frequency (MHz)				1852.5	1880	1907.5	
5	QPSK	1	0	23.37	23.43	23.26	24.2
5	QPSK	1	12	23.34	23.21	23.21	
5	QPSK	1	24	23.24	23.29	23.17	
5	QPSK	12	0	22.81	22.87	22.83	24
5	QPSK	12	7	22.81	22.66	22.76	
5	QPSK	12	13	22.76	22.65	22.70	
5	QPSK	25	0	22.71	22.66	22.67	24
5	16QAM	1	0	22.97	23.11	22.97	
5	16QAM	1	12	23.01	22.96	22.82	
5	16QAM	1	24	22.98	22.89	22.96	23
5	16QAM	12	0	22.28	22.29	22.29	
5	16QAM	12	7	22.50	22.59	22.44	
5	16QAM	12	13	22.43	22.43	22.36	23
5	16QAM	25	0	22.30	22.43	22.33	
5	64QAM	1	0	22.49	22.46	22.40	23
5	64QAM	1	12	22.45	22.38	22.40	
5	64QAM	1	24	22.42	22.50	22.33	
5	64QAM	12	0	21.29	21.21	21.35	22
5	64QAM	12	7	21.41	21.48	21.45	
5	64QAM	12	13	21.45	21.35	21.58	
5	64QAM	25	0	21.39	21.41	21.42	Tune-up limit (dBm)
Channel				18615	18900	19185	
Frequency (MHz)				1851.5	1880	1908.5	
3	QPSK	1	0	23.30	23.42	23.33	24.2
3	QPSK	1	8	23.32	23.22	23.25	
3	QPSK	1	14	23.30	23.35	23.16	
3	QPSK	8	0	22.83	22.84	22.82	24
3	QPSK	8	4	22.87	22.66	22.77	
3	QPSK	8	7	22.70	22.65	22.72	
3	QPSK	15	0	22.71	22.70	22.76	24
3	16QAM	1	0	23.03	23.08	22.99	
3	16QAM	1	8	23.01	22.90	22.87	
3	16QAM	1	14	23.00	22.92	22.91	23
3	16QAM	8	0	22.32	22.34	22.25	
3	16QAM	8	4	22.50	22.57	22.41	
3	16QAM	8	7	22.44	22.36	22.32	23
3	16QAM	15	0	22.36	22.44	22.28	
3	64QAM	1	0	22.50	22.39	22.43	
3	64QAM	1	8	22.40	22.42	22.45	23
3	64QAM	1	14	22.52	22.46	22.35	
3	64QAM	8	0	21.28	21.26	21.33	
3	64QAM	8	4	21.38	21.35	21.50	22
3	64QAM	8	7	21.44	21.38	21.50	
3	64QAM	15	0	21.31	21.47	21.48	
Channel				18607	18900	19193	Tune-up limit (dBm)
Frequency (MHz)				1850.7	1880	1909.3	
1.4	QPSK	1	0	23.34	23.34	23.30	24.2
1.4	QPSK	1	5	23.26	23.26	23.25	
1.4	QPSK	1	5	23.19	23.11	23.12	
1.4	QPSK	3	0	23.35	23.34	23.35	24
1.4	QPSK	3	1	23.22	23.16	23.15	
1.4	QPSK	3	3	23.19	23.16	23.15	
1.4	QPSK	6	0	22.43	22.42	22.42	24
1.4	16QAM	1	0	22.91	22.86	22.91	
1.4	16QAM	1	3	22.88	22.81	22.83	
1.4	16QAM	1	5	22.85	22.76	22.83	24
1.4	16QAM	3	0	22.88	22.87	22.79	
1.4	16QAM	3	1	22.71	22.68	22.62	
1.4	16QAM	3	3	22.71	22.68	22.61	23
1.4	16QAM	6	0	22.81	22.74	22.74	
1.4	64QAM	1	0	22.53	22.44	22.53	
1.4	64QAM	1	3	22.39	22.30	22.30	23
1.4	64QAM	1	5	22.40	22.39	22.32	
1.4	64QAM	3	0	22.44	22.37	22.41	
1.4	64QAM	3	1	22.38	22.35	22.38	22
1.4	64QAM	3	3	22.46	22.43	22.40	
1.4	64QAM	6	0	21.35	21.34	21.28	



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				20550	20175	20300					
Frequency (MHz)				1720	1732.5	1745					
20	QPSK	1	0	23.83	23.89	23.90	25				
20	QPSK	1	49	23.69	23.74	23.71					
20	QPSK	1	99	23.63	23.65	23.74					
20	QPSK	50	0	23.21	23.26	23.29	24				
20	QPSK	50	24	23.23	23.19	23.28					
20	QPSK	50	50	23.12	23.20	23.16					
20	QPSK	100	0	23.19	23.22	23.25	24				
20	16QAM	1	0	23.44	23.58	23.52					
20	16QAM	1	49	23.33	23.36	23.45					
20	16QAM	1	99	23.28	23.38	23.35	23				
20	16QAM	50	0	22.25	22.23	22.27					
20	16QAM	50	24	22.20	22.16	22.28					
20	16QAM	50	50	22.17	22.18	22.22	23				
20	16QAM	100	0	22.24	22.15	22.29					
20	64QAM	1	0	22.35	22.38	22.47					
20	64QAM	1	49	22.26	22.30	22.21	23				
20	64QAM	1	99	22.22	22.26	22.25					
20	64QAM	50	0	21.21	21.32	21.32					
20	64QAM	50	24	21.23	21.21	21.34	22				
20	64QAM	50	50	21.13	21.17	21.18					
20	64QAM	100	0	21.21	21.15	21.33					
Channel				20025	20175	20325	Tune-up limit (dBm)				
Frequency (MHz)				1717.5	1732.5	1747.5					
15	QPSK	1	0	23.77	23.87	23.81	25				
15	QPSK	1	37	23.59	23.74	23.61					
15	QPSK	1	74	23.60	23.64	23.72					
15	QPSK	36	0	23.14	23.24	23.27	24				
15	QPSK	36	20	23.16	23.09	23.25					
15	QPSK	36	39	23.07	23.11	23.07					
15	QPSK	75	0	23.19	23.22	23.18	24				
15	16QAM	1	0	23.39	23.48	23.49					
15	16QAM	1	37	23.31	23.34	23.39					
15	16QAM	1	74	23.27	23.38	23.30	23				
15	16QAM	36	0	22.20	22.19	22.22					
15	16QAM	36	20	22.16	22.15	22.19					
15	16QAM	36	39	22.10	22.10	22.15	23				
15	16QAM	75	0	22.18	22.17	22.24					
15	64QAM	1	0	22.35	22.29	22.38					
15	64QAM	1	37	22.17	22.30	22.20	23				
15	64QAM	1	74	22.14	22.20	22.15					
15	64QAM	36	0	21.17	21.27	21.23					
15	64QAM	36	20	21.14	21.19	21.24	22				
15	64QAM	36	39	21.08	21.10	21.13					
15	64QAM	75	0	21.18	21.12	21.26					
Channel				20000	20175	20350	Tune-up limit (dBm)				
Frequency (MHz)				1715	1732.5	1750					
10	QPSK	1	0	23.75	23.82	23.84	25				
10	QPSK	1	25	23.64	23.64	23.71					
10	QPSK	1	49	23.62	23.59	23.68					
10	QPSK	25	0	23.21	23.25	23.21	24				
10	QPSK	25	12	23.15	23.12	23.19					
10	QPSK	25	25	23.10	23.11	23.07					
10	QPSK	50	0	23.19	23.22	23.22	24				
10	16QAM	1	0	23.34	23.55	23.43					
10	16QAM	1	25	23.28	23.33	23.38					
10	16QAM	1	49	23.20	23.34	23.35	23				
10	16QAM	25	0	22.18	22.14	22.22					
10	16QAM	25	12	22.20	22.13	22.26					
10	16QAM	25	25	22.10	22.15	22.15	23				
10	16QAM	50	0	22.18	22.12	22.27					
10	64QAM	1	0	22.34	22.30	22.39					
10	64QAM	1	25	22.25	22.20	22.18	23				
10	64QAM	1	49	22.20	22.23	22.15					
10	64QAM	25	0	21.15	21.32	21.22					
10	64QAM	25	12	21.17	21.20	21.31	22				
10	64QAM	25	25	21.09	21.07	21.18					
10	64QAM	50	0	21.17	21.14	21.27					
Channel				19975	20175	20375	Tune-up limit (dBm)				
Frequency (MHz)				1712.5	1732.5	1752.5					
5	QPSK	1	0	23.75	23.81	23.86	25				
5	QPSK	1	8	23.61	23.70	23.71					
5	QPSK	1	24	23.62	23.64	23.65					
5	QPSK	12	0	23.15	23.19	23.27	24				
5	QPSK	12	7	23.22	23.18	23.25					
5	QPSK	12	13	23.08	23.13	23.16					
5	QPSK	25	0	23.14	23.18	23.13	24				
5	16QAM	1	0	23.37	23.51	23.49					
5	16QAM	1	12	23.29	23.36	23.38					
5	16QAM	1	24	23.19	23.30	23.31	23				
5	16QAM	12	0	22.18	22.22	22.22					
5	16QAM	12	7	22.14	22.06	22.28					
5	16QAM	12	13	22.08	22.12	22.20	23				
5	16QAM	25	0	22.17	22.11	22.21					
5	64QAM	1	0	22.27	22.28	22.47					
5	64QAM	1	12	22.23	22.22	22.13	23				
5	64QAM	1	24	22.21	22.16	22.18					
5	64QAM	12	0	21.20	21.28	21.32					
5	64QAM	12	7	21.22	21.12	21.31	22				
5	64QAM	12	13	21.04	21.11	21.17					
5	64QAM	25	0	21.11	21.06	21.23					
Channel				19965	20175	20385	Tune-up limit (dBm)				
Frequency (MHz)				1711.5	1732.5	1753.5					
3	QPSK	1	0	23.75	23.88	23.85	25				
3	QPSK	1	8	23.61	23.73	23.82					
3	QPSK	1	14	23.62	23.59	23.67					
3	QPSK	8	0	23.20	23.20	23.20	24				
3	QPSK	8	4	23.21	23.12	23.24					
3	QPSK	8	7	23.11	23.15	23.11					
3	QPSK	15	0	23.16	23.19	23.16	24				
3	16QAM	1	0	23.43	23.53	23.49					
3	16QAM	1	8	23.30	23.27	23.35					
3	16QAM	1	14	23.18	23.36	23.30	23				
3	16QAM	8	0	22.18	22.17	22.24					
3	16QAM	8	4	22.13	22.10	22.27					
3	16QAM	8	7	22.09	22.08	22.15	23				
3	16QAM	15	0	22.18	22.12	22.23					
3	64QAM	1	0	22.34	22.36	22.38					
3	64QAM	1	8	22.18	22.30	22.16	23				
3	64QAM	1	14	22.17	22.22	22.18					
3	64QAM	8	0	21.20	21.25	21.23					
3	64QAM	8	4	21.16	21.17	21.29	22				
3	64QAM	8	7	21.10	21.09	21.14					
3	64QAM	15	0	21.16	21.05	21.29					
Channel				19967	20175	20393	Tune-up limit (dBm)				
Frequency (MHz)				1710.7	1732.5	1754.3					
1.4	QPSK	1	0	23.80	23.80	23.72	25				
1.4	QPSK	1	3	23.66	23.60	23.81					
1.4	QPSK	1	5	23.71	23.62	23.62					
1.4	QPSK	3	0	23.76	23.67	23.70	24				
1.4	QPSK	3	1	23.54	23.49	23.54					
1.4	QPSK	3	3	23.65	23.60	23.61					
1.4	QPSK	6	0	23.23	23.14	23.13	24				
1.4	16QAM	1	0	23.42	23.36	23.41					
1.4	16QAM	1	3	23.36	23.30	23.34					
1.											



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				20450	20525	20600					
Frequency (MHz)				829	836.5	848					
10	QPSK	1	0	24.40	24.30	24.33	25				
10	QPSK	1	25	24.22	24.22	24.15					
10	QPSK	1	49	24.26	24.25	24.23					
10	QPSK	25	0	23.34	23.39	23.32	24				
10	QPSK	25	12	23.41	23.46	23.41					
10	QPSK	25	25	23.41	23.48	23.39					
10	QPSK	50	0	23.40	23.46	23.31	24				
10	16QAM	1	0	23.75	23.67	23.74					
10	16QAM	1	25	23.68	23.60	23.65					
10	16QAM	1	49	23.66	23.59	23.64	23				
10	16QAM	25	0	22.35	22.43	22.25					
10	16QAM	25	12	22.52	22.50	22.43					
10	16QAM	25	25	22.42	22.38	22.40	23				
10	16QAM	50	0	22.43	22.48	22.42					
10	64QAM	1	0	22.49	22.52	22.41					
10	64QAM	1	25	22.58	22.57	22.54	23				
10	64QAM	1	49	22.53	22.53	22.49					
10	64QAM	25	0	21.44	21.36	21.42					
10	64QAM	25	12	21.48	21.49	21.47	22				
10	64QAM	25	25	21.50	21.48	21.46					
10	64QAM	50	0	21.54	21.54	21.46					
Channel				20425	20525	20625	Tune-up limit (dBm)				
Frequency (MHz)				826.5	836.5	846.5					
5	QPSK	1	0	24.39	24.38	24.34	25				
5	QPSK	1	12	24.12	24.17	24.14					
5	QPSK	1	24	24.25	24.26	24.18					
5	QPSK	12	0	23.30	23.30	23.30	24				
5	QPSK	12	7	23.31	23.32	23.37					
5	QPSK	12	13	23.36	23.41	23.41					
5	QPSK	25	0	23.35	23.39	23.37	24				
5	16QAM	1	0	23.72	23.65	23.69					
5	16QAM	1	12	23.61	23.62	23.63					
5	16QAM	1	24	23.60	23.57	23.60	23				
5	16QAM	12	0	22.29	22.34	22.28					
5	16QAM	12	7	22.42	22.43	22.47					
5	16QAM	12	13	22.39	22.35	22.36	23				
5	16QAM	25	0	22.34	22.36	22.34					
5	64QAM	1	0	22.39	22.45	22.45					
5	64QAM	1	12	22.56	22.56	22.56	23				
5	64QAM	1	24	22.48	22.49	22.51					
5	64QAM	12	0	21.35	21.35	21.36					
5	64QAM	12	7	21.40	21.44	21.41	22				
5	64QAM	12	13	21.49	21.49	21.44					
5	64QAM	25	0	21.49	21.46	21.47					
Channel				20415	20525	20635	Tune-up limit (dBm)				
Frequency (MHz)				825.5	836.5	847.5					
3	QPSK	1	0	24.39	24.37	24.37	25				
3	QPSK	1	8	24.22	24.21	24.19					
3	QPSK	1	14	24.23	24.16	24.16					
3	QPSK	8	0	23.28	23.28	23.27	24				
3	QPSK	8	4	23.34	23.41	23.33					
3	QPSK	8	7	23.36	23.39	23.35					
3	QPSK	15	0	23.35	23.31	23.36	24				
3	16QAM	1	0	23.71	23.68	23.75					
3	16QAM	1	8	23.64	23.68	23.61					
3	16QAM	1	14	23.64	23.62	23.65	23				
3	16QAM	8	0	22.32	22.35	22.33					
3	16QAM	8	4	22.43	22.48	22.44					
3	16QAM	8	7	22.42	22.42	22.34	23				
3	16QAM	15	0	22.33	22.34	22.40					
3	64QAM	1	0	22.44	22.42	22.49					
3	64QAM	1	8	22.51	22.56	22.55	23				
3	64QAM	1	14	22.52	22.46	22.45					
3	64QAM	8	0	21.42	21.39	21.36					
3	64QAM	8	4	21.42	21.45	21.38	22				
3	64QAM	8	7	21.44	21.46	21.44					
3	64QAM	15	0	21.46	21.54	21.49					
Channel				20407	20525	20643	Tune-up limit (dBm)				
Frequency (MHz)				824.7	836.5	848.3					
1.4	QPSK	1	0	24.24	24.17	24.15	25				
1.4	QPSK	1	3	24.12	24.05	24.11					
1.4	QPSK	1	5	24.25	24.15	24.15					
1.4	QPSK	3	0	24.21	24.19	24.20	24				
1.4	QPSK	3	1	24.00	23.90	23.94					
1.4	QPSK	3	3	24.29	24.22	24.22					
1.4	QPSK	6	0	23.40	23.30	23.40	24				
1.4	16QAM	1	0	23.71	23.71	23.67					
1.4	16QAM	1	3	23.59	23.58	23.58					
1.4	16QAM	1	5	23.58	23.52	23.53	24				
1.4	16QAM	3	0	23.71	23.64	23.65					
1.4	16QAM	3	1	23.43	23.38	23.40					
1.4	16QAM	3	3	23.54	23.52	23.54	23				
1.4	16QAM	6	0	22.46	22.43	22.42					
1.4	64QAM	1	0	22.51	22.43	22.50					
1.4	64QAM	1	3	22.47	22.42	22.47	23				
1.4	64QAM	1	5	22.46	22.43	22.44					
1.4	64QAM	3	0	22.35	22.29	22.28					
1.4	64QAM	3	1	22.50	22.41	22.49	22				
1.4	64QAM	3	3	22.44	22.35	22.36					
1.4	64QAM	6	0	21.48	21.47	21.45	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	17.68	17.64	17.70	18.7	
20	QPSK	1	49	17.38	17.52	17.48		
20	QPSK	1	99	17.51	17.59	17.57		
20	QPSK	50	0	17.45	17.48	17.48	18.7	
20	QPSK	50	24	17.26	17.24	17.29		
20	QPSK	50	50	17.27	17.30	17.29		
20	QPSK	100	0	17.37	17.39	17.44	18.7	
20	16QAM	1	0	17.26	17.36	17.35		
20	16QAM	1	49	17.47	17.54	17.54		
20	16QAM	1	99	17.25	17.33	17.27	18.7	
20	16QAM	50	0	17.40	17.52	17.43		
20	16QAM	50	24	17.45	17.51	17.55		
20	16QAM	50	50	17.47	17.51	17.52	18.7	
20	16QAM	100	0	17.36	17.45	17.45		
20	64QAM	1	0	17.50	17.45	17.50	18.7	
20	64QAM	1	49	17.21	17.24	17.25		
20	64QAM	1	99	17.41	17.48	17.48		
20	64QAM	50	0	17.42	17.46	17.46	18.7	
20	64QAM	50	24	17.43	17.39	17.44		
20	64QAM	50	50	17.18	17.25	17.27		
20	64QAM	100	0	17.44	17.51	17.47	Tune-up limit (dBm)	
Channel				20825 <th>21100</th> <th>21375</th>	21100	21375		
Frequency (MHz)				2507.5	2535	2562.5		
15	QPSK	1	0	17.50	17.56	17.68	18.7	
15	QPSK	1	37	17.49	17.47	17.40		
15	QPSK	1	74	17.52	17.55	17.47		
15	QPSK	36	0	17.45	17.48	17.44	18.7	
15	QPSK	36	20	17.26	17.24	17.19		
15	QPSK	36	39	17.29	17.19	17.23		
15	QPSK	75	0	17.43	17.38	17.42	18.7	
15	16QAM	1	0	17.30	17.31	17.25		
15	16QAM	1	37	17.44	17.51	17.44		
15	16QAM	1	74	17.18	17.23	17.18	18.7	
15	16QAM	36	0	17.39	17.33	17.40		
15	16QAM	36	20	17.52	17.54	17.54		
15	16QAM	36	39	17.46	17.52	17.46	18.7	
15	16QAM	75	0	17.40	17.37	17.38		
15	64QAM	1	0	17.41	17.49	17.50	18.7	
15	64QAM	1	37	17.22	17.18	17.20		
15	64QAM	1	74	17.46	17.38	17.42		
15	64QAM	36	0	17.36	17.42	17.46	18.7	
15	64QAM	36	20	17.41	17.36	17.37		
15	64QAM	36	39	17.24	17.26	17.26		
15	64QAM	75	0	17.45	17.43	17.37	Tune-up limit (dBm)	
Channel				20800	21100	21400		
Frequency (MHz)				2505	2535	2565		
10	QPSK	1	0	17.51	17.62	17.67	18.7	
10	QPSK	1	25	17.48	17.46	17.45		
10	QPSK	1	49	17.51	17.48	17.50		
10	QPSK	25	0	17.38	17.44	17.43	18.7	
10	QPSK	25	12	17.27	17.27	17.24		
10	QPSK	25	25	17.29	17.27	17.22		
10	QPSK	50	0	17.40	17.42	17.41	18.7	
10	16QAM	1	0	17.32	17.26	17.28		
10	16QAM	1	25	17.44	17.45	17.50		
10	16QAM	1	49	17.25	17.20	17.20	18.7	
10	16QAM	25	0	17.43	17.41	17.39		
10	16QAM	25	12	17.48	17.49	17.53		
10	16QAM	25	25	17.46	17.50	17.51	18.7	
10	16QAM	50	0	17.37	17.35	17.40		
10	64QAM	1	0	17.40	17.49	17.48	18.7	
10	64QAM	1	25	17.22	17.16	17.19		
10	64QAM	1	49	17.41	17.46	17.42		
10	64QAM	25	0	17.36	17.36	17.37	18.7	
10	64QAM	25	12	17.35	17.41	17.35		
10	64QAM	25	25	17.27	17.27	17.19		
10	64QAM	50	0	17.37	17.40	17.40	Tune-up limit (dBm)	
Channel				20775	21100	21425		
Frequency (MHz)				2502.5	2535	2567.5		
5	QPSK	1	0	17.55	17.63	17.69	18.7	
5	QPSK	1	12	17.39	17.44	17.48		
5	QPSK	1	24	17.51	17.50	17.57		
5	QPSK	12	0	17.41	17.48	17.46	18.7	
5	QPSK	12	7	17.25	17.20	17.25		
5	QPSK	12	13	17.20	17.21	17.26		
5	QPSK	25	0	17.36	17.39	17.36	18.7	
5	16QAM	1	0	17.30	17.30	17.25		
5	16QAM	1	12	17.51	17.45	17.49		
5	16QAM	1	24	17.18	17.18	17.24	18.7	
5	16QAM	12	0	17.39	17.37	17.40		
5	16QAM	12	7	17.49	17.48	17.54		
5	16QAM	12	13	17.43	17.44	17.49	18.7	
5	16QAM	25	0	17.43	17.42	17.42		
5	64QAM	1	0	17.40	17.47	17.40	18.7	
5	64QAM	1	12	17.21	17.19	17.25		
5	64QAM	1	24	17.39	17.43	17.41		
5	64QAM	12	0	17.46	17.46	17.36	18.7	
5	64QAM	12	7	17.39	17.40	17.43		
5	64QAM	12	13	17.18	17.26	17.21		
5	64QAM	25	0	17.37	17.37	17.46		



Band 12									
Ant 0									
RBW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch (dBm)	Power Middle Ch (dBm)	Power High Ch (dBm)	Tune-up limit (dBm)		
Channel				23060	23095	23130			
Frequency (MHz)				704	707.5	711			
10	QPSK	1	0	24.21	24.25	24.18	25		
10	QPSK	1	25	24.23	24.25	24.30			
10	QPSK	1	49	24.38	24.31	24.34			
10	QPSK	25	0	23.36	23.36	23.38	24		
10	QPSK	25	12	23.34	23.42	23.39			
10	QPSK	25	25	23.49	23.48	23.47			
10	QPSK	50	0	23.39	23.46	23.36	24		
10	16QAM	1	0	23.63	23.58	23.59			
10	16QAM	1	25	23.66	23.67	23.63			
10	16QAM	1	49	23.69	23.67	23.64	23		
10	16QAM	25	0	22.36	22.37	22.36			
10	16QAM	25	12	22.39	22.47	22.37			
10	16QAM	25	25	22.45	22.44	22.47	23		
10	16QAM	50	0	22.39	22.35	22.47			
10	64QAM	1	0	22.38	22.43	22.40	23		
10	64QAM	1	25	22.61	22.62	22.61			
10	64QAM	1	49	22.51	22.50	22.54			
10	64QAM	25	0	21.46	21.41	21.47	22		
10	64QAM	25	12	21.43	21.48	21.46			
10	64QAM	25	25	21.54	21.48	21.49			
10	64QAM	50	0	21.38	21.45	21.44			
Channel				23035	23095	23155	Tune-up limit (dBm)		
Frequency (MHz)				701.5	707.5	713.5			
5	QPSK	1	0	24.20	24.17	24.18	25		
5	QPSK	1	12	24.21	24.15	24.26			
5	QPSK	1	24	24.30	24.21	24.33			
5	QPSK	12	0	23.45	23.31	23.36	24		
5	QPSK	12	7	23.33	23.41	23.36			
5	QPSK	12	13	23.53	23.47	23.52			
5	QPSK	25	0	23.37	23.42	23.36	24		
5	16QAM	1	0	23.55	23.53	23.64			
5	16QAM	1	12	23.62	23.58	23.62			
5	16QAM	1	24	23.70	23.59	23.72	23		
5	16QAM	12	0	22.41	22.28	22.42			
5	16QAM	12	7	22.47	22.37	22.47			
5	16QAM	12	13	22.50	22.37	22.50	23		
5	16QAM	25	0	22.46	22.36	22.41			
5	64QAM	1	0	22.47	22.35	22.44	23		
5	64QAM	1	12	22.63	22.60	22.61			
5	64QAM	1	24	22.57	22.45	22.54			
5	64QAM	12	0	21.44	21.41	21.45	22		
5	64QAM	12	7	21.39	21.48	21.41			
5	64QAM	12	13	21.47	21.40	21.53			
5	64QAM	25	0	21.48	21.42	21.38			
Channel				23025	23095	23165	Tune-up limit (dBm)		
Frequency (MHz)				700.5	707.5	714.5			
3	QPSK	1	0	24.28	24.15	24.19	25		
3	QPSK	1	8	24.20	24.15	24.29			
3	QPSK	1	14	24.32	24.28	24.35			
3	QPSK	8	0	23.40	23.27	23.37	24		
3	QPSK	8	4	23.44	23.38	23.36			
3	QPSK	8	7	23.41	23.43	23.52			
3	QPSK	15	0	23.42	23.38	23.43	24		
3	16QAM	1	0	23.71	23.53	23.59			
3	16QAM	1	8	23.61	23.57	23.67			
3	16QAM	1	14	23.73	23.62	23.88	23		
3	16QAM	8	0	22.41	22.31	22.40			
3	16QAM	8	4	22.42	22.40	22.38			
3	16QAM	8	7	22.46	22.40	22.45	23		
3	16QAM	15	0	22.51	22.39	22.44			
3	64QAM	1	0	22.46	22.36	22.40	23		
3	64QAM	1	8	22.56	22.56	22.57			
3	64QAM	1	14	22.59	22.44	22.52			
3	64QAM	8	0	21.40	21.35	21.40	22		
3	64QAM	8	4	21.46	21.39	21.48			
3	64QAM	8	7	21.51	21.41	21.55			
3	64QAM	15	0	21.54	21.40	21.41			
Channel				23017	23095	23173	Tune-up limit (dBm)		
Frequency (MHz)				699.7	707.5	715.3			
1.4	QPSK	1	0	24.27	24.19	24.21	25		
1.4	QPSK	1	3	24.22	24.17	24.12			
1.4	QPSK	1	5	24.20	24.28	24.17			
1.4	QPSK	3	0	24.21	24.16	24.15	24		
1.4	QPSK	3	1	24.06	24.10	23.97			
1.4	QPSK	3	3	24.19	24.17	24.17			
1.4	QPSK	6	0	23.43	23.48	23.39	24		
1.4	16QAM	1	0	23.61	23.60	23.51			
1.4	16QAM	1	3	23.65	23.65	23.64			
1.4	16QAM	1	5	23.66	23.73	23.63	24		
1.4	16QAM	3	0	23.65	23.62	23.56			
1.4	16QAM	3	1	23.58	23.62	23.52			
1.4	16QAM	3	3	23.59	23.58	23.52	23		
1.4	16QAM	6	0	22.36	22.42	22.32			
1.4	64QAM	1	0	22.47	22.40	22.47			
1.4	64QAM	1	3	22.48	22.45	22.41	23		
1.4	64QAM	1	5	22.49	22.52	22.49			
1.4	64QAM	3	0	22.33	22.38	22.25			
1.4	64QAM	3	1	22.44	22.42	22.44	22		
1.4	64QAM	3	3	22.55	22.57	22.48			
1.4	64QAM	6	0	21.47	21.40	21.43			



Band 13							
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				23230			Tune-up limit (dBm)
Frequency (MHz)				782			
10	QPSK	1	0	24.51			25
10	QPSK	1	25	24.40			
10	QPSK	1	49	24.40			
10	QPSK	25	0	23.48			24
10	QPSK	25	12	23.56			
10	QPSK	25	25	23.57			
10	QPSK	50	0	23.56			24
10	16QAM	1	0	23.75			
10	16QAM	1	25	23.75			
10	16QAM	1	49	23.81			24
10	16QAM	25	0	22.56			
10	16QAM	25	12	22.53			
10	16QAM	25	25	22.57			23
10	16QAM	50	0	22.55			
10	64QAM	1	0	22.70			
10	64QAM	1	25	22.85			23
10	64QAM	1	49	22.71			
10	64QAM	25	0	21.54			
10	64QAM	25	12	21.55			22
10	64QAM	25	25	21.62			
10	64QAM	50	0	21.55			
Channel				23205	23230	23255	Tune-up limit (dBm)
Frequency (MHz)				779.5	782	784.5	
5	QPSK	1	0	24.50	24.48	24.41	25
5	QPSK	1	12	24.39	24.36	24.31	
5	QPSK	1	24	24.33	24.34	24.33	
5	QPSK	12	0	23.48	23.48	23.47	24
5	QPSK	12	7	23.51	23.52	23.51	
5	QPSK	12	13	23.51	23.48	23.53	
5	QPSK	25	0	23.91	23.54	23.49	24
5	16QAM	1	0	23.72	23.76	23.76	
5	16QAM	1	12	23.74	23.71	23.68	
5	16QAM	1	24	23.80	23.71	23.79	23
5	16QAM	12	0	22.50	22.56	22.56	
5	16QAM	12	7	22.51	22.49	22.45	
5	16QAM	12	13	22.52	22.50	22.55	23
5	16QAM	25	0	22.52	22.53	22.47	
5	64QAM	1	0	22.64	22.60	22.68	
5	64QAM	1	12	22.57	22.56	22.65	23
5	64QAM	1	24	22.62	22.62	22.69	
5	64QAM	12	0	21.51	21.51	21.46	
5	64QAM	12	7	21.46	21.52	21.52	22
5	64QAM	12	13	21.56	21.53	21.61	
5	64QAM	25	0	21.54	21.49	21.55	



Band 14							
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				23330			
Frequency (MHz)				793			
10	QPSK	1	0	24.37			25
10	QPSK	1	25	24.30			
10	QPSK	1	49	24.30			
10	QPSK	25	0	23.48			24
10	QPSK	25	12	23.51			
10	QPSK	25	25	23.54			
10	QPSK	50	0	23.43			24
10	16QAM	1	0	23.75			
10	16QAM	1	25	23.66			
10	16QAM	1	49	23.72			24
10	16QAM	25	0	22.44			
10	16QAM	25	12	22.41			
10	16QAM	25	25	22.48			23
10	16QAM	50	0	22.40			
10	64QAM	1	0	22.64			
10	64QAM	1	25	22.66			23
10	64QAM	1	49	22.58			
10	64QAM	25	0	21.50			
10	64QAM	25	12	21.44			22
10	64QAM	25	25	21.52			
10	64QAM	50	0	21.44			
Channel				23305	23330	23355	Tune-up limit (dBm)
Frequency (MHz)				790.5	793	795.5	
5	QPSK	1	0	24.33	24.27	24.32	25
5	QPSK	1	12	24.21	24.27	24.23	
5	QPSK	1	24	24.22	24.26	24.25	
5	QPSK	12	0	23.39	23.41	23.43	24
5	QPSK	12	7	23.48	23.48	23.42	
5	QPSK	12	13	23.47	23.50	23.50	
5	QPSK	25	0	23.41	23.36	23.34	24
5	16QAM	1	0	23.77	23.75	23.72	
5	16QAM	1	12	23.62	23.61	23.56	
5	16QAM	1	24	23.67	23.66	23.64	23
5	16QAM	12	0	22.38	22.41	22.34	
5	16QAM	12	7	22.38	22.36	22.33	
5	16QAM	12	13	22.43	22.45	22.47	23
5	16QAM	25	0	22.34	22.33	22.39	
5	64QAM	1	0	22.64	22.55	22.59	
5	64QAM	1	12	22.65	22.66	22.64	23
5	64QAM	1	24	22.53	22.52	22.53	
5	64QAM	12	0	21.40	21.40	21.44	
5	64QAM	12	7	21.35	21.42	21.37	22
5	64QAM	12	13	21.49	21.49	21.45	
5	64QAM	25	0	21.37	21.40	21.35	



Band 17							
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				23780	23790	23800	
Frequency (MHz)				709	710	711	
10	QPSK	1	0	24.25	24.25	24.25	25
10	QPSK	1	25	24.25	24.19	24.27	
10	QPSK	1	49	24.37	24.33	24.36	
10	QPSK	25	0	23.36	23.33	23.28	24
10	QPSK	25	12	23.49	23.43	23.42	
10	QPSK	25	25	23.47	23.42	23.44	
10	QPSK	50	0	23.43	23.35	23.41	24
10	16QAM	1	0	23.56	23.50	23.50	
10	16QAM	1	25	23.65	23.62	23.65	
10	16QAM	1	49	23.69	23.69	23.62	23
10	16QAM	25	0	22.37	22.31	22.32	
10	16QAM	25	12	22.48	22.48	22.39	
10	16QAM	25	25	22.46	22.43	22.46	23
10	16QAM	50	0	22.46	22.36	22.39	
10	64QAM	1	0	22.53	22.53	22.43	
10	64QAM	1	25	22.60	22.59	22.52	23
10	64QAM	1	49	22.57	22.55	22.52	
10	64QAM	25	0	21.33	21.27	21.29	
10	64QAM	25	12	21.58	21.48	21.50	22
10	64QAM	25	25	21.50	21.48	21.48	
10	64QAM	50	0	21.51	21.45	21.44	
Channel				23755	23790	23825	Tune-up limit (dBm)
Frequency (MHz)				708.5	710	713.5	
5	QPSK	1	0	24.23	24.20	24.25	25
5	QPSK	1	12	24.29	24.29	24.25	
5	QPSK	1	24	24.32	24.29	24.27	
5	QPSK	12	0	23.36	23.32	23.28	24
5	QPSK	12	7	23.40	23.42	23.47	
5	QPSK	12	13	23.46	23.39	23.46	
5	QPSK	25	0	23.33	23.37	23.35	24
5	16QAM	1	0	23.50	23.49	23.49	
5	16QAM	1	12	23.65	23.57	23.55	
5	16QAM	1	24	23.62	23.63	23.67	23
5	16QAM	12	0	22.28	22.28	22.27	
5	16QAM	12	7	22.47	22.46	22.47	
5	16QAM	12	13	22.42	22.46	22.46	23
5	16QAM	25	0	22.36	22.42	22.37	
5	64QAM	1	0	22.43	22.50	22.52	
5	64QAM	1	12	22.53	22.58	22.50	23
5	64QAM	1	24	22.54	22.54	22.49	
5	64QAM	12	0	21.27	21.28	21.31	
5	64QAM	12	7	21.52	21.51	21.56	22
5	64QAM	12	13	21.45	21.41	21.40	
5	64QAM	25	0	21.44	21.48	21.44	



Band 25											
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				26140	26340	26590					
Frequency (MHz)				1860	1880	1905					
20	QPSK	1	0	23.58	23.65	23.51	24.2				
20	QPSK	1	49	23.51	23.58	23.54					
20	QPSK	1	99	23.42	23.51	23.43					
20	QPSK	50	0	23.34	23.40	23.37	24				
20	QPSK	50	24	23.28	23.34	23.31					
20	QPSK	50	50	23.26	23.31	23.21					
20	QPSK	100	0	23.23	23.26	23.17	24				
20	16QAM	1	0	23.20	23.26	23.25					
20	16QAM	1	49	23.17	23.25	23.20					
20	16QAM	1	99	23.01	23.11	23.10	23				
20	16QAM	50	0	22.52	22.59	22.49					
20	16QAM	50	24	22.62	22.72	22.70					
20	16QAM	50	50	22.63	22.64	22.80	23				
20	16QAM	100	0	22.59	22.61	22.53					
20	64QAM	1	0	22.73	22.75	22.74					
20	64QAM	1	49	22.63	22.73	22.65	23				
20	64QAM	1	99	22.62	22.67	22.66					
20	64QAM	50	0	21.54	21.61	21.57					
20	64QAM	50	24	21.71	21.76	21.70	22				
20	64QAM	50	50	21.58	21.67	21.65					
20	64QAM	100	0	21.54	21.57	21.51					
Channel				26090	26340	26640	Tune-up limit (dBm)				
Frequency (MHz)				1857.5	1880	1907.5					
15	QPSK	1	0	23.61	23.60	23.53	24.2				
15	QPSK	1	37	23.49	23.51	23.53					
15	QPSK	1	74	23.49	23.45	23.47					
15	QPSK	36	0	23.35	23.31	23.37	24				
15	QPSK	36	20	23.29	23.34	23.34					
15	QPSK	36	39	23.27	23.23	23.21					
15	QPSK	75	0	23.16	23.24	23.24	24				
15	16QAM	1	0	23.21	23.21	23.25					
15	16QAM	1	37	23.21	23.21	23.19					
15	16QAM	1	74	23.03	23.08	23.04	23				
15	16QAM	36	0	22.51	22.54	22.57					
15	16QAM	36	20	22.69	22.65	22.67					
15	16QAM	36	39	22.57	22.56	22.62	23				
15	16QAM	75	0	22.61	22.53	22.61					
15	64QAM	1	0	22.69	22.71	22.74					
15	64QAM	1	37	22.65	22.69	22.70	23				
15	64QAM	1	74	22.59	22.65	22.59					
15	64QAM	36	0	21.56	21.53	21.57					
15	64QAM	36	20	21.71	21.74	21.66	22				
15	64QAM	36	39	21.65	21.57	21.65					
15	64QAM	75	0	21.56	21.51	21.56					
Channel				26065	21.57	26665	Tune-up limit (dBm)				
Frequency (MHz)				1852.5	1880	1912.5					
10	QPSK	1	0	23.57	23.58	23.61	24.2				
10	QPSK	1	25	23.51	23.56	23.53					
10	QPSK	1	49	23.41	23.42	23.49					
10	QPSK	25	0	23.39	23.40	23.33	24				
10	QPSK	25	12	23.33	23.24	23.32					
10	QPSK	25	25	23.26	23.26	23.26					
10	QPSK	50	0	23.26	23.20	23.25	24				
10	16QAM	1	0	23.26	23.21	23.25					
10	16QAM	1	25	23.22	23.19	23.18					
10	16QAM	1	49	23.02	23.01	23.08	23				
10	16QAM	25	0	22.49	22.53	22.54					
10	16QAM	25	12	22.67	22.62	22.66					
10	16QAM	25	25	22.61	22.63	22.62	23				
10	16QAM	50	0	22.57	22.55	22.53					
10	64QAM	1	0	22.72	22.74	22.71					
10	64QAM	1	25	22.63	22.69	22.65	23				
10	64QAM	1	49	22.62	22.57	22.58					
10	64QAM	25	0	21.56	21.54	21.59					
10	64QAM	25	12	21.74	21.75	21.74	22				
10	64QAM	25	25	21.58	21.64	21.60					
10	64QAM	50	0	21.56	21.47	21.47					
Channel				26065	21.57	26665	Tune-up limit (dBm)				
Frequency (MHz)				1852.5	1880	1912.5					
5	QPSK	1	0	23.56	23.59	23.60	24.2				
5	QPSK	1	8	23.54	23.48	23.46					
5	QPSK	1	24	23.42	23.42	23.46					
5	QPSK	12	0	23.35	23.38	23.39	24				
5	QPSK	12	7	23.33	23.28	23.31					
5	QPSK	12	13	23.28	23.25	23.26					
5	QPSK	25	0	23.16	23.25	23.24	24				
5	16QAM	1	0	23.25	23.16	23.20					
5	16QAM	1	12	23.16	23.18	23.20					
5	16QAM	1	24	23.01	23.05	23.03	23				
5	16QAM	12	0	22.54	22.58	22.58					
5	16QAM	12	7	22.65	22.69	22.65					
5	16QAM	12	13	22.64	22.60	22.61	23				
5	16QAM	25	0	22.52	22.51	22.53					
5	64QAM	1	0	22.74	22.75	22.74					
5	64QAM	1	12	22.70	22.66	22.73	23				
5	64QAM	1	24	22.60	22.59	22.59					
5	64QAM	12	0	21.55	21.56	21.53					
5	64QAM	12	7	21.73	21.74	21.72	22				
5	64QAM	12	13	21.64	21.64	21.61					
5	64QAM	25	0	21.47	21.50	21.51					
Channel				26065	26340	26675	Tune-up limit (dBm)				
Frequency (MHz)				1851.5	1880	1913.5					
3	QPSK	1	0	23.56	23.59	23.60	24.2				
3	QPSK	1	8	23.54	23.48	23.46					
3	QPSK	1	14	23.46	23.45	23.51					
3	QPSK	8	0	23.37	23.30	23.31	24				
3	QPSK	8	4	23.32	23.26	23.29					
3	QPSK	8	7	23.23	23.30	23.23					
3	QPSK	15	0	23.26	23.17	23.21	24				
3	16QAM	1	0	23.19	23.26	23.24					
3	16QAM	1	8	23.16	23.23	23.16					
3	16QAM	1	14	23.01	23.04	23.08	23				
3	16QAM	8	0	22.52	22.58	22.58					
3	16QAM	8	4	22.66	22.68	22.66					
3	16QAM	8	7	22.55	22.64	22.57	23				
3	16QAM	15	0	22.54	22.60	22.51					
3	64QAM	1	0	22.72	22.66	22.70					
3	64QAM	1	8	22.72	22.66	22.63	23				
3	64QAM	1	14	22.63	22.58	22.63					
3	64QAM	8	0	21.59	21.58	21.59					
3	64QAM	8	4	21.69	21.75	21.70	22				
3	64QAM	8	7	21.57	21.63	21.63					
3	64QAM	15	0	21.56	21.56	21.54					
Channel				26047	26340	26683	Tune-up limit (dBm)				
Frequency (MHz)				1850.7	1880	1914.3					
1.4	QPSK	1	0	22.90	22.93	22.87	24.2				
1.4	QPSK	1	3	22.91	22.92	22.86					
1.4	QPSK	1	5	22.85	22.87	22.82					
1.4	QPSK	3	0	22.82	22.84	22.74	24				
1.4	QPSK	3	1	22.85	22.91	22.83					
1.4	QPSK	3	3	22.69	22.79	22.79					
1.4	QPSK	6	0	23.04	23.05	23.04	24				
1.4	16QAM	1	0	23.26	23.26	23.27					
1.4	16QAM	1	3	23.30	23.30	23.27					
1.4	16QAM	1	5	23.10	23.20	23.10	24				
1.4	16QAM	3	0	23.17	23.25	23.22					
1.4	16QAM	3	1	23.14	23.17	23.14					
1.4	16QAM	3	3	23.19	23.21	23.14	23				
1.4	16QAM	3	5	23.36	23.36	23.36					
1.4	64QAM	1	0	22.37	22.44	22.43					
1.4	64QAM	1	3	22.49	22.51	22.51	23				
1.4	64QAM	1	5	23.26	23.43	23.42					
1.4	64QAM	3	0	22.37	22.38	22.31					
1.4	64QAM	3	1	22.34	22.38	23.25	23				
1.4	64QAM	3	3	22.39	22.31	22.31					
1.4	64QAM	5	0	21.24	21.33	21.39					



Band 26											
Ann 0											
SRV (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)				
Channel				26765	26865	26965					
Frequency (MHz)				821.5	831.5	841.5					
15	QPSK	1	0	24.46	24.48	24.40	25				
15	QPSK	1	37	24.28	24.28	24.38					
15	QPSK	1	74	24.33	24.34	24.27					
15	QPSK	36	0	23.51	23.53	23.50	24				
15	QPSK	36	20	23.40	23.46	23.46					
15	QPSK	36	39	23.44	23.45	23.46					
15	QPSK	75	0	23.45	23.50	23.39	24				
15	16QAM	1	0	23.70	23.74	23.66					
15	16QAM	1	37	23.64	23.58	23.62					
15	16QAM	1	74	23.79	23.85	23.69	23				
15	16QAM	36	0	22.48	22.56	22.47					
15	16QAM	36	20	22.61	22.63	22.53					
15	16QAM	36	39	22.62	22.64	22.57	23				
15	16QAM	75	0	22.52	22.57	22.51					
15	64QAM	1	0	22.67	22.68	22.60	23				
15	64QAM	1	37	22.69	22.62	22.77					
15	64QAM	1	74	22.62	22.62	22.64					
15	64QAM	36	0	21.62	21.68	21.58	22				
15	64QAM	36	20	21.59	21.53	21.49					
15	64QAM	36	39	21.57	21.53	21.67					
15	64QAM	75	0	21.52	21.55	21.56	25				
Channel				26740	26865	26990	Tune-up limit (dBm)				
Frequency (MHz)				819	831.5	844					
10	QPSK	1	0	24.44	24.47	24.36	25				
10	QPSK	1	25	24.25	24.30	24.19					
10	QPSK	1	49	24.40	24.42	24.25					
10	QPSK	25	0	23.41	23.41	23.58	24				
10	QPSK	25	12	23.40	23.37	23.31					
10	QPSK	25	25	23.44	23.48	23.54					
10	QPSK	50	0	23.45	23.41	23.41	24				
10	16QAM	1	0	23.69	23.75	23.77					
10	16QAM	1	25	23.68	23.60	23.67					
10	16QAM	1	49	23.86	23.87	23.81	23				
10	16QAM	25	0	22.58	22.48	22.50					
10	16QAM	25	12	22.52	22.64	22.59					
10	16QAM	25	25	22.70	22.55	22.87	23				
10	16QAM	50	0	22.59	22.48	22.58					
10	64QAM	1	0	22.71	22.66	22.74	23				
10	64QAM	1	25	22.73	22.78	22.67					
10	64QAM	1	49	22.53	22.59	22.53					
10	64QAM	25	0	21.70	21.54	21.58	22				
10	64QAM	25	12	21.62	21.52	21.49					
10	64QAM	25	25	21.61	21.58	21.58					
10	64QAM	50	0	21.57	21.51	21.57	25				
Channel				26715	26865	27015	Tune-up limit (dBm)				
Frequency (MHz)				816.5	831.5	846.5					
5	QPSK	1	0	24.39	24.48	24.37	25				
5	QPSK	1	12	24.29	24.22	24.22					
5	QPSK	1	24	24.31	24.37	24.30					
5	QPSK	12	0	23.44	23.57	23.60	24				
5	QPSK	12	7	23.35	23.33	23.40					
5	QPSK	12	13	23.45	23.42	23.53					
5	QPSK	25	0	23.54	23.41	23.50	24				
5	16QAM	1	0	23.73	23.67	23.75					
5	16QAM	1	12	23.74	23.70	23.68					
5	16QAM	1	24	23.83	23.76	23.89	23				
5	16QAM	12	0	22.58	22.45	22.53					
5	16QAM	12	7	22.53	22.64	22.51					
5	16QAM	12	13	22.53	22.71	22.85	23				
5	16QAM	25	0	22.57	22.55	22.49					
5	64QAM	1	0	22.58	22.66	22.57	23				
5	64QAM	1	12	22.66	22.70	22.78					
5	64QAM	1	24	22.68	22.53	22.72					
5	64QAM	12	0	21.69	21.70	21.70	22				
5	64QAM	12	7	21.62	21.50	21.62					
5	64QAM	12	13	21.56	21.65	21.59					
5	64QAM	25	0	21.48	21.52	21.45	25				
Channel				26705	26865	27025	Tune-up limit (dBm)				
Frequency (MHz)				815.5	831.5	847.5					
3	QPSK	1	0	24.47	24.38	24.40	25				
3	QPSK	1	8	24.31	24.31	24.20					
3	QPSK	1	14	24.38	24.42	24.42					
3	QPSK	8	0	23.53	23.47	23.49	24				
3	QPSK	8	4	23.41	23.40	23.40					
3	QPSK	8	7	23.40	23.36	23.45					
3	QPSK	15	0	23.46	23.35	23.41	24				
3	16QAM	1	0	23.73	23.73	23.60					
3	16QAM	1	8	23.72	23.72	23.68					
3	16QAM	1	14	23.74	23.88	23.85	23				
3	16QAM	8	0	22.56	22.42	22.47					
3	16QAM	8	4	22.64	22.56	22.55					
3	16QAM	8	7	22.56	22.69	22.54	23				
3	16QAM	15	0	22.43	22.53	22.49					
3	64QAM	1	0	22.64	22.67	22.71	23				
3	64QAM	1	8	22.78	22.70	22.59					
3	64QAM	1	14	22.57	22.52	22.56					
3	64QAM	8	0	21.68	21.59	21.56	22				
3	64QAM	8	4	21.56	21.62	21.59					
3	64QAM	8	7	21.50	21.49	21.53					
3	64QAM	15	0	21.51	21.42	21.43	25				
Channel				26697	26865	27033	Tune-up limit (dBm)				
Frequency (MHz)				814.7	831.5	848.3					
1.4	QPSK	1	0	24.31	24.36	24.35	25				
1.4	QPSK	1	3	24.22	24.12	24.24					
1.4	QPSK	1	5	24.27	24.24	24.24					
1.4	QPSK	3	0	24.30	24.20	24.40	24				
1.4	QPSK	3	1	24.26	24.16	24.22					
1.4	QPSK	3	3	24.37	24.43	24.47					
1.4	QPSK	6	0	23.44	23.37	23.35	24				
1.4	16QAM	1	0	23.75	23.78	23.66					
1.4	16QAM	1	3	23.68	23.71	23.70					
1.4	16QAM	1	5	23.63	23.67	23.67	24				
1.4	16QAM	3	0	23.62	23.68	23.69					
1.4	16QAM	3	1	23.63	23.65	23.71					
1.4	16QAM	3	3	23.59	23.52	23.84	23				
1.4	16QAM	6	0	22.41	22.32	22.48					
1.4	64QAM	1	0	22.33	22.31	22.32					
1.4	64QAM	1	3	22.61	22.70	22.55	23				
1.4	64QAM	1	5	22.49	22.53	22.39					
1.4	64QAM	3	0	22.29	22.28	22.23					
1.4	64QAM	3	1	22.36	22.35	22.32	23				
1.4	64QAM	3	3	22.33	22.40	22.37					
1.4	64QAM	6	0	21.59	21.50	21.57					



Band 30							
Ant 2							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				27710			
Frequency (MHz)				2310			
10	QPSK	1	0	19.04			19.7
10	QPSK	1	25	19.83			
10	QPSK	1	49	19.86			
10	QPSK	25	0	19.58			19.7
10	QPSK	25	12	19.86			
10	QPSK	25	25	19.69			
10	QPSK	50	0	19.66			19.7
10	16QAM	1	0	19.53			
10	16QAM	1	25	19.43			
10	16QAM	1	49	19.51			19.7
10	16QAM	25	0	19.68			
10	16QAM	25	12	19.72			
10	16QAM	25	25	19.65			19.7
10	16QAM	50	0	19.63			
10	64QAM	1	0	19.77			
10	64QAM	1	25	19.89			19.7
10	64QAM	1	49	19.83			
10	64QAM	25	0	19.60			
10	64QAM	25	12	19.70			19.7
10	64QAM	25	25	19.81			
10	64QAM	50	0	19.68			
Channel				27685	27710	27735	Tune-up limit (dBm)
Frequency (MHz)				2307.5	2310	2312.5	
5	QPSK	1	0	19.02	19.96	19.03	19.7
5	QPSK	1	12	19.85	19.88	19.73	
5	QPSK	1	24	19.83	19.78	19.77	
5	QPSK	12	0	19.54	19.53	19.54	19.7
5	QPSK	12	7	19.91	19.92	19.80	
5	QPSK	12	13	19.75	19.78	19.64	
5	QPSK	25	0	19.76	19.76	19.66	19.7
5	16QAM	1	0	19.49	19.47	19.54	
5	16QAM	1	12	19.42	19.41	19.49	
5	16QAM	1	24	19.57	19.55	19.58	19.7
5	16QAM	12	0	19.78	19.82	19.65	
5	16QAM	12	7	19.79	19.73	19.75	
5	16QAM	12	13	19.72	19.54	19.68	19.7
5	16QAM	25	0	19.60	19.58	19.53	
5	64QAM	1	0	19.85	19.82	19.75	
5	64QAM	1	12	19.93	19.95	19.95	19.7
5	64QAM	1	24	19.79	19.74	19.89	
5	64QAM	12	0	19.65	19.69	19.70	
5	64QAM	12	7	19.79	19.73	19.65	19.7
5	64QAM	12	13	19.89	19.84	19.95	
5	64QAM	25	0	19.68	19.69	19.84	



Band 66											
Art 2											
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up (dBm)				
Channel				132072	132322	132572					
Frequency (MHz)				1720	1745	1770					
20	QPSK	1	0	24.01	24.00	24.10	25				
20	QPSK	1	49	23.81	23.73	23.79					
20	QPSK	1	99	23.54	23.68	23.64					
20	QPSK	50	0	23.37	23.28	23.40	24				
20	QPSK	50	24	23.20	23.13	23.11					
20	QPSK	50	50	23.33	23.29	23.23					
20	QPSK	100	0	23.41	23.35	23.38	24				
20	16QAM	1	0	23.43	23.49	23.47					
20	16QAM	1	49	23.39	23.38	23.46					
20	16QAM	1	99	23.20	23.39	23.30	23				
20	16QAM	50	0	22.35	22.39	22.32					
20	16QAM	50	24	22.57	22.28	22.38					
20	16QAM	50	50	22.17	22.33	22.17	23				
20	16QAM	100	0	22.40	22.31	22.43					
20	64QAM	1	0	22.36	22.52	22.39					
20	64QAM	1	49	22.27	22.40	22.24	23				
20	64QAM	1	99	22.02	22.03	21.95					
20	64QAM	50	0	21.25	21.16	21.16					
20	64QAM	50	24	21.36	21.35	21.46	22				
20	64QAM	50	50	21.23	21.20	21.27					
20	64QAM	100	0	21.34	21.37	21.26					
Channel				132022	132322	132597	Tune-up (dBm)				
Frequency (MHz)				1717.5	1745	1772.5					
15	QPSK	1	0	24.03	24.02	24.08	25				
15	QPSK	1	37	23.89	23.83	23.89					
15	QPSK	1	74	23.62	23.64	23.54					
15	QPSK	36	0	23.47	23.50	23.45	24				
15	QPSK	36	20	23.06	23.04	23.08					
15	QPSK	36	39	23.21	23.26	23.23					
15	QPSK	75	0	23.39	23.36	23.34	24				
15	16QAM	1	0	23.52	23.54	23.51					
15	16QAM	1	37	23.42	23.51	23.47					
15	16QAM	1	74	23.35	23.23	23.38	23				
15	16QAM	36	0	22.36	22.22	22.33					
15	16QAM	36	20	22.59	22.46	22.31					
15	16QAM	36	39	22.15	22.16	22.23	23				
15	16QAM	75	0	22.48	22.52	22.47					
15	64QAM	1	0	22.34	22.44	22.35					
15	64QAM	1	37	22.18	22.19	22.18	23				
15	64QAM	1	74	21.92	21.88	21.93					
15	64QAM	36	0	21.25	21.22	21.25					
15	64QAM	36	20	21.52	21.50	21.53	22				
15	64QAM	36	39	21.31	21.22	21.35					
15	64QAM	75	0	21.28	21.17	21.26					
Channel				132022	132322	132622	Tune-up (dBm)				
Frequency (MHz)				1712.5	1745	1777.5					
10	QPSK	1	0	24.04	24.07	24.05	25				
10	QPSK	1	25	23.89	23.89	23.75					
10	QPSK	1	49	23.64	23.58	23.74					
10	QPSK	25	0	23.34	23.41	23.46	24				
10	QPSK	25	12	23.21	23.13	23.19					
10	QPSK	25	25	23.26	23.14	23.18					
10	QPSK	50	0	23.33	23.43	23.44	24				
10	16QAM	1	0	23.37	23.53	23.55					
10	16QAM	1	25	23.49	23.39	23.53					
10	16QAM	1	49	23.22	23.35	23.38	23				
10	16QAM	25	0	22.32	22.23	22.24					
10	16QAM	25	12	22.30	22.36	22.44					
10	16QAM	25	25	22.12	22.24	22.23	23				
10	16QAM	50	0	22.36	22.35	22.43					
10	64QAM	1	0	22.34	22.30	22.42					
10	64QAM	1	25	22.30	22.21	22.25	23				
10	64QAM	1	49	21.90	21.90	22.03					
10	64QAM	25	0	21.24	21.25	21.25					
10	64QAM	25	12	21.52	21.48	21.49	22				
10	64QAM	25	25	21.27	21.29	21.21					
10	64QAM	50	0	21.25	21.19	21.31					
Channel				131997	132322	132647	Tune-up (dBm)				
Frequency (MHz)				1712.5	1745	1777.5					
5	QPSK	1	0	24.04	24.07	24.05	25				
5	QPSK	1	12	23.75	23.62	23.79					
5	QPSK	1	24	23.62	23.62	23.74					
5	QPSK	12	0	23.35	23.40	23.31	24				
5	QPSK	12	7	23.04	23.15	23.08					
5	QPSK	12	13	23.24	23.26	23.31					
5	QPSK	25	0	23.47	23.33	23.36	24				
5	16QAM	1	0	23.51	23.45	23.52					
5	16QAM	1	12	23.50	23.48	23.55					
5	16QAM	1	24	23.31	23.23	23.29	23				
5	16QAM	12	0	22.39	22.39	22.30					
5	16QAM	12	7	22.29	22.43	22.34					
5	16QAM	12	13	22.09	22.27	22.25	23				
5	16QAM	25	0	22.45	22.49	22.36					
5	64QAM	1	0	22.48	22.48	22.33					
5	64QAM	1	12	22.17	22.24	22.32	23				
5	64QAM	1	24	21.92	22.02	21.95					
5	64QAM	12	0	21.14	21.06	21.25					
5	64QAM	12	7	21.38	21.58	21.49	22				
5	64QAM	12	13	21.22	21.18	21.27					
5	64QAM	25	0	21.32	21.29	21.29					
Channel				131987	132322	132657	Tune-up (dBm)				
Frequency (MHz)				1711.5	1745	1778.5					
3	QPSK	1	0	24.00	24.02	24.07	25				
3	QPSK	1	8	23.86	23.70	23.91					
3	QPSK	1	14	23.61	23.61	23.55					
3	QPSK	8	0	23.47	23.39	23.42	24				
3	QPSK	8	4	23.20	23.03	23.03					
3	QPSK	8	7	23.26	23.29	23.24					
3	QPSK	15	0	23.45	23.47	23.48	24				
3	16QAM	1	0	23.39	23.44	23.43					
3	16QAM	1	8	23.41	23.53	23.44					
3	16QAM	1	14	23.32	23.23	23.22	23				
3	16QAM	8	0	22.24	22.25	22.30					
3	16QAM	8	4	22.42	22.32	22.35					
3	16QAM	8	7	22.16	22.11	22.27	23				
3	16QAM	15	0	22.52	22.37	22.38					
3	64QAM	1	0	22.45	22.39	22.46					
3	64QAM	1	8	22.18	22.31	22.29	23				
3	64QAM	1	14	21.92	21.97	21.92					
3	64QAM	8	0	21.09	21.18	21.21					
3	64QAM	8	4	21.53	21.40	21.53	22				
3	64QAM	8	7	21.28	21.27	21.27					
3	64QAM	15	0	21.34	21.21	21.16					
Channel				131979	132322	132665	Tune-up (dBm)				
Frequency (MHz)				1711.7	1745	1778.3					
1.4	QPSK	1	0	23.81	23.93	23.90	25				
1.4	QPSK	1	3	23.86	23.85	23.91					
1.4	QPSK	1	5	23.61	23.70	23.71					
1.4	QPSK	3	0	23.74	23.72	23.75	24				
1.4	QPSK	3	1	23.66	23.65	23.62					
1.4	QPSK	3	3	23.72	23.62	23.75					
1.4	QPSK	6	0	23.21	23.19	23.22	24				
1.4	16QAM	1	0	23.41	23.41	23.44					
1.4	16QAM	1	3	23.42	23.45	23.38					
1.4	16QAM	1	5	23.32	23.32	23.35	23				
1.4	16QAM	3	0	23.45	23.51	23.44					
1.4	16QAM	3	1	23.44	23.37	23.45					
1.4	16QAM	3	3	23.30	23.28	23.28	23				
1.4	16QAM	6	0	22.20	22.14	22.22					
1.4	16QAM	6	3	22.24	22.36	22.24					
1.4	64QAM	1	0	22.36	22.36	22.38	23				
1.4	64QAM	3	0	22.39	22.31	22.42					
1.4	64QAM	3	1	22.27	22.24	22.19					
1.4	64QAM	3	3	22.20	22.07	22.00	23				
1.4	64QAM	6	0	21.14	21.14	21.14					
1.4	64QAM	6	3	21.14	21.14	21.14					



Band 71									
Ann 0									
RBW (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	686			
20	QPSK	1	0	24.49	24.43	24.37	25		
20	QPSK	1	49	24.26	24.31	24.23			
20	QPSK	1	99	24.30	24.39	24.42			
20	QPSK	50	0	23.52	23.56	23.57	24		
20	QPSK	50	24	23.62	23.55	23.43			
20	QPSK	100	0	23.57	23.46	23.52			
20	16QAM	1	0	23.75	23.73	23.73	24		
20	16QAM	1	49	23.55	23.61	23.69			
20	16QAM	1	99	23.74	23.60	23.76			
20	16QAM	50	0	22.45	22.50	22.51	23		
20	16QAM	50	24	22.57	22.50	22.53			
20	16QAM	50	50	22.44	22.46	22.52			
20	16QAM	100	0	22.43	22.44	22.47	22		
20	64QAM	1	0	22.55	22.66	22.57			
20	64QAM	1	49	22.55	22.58	22.50			
20	64QAM	1	99	22.58	22.53	22.57	23		
20	64QAM	50	0	21.51	21.43	21.39			
20	64QAM	50	24	21.48	21.44	21.53			
20	64QAM	50	50	21.47	21.43	21.46	22		
20	64QAM	100	0	21.43	21.49	21.52			
Channel				133197	133297	133397			
Frequency (MHz)				670.5	680.5	680.5			
15	QPSK	1	0	24.42	24.34	24.34	25		
15	QPSK	1	37	24.17	24.33	24.26			
15	QPSK	1	74	24.40	24.24	24.43			
15	QPSK	36	0	23.54	23.57	23.49	24		
15	QPSK	36	20	23.57	23.52	23.49			
15	QPSK	36	39	23.59	23.40	23.54			
15	QPSK	75	0	23.47	23.55	23.46	24		
15	16QAM	1	0	23.73	23.78	23.67			
15	16QAM	1	37	23.61	23.60	23.55			
15	16QAM	1	74	23.68	23.59	23.75	23		
15	16QAM	36	0	22.41	22.38	22.44			
15	16QAM	36	20	22.66	22.58	22.45			
15	16QAM	36	39	22.37	22.57	22.49	22		
15	16QAM	75	0	22.43	22.52	22.44			
15	64QAM	1	0	22.64	22.52	22.51			
15	64QAM	1	37	22.46	22.64	22.64	23		
15	64QAM	1	74	22.59	22.59	22.54			
15	64QAM	36	0	21.57	21.46	21.47			
15	64QAM	36	20	21.57	21.57	21.58	22		
15	64QAM	36	39	21.56	21.41	21.44			
15	64QAM	75	0	21.34	21.49	21.57			
Channel				133172	133272	133422	Tune-up limit (dBm)		
Frequency (MHz)				668	678	683			
10	QPSK	1	0	24.45	24.36	24.33	25		
10	QPSK	1	25	24.23	24.35	24.26			
10	QPSK	1	49	24.34	24.26	24.24			
10	QPSK	25	0	23.56	23.48	23.49	24		
10	QPSK	25	12	23.71	23.59	23.55			
10	QPSK	25	25	23.53	23.57	23.56			
10	QPSK	50	0	23.66	23.59	23.52	24		
10	16QAM	1	0	23.76	23.69	23.77			
10	16QAM	1	25	23.64	23.69	23.61			
10	16QAM	1	49	23.71	23.61	23.74	23		
10	16QAM	25	0	22.45	22.38	22.37			
10	16QAM	25	12	22.60	22.52	22.43			
10	16QAM	25	25	22.49	22.46	22.40	22		
10	16QAM	50	0	22.34	22.49	22.52			
10	64QAM	1	0	22.50	22.58	22.50			
10	64QAM	1	25	22.46	22.61	22.56	23		
10	64QAM	1	49	22.64	22.62	22.53			
10	64QAM	25	0	21.59	21.57	21.47			
10	64QAM	25	12	21.55	21.58	21.43	22		
10	64QAM	25	25	21.44	21.48	21.51			
10	64QAM	50	0	21.42	21.43	21.56			
Channel				133147	133247	133447	Tune-up limit (dBm)		
Frequency (MHz)				665.5	675.5	685.5			
5	QPSK	1	0	24.50	24.42	24.37	25		
5	QPSK	1	12	24.16	24.24	24.33			
5	QPSK	1	24	24.24	24.27	24.27			
5	QPSK	12	0	23.50	23.54	23.49	24		
5	QPSK	12	7	23.56	23.63	23.49			
5	QPSK	12	13	23.59	23.55	23.49			
5	QPSK	25	0	23.65	23.52	23.56	24		
5	16QAM	1	0	23.84	23.66	23.79			
5	16QAM	1	12	23.58	23.73	23.59			
5	16QAM	1	24	23.84	23.74	23.70	23		
5	16QAM	12	0	22.35	22.54	22.39			
5	16QAM	12	7	22.54	22.50	22.46			
5	16QAM	12	13	22.43	22.52	22.45	22		
5	16QAM	25	0	22.49	22.51	22.48			
5	64QAM	1	0	22.45	22.59	22.53			
5	64QAM	1	12	22.54	22.54	22.47	23		
5	64QAM	1	24	22.59	22.51	22.54			
5	64QAM	12	0	21.51	21.39	21.47			
5	64QAM	12	7	21.40	21.58	21.49	22		
5	64QAM	12	13	21.48	21.43	21.57			
5	64QAM	25	0	21.47	21.57	21.48			



Band 2							
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				18700	18900	19100	
Frequency (MHz)				1860	1880	1900	
20	QPSK	1	0	24.82	24.74	24.82	25
20	QPSK	1	49	24.72	24.73	24.81	
20	QPSK	1	99	24.78	24.81	24.84	
20	QPSK	50	0	23.81	23.74	23.75	24
20	QPSK	50	24	23.89	23.82	23.81	
20	QPSK	50	50	23.88	23.94	23.83	
20	QPSK	100	0	23.84	23.94	23.84	24
20	16QAM	1	0	23.98	23.93	23.91	
20	16QAM	1	49	23.86	23.96	23.85	
20	16QAM	1	99	23.93	23.91	23.80	23
20	16QAM	50	0	22.94	22.91	22.75	
20	16QAM	50	24	22.91	22.92	22.82	
20	16QAM	50	50	22.83	22.85	22.77	23
20	16QAM	100	0	22.80	22.97	22.90	
20	64QAM	1	0	22.89	22.80	22.83	
20	64QAM	1	49	22.76	22.71	22.62	23
20	64QAM	1	99	22.25	22.89	22.83	
20	64QAM	50	0	21.81	21.81	21.24	
20	64QAM	50	24	21.80	21.90	21.08	22
20	64QAM	50	50	21.27	21.81	21.73	
20	64QAM	100	0	21.97	21.96	21.34	
Channel				18675	18900	19125	Tune-up limit (dBm)
Frequency (MHz)				1857.5	1880	1902.5	
15	QPSK	1	0	24.74	24.83	24.76	25
15	QPSK	1	37	24.72	24.67	24.70	
15	QPSK	1	74	24.60	24.75	24.75	
15	QPSK	36	0	23.91	23.81	23.83	24
15	QPSK	36	20	23.84	23.81	23.75	
15	QPSK	36	39	23.94	23.80	23.72	
15	QPSK	75	0	23.80	23.86	23.82	24
15	16QAM	1	0	23.81	23.89	23.86	
15	16QAM	1	37	23.97	23.83	23.87	
15	16QAM	1	74	23.80	23.88	23.92	23
15	16QAM	36	0	22.91	22.89	22.84	
15	16QAM	36	20	22.93	22.98	22.85	
15	16QAM	36	39	22.78	22.83	22.75	23
15	16QAM	75	0	22.94	22.82	22.75	
15	64QAM	1	0	22.85	22.83	22.82	
15	64QAM	1	37	22.76	22.89	21.93	23
15	64QAM	1	74	22.35	22.96	22.85	
15	64QAM	36	0	21.92	21.77	21.24	
15	64QAM	36	20	21.85	21.76	21.56	22
15	64QAM	36	39	21.35	21.79	21.75	
15	64QAM	75	0	21.92	21.86	21.38	
Channel				18650	18900	19150	Tune-up limit (dBm)
Frequency (MHz)				1855	1880	1905	
10	QPSK	1	0	24.75	24.77	24.80	25
10	QPSK	1	25	24.71	24.78	24.80	
10	QPSK	1	49	24.78	24.65	24.64	
10	QPSK	25	0	23.76	23.86	23.74	24
10	QPSK	25	12	23.87	23.82	23.77	
10	QPSK	25	25	23.90	23.96	23.79	
10	QPSK	50	0	23.76	23.86	23.84	24
10	16QAM	1	0	23.98	23.99	23.78	
10	16QAM	1	25	23.80	23.95	23.89	
10	16QAM	1	49	23.80	23.92	23.77	23
10	16QAM	25	0	22.80	22.83	22.79	
10	16QAM	25	12	22.84	22.81	22.82	
10	16QAM	25	25	22.79	22.89	22.77	23
10	16QAM	50	0	22.88	22.81	22.88	
10	64QAM	1	0	22.99	22.81	22.87	
10	64QAM	1	25	22.76	22.92	21.96	23
10	64QAM	1	49	22.27	22.87	22.88	
10	64QAM	25	0	21.92	21.81	21.13	
10	64QAM	25	12	21.79	21.77	21.12	22
10	64QAM	25	25	21.29	21.96	21.85	
10	64QAM	50	0	21.98	21.96	21.51	
Channel				18625	18900	19175	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1880	1907.5	
5	QPSK	1	0	24.81	24.67	24.70	25
5	QPSK	1	12	24.80	24.75	24.73	
5	QPSK	1	24	24.71	24.78	24.69	
5	QPSK	12	0	23.91	23.75	23.71	24
5	QPSK	12	7	23.84	23.69	23.67	
5	QPSK	12	13	23.94	23.89	23.91	
5	QPSK	25	0	23.93	23.92	23.83	24
5	16QAM	1	0	23.82	23.97	23.88	
5	16QAM	1	12	23.81	23.96	23.92	
5	16QAM	1	24	23.84	23.94	23.83	23
5	16QAM	12	0	22.80	22.82	22.73	
5	16QAM	12	7	22.91	22.81	22.92	
5	16QAM	12	13	22.91	23.00	22.72	23
5	16QAM	25	0	22.80	22.97	22.96	
5	64QAM	1	0	22.95	22.85	22.91	
5	64QAM	1	12	22.82	22.76	22.71	23
5	64QAM	1	24	22.24	22.78	22.95	
5	64QAM	12	0	21.91	21.80	21.19	
5	64QAM	12	7	21.91	21.81	21.13	22
5	64QAM	12	13	21.38	21.94	21.71	
5	64QAM	25	0	21.83	21.98	21.49	
Channel				18615	18900	19185	Tune-up limit (dBm)
Frequency (MHz)				1851.5	1880	1908.5	
3	QPSK	1	0	24.77	24.82	24.82	25
3	QPSK	1	8	24.68	24.75	24.66	
3	QPSK	1	14	24.77	24.67	24.69	
3	QPSK	8	0	23.91	23.78	23.75	24
3	QPSK	8	4	23.87	23.83	23.86	
3	QPSK	8	7	23.83	23.92	23.90	
3	QPSK	15	0	23.86	23.90	23.71	24
3	16QAM	1	0	23.97	24.00	23.89	
3	16QAM	1	8	23.82	23.83	23.93	
3	16QAM	1	14	23.86	23.76	23.91	23
3	16QAM	8	0	22.78	22.74	22.81	
3	16QAM	8	4	22.91	22.80	22.90	
3	16QAM	8	7	22.81	22.96	22.72	23
3	16QAM	15	0	22.89	22.89	22.77	
3	64QAM	1	0	22.98	22.87	22.90	
3	64QAM	1	8	22.90	22.91	22.70	23
3	64QAM	1	14	22.17	22.91	22.91	
3	64QAM	8	0	21.79	21.77	21.22	
3	64QAM	8	4	21.84	21.92	21.11	22
3	64QAM	8	7	21.39	21.87	21.81	
3	64QAM	15	0	21.83	21.92	21.48	
Channel				18607	18900	19193	Tune-up limit (dBm)
Frequency (MHz)				1850.7	1880	1909.3	
1.4	QPSK	1	0	24.83	24.81	24.73	25
1.4	QPSK	1	5	24.68	24.69	24.50	
1.4	QPSK	1	5	24.70	24.70	24.54	
1.4	QPSK	3	0	24.82	24.73	24.71	24
1.4	QPSK	3	1	24.69	24.55	24.49	
1.4	QPSK	3	3	24.67	24.53	24.61	
1.4	QPSK	6	0	23.80	23.83	23.74	24
1.4	16QAM	1	0	23.83	23.73	23.77	
1.4	16QAM	1	3	23.83	23.81	23.85	
1.4	16QAM	1	5	23.81	23.92	23.88	24
1.4	16QAM	3	0	23.89	23.83	23.65	
1.4	16QAM	3	1	23.72	23.85	23.78	
1.4	16QAM	3	3	23.92	23.86	23.65	23
1.4	16QAM	6	0	22.91	22.84	22.72	
1.4	64QAM	1	0	22.73	22.77	22.89	
1.4	64QAM	1	3	22.77	22.80	21.97	23
1.4	64QAM	1	5	22.32	22.88	22.94	
1.4	64QAM	3	0	22.95	22.72	22.81	
1.4	64QAM	3	1	22.84	22.97	22.77	22
1.4	64QAM	3	3	22.21	22.78	22.90	
1.4	64QAM	6	0	21.80	21.89	21.38	



Band 4										
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				20550	20175	20300				
Frequency (MHz)				1720	1732.5	1745				
20	QPSK	1	0	21.69	21.61	21.60	21.7			
20	QPSK	1	49	21.49	21.55	21.54				
20	QPSK	1	99	21.56	21.48	21.54				
20	QPSK	50	0	21.50	21.43	21.46	21.7			
20	QPSK	50	24	21.51	21.56	21.52				
20	QPSK	50	50	21.39	21.59	20.56				
20	QPSK	100	0	21.58	20.97	21.29	21.7			
20	16QAM	1	0	21.59	21.29	21.60				
20	16QAM	1	49	21.52	21.16	21.40				
20	16QAM	1	99	21.57	20.96	21.42	21.7			
20	16QAM	50	0	21.50	21.48	21.21				
20	16QAM	50	24	21.56	21.37	21.27				
20	16QAM	50	50	21.56	21.57	21.56	21.7			
20	16QAM	100	0	21.57	21.57	21.57				
20	64QAM	1	0	21.42	21.49	21.51	21.7			
20	64QAM	1	49	21.30	21.31	21.33				
20	64QAM	1	99	21.33	21.30	21.27				
20	64QAM	50	0	21.46	21.41	21.43	21.7			
20	64QAM	50	24	21.50	21.45	21.42				
20	64QAM	50	50	21.48	21.43	21.46				
20	64QAM	100	0	21.49	21.43	21.46	Tune-up limit (dBm)			
Channel				20000	20175	20350				
Frequency (MHz)				1717.5	1732.5	1747.5				
15	QPSK	1	0	21.65	21.56	21.60	21.7			
15	QPSK	1	37	21.42	21.51	21.48				
15	QPSK	1	74	21.56	21.44	21.46				
15	QPSK	36	0	21.40	21.40	21.36	21.7			
15	QPSK	36	20	21.51	21.47	21.48				
15	QPSK	36	39	21.37	21.58	20.48				
15	QPSK	75	0	21.54	20.96	21.28	21.7			
15	16QAM	1	0	21.59	21.27	21.60				
15	16QAM	1	37	21.49	21.12	21.30				
15	16QAM	1	74	21.48	20.93	21.38	21.7			
15	16QAM	36	0	21.42	21.46	21.20				
15	16QAM	36	20	21.55	21.31	21.17				
15	16QAM	36	39	21.47	21.47	21.33	21.7			
15	16QAM	75	0	21.55	21.54	21.55				
15	64QAM	1	0	21.41	21.44	21.43	21.7			
15	64QAM	1	37	21.30	21.23	21.27				
15	64QAM	1	74	21.28	21.23	21.19				
15	64QAM	36	0	21.42	21.46	21.20	21.7			
15	64QAM	36	20	21.49	21.35	21.39				
15	64QAM	36	39	21.39	21.43	21.37				
15	64QAM	75	0	21.45	21.39	21.42	Tune-up limit (dBm)			
Channel				20000	20175	20350				
Frequency (MHz)				1715	1732.5	1750				
10	QPSK	1	0	21.67	21.61	21.56	21.7			
10	QPSK	1	25	21.45	21.48	21.53				
10	QPSK	1	49	21.47	21.42	21.46				
10	QPSK	25	0	21.46	21.33	21.40	21.7			
10	QPSK	25	12	21.41	21.51	21.52				
10	QPSK	25	25	21.38	21.52	20.47				
10	QPSK	50	0	21.56	20.96	21.28	21.7			
10	16QAM	1	0	21.56	21.24	21.52				
10	16QAM	1	25	21.45	21.11	21.33				
10	16QAM	1	49	21.47	20.94	21.39	21.7			
10	16QAM	25	0	21.49	21.43	21.21				
10	16QAM	25	12	21.56	21.29	21.26				
10	16QAM	25	25	21.53	21.55	21.54	21.7			
10	16QAM	50	0	21.48	21.56	21.50				
10	64QAM	1	0	21.41	21.48	21.43				
10	64QAM	1	25	21.29	21.28	21.28	21.7			
10	64QAM	1	49	21.25	21.25	21.18				
10	64QAM	25	0	21.40	21.39	21.33				
10	64QAM	25	12	21.49	21.40	21.38	21.7			
10	64QAM	25	25	21.38	21.33	21.40				
10	64QAM	50	0	21.44	21.35	21.39				
Channel				19975	20175	20375	Tune-up limit (dBm)			
Frequency (MHz)				1712.5	1732.5	1752.5				
5	QPSK	1	0	21.67	21.52	21.56	21.7			
5	QPSK	1	12	21.40	21.55	21.44				
5	QPSK	1	24	21.56	21.38	21.44				
5	QPSK	12	0	21.44	21.38	21.45	21.7			
5	QPSK	12	7	21.44	21.53	21.49				
5	QPSK	12	13	21.39	21.59	20.51				
5	QPSK	25	0	21.56	20.92	21.26	21.7			
5	16QAM	1	0	21.55	21.29	21.54				
5	16QAM	1	12	21.51	21.12	21.38				
5	16QAM	1	24	21.48	20.92	21.40	21.7			
5	16QAM	12	0	21.45	21.41	21.17				
5	16QAM	12	7	21.52	21.37	21.18				
5	16QAM	12	13	21.46	21.52	21.48	21.7			
5	16QAM	25	0	21.47	21.52	21.53				
5	64QAM	1	0	21.34	21.42	21.48	21.7			
5	64QAM	1	12	21.26	21.23	21.33				
5	64QAM	1	24	21.23	21.24	21.19				
5	64QAM	12	0	21.36	21.41	21.40	21.7			
5	64QAM	12	7	21.49	21.45	21.32				
5	64QAM	12	13	21.40	21.39	21.41				
5	64QAM	25	0	21.40	21.35	21.44	Tune-up limit (dBm)			
Channel				19965	20175	20385				
Frequency (MHz)				1711.5	1732.5	1753.5				
3	QPSK	1	0	21.67	21.54	21.57	21.7			
3	QPSK	1	6	21.40	21.53	21.50				
3	QPSK	1	14	21.51	21.44	21.45				
3	QPSK	8	0	21.48	21.40	21.39	21.7			
3	QPSK	8	4	21.50	21.51	21.51				
3	QPSK	8	7	21.39	21.49	20.47				
3	QPSK	15	0	21.56	20.94	21.20	21.7			
3	16QAM	1	0	21.55	21.24	21.60				
3	16QAM	1	6	21.51	21.10	21.40				
3	16QAM	1	14	21.49	20.90	21.34	21.7			
3	16QAM	8	0	21.44	21.40	21.16				
3	16QAM	8	4	21.46	21.35	21.23				
3	16QAM	8	7	21.55	21.56	21.52	21.7			
3	16QAM	15	0	21.55	21.54	21.50				
3	64QAM	1	0	21.38	21.39	21.45				
3	64QAM	1	6	21.29	21.26	21.31	21.7			
3	64QAM	1	14	21.26	21.20	21.18				
3	64QAM	8	0	21.46	21.38	21.39				
3	64QAM	8	4	21.47	21.38	21.33	21.7			
3	64QAM	8	7	21.41	21.41	21.41				
3	64QAM	15	0	21.47	21.41	21.42				
Channel				19967	20175	20393	Tune-up limit (dBm)			
Frequency (MHz)				1710.7	1732.5	1754.3				
1.4	QPSK	1	0	21.68	21.60	21.51	21.7			
1.4	QPSK	1	3	21.39	21.54	21.50				
1.4	QPSK	1	6	21.55	21.41	21.54				
1.4	QPSK	3	0	21.43	21.35	21.44	21.7			
1.4	QPSK	3	1	21.51	21.48	21.46				
1.4	QPSK	3	3	21.34	21.55	20.48				
1.4	QPSK	6	0	21.57	20.96	21.25	21.7			
1.4	16QAM	1	0	21.59	21.25	21.53				
1.4	16QAM	1	3	21.43	21.10	21.36				
1.4	16QAM	1	6	21.52	20.92	21.33	21.7			
1.4	16QAM	3	0	21.49	21.43	21.20				
1.4	16QAM	3	1	21.47	21.35	21.22				
1.4	16QAM	3	3	21.55	21.47	21.52	21.7			
1.4	16QAM	6	0	21.48	21.53	21.51				
1.4	16QAM	6	1	21.43	21.43	21.43				
1.4	64QAM	1	0	21.42	21.43	21.43	21.7			
1.4	64QAM	1	3	21.26	21.28	21.18				
1.4	64QAM	1	6	21.36	21.28	21.18				
1.4	64QAM	3	0	21.46	21.38	21.38	21.7			
1.4	64QAM	3	1	21.41	21.38	21.38				
1.4	64QAM	3	3	21.40	21.35	21.45				



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)				829	836.5	844					
10	QPSK	1	0	24.19	24.16	24.37	25				
10	QPSK	1	25	24.25	24.26	24.24					
10	QPSK	1	49	24.23	24.31	24.11					
10	QPSK	25	0	23.31	23.23	23.37	24				
10	QPSK	25	12	23.46	23.38	23.32					
10	QPSK	25	25	23.32	23.45	23.32					
10	QPSK	50	0	23.36	23.41	23.35	24				
10	16QAM	1	0	23.61	23.55	23.68					
10	16QAM	1	25	23.54	23.63	23.50					
10	16QAM	1	49	23.58	23.67	23.56	23				
10	16QAM	25	0	22.34	22.41	22.32					
10	16QAM	25	12	22.42	22.19	22.27					
10	16QAM	25	25	22.26	22.43	22.45	22				
10	16QAM	50	0	22.35	22.47	22.33					
10	64QAM	1	0	22.55	22.60	22.39					
10	64QAM	1	25	22.51	22.51	22.89	23				
10	64QAM	1	49	22.52	22.48	21.81					
10	64QAM	25	0	21.31	21.41	21.29					
10	64QAM	25	12	21.49	21.32	21.29	22				
10	64QAM	25	25	21.40	21.33	21.20					
10	64QAM	50	0	21.54	21.31	21.14					
Channel				20425	20525	20625	Tune-up limit (dBm)				
Frequency (MHz)				826.5	836.5	846.5					
5	QPSK	1	0	24.20	24.16	24.27	25				
5	QPSK	1	12	24.15	24.16	24.29					
5	QPSK	1	24	24.10	24.26	24.22					
5	QPSK	12	0	23.24	23.33	23.24	24				
5	QPSK	12	7	23.47	23.26	23.32					
5	QPSK	12	13	23.34	23.28	23.38					
5	QPSK	25	0	23.35	23.29	23.34	24				
5	16QAM	1	0	23.75	23.57	23.71					
5	16QAM	1	12	23.66	23.60	23.55					
5	16QAM	1	24	23.61	23.54	23.50	23				
5	16QAM	12	0	22.37	22.31	22.29					
5	16QAM	12	7	22.47	22.27	22.22					
5	16QAM	12	13	22.40	22.26	22.48	22				
5	16QAM	25	0	22.46	22.28	22.32					
5	64QAM	1	0	22.47	22.46	22.54					
5	64QAM	1	12	22.51	22.48	22.88	23				
5	64QAM	1	24	22.51	22.56	21.75					
5	64QAM	12	0	21.25	21.32	21.27					
5	64QAM	12	7	21.47	21.42	21.43	22				
5	64QAM	12	13	21.33	21.31	21.03					
5	64QAM	25	0	21.36	21.36	21.22					
Channel				20415	20525	20635	Tune-up limit (dBm)				
Frequency (MHz)				825.5	836.5	847.5					
3	QPSK	1	0	24.19	24.27	24.36	25				
3	QPSK	1	8	24.16	24.24	24.14					
3	QPSK	1	14	24.14	24.33	24.23					
3	QPSK	8	0	23.30	23.26	23.38	24				
3	QPSK	8	4	23.30	23.23	23.28					
3	QPSK	8	7	23.31	23.38	23.31					
3	QPSK	15	0	23.29	23.38	23.35	24				
3	16QAM	1	0	23.75	23.65	23.70					
3	16QAM	1	8	23.52	23.51	23.67					
3	16QAM	1	14	23.66	23.58	23.51	23				
3	16QAM	8	0	22.33	22.27	22.25					
3	16QAM	8	4	22.31	22.38	22.38					
3	16QAM	8	7	22.40	22.40	22.36	22				
3	16QAM	15	0	22.43	22.29	22.25					
3	64QAM	1	0	22.42	22.49	22.47					
3	64QAM	1	8	22.60	22.53	22.89	23				
3	64QAM	1	14	22.59	22.60	21.73					
3	64QAM	8	0	21.26	21.27	21.37					
3	64QAM	8	4	21.47	21.43	21.39	22				
3	64QAM	8	7	21.33	21.41	21.05					
3	64QAM	15	0	21.52	21.36	21.25					
Channel				20407	20525	20643	Tune-up limit (dBm)				
Frequency (MHz)				824.7	836.5	848.3					
1.4	QPSK	1	0	24.19	24.36	24.19	25				
1.4	QPSK	1	3	24.15	24.10	24.31					
1.4	QPSK	1	5	24.17	24.25	24.23					
1.4	QPSK	3	0	24.14	24.22	24.07	24				
1.4	QPSK	3	1	24.01	24.14	24.19					
1.4	QPSK	3	3	24.08	24.19	24.14					
1.4	QPSK	6	0	23.38	23.31	23.34	24				
1.4	16QAM	1	0	23.75	23.60	23.57					
1.4	16QAM	1	3	23.55	23.53	23.38					
1.4	16QAM	1	5	23.41	23.39	23.44	24				
1.4	16QAM	3	0	23.54	23.53	23.51					
1.4	16QAM	3	1	23.47	23.47	23.37					
1.4	16QAM	3	3	23.34	23.37	23.41	23				
1.4	16QAM	6	0	22.33	22.28	22.25					
1.4	64QAM	1	0	22.43	22.47	22.43					
1.4	64QAM	1	3	22.49	22.56	22.54	23				
1.4	64QAM	1	5	22.46	22.53	21.66					
1.4	64QAM	3	0	22.47	22.30	22.25					
1.4	64QAM	3	1	22.50	22.57	22.47	22				
1.4	64QAM	3	3	22.31	22.35	21.53					
1.4	64QAM	6	0	21.37	21.31	21.08					



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				20850	21100	21350					
Frequency (MHz)				2510	2535	2560					
20	QPSK	1	0	23.72	23.75	23.38	24.7				
20	QPSK	1	49	23.74	23.78	23.37					
20	QPSK	1	99	24.11	24.01	23.94					
20	QPSK	50	0	23.75	23.71	22.99	24				
20	QPSK	50	24	23.97	23.74	22.84					
20	QPSK	50	50	23.76	23.70	23.51					
20	QPSK	100	0	23.85	23.82	22.76	24				
20	16QAM	1	0	23.80	23.96	22.88					
20	16QAM	1	49	24.04	24.02	22.51					
20	16QAM	1	99	23.97	23.84	23.65	23				
20	16QAM	50	0	22.82	22.67	22.01					
20	16QAM	50	24	22.68	22.91	22.16					
20	16QAM	50	50	22.75	22.79	22.44	23				
20	16QAM	100	0	22.66	22.91	21.79					
20	64QAM	1	0	22.74	22.35	21.86					
20	64QAM	1	49	22.92	22.78	21.34	23				
20	64QAM	1	99	22.58	22.69	21.59					
20	64QAM	50	0	21.73	21.83	20.40					
20	64QAM	50	24	21.68	21.83	20.49	22				
20	64QAM	50	50	21.45	21.83	20.42					
20	64QAM	100	0	21.67	21.73	20.86					
Channel				20825	21100	21375	Tune-up limit (dBm)				
Frequency (MHz)				2507.5	2535	2562.5					
15	QPSK	1	0	23.75	23.67	23.31	24.7				
15	QPSK	1	37	23.70	23.77	23.35					
15	QPSK	1	74	23.90	23.98	23.80					
15	QPSK	36	0	23.82	23.71	22.95	24				
15	QPSK	36	20	23.83	23.80	23.03					
15	QPSK	36	39	23.59	23.72	23.53					
15	QPSK	75	0	23.75	23.70	22.83	24				
15	16QAM	1	0	23.67	23.95	22.87					
15	16QAM	1	37	23.84	23.91	22.39					
15	16QAM	1	74	23.86	23.93	23.53	24				
15	16QAM	36	0	22.77	22.82	21.99					
15	16QAM	36	20	22.85	22.73	22.09					
15	16QAM	36	39	22.70	22.87	22.46	23				
15	16QAM	75	0	22.83	22.72	21.74					
15	64QAM	1	0	22.83	22.39	21.81					
15	64QAM	1	37	22.82	22.77	21.41	23				
15	64QAM	1	74	22.52	22.62	21.47					
15	64QAM	36	0	21.63	21.77	20.36					
15	64QAM	36	20	21.71	21.80	20.41	23				
15	64QAM	36	39	21.47	21.92	20.41					
15	64QAM	75	0	21.58	21.71	20.80					
Channel				20800	21100	21400	Tune-up limit (dBm)				
Frequency (MHz)				2505	2535	2565					
10	QPSK	1	0	23.71	23.77	23.37	24.7				
10	QPSK	1	25	23.83	23.72	23.32					
10	QPSK	1	49	23.97	23.91	23.80					
10	QPSK	25	0	23.66	23.75	23.03	24				
10	QPSK	25	12	23.81	23.76	22.83					
10	QPSK	25	25	23.68	23.66	23.37					
10	QPSK	50	0	23.69	23.72	22.83	24				
10	16QAM	1	0	23.52	23.87	22.87					
10	16QAM	1	25	23.88	23.83	22.41					
10	16QAM	1	49	23.94	23.86	23.55	23				
10	16QAM	25	0	22.76	22.76	22.02					
10	16QAM	25	12	22.72	22.90	22.06					
10	16QAM	25	25	22.90	22.81	22.51	23				
10	16QAM	50	0	22.76	22.78	21.89					
10	64QAM	1	0	22.84	22.34	21.81					
10	64QAM	1	25	22.87	22.97	21.37	23				
10	64QAM	1	49	22.42	22.66	21.61					
10	64QAM	25	0	21.82	21.82	20.46					
10	64QAM	25	12	21.70	21.74	20.52	22				
10	64QAM	25	25	21.47	21.89	20.42					
10	64QAM	50	0	21.74	21.78	20.81					
Channel				20775	21100	21425	Tune-up limit (dBm)				
Frequency (MHz)				2502.5	2535	2567.5					
5	QPSK	1	0	23.67	23.69	23.33	24.7				
5	QPSK	1	12	23.69	23.73	23.30					
5	QPSK	1	24	23.98	23.88	23.92					
5	QPSK	12	0	23.62	23.73	23.02	24				
5	QPSK	12	7	23.97	23.77	22.99					
5	QPSK	12	13	23.74	23.82	23.49					
5	QPSK	25	0	23.72	23.74	22.72	24				
5	16QAM	1	0	23.79	23.88	22.87					
5	16QAM	1	12	24.00	23.85	22.40					
5	16QAM	1	24	23.99	23.89	23.87	23				
5	16QAM	12	0	22.62	22.80	22.05					
5	16QAM	12	7	22.73	22.85	22.21					
5	16QAM	12	13	22.66	22.87	22.45	23				
5	16QAM	25	0	22.69	22.87	21.80					
5	64QAM	1	0	22.81	22.48	21.74					
5	64QAM	1	12	22.88	22.95	21.31	23				
5	64QAM	1	24	22.53	22.69	21.56					
5	64QAM	12	0	21.77	21.73	20.43					
5	64QAM	12	7	21.89	21.75	20.45	22				
5	64QAM	12	13	21.49	21.84	20.43					
5	64QAM	25	0	21.64	21.77	20.83					



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				23060	23095	23130					
Frequency (MHz)				704	707.5	711					
10	QPSK	1	0	24.35	24.29	24.28	25				
10	QPSK	1	25	24.33	24.36	24.21					
10	QPSK	1	49	24.40	24.39	24.27					
10	QPSK	25	0	23.29	23.47	23.40	24				
10	QPSK	25	12	23.40	23.50	23.45					
10	QPSK	25	25	23.41	23.39	23.47					
10	QPSK	50	0	23.47	23.55	23.44	24				
10	16QAM	1	0	23.59	23.61	23.54					
10	16QAM	1	25	23.64	23.59	23.69					
10	16QAM	25	0	22.35	22.32	22.49	23				
10	16QAM	25	12	22.57	22.35	22.31					
10	16QAM	25	25	22.42	22.56	22.41					
10	16QAM	50	0	22.49	22.36	22.33	23				
10	64QAM	1	0	22.56	22.39	22.40					
10	64QAM	1	25	22.57	22.70	22.64					
10	64QAM	1	49	22.66	22.65	22.48	22				
10	64QAM	25	0	21.43	21.50	21.33					
10	64QAM	25	12	21.61	21.43	21.47					
10	64QAM	25	25	21.50	21.41	21.47					
10	64QAM	50	0	21.44	21.49	21.46					
Channel				23035	23095	23155	Tune-up limit (dBm)				
Frequency (MHz)				701.5	707.5	713.5					
5	QPSK	1	0	24.39	24.31	24.18	25				
5	QPSK	1	12	24.29	24.25	24.27					
5	QPSK	1	24	24.25	24.27	24.37					
5	QPSK	12	0	23.31	23.37	23.29	24				
5	QPSK	12	7	23.42	23.52	23.49					
5	QPSK	12	13	23.35	23.31	23.30					
5	QPSK	25	0	23.48	23.41	23.36	24				
5	16QAM	1	0	23.59	23.60	23.63					
5	16QAM	1	12	23.67	23.75	23.58					
5	16QAM	1	24	23.79	23.62	23.63	23				
5	16QAM	12	0	22.43	22.39	22.37					
5	16QAM	12	7	22.58	22.46	22.33					
5	16QAM	12	13	22.40	22.38	22.41	23				
5	16QAM	25	0	22.44	22.32	22.40					
5	64QAM	1	0	22.57	22.48	22.44					
5	64QAM	1	12	22.61	22.63	22.60	23				
5	64QAM	1	24	22.56	22.46	22.60					
5	64QAM	12	0	21.37	21.36	21.37					
5	64QAM	12	7	21.47	21.48	21.40	22				
5	64QAM	12	13	21.54	21.46	21.52					
5	64QAM	25	0	21.68	21.40	21.35					
Channel				23025	23095	23165	Tune-up limit (dBm)				
Frequency (MHz)				700.5	707.5	714.5					
3	QPSK	1	0	24.38	24.29	24.17	25				
3	QPSK	1	8	24.26	24.39	24.17					
3	QPSK	1	14	24.35	24.32	24.22					
3	QPSK	8	0	23.29	23.49	23.32	24				
3	QPSK	8	4	23.59	23.50	23.48					
3	QPSK	8	7	23.41	23.44	23.39					
3	QPSK	15	0	23.39	23.42	23.44	24				
3	16QAM	1	0	23.59	23.71	23.60					
3	16QAM	1	8	23.68	23.73	23.67					
3	16QAM	1	14	23.80	23.77	23.69	23				
3	16QAM	8	0	22.47	22.42	22.40					
3	16QAM	8	4	22.56	22.39	22.41					
3	16QAM	8	7	22.39	22.52	22.46	23				
3	16QAM	15	0	22.54	22.32	22.31					
3	64QAM	1	0	22.55	22.50	22.36					
3	64QAM	1	8	22.54	22.68	22.54	23				
3	64QAM	1	14	22.63	22.61	22.57					
3	64QAM	8	0	21.39	21.40	21.35					
3	64QAM	8	4	21.57	21.37	21.45	22				
3	64QAM	8	7	21.51	21.52	21.48					
3	64QAM	15	0	21.47	21.39	21.36					
Channel				23017	23095	23173	Tune-up limit (dBm)				
Frequency (MHz)				699.7	707.5	715.3					
1.4	QPSK	1	0	24.30	24.30	24.22	25				
1.4	QPSK	1	3	24.26	24.28	24.22					
1.4	QPSK	1	5	24.31	24.33	24.22					
1.4	QPSK	3	0	23.35	23.43	23.34	24				
1.4	QPSK	3	1	23.60	23.39	23.53					
1.4	QPSK	3	3	23.40	23.44	23.33					
1.4	QPSK	6	0	23.45	23.43	23.36	24				
1.4	16QAM	1	0	23.65	23.67	23.52					
1.4	16QAM	1	3	23.71	23.61	23.56					
1.4	16QAM	1	5	23.75	23.60	23.60	24				
1.4	16QAM	3	0	22.40	22.37	22.33					
1.4	16QAM	3	1	22.41	22.32	22.50					
1.4	16QAM	3	3	22.40	22.41	22.48	23				
1.4	16QAM	6	0	22.37	22.50	22.50					
1.4	64QAM	1	0	22.48	22.44	22.55					
1.4	64QAM	1	3	22.50	22.67	22.48	23				
1.4	64QAM	1	5	22.54	22.47	22.58					
1.4	64QAM	3	0	21.53	21.50	21.53					
1.4	64QAM	3	1	21.60	21.53	21.41	22				
1.4	64QAM	3	3	21.40	21.56	21.51					
1.4	64QAM	6	0	21.48	21.42	21.51					



Band 13							
Art 1							
BW (kHz)	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	24.33			25
10	QPSK	1	25	24.28			
10	QPSK	1	49	24.47			
10	QPSK	25	0	23.36			24
10	QPSK	25	12	23.53			
10	QPSK	25	25	23.52			
10	QPSK	50	0	23.45			24
10	16QAM	1	0	23.77			
10	16QAM	1	25	23.79			
10	16QAM	1	49	23.78			24
10	16QAM	25	0	22.57			
10	16QAM	25	12	22.53			
10	16QAM	25	25	22.52			23
10	16QAM	50	0	22.59			
10	64QAM	1	0	22.55			
10	64QAM	1	25	22.87			23
10	64QAM	1	49	22.71			
10	64QAM	25	0	21.58			
10	64QAM	25	12	21.53			22
10	64QAM	25	25	21.50			
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	24.36	24.44	24.30	25
5	QPSK	1	12	24.32	24.45	24.35	
5	QPSK	1	24	24.44	24.41	24.29	
5	QPSK	12	0	23.43	23.35	23.50	24
5	QPSK	12	7	23.45	23.53	23.56	
5	QPSK	12	13	23.49	23.50	23.54	
5	QPSK	25	0	23.61	23.61	23.56	24
5	16QAM	1	0	23.63	23.64	23.66	
5	16QAM	1	12	23.64	23.67	23.74	
5	16QAM	1	24	23.68	23.78	23.65	24
5	16QAM	12	0	22.39	22.41	22.58	
5	16QAM	12	7	22.59	22.47	22.50	
5	16QAM	12	13	22.64	22.46	22.52	23
5	16QAM	25	0	22.58	22.51	22.52	
5	64QAM	1	0	22.74	22.68	22.67	
5	64QAM	1	12	22.76	22.68	22.75	23
5	64QAM	1	24	22.70	22.69	22.72	
5	64QAM	12	0	21.42	21.59	21.50	
5	64QAM	12	7	21.56	21.81	21.49	22
5	64QAM	12	13	21.49	21.49	21.56	
5	64QAM	25	0	21.50	21.43	21.59	



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				2330			
Frequency (MHz)				793			
10	QPSK	1	0	24.49			25
10	QPSK	1	25	24.35			
10	QPSK	1	49	24.36			
10	QPSK	25	0	23.41			24
10	QPSK	25	12	23.42			
10	QPSK	25	25	23.57			
10	QPSK	50	0	23.34			24
10	16QAM	1	0	23.80			
10	16QAM	1	25	23.69			
10	16QAM	1	49	23.70			24
10	16QAM	25	0	22.40			
10	16QAM	25	12	22.35			
10	16QAM	25	25	22.38			23
10	16QAM	50	0	22.35			
10	64QAM	1	0	22.69			
10	64QAM	1	25	22.68			23
10	64QAM	1	49	22.54			
10	64QAM	25	0	21.50			
10	64QAM	25	12	21.41			22
10	64QAM	25	25	21.54			
10	64QAM	50	0	21.43			
Channel				2305	2330	2355	Tune-up limit (dBm)
Frequency (MHz)				790.5	793	795.5	
5	QPSK	1	0	24.41	24.44	24.33	25
5	QPSK	1	12	24.38	24.37	24.29	
5	QPSK	1	24	24.33	24.23	24.27	
5	QPSK	12	0	23.38	23.43	23.45	24
5	QPSK	12	7	23.35	23.38	23.36	
5	QPSK	12	13	23.51	23.48	23.50	
5	QPSK	25	0	23.45	23.42	23.41	24
5	16QAM	1	0	23.72	23.65	23.75	
5	16QAM	1	12	23.85	23.72	23.68	
5	16QAM	1	24	23.59	23.73	23.68	23
5	16QAM	12	0	22.38	22.38	22.41	
5	16QAM	12	7	22.53	22.54	22.48	
5	16QAM	12	13	22.40	22.38	22.48	23
5	16QAM	25	0	22.38	22.42	22.38	
5	64QAM	1	0	22.60	22.58	22.58	
5	64QAM	1	12	22.61	22.59	22.73	23
5	64QAM	1	24	22.49	22.62	22.59	
5	64QAM	12	0	21.43	21.47	21.55	
5	64QAM	12	7	21.41	21.58	21.58	22
5	64QAM	12	13	21.53	21.52	21.51	
5	64QAM	25	0	21.47	21.49	21.45	



Band 17							
Art.1							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Turn-up limit (dBm)
Channel				23780	23790	23800	
Frequency (MHz)				709	710	711	
10	QPSK	1	0	24.26	24.06	24.29	25
10	QPSK	1	25	24.19	24.30	24.21	
10	QPSK	1	49	24.36	24.39	24.23	
10	QPSK	25	0	23.36	23.31	23.34	24
10	QPSK	25	12	23.53	23.34	23.46	
10	QPSK	25	25	23.49	23.51	23.49	
10	QPSK	50	0	23.39	23.42	23.32	24
10	16QAM	1	0	23.65	23.68	23.67	
10	16QAM	1	25	23.72	23.71	23.69	
10	16QAM	1	49	23.63	23.62	23.79	23
10	16QAM	25	0	22.38	22.38	22.37	
10	16QAM	25	12	22.35	22.40	22.40	
10	16QAM	25	25	22.51	22.50	22.42	23
10	16QAM	50	0	22.55	22.35	22.32	
10	64QAM	1	0	22.45	22.55	22.47	
10	64QAM	1	25	22.64	22.50	22.65	23
10	64QAM	1	49	22.62	22.63	22.67	
10	64QAM	25	0	21.43	21.43	21.40	
10	64QAM	25	12	21.43	21.35	21.38	22
10	64QAM	25	25	21.51	21.51	21.49	
10	64QAM	50	0	21.58	21.53	21.51	
Channel				23755	23790	23825	Turn-up limit (dBm)
Frequency (MHz)				708.5	710	713.5	
5	QPSK	1	0	24.34	24.23	24.31	25
5	QPSK	1	12	24.31	24.26	24.20	
5	QPSK	1	24	24.26	24.39	24.30	
5	QPSK	12	0	23.41	23.43	23.28	24
5	QPSK	12	7	23.38	23.48	23.38	
5	QPSK	12	13	23.50	23.53	23.51	
5	QPSK	25	0	23.52	23.28	23.45	24
5	16QAM	1	0	23.62	23.69	23.66	
5	16QAM	1	12	23.62	23.68	23.71	
5	16QAM	1	24	23.76	23.63	23.77	23
5	16QAM	12	0	22.42	22.24	22.39	
5	16QAM	12	7	22.52	22.41	22.39	
5	16QAM	12	13	22.41	22.41	22.49	23
5	16QAM	25	0	22.42	22.35	22.33	
5	64QAM	1	0	22.56	22.51	22.48	
5	64QAM	1	12	22.68	22.53	22.49	23
5	64QAM	1	24	22.52	22.53	22.58	
5	64QAM	12	0	21.38	21.35	21.38	
5	64QAM	12	7	21.49	21.54	21.38	22
5	64QAM	12	13	21.49	21.52	21.41	
5	64QAM	25	0	21.46	21.45	21.34	



Band 25									
Ann 0									
SRV (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)		
Channel				26140	26340	26590			
Frequency (MHz)				1860	1865	1905			
20	QPSK	1	0	24.67	24.78	24.85	25		
20	QPSK	1	49	24.61	24.83	24.53			
20	QPSK	1	99	24.72	24.72	23.88			
20	QPSK	50	0	23.90	23.87	23.70	24		
20	QPSK	50	24	23.87	23.60	23.71			
20	QPSK	50	50	23.75	23.65	23.64			
20	QPSK	100	0	23.79	23.67	23.89	24		
20	16QAM	1	0	23.76	23.77	23.89			
20	16QAM	1	49	23.77	23.88	23.83			
20	16QAM	1	99	23.89	23.89	23.19	23		
20	16QAM	50	0	22.92	22.80	22.77			
20	16QAM	50	24	22.90	22.82	22.81			
20	16QAM	50	50	22.81	22.85	22.71	23		
20	16QAM	100	0	22.84	22.93	22.77			
20	64QAM	1	0	22.81	22.35	21.88	23		
20	64QAM	1	49	22.55	22.83	22.54			
20	64QAM	1	99	22.08	22.80	21.44			
20	64QAM	50	0	21.90	21.59	21.30	22		
20	64QAM	50	24	21.69	21.87	21.34			
20	64QAM	50	50	21.16	21.76	21.28			
20	64QAM	100	0	21.68	21.82	20.93	25		
Channel				26090	26340	26640			
Frequency (MHz)				1867.5	1865	1907.5			
15	QPSK	1	0	24.86	24.80	24.58	25		
15	QPSK	1	37	24.75	24.74	24.63			
15	QPSK	1	74	24.70	24.66	23.91			
15	QPSK	36	0	23.76	23.90	23.76	24		
15	QPSK	36	20	23.87	23.71	23.75			
15	QPSK	36	39	23.75	23.71	23.80			
15	QPSK	75	0	23.77	23.75	23.87	24		
15	16QAM	1	0	23.75	23.90	23.97			
15	16QAM	1	37	23.88	23.81	23.97			
15	16QAM	1	74	23.85	23.75	23.24	23		
15	16QAM	36	0	22.76	22.75	22.74			
15	16QAM	36	20	22.97	22.74	22.81			
15	16QAM	36	39	22.76	22.77	22.87	23		
15	16QAM	75	0	22.85	22.86	22.73			
15	64QAM	1	0	22.90	22.36	21.92	23		
15	64QAM	1	37	22.53	22.89	22.74			
15	64QAM	1	74	21.94	22.87	21.42			
15	64QAM	36	0	21.91	21.64	21.37	22		
15	64QAM	36	20	21.51	21.80	21.34			
15	64QAM	36	39	21.17	21.84	21.34			
15	64QAM	75	0	21.62	21.91	20.96	25		
Channel				26090	26340	26640			
Frequency (MHz)				1865	1865	1910			
10	QPSK	1	0	24.80	24.80	24.67	25		
10	QPSK	1	25	24.71	24.72	24.70			
10	QPSK	1	49	24.71	24.77	23.89			
10	QPSK	25	0	23.79	23.90	23.76	24		
10	QPSK	25	12	23.86	23.69	23.69			
10	QPSK	25	25	23.79	23.71	23.88			
10	QPSK	50	0	23.70	23.77	23.88	24		
10	16QAM	1	0	23.83	23.85	23.87			
10	16QAM	1	25	23.87	23.75	23.96			
10	16QAM	1	49	23.91	23.88	23.23	23		
10	16QAM	25	0	22.80	22.88	22.71			
10	16QAM	25	12	22.91	22.75	22.78			
10	16QAM	25	25	22.82	22.82	22.89	23		
10	16QAM	50	0	22.93	22.91	22.79			
10	64QAM	1	0	22.83	22.53	21.97	23		
10	64QAM	1	25	22.59	22.96	22.66			
10	64QAM	1	49	21.97	22.94	21.28			
10	64QAM	25	0	21.80	21.53	20.88	22		
10	64QAM	25	12	21.64	21.72	21.35			
10	64QAM	25	25	21.19	21.93	21.35			
10	64QAM	50	0	21.69	21.77	20.85	25		
Channel				26095	26340	26665			
Frequency (MHz)				1862.5	1865	1912.5			
5	QPSK	1	0	24.76	24.74	24.54	25		
5	QPSK	1	12	24.67	24.74	24.58			
5	QPSK	1	24	24.55	24.70	23.87			
5	QPSK	12	0	23.82	23.78	23.73	24		
5	QPSK	12	7	23.80	23.82	23.80			
5	QPSK	12	13	23.81	23.83	23.76			
5	QPSK	25	0	23.90	23.78	23.71	24		
5	16QAM	1	0	23.90	23.80	23.90			
5	16QAM	1	12	23.83	23.81	23.90			
5	16QAM	1	24	23.89	23.86	23.17	23		
5	16QAM	12	0	22.78	22.73	22.66			
5	16QAM	12	7	22.85	22.81	22.78			
5	16QAM	12	13	22.77	22.78	22.76	23		
5	16QAM	25	0	22.87	22.84	22.71			
5	64QAM	1	0	22.85	22.40	21.88	23		
5	64QAM	1	12	22.49	22.86	22.61			
5	64QAM	1	24	22.01	22.88	21.29			
5	64QAM	12	0	21.77	21.53	20.91	22		
5	64QAM	12	7	21.53	21.83	21.27			
5	64QAM	12	13	21.09	21.80	21.21			
5	64QAM	25	0	21.50	21.76	20.94	25		
Channel				26095	26340	26675			
Frequency (MHz)				1861.5	1865	1913.5			
3	QPSK	1	0	24.79	24.71	24.69	25		
3	QPSK	1	8	24.66	24.73	24.56			
3	QPSK	1	14	24.73	24.72	23.92			
3	QPSK	8	0	23.90	23.88	23.81	24		
3	QPSK	8	4	23.74	23.63	23.56			
3	QPSK	8	7	23.88	23.76	23.70			
3	QPSK	15	0	23.77	23.69	23.62	24		
3	16QAM	1	0	23.72	23.81	23.85			
3	16QAM	1	8	23.82	23.82	23.87			
3	16QAM	1	14	23.82	23.81	23.31	23		
3	16QAM	8	0	22.81	22.79	22.74			
3	16QAM	8	4	22.82	22.85	22.84			
3	16QAM	8	7	22.82	22.80	22.84	23		
3	16QAM	15	0	22.77	22.94	22.73			
3	64QAM	1	0	22.77	22.55	22.07	23		
3	64QAM	1	8	22.59	22.94	22.67			
3	64QAM	1	14	22.10	22.94	21.44			
3	64QAM	8	0	21.89	21.54	20.88	22		
3	64QAM	8	4	21.69	21.71	21.30			
3	64QAM	8	7	21.07	21.90	21.24			
3	64QAM	15	0	21.62	21.89	20.98	25		
Channel				26047	26340	26683			
Frequency (MHz)				1860.7	1865	1914.3			
1.4	QPSK	1	0	24.78	24.58	24.59	25		
1.4	QPSK	1	3	24.66	24.73	24.56			
1.4	QPSK	1	5	24.61	24.68	23.89			
1.4	QPSK	3	0	24.71	24.63	24.61	24		
1.4	QPSK	3	1	24.70	24.53	24.61			
1.4	QPSK	3	3	24.60	24.75	23.89			
1.4	QPSK	6	0	23.81	23.84	23.63	24		
1.4	16QAM	1	0	23.92	23.90	23.84			
1.4	16QAM	1	3	23.84	23.98	23.88			
1.4									



Band 26											
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				26765	26865	26965					
Frequency (MHz)				821.5	831.5	841.5					
15	QPSK	1	0	24.31	24.22	24.23	25				
15	QPSK	1	37	24.14	24.21	24.14					
15	QPSK	1	74	24.11	24.09	24.09					
15	QPSK	36	0	23.29	23.28	23.40	24				
15	QPSK	36	20	23.37	23.37	23.34					
15	QPSK	36	39	23.48	23.35	23.27					
15	QPSK	75	0	23.42	23.27	23.36	24				
15	16QAM	1	0	23.61	23.56	23.53					
15	16QAM	1	37	23.60	23.60	23.46					
15	16QAM	1	74	23.45	23.54	23.30	23				
15	16QAM	36	0	22.31	22.30	22.45					
15	16QAM	36	20	22.38	22.23	22.33					
15	16QAM	36	39	22.37	22.31	22.25	23				
15	16QAM	75	0	22.32	22.35	22.41					
15	64QAM	1	0	22.54	22.30	22.46	23				
15	64QAM	1	37	22.45	22.48	22.48					
15	64QAM	1	74	22.35	22.36	21.62					
15	64QAM	36	0	21.42	21.42	21.43	22				
15	64QAM	36	20	21.53	21.41	21.41					
15	64QAM	36	39	21.32	21.43	21.37					
15	64QAM	75	0	21.46	21.33	21.30	25				
Channel				26740	26865	26990	Tune-up limit (dBm)				
Frequency (MHz)				819	831.5	844					
10	QPSK	1	0	24.28	24.20	24.16	25				
10	QPSK	1	25	24.29	24.26	24.08					
10	QPSK	1	49	24.27	24.20	24.02					
10	QPSK	25	0	23.48	23.29	23.26	24				
10	QPSK	25	12	23.37	23.38	23.48					
10	QPSK	25	25	23.36	23.40	23.34					
10	QPSK	50	0	23.40	23.22	23.24	24				
10	16QAM	1	0	23.69	23.57	23.47					
10	16QAM	1	25	23.61	23.60	23.42					
10	16QAM	1	49	23.56	23.42	23.45	23				
10	16QAM	25	0	22.33	22.41	22.31					
10	16QAM	25	12	22.52	22.41	22.30					
10	16QAM	25	25	22.46	22.27	22.29	23				
10	16QAM	50	0	22.32	22.27	22.32					
10	64QAM	1	0	22.36	22.36	22.46					
10	64QAM	1	49	22.45	22.40	21.77	22				
10	64QAM	25	0	21.39	21.30	21.34					
10	64QAM	25	12	21.47	21.24	21.50					
10	64QAM	25	25	21.44	21.44	21.42	22				
10	64QAM	50	0	21.33	21.33	21.29					
Channel				26715	26865	27015				Tune-up limit (dBm)	
Frequency (MHz)				816.5	831.5	846.5					
5	QPSK	1	0	24.27	24.23	24.23	25				
5	QPSK	1	12	24.28	24.09	24.08					
5	QPSK	1	24	24.12	24.14	24.19					
5	QPSK	12	0	23.47	23.29	23.32	24				
5	QPSK	12	7	23.47	23.41	23.43					
5	QPSK	12	13	23.31	23.30	23.45					
5	QPSK	25	0	23.46	23.28	23.27	24				
5	16QAM	1	0	23.64	23.49	23.49					
5	16QAM	1	12	23.59	23.46	23.61					
5	16QAM	1	24	23.56	23.58	23.36	23				
5	16QAM	12	0	22.35	22.30	22.42					
5	16QAM	12	7	22.37	22.40	22.47					
5	16QAM	12	13	22.50	22.34	22.26	23				
5	16QAM	25	0	22.38	22.38	22.41					
5	64QAM	1	0	22.52	22.30	22.42					
5	64QAM	1	12	22.41	22.43	22.43	22				
5	64QAM	1	24	22.34	22.47	21.82					
5	64QAM	12	0	21.44	21.48	21.36					
5	64QAM	12	7	21.44	21.27	21.41	22				
5	64QAM	12	13	21.41	21.38	21.50					
5	64QAM	25	0	21.34	21.32	21.30					
Channel				26705	26865	27025	Tune-up limit (dBm)				
Frequency (MHz)				815.5	831.5	847.5					
3	QPSK	1	0	24.30	24.22	24.12	25				
3	QPSK	1	8	24.10	24.13	24.06					
3	QPSK	1	14	24.15	24.27	24.14					
3	QPSK	8	0	23.33	23.43	23.27	24				
3	QPSK	8	4	23.30	23.41	23.45					
3	QPSK	8	7	23.40	23.34	23.28					
3	QPSK	15	0	23.36	23.39	23.40	24				
3	16QAM	1	0	23.70	23.41	23.60					
3	16QAM	1	8	23.53	23.53	23.54					
3	16QAM	1	14	23.58	23.57	23.42	23				
3	16QAM	8	0	22.32	22.46	22.29					
3	16QAM	8	4	22.45	22.28	22.47					
3	16QAM	8	7	22.46	22.41	22.36	23				
3	16QAM	15	0	22.36	22.23	22.36					
3	64QAM	1	0	22.37	22.34	22.33					
3	64QAM	1	8	22.51	22.46	22.55	22				
3	64QAM	1	14	22.50	22.42	21.73					
3	64QAM	8	0	21.39	21.41	21.45					
3	64QAM	8	4	21.46	21.27	21.45	22				
3	64QAM	8	7	21.52	21.50	21.41					
3	64QAM	15	0	21.47	21.27	21.30					
Channel				26697	26865	27033	Tune-up limit (dBm)				
Frequency (MHz)				814.7	831.5	848.3					
1.4	QPSK	1	0	24.30	24.15	24.05	25				
1.4	QPSK	1	3	24.24	24.26	24.16					
1.4	QPSK	1	5	24.15	24.12	23.91					
1.4	QPSK	3	0	24.26	24.16	24.11	24				
1.4	QPSK	3	1	24.09	24.11	24.04					
1.4	QPSK	3	3	24.18	24.16	24.10					
1.4	QPSK	6	0	23.45	23.27	23.20	24				
1.4	16QAM	1	0	23.69	23.37	23.42					
1.4	16QAM	1	3	23.39	23.48	23.61					
1.4	16QAM	1	5	23.44	23.59	23.30	24				
1.4	16QAM	3	0	23.41	23.42	23.32					
1.4	16QAM	3	1	23.41	23.48	23.45					
1.4	16QAM	3	3	23.37	23.43	23.35	23				
1.4	16QAM	6	0	22.34	22.23	22.25					
1.4	64QAM	1	0	22.29	22.38	22.26					
1.4	64QAM	1	3	22.39	22.38	22.36	23				
1.4	64QAM	1	5	22.38	22.38	21.52					
1.4	64QAM	3	0	22.27	22.32	22.26					
1.4	64QAM	3	1	22.30	22.40	22.36	22				
1.4	64QAM	3	3	22.39	22.23	21.64					
1.4	64QAM	6	0	21.45	21.41	21.22					



Band 30							
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				27710			
Frequency (MHz)				2315			
10	QPSK	1	0	24.09			24.7
10	QPSK	1	25	24.17			
10	QPSK	1	49	24.28			
10	QPSK	25	0	23.18			24
10	QPSK	25	12	23.28			
10	QPSK	25	25	23.35			
10	QPSK	50	0	23.32			24
10	16QAM	1	0	23.58			
10	16QAM	1	25	23.54			
10	16QAM	1	49	23.57			24
10	16QAM	25	0	22.14			
10	16QAM	25	12	22.34			
10	16QAM	25	25	22.24			23
10	16QAM	50	0	22.15			
10	64QAM	1	0	22.38			
10	64QAM	1	25	22.49			23
10	64QAM	1	49	22.44			
10	64QAM	25	0	21.27			
10	64QAM	25	12	21.35			22
10	64QAM	25	25	21.23			
10	64QAM	50	0	21.27			
Channel				27685	27710	27735	Tune-up limit (dBm)
Frequency (MHz)				2307.5	2310	2312.5	
5	QPSK	1	0	24.18	24.23	24.09	24.7
5	QPSK	1	12	24.20	24.26	24.27	
5	QPSK	1	24	24.10	24.26	24.15	
5	QPSK	12	0	23.23	23.12	23.17	24
5	QPSK	12	7	23.29	23.30	23.15	
5	QPSK	12	13	23.28	23.31	23.26	
5	QPSK	25	0	23.21	23.28	23.19	24
5	16QAM	1	0	23.59	23.58	23.58	
5	16QAM	1	12	23.54	23.61	23.65	
5	16QAM	1	24	23.61	23.57	23.60	23
5	16QAM	12	0	22.30	22.15	22.15	
5	16QAM	12	7	22.35	22.37	22.28	
5	16QAM	12	13	22.30	22.35	22.28	23
5	16QAM	25	0	22.30	22.28	22.18	
5	64QAM	1	0	22.48	22.38	22.51	
5	64QAM	1	12	22.46	22.46	22.40	23
5	64QAM	1	24	22.41	22.40	22.38	
5	64QAM	12	0	21.20	21.17	21.32	
5	64QAM	12	7	21.34	21.34	21.41	22
5	64QAM	12	13	21.21	21.39	21.24	
5	64QAM	25	0	21.24	21.34	21.30	



Band 66											
Ann 0											
BSW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)				
Channel				132072	132322	132572					
Frequency (MHz)				1720	1745	1770					
20	QPSK	1	0	21.08	21.27	21.23	21.7				
20	QPSK	1	49	21.09	21.19	21.20					
20	QPSK	1	99	21.23	21.11	21.15					
20	QPSK	50	0	20.91	20.89	21.05	21.7				
20	QPSK	50	24	21.06	20.94	21.02					
20	QPSK	50	50	20.92	20.98	21.01					
20	QPSK	100	0	20.87	20.94	20.95	21.7				
20	16QAM	1	0	20.82	20.83	20.92					
20	16QAM	1	49	20.85	20.81	20.72					
20	16QAM	1	99	20.87	20.84	20.87	21.7				
20	16QAM	50	0	20.93	20.94	20.87					
20	16QAM	50	24	20.87	20.95	20.94					
20	16QAM	50	50	20.95	20.93	20.93	21.7				
20	16QAM	100	0	21.00	20.77	20.98					
20	64QAM	1	0	21.05	20.55	21.08	21.7				
20	64QAM	1	49	21.11	20.81	20.99					
20	64QAM	1	99	20.97	20.94	21.08					
20	64QAM	50	0	20.91	21.16	20.82	21.7				
20	64QAM	50	24	21.05	21.15	20.15					
20	64QAM	50	50	20.95	20.97	20.53					
20	64QAM	100	0	20.98	21.17	20.84	Tune-up limit (dBm)				
Channel				132047	132322	132597					
Frequency (MHz)				1717.5	1745	1772.5					
15	QPSK	1	0	21.25	21.17	21.08	21.7				
15	QPSK	1	37	21.17	21.13	21.20					
15	QPSK	1	74	21.08	21.02	21.00					
15	QPSK	36	0	20.79	20.85	20.86	21.7				
15	QPSK	36	20	20.91	20.79	20.82					
15	QPSK	36	39	20.93	20.90	20.85					
15	QPSK	75	0	20.95	20.90	20.94	21.7				
15	16QAM	1	0	20.79	20.87	20.91					
15	16QAM	1	37	20.79	20.76	20.83					
15	16QAM	1	74	20.70	20.80	20.70	21.7				
15	16QAM	36	0	20.83	20.90	21.01					
15	16QAM	36	20	20.98	20.92	20.93					
15	16QAM	36	39	20.94	20.92	20.93	21.7				
15	16QAM	75	0	20.93	20.94	20.88					
15	64QAM	1	0	20.94	20.72	21.13					
15	64QAM	1	37	21.04	20.85	21.17	21.7				
15	64QAM	1	74	21.02	20.93	21.09					
15	64QAM	36	0	20.91	21.14	20.85					
15	64QAM	36	20	20.91	21.13	20.31	21.7				
15	64QAM	36	39	21.00	20.88	20.56					
15	64QAM	75	0	20.94	21.15	20.58					
Channel				132022	132322	132622	Tune-up limit (dBm)				
Frequency (MHz)				1715	1745	1775					
10	QPSK	1	0	21.08	21.09	21.09	21.7				
10	QPSK	1	25	21.17	21.17	21.20					
10	QPSK	1	49	21.14	21.06	20.96					
10	QPSK	25	0	20.97	20.95	20.97	21.7				
10	QPSK	25	12	20.97	20.86	21.01					
10	QPSK	25	25	20.86	20.91	20.92					
10	QPSK	50	0	20.91	20.93	20.96	21.7				
10	16QAM	1	0	20.86	21.01	20.98					
10	16QAM	1	25	20.85	20.82	20.82					
10	16QAM	1	49	20.83	20.67	20.89	21.7				
10	16QAM	25	0	20.92	20.89	20.91					
10	16QAM	25	12	20.93	20.86	20.86					
10	16QAM	25	25	20.85	20.96	20.99	21.7				
10	16QAM	50	0	20.91	20.78	20.82					
10	64QAM	1	0	20.98	20.66	21.05					
10	64QAM	1	25	21.11	20.85	21.08	21.7				
10	64QAM	1	49	20.97	21.05	21.04					
10	64QAM	25	0	21.00	21.08	20.99					
10	64QAM	25	12	20.95	21.12	20.33	21.7				
10	64QAM	25	25	20.96	21.01	20.90					
10	64QAM	50	0	21.07	21.12	20.86					
Channel				131997	132322	132647	Tune-up limit (dBm)				
Frequency (MHz)				1712.5	1745	1777.5					
5	QPSK	1	0	21.20	21.12	21.18	21.7				
5	QPSK	1	12	21.09	21.13	21.13					
5	QPSK	1	24	21.20	21.09	21.14					
5	QPSK	12	0	20.92	20.95	21.02	21.7				
5	QPSK	12	7	20.99	20.85	21.01					
5	QPSK	12	13	20.88	21.01	20.88					
5	QPSK	25	0	20.99	20.92	20.96	21.7				
5	16QAM	1	0	20.81	20.90	21.04					
5	16QAM	1	12	20.83	20.80	20.79					
5	16QAM	1	24	20.87	20.84	20.86	21.7				
5	16QAM	12	0	20.89	20.86	20.87					
5	16QAM	12	7	20.96	20.94	20.93					
5	16QAM	12	13	20.86	20.96	20.96	21.7				
5	16QAM	25	0	20.97	20.94	20.79					
5	64QAM	1	0	20.95	20.71	21.18					
5	64QAM	1	12	21.00	20.77	21.12	21.7				
5	64QAM	1	24	21.11	21.01	21.11					
5	64QAM	12	0	20.93	21.17	20.94					
5	64QAM	12	7	20.97	21.18	20.25	21.7				
5	64QAM	12	13	21.07	20.86	20.45					
5	64QAM	25	0	20.98	21.08	20.84					
Channel				131987	132322	132657	Tune-up limit (dBm)				
Frequency (MHz)				1710.5	1745	1778.5					
3	QPSK	1	0	21.14	21.09	21.21	21.7				
3	QPSK	1	8	21.06	21.10	21.19					
3	QPSK	1	14	21.17	21.10	20.96					
3	QPSK	8	0	20.78	20.86	20.96	21.7				
3	QPSK	8	4	20.91	20.80	20.91					
3	QPSK	8	7	20.92	21.01	20.86					
3	QPSK	15	0	20.99	20.76	20.86	21.7				
3	16QAM	1	0	20.75	20.91	20.97					
3	16QAM	1	8	20.74	20.78	20.71					
3	16QAM	1	14	20.86	20.75	20.87	21.7				
3	16QAM	8	0	20.82	20.98	20.98					
3	16QAM	8	4	20.96	20.85	20.93					
3	16QAM	8	7	20.92	20.96	20.85	21.7				
3	16QAM	15	0	20.96	20.77	20.97					
3	64QAM	1	0	21.11	20.67	21.14					
3	64QAM	1	8	21.00	20.75	21.01	21.7				
3	64QAM	1	14	21.00	20.98	21.08					
3	64QAM	8	0	21.00	21.09	20.92					
3	64QAM	8	4	20.94	21.09	20.22	21.7				
3	64QAM	8	7	21.04	20.82	20.44					
3	64QAM	15	0	20.93	21.10	20.85					
Channel				131979	132322	132665	Tune-up limit (dBm)				
Frequency (MHz)				1710.7	1745	1778.3					
1.4	QPSK	1	0	20.82	20.73	21.04	21.7				
1.4	QPSK	1	3	20.65	20.76	20.71					
1.4	QPSK	1	5	20.69	20.68	20.71					
1.4	QPSK	3	0	20.75	20.82	20.99	21.7				
1.4	QPSK	3	1	20.71	20.61	20.67					
1.4	QPSK	3	3	20.57	20.68	20.67					



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	133322	133372			
Frequency (MHz)				673	683	686			
20	QPSK	1	0	24.33	24.42	24.18	25		
20	QPSK	1	49	24.28	24.41	24.31			
20	QPSK	1	99	24.24	24.29	24.33			
20	QPSK	50	0	23.52	23.61	23.47	24		
20	QPSK	50	24	23.50	23.55	23.37			
20	QPSK	50	50	23.50	23.51	23.58			
20	QPSK	100	0	23.96	23.45	23.36	24		
20	16QAM	1	0	23.69	23.56	23.55			
20	16QAM	1	49	23.71	23.77	23.71			
20	16QAM	1	99	23.70	23.59	23.69	23		
20	16QAM	50	0	22.45	22.38	22.47			
20	16QAM	50	24	22.62	22.45	22.34			
20	16QAM	50	50	22.56	22.52	22.45	22		
20	16QAM	100	0	22.36	22.42	22.43			
20	64QAM	1	0	22.52	22.43	22.44			
20	64QAM	1	49	22.59	22.51	22.50	23		
20	64QAM	1	99	22.67	22.49	22.58			
20	64QAM	50	0	21.41	21.32	21.42			
20	64QAM	50	24	21.50	21.53	21.42	22		
20	64QAM	50	50	21.45	21.63	21.49			
20	64QAM	100	0	21.51	21.31	21.49			
Channel				133197	133297	133397	Tune-up limit (dBm)		
Frequency (MHz)				670.5	680.5	680.5 <th colspan="3"></th>			
15	QPSK	1	0	24.40	24.41	24.32	25		
15	QPSK	1	37	24.31	24.27	24.24			
15	QPSK	1	74	24.32	24.36	24.28			
15	QPSK	36	0	23.47	23.53	23.42	24		
15	QPSK	36	20	23.33	23.32	23.53			
15	QPSK	36	39	23.57	23.51	23.53			
15	QPSK	75	0	23.43	23.41	23.53	24		
15	16QAM	1	0	23.63	23.71	23.72			
15	16QAM	1	37	23.70	23.69	23.65			
15	16QAM	1	74	23.62	23.70	23.59	23		
15	16QAM	36	0	22.39	22.41	22.49			
15	16QAM	36	20	22.53	22.41	22.51			
15	16QAM	36	39	22.42	22.46	22.52	22		
15	16QAM	75	0	22.46	22.45	22.53			
15	64QAM	1	0	22.59	22.59	22.44			
15	64QAM	1	37	22.51	22.58	22.59	23		
15	64QAM	1	74	22.61	22.55	22.42			
15	64QAM	36	0	21.54	21.46	21.32			
15	64QAM	36	20	21.61	21.55	21.36	22		
15	64QAM	36	39	21.54	21.44	21.58			
15	64QAM	75	0	21.62	21.45	21.49			
Channel				133172	133272	133422	Tune-up limit (dBm)		
Frequency (MHz)				668	678	683			
10	QPSK	1	0	24.50	24.36	24.30	25		
10	QPSK	1	25	24.24	24.29	24.40			
10	QPSK	1	49	24.22	24.28	24.19			
10	QPSK	25	0	23.37	23.52	23.49	24		
10	QPSK	25	12	23.47	23.50	23.54			
10	QPSK	25	25	23.53	23.55	23.43			
10	QPSK	50	0	23.43	23.47	23.41	24		
10	16QAM	1	0	23.71	23.71	23.66			
10	16QAM	1	25	23.60	23.59	23.59			
10	16QAM	1	49	23.60	23.59	23.62	23		
10	16QAM	25	0	22.51	22.45	22.46			
10	16QAM	25	12	22.43	22.37	22.42			
10	16QAM	25	25	22.42	22.56	22.55	22		
10	16QAM	50	0	22.54	22.41	22.49			
10	64QAM	1	0	22.50	22.58	22.55			
10	64QAM	1	25	22.48	22.49	22.52	23		
10	64QAM	1	49	22.54	22.53	22.58			
10	64QAM	25	0	21.56	21.30	21.45			
10	64QAM	25	12	21.45	21.40	21.54	22		
10	64QAM	25	25	21.56	21.55	21.62			
10	64QAM	50	0	21.58	21.35	21.44			
Channel				133147	133247	133447	Tune-up limit (dBm)		
Frequency (MHz)				665.5	675.5	685.5			
5	QPSK	1	0	24.45	24.25	24.30	25		
5	QPSK	1	12	24.29	24.24	24.25			
5	QPSK	1	24	24.26	24.23	24.30			
5	QPSK	12	0	23.35	23.45	23.49	24		
5	QPSK	12	7	23.32	23.50	23.39			
5	QPSK	12	13	23.42	23.55	23.48			
5	QPSK	25	0	23.41	23.36	23.50	24		
5	16QAM	1	0	23.80	23.68	23.73			
5	16QAM	1	12	23.60	23.63	23.62			
5	16QAM	1	24	23.66	23.70	23.55	23		
5	16QAM	12	0	22.39	22.47	22.45			
5	16QAM	12	7	22.50	22.42	22.42			
5	16QAM	12	13	22.59	22.45	22.52	22		
5	16QAM	25	0	22.43	22.36	22.49			
5	64QAM	1	0	22.66	22.51	22.44			
5	64QAM	1	12	22.57	22.53	22.45	23		
5	64QAM	1	24	22.50	22.51	22.40			
5	64QAM	12	0	21.53	21.40	21.44			
5	64QAM	12	7	21.42	21.57	21.43	22		
5	64QAM	12	13	21.53	21.46	21.45			
5	64QAM	25	0	21.62	21.39	21.49			



Band 38							
Ant 2							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				37850	38000	38150	
Frequency (MHz)				2580	2595	2610	
20	QPSK	1	0	24.11	24.15	24.17	25
20	QPSK	1	49	24.16	24.21	24.20	
20	QPSK	1	99	24.22	24.25	24.23	
20	QPSK	50	0	23.25	23.27	23.28	24
20	QPSK	50	24	23.32	23.31	23.29	
20	QPSK	50	50	23.35	23.37	23.37	
20	QPSK	100	0	23.36	23.29	23.28	24
20	16QAM	1	0	23.23	23.28	23.27	
20	16QAM	1	49	23.23	23.29	23.29	
20	16QAM	1	99	23.32	23.35	23.31	23
20	16QAM	50	0	22.27	22.32	22.31	
20	16QAM	50	24	22.36	22.32	22.32	
20	16QAM	50	50	22.37	22.40	22.39	23
20	16QAM	100	0	22.37	22.30	22.31	
20	64QAM	1	0	21.93	21.95	21.96	
20	64QAM	1	49	21.96	22.01	22.02	23
20	64QAM	1	99	22.05	22.07	22.02	
20	64QAM	50	0	21.26	21.32	21.32	
20	64QAM	50	24	21.37	21.34	21.33	22
20	64QAM	50	50	21.37	21.40	21.39	
20	64QAM	100	0	21.34	21.31	21.33	
Channel				37825	38000	38175	Tune-up limit (dBm)
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	24.01	24.14	24.15	25
15	QPSK	1	37	24.12	24.18	24.11	
15	QPSK	1	74	24.13	24.15	24.13	
15	QPSK	36	0	23.18	23.26	23.23	24
15	QPSK	36	20	23.25	23.30	23.23	
15	QPSK	36	39	23.27	23.33	23.31	
15	QPSK	75	0	23.28	23.27	23.23	24
15	16QAM	1	0	23.22	23.22	23.22	
15	16QAM	1	37	23.13	23.25	23.28	
15	16QAM	1	74	23.29	23.33	23.23	23
15	16QAM	36	0	22.17	22.29	22.24	
15	16QAM	36	20	22.33	22.26	22.23	
15	16QAM	36	39	22.30	22.32	22.31	23
15	16QAM	75	0	22.32	22.24	22.21	
15	64QAM	1	0	21.89	21.91	21.87	
15	64QAM	1	37	21.94	21.91	21.94	23
15	64QAM	1	74	22.01	21.97	21.92	
15	64QAM	36	0	21.26	21.23	21.26	
15	64QAM	36	20	21.32	21.28	21.24	22
15	64QAM	36	39	21.35	21.31	21.36	
15	64QAM	75	0	21.25	21.27	21.31	
Channel				37800	38000	38200	Tune-up limit (dBm)
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	24.06	24.11	24.07	25
10	QPSK	1	25	24.14	24.21	24.10	
10	QPSK	1	49	24.15	24.19	24.20	
10	QPSK	25	0	23.21	23.21	23.24	24
10	QPSK	25	12	23.30	23.26	23.27	
10	QPSK	25	25	23.28	23.36	23.36	
10	QPSK	50	0	23.35	23.20	23.18	24
10	16QAM	1	0	23.14	23.19	23.21	
10	16QAM	1	25	23.21	23.28	23.27	
10	16QAM	1	49	23.23	23.28	23.23	23
10	16QAM	25	0	22.24	22.22	22.23	
10	16QAM	25	12	22.36	22.22	22.24	
10	16QAM	25	25	22.32	22.39	22.37	23
10	16QAM	50	0	22.30	22.21	22.21	
10	64QAM	1	0	21.83	21.94	21.86	
10	64QAM	1	25	21.90	21.96	21.98	23
10	64QAM	1	49	22.01	22.01	22.00	
10	64QAM	25	0	21.26	21.27	21.31	
10	64QAM	25	12	21.28	21.28	21.28	22
10	64QAM	25	25	21.27	21.38	21.32	
10	64QAM	50	0	21.34	21.24	21.26	
Channel				37775	38000	38225	Tune-up limit (dBm)
Frequency (MHz)				2572.5	2595	2617.5	
5	QPSK	1	0	24.04	24.06	24.07	25
5	QPSK	1	12	24.10	24.14	24.11	
5	QPSK	1	24	24.16	24.20	24.19	
5	QPSK	12	0	23.16	23.24	23.25	24
5	QPSK	12	7	23.27	23.23	23.27	
5	QPSK	12	13	23.26	23.35	23.35	
5	QPSK	25	0	23.29	23.19	23.24	24
5	16QAM	1	0	23.17	23.22	23.24	
5	16QAM	1	12	23.23	23.20	23.21	
5	16QAM	1	24	23.28	23.27	23.22	23
5	16QAM	12	0	22.17	22.22	22.24	
5	16QAM	12	7	22.27	22.32	22.24	
5	16QAM	12	13	22.36	22.33	22.37	23
5	16QAM	25	0	22.36	22.21	22.30	
5	64QAM	1	0	21.92	21.93	21.93	
5	64QAM	1	12	21.92	21.96	21.96	23
5	64QAM	1	24	21.96	22.03	21.95	
5	64QAM	12	0	21.19	21.31	21.29	
5	64QAM	12	7	21.37	21.33	21.26	22
5	64QAM	12	13	21.30	21.36	21.36	
5	64QAM	25	0	21.34	21.29	21.27	



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	26.08	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	24.87	
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	24.39	24.25	24.11	
20	64QAM	1	0	23.79	23.74	23.55	
20	64QAM	1	49	23.62	23.50	23.62	24.5
20	64QAM	1	99	23.62	23.66	23.53	
20	64QAM	50	0	22.73	22.50	22.58	
20	64QAM	50	24	22.69	22.51	22.56	24.5
20	64QAM	50	50	22.58	22.52	22.50	
20	64QAM	100	0	22.53	22.55	22.58	
Channel				37825	38000	38175	Tune-up limit (dBm)
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	25.94	25.93	25.98	27.5
15	QPSK	1	37	25.98	26.00	26.06	
15	QPSK	1	74	26.02	26.01	26.03	
15	QPSK	36	0	25.27	25.17	25.24	26.5
15	QPSK	36	20	25.17	25.25	25.21	
15	QPSK	36	39	25.10	25.09	25.08	
15	QPSK	75	0	25.26	25.27	25.21	26.5
15	16QAM	1	0	25.33	25.34	25.40	
15	16QAM	1	37	25.48	25.42	25.41	
15	16QAM	1	74	25.37	25.45	25.46	25.5
15	16QAM	36	0	24.26	24.18	24.24	
15	16QAM	36	20	24.39	24.37	24.34	
15	16QAM	36	39	24.40	24.39	24.32	25.5
15	16QAM	75	0	24.31	24.39	24.29	
15	64QAM	1	0	23.77	23.70	23.79	
15	64QAM	1	37	23.60	23.58	23.53	24.5
15	64QAM	1	74	23.60	23.58	23.61	
15	64QAM	36	0	22.64	22.67	22.73	
15	64QAM	36	20	22.68	22.64	22.62	24.5
15	64QAM	36	39	22.56	22.53	22.48	
15	64QAM	75	0	22.47	22.43	22.48	
Channel				37800	38000	38200	Tune-up limit (dBm)
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	26.01	25.94	25.99	27.5
10	QPSK	1	25	26.04	26.02	26.08	
10	QPSK	1	49	26.11	26.01	26.10	
10	QPSK	25	0	25.19	25.22	25.24	26.5
10	QPSK	25	12	25.17	25.22	25.20	
10	QPSK	25	25	25.10	25.13	25.07	
10	QPSK	50	0	25.28	25.22	25.21	26.5
10	16QAM	1	0	25.36	25.37	25.33	
10	16QAM	1	25	25.44	25.41	25.48	
10	16QAM	1	49	25.43	25.38	25.44	25.5
10	16QAM	25	0	24.27	24.20	24.24	
10	16QAM	25	12	24.34	24.36	24.30	
10	16QAM	25	25	24.39	24.38	24.32	25.5
10	16QAM	50	0	24.39	24.39	24.34	
10	64QAM	1	0	23.77	23.69	23.78	
10	64QAM	1	25	23.58	23.59	23.57	24.5
10	64QAM	1	49	23.58	23.58	23.57	
10	64QAM	25	0	22.70	22.67	22.68	
10	64QAM	25	12	22.60	22.69	22.69	24.5
10	64QAM	25	25	22.48	22.58	22.53	
10	64QAM	50	0	22.49	22.46	22.52	
Channel				37775	38000	38225	Tune-up limit (dBm)
Frequency (MHz)				2572.5	2595	2617.5	
5	QPSK	1	0	25.95	25.95	25.97	27.5
5	QPSK	1	12	26.00	25.98	25.99	
5	QPSK	1	24	26.08	26.02	26.10	
5	QPSK	12	0	25.17	25.22	25.23	26.5
5	QPSK	12	7	25.26	25.18	25.17	
5	QPSK	12	13	25.12	25.10	25.15	
5	QPSK	25	0	25.20	25.29	25.25	26.5
5	16QAM	1	0	25.36	25.40	25.32	
5	16QAM	1	12	25.48	25.38	25.41	
5	16QAM	1	24	25.44	25.47	25.40	25.5
5	16QAM	12	0	24.19	24.22	24.19	
5	16QAM	12	7	24.30	24.37	24.36	
5	16QAM	12	13	24.30	24.32	24.33	25.5
5	16QAM	25	0	24.34	24.31	24.32	
5	64QAM	1	0	23.69	23.79	23.70	
5	64QAM	1	12	23.53	23.57	23.61	24.5
5	64QAM	1	24	23.60	23.55	23.57	
5	64QAM	12	0	22.63	22.73	22.66	
5	64QAM	12	7	22.62	22.60	22.66	24.5
5	64QAM	12	13	22.54	22.58	22.51	
5	64QAM	25	0	22.50	22.43	22.52	



Band 41										
Ant 2										
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Low Middle Ch. / Freq.	Power Middle Ch. / Freq.	Power High Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	
Channel				39750	40185	40620	41055	41490		
Frequency (MHz)				2506	2549.5	2593	2636.5	2680		
20	QPSK	1	0	24.46	24.28	24.28	23.98	23.69	25	
20	QPSK	1	49	24.42	24.29	24.22	24.24	24.06		
20	QPSK	1	99	24.41	24.25	24.33	23.80	23.99		
20	QPSK	50	0	23.59	23.44	23.30	23.27	23.03	24	
20	QPSK	50	24	23.54	23.36	23.32	23.25	23.19		
20	QPSK	50	50	23.51	23.36	23.40	23.12	23.16		
20	QPSK	100	0	23.53	23.37	23.33	23.15	23.11	24	
20	16QAM	1	0	23.57	23.41	23.41	23.10	22.74		
20	16QAM	1	49	23.53	23.37	23.32	23.35	23.12		
20	16QAM	1	99	23.51	23.38	23.42	22.86	23.10	23	
20	16QAM	50	0	22.61	22.44	22.32	22.30	22.04		
20	16QAM	50	24	22.55	22.42	22.35	22.28	22.20		
20	16QAM	50	50	22.53	22.37	22.43	22.14	22.20	23	
20	16QAM	100	0	22.56	22.38	22.32	22.17	22.11		
20	64QAM	1	0	22.31	22.10	22.02	21.83	21.34		
20	64QAM	1	49	22.24	22.07	22.03	22.07	21.83	23	
20	64QAM	1	99	22.20	22.09	22.13	21.48	21.83		
20	64QAM	50	0	21.61	21.46	21.35	21.30	21.05		
20	64QAM	50	24	21.55	21.40	21.36	21.28	21.18	22	
20	64QAM	50	50	21.53	21.39	21.43	21.16	21.17		
20	64QAM	100	0	21.53	21.40	21.35	21.19	21.11		
Channel				39725	40173	40620	41068	41515	Tune-up limit (dBm)	
Frequency (MHz)				2503.5	2548.3	2593	2637.8	2682.5		
15	QPSK	1	0	24.42	24.25	24.28	23.97	23.61	25	
15	QPSK	1	37	24.34	24.28	24.15	24.23	23.96		
15	QPSK	1	74	24.31	24.19	24.30	23.74	23.98		
15	QPSK	36	0	23.56	23.40	23.24	23.24	23.03	24	
15	QPSK	36	20	23.52	23.28	23.25	23.25	23.11		
15	QPSK	36	39	23.43	23.35	23.31	23.06	23.07		
15	QPSK	75	0	23.52	23.35	23.28	23.09	23.06	24	
15	16QAM	1	0	23.50	23.32	23.33	23.05	22.69		
15	16QAM	1	37	23.45	23.32	23.25	23.25	23.10		
15	16QAM	1	74	23.50	23.34	23.35	22.80	23.02	23	
15	16QAM	36	0	22.52	22.35	22.25	22.25	22.02		
15	16QAM	36	20	22.46	22.36	22.34	22.18	22.13		
15	16QAM	36	39	22.47	22.31	22.34	22.11	22.18	23	
15	16QAM	75	0	22.51	22.30	22.32	22.17	22.05		
15	64QAM	1	0	22.27	22.09	22.02	21.82	21.26		
15	64QAM	1	37	22.17	21.99	21.93	21.98	21.76	23	
15	64QAM	1	74	22.15	22.00	22.04	21.44	21.81		
15	64QAM	36	0	21.61	21.36	21.31	21.21	20.96		
15	64QAM	36	20	21.54	21.37	21.32	21.24	21.15	22	
15	64QAM	36	39	21.47	21.39	21.39	21.13	21.08		
15	64QAM	75	0	21.47	21.32	21.30	21.17	21.07		
Channel				39700	40160	40620	41080	41540	Tune-up limit (dBm)	
Frequency (MHz)				2501	2547	2593	2639	2685		
10	QPSK	1	0	24.43	24.23	24.24	23.92	23.67	25	
10	QPSK	1	25	24.37	24.29	24.18	24.23	24.00		
10	QPSK	1	49	24.37	24.25	24.25	23.70	23.96		
10	QPSK	25	0	23.51	23.44	23.29	23.24	23.01	24	
10	QPSK	25	12	23.53	23.26	23.23	23.18	23.14		
10	QPSK	25	25	23.42	23.31	23.39	23.11	23.13		
10	QPSK	50	0	23.52	23.31	23.24	23.09	23.09	24	
10	16QAM	1	0	23.49	23.40	23.32	23.10	22.69		
10	16QAM	1	25	23.44	23.31	23.25	23.29	23.02		
10	16QAM	1	49	23.41	23.36	23.37	22.86	23.10	23	
10	16QAM	25	0	22.60	22.41	22.25	22.22	21.96		
10	16QAM	25	12	22.48	22.37	22.33	22.20	22.10		
10	16QAM	25	25	22.52	22.29	22.42	22.08	22.17	23	
10	16QAM	50	0	22.51	22.37	22.29	22.08	22.11		
10	64QAM	1	0	22.24	22.02	21.97	21.83	21.29		
10	64QAM	1	25	22.24	22.04	21.98	22.05	21.77	23	
10	64QAM	1	49	22.13	22.04	22.07	21.44	21.78		
10	64QAM	25	0	21.58	21.36	21.33	21.29	21.00		
10	64QAM	25	12	21.55	21.39	21.36	21.21	21.14	22	
10	64QAM	25	25	21.47	21.36	21.41	21.12	21.08		
10	64QAM	50	0	21.45	21.34	21.32	21.12	21.02		
Channel				39675	40148	40620	41093	41565	Tune-up limit (dBm)	
Frequency (MHz)				2498.5	2545.8	2593	2640.30	2687.5		
5	QPSK	1	0	24.40	24.23	24.22	23.97	23.68	25	
5	QPSK	1	12	24.35	24.29	24.14	24.16	24.04		
5	QPSK	1	24	24.36	24.21	24.25	23.76	23.90		
5	QPSK	12	0	23.52	23.41	23.20	23.17	22.94	24	
5	QPSK	12	7	23.44	23.35	23.23	23.22	23.16		
5	QPSK	12	13	23.49	23.28	23.32	23.07	23.15		
5	QPSK	25	0	23.48	23.31	23.32	23.09	23.02	24	
5	16QAM	1	0	23.48	23.31	23.38	23.04	22.74		
5	16QAM	1	12	23.53	23.36	23.26	23.27	23.04		
5	16QAM	1	24	23.43	23.38	23.38	22.84	23.07	23	
5	16QAM	12	0	22.53	22.40	22.24	22.25	22.03		
5	16QAM	12	7	22.47	22.41	22.25	22.25	22.13		
5	16QAM	12	13	22.50	22.33	22.35	22.10	22.15	23	
5	16QAM	25	0	22.49	22.31	22.22	22.14	22.10		
5	64QAM	1	0	22.25	22.10	21.97	21.83	21.29		
5	64QAM	1	12	22.24	21.99	21.98	21.99	21.81	23	
5	64QAM	1	24	22.20	22.09	22.07	21.48	21.80		
5	64QAM	12	0	21.60	21.40	21.28	21.22	21.01		
5	64QAM	12	7	21.49	21.33	21.29	21.24	21.08	22	
5	64QAM	12	13	21.50	21.35	21.41	21.15	21.09		
5	64QAM	25	0	21.52	21.35	21.30	21.09	21.07		



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	26.37	26.23	25.86	25.89	25.62	27.5	
20	QPSK	1	49	26.34	26.19	25.87	26.17	25.98		
20	QPSK	1	99	26.32	26.17	25.57	25.71	25.92		
20	QPSK	50	0	25.61	25.44	25.02	25.31	25.04	26.5	
20	QPSK	50	24	25.53	25.40	24.97	25.27	25.20		
20	QPSK	50	50	25.53	25.36	24.72	25.12	25.19		
20	QPSK	100	0	24.53	25.38	24.90	25.16	25.10	26.5	
20	16QAM	1	0	25.72	25.53	25.19	25.26	24.93		
20	16QAM	1	49	25.69	25.56	25.21	25.50	25.31		
20	16QAM	1	99	25.66	25.53	24.82	25.02	25.24	25.5	
20	16QAM	50	0	24.66	24.47	24.24	24.31	24.09		
20	16QAM	50	24	24.57	24.41	24.19	24.31	24.23		
20	16QAM	50	50	24.56	24.40	24.13	24.16	24.22	25.5	
20	16QAM	100	0	24.04	24.40	23.99	24.19	24.14		
20	64QAM	1	0	23.93	24.12	23.52	24.15	23.77		
20	64QAM	1	49	24.14	24.21	23.52	24.36	24.05	25.5	
20	64QAM	1	99	24.21	24.34	23.67	23.85	23.73		
20	64QAM	50	0	23.03	23.12	22.55	23.33	23.08		
20	64QAM	50	24	23.20	23.15	22.55	23.31	23.09	24.5	
20	64QAM	50	50	23.18	23.30	22.52	23.17	22.79		
20	64QAM	100	0	22.99	23.11	22.53	23.21	22.91		
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	26.28	26.15	25.82	25.79	25.56	27.5	
15	QPSK	1	37	26.26	26.12	25.82	26.12	25.96		
15	QPSK	1	74	26.28	26.14	25.52	25.61	25.86		
15	QPSK	36	0	25.61	25.36	24.97	25.25	24.97	26.5	
15	QPSK	36	20	25.47	25.34	24.96	25.22	25.18		
15	QPSK	36	39	25.53	25.30	24.66	25.08	25.14		
15	QPSK	75	0	24.49	25.36	24.84	25.13	25.05	26.5	
15	16QAM	1	0	25.64	25.43	25.11	25.24	24.91		
15	16QAM	1	37	25.64	25.47	25.20	25.43	25.25		
15	16QAM	1	74	25.57	25.46	24.74	25.01	25.15	25.5	
15	16QAM	36	0	24.59	24.45	24.20	24.25	24.09		
15	16QAM	36	20	24.51	24.33	24.19	24.27	24.21		
15	16QAM	36	39	24.56	24.33	24.12	24.09	24.16	25.5	
15	16QAM	75	0	23.94	24.31	23.91	24.10	24.12		
15	64QAM	1	0	23.92	24.06	23.49	24.06	23.77		
15	64QAM	1	37	24.09	24.14	23.42	24.30	23.98	25.5	
15	64QAM	1	74	24.17	24.34	23.66	23.82	23.73		
15	64QAM	36	0	23.00	23.07	22.54	23.26	23.03		
15	64QAM	36	20	23.14	23.15	22.46	23.29	23.07	24.5	
15	64QAM	36	39	23.11	23.20	22.49	23.13	22.78		
15	64QAM	75	0	22.93	23.04	22.53	23.14	22.84		
Channel				39700	40160	40620	41080	41540	Tune-up limit (dBm)	
Frequency (MHz)				2501	2547	2593	2639	2685		
10	QPSK	1	0	26.32	26.16	25.79	25.79	25.56	27.5	
10	QPSK	1	25	26.26	26.09	25.85	26.11	25.98		
10	QPSK	1	49	26.31	26.16	25.51	25.63	25.92		
10	QPSK	25	0	25.61	25.37	25.02	25.28	25.03	26.5	
10	QPSK	25	12	25.49	25.30	24.88	25.25	25.14		
10	QPSK	25	25	25.51	25.33	24.69	25.11	25.09		
10	QPSK	50	0	24.51	25.28	24.89	25.11	25.05	26.5	
10	16QAM	1	0	25.72	25.43	25.13	25.25	24.92		
10	16QAM	1	25	25.59	25.47	25.12	25.49	25.24		
10	16QAM	1	49	25.64	25.45	24.75	24.98	25.18	25.5	
10	16QAM	25	0	24.66	24.37	24.21	24.27	24.07		
10	16QAM	25	12	24.57	24.39	24.14	24.22	24.22		
10	16QAM	25	25	24.56	24.32	24.07	24.06	24.14	25.5	
10	16QAM	50	0	23.99	24.34	23.96	24.19	24.11		
10	64QAM	1	0	23.85	24.12	23.43	24.14	23.73		
10	64QAM	1	25	24.09	24.13	23.52	24.36	23.97	25.5	
10	64QAM	1	49	24.19	24.32	23.58	23.77	23.66		
10	64QAM	25	0	23.03	23.02	22.49	23.27	22.99		
10	64QAM	25	12	23.18	23.13	22.55	23.27	23.08	24.5	
10	64QAM	25	25	23.17	23.29	22.44	23.17	22.77		
10	64QAM	50	0	22.94	23.06	22.50	23.21	22.82		
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	26.32	26.17	25.82	25.80	25.54	27.5	
5	QPSK	1	12	26.27	26.13	25.79	26.12	25.91		
5	QPSK	1	24	26.32	26.07	25.57	25.63	25.90		
5	QPSK	12	0	25.57	25.40	25.02	25.23	25.01	26.5	
5	QPSK	12	7	25.50	25.35	24.87	25.22	25.17		
5	QPSK	12	13	25.46	25.32	24.67	25.07	25.11		
5	QPSK	25	0	24.50	25.28	24.81	25.16	25.04	26.5	
5	16QAM	1	0	25.70	25.47	25.13	25.17	24.83		
5	16QAM	1	12	25.63	25.55	25.13	25.44	25.28		
5	16QAM	1	24	25.57	25.43	24.82	24.96	25.20	25.5	
5	16QAM	12	0	24.58	24.47	24.21	24.22	24.06		
5	16QAM	12	7	24.57	24.37	24.10	24.23	24.19		
5	16QAM	12	13	24.53	24.36	24.07	24.14	24.17	25.5	
5	16QAM	25	0	24.01	24.40	23.99	24.12	24.11		
5	64QAM	1	0	23.87	24.04	23.42	24.07	23.73		
5	64QAM	1	12	24.12	24.11	23.42	24.33	24.02	25.5	
5	64QAM	1	24	24.14	24.32	23.62	23.75	23.68		
5	64QAM	12	0	22.95	23.12	22.47	23.28	23.02		
5	64QAM	12	7	23.12	23.05	22.48	23.24	23.03	24.5	
5	64QAM	12	13	23.11	23.28	22.45	23.09	22.72		
5	64QAM	25	0	22.99	23.08	22.44	23.13	22.85		



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	24.66	24.73	24.76	25
20	QPSK	1	49	24.66	24.73	24.77	
20	QPSK	1	99	24.60	24.67	24.70	
20	QPSK	50	0	23.83	23.88	23.97	24
20	QPSK	50	24	23.91	23.87	23.93	
20	QPSK	50	50	23.84	23.88	23.94	
20	QPSK	100	0	23.86	23.85	23.93	24
20	16QAM	1	0	23.98	23.82	23.80	
20	16QAM	1	49	23.98	23.81	23.88	
20	16QAM	1	99	23.99	23.84	23.83	23
20	16QAM	50	0	22.86	22.94	22.99	
20	16QAM	50	24	22.93	22.90	22.97	
20	16QAM	50	50	22.86	22.93	22.96	23
20	16QAM	100	0	22.89	22.87	22.95	
20	64QAM	1	0	22.81	22.89	22.92	
20	64QAM	1	49	22.85	22.94	22.88	23
20	64QAM	1	99	22.88	22.90	22.79	
20	64QAM	50	0	21.87	21.94	21.94	
20	64QAM	50	24	21.95	21.91	21.96	22
20	64QAM	50	50	21.88	21.92	21.84	
20	64QAM	100	0	21.90	21.89	21.87	
Channel				43165	43340	43515	Tune-up limit (dBm)
Frequency (MHz)				3557.5	3575	3592.5	
15	QPSK	1	0	24.62	24.70	24.74	25
15	QPSK	1	37	24.59	24.64	24.75	
15	QPSK	1	74	24.60	24.63	24.65	
15	QPSK	36	0	23.81	23.87	23.97	24
15	QPSK	36	20	23.91	23.78	23.87	
15	QPSK	36	39	23.82	23.79	23.90	
15	QPSK	75	0	23.86	23.76	23.83	24
15	16QAM	1	0	23.93	23.72	23.75	
15	16QAM	1	37	23.97	23.79	23.80	
15	16QAM	1	74	23.97	23.78	23.75	23
15	16QAM	36	0	22.85	22.88	22.92	
15	16QAM	36	20	22.89	22.85	22.89	
15	16QAM	36	39	22.83	22.89	22.90	23
15	16QAM	75	0	22.82	22.86	22.89	
15	64QAM	1	0	22.72	22.83	22.84	
15	64QAM	1	37	22.76	22.87	22.88	23
15	64QAM	1	74	22.79	22.80	22.78	
15	64QAM	36	0	21.81	21.88	21.85	
15	64QAM	36	20	21.91	21.91	21.96	22
15	64QAM	36	39	21.78	21.92	21.77	
15	64QAM	75	0	21.86	21.84	21.83	
Channel				43140	43340	43540	Tune-up limit (dBm)
Frequency (MHz)				3555	3575	3595	
10	QPSK	1	0	24.62	24.72	24.69	25
10	QPSK	1	25	24.64	24.68	24.67	
10	QPSK	1	49	24.50	24.65	24.60	
10	QPSK	25	0	23.77	23.87	23.95	24
10	QPSK	25	12	23.83	23.77	23.91	
10	QPSK	25	25	23.80	23.78	23.87	
10	QPSK	50	0	23.84	23.76	23.93	24
10	16QAM	1	0	23.98	23.82	23.73	
10	16QAM	1	25	23.94	23.81	23.87	
10	16QAM	1	49	23.96	23.74	23.78	23
10	16QAM	25	0	22.76	22.90	22.93	
10	16QAM	25	12	22.92	22.83	22.94	
10	16QAM	25	25	22.77	22.89	22.91	23
10	16QAM	50	0	22.82	22.80	22.92	
10	64QAM	1	0	22.79	22.80	22.91	
10	64QAM	1	25	22.81	22.91	22.82	23
10	64QAM	1	49	22.86	22.82	22.78	
10	64QAM	25	0	21.86	21.92	21.91	
10	64QAM	25	12	21.89	21.84	21.88	22
10	64QAM	25	25	21.85	21.84	21.84	
10	64QAM	50	0	21.85	21.84	21.81	
Channel				43115	43340	43565	Tune-up limit (dBm)
Frequency (MHz)				3552.5	3575	3597.5	
5	QPSK	1	0	24.62	24.72	24.71	25
5	QPSK	1	12	24.64	24.68	24.70	
5	QPSK	1	24	24.51	24.59	24.67	
5	QPSK	12	0	23.74	23.78	23.89	24
5	QPSK	12	7	23.83	23.77	23.83	
5	QPSK	12	13	23.80	23.85	23.87	
5	QPSK	25	0	23.83	23.81	23.92	24
5	16QAM	1	0	23.91	23.74	23.71	
5	16QAM	1	12	23.97	23.78	23.82	
5	16QAM	1	24	23.93	23.82	23.74	23
5	16QAM	12	0	22.86	22.92	22.94	
5	16QAM	12	7	22.85	22.80	22.94	
5	16QAM	12	13	22.79	22.88	22.95	23
5	16QAM	25	0	22.88	22.86	22.95	
5	64QAM	1	0	22.71	22.89	22.89	
5	64QAM	1	12	22.82	22.85	22.78	23
5	64QAM	1	24	22.80	22.83	22.77	
5	64QAM	12	0	21.77	21.88	21.86	
5	64QAM	12	7	21.93	21.90	21.88	22
5	64QAM	12	13	21.85	21.92	21.83	
5	64QAM	25	0	21.89	21.82	21.81	



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	21.49	24.85	24.87	21.49	25
20	QPSK	1	49	21.29	24.94	24.92	21.27	
20	QPSK	1	99	21.29	24.92	24.88	21.20	
20	QPSK	50	0	20.63	23.82	23.85	20.64	
20	QPSK	50	24	20.59	23.89	23.85	20.55	24
20	QPSK	50	50	20.53	23.83	23.81	20.45	
20	QPSK	100	0	20.56	23.71	23.79	20.53	
20	16QAM	1	0	20.80	23.47	23.57	20.88	
20	16QAM	1	49	20.65	23.29	23.33	20.65	24
20	16QAM	1	99	20.69	23.31	23.25	20.61	
20	16QAM	50	0	19.67	22.20	22.29	19.66	
20	16QAM	50	24	19.62	22.25	22.22	19.59	
20	16QAM	50	50	19.57	22.18	22.17	19.48	23
20	16QAM	100	0	19.62	22.23	22.22	19.54	
20	64QAM	1	0	19.63	22.30	22.13	19.77	
20	64QAM	1	49	19.53	22.17	22.11	19.47	
20	64QAM	1	99	19.58	22.16	22.07	19.44	23
20	64QAM	50	0	18.66	21.22	21.18	18.65	
20	64QAM	50	24	18.62	21.14	21.22	18.56	
20	64QAM	50	50	18.56	21.18	21.08	18.47	
20	64QAM	100	0	18.60	21.25	21.04	18.55	22
Channel				55315	55820	56160	56665	
Frequency (MHz)				3557.5	3608	3642	3692.5	Tune-up limit (dBm)
15	QPSK	1	0	21.49	24.83	24.80	21.44	25
15	QPSK	1	37	21.21	24.91	24.82	21.23	
15	QPSK	1	74	21.23	24.82	24.83	21.11	
15	QPSK	36	0	20.56	23.80	23.75	20.55	
15	QPSK	36	20	20.50	23.83	23.81	20.54	24
15	QPSK	36	39	20.46	23.76	23.80	20.43	
15	QPSK	75	0	20.51	23.70	23.77	20.52	
15	16QAM	1	0	20.74	23.43	23.50	20.82	
15	16QAM	1	37	20.63	23.29	23.33	20.59	24
15	16QAM	1	74	20.64	23.22	23.18	20.58	
15	16QAM	36	0	19.60	22.19	22.19	19.58	
15	16QAM	36	20	19.56	22.24	22.19	19.59	
15	16QAM	36	39	19.48	22.18	22.09	19.42	23
15	16QAM	75	0	19.57	22.17	22.19	19.51	
15	64QAM	1	0	19.63	22.29	22.11	19.68	
15	64QAM	1	37	19.45	22.14	22.02	19.38	
15	64QAM	1	74	19.56	22.10	22.03	19.35	23
15	64QAM	36	0	18.66	21.14	21.10	18.56	
15	64QAM	36	20	18.54	21.12	21.17	18.53	
15	64QAM	36	39	18.50	21.15	21.02	18.37	
15	64QAM	75	0	18.59	21.22	20.97	18.45	22
Channel				55290	55815	56165	56890	
Frequency (MHz)				3555	3607.5	3642.5	3695	Tune-up limit (dBm)
10	QPSK	1	0	21.39	24.82	24.86	21.46	25
10	QPSK	1	25	21.26	24.89	24.91	21.20	
10	QPSK	1	49	21.21	24.82	24.79	21.20	
10	QPSK	25	0	20.53	23.81	23.85	20.54	
10	QPSK	25	12	20.59	23.89	23.78	20.48	24
10	QPSK	25	25	20.43	23.75	23.79	20.45	
10	QPSK	50	0	20.46	23.65	23.79	20.50	
10	16QAM	1	0	20.75	23.43	23.57	20.83	
10	16QAM	1	25	20.62	23.26	23.32	20.57	24
10	16QAM	1	49	20.66	23.25	23.24	20.54	
10	16QAM	25	0	19.62	22.14	22.21	19.64	
10	16QAM	25	12	19.61	22.23	22.22	19.50	
10	16QAM	25	25	19.54	22.16	22.08	19.47	23
10	16QAM	50	0	19.53	22.23	22.18	19.48	
10	64QAM	1	0	19.54	22.24	22.04	19.75	
10	64QAM	1	25	19.48	22.08	22.01	19.45	
10	64QAM	1	49	19.50	22.15	22.01	19.36	23
10	64QAM	25	0	18.66	21.14	21.09	18.60	
10	64QAM	25	12	18.55	21.07	21.21	18.52	
10	64QAM	25	25	18.48	21.08	21.05	18.42	
10	64QAM	50	0	18.54	21.21	21.04	18.49	22
Channel				55265	55810	56170	56715	
Frequency (MHz)				3552.5	3607	3643	3697.5	Tune-up limit (dBm)
5	QPSK	1	0	21.48	24.83	24.77	21.40	25
5	QPSK	1	12	21.24	24.94	24.91	21.19	
5	QPSK	1	24	21.28	24.86	24.84	21.13	
5	QPSK	12	0	20.61	23.80	23.77	20.57	
5	QPSK	12	7	20.53	23.87	23.79	20.46	24
5	QPSK	12	13	20.44	23.82	23.71	20.37	
5	QPSK	25	0	20.55	23.64	23.72	20.46	
5	16QAM	1	0	20.75	23.39	23.48	20.84	
5	16QAM	1	12	20.64	23.22	23.24	20.58	24
5	16QAM	1	24	20.66	23.27	23.15	20.60	
5	16QAM	12	0	19.60	22.16	22.21	19.56	
5	16QAM	12	7	19.58	22.16	22.18	19.54	
5	16QAM	12	13	19.52	22.10	22.10	19.38	23
5	16QAM	25	0	19.61	22.19	22.15	19.51	
5	64QAM	1	0	19.57	22.20	22.05	19.74	
5	64QAM	1	12	19.46	22.12	22.08	19.47	
5	64QAM	1	24	19.58	22.14	22.04	19.44	23
5	64QAM	12	0	18.57	21.20	21.13	18.60	
5	64QAM	12	7	18.55	21.04	21.18	18.47	
5	64QAM	12	13	18.56	21.15	21.08	18.45	
5	64QAM	25	0	18.55	21.24	21.01	18.47	22



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	24.97	24.90	25
20	QPSK	1	49	24.89	24.83	24.86	
20	QPSK	1	99	24.86	24.87	24.88	
20	QPSK	50	0	23.84	23.80	23.80	24
20	QPSK	50	24	23.80	23.83	23.83	
20	QPSK	50	50	23.80	23.85	23.93	
20	QPSK	100	0	23.88	23.78	23.71	24
20	16QAM	1	0	23.87	23.78	23.70	
20	16QAM	1	49	23.86	23.89	23.88	
20	16QAM	1	99	23.75	23.74	23.82	23
20	16QAM	50	0	22.81	22.81	22.82	
20	16QAM	50	24	22.81	22.84	22.85	
20	16QAM	50	50	22.83	22.86	22.85	23
20	16QAM	100	0	22.88	22.85	22.83	
20	64QAM	1	0	22.91	22.92	22.90	
20	64QAM	1	49	22.87	22.88	22.93	23
20	64QAM	1	99	22.95	22.91	22.91	
20	64QAM	50	0	21.81	21.82	21.84	
20	64QAM	50	24	21.76	21.75	21.85	22
20	64QAM	50	50	21.85	21.88	21.80	
20	64QAM	100	0	21.79	21.85	21.83	
Channel				37825	38000	38175	Tune-up limit (dBm)
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	24.91	24.96	24.91	25
15	QPSK	1	37	24.82	24.73	24.80	
15	QPSK	1	74	24.87	24.80	24.83	
15	QPSK	36	0	23.71	23.72	23.75	24
15	QPSK	36	20	23.78	23.73	23.75	
15	QPSK	36	39	23.79	23.76	23.77	
15	QPSK	75	0	23.78	23.72	23.75	24
15	16QAM	1	0	23.77	23.72	23.77	
15	16QAM	1	37	23.86	23.85	23.81	
15	16QAM	1	74	23.64	23.68	23.66	23
15	16QAM	36	0	22.74	22.81	22.71	
15	16QAM	36	20	22.77	22.76	22.80	
15	16QAM	36	39	22.82	22.82	22.80	23
15	16QAM	75	0	22.78	22.83	22.81	
15	64QAM	1	0	22.85	22.83	22.90	
15	64QAM	1	37	22.86	22.80	22.78	23
15	64QAM	1	74	22.89	22.84	22.81	
15	64QAM	36	0	21.78	21.75	21.81	
15	64QAM	36	20	21.68	21.66	21.70	22
15	64QAM	36	39	21.87	21.82	21.83	
15	64QAM	75	0	21.76	21.83	21.84	
Channel				37800	38000	38200	Tune-up limit (dBm)
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	24.89	24.93	24.92	25
10	QPSK	1	25	24.82	24.82	24.82	
10	QPSK	1	49	24.81	24.87	24.85	
10	QPSK	25	0	23.80	23.70	23.78	24
10	QPSK	25	12	23.83	23.77	23.78	
10	QPSK	25	25	23.79	23.83	23.75	
10	QPSK	50	0	23.75	23.74	23.77	24
10	16QAM	1	0	23.76	23.73	23.78	
10	16QAM	1	25	23.85	23.79	23.84	
10	16QAM	1	49	23.66	23.70	23.66	23
10	16QAM	25	0	22.71	22.71	22.77	
10	16QAM	25	12	22.83	22.80	22.80	
10	16QAM	25	25	22.77	22.81	22.79	23
10	16QAM	50	0	22.80	22.78	22.77	
10	64QAM	1	0	22.86	22.85	22.86	
10	64QAM	1	25	22.83	22.79	22.84	23
10	64QAM	1	49	22.91	22.91	22.87	
10	64QAM	25	0	21.73	21.78	21.72	
10	64QAM	25	12	21.65	21.67	21.65	22
10	64QAM	25	25	21.83	21.83	21.79	
10	64QAM	50	0	21.84	21.75	21.77	
Channel				37775	38000	38225	Tune-up limit (dBm)
Frequency (MHz)				2572.5	2595	2617.5	
5	QPSK	1	0	24.89	24.89	24.97	25
5	QPSK	1	12	24.82	24.81	24.77	
5	QPSK	1	24	24.87	24.86	24.78	
5	QPSK	12	0	23.74	23.73	23.80	24
5	QPSK	12	7	23.73	23.77	23.74	
5	QPSK	12	13	23.84	23.77	23.84	
5	QPSK	25	0	23.71	23.71	23.72	24
5	16QAM	1	0	23.76	23.69	23.77	
5	16QAM	1	12	23.88	23.87	23.89	
5	16QAM	1	24	23.71	23.66	23.70	23
5	16QAM	12	0	22.72	22.74	22.71	
5	16QAM	12	7	22.77	22.80	22.78	
5	16QAM	12	13	22.78	22.76	22.82	23
5	16QAM	25	0	22.81	22.75	22.83	
5	64QAM	1	0	22.85	22.92	22.88	
5	64QAM	1	12	22.88	22.79	22.84	23
5	64QAM	1	24	22.81	22.85	22.85	
5	64QAM	12	0	21.73	21.82	21.72	
5	64QAM	12	7	21.69	21.70	21.71	22
5	64QAM	12	13	21.85	21.79	21.78	
5	64QAM	25	0	21.77	21.77	21.80	



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	26.91	27.5
20	QPSK	1	49	26.76	26.96	26.95	
20	QPSK	1	99	26.79	26.98	26.99	
20	QPSK	50	0	25.72	25.88	26.08	26.5
20	QPSK	50	24	25.78	25.92	26.24	
20	QPSK	50	50	25.75	25.87	26.01	
20	QPSK	100	0	25.83	25.90	26.06	26.5
20	16QAM	1	0	26.23	26.30	26.30	
20	16QAM	1	49	26.00	26.22	26.34	
20	16QAM	1	99	26.02	26.38	26.37	25.5
20	16QAM	50	0	24.98	25.06	25.25	
20	16QAM	50	24	24.96	25.17	25.29	
20	16QAM	50	50	25.04	25.22	25.28	25.5
20	16QAM	100	0	24.92	25.05	25.13	
20	64QAM	1	0	24.30	24.41	24.47	
20	64QAM	1	49	24.03	24.29	24.72	24.5
20	64QAM	1	99	24.04	24.53	24.66	
20	64QAM	50	0	23.16	23.12	23.40	
20	64QAM	50	24	23.13	23.23	23.48	24.5
20	64QAM	50	50	23.09	23.30	23.42	
20	64QAM	100	0	23.10	23.13	23.22	
Channel				37825	38000	38175	Tune-up limit (dBm)
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	26.81	26.84	26.86	27.5
15	QPSK	1	37	26.76	26.91	26.94	
15	QPSK	1	74	26.73	26.96	26.98	
15	QPSK	36	0	25.65	25.88	26.00	26.5
15	QPSK	36	20	25.76	25.89	26.16	
15	QPSK	36	39	25.70	25.86	26.01	
15	QPSK	75	0	25.73	25.86	25.97	26.5
15	16QAM	1	0	26.22	26.21	26.22	
15	16QAM	1	37	25.91	26.21	26.30	
15	16QAM	1	74	25.98	26.37	26.28	25.5
15	16QAM	36	0	24.88	25.01	25.19	
15	16QAM	36	20	24.94	25.14	25.25	
15	16QAM	36	39	25.02	25.17	25.19	25.5
15	16QAM	75	0	24.88	24.98	25.11	
15	64QAM	1	0	24.24	24.40	24.44	
15	64QAM	1	37	24.03	24.25	24.68	24.5
15	64QAM	1	74	24.03	24.45	24.63	
15	64QAM	36	0	23.16	23.05	23.31	
15	64QAM	36	20	23.04	23.14	23.45	24.5
15	64QAM	36	39	23.07	23.30	23.42	
15	64QAM	75	0	23.06	23.10	23.13	
Channel				37800	38000	38200	Tune-up limit (dBm)
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	26.85	26.88	26.90	27.5
10	QPSK	1	25	26.72	26.90	26.91	
10	QPSK	1	49	26.74	26.89	26.96	
10	QPSK	25	0	25.71	25.88	25.99	26.5
10	QPSK	25	12	25.68	25.82	26.14	
10	QPSK	25	25	25.69	25.83	25.92	
10	QPSK	50	0	25.73	25.89	25.98	26.5
10	16QAM	1	0	26.23	26.24	26.21	
10	16QAM	1	25	25.90	26.17	26.24	
10	16QAM	1	49	25.99	26.28	26.32	25.5
10	16QAM	25	0	24.90	25.06	25.15	
10	16QAM	25	12	24.93	25.09	25.22	
10	16QAM	25	25	24.94	25.16	25.20	25.5
10	16QAM	50	0	24.88	25.02	25.07	
10	64QAM	1	0	24.23	24.37	24.37	
10	64QAM	1	25	23.93	24.26	24.67	24.5
10	64QAM	1	49	24.03	24.49	24.61	
10	64QAM	25	0	23.09	23.05	23.36	
10	64QAM	25	12	23.09	23.15	23.43	24.5
10	64QAM	25	25	23.03	23.26	23.40	
10	64QAM	50	0	23.08	23.09	23.17	
Channel				37775	38000	38225	Tune-up limit (dBm)
Frequency (MHz)				2572.5	2595	2617.5	
5	QPSK	1	0	26.84	26.81	26.83	27.5
5	QPSK	1	12	26.71	26.90	26.88	
5	QPSK	1	24	26.75	26.95	26.95	
5	QPSK	12	0	25.67	25.85	26.05	26.5
5	QPSK	12	7	25.72	25.83	26.19	
5	QPSK	12	13	25.69	25.87	26.01	
5	QPSK	25	0	25.83	25.82	26.06	26.5
5	16QAM	1	0	26.17	26.29	26.25	
5	16QAM	1	12	25.92	26.16	26.25	
5	16QAM	1	24	25.92	26.34	26.32	25.5
5	16QAM	12	0	24.89	25.03	25.21	
5	16QAM	12	7	24.96	25.07	25.25	
5	16QAM	12	13	25.04	25.21	25.19	25.5
5	16QAM	25	0	24.88	25.04	25.04	
5	64QAM	1	0	24.29	24.41	24.41	
5	64QAM	1	12	23.98	24.28	24.65	24.5
5	64QAM	1	24	24.02	24.48	24.66	
5	64QAM	12	0	23.14	23.05	23.34	
5	64QAM	12	7	23.11	23.14	23.46	24.5
5	64QAM	12	13	23.05	23.21	23.32	
5	64QAM	25	0	23.06	23.13	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	24.70	24.95	24.81	24.99	24.55	25	
20	QPSK	1	49	24.79	24.96	24.86	24.86	24.90		
20	QPSK	1	99	24.85	24.95	24.87	24.85	24.76		
20	QPSK	50	0	23.91	23.91	23.90	23.99	23.89	24	
20	QPSK	50	24	23.94	23.95	23.92	23.95	23.91		
20	QPSK	50	50	23.93	23.96	23.94	23.90	23.93		
20	QPSK	100	0	23.95	23.98	23.92	23.88	23.95	24	
20	16QAM	1	0	23.84	23.84	23.81	23.82	23.64		
20	16QAM	1	49	23.83	23.88	23.82	23.88	23.97		
20	16QAM	1	99	23.93	23.83	23.81	23.94	23.81	23	
20	16QAM	50	0	22.92	22.82	22.81	22.90	22.92		
20	16QAM	50	24	22.96	22.87	22.85	22.86	22.95		
20	16QAM	50	50	22.97	22.87	22.78	22.78	22.94	23	
20	16QAM	100	0	22.95	22.85	22.75	22.88	22.96		
20	64QAM	1	0	22.60	22.77	22.90	22.86	22.32		
20	64QAM	1	49	22.56	22.81	22.81	23.16	22.71	23	
20	64QAM	1	99	22.66	22.86	22.83	22.61	22.51		
20	64QAM	50	0	21.94	21.84	21.83	21.80	21.92		
20	64QAM	50	24	21.97	21.86	21.84	21.88	21.87	22	
20	64QAM	50	50	22.00	21.81	21.88	21.89	21.94		
20	64QAM	100	0	21.99	21.89	21.83	21.82	21.96		
Channel				39725	40173	40620	41068	41515	Tune-up limit (dBm)	
Frequency (MHz)				2503.5	2548.3	2593	2637.8	2682.5		
15	QPSK	1	0	24.70	24.92	24.96	24.98	24.48	25	
15	QPSK	1	37	24.75	24.85	24.84	24.76	24.80		
15	QPSK	1	74	24.76	24.80	24.83	24.81	24.71		
15	QPSK	36	0	23.84	23.94	23.93	23.92	23.79	24	
15	QPSK	36	20	23.88	23.85	23.86	23.92	23.82		
15	QPSK	36	39	23.96	23.86	23.86	23.88	23.93		
15	QPSK	75	0	23.88	23.79	23.81	23.87	23.89	24	
15	16QAM	1	0	23.80	23.72	23.74	23.81	23.60		
15	16QAM	1	37	23.83	23.78	23.85	23.85	23.90		
15	16QAM	1	74	23.89	23.91	23.87	23.94	23.74	23	
15	16QAM	36	0	22.84	22.81	22.80	22.83	22.90		
15	16QAM	36	20	22.98	22.80	22.82	22.83	22.90		
15	16QAM	36	39	22.94	22.68	22.69	22.68	22.93	23	
15	16QAM	75	0	22.96	22.81	22.80	22.82	22.89		
15	64QAM	1	0	22.59	22.84	22.77	22.81	22.26		
15	64QAM	1	37	22.57	22.89	22.80	22.88	22.66	23	
15	64QAM	1	74	22.69	22.61	22.55	22.60	22.41		
15	64QAM	36	0	21.88	21.70	21.75	21.71	21.84		
15	64QAM	36	20	21.87	21.84	21.85	21.87	21.78	22	
15	64QAM	36	39	21.99	21.81	21.84	21.85	21.91		
15	64QAM	75	0	21.91	21.78	21.81	21.77	21.93		
Channel				39700	40160	40620	41080	41540	Tune-up limit (dBm)	
Frequency (MHz)				2501	2547	2593	2639	2685		
10	QPSK	1	0	24.65	24.98	24.94	24.99	24.49	25	
10	QPSK	1	25	24.73	24.78	24.77	24.77	24.88		
10	QPSK	1	49	24.85	24.75	24.83	24.80	24.69		
10	QPSK	25	0	23.90	23.96	23.89	23.96	23.85	24	
10	QPSK	25	12	23.91	23.90	23.93	23.88	23.90		
10	QPSK	25	25	23.88	23.80	23.88	23.87	23.90		
10	QPSK	50	0	23.89	23.82	23.81	23.84	23.88	24	
10	16QAM	1	0	23.83	23.78	23.78	23.77	23.64		
10	16QAM	1	25	23.82	23.78	23.84	23.79	23.95		
10	16QAM	1	49	23.92	23.92	23.90	23.91	23.80	23	
10	16QAM	25	0	22.91	22.87	22.83	22.87	22.86		
10	16QAM	25	12	22.91	22.85	22.83	22.77	22.89		
10	16QAM	25	25	22.92	22.75	22.73	22.78	22.93	23	
10	16QAM	50	0	22.88	22.83	22.80	22.78	22.89		
10	64QAM	1	0	22.51	22.81	22.81	22.79	22.32		
10	64QAM	1	25	22.58	22.81	22.88	22.82	22.71	23	
10	64QAM	1	49	22.63	22.55	22.55	22.59	22.44		
10	64QAM	25	0	21.85	21.70	21.76	21.76	21.82		
10	64QAM	25	12	21.91	21.86	21.80	21.79	21.86	22	
10	64QAM	25	25	21.99	21.89	21.83	21.80	21.87		
10	64QAM	50	0	22.00	21.77	21.78	21.81	21.96		
Channel				39675	40148	40620	41093	41565	Tune-up limit (dBm)	
Frequency (MHz)				2498.5	2545.8	2593	2640.30	2687.5		
5	QPSK	1	0	24.68	24.89	24.95	24.99	24.51	25	
5	QPSK	1	12	24.69	24.77	24.83	24.80	24.82		
5	QPSK	1	24	24.86	24.85	24.77	24.80	24.69		
5	QPSK	12	0	23.89	23.94	23.92	23.94	23.87	24	
5	QPSK	12	7	23.91	23.93	23.90	23.88	23.89		
5	QPSK	12	13	23.87	23.89	23.83	23.89	23.88		
5	QPSK	25	0	23.95	23.80	23.80	23.87	23.89	24	
5	16QAM	1	0	23.84	23.80	23.82	23.75	23.64		
5	16QAM	1	12	23.82	23.82	23.87	23.85	23.94		
5	16QAM	1	24	23.97	23.89	23.90	23.85	23.78	23	
5	16QAM	12	0	22.92	22.82	22.90	22.81	22.92		
5	16QAM	12	7	22.96	22.82	22.84	22.85	22.86		
5	16QAM	12	13	22.91	22.76	22.72	22.77	22.90	23	
5	16QAM	25	0	22.89	22.81	22.83	22.85	22.87		
5	64QAM	1	0	22.51	22.79	22.83	22.76	22.27		
5	64QAM	1	12	22.50	22.83	22.83	22.89	22.61	23	
5	64QAM	1	24	22.69	22.54	22.58	22.61	22.48		
5	64QAM	12	0	21.95	21.78	21.80	21.80	21.84		
5	64QAM	12	7	21.96	21.87	21.79	21.83	21.79	22	
5	64QAM	12	13	21.92	21.87	21.82	21.88	21.94		
5	64QAM	25	0	21.94	21.73	21.81	21.80	21.93		



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	26.19	26.48	27.00	26.91	26.48	27.5	
20	QPSK	1	49	26.60	26.13	26.95	27.19	26.81		
20	QPSK	1	99	26.71	26.16	27.01	26.75	26.53		
20	QPSK	50	0	25.46	25.33	26.21	26.26	25.91		
20	QPSK	50	24	25.81	25.21	26.24	26.38	26.02	26.5	
20	QPSK	50	50	25.95	25.12	26.25	26.16	25.82		
20	QPSK	100	0	25.43	25.20	26.24	26.18	25.93		
20	16QAM	1	0	25.51	25.61	26.34	26.26	25.81		
20	16QAM	1	49	25.92	25.51	26.32	26.56	26.16	26.5	
20	16QAM	1	99	26.06	25.38	26.37	26.08	25.82		
20	16QAM	50	0	24.65	24.48	25.23	25.33	24.93		
20	16QAM	50	24	24.97	24.43	25.28	25.41	25.07		
20	16QAM	50	50	24.98	24.29	25.28	25.18	24.95	25.5	
20	16QAM	100	0	24.45	24.32	25.24	25.21	24.98		
20	64QAM	1	0	24.54	24.57	24.65	25.10	24.42		
20	64QAM	1	49	24.46	24.43	24.83	25.41	24.20		
20	64QAM	1	99	24.41	24.30	24.50	24.91	24.28	25.5	
20	64QAM	50	0	23.65	23.45	23.72	24.30	23.47		
20	64QAM	50	24	23.03	23.45	23.73	24.41	23.37		
20	64QAM	50	50	23.22	23.30	23.75	24.18	23.13		
20	64QAM	100	0	23.87	23.42	23.70	24.23	23.23	24.5	
Channel				39725	40173	40620	41068	41515		
Frequency (MHz)				2503.5	2548.3	2593	2637.8	2682.5		
15	QPSK	1	0	26.16	26.39	26.98	26.85	26.44		27.5
15	QPSK	1	37	26.53	26.03	26.86	27.15	26.72		
15	QPSK	1	74	26.63	26.12	26.99	26.69	26.48		
15	QPSK	36	0	25.40	25.24	26.20	26.16	25.83		
15	QPSK	36	20	25.77	25.13	26.18	26.36	26.01	26.5	
15	QPSK	36	39	25.90	25.07	26.18	26.06	25.80		
15	QPSK	75	0	25.33	25.16	26.17	26.13	25.91		
15	16QAM	1	0	25.46	25.60	26.33	26.23	25.79		
15	16QAM	1	37	25.82	25.47	26.24	26.53	26.12	26.5	
15	16QAM	1	74	26.04	25.32	26.27	26.00	25.81		
15	16QAM	36	0	24.61	24.44	25.20	25.24	24.91		
15	16QAM	36	20	24.88	24.40	25.18	25.32	25.01		
15	16QAM	36	39	24.89	24.24	25.24	25.08	24.94	25.5	
15	16QAM	75	0	24.35	24.32	25.22	25.18	24.89		
15	64QAM	1	0	24.48	24.49	24.62	25.04	24.41		
15	64QAM	1	37	24.42	24.36	24.76	25.39	24.16		
15	64QAM	1	74	24.36	24.23	24.49	24.81	24.26	25.5	
15	64QAM	36	0	23.57	23.40	23.71	24.24	23.47		
15	64QAM	36	20	22.95	23.41	23.63	24.38	23.35		
15	64QAM	36	39	23.13	23.23	23.68	24.13	23.11		
15	64QAM	75	0	23.81	23.36	23.61	24.21	23.15	24.5	
Channel				39700	40160	40620	41080	41540		
Frequency (MHz)				2501	2547	2593	2639	2685		
10	QPSK	1	0	26.18	26.45	27.00	26.89	26.44		27.5
10	QPSK	1	25	26.52	26.10	26.91	27.17	26.76		
10	QPSK	1	49	26.71	26.06	27.01	26.74	26.49		
10	QPSK	25	0	25.40	25.28	26.17	26.21	25.90		
10	QPSK	25	12	25.75	25.21	26.18	26.30	26.00	26.5	
10	QPSK	25	25	25.91	25.06	26.15	26.10	25.80		
10	QPSK	50	0	25.35	25.17	26.15	26.13	25.92		
10	16QAM	1	0	25.49	25.53	26.26	26.23	25.80		
10	16QAM	1	25	25.86	25.44	26.29	26.47	26.16	26.5	
10	16QAM	1	49	25.98	25.38	26.37	25.99	25.79		
10	16QAM	25	0	24.58	24.45	25.15	25.33	24.91		
10	16QAM	25	12	24.97	24.41	25.26	25.32	25.03		
10	16QAM	25	25	24.95	24.21	25.27	25.10	24.95	25.5	
10	16QAM	50	0	24.43	24.29	25.21	25.11	24.90		
10	64QAM	1	0	24.49	24.47	24.57	25.06	24.36		
10	64QAM	1	25	24.43	24.39	24.75	25.35	24.10		
10	64QAM	1	49	24.34	24.25	24.50	24.90	24.21	25.5	
10	64QAM	25	0	23.57	23.38	23.67	24.30	23.47		
10	64QAM	25	12	22.93	23.36	23.65	24.41	23.31		
10	64QAM	25	25	23.17	23.25	23.68	24.11	23.08		
10	64QAM	50	0	23.85	23.42	23.65	24.15	23.22	24.5	
Channel				39675	40148	40620	41093	41565		
Frequency (MHz)				2498.5	2545.8	2593	2640.30	2687.5		
5	QPSK	1	0	26.17	26.42	26.93	26.82	26.39		27.5
5	QPSK	1	12	26.55	26.11	26.88	27.19	26.79		
5	QPSK	1	24	26.65	26.12	27.00	26.65	26.50		
5	QPSK	12	0	25.36	25.26	26.12	26.26	25.87		
5	QPSK	12	7	25.73	25.13	26.24	26.30	25.99	26.5	
5	QPSK	12	13	25.94	25.03	26.15	26.07	25.80		
5	QPSK	25	0	25.37	25.20	26.17	26.16	25.86		
5	16QAM	1	0	25.44	25.61	26.26	26.17	25.77		
5	16QAM	1	12	25.88	25.50	26.29	26.51	26.14	26.5	
5	16QAM	1	24	25.98	25.32	26.34	26.04	25.74		
5	16QAM	12	0	24.62	24.46	25.18	25.33	24.83		
5	16QAM	12	7	24.87	24.35	25.23	25.34	25.00		
5	16QAM	12	13	24.88	24.27	25.25	25.10	24.94	25.5	
5	16QAM	25	0	24.42	24.31	25.21	25.18	24.97		
5	64QAM	1	0	24.53	24.50	24.64	25.06	24.39		
5	64QAM	1	12	24.46	24.36	24.83	25.40	24.18		
5	64QAM	1	24	24.40	24.29	24.43	24.88	24.25	25.5	
5	64QAM	12	0	23.61	23.37	23.65	24.28	23.42		
5	64QAM	12	7	22.94	23.35	23.73	24.34	23.33		
5	64QAM	12	13	23.20	23.22	23.68	24.08	23.06		
5	64QAM	25	0	23.78	23.41	23.64	24.15	23.17	24.5	



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	23.02	23.06	23.5
20	QPSK	1	49	22.95	22.99	23.04	
20	QPSK	1	99	22.89	22.92	22.97	
20	QPSK	50	0	22.16	22.16	22.25	22.5
20	QPSK	50	24	22.19	22.14	22.21	
20	QPSK	50	50	22.11	22.17	22.20	
20	QPSK	100	0	22.16	22.15	22.18	22.5
20	16QAM	1	0	22.29	22.35	22.43	
20	16QAM	1	49	22.33	22.33	22.38	
20	16QAM	1	99	22.24	22.30	22.32	21.5
20	16QAM	50	0	21.18	21.23	21.27	
20	16QAM	50	24	21.23	21.20	21.25	
20	16QAM	50	50	21.16	21.19	21.23	21.5
20	16QAM	100	0	21.20	21.17	21.21	
20	64QAM	1	0	21.09	21.16	21.22	
20	64QAM	1	49	21.15	21.22	21.18	20.5
20	64QAM	1	99	21.15	21.18	21.08	
20	64QAM	50	0	20.18	20.23	20.22	
20	64QAM	50	24	20.24	20.19	20.25	20.5
20	64QAM	50	50	20.16	20.20	20.19	
20	64QAM	100	0	20.19	20.20	20.17	
Channel				43165	43340	43515	Tune-up limit (dBm)
Frequency (MHz)				3557.5	3575	3592.5	
15	QPSK	1	0	22.85	23.00	22.96	23.5
15	QPSK	1	37	22.87	22.93	22.97	
15	QPSK	1	74	22.81	22.88	22.97	
15	QPSK	36	0	22.14	22.13	22.15	22.5
15	QPSK	36	20	22.10	22.07	22.21	
15	QPSK	36	39	22.10	22.10	22.17	
15	QPSK	75	0	22.14	22.06	22.16	22.5
15	16QAM	1	0	22.26	22.30	22.41	
15	16QAM	1	37	22.31	22.28	22.33	
15	16QAM	1	74	22.18	22.24	22.32	21.5
15	16QAM	36	0	21.16	21.14	21.27	
15	16QAM	36	20	21.21	21.15	21.20	
15	16QAM	36	39	21.16	21.14	21.13	21.5
15	16QAM	75	0	21.15	21.10	21.17	
15	64QAM	1	0	21.01	21.06	21.13	
15	64QAM	1	37	21.14	21.17	21.13	20.5
15	64QAM	1	74	21.12	21.14	21.00	
15	64QAM	36	0	20.10	20.17	20.16	
15	64QAM	36	20	20.21	20.18	20.17	20.5
15	64QAM	36	39	20.07	20.16	20.12	
15	64QAM	75	0	20.12	20.20	20.08	
Channel				43140	43340	43540	Tune-up limit (dBm)
Frequency (MHz)				3555	3575	3595	
10	QPSK	1	0	22.91	22.95	23.05	23.5
10	QPSK	1	25	22.86	22.96	23.02	
10	QPSK	1	49	22.86	22.85	22.91	
10	QPSK	25	0	22.14	22.16	22.17	22.5
10	QPSK	25	12	22.13	22.07	22.12	
10	QPSK	25	25	22.11	22.07	22.11	
10	QPSK	50	0	22.06	22.07	22.18	22.5
10	16QAM	1	0	22.29	22.33	22.43	
10	16QAM	1	25	22.26	22.32	22.30	
10	16QAM	1	49	22.16	22.20	22.29	21.5
10	16QAM	25	0	21.10	21.21	21.21	
10	16QAM	25	12	21.23	21.16	21.21	
10	16QAM	25	25	21.14	21.09	21.21	21.5
10	16QAM	50	0	21.18	21.16	21.18	
10	64QAM	1	0	21.09	21.09	21.21	
10	64QAM	1	25	21.09	21.17	21.14	20.5
10	64QAM	1	49	21.05	21.18	21.08	
10	64QAM	25	0	20.16	20.15	20.19	
10	64QAM	25	12	20.24	20.16	20.19	20.5
10	64QAM	25	25	20.12	20.14	20.18	
10	64QAM	50	0	20.18	20.18	20.17	
Channel				43115	43340	43565	Tune-up limit (dBm)
Frequency (MHz)				3552.5	3575	3597.5	
5	QPSK	1	0	22.88	22.98	22.97	23.5
5	QPSK	1	12	22.95	22.91	23.04	
5	QPSK	1	24	22.82	22.88	22.93	
5	QPSK	12	0	22.16	22.08	22.18	22.5
5	QPSK	12	7	22.18	22.11	22.13	
5	QPSK	12	13	22.10	22.07	22.18	
5	QPSK	25	0	22.16	22.14	22.10	22.5
5	16QAM	1	0	22.28	22.30	22.39	
5	16QAM	1	12	22.28	22.32	22.30	
5	16QAM	1	24	22.23	22.22	22.27	21.5
5	16QAM	12	0	21.13	21.19	21.21	
5	16QAM	12	7	21.21	21.10	21.22	
5	16QAM	12	13	21.15	21.13	21.18	21.5
5	16QAM	25	0	21.14	21.17	21.12	
5	64QAM	1	0	21.02	21.12	21.13	
5	64QAM	1	12	21.09	21.15	21.18	20.5
5	64QAM	1	24	21.11	21.09	20.99	
5	64QAM	12	0	20.14	20.22	20.22	
5	64QAM	12	7	20.15	20.10	20.20	20.5
5	64QAM	12	13	20.10	20.19	20.14	
5	64QAM	25	0	20.12	20.18	20.17	



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	19.68	23.27	23.31	19.59	23.5
20	QPSK	1	49	19.50	23.11	23.04	19.30	
20	QPSK	1	99	19.52	23.06	23.01	19.23	
20	QPSK	50	0	18.85	22.33	22.37	18.67	
20	QPSK	50	24	18.81	22.37	22.29	18.60	22.5
20	QPSK	50	50	18.75	22.30	22.29	18.50	
20	QPSK	100	0	18.80	22.37	22.27	18.59	
20	16QAM	1	0	19.86	22.24	22.20	18.90	
20	16QAM	1	49	18.85	22.49	22.23	18.70	22.5
20	16QAM	1	99	18.93	22.46	22.43	18.62	
20	16QAM	50	0	17.87	21.40	21.36	17.71	
20	16QAM	50	24	17.83	21.40	21.35	17.63	
20	16QAM	50	50	17.78	21.36	21.27	17.54	21.5
20	16QAM	100	0	17.82	21.42	21.32	17.60	
20	64QAM	1	0	17.88	21.48	21.30	17.84	
20	64QAM	1	49	17.77	21.35	21.22	17.52	
20	64QAM	1	99	17.78	21.34	21.13	17.52	21.5
20	64QAM	50	0	16.88	20.40	20.34	16.72	
20	64QAM	50	24	16.84	20.44	20.35	16.63	
20	64QAM	50	50	16.78	20.35	20.20	16.52	
20	64QAM	100	0	16.83	20.43	20.34	16.63	20.5
Channel				55315	55820	56160	56665	
Frequency (MHz)				3557.5	3608	3642	3692.5	Tune-up limit (dBm)
15	QPSK	1	0	19.60	23.19	23.31	19.50	23.5
15	QPSK	1	37	19.42	23.05	22.96	19.20	
15	QPSK	1	74	19.44	23.06	22.92	19.20	
15	QPSK	36	0	18.83	22.26	22.31	18.61	
15	QPSK	36	20	18.80	22.27	22.24	18.52	22.5
15	QPSK	36	39	18.65	22.22	22.26	18.50	
15	QPSK	75	0	18.71	22.30	22.19	18.59	
15	16QAM	1	0	19.86	22.19	22.18	18.84	
15	16QAM	1	37	18.81	22.42	22.21	18.62	22.5
15	16QAM	1	74	18.86	22.45	22.33	18.61	
15	16QAM	36	0	17.77	21.40	21.35	17.63	
15	16QAM	36	20	17.78	21.31	21.25	17.53	
15	16QAM	36	39	17.71	21.28	21.27	17.46	21.5
15	16QAM	75	0	17.81	21.36	21.22	17.56	
15	64QAM	1	0	17.88	21.42	21.25	17.79	
15	64QAM	1	37	17.73	21.27	21.19	17.46	
15	64QAM	1	74	17.77	21.33	21.09	17.43	21.5
15	64QAM	36	0	16.84	20.34	20.26	16.70	
15	64QAM	36	20	16.84	20.43	20.32	16.58	
15	64QAM	36	39	16.73	20.25	20.10	16.50	
15	64QAM	75	0	16.80	20.33	20.30	16.59	20.5
Channel				55290	55815	56165	56690	
Frequency (MHz)				3555	3607.5	3642.5	3695	Tune-up limit (dBm)
10	QPSK	1	0	19.67	23.21	23.29	19.55	23.5
10	QPSK	1	25	19.48	23.10	22.95	19.28	
10	QPSK	1	49	19.47	22.99	23.00	19.13	
10	QPSK	25	0	18.80	22.32	22.27	18.57	
10	QPSK	25	12	18.71	22.33	22.20	18.57	22.5
10	QPSK	25	25	18.74	22.28	22.26	18.49	
10	QPSK	50	0	18.77	22.30	22.21	18.58	
10	16QAM	1	0	19.76	22.20	22.13	18.88	
10	16QAM	1	25	18.77	22.49	22.13	18.65	22.5
10	16QAM	1	49	18.91	22.43	22.42	18.61	
10	16QAM	25	0	17.86	21.36	21.33	17.65	
10	16QAM	25	12	17.75	21.39	21.35	17.61	
10	16QAM	25	25	17.71	21.26	21.17	17.50	21.5
10	16QAM	50	0	17.82	21.35	21.22	17.54	
10	64QAM	1	0	17.82	21.42	21.26	17.84	
10	64QAM	1	25	17.69	21.25	21.22	17.47	
10	64QAM	1	49	17.68	21.24	21.09	17.50	21.5
10	64QAM	25	0	16.87	20.39	20.26	16.71	
10	64QAM	25	12	16.82	20.44	20.25	16.56	
10	64QAM	25	25	16.76	20.33	20.16	16.44	
10	64QAM	50	0	16.83	20.36	20.28	16.62	20.5
Channel				55265	55810	56170	56715	
Frequency (MHz)				3552.5	3607	3643	3697.5	Tune-up limit (dBm)
5	QPSK	1	0	19.68	23.19	23.26	19.51	23.5
5	QPSK	1	12	19.46	23.04	23.01	19.30	
5	QPSK	1	24	19.52	22.97	22.95	19.17	
5	QPSK	12	0	18.75	22.28	22.29	18.60	
5	QPSK	12	7	18.81	22.28	22.26	18.51	22.5
5	QPSK	12	13	18.75	22.28	22.28	18.44	
5	QPSK	25	0	18.75	22.29	22.18	18.52	
5	16QAM	1	0	19.76	22.14	22.13	18.80	
5	16QAM	1	12	18.85	22.44	22.14	18.60	22.5
5	16QAM	1	24	18.90	22.36	22.41	18.59	
5	16QAM	12	0	17.82	21.38	21.29	17.65	
5	16QAM	12	7	17.78	21.40	21.33	17.54	
5	16QAM	12	13	17.71	21.31	21.22	17.51	21.5
5	16QAM	25	0	17.75	21.39	21.29	17.56	
5	64QAM	1	0	17.88	21.44	21.20	17.77	
5	64QAM	1	12	17.77	21.31	21.17	17.52	
5	64QAM	1	24	17.76	21.34	21.03	17.44	21.5
5	64QAM	12	0	16.88	20.39	20.27	16.67	
5	64QAM	12	7	16.78	20.44	20.31	16.61	
5	64QAM	12	13	16.78	20.35	20.13	16.45	
5	64QAM	25	0	16.79	20.42	20.27	16.63	20.5



Band 38							
Ant 2							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				37850	38000	38150	
Frequency (MHz)				2580	2595	2610	
20	QPSK	1	0	24.18	24.25	24.15	
20	QPSK	1	49	24.30	24.17	24.22	25
20	QPSK	1	99	24.15	24.27	24.21	
20	QPSK	50	0	23.32	23.29	23.37	
20	QPSK	50	24	23.43	23.35	23.38	24
20	QPSK	50	50	23.38	23.37	23.45	
20	QPSK	100	0	23.41	23.32	23.25	
20	16QAM	1	0	23.32	23.37	23.38	24
20	16QAM	1	49	23.30	23.30	23.27	
20	16QAM	1	99	23.34	23.46	23.32	
20	16QAM	50	0	22.22	22.29	22.47	23
20	16QAM	50	24	22.42	22.42	22.30	
20	16QAM	50	50	22.36	22.44	22.42	
20	16QAM	100	0	22.30	22.47	22.42	23
20	64QAM	1	0	22.07	22.05	21.99	
20	64QAM	1	49	21.92	22.07	22.07	
20	64QAM	1	99	22.04	22.08	22.07	22
20	64QAM	50	0	21.39	21.30	21.36	
20	64QAM	50	24	21.37	21.34	21.49	
20	64QAM	50	50	21.45	21.55	21.51	22
20	64QAM	100	0	21.34	21.44	21.30	
Channel				37825	38000	38175	Tune-up limit (dBm)
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	24.10	24.19	24.21	25
15	QPSK	1	37	24.23	24.21	24.20	
15	QPSK	1	74	24.23	24.21	24.24	
15	QPSK	36	0	23.24	23.42	23.47	24
15	QPSK	36	20	23.43	23.36	23.25	
15	QPSK	36	39	23.46	23.50	23.35	
15	QPSK	75	0	23.43	23.28	23.37	24
15	16QAM	1	0	23.37	23.38	23.33	
15	16QAM	1	37	23.38	23.39	23.31	
15	16QAM	1	74	23.35	23.36	23.42	23
15	16QAM	36	0	22.27	22.30	22.43	
15	16QAM	36	20	22.34	22.40	22.28	
15	16QAM	36	39	22.33	22.45	22.48	23
15	16QAM	75	0	22.50	22.28	22.38	
15	64QAM	1	0	22.00	21.97	21.94	
15	64QAM	1	37	22.07	22.03	22.18	23
15	64QAM	1	74	22.13	22.23	22.07	
15	64QAM	36	0	21.39	21.46	21.38	
15	64QAM	36	20	21.48	21.49	21.47	22
15	64QAM	36	39	21.44	21.55	21.42	
15	64QAM	75	0	21.38	21.41	21.34	
Channel				37800	38000	38200	Tune-up limit (dBm)
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	24.10	24.29	24.30	25
10	QPSK	1	25	24.26	24.23	24.22	
10	QPSK	1	49	24.23	24.21	24.28	
10	QPSK	25	0	23.27	23.40	23.48	24
10	QPSK	25	12	23.34	23.36	23.35	
10	QPSK	25	25	23.37	23.34	23.49	
10	QPSK	50	0	23.33	23.29	23.37	24
10	16QAM	1	0	23.28	23.36	23.31	
10	16QAM	1	25	23.27	23.40	23.26	
10	16QAM	1	49	23.26	23.32	23.45	23
10	16QAM	25	0	22.36	22.39	22.39	
10	16QAM	25	12	22.42	22.44	22.35	
10	16QAM	25	25	22.33	22.46	22.44	23
10	16QAM	50	0	22.34	22.45	22.38	
10	64QAM	1	0	21.89	21.95	21.96	
10	64QAM	1	25	21.98	22.12	22.04	23
10	64QAM	1	49	22.17	22.18	21.99	
10	64QAM	25	0	21.39	21.47	21.45	
10	64QAM	25	12	21.31	21.44	21.39	22
10	64QAM	25	25	21.34	21.41	21.50	
10	64QAM	50	0	21.48	21.43	21.42	
Channel				37775	38000	38225	Tune-up limit (dBm)
Frequency (MHz)				2572.5	2595	2617.5	
5	QPSK	1	0	24.21	24.29	24.17	25
5	QPSK	1	12	24.17	24.17	24.24	
5	QPSK	1	24	24.29	24.26	24.25	
5	QPSK	12	0	23.34	23.24	23.36	24
5	QPSK	12	7	23.43	23.36	23.40	
5	QPSK	12	13	23.44	23.50	23.40	
5	QPSK	25	0	23.33	23.46	23.41	24
5	16QAM	1	0	23.25	23.41	23.37	
5	16QAM	1	12	23.25	23.39	23.42	
5	16QAM	1	24	23.38	23.33	23.32	23
5	16QAM	12	0	22.40	22.39	22.42	
5	16QAM	12	7	22.31	22.35	22.41	
5	16QAM	12	13	22.50	22.40	22.46	23
5	16QAM	25	0	22.35	22.38	22.31	
5	64QAM	1	0	21.98	22.02	22.12	
5	64QAM	1	12	21.94	22.03	22.05	23
5	64QAM	1	24	22.10	22.22	22.11	
5	64QAM	12	0	21.24	21.41	21.40	
5	64QAM	12	7	21.29	21.31	21.34	22
5	64QAM	12	13	21.33	21.53	21.55	
5	64QAM	25	0	21.34	21.32	21.31	



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	25.96	26.04	26.15	27.5
20	QPSK	1	49	26.13	26.00	26.10	
20	QPSK	1	99	26.11	26.13	25.90	
20	QPSK	50	0	25.33	25.09	24.99	26.5
20	QPSK	50	24	25.25	25.00	24.94	
20	QPSK	50	50	25.22	25.07	24.97	
20	QPSK	100	0	25.36	25.04	25.06	26.5
20	16QAM	1	0	25.50	25.43	25.53	
20	16QAM	1	49	25.52	25.50	25.52	
20	16QAM	1	99	25.37	25.45	25.26	25.5
20	16QAM	50	0	24.34	24.30	24.21	
20	16QAM	50	24	24.47	24.31	24.24	
20	16QAM	50	50	24.33	24.32	24.16	25.5
20	16QAM	100	0	24.30	24.35	24.18	
20	64QAM	1	0	23.89	23.71	23.55	25.5
20	64QAM	1	49	23.60	23.55	23.62	
20	64QAM	1	99	23.72	23.56	23.48	
20	64QAM	50	0	22.76	22.49	22.60	24.5
20	64QAM	50	24	22.69	22.55	22.57	
20	64QAM	50	50	22.57	22.56	22.68	
20	64QAM	100	0	22.50	22.49	22.58	Tune-up limit (dBm)
Channel				37825	38000	38175	
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	25.94	26.05	26.03	
15	QPSK	1	37	26.02	26.17	26.10	27.5
15	QPSK	1	74	26.03	26.11	25.95	
15	QPSK	36	0	25.29	25.16	25.05	26.5
15	QPSK	36	20	25.34	25.18	25.05	
15	QPSK	36	39	25.09	25.07	24.91	
15	QPSK	75	0	25.31	25.23	25.12	26.5
15	16QAM	1	0	25.50	25.35	25.40	
15	16QAM	1	37	25.42	25.53	25.55	
15	16QAM	1	74	25.39	25.48	25.35	25.5
15	16QAM	36	0	24.29	24.41	24.36	
15	16QAM	36	20	24.40	24.31	24.42	
15	16QAM	36	39	24.46	24.32	24.27	25.5
15	16QAM	75	0	24.35	24.21	24.08	
15	64QAM	1	0	23.70	23.66	23.73	
15	64QAM	1	37	23.68	23.52	23.71	24.5
15	64QAM	1	74	23.53	23.68	23.58	
15	64QAM	36	0	22.71	22.63	22.52	
15	64QAM	36	20	22.73	22.49	22.48	24.5
15	64QAM	36	39	22.56	22.50	22.57	
15	64QAM	75	0	22.49	22.65	22.74	
Channel				37800	38000	38200	Tune-up limit (dBm)
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	26.00	26.13	26.00	27.5
10	QPSK	1	25	26.16	26.00	26.09	
10	QPSK	1	49	26.15	26.18	26.09	
10	QPSK	25	0	25.24	25.07	25.01	26.5
10	QPSK	25	12	25.17	25.18	25.05	
10	QPSK	25	25	25.20	24.93	24.80	
10	QPSK	50	0	25.40	25.12	24.98	26.5
10	16QAM	1	0	25.41	25.42	25.58	
10	16QAM	1	25	25.51	25.47	25.53	
10	16QAM	1	49	25.57	25.48	25.41	25.5
10	16QAM	25	0	24.37	24.27	24.21	
10	16QAM	25	12	24.34	24.38	24.35	
10	16QAM	25	25	24.50	24.49	24.35	25.5
10	16QAM	50	0	24.48	24.18	24.13	
10	64QAM	1	0	23.80	23.72	23.61	
10	64QAM	1	25	23.52	23.60	23.52	24.5
10	64QAM	1	49	23.65	23.58	23.63	
10	64QAM	25	0	22.63	22.48	22.58	
10	64QAM	25	12	22.63	22.63	22.65	24.5
10	64QAM	25	25	22.57	22.54	22.58	
10	64QAM	50	0	22.56	22.50	22.60	
Channel				37775	38000	38225	Tune-up limit (dBm)
Frequency (MHz)				2572.5	2595	2617.5	
5	QPSK	1	0	26.08	26.04	26.05	27.5
5	QPSK	1	12	26.09	26.06	26.02	
5	QPSK	1	24	26.06	26.18	25.97	
5	QPSK	12	0	25.21	25.20	25.09	26.5
5	QPSK	12	7	25.17	25.00	24.97	
5	QPSK	12	13	25.10	24.97	24.84	
5	QPSK	25	0	25.31	25.18	25.12	26.5
5	16QAM	1	0	25.38	25.51	25.49	
5	16QAM	1	12	25.47	25.41	25.46	
5	16QAM	1	24	25.55	25.47	25.33	25.5
5	16QAM	12	0	24.36	24.37	24.25	
5	16QAM	12	7	24.32	24.43	24.40	
5	16QAM	12	13	24.41	24.33	24.32	25.5
5	16QAM	25	0	24.35	24.18	24.08	
5	64QAM	1	0	23.81	23.74	23.62	
5	64QAM	1	12	23.70	23.59	23.55	24.5
5	64QAM	1	24	23.72	23.63	23.63	
5	64QAM	12	0	22.78	22.48	22.68	
5	64QAM	12	7	22.67	22.58	22.66	24.5
5	64QAM	12	13	22.66	22.50	22.70	
5	64QAM	25	0	22.47	22.58	22.63	



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	24.55	24.36	24.35	23.93	23.73	25	
20	QPSK	1	49	24.57	24.38	24.22	24.26	24.02		
20	QPSK	1	99	24.53	24.18	24.36	23.76	24.03		
20	QPSK	50	0	23.63	23.37	23.28	23.41	23.16		
20	QPSK	50	24	23.62	23.47	23.47	23.25	23.29	24	
20	QPSK	50	50	23.57	23.40	23.54	23.12	23.26		
20	QPSK	100	0	23.56	23.31	23.40	23.16	23.10		
20	16QAM	1	0	23.62	23.33	23.42	23.23	22.88		
20	16QAM	1	49	23.65	23.47	23.41	23.46	23.22	24	
20	16QAM	1	99	23.58	23.46	23.47	22.94	23.07		
20	16QAM	50	0	22.61	22.48	22.33	22.40	22.07		
20	16QAM	50	24	22.58	22.38	22.33	22.30	22.17		
20	16QAM	50	50	22.51	22.48	22.45	22.21	22.30	23	
20	16QAM	100	0	22.56	22.46	22.29	22.30	22.12		
20	64QAM	1	0	22.43	22.19	22.18	21.87	21.48		
20	64QAM	1	49	22.31	22.05	22.11	22.08	21.96		
20	64QAM	1	99	22.23	22.06	22.09	21.46	21.99	23	
20	64QAM	50	0	21.61	21.42	21.41	21.30	21.11		
20	64QAM	50	24	21.70	21.43	21.44	21.36	21.21		
20	64QAM	50	50	21.59	21.52	21.42	21.15	21.34		
20	64QAM	100	0	21.52	21.35	21.47	21.20	21.11	22	
Channel				39725	40173	40620	41068	41515		
Frequency (MHz)				2503.5	2548.3	2593	2637.8	2682.5		
15	QPSK	1	0	24.43	24.24	24.36	24.12	23.65	25	
15	QPSK	1	37	24.00	24.29	24.32	24.38	24.17		
15	QPSK	1	74	24.48	24.30	24.37	23.85	24.13		
15	QPSK	36	0	23.55	23.39	23.34	23.29	23.15		
15	QPSK	36	20	23.47	23.49	23.46	23.26	23.25	24	
15	QPSK	36	39	23.47	23.35	23.39	23.20	23.23		
15	QPSK	75	0	23.62	23.38	23.41	23.27	23.20		
15	16QAM	1	0	23.56	23.33	23.39	23.20	22.84		
15	16QAM	1	37	23.60	23.38	23.40	23.52	23.21	24	
15	16QAM	1	74	23.48	23.38	23.52	23.04	23.27		
15	16QAM	36	0	22.75	22.60	22.29	22.37	22.08		
15	16QAM	36	20	22.60	22.48	22.46	22.29	22.35		
15	16QAM	36	39	22.50	22.38	22.58	22.30	22.28	23	
15	16QAM	75	0	22.49	22.52	22.33	22.22	22.07		
15	64QAM	1	0	22.39	22.08	22.19	21.83	21.48		
15	64QAM	1	37	22.39	22.21	22.03	22.24	21.91		
15	64QAM	1	74	22.20	22.23	22.24	21.55	21.95	23	
15	64QAM	36	0	21.76	21.43	21.35	21.39	21.11		
15	64QAM	36	20	21.53	21.52	21.45	21.43	21.30		
15	64QAM	36	39	21.58	21.51	21.46	21.15	21.32		
15	64QAM	75	0	21.52	21.55	21.29	21.27	21.09	22	
Channel				39700	40160	40620	41080	41540		
Frequency (MHz)				2501	2547	2593	2639	2685		
10	QPSK	1	0	24.38	24.41	24.35	23.97	23.72	25	
10	QPSK	1	25	24.48	24.27	24.33	24.30	24.08		
10	QPSK	1	49	24.50	24.14	24.45	23.84	23.95		
10	QPSK	25	0	23.68	23.54	23.45	23.23	23.12		
10	QPSK	25	12	23.65	23.34	23.30	23.22	23.29	24	
10	QPSK	25	25	23.45	23.34	23.48	23.20	23.34		
10	QPSK	50	0	23.51	23.44	23.44	23.22	23.06		
10	16QAM	1	0	23.57	23.48	23.36	23.15	22.90		
10	16QAM	1	25	23.52	23.38	23.36	23.42	23.26	24	
10	16QAM	1	49	23.55	23.55	23.44	23.03	23.09		
10	16QAM	25	0	22.56	22.53	22.47	22.38	22.15		
10	16QAM	25	12	22.58	22.40	22.37	22.38	22.21		
10	16QAM	25	25	22.46	22.46	22.39	22.15	22.22	23	
10	16QAM	50	0	22.61	22.40	22.42	22.32	22.08		
10	64QAM	1	0	22.31	22.08	22.17	21.98	21.35		
10	64QAM	1	25	22.24	22.10	22.18	22.14	21.93		
10	64QAM	1	49	22.29	22.05	22.21	21.55	21.85	23	
10	64QAM	25	0	21.62	21.53	21.33	21.40	21.05		
10	64QAM	25	12	21.51	21.50	21.44	21.28	21.33		
10	64QAM	25	25	21.64	21.49	21.46	21.17	21.18		
10	64QAM	50	0	21.54	21.53	21.45	21.33	21.22	22	
Channel				39675	40148	40620	41093	41565		
Frequency (MHz)				2498.5	2545.8	2593	2640.30	2687.5		
5	QPSK	1	0	24.43	24.23	24.27	23.99	23.80	25	
5	QPSK	1	12	24.51	24.30	24.18	24.22	24.17		
5	QPSK	1	24	24.48	24.24	24.41	23.90	24.00		
5	QPSK	12	0	23.71	23.45	23.46	23.32	23.03		
5	QPSK	12	7	23.62	23.52	23.40	23.36	23.18	24	
5	QPSK	12	13	23.59	23.39	23.44	23.12	23.15		
5	QPSK	25	0	23.53	23.35	23.43	23.22	23.09		
5	16QAM	1	0	23.68	23.37	23.52	23.16	22.85		
5	16QAM	1	12	23.54	23.30	23.41	23.35	23.26	24	
5	16QAM	1	24	23.64	23.45	23.38	22.99	23.23		
5	16QAM	12	0	22.59	22.56	22.41	22.44	22.22		
5	16QAM	12	7	22.56	22.35	22.39	22.35	22.20		
5	16QAM	12	13	22.63	22.40	22.44	22.26	22.21	23	
5	16QAM	25	0	22.65	22.37	22.42	22.17	22.12		
5	64QAM	1	0	22.31	22.12	22.12	21.92	21.33		
5	64QAM	1	12	22.41	22.04	22.12	22.26	21.82		
5	64QAM	1	24	22.33	22.20	22.19	21.50	21.85	23	
5	64QAM	12	0	21.64	21.45	21.35	21.33	21.14		
5	64QAM	12	7	21.61	21.36	21.30	21.27	21.28		
5	64QAM	12	13	21.60	21.43	21.52	21.13	21.21		
5	64QAM	25	0	21.69	21.45	21.30	21.34	21.18	22	



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	26.32	26.07	25.61	25.67	25.72	27.5	
20	QPSK	1	49	26.22	26.03	25.72	25.90	25.81		
20	QPSK	1	99	26.03	26.00	25.56	25.52	25.71		
20	QPSK	50	0	25.42	25.32	24.94	25.07	24.83		
20	QPSK	50	24	25.25	25.24	24.79	25.03	25.03	26.5	
20	QPSK	50	50	25.21	25.06	24.51	25.02	24.92		
20	QPSK	100	0	25.35	25.17	24.54	25.06	24.99		
20	16QAM	1	0	25.58	25.31	24.83	25.15	24.72		
20	16QAM	1	49	25.46	25.41	25.04	25.24	25.25	26.5	
20	16QAM	1	99	25.47	25.41	24.65	24.89	25.03		
20	16QAM	50	0	24.42	24.17	24.06	24.22	23.92		
20	16QAM	50	24	24.47	24.16	24.07	24.09	24.07		
20	16QAM	50	50	24.45	24.11	23.92	24.07	23.95	25.5	
20	16QAM	100	0	23.96	24.29	23.89	24.00	23.91		
20	64QAM	1	0	23.57	24.02	23.56	23.83	23.64		
20	64QAM	1	49	23.90	24.15	23.59	24.16	23.78		
20	64QAM	1	99	24.12	24.23	23.51	23.73	23.55	25.5	
20	64QAM	50	0	22.82	22.92	22.76	23.07	22.97		
20	64QAM	50	24	22.92	23.01	22.88	23.07	22.86		
20	64QAM	50	50	22.92	23.11	22.81	22.96	22.82		
20	64QAM	100	0	22.83	22.79	22.82	23.09	22.79		
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	26.19	26.03	25.62	25.72	25.71	27.5	
15	QPSK	1	37	26.24	25.88	25.62	26.07	25.73		
15	QPSK	1	74	26.05	25.96	25.50	25.52	25.64		
15	QPSK	36	0	25.32	25.21	24.94	25.06	24.91		
15	QPSK	36	20	25.41	25.16	24.77	25.01	24.90	26.5	
15	QPSK	36	39	25.32	25.24	24.53	24.86	24.99		
15	QPSK	75	0	25.26	25.20	24.66	24.97	24.94		
15	16QAM	1	0	25.51	25.43	24.87	25.14	24.82		
15	16QAM	1	37	25.49	25.25	25.02	25.28	25.20	26.5	
15	16QAM	1	74	25.44	25.31	24.55	24.93	24.97		
15	16QAM	36	0	24.49	24.27	23.96	24.16	23.90		
15	16QAM	36	20	24.27	24.29	23.92	24.15	23.98		
15	16QAM	36	39	24.38	24.24	23.96	24.01	23.96	25.5	
15	16QAM	75	0	23.92	24.14	23.89	24.06	23.92		
15	64QAM	1	0	23.75	23.94	23.75	23.87	23.59		
15	64QAM	1	37	23.84	23.98	23.54	24.23	23.73		
15	64QAM	1	74	23.92	24.07	23.57	23.67	23.55	25.5	
15	64QAM	36	0	22.75	22.97	22.91	23.15	22.81		
15	64QAM	36	20	23.00	23.06	22.74	23.01	22.90		
15	64QAM	36	39	22.93	22.97	22.65	22.98	22.55		
15	64QAM	75	0	22.81	22.78	22.76	22.97	22.80	24.5	
Channel				39700	40160	40620	41080	41540		Tune-up limit (dBm)
Frequency (MHz)				2501	2547	2593	2639	2685		
10	QPSK	1	0	26.24	26.04	25.68	25.65	25.73		27.5
10	QPSK	1	25	26.18	26.03	25.65	26.05	25.87		
10	QPSK	1	49	26.10	25.95	25.54	25.50	25.76		
10	QPSK	25	0	25.36	25.30	24.83	25.00	24.93		
10	QPSK	25	12	25.40	25.12	24.75	25.11	24.98	26.5	
10	QPSK	25	25	25.23	25.18	24.59	24.87	25.00		
10	QPSK	50	0	25.35	25.18	24.57	25.07	24.92		
10	16QAM	1	0	25.60	25.38	24.93	25.05	24.70		
10	16QAM	1	25	25.60	25.40	24.95	25.40	25.11	26.5	
10	16QAM	1	49	25.52	25.31	24.62	24.91	25.07		
10	16QAM	25	0	24.47	24.34	23.95	24.16	23.94		
10	16QAM	25	12	24.29	24.29	24.06	24.13	24.02		
10	16QAM	25	25	24.46	24.17	23.94	23.88	24.04	25.5	
10	16QAM	50	0	23.96	24.17	23.86	23.99	24.05		
10	64QAM	1	0	23.76	24.02	23.62	24.01	23.66		
10	64QAM	1	25	23.84	24.02	23.54	24.13	23.74		
10	64QAM	1	49	24.07	24.09	23.55	23.74	23.54	25.5	
10	64QAM	25	0	22.83	22.91	22.86	23.20	22.90		
10	64QAM	25	12	23.06	23.00	22.70	23.16	22.85		
10	64QAM	25	25	23.09	23.02	22.67	22.96	22.58		
10	64QAM	50	0	22.83	22.79	22.71	23.06	22.73	24.5	
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	26.18	25.97	25.59	25.71	25.67		27.5
5	QPSK	1	12	26.19	25.94	25.61	26.05	25.81		
5	QPSK	1	24	26.20	25.87	25.57	25.59	25.81		
5	QPSK	12	0	25.39	25.26	24.92	25.12	24.89		
5	QPSK	12	7	25.28	25.20	24.76	25.00	24.89	26.5	
5	QPSK	12	13	25.20	25.23	24.56	25.02	24.96		
5	QPSK	25	0	25.32	25.13	24.65	24.96	24.83		
5	16QAM	1	0	25.47	25.38	24.78	25.01	24.76		
5	16QAM	1	12	25.58	25.34	24.92	25.37	25.05	26.5	
5	16QAM	1	24	25.46	25.30	24.68	24.95	24.97		
5	16QAM	12	0	24.46	24.28	23.98	24.17	23.99		
5	16QAM	12	7	24.35	24.12	24.01	24.19	24.11		
5	16QAM	12	13	24.35	24.25	23.83	23.99	24.11	25.5	
5	16QAM	25	0	23.87	24.10	23.82	23.99	24.03		
5	64QAM	1	0	23.58	24.02	23.58	23.90	23.53		
5	64QAM	1	12	23.92	24.12	23.54	24.25	23.83		
5	64QAM	1	24	24.01	24.10	23.63	23.73	23.55	25.5	
5	64QAM	12	0	22.79	22.97	22.82	23.05	22.84		
5	64QAM	12	7	23.07	23.08	22.76	23.03	22.93		
5	64QAM	12	13	22.96	23.09	22.72	23.10	22.56		
5	64QAM	25	0	22.79	22.77	22.63	23.05	22.74		



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)				3560	3575	3590	
20	QPSK	1	0	24.57	24.75	24.83	25
20	QPSK	1	49	24.53	24.59	24.66	
20	QPSK	1	99	24.59	24.71	24.56	
20	QPSK	50	0	23.86	23.84	23.98	24
20	QPSK	50	24	23.82	23.74	23.87	
20	QPSK	50	50	23.80	23.78	23.92	
20	QPSK	100	0	23.84	23.79	23.91	24
20	16QAM	1	0	23.84	23.93	23.89	
20	16QAM	1	49	23.86	23.93	23.83	
20	16QAM	1	99	23.89	23.85	23.85	23
20	16QAM	50	0	22.95	22.90	22.99	
20	16QAM	50	24	22.91	22.90	22.96	
20	16QAM	50	50	22.73	22.85	22.87	23
20	16QAM	100	0	22.88	22.94	22.88	
20	64QAM	1	0	22.81	22.87	22.87	
20	64QAM	1	49	22.71	22.86	22.86	22
20	64QAM	1	99	22.81	22.95	22.77	
20	64QAM	50	0	21.86	21.98	21.84	
20	64QAM	50	24	21.80	21.80	21.85	22
20	64QAM	50	50	21.84	21.97	21.85	
20	64QAM	100	0	21.81	21.86	21.84	
Channel				43165	43340	43515	Tune-up limit (dBm)
Frequency (MHz)				3557.5	3575	3592.5	
15	QPSK	1	0	24.71	24.70	24.79	25
15	QPSK	1	37	24.54	24.64	24.71	
15	QPSK	1	74	24.63	24.71	24.76	
15	QPSK	36	0	23.72	23.86	24.03	24
15	QPSK	36	20	23.77	23.88	23.85	
15	QPSK	36	39	23.70	23.82	24.00	
15	QPSK	75	0	23.94	23.84	23.86	24
15	16QAM	1	0	23.88	23.99	23.98	
15	16QAM	1	37	24.00	23.94	23.84	
15	16QAM	1	74	23.88	23.96	24.05	23
15	16QAM	36	0	22.85	22.87	22.89	
15	16QAM	36	20	22.83	22.76	22.98	
15	16QAM	36	39	22.75	22.98	22.84	23
15	16QAM	75	0	22.82	22.93	22.90	
15	64QAM	1	0	22.77	22.80	22.92	
15	64QAM	1	37	22.76	22.91	22.80	22
15	64QAM	1	74	22.72	22.96	22.76	
15	64QAM	36	0	21.77	21.92	21.90	
15	64QAM	36	20	21.91	21.85	22.00	22
15	64QAM	36	39	21.81	21.98	21.87	
15	64QAM	75	0	21.78	21.85	21.87	
Channel				43140	43340	43540	Tune-up limit (dBm)
Frequency (MHz)				3555	3575	3595	
10	QPSK	1	0	24.66	24.58	24.71	25
10	QPSK	1	25	24.52	24.76	24.77	
10	QPSK	1	49	24.51	24.62	24.68	
10	QPSK	25	0	23.81	23.88	23.91	24
10	QPSK	25	12	23.89	23.81	23.87	
10	QPSK	25	25	23.86	23.89	23.96	
10	QPSK	50	0	23.91	23.73	23.97	24
10	16QAM	1	0	24.00	24.01	23.91	
10	16QAM	1	25	23.92	24.00	23.88	
10	16QAM	1	49	23.94	23.89	24.03	23
10	16QAM	25	0	22.80	22.86	23.07	
10	16QAM	25	12	22.79	22.80	22.83	
10	16QAM	25	25	22.78	22.86	22.83	23
10	16QAM	50	0	22.82	22.89	22.94	
10	64QAM	1	0	22.82	22.87	22.87	
10	64QAM	1	25	22.89	22.97	22.83	22
10	64QAM	1	49	22.86	22.90	22.75	
10	64QAM	25	0	21.89	21.96	21.75	
10	64QAM	25	12	21.89	21.81	22.02	22
10	64QAM	25	25	21.88	21.87	21.85	
10	64QAM	50	0	21.79	21.83	21.90	
Channel				43115	43340	43565	Tune-up limit (dBm)
Frequency (MHz)				3552.5	3575	3597.5	
5	QPSK	1	0	24.72	24.71	24.71	25
5	QPSK	1	12	24.64	24.72	24.69	
5	QPSK	1	24	24.58	24.56	24.76	
5	QPSK	12	0	23.82	23.88	23.89	24
5	QPSK	12	7	23.77	23.90	23.89	
5	QPSK	12	13	23.79	23.79	23.84	
5	QPSK	25	0	23.75	23.89	23.91	24
5	16QAM	1	0	23.86	23.99	23.85	
5	16QAM	1	12	23.89	23.96	23.94	
5	16QAM	1	24	24.04	23.92	24.04	23
5	16QAM	12	0	22.91	22.93	23.03	
5	16QAM	12	7	22.81	22.87	23.00	
5	16QAM	12	13	22.90	22.82	22.93	23
5	16QAM	25	0	22.86	22.90	22.99	
5	64QAM	1	0	22.77	22.75	22.95	
5	64QAM	1	12	22.79	22.89	22.82	22
5	64QAM	1	24	22.89	22.91	22.77	
5	64QAM	12	0	21.86	21.89	21.95	
5	64QAM	12	7	21.83	21.88	21.88	22
5	64QAM	12	13	21.83	21.88	21.94	
5	64QAM	25	0	21.85	21.82	21.83	



Band 48 (3.5G Band)									
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	20.95	24.38	24.60	20.88	25	
20	QPSK	1	49	20.85	24.23	24.23	20.75		
20	QPSK	1	99	20.81	24.22	24.23	20.71		
20	QPSK	50	0	20.07	23.47	23.62	19.97		
20	QPSK	50	24	19.84	23.45	23.46	19.98	24	
20	QPSK	50	50	19.92	23.56	23.40	19.87		
20	QPSK	100	0	19.86	23.43	23.59	19.89		
20	16QAM	1	0	19.83	23.73	23.75	19.94		
20	16QAM	1	49	19.76	23.49	23.52	19.87	24	
20	16QAM	1	99	19.90	23.44	23.38	19.71		
20	16QAM	50	0	18.97	22.54	22.57	19.01		
20	16QAM	50	24	19.06	22.48	22.46	18.84		
20	16QAM	50	50	18.90	22.60	22.58	18.72	23	
20	16QAM	100	0	18.90	22.52	22.47	18.80		
20	64QAM	1	0	18.77	22.29	22.14	18.79		
20	64QAM	1	49	18.59	22.24	22.08	18.63		
20	64QAM	1	99	18.61	22.21	21.96	18.56	23	
20	64QAM	50	0	18.05	21.46	21.42	17.99		
20	64QAM	50	24	17.95	21.56	21.40	17.99		
20	64QAM	50	50	17.99	21.58	21.31	17.80		
20	64QAM	100	0	17.87	21.62	21.30	17.97	22	
Channel				55315	55820	56160	56665		
Frequency (MHz)				3557.5	3608	3642	3692.5		
15	QPSK	1	0	20.99	24.44	24.51	21.03	25	
15	QPSK	1	37	20.74	24.26	24.22	20.65		
15	QPSK	1	74	20.77	24.13	24.04	20.72		
15	QPSK	36	0	19.88	23.61	23.53	19.99		
15	QPSK	36	20	19.91	23.59	23.41	19.95	24	
15	QPSK	36	39	19.84	23.45	23.37	19.90		
15	QPSK	75	0	19.88	23.54	23.48	19.88		
15	16QAM	1	0	19.84	23.78	23.73	19.86		
15	16QAM	1	37	19.94	23.46	23.42	19.73	24	
15	16QAM	1	74	19.79	23.54	23.45	19.77		
15	16QAM	36	0	18.98	22.64	22.60	18.92		
15	16QAM	36	20	18.94	22.57	22.64	18.85		
15	16QAM	36	39	18.81	22.59	22.48	18.74	23	
15	16QAM	75	0	19.04	22.53	22.44	18.98		
15	64QAM	1	0	18.66	22.37	22.06	18.94		
15	64QAM	1	37	18.69	22.25	22.19	18.66		
15	64QAM	1	74	18.73	22.23	22.09	18.61	23	
15	64QAM	36	0	18.02	21.50	21.40	17.93		
15	64QAM	36	20	17.91	21.59	21.39	17.92		
15	64QAM	36	39	17.94	21.54	21.32	17.74		
15	64QAM	75	0	17.99	21.48	21.31	17.89	22	
Channel				55290	55815	56165	56690		
Frequency (MHz)				3555	3607.5	3642.5	3695		
10	QPSK	1	0	20.88	24.34	24.55	20.88	25	
10	QPSK	1	25	20.73	24.27	24.17	20.80		
10	QPSK	1	49	20.76	24.23	24.06	20.64		
10	QPSK	25	0	19.97	23.51	23.49	19.86		
10	QPSK	25	12	19.98	23.45	23.48	20.00	24	
10	QPSK	25	25	19.81	23.39	23.41	19.85		
10	QPSK	50	0	19.99	23.47	23.52	19.78		
10	16QAM	1	0	19.90	23.75	23.63	19.83		
10	16QAM	1	25	19.82	23.42	23.55	19.83	24	
10	16QAM	1	49	19.82	23.54	23.40	19.84		
10	16QAM	25	0	18.92	22.50	22.71	18.95		
10	16QAM	25	12	19.00	22.67	22.49	18.90		
10	16QAM	25	25	18.95	22.48	22.46	18.80	23	
10	16QAM	50	0	19.03	22.55	22.46	18.88		
10	64QAM	1	0	18.79	22.43	22.05	18.95		
10	64QAM	1	25	18.65	22.28	22.03	18.63		
10	64QAM	1	49	18.62	22.35	21.95	18.53	23	
10	64QAM	25	0	17.92	21.49	21.39	18.08		
10	64QAM	25	12	18.02	21.62	21.54	17.94		
10	64QAM	25	25	17.99	21.42	21.44	17.91		
10	64QAM	50	0	17.91	21.57	21.26	18.00	22	
Channel				55265	55810	56170	56715		
Frequency (MHz)				3552.5	3607	3643	3697.5		
5	QPSK	1	0	20.98	24.39	24.56	20.94	25	
5	QPSK	1	12	20.68	24.14	24.16	20.67		
5	QPSK	1	24	20.67	24.16	24.04	20.58		
5	QPSK	12	0	20.04	23.61	23.55	19.91		
5	QPSK	12	7	20.00	23.43	23.55	20.00	24	
5	QPSK	12	13	19.94	23.40	23.43	19.87		
5	QPSK	25	0	19.87	23.43	23.55	19.85		
5	16QAM	1	0	19.85	23.69	23.73	19.96		
5	16QAM	1	12	19.74	23.45	23.50	19.80	24	
5	16QAM	1	24	19.81	23.45	23.45	19.79		
5	16QAM	12	0	19.03	22.50	22.59	18.96		
5	16QAM	12	7	18.87	22.49	22.65	19.02		
5	16QAM	12	13	18.86	22.42	22.43	18.83	23	
5	16QAM	25	0	19.00	22.52	22.48	18.95		
5	64QAM	1	0	18.79	22.39	22.01	18.89		
5	64QAM	1	12	18.68	22.24	22.01	18.54		
5	64QAM	1	24	18.58	22.36	21.94	18.63	23	
5	64QAM	12	0	18.09	21.49	21.34	17.90		
5	64QAM	12	7	17.96	21.49	21.53	17.91		
5	64QAM	12	13	17.85	21.57	21.28	17.92		
5	64QAM	25	0	18.05	21.50	21.45	17.92	22	



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	24.97	24.91	24.97	25
20	QPSK	1	49	24.95	24.99	24.95	
20	QPSK	1	99	24.90	24.98	23.84	
20	QPSK	50	0	23.84	23.94	23.81	24
20	QPSK	50	24	23.93	23.97	23.84	
20	QPSK	50	50	23.84	23.93	23.77	
20	QPSK	100	0	23.79	23.97	23.82	24
20	16QAM	1	0	23.83	23.76	23.84	
20	16QAM	1	49	23.78	23.92	23.74	
20	16QAM	1	99	23.80	23.84	23.92	23
20	16QAM	50	0	22.77	22.91	22.90	
20	16QAM	50	24	22.82	22.82	22.77	
20	16QAM	50	50	22.82	22.82	22.77	23
20	16QAM	100	0	22.89	22.93	22.77	
20	64QAM	1	0	22.89	22.73	22.77	
20	64QAM	1	49	22.69	22.85	22.74	23
20	64QAM	1	99	22.89	22.84	22.72	
20	64QAM	50	0	21.97	21.77	21.91	
20	64QAM	50	24	21.89	21.76	21.87	22
20	64QAM	50	50	21.80	21.84	21.80	
20	64QAM	100	0	21.79	21.80	21.87	
Channel				37825	38000	38175	Tune-up limit (dBm)
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	24.85	24.88	24.97	25
15	QPSK	1	37	24.92	24.91	24.90	
15	QPSK	1	74	24.91	24.98	24.93	
15	QPSK	36	0	23.91	23.89	23.81	24
15	QPSK	36	20	24.00	23.92	23.84	
15	QPSK	36	39	23.85	23.89	23.82	
15	QPSK	75	0	23.91	23.89	23.83	24
15	16QAM	1	0	23.93	23.81	23.83	
15	16QAM	1	37	23.77	23.91	23.73	
15	16QAM	1	74	23.88	23.85	23.79	23
15	16QAM	36	0	22.77	22.78	22.86	
15	16QAM	36	20	22.91	22.86	22.86	
15	16QAM	36	39	22.78	22.83	22.77	23
15	16QAM	75	0	22.85	22.92	22.90	
15	64QAM	1	0	22.75	22.77	22.77	
15	64QAM	1	37	22.87	22.78	22.88	23
15	64QAM	1	74	22.78	22.88	22.76	
15	64QAM	36	0	21.92	21.80	21.99	
15	64QAM	36	20	21.90	21.79	21.86	22
15	64QAM	36	39	21.72	21.97	21.81	
15	64QAM	75	0	21.88	21.78	21.80	
Channel				37800	38000	38200	Tune-up limit (dBm)
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	24.82	24.86	24.84	25
10	QPSK	1	25	24.84	24.99	24.96	
10	QPSK	1	49	24.97	24.99	24.98	
10	QPSK	25	0	23.98	23.87	23.84	24
10	QPSK	25	12	23.98	23.82	23.95	
10	QPSK	25	25	23.94	23.83	23.83	
10	QPSK	50	0	23.84	23.96	23.88	24
10	16QAM	1	0	23.85	23.96	23.82	
10	16QAM	1	25	23.89	23.94	23.71	
10	16QAM	1	49	23.85	23.81	23.75	23
10	16QAM	25	0	22.92	22.86	22.86	
10	16QAM	25	12	22.99	22.89	22.77	
10	16QAM	25	25	22.90	22.87	22.78	23
10	16QAM	50	0	22.81	22.85	22.83	
10	64QAM	1	0	22.87	22.76	22.78	
10	64QAM	1	25	22.86	22.80	22.78	23
10	64QAM	1	49	22.81	22.71	22.82	
10	64QAM	25	0	21.92	21.78	21.83	
10	64QAM	25	12	21.84	21.74	21.74	22
10	64QAM	25	25	21.81	21.90	21.86	
10	64QAM	50	0	21.81	21.89	21.85	
Channel				37775	38000	38225	Tune-up limit (dBm)
Frequency (MHz)				2572.5	2595	2617.5	
5	QPSK	1	0	24.98	24.84	24.88	25
5	QPSK	1	12	24.96	24.91	24.86	
5	QPSK	1	24	24.90	24.86	24.89	
5	QPSK	12	0	23.97	23.82	23.96	24
5	QPSK	12	7	23.88	23.82	23.99	
5	QPSK	12	13	23.88	23.75	23.84	
5	QPSK	25	0	23.87	23.89	23.85	24
5	16QAM	1	0	23.87	23.77	23.84	
5	16QAM	1	12	23.96	23.81	23.77	
5	16QAM	1	24	23.82	23.92	23.83	23
5	16QAM	12	0	22.81	22.91	22.71	
5	16QAM	12	7	22.86	22.84	22.89	
5	16QAM	12	13	22.82	22.78	22.88	23
5	16QAM	25	0	22.88	22.82	22.89	
5	64QAM	1	0	22.85	22.74	22.89	
5	64QAM	1	12	22.74	22.81	22.87	23
5	64QAM	1	24	22.81	22.80	22.88	
5	64QAM	12	0	21.91	21.71	21.81	
5	64QAM	12	7	21.93	21.82	21.84	22
5	64QAM	12	13	21.86	21.78	21.95	
5	64QAM	25	0	21.80	21.87	21.86	



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	26.78	26.99	26.97	27.5
20	QPSK	1	49	26.56	26.94	27.09	
20	QPSK	1	99	26.52	27.05	26.96	
20	QPSK	50	0	25.73	25.89	26.17	26.5
20	QPSK	50	24	25.73	25.96	26.21	
20	QPSK	50	50	25.69	25.98	26.10	
20	QPSK	100	0	25.91	25.96	26.00	26.5
20	16QAM	1	0	26.27	26.29	26.40	
20	16QAM	1	49	25.92	26.26	26.39	
20	16QAM	1	99	25.86	26.32	26.33	25.5
20	16QAM	50	0	24.98	25.18	25.20	
20	16QAM	50	24	25.04	25.25	25.22	
20	16QAM	50	50	25.03	25.18	25.37	25.5
20	16QAM	100	0	24.98	25.04	25.12	
20	64QAM	1	0	24.28	24.43	24.43	
20	64QAM	1	49	24.10	24.35	24.64	24.5
20	64QAM	1	99	24.03	24.46	24.69	
20	64QAM	50	0	23.23	23.24	23.39	
20	64QAM	50	24	23.19	23.21	23.40	24.5
20	64QAM	50	50	23.16	23.25	23.33	
20	64QAM	100	0	23.17	23.05	23.31	
Channel				37825	38000	38175	Tune-up limit (dBm)
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	26.90	26.95	26.87	27.5
15	QPSK	1	37	26.60	26.93	26.94	
15	QPSK	1	74	26.51	26.94	27.08	
15	QPSK	36	0	25.68	25.84	26.12	26.5
15	QPSK	36	20	25.72	26.00	26.21	
15	QPSK	36	39	25.79	25.87	25.96	
15	QPSK	75	0	25.93	25.85	26.08	26.5
15	16QAM	1	0	26.13	26.27	26.29	
15	16QAM	1	37	25.95	26.22	26.25	
15	16QAM	1	74	25.89	26.27	26.38	25.5
15	16QAM	36	0	24.85	25.02	25.35	
15	16QAM	36	20	24.92	25.29	25.27	
15	16QAM	36	39	25.00	25.27	25.41	25.5
15	16QAM	75	0	24.93	25.08	25.25	
15	64QAM	1	0	24.35	24.29	24.42	
15	64QAM	1	37	24.13	24.36	24.82	24.5
15	64QAM	1	74	23.98	24.54	24.63	
15	64QAM	36	0	23.26	23.13	23.51	
15	64QAM	36	20	23.04	23.29	23.57	24.5
15	64QAM	36	39	23.21	23.41	23.44	
15	64QAM	75	0	23.16	23.19	23.34	
Channel				37800	38000	38200	Tune-up limit (dBm)
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	26.79	26.81	27.00	27.5
10	QPSK	1	25	26.61	26.90	27.09	
10	QPSK	1	49	26.61	26.94	27.04	
10	QPSK	25	0	25.83	25.83	26.18	26.5
10	QPSK	25	12	25.82	25.87	26.36	
10	QPSK	25	25	25.83	25.95	25.93	
10	QPSK	50	0	25.78	25.91	25.98	26.5
10	16QAM	1	0	26.24	26.23	26.24	
10	16QAM	1	25	25.96	26.16	26.40	
10	16QAM	1	49	26.06	26.44	26.30	25.5
10	16QAM	25	0	24.92	25.02	25.30	
10	16QAM	25	12	24.99	25.26	25.23	
10	16QAM	25	25	24.97	25.15	25.35	25.5
10	16QAM	50	0	24.97	24.96	25.13	
10	64QAM	1	0	24.29	24.29	24.51	
10	64QAM	1	25	23.98	24.37	24.78	24.5
10	64QAM	1	49	23.95	24.49	24.73	
10	64QAM	25	0	23.15	23.10	23.43	
10	64QAM	25	12	23.18	23.39	23.51	24.5
10	64QAM	25	25	23.23	23.35	23.47	
10	64QAM	50	0	23.17	23.11	23.17	
Channel				37775	38000	38225	Tune-up limit (dBm)
Frequency (MHz)				2572.5	2595	2617.5	
5	QPSK	1	0	26.88	26.96	27.04	27.5
5	QPSK	1	12	26.52	26.90	27.01	
5	QPSK	1	24	26.61	27.00	26.93	
5	QPSK	12	0	25.80	25.83	26.03	26.5
5	QPSK	12	7	25.82	25.89	26.34	
5	QPSK	12	13	25.71	25.81	25.99	
5	QPSK	25	0	25.80	25.81	26.04	26.5
5	16QAM	1	0	26.17	26.39	26.40	
5	16QAM	1	12	25.91	26.36	26.41	
5	16QAM	1	24	26.01	26.29	26.40	25.5
5	16QAM	12	0	24.97	24.98	25.39	
5	16QAM	12	7	24.94	25.32	25.37	
5	16QAM	12	13	25.01	25.17	25.25	25.5
5	16QAM	25	0	24.82	25.07	25.11	
5	64QAM	1	0	24.36	24.47	24.51	
5	64QAM	1	12	24.07	24.30	24.64	24.5
5	64QAM	1	24	24.04	24.48	24.75	
5	64QAM	12	0	23.08	23.23	23.48	
5	64QAM	12	7	23.17	23.22	23.49	24.5
5	64QAM	12	13	23.04	23.26	23.43	
5	64QAM	25	0	23.19	23.10	23.19	



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	24.60	24.78	24.91	24.87	24.45	25	
20	QPSK	1	49	24.59	24.92	24.92	24.84	24.75		
20	QPSK	1	99	24.72	24.88	24.98	24.74	24.60		
20	QPSK	50	0	23.81	23.98	23.94	23.80	23.84		
20	QPSK	50	24	23.79	23.94	23.96	23.92	23.84	24	
20	QPSK	50	50	23.77	23.91	23.86	23.95	23.83		
20	QPSK	100	0	23.83	24.00	23.98	23.92	23.91		
20	16QAM	1	0	23.65	24.00	23.86	23.92	23.55		
20	16QAM	1	49	23.74	23.97	23.85	23.86	23.84	24	
20	16QAM	1	99	23.80	23.82	23.88	23.92	23.82		
20	16QAM	50	0	22.74	22.87	22.89	22.75	22.79		
20	16QAM	50	24	22.82	22.83	22.91	22.80	23.03		
20	16QAM	50	50	22.94	22.94	22.83	22.85	22.75	23	
20	16QAM	100	0	22.85	22.82	22.91	22.81	22.96		
20	64QAM	1	0	22.60	22.76	22.84	22.86	22.15		
20	64QAM	1	49	22.53	22.78	22.62	22.80	22.64		
20	64QAM	1	99	22.64	22.86	22.72	22.47	22.34	23	
20	64QAM	50	0	21.77	21.88	21.88	21.88	21.82		
20	64QAM	50	24	21.78	21.93	21.79	21.86	21.95		
20	64QAM	50	50	21.85	22.01	21.88	21.94	21.83		
20	64QAM	100	0	21.83	21.95	21.94	21.91	21.93	22	
Channel				39725	40173	40620	41068	41515		
Frequency (MHz)				2503.5	2548.3	2593	2637.8	2682.5		
15	QPSK	1	0	24.66	24.76	24.90	24.79	24.40		tune-up limit (dBm)
15	QPSK	1	37	24.59	24.85	24.87	24.89	24.74		
15	QPSK	1	74	24.75	24.83	24.80	24.76	24.63	25	
15	QPSK	36	0	23.84	24.00	23.96	23.98	23.82		
15	QPSK	36	20	23.89	23.88	23.91	23.87	23.91		
15	QPSK	36	39	23.74	23.83	23.84	23.92	23.71		
15	QPSK	75	0	23.74	23.85	23.96	23.95	23.82	24	
15	16QAM	1	0	23.83	23.96	23.88	23.99	23.55		
15	16QAM	1	37	23.67	23.92	23.93	23.98	23.88		
15	16QAM	1	74	23.91	23.84	23.82	23.91	23.84		
15	16QAM	36	0	22.87	22.74	22.89	22.90	22.89	23	
15	16QAM	36	20	22.97	22.76	22.86	22.88	22.86		
15	16QAM	36	39	22.90	22.95	22.97	22.81	22.81		
15	16QAM	75	0	22.92	22.88	22.92	22.97	22.96		
15	64QAM	1	0	22.50	22.72	22.71	22.69	22.35	23	
15	64QAM	1	37	22.37	22.75	22.80	22.98	22.63		
15	64QAM	1	74	22.47	22.67	22.63	22.60	22.51		
15	64QAM	36	0	21.76	21.75	21.81	21.72	21.74		
15	64QAM	36	20	21.86	21.85	21.87	21.82	21.94	22	
15	64QAM	36	39	21.83	21.84	21.89	21.93	21.85		
15	64QAM	36	75	21.83	21.74	21.77	21.82	21.85		
Channel				39700	40160	40620	41080	41540		
Frequency (MHz)				2501	2547	2593	2639	2685	tune-up limit (dBm)	
10	QPSK	1	0	24.58	24.88	24.92	24.97	24.43	25	
10	QPSK	1	25	24.74	24.82	24.92	24.95	24.87		
10	QPSK	1	49	24.80	24.86	24.89	24.82	24.71		
10	QPSK	25	0	23.85	23.84	23.97	23.98	23.86		
10	QPSK	25	12	23.86	23.94	23.89	23.84	23.82	24	
10	QPSK	25	25	23.89	23.84	23.88	23.95	23.80		
10	QPSK	50	0	23.91	23.99	23.91	23.72	23.76		
10	16QAM	1	0	23.78	23.95	23.98	23.92	23.59		
10	16QAM	1	25	23.78	23.83	23.90	23.93	23.83	24	
10	16QAM	1	49	23.78	23.93	23.83	23.96	23.83		
10	16QAM	25	0	22.85	22.90	22.85	22.83	22.84		
10	16QAM	25	12	22.81	22.88	22.89	22.83	22.94		
10	16QAM	25	25	22.88	22.93	22.95	22.92	22.85	23	
10	16QAM	50	0	22.80	22.87	22.76	22.82	22.93		
10	64QAM	1	0	22.41	22.66	22.89	22.69	22.35		
10	64QAM	1	25	22.44	22.68	22.76	22.95	22.59		
10	64QAM	1	49	22.54	22.72	22.75	22.61	22.48	23	
10	64QAM	25	0	21.81	21.81	21.76	21.78	21.88		
10	64QAM	25	12	21.91	21.93	21.86	21.83	21.88		
10	64QAM	25	25	21.90	21.99	21.82	21.86	21.96		
10	64QAM	50	0	21.97	21.81	21.81	21.82	21.83	tune-up limit (dBm)	
Channel				39675	40148	40620	41093	41565		
Frequency (MHz)				2498.5	2545.8	2593	2640.30	2687.5		
5	QPSK	1	0	24.67	24.73	24.82	24.81	24.50	25	
5	QPSK	1	12	24.61	24.82	24.95	24.90	24.78		
5	QPSK	1	24	24.83	24.83	24.91	24.80	24.74		
5	QPSK	12	0	23.89	23.93	23.96	23.85	23.81		
5	QPSK	12	7	23.79	23.84	23.96	23.82	23.81	24	
5	QPSK	12	13	23.80	23.83	23.82	23.94	23.88		
5	QPSK	25	0	23.84	23.95	23.83	23.94	23.76		
5	16QAM	1	0	23.66	23.94	23.82	23.80	23.62		
5	16QAM	1	12	23.79	24.00	23.90	23.89	23.80	24	
5	16QAM	1	24	23.75	23.81	23.95	23.76	23.67		
5	16QAM	12	0	22.86	22.80	22.82	22.84	22.73		
5	16QAM	12	7	22.88	22.92	22.78	22.92	22.86		
5	16QAM	12	13	22.86	22.82	22.94	22.87	22.92	23	
5	16QAM	25	0	22.85	22.83	22.74	22.83	22.84		
5	64QAM	1	0	22.58	22.75	22.73	22.68	22.29		
5	64QAM	1	12	22.54	22.60	22.79	22.79	22.55		
5	64QAM	1	24	22.60	22.75	22.67	22.63	22.44	23	
5	64QAM	12	0	21.78	21.90	21.90	21.84	21.85		
5	64QAM	12	7	21.82	21.90	21.87	21.84	21.92		
5	64QAM	12	13	21.89	21.95	21.83	21.88	21.88		
5	64QAM	25	0	21.89	21.96	21.76	21.73	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	25.85	25.97	26.77	26.49	26.15	27.5	
20	QPSK	1	49	26.24	25.78	26.64	26.70	26.54		
20	QPSK	1	99	26.38	25.97	26.60	26.41	26.14		
20	QPSK	50	0	25.25	25.07	25.81	25.90	25.72		
20	QPSK	50	24	25.41	24.86	25.88	26.11	25.71	26.5	
20	QPSK	50	50	25.60	24.84	26.00	25.81	25.49		
20	QPSK	100	0	24.57	24.90	25.92	25.84	25.55		
20	16QAM	1	0	25.19	25.27	26.00	25.99	25.57		
20	16QAM	1	49	25.74	25.04	25.90	26.30	25.85	26.5	
20	16QAM	1	99	25.84	25.02	26.15	25.74	25.47		
20	16QAM	50	0	24.30	24.06	25.00	25.01	24.59		
20	16QAM	50	24	24.58	24.05	24.89	25.05	24.72		
20	16QAM	50	50	24.76	24.00	25.06	24.86	24.71	25.5	
20	16QAM	100	0	24.15	23.91	24.96	24.91	24.61		
20	64QAM	1	0	23.60	23.67	24.38	24.74	24.13		
20	64QAM	1	49	23.51	23.65	24.35	25.08	23.83		
20	64QAM	1	99	24.13	23.71	24.15	24.55	23.51	25.5	
20	64QAM	50	0	22.56	22.55	23.29	24.05	23.08		
20	64QAM	50	24	22.59	22.56	23.26	24.21	23.02		
20	64QAM	50	50	22.87	22.68	23.44	24.00	22.76		
20	64QAM	100	0	22.52	22.58	23.38	23.85	23.00	24.5	
Channel				39725	40173	40620	41068	41515		
Frequency (MHz)				2503.5	2548.3	2593	2637.8	2682.5		
15	QPSK	1	0	25.91	26.03	26.62	26.50	26.21		
15	QPSK	1	37	26.21	25.96	26.76	26.71	26.55		
15	QPSK	1	74	26.42	25.94	26.61	26.47	26.04		
15	QPSK	36	0	25.23	25.09	25.94	26.05	25.64		
15	QPSK	36	20	25.33	25.03	26.00	26.02	25.82	26.5	
15	QPSK	36	39	25.64	24.89	25.97	25.83	25.45		
15	QPSK	75	0	24.56	24.88	25.96	25.78	25.73		
15	16QAM	1	0	25.21	25.20	26.14	26.02	25.45		
15	16QAM	1	37	25.65	25.19	26.06	26.32	25.90	26.5	
15	16QAM	1	74	25.85	25.01	25.96	25.81	25.58		
15	16QAM	36	0	24.30	24.10	25.02	24.93	24.67		
15	16QAM	36	20	24.78	24.03	25.06	25.11	24.73		
15	16QAM	36	39	24.75	24.02	25.03	24.97	24.76	25.5	
15	16QAM	75	0	24.20	23.83	24.91	24.90	24.62		
15	64QAM	1	0	23.58	23.59	24.34	24.74	24.00		
15	64QAM	1	37	23.53	23.63	24.51	25.04	23.85		
15	64QAM	1	74	24.05	23.56	24.11	24.52	23.59	25.5	
15	64QAM	36	0	22.50	22.56	23.30	24.02	23.10		
15	64QAM	36	20	22.72	22.55	23.33	24.20	23.04		
15	64QAM	36	39	22.96	22.66	23.32	23.99	22.81		
15	64QAM	75	0	22.59	22.51	23.34	24.01	22.85	24.5	
Channel				39700	40160	40620	41080	41540		
Frequency (MHz)				2501	2547	2593	2639	2685		
10	QPSK	1	0	25.91	26.14	26.70	26.53	26.17		
10	QPSK	1	25	26.36	25.81	26.61	26.62	26.50		
10	QPSK	1	49	26.50	25.78	26.61	26.50	26.04		
10	QPSK	25	0	25.18	25.10	25.84	26.09	25.72		
10	QPSK	25	12	25.45	25.03	26.03	26.05	25.69	26.5	
10	QPSK	25	25	25.63	24.73	25.91	25.97	25.49		
10	QPSK	50	0	24.58	24.77	26.05	25.78	25.65		
10	16QAM	1	0	25.26	25.30	26.08	26.01	25.42		
10	16QAM	1	25	25.63	25.09	26.01	26.18	25.81	26.5	
10	16QAM	1	49	25.79	25.05	26.16	25.71	25.49		
10	16QAM	25	0	24.32	24.11	25.03	25.05	24.63		
10	16QAM	25	12	24.77	24.16	25.04	25.02	24.74		
10	16QAM	25	25	24.77	23.99	25.07	24.81	24.71	25.5	
10	16QAM	50	0	24.18	23.99	25.03	24.87	24.80		
10	64QAM	1	0	23.56	23.69	24.35	24.80	24.19		
10	64QAM	1	25	23.66	23.62	24.41	25.12	23.91		
10	64QAM	1	49	24.02	23.70	24.09	24.53	23.56	25.5	
10	64QAM	25	0	22.62	23.52	23.24	23.96	23.05		
10	64QAM	25	12	22.65	22.59	23.32	24.10	23.00		
10	64QAM	25	25	22.96	22.53	23.47	23.82	22.73		
10	64QAM	50	0	22.50	22.60	23.33	23.99	22.86	24.5	
Channel				39675	40148	40620	41093	41565		
Frequency (MHz)				2498.5	2545.8	2593	2640.30	2687.5		
5	QPSK	1	0	25.88	26.11	26.76	26.55	26.24		
5	QPSK	1	12	26.21	25.86	26.70	26.56	26.52		
5	QPSK	1	24	26.57	25.85	26.64	26.44	26.20		
5	QPSK	12	0	25.16	25.04	26.01	25.93	25.54		
5	QPSK	12	7	25.40	24.94	26.02	26.05	25.69	26.5	
5	QPSK	12	13	25.77	24.87	26.04	25.89	25.56		
5	QPSK	25	0	24.56	24.89	25.88	25.80	25.55		
5	16QAM	1	0	25.18	25.26	26.16	26.01	25.44		
5	16QAM	1	12	25.58	25.08	25.99	26.24	25.85	26.5	
5	16QAM	1	24	25.81	25.07	26.05	25.87	25.50		
5	16QAM	12	0	24.25	24.12	25.03	24.99	24.58		
5	16QAM	12	7	24.74	24.15	24.92	25.21	24.88		
5	16QAM	12	13	24.73	23.99	24.96	24.98	24.68	25.5	
5	16QAM	25	0	24.30	23.90	24.98	25.00	24.67		
5	64QAM	1	0	23.57	23.66	24.38	24.84	24.12		
5	64QAM	1	12	23.66	23.64	24.35	25.12	23.72		
5	64QAM	1	24	24.09	23.58	24.06	24.54	23.54	25.5	
5	64QAM	12	0	22.58	22.54	23.37	24.10	23.13		
5	64QAM	12	7	22.71	22.60	23.27	24.05	23.05		
5	64QAM	12	13	22.90	22.62	23.51	23.83	22.78		
5	64QAM	25	0	22.58	22.56	23.42	24.00	22.97	24.5	



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	22.89	22.98	23.02	23.5
20	QPSK	1	49	22.95	23.08	23.15	
20	QPSK	1	99	22.79	23.02	22.91	
20	QPSK	50	0	22.06	22.02	22.19	22.5
20	QPSK	50	24	22.09	22.02	21.98	
20	QPSK	50	50	21.93	22.12	21.98	
20	QPSK	100	0	22.15	22.05	22.05	22.5
20	16QAM	1	0	22.10	22.16	22.21	
20	16QAM	1	49	22.04	22.17	22.19	
20	16QAM	1	99	22.03	22.09	21.98	21.5
20	16QAM	50	0	21.05	21.07	21.19	
20	16QAM	50	24	21.20	21.10	21.06	
20	16QAM	50	50	21.09	21.12	21.15	21.5
20	16QAM	100	0	21.15	21.07	21.18	
20	64QAM	1	0	20.61	20.72	20.70	
20	64QAM	1	49	20.85	20.89	20.61	21.5
20	64QAM	1	99	20.73	20.80	20.53	
20	64QAM	50	0	20.14	20.18	19.97	
20	64QAM	50	24	20.01	20.07	20.12	20.5
20	64QAM	50	50	20.01	20.16	19.88	
20	64QAM	100	0	20.13	20.01	19.99	
Channel				43165	43340	43515	Tune-up limit (dBm)
Frequency (MHz)				3557.5	3575	3592.5	
15	QPSK	1	0	22.88	23.03	23.04	23.5
15	QPSK	1	37	22.91	22.92	22.98	
15	QPSK	1	74	22.79	22.89	22.91	
15	QPSK	36	0	22.00	22.07	22.15	22.5
15	QPSK	36	20	22.13	22.01	22.14	
15	QPSK	36	39	21.98	22.14	22.17	
15	QPSK	75	0	22.13	22.11	21.99	22.5
15	16QAM	1	0	22.13	22.01	22.27	
15	16QAM	1	37	22.01	21.99	22.17	
15	16QAM	1	74	21.95	22.01	22.07	21.5
15	16QAM	36	0	21.08	21.18	21.20	
15	16QAM	36	20	21.10	21.15	21.17	
15	16QAM	36	39	20.95	21.12	21.17	21.5
15	16QAM	75	0	21.15	21.13	21.09	
15	64QAM	1	0	20.71	20.73	20.70	
15	64QAM	1	37	20.68	20.80	20.69	21.5
15	64QAM	1	74	20.80	20.69	20.48	
15	64QAM	36	0	19.96	20.17	20.04	
15	64QAM	36	20	20.16	20.10	20.03	20.5
15	64QAM	36	39	20.10	19.99	20.05	
15	64QAM	75	0	20.18	20.12	19.84	
Channel				43140	43340	43540	Tune-up limit (dBm)
Frequency (MHz)				3555	3575	3595	
10	QPSK	1	0	22.89	23.01	23.01	23.5
10	QPSK	1	25	23.08	23.06	23.03	
10	QPSK	1	49	22.95	22.88	22.93	
10	QPSK	25	0	21.99	22.17	22.16	22.5
10	QPSK	25	12	22.15	22.10	22.12	
10	QPSK	25	25	22.02	22.11	22.12	
10	QPSK	50	0	21.99	21.92	22.01	22.5
10	16QAM	1	0	22.09	22.05	22.07	
10	16QAM	1	25	21.96	22.17	22.18	
10	16QAM	1	49	21.96	22.03	22.11	21.5
10	16QAM	25	0	21.02	21.17	21.20	
10	16QAM	25	12	21.11	21.04	21.07	
10	16QAM	25	25	20.98	21.05	21.15	21.5
10	16QAM	50	0	20.99	20.97	21.11	
10	64QAM	1	0	20.68	20.79	20.83	
10	64QAM	1	25	20.72	20.80	20.75	21.5
10	64QAM	1	49	20.83	20.81	20.46	
10	64QAM	25	0	20.12	20.11	19.98	
10	64QAM	25	12	20.08	19.99	20.15	20.5
10	64QAM	25	25	20.10	20.12	20.03	
10	64QAM	50	0	20.05	20.13	19.97	
Channel				43115	43340	43565	Tune-up limit (dBm)
Frequency (MHz)				3552.5	3575	3597.5	
5	QPSK	1	0	23.03	22.95	23.12	23.5
5	QPSK	1	12	22.88	22.96	23.16	
5	QPSK	1	24	22.96	22.85	23.02	
5	QPSK	12	0	21.95	22.02	22.02	22.5
5	QPSK	12	7	22.06	22.13	22.05	
5	QPSK	12	13	22.05	22.16	22.18	
5	QPSK	25	0	22.16	22.03	22.15	22.5
5	16QAM	1	0	22.05	22.18	22.20	
5	16QAM	1	12	22.07	22.02	22.05	
5	16QAM	1	24	22.03	22.12	21.98	21.5
5	16QAM	12	0	21.11	21.10	21.21	
5	16QAM	12	7	21.08	21.07	21.08	
5	16QAM	12	13	21.12	21.18	21.02	21.5
5	16QAM	25	0	21.00	21.06	21.04	
5	64QAM	1	0	20.65	20.89	20.81	
5	64QAM	1	12	20.68	20.94	20.67	21.5
5	64QAM	1	24	20.73	20.73	20.59	
5	64QAM	12	0	20.12	20.19	20.05	
5	64QAM	12	7	20.06	20.00	20.05	20.5
5	64QAM	12	13	20.15	20.06	19.97	
5	64QAM	25	0	20.18	19.98	19.97	



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	19.61	23.32	23.44	19.49	23.5
20	QPSK	1	49	19.39	23.12	23.07	19.40	
20	QPSK	1	99	19.48	23.03	23.06	19.23	
20	QPSK	50	0	18.73	22.15	22.42	18.51	
20	QPSK	50	24	18.63	22.31	22.27	18.39	22.5
20	QPSK	50	50	18.70	22.08	22.04	18.31	
20	QPSK	100	0	18.72	22.34	22.23	18.42	
20	16QAM	1	0	18.76	22.41	22.29	18.77	
20	16QAM	1	49	18.54	22.15	22.04	18.37	22.5
20	16QAM	1	99	18.72	22.25	22.12	18.20	
20	16QAM	50	0	17.66	21.22	21.34	17.65	
20	16QAM	50	24	17.73	21.37	21.30	17.39	
20	16QAM	50	50	17.68	21.28	21.10	17.48	21.5
20	16QAM	100	0	17.63	21.32	21.30	17.47	
20	64QAM	1	0	17.49	21.12	20.76	17.36	
20	64QAM	1	49	17.40	20.87	20.80	17.05	
20	64QAM	1	99	17.47	20.94	20.67	17.14	21.5
20	64QAM	50	0	16.65	20.30	20.11	16.54	
20	64QAM	50	24	16.66	20.17	20.16	16.51	
20	64QAM	50	50	16.70	20.19	20.07	16.43	
20	64QAM	100	0	16.79	20.36	20.10	16.51	20.5
Channel				55315	55820	56160	56665	
Frequency (MHz)				3557.5	3608	3642	3692.5	Tune-up limit (dBm)
15	QPSK	1	0	19.72	23.36	23.42	19.56	23.5
15	QPSK	1	37	19.39	23.00	23.05	19.32	
15	QPSK	1	74	19.46	23.07	22.99	19.28	
15	QPSK	36	0	18.70	22.13	22.38	18.51	
15	QPSK	36	20	18.59	22.31	22.11	18.39	22.5
15	QPSK	36	39	18.55	22.12	22.12	18.44	
15	QPSK	75	0	18.60	22.15	22.13	18.44	
15	16QAM	1	0	18.83	22.45	22.30	18.61	
15	16QAM	1	37	18.53	22.24	22.14	18.29	22.5
15	16QAM	1	74	18.53	22.17	22.08	18.27	
15	16QAM	36	0	17.83	21.22	21.19	17.65	
15	16QAM	36	20	17.74	21.37	21.14	17.40	
15	16QAM	36	39	17.57	21.15	21.08	17.43	21.5
15	16QAM	75	0	17.73	21.31	21.30	17.50	
15	64QAM	1	0	17.54	21.02	20.73	17.37	
15	64QAM	1	37	17.46	20.87	20.81	17.19	
15	64QAM	1	74	17.29	20.90	20.73	17.10	21.5
15	64QAM	36	0	16.72	20.29	20.06	16.55	
15	64QAM	36	20	16.78	20.26	20.05	16.53	
15	64QAM	36	39	16.58	20.23	19.97	16.30	
15	64QAM	75	0	16.67	20.30	20.11	16.53	20.5
Channel				55290	55815	56165	56690	
Frequency (MHz)				3555	3607.5	3642.5	3695	Tune-up limit (dBm)
10	QPSK	1	0	19.59	23.36	23.37	19.56	23.5
10	QPSK	1	25	19.47	23.07	23.02	19.41	
10	QPSK	1	49	19.58	23.09	22.90	19.19	
10	QPSK	25	0	18.62	22.24	22.39	18.46	
10	QPSK	25	12	18.65	22.29	22.28	18.46	22.5
10	QPSK	25	25	18.60	22.27	22.16	18.41	
10	QPSK	50	0	18.55	22.25	22.27	18.46	
10	16QAM	1	0	18.69	22.32	22.44	18.57	
10	16QAM	1	25	18.50	22.25	22.14	18.33	22.5
10	16QAM	1	49	18.56	22.22	22.00	18.40	
10	16QAM	25	0	17.82	21.26	21.29	17.54	
10	16QAM	25	12	17.76	21.22	21.25	17.42	
10	16QAM	25	25	17.60	21.26	21.11	17.40	21.5
10	16QAM	50	0	17.74	21.25	21.22	17.42	
10	64QAM	1	0	17.51	20.98	20.77	17.36	
10	64QAM	1	25	17.31	20.87	20.85	17.05	
10	64QAM	1	49	17.36	20.93	20.66	17.06	21.5
10	64QAM	25	0	16.72	20.26	20.02	16.55	
10	64QAM	25	12	16.64	20.34	20.08	16.42	
10	64QAM	25	25	16.66	20.23	19.89	16.46	
10	64QAM	50	0	16.78	20.32	20.04	16.55	20.5
Channel				55265	55810	56170	56715	
Frequency (MHz)				3552.5	3607	3643	3697.5	Tune-up limit (dBm)
5	QPSK	1	0	19.55	23.33	23.27	19.58	23.5
5	QPSK	1	12	19.37	22.98	23.11	19.28	
5	QPSK	1	24	19.49	23.01	23.00	19.17	
5	QPSK	12	0	18.64	22.13	22.40	18.56	
5	QPSK	12	7	18.61	22.23	22.14	18.49	22.5
5	QPSK	12	13	18.54	22.28	22.13	18.41	
5	QPSK	25	0	18.74	22.15	22.26	18.35	
5	16QAM	1	0	18.77	22.30	22.32	18.62	
5	16QAM	1	12	18.56	22.26	22.13	18.38	22.5
5	16QAM	1	24	18.59	22.10	22.06	18.23	
5	16QAM	12	0	17.73	21.18	21.28	17.65	
5	16QAM	12	7	17.66	21.33	21.25	17.49	
5	16QAM	12	13	17.73	21.24	21.06	17.37	21.5
5	16QAM	25	0	17.64	21.25	21.21	17.50	
5	64QAM	1	0	17.37	21.10	20.72	17.45	
5	64QAM	1	12	17.31	20.93	20.85	17.05	
5	64QAM	1	24	17.44	21.03	20.59	17.11	21.5
5	64QAM	12	0	16.65	20.24	19.99	16.62	
5	64QAM	12	7	16.77	20.23	20.17	16.52	
5	64QAM	12	13	16.63	20.13	20.04	16.48	
5	64QAM	25	0	16.69	20.18	20.13	16.38	20.5



Band 38							
Ant 2							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				37850	38000	38150	
Frequency (MHz)				2580	2595	2610	
20	QPSK	1	0	24.04	24.09	24.19	25
20	QPSK	1	49	24.05	24.06	24.20	
20	QPSK	1	99	24.00	24.03	24.04	
20	QPSK	50	0	23.35	23.28	23.33	24
20	QPSK	50	24	23.37	23.39	23.30	
20	QPSK	50	50	23.45	23.50	23.40	
20	QPSK	100	0	23.31	23.38	23.45	24
20	16QAM	1	0	23.18	23.40	23.36	
20	16QAM	1	49	23.29	23.36	23.46	
20	16QAM	1	99	23.40	23.45	23.43	23
20	16QAM	50	0	22.31	22.45	22.33	
20	16QAM	50	24	22.31	22.46	22.32	
20	16QAM	50	50	22.41	22.52	22.42	23
20	16QAM	100	0	22.38	22.35	22.29	
20	64QAM	1	0	22.05	21.95	22.09	
20	64QAM	1	49	22.03	22.15	22.07	23
20	64QAM	1	99	22.04	22.23	22.09	
20	64QAM	50	0	21.36	21.45	21.33	
20	64QAM	50	24	21.43	21.46	21.39	22
20	64QAM	50	50	21.36	21.45	21.39	
20	64QAM	100	0	21.31	21.38	21.40	
Channel				37825	38000	38175	Tune-up limit (dBm)
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	24.06	24.01	24.13	25
15	QPSK	1	37	24.07	24.08	24.03	
15	QPSK	1	74	24.13	24.19	24.14	
15	QPSK	36	0	23.30	23.37	23.41	24
15	QPSK	36	20	23.45	23.41	23.31	
15	QPSK	36	39	23.33	23.37	23.37	
15	QPSK	75	0	23.33	23.29	23.32	24
15	16QAM	1	0	23.24	23.40	23.41	
15	16QAM	1	37	23.33	23.41	23.33	
15	16QAM	1	74	23.28	23.40	23.39	23
15	16QAM	36	0	22.40	22.41	22.38	
15	16QAM	36	20	22.30	22.39	22.46	
15	16QAM	36	39	22.40	22.56	22.47	23
15	16QAM	75	0	22.49	22.42	22.41	
15	64QAM	1	0	21.95	22.03	21.95	
15	64QAM	1	37	22.06	22.14	22.12	23
15	64QAM	1	74	22.13	22.15	22.07	
15	64QAM	36	0	21.42	21.29	21.36	
15	64QAM	36	20	21.39	21.40	21.38	22
15	64QAM	36	39	21.36	21.49	21.45	
15	64QAM	75	0	21.44	21.32	21.43	
Channel				37800	38000	38200	Tune-up limit (dBm)
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	24.16	24.20	24.06	25
10	QPSK	1	25	24.04	24.19	24.17	
10	QPSK	1	49	24.02	24.07	24.05	
10	QPSK	25	0	23.22	23.24	23.36	24
10	QPSK	25	12	23.31	23.27	23.38	
10	QPSK	25	25	23.43	23.41	23.54	
10	QPSK	50	0	23.46	23.44	23.35	24
10	16QAM	1	0	23.25	23.21	23.40	
10	16QAM	1	25	23.38	23.28	23.38	
10	16QAM	1	49	23.42	23.41	23.39	23
10	16QAM	25	0	22.37	22.36	22.35	
10	16QAM	25	12	22.31	22.27	22.37	
10	16QAM	25	25	22.40	22.41	22.54	23
10	16QAM	50	0	22.30	22.47	22.29	
10	64QAM	1	0	21.98	22.01	21.95	
10	64QAM	1	25	21.91	21.96	22.01	23
10	64QAM	1	49	22.15	22.13	22.15	
10	64QAM	25	0	21.27	21.36	21.43	
10	64QAM	25	12	21.41	21.47	21.37	22
10	64QAM	25	25	21.41	21.55	21.48	
10	64QAM	50	0	21.40	21.44	21.39	
Channel				37775	38000	38225	Tune-up limit (dBm)
Frequency (MHz)				2572.5	2595	2617.5	
5	QPSK	1	0	24.09	24.04	24.19	25
5	QPSK	1	12	24.05	24.18	24.02	
5	QPSK	1	24	24.17	24.20	24.06	
5	QPSK	12	0	23.34	23.38	23.46	24
5	QPSK	12	7	23.38	23.38	23.36	
5	QPSK	12	13	23.35	23.33	23.39	
5	QPSK	25	0	23.45	23.29	23.33	24
5	16QAM	1	0	23.20	23.32	23.24	
5	16QAM	1	12	23.28	23.38	23.45	
5	16QAM	1	24	23.35	23.47	23.29	23
5	16QAM	12	0	22.34	22.37	22.33	
5	16QAM	12	7	22.47	22.34	22.33	
5	16QAM	12	13	22.40	22.41	22.48	23
5	16QAM	25	0	22.30	22.29	22.41	
5	64QAM	1	0	22.05	21.91	22.08	
5	64QAM	1	12	21.93	22.08	22.01	23
5	64QAM	1	24	22.13	22.13	22.11	
5	64QAM	12	0	21.23	21.48	21.33	
5	64QAM	12	7	21.35	21.32	21.30	22
5	64QAM	12	13	21.43	21.40	21.39	
5	64QAM	25	0	21.37	21.44	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	25.74	25.71	25.35	26.6
20	QPSK	1	49	25.70	25.65	25.58	
20	QPSK	1	99	25.64	25.76	25.36	
20	QPSK	50	0	25.56	25.11	24.75	25.6
20	QPSK	50	24	25.15	25.13	24.82	
20	QPSK	50	50	25.26	25.14	24.52	
20	QPSK	100	0	23.68	24.96	24.63	25.6
20	16QAM	1	0	25.44	25.14	24.78	
20	16QAM	1	49	25.26	25.20	25.02	
20	16QAM	1	99	25.42	25.12	24.68	24.6
20	16QAM	50	0	24.31	24.06	23.91	
20	16QAM	50	24	24.21	24.05	24.04	
20	16QAM	50	50	24.19	23.97	23.79	24.6
20	16QAM	100	0	23.73	24.12	23.80	
20	64QAM	1	0	23.55	23.87	23.72	
20	64QAM	1	49	23.93	23.86	23.77	24.6
20	64QAM	1	99	24.03	23.89	23.77	
20	64QAM	50	0	22.76	22.83	22.80	
20	64QAM	50	24	23.05	22.83	22.79	23.6
20	64QAM	50	50	22.97	22.99	22.80	
20	64QAM	100	0	22.74	22.63	22.66	
Channel				37825	38000	38175	Tune-up limit (dBm)
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	25.79	25.62	25.45	26.6
15	QPSK	1	37	25.74	25.70	25.66	
15	QPSK	1	74	25.71	25.64	25.17	
15	QPSK	36	0	25.65	25.12	24.88	25.6
15	QPSK	36	20	25.15	25.17	24.78	
15	QPSK	36	39	25.11	25.10	24.51	
15	QPSK	75	0	23.75	25.10	24.63	25.6
15	16QAM	1	0	25.51	25.20	24.75	
15	16QAM	1	37	25.40	25.16	25.12	
15	16QAM	1	74	25.32	25.14	24.65	24.6
15	16QAM	36	0	24.24	24.18	23.92	
15	16QAM	36	20	24.21	24.05	23.94	
15	16QAM	36	39	24.27	24.03	23.98	24.6
15	16QAM	75	0	23.77	24.01	23.74	
15	64QAM	1	0	23.59	23.83	23.84	
15	64QAM	1	37	23.95	23.85	23.73	24.6
15	64QAM	1	74	23.85	24.06	23.69	
15	64QAM	36	0	22.71	22.70	22.62	
15	64QAM	36	20	22.99	22.74	22.80	23.6
15	64QAM	36	39	22.97	22.86	22.74	
15	64QAM	75	0	22.79	22.63	22.80	
Channel				37800	38000	38200	Tune-up limit (dBm)
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	25.71	25.76	25.51	26.6
10	QPSK	1	25	25.59	25.60	25.65	
10	QPSK	1	49	25.69	25.63	25.28	
10	QPSK	25	0	25.53	25.23	24.72	25.6
10	QPSK	25	12	25.12	25.02	24.79	
10	QPSK	25	25	25.12	25.09	24.49	
10	QPSK	50	0	23.70	25.05	24.65	25.6
10	16QAM	1	0	25.47	25.26	24.75	
10	16QAM	1	25	25.23	25.25	25.05	
10	16QAM	1	49	25.30	25.04	24.69	24.6
10	16QAM	25	0	24.35	24.17	23.92	
10	16QAM	25	12	24.21	24.10	24.05	
10	16QAM	25	25	24.11	24.15	23.78	24.6
10	16QAM	50	0	23.78	24.04	23.86	
10	64QAM	1	0	23.48	23.86	23.75	
10	64QAM	1	25	23.81	23.87	23.82	24.6
10	64QAM	1	49	23.99	24.01	23.66	
10	64QAM	25	0	22.79	22.74	22.67	
10	64QAM	25	12	22.87	22.82	22.74	23.6
10	64QAM	25	25	23.08	23.00	22.80	
10	64QAM	50	0	22.86	22.73	22.71	
Channel				37775	38000	38225	Tune-up limit (dBm)
Frequency (MHz)				2572.5	2595	2617.5	
5	QPSK	1	0	25.82	25.72	25.34	26.6
5	QPSK	1	12	25.74	25.51	25.61	
5	QPSK	1	24	25.53	25.64	25.16	
5	QPSK	12	0	25.60	25.12	24.83	25.6
5	QPSK	12	7	25.23	25.12	24.76	
5	QPSK	12	13	25.13	25.10	24.46	
5	QPSK	25	0	23.81	25.08	24.67	25.6
5	16QAM	1	0	25.40	25.33	24.76	
5	16QAM	1	12	25.28	25.18	25.05	
5	16QAM	1	24	25.28	25.05	24.69	24.6
5	16QAM	12	0	24.40	24.21	23.94	
5	16QAM	12	7	24.23	24.10	24.03	
5	16QAM	12	13	24.14	24.14	23.78	24.6
5	16QAM	25	0	23.66	24.08	23.73	
5	64QAM	1	0	23.45	23.87	23.69	
5	64QAM	1	12	23.91	23.77	23.64	24.6
5	64QAM	1	24	23.93	23.92	23.70	
5	64QAM	12	0	22.83	22.77	22.74	
5	64QAM	12	7	22.90	22.84	22.74	23.6
5	64QAM	12	13	23.05	22.98	22.67	
5	64QAM	25	0	22.86	22.72	22.65	



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	23.28	23.29	23.11	23.25	25	
20	QPSK	1	49	23.40	23.10	23.14	23.08	23.12		
20	QPSK	1	99	23.26	23.24	23.06	22.98	23.11		
20	QPSK	50	0	23.24	23.00	23.21	23.10	23.19	24	
20	QPSK	50	24	23.19	23.15	23.03	23.13	23.09		
20	QPSK	50	50	23.10	23.05	23.09	23.04	23.16		
20	QPSK	100	0	23.31	23.12	23.20	23.04	23.08	24	
20	16QAM	1	0	23.35	23.15	23.27	23.11	23.23		
20	16QAM	1	49	23.25	23.20	23.05	23.02	23.20		
20	16QAM	1	99	23.28	23.23	23.17	23.33	23.24	23	
20	16QAM	50	0	22.73	22.57	22.40	22.39	22.30		
20	16QAM	50	24	22.54	22.47	22.37	22.30	22.24		
20	16QAM	50	50	22.56	22.34	22.44	22.45	22.47	23	
20	16QAM	100	0	22.46	22.49	22.32	22.35	22.28		
20	64QAM	1	0	22.42	22.14	22.10	22.15	22.14		
20	64QAM	1	49	22.27	22.12	22.09	21.96	22.06	23	
20	64QAM	1	99	22.28	22.01	22.09	22.07	22.05		
20	64QAM	50	0	21.76	21.40	21.30	21.33	21.30		
20	64QAM	50	24	21.64	21.47	21.42	21.38	21.35	22	
20	64QAM	50	50	21.57	21.41	21.43	21.43	21.41		
20	64QAM	100	0	21.49	21.34	21.33	21.35	21.18		
Channel				39725	40173	40620	41068	41515	Tune-up limit (dBm)	
Frequency (MHz)				2503.5	2548.3	2593	2637.8	2682.5		
15	QPSK	1	0	23.39	23.24	23.28	23.09	23.21	25	
15	QPSK	1	37	23.30	23.14	23.20	23.03	23.14		
15	QPSK	1	74	23.37	23.21	23.22	22.95	23.12		
15	QPSK	36	0	23.27	23.08	23.08	23.01	23.09	24	
15	QPSK	36	20	23.27	23.17	23.03	22.95	23.02		
15	QPSK	36	39	23.19	23.13	23.25	23.08	23.03		
15	QPSK	75	0	23.35	23.17	23.08	23.10	23.08	24	
15	16QAM	1	0	23.37	23.31	23.19	23.17	23.26		
15	16QAM	1	37	23.24	23.09	23.23	23.00	23.20		
15	16QAM	1	74	23.25	23.17	23.29	23.17	23.12	23	
15	16QAM	36	0	22.57	22.54	22.31	22.29	22.20		
15	16QAM	36	20	22.62	22.45	22.39	22.32	22.27		
15	16QAM	36	39	22.47	22.51	22.39	22.39	22.40	23	
15	16QAM	75	0	22.58	22.39	22.28	22.40	22.28		
15	64QAM	1	0	22.35	22.14	22.10	22.05	22.04		
15	64QAM	1	37	22.33	22.16	22.04	22.02	22.15	23	
15	64QAM	1	74	22.17	22.12	22.08	22.24	22.15		
15	64QAM	36	0	21.63	21.42	21.39	21.27	21.33		
15	64QAM	36	20	21.51	21.38	21.37	21.38	21.27	22	
15	64QAM	36	39	21.53	21.41	21.49	21.34	21.47		
15	64QAM	75	0	21.51	21.49	21.44	21.24	21.27		
Channel				39700	40160	40620	41080	41540	Tune-up limit (dBm)	
Frequency (MHz)				2501	2547	2593	2639	2685		
10	QPSK	1	0	23.31	23.27	23.34	23.08	23.17	25	
10	QPSK	1	25	23.37	23.18	23.07	23.13	23.10		
10	QPSK	1	49	23.41	23.27	23.06	23.01	22.94		
10	QPSK	25	0	23.35	23.09	23.08	23.01	23.17	24	
10	QPSK	25	12	23.30	23.18	23.11	23.14	23.03		
10	QPSK	25	25	23.12	23.16	23.27	23.21	22.99		
10	QPSK	50	0	23.31	23.24	23.21	23.14	23.22	24	
10	16QAM	1	0	23.35	23.24	23.17	23.21	23.21		
10	16QAM	1	25	23.40	23.10	23.10	23.03	23.16		
10	16QAM	1	49	23.32	23.17	23.26	23.17	23.28	23	
10	16QAM	25	0	22.63	22.39	22.34	22.29	22.27		
10	16QAM	25	12	22.49	22.46	22.33	22.34	22.32		
10	16QAM	25	25	22.50	22.43	22.50	22.38	22.27	23	
10	16QAM	50	0	22.47	22.42	22.38	22.27	22.41		
10	64QAM	1	0	22.32	22.19	22.04	22.01	22.03		
10	64QAM	1	25	22.31	22.14	22.02	21.95	22.08	23	
10	64QAM	1	49	22.23	22.16	22.22	22.25	22.01		
10	64QAM	25	0	21.56	21.56	21.46	21.40	21.37		
10	64QAM	25	12	21.53	21.51	21.45	21.26	21.38	22	
10	64QAM	25	25	21.65	21.38	21.44	21.39	21.38		
10	64QAM	50	0	21.49	21.32	21.30	21.24	21.24		
Channel				39675	40148	40620	41093	41565	Tune-up limit (dBm)	
Frequency (MHz)				2498.5	2545.8	2593	2640.30	2687.5		
5	QPSK	1	0	23.32	23.22	23.29	23.04	23.12	25	
5	QPSK	1	12	23.31	23.29	23.20	22.96	23.16		
5	QPSK	1	24	23.32	23.10	23.20	22.97	23.07		
5	QPSK	12	0	23.28	23.07	23.09	23.14	23.05	24	
5	QPSK	12	7	23.25	23.07	23.15	23.09	23.01		
5	QPSK	12	13	23.22	23.02	23.20	23.03	23.17		
5	QPSK	25	0	23.33	23.26	23.15	23.02	23.11	24	
5	16QAM	1	0	23.36	23.11	23.17	23.21	23.14		
5	16QAM	1	12	23.29	23.29	23.04	22.99	23.19		
5	16QAM	1	24	23.27	23.15	23.27	23.33	23.10	23	
5	16QAM	12	0	22.65	22.42	22.38	22.36	22.21		
5	16QAM	12	7	22.59	22.52	22.41	22.39	22.35		
5	16QAM	12	13	22.61	22.39	22.52	22.35	22.32	23	
5	16QAM	25	0	22.48	22.47	22.33	22.27	22.32		
5	64QAM	1	0	22.26	22.08	22.07	22.08	22.09		
5	64QAM	1	12	22.33	22.02	22.08	22.00	21.98	23	
5	64QAM	1	24	22.15	22.08	22.16	22.06	22.08		
5	64QAM	12	0	21.70	21.54	21.42	21.32	21.21		
5	64QAM	12	7	21.62	21.47	21.41	21.35	21.40	22	
5	64QAM	12	13	21.55	21.43	21.47	21.46	21.41		
5	64QAM	25	0	21.53	21.36	21.39	21.30	21.35		



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	25.62	25.68	25.56	25.62	25.33	26.6
20	QPSK	1	49	25.60	25.66	25.70	25.72	25.62	
20	QPSK	1	99	25.70	25.65	25.22	25.37	25.64	
20	QPSK	50	0	25.63	25.20	24.76	25.04	24.80	25.6
20	QPSK	50	24	25.18	25.20	24.73	25.07	24.90	
20	QPSK	50	50	25.12	25.17	24.54	24.96	24.86	
20	QPSK	100	0	23.66	25.07	24.61	24.95	24.86	25.6
20	16QAM	1	0	25.38	25.30	24.82	24.94	24.67	
20	16QAM	1	49	25.43	25.26	25.19	25.13	25.05	
20	16QAM	1	99	25.37	25.15	24.75	24.69	24.97	24.6
20	16QAM	50	0	24.40	24.19	23.96	24.07	23.86	
20	16QAM	50	24	24.28	24.08	24.07	24.10	23.95	
20	16QAM	50	50	24.23	24.11	24.01	23.83	23.95	24.6
20	16QAM	100	0	23.87	24.17	23.77	23.95	23.93	
20	64QAM	1	0	23.53	23.97	23.77	23.88	23.59	
20	64QAM	1	49	23.94	23.88	23.85	24.17	23.76	24.6
20	64QAM	1	99	23.98	24.12	23.66	23.53	23.55	
20	64QAM	50	0	22.90	22.69	22.78	23.14	22.92	
20	64QAM	50	24	22.96	22.89	22.77	23.12	22.99	23.6
20	64QAM	50	50	23.16	23.03	22.83	23.04	22.66	
20	64QAM	100	0	22.88	22.74	22.68	22.87	22.75	
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	25.78	25.78	25.55	25.57	25.42	26.6
15	QPSK	1	37	25.65	25.61	25.77	25.80	25.84	
15	QPSK	1	74	25.70	25.66	25.35	25.56	25.61	
15	QPSK	36	0	25.64	25.11	24.79	25.00	24.91	25.6
15	QPSK	36	20	25.21	25.14	24.73	24.88	24.92	
15	QPSK	36	39	25.25	25.14	24.61	24.82	24.96	
15	QPSK	75	0	23.75	25.14	24.70	24.82	24.81	25.6
15	16QAM	1	0	25.34	25.33	24.90	24.98	24.77	
15	16QAM	1	37	25.39	25.33	25.17	25.27	24.96	
15	16QAM	1	74	25.45	25.33	24.64	24.73	25.09	24.6
15	16QAM	36	0	24.43	24.28	24.05	24.13	23.90	
15	16QAM	36	20	24.22	24.12	24.05	24.02	23.90	
15	16QAM	36	39	24.31	24.10	23.96	23.82	23.97	24.6
15	16QAM	75	0	23.77	24.20	23.74	23.95	23.98	
15	64QAM	1	0	23.84	23.91	23.76	23.86	23.60	
15	64QAM	1	37	23.95	23.81	23.81	24.20	23.87	24.6
15	64QAM	1	74	24.08	24.08	23.76	23.66	23.56	
15	64QAM	36	0	22.78	22.87	22.72	23.15	22.92	
15	64QAM	36	20	22.95	22.90	22.85	23.00	22.80	23.6
15	64QAM	36	39	23.11	22.99	22.72	22.91	22.67	
15	64QAM	75	0	22.86	22.71	22.84	23.06	22.63	
Channel				39700	40160	40620	41080	41540	Tune-up limit (dBm)
Frequency (MHz)				2501	2547	2593	2639	2685	
10	QPSK	1	0	25.63	25.67	25.49	25.73	25.29	26.6
10	QPSK	1	25	25.72	25.64	25.83	25.72	25.65	
10	QPSK	1	49	25.54	25.76	25.30	25.49	25.60	
10	QPSK	25	0	25.53	25.10	24.82	24.98	24.76	25.6
10	QPSK	25	12	25.23	25.01	24.81	24.94	25.01	
10	QPSK	25	25	25.29	25.02	24.47	24.98	24.91	
10	QPSK	50	0	23.69	25.15	24.77	24.83	24.82	25.6
10	16QAM	1	0	25.46	25.29	24.78	25.08	24.78	
10	16QAM	1	25	25.38	25.34	25.07	25.15	25.13	
10	16QAM	1	49	25.35	25.32	24.70	24.78	24.96	24.6
10	16QAM	25	0	24.43	24.12	24.14	24.06	23.81	
10	16QAM	25	12	24.23	24.24	23.90	24.12	24.01	
10	16QAM	25	25	24.23	24.15	24.07	23.98	23.97	24.6
10	16QAM	50	0	23.80	24.22	23.87	24.02	23.81	
10	64QAM	1	0	23.61	23.89	23.87	23.89	23.42	
10	64QAM	1	25	23.86	23.82	23.83	24.06	23.82	24.6
10	64QAM	1	49	24.05	23.97	23.66	23.57	23.50	
10	64QAM	25	0	22.83	22.83	22.79	22.97	22.79	
10	64QAM	25	12	23.01	22.79	22.84	23.09	22.84	23.6
10	64QAM	25	25	23.05	22.86	22.84	22.90	22.52	
10	64QAM	50	0	22.86	22.80	22.76	22.95	22.72	
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	25.74	25.76	25.53	25.70	25.29	26.6
5	QPSK	1	12	25.64	25.67	25.68	25.74	25.77	
5	QPSK	1	24	25.65	25.68	25.26	25.48	25.55	
5	QPSK	12	0	25.62	25.14	24.78	25.11	24.76	25.6
5	QPSK	12	7	25.37	25.09	24.84	24.90	25.01	
5	QPSK	12	13	25.25	25.05	24.65	24.85	24.93	
5	QPSK	25	0	23.73	25.04	24.71	24.85	24.82	25.6
5	16QAM	1	0	25.43	25.19	24.88	25.01	24.63	
5	16QAM	1	12	25.47	25.36	25.16	25.30	24.99	
5	16QAM	1	24	25.38	25.28	24.64	24.83	25.02	24.6
5	16QAM	12	0	24.47	24.26	24.12	23.98	23.84	
5	16QAM	12	7	24.21	24.06	23.93	24.14	23.95	
5	16QAM	12	13	24.35	24.22	24.00	23.92	24.07	24.6
5	16QAM	25	0	23.69	24.07	23.90	23.92	23.84	
5	64QAM	1	0	23.52	23.95	23.75	23.92	23.54	
5	64QAM	1	12	23.96	23.84	23.81	24.16	23.87	24.6
5	64QAM	1	24	24.00	23.96	23.79	23.52	23.44	
5	64QAM	12	0	22.81	22.81	22.72	23.05	22.90	
5	64QAM	12	7	23.10	22.77	22.73	23.14	22.91	23.6
5	64QAM	12	13	23.10	22.87	22.82	22.96	22.51	
5	64QAM	25	0	22.74	22.82	22.69	22.87	22.74	



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	24.69	24.59	24.80	25
20	QPSK	1	49	24.53	24.57	24.80	
20	QPSK	1	99	24.69	24.64	24.70	
20	QPSK	50	0	23.76	23.92	23.88	24
20	QPSK	50	24	23.97	23.85	23.90	
20	QPSK	50	50	23.86	23.84	23.90	
20	QPSK	100	0	23.92	23.80	23.78	24
20	16QAM	1	0	23.96	23.86	23.90	
20	16QAM	1	49	24.03	24.05	23.90	
20	16QAM	1	99	23.96	23.90	24.09	23
20	16QAM	50	0	22.81	22.96	22.92	
20	16QAM	50	24	22.84	22.91	22.89	
20	16QAM	50	50	22.90	22.96	22.83	23
20	16QAM	100	0	22.94	22.93	22.81	
20	64QAM	1	0	22.73	22.91	22.86	
20	64QAM	1	49	22.86	22.95	22.76	23
20	64QAM	1	99	22.77	22.77	22.74	
20	64QAM	50	0	21.85	21.89	21.91	
20	64QAM	50	24	21.80	21.86	21.84	22
20	64QAM	50	50	21.87	21.91	21.81	
20	64QAM	100	0	21.97	21.79	21.84	
Channel				43165	43340	43515	Tune-up limit (dBm)
Frequency (MHz)				3557.5	3575	3592.5	
15	QPSK	1	0	24.72	24.72	24.72	25
15	QPSK	1	37	24.59	24.59	24.69	
15	QPSK	1	74	24.61	24.68	24.70	
15	QPSK	36	0	23.83	23.94	23.99	24
15	QPSK	36	20	23.91	23.80	23.80	
15	QPSK	36	39	23.70	23.86	23.88	
15	QPSK	75	0	23.84	23.82	23.78	24
15	16QAM	1	0	23.99	23.87	23.91	
15	16QAM	1	37	24.00	23.95	23.87	
15	16QAM	1	74	23.92	24.06	24.00	23
15	16QAM	36	0	22.76	22.88	23.06	
15	16QAM	36	20	22.80	22.91	22.95	
15	16QAM	36	39	22.78	22.82	23.00	23
15	16QAM	75	0	22.78	22.77	22.93	
15	64QAM	1	0	22.74	22.84	22.99	
15	64QAM	1	37	22.88	22.98	22.88	23
15	64QAM	1	74	22.80	22.76	22.76	
15	64QAM	36	0	21.87	21.80	21.75	
15	64QAM	36	20	21.86	21.88	22.01	22
15	64QAM	36	39	21.88	21.92	21.92	
15	64QAM	75	0	21.96	21.87	21.78	
Channel				43140	43340	43540	Tune-up limit (dBm)
Frequency (MHz)				3555	3575	3595	
10	QPSK	1	0	24.56	24.75	24.71	25
10	QPSK	1	25	24.67	24.56	24.77	
10	QPSK	1	49	24.64	24.61	24.72	
10	QPSK	25	0	23.78	23.94	23.94	24
10	QPSK	25	12	23.80	23.90	23.98	
10	QPSK	25	25	23.82	23.96	23.91	
10	QPSK	50	0	23.82	23.78	23.79	24
10	16QAM	1	0	23.91	23.97	23.89	
10	16QAM	1	25	23.83	23.97	23.80	
10	16QAM	1	49	23.95	23.93	24.01	23
10	16QAM	25	0	22.93	22.83	22.88	
10	16QAM	25	12	22.92	22.80	22.94	
10	16QAM	25	25	22.83	22.87	22.89	23
10	16QAM	50	0	22.96	22.95	22.97	
10	64QAM	1	0	22.79	22.82	22.88	
10	64QAM	1	25	22.75	22.83	22.87	23
10	64QAM	1	49	22.84	22.84	22.73	
10	64QAM	25	0	21.85	21.82	21.79	
10	64QAM	25	12	21.95	21.83	21.87	22
10	64QAM	25	25	21.88	21.93	21.93	
10	64QAM	50	0	21.81	21.93	21.83	
Channel				43115	43340	43565	Tune-up limit (dBm)
Frequency (MHz)				3552.5	3575	3597.5	
5	QPSK	1	0	24.66	24.64	24.68	25
5	QPSK	1	12	24.53	24.58	24.72	
5	QPSK	1	24	24.51	24.63	24.69	
5	QPSK	12	0	23.84	23.93	23.86	24
5	QPSK	12	7	23.87	23.83	23.83	
5	QPSK	12	13	23.70	23.96	23.83	
5	QPSK	25	0	23.89	23.74	23.92	24
5	16QAM	1	0	24.00	24.01	23.96	
5	16QAM	1	12	24.01	23.99	23.94	
5	16QAM	1	24	23.90	24.05	23.95	23
5	16QAM	12	0	22.83	22.83	23.07	
5	16QAM	12	7	22.79	22.86	22.94	
5	16QAM	12	13	22.88	22.87	22.89	23
5	16QAM	25	0	22.86	22.94	22.92	
5	64QAM	1	0	22.73	22.77	22.81	
5	64QAM	1	12	22.75	22.90	22.77	23
5	64QAM	1	24	22.79	22.88	22.82	
5	64QAM	12	0	21.78	21.97	21.81	
5	64QAM	12	7	21.82	21.87	21.90	22
5	64QAM	12	13	21.83	21.97	21.84	
5	64QAM	25	0	21.90	21.94	21.93	



Band 38							
Ant 2							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				37850	38000	38150	
Frequency (MHz)				2580	2595	2610	
20	QPSK	1	0	24.04	24.09	24.19	24.2
20	QPSK	1	49	24.05	24.06	24.20	
20	QPSK	1	99	24.00	24.03	24.04	
20	QPSK	50	0	23.35	23.28	23.33	24
20	QPSK	50	24	23.37	23.39	23.30	
20	QPSK	50	50	23.45	23.50	23.40	
20	QPSK	100	0	23.31	23.38	23.45	24
20	16QAM	1	0	23.18	23.40	23.36	
20	16QAM	1	49	23.29	23.36	23.46	
20	16QAM	1	99	23.40	23.45	23.43	23
20	16QAM	50	0	22.31	22.45	22.33	
20	16QAM	50	24	22.31	22.46	22.32	
20	16QAM	50	50	22.41	22.52	22.42	23
20	16QAM	100	0	22.38	22.35	22.29	
20	64QAM	1	0	22.05	21.95	22.09	
20	64QAM	1	49	22.03	22.15	22.07	23
20	64QAM	1	99	22.04	22.23	22.09	
20	64QAM	50	0	21.36	21.45	21.33	
20	64QAM	50	24	21.43	21.46	21.39	22
20	64QAM	50	50	21.36	21.45	21.39	
20	64QAM	100	0	21.31	21.38	21.40	
Channel				37825	38000	38175	Tune-up limit (dBm)
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	24.06	24.01	24.13	24.2
15	QPSK	1	37	24.07	24.08	24.03	
15	QPSK	1	74	24.13	24.19	24.14	
15	QPSK	36	0	23.30	23.37	23.41	24
15	QPSK	36	20	23.45	23.41	23.31	
15	QPSK	36	39	23.33	23.37	23.37	
15	QPSK	75	0	23.33	23.29	23.32	24
15	16QAM	1	0	23.24	23.40	23.41	
15	16QAM	1	37	23.33	23.41	23.33	
15	16QAM	1	74	23.28	23.40	23.39	23
15	16QAM	36	0	22.40	22.41	22.38	
15	16QAM	36	20	22.30	22.39	22.46	
15	16QAM	36	39	22.40	22.56	22.47	23
15	16QAM	75	0	22.49	22.42	22.41	
15	64QAM	1	0	21.95	22.03	21.95	
15	64QAM	1	37	22.06	22.14	22.12	23
15	64QAM	1	74	22.13	22.15	22.07	
15	64QAM	36	0	21.42	21.29	21.36	
15	64QAM	36	20	21.39	21.40	21.38	22
15	64QAM	36	39	21.36	21.49	21.45	
15	64QAM	75	0	21.44	21.32	21.43	
Channel				37800	38000	38200	Tune-up limit (dBm)
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	24.16	24.20	24.06	24.2
10	QPSK	1	25	24.04	24.19	24.17	
10	QPSK	1	49	24.02	24.07	24.05	
10	QPSK	25	0	23.22	23.24	23.36	24
10	QPSK	25	12	23.31	23.27	23.38	
10	QPSK	25	25	23.43	23.41	23.54	
10	QPSK	50	0	23.46	23.44	23.35	24
10	16QAM	1	0	23.25	23.21	23.40	
10	16QAM	1	25	23.38	23.28	23.38	
10	16QAM	1	49	23.42	23.41	23.39	23
10	16QAM	25	0	22.37	22.36	22.35	
10	16QAM	25	12	22.31	22.27	22.37	
10	16QAM	25	25	22.40	22.41	22.54	23
10	16QAM	50	0	22.30	22.47	22.29	
10	64QAM	1	0	21.98	22.01	21.95	
10	64QAM	1	25	21.91	21.96	22.01	23
10	64QAM	1	49	22.15	22.13	22.15	
10	64QAM	25	0	21.27	21.36	21.43	
10	64QAM	25	12	21.41	21.47	21.37	22
10	64QAM	25	25	21.41	21.55	21.48	
10	64QAM	50	0	21.40	21.44	21.39	
Channel				37775	38000	38225	Tune-up limit (dBm)
Frequency (MHz)				2572.5	2595	2617.5	
5	QPSK	1	0	24.09	24.04	24.19	24.2
5	QPSK	1	12	24.05	24.18	24.02	
5	QPSK	1	24	24.17	24.20	24.06	
5	QPSK	12	0	23.34	23.38	23.46	24
5	QPSK	12	7	23.38	23.38	23.36	
5	QPSK	12	13	23.35	23.33	23.39	
5	QPSK	25	0	23.45	23.29	23.33	24
5	16QAM	1	0	23.20	23.32	23.24	
5	16QAM	1	12	23.28	23.38	23.45	
5	16QAM	1	24	23.35	23.47	23.29	23
5	16QAM	12	0	22.34	22.37	22.33	
5	16QAM	12	7	22.47	22.34	22.33	
5	16QAM	12	13	22.40	22.41	22.48	23
5	16QAM	25	0	22.30	22.29	22.41	
5	64QAM	1	0	22.05	21.91	22.08	
5	64QAM	1	12	21.93	22.08	22.01	23
5	64QAM	1	24	22.13	22.13	22.11	
5	64QAM	12	0	21.23	21.48	21.33	
5	64QAM	12	7	21.35	21.32	21.30	22
5	64QAM	12	13	21.43	21.40	21.39	
5	64QAM	25	0	21.37	21.44	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	25.74	25.71	25.35	25.8
20	QPSK	1	49	25.70	25.65	25.58	
20	QPSK	1	99	25.64	25.76	25.36	
20	QPSK	50	0	25.56	25.11	24.75	25.8
20	QPSK	50	24	25.15	25.13	24.82	
20	QPSK	50	50	25.26	25.14	24.52	
20	QPSK	100	0	23.68	24.96	24.63	25.8
20	16QAM	1	0	25.44	25.14	24.78	
20	16QAM	1	49	25.26	25.20	25.02	
20	16QAM	1	99	25.42	25.12	24.68	25.5
20	16QAM	50	0	24.31	24.06	23.91	
20	16QAM	50	24	24.21	24.05	24.04	
20	16QAM	50	50	24.19	23.97	23.79	25.5
20	16QAM	100	0	23.73	24.12	23.80	
20	64QAM	1	0	23.55	23.87	23.72	
20	64QAM	1	49	23.93	23.86	23.77	24.5
20	64QAM	1	99	24.03	23.89	23.77	
20	64QAM	50	0	22.76	22.83	22.80	
20	64QAM	50	24	23.05	22.83	22.79	24.5
20	64QAM	50	50	22.97	22.99	22.80	
20	64QAM	100	0	22.74	22.63	22.66	
Channel				37825	38000	38175	Tune-up limit (dBm)
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	25.79	25.62	25.45	25.8
15	QPSK	1	37	25.74	25.70	25.66	
15	QPSK	1	74	25.71	25.64	25.17	
15	QPSK	36	0	25.65	25.12	24.88	25.8
15	QPSK	36	20	25.15	25.17	24.78	
15	QPSK	36	39	25.11	25.10	24.51	
15	QPSK	75	0	23.75	25.10	24.63	25.8
15	16QAM	1	0	25.51	25.20	24.75	
15	16QAM	1	37	25.40	25.16	25.12	
15	16QAM	1	74	25.32	25.14	24.65	25.5
15	16QAM	36	0	24.24	24.18	23.92	
15	16QAM	36	20	24.21	24.05	23.94	
15	16QAM	36	39	24.27	24.03	23.98	25.5
15	16QAM	75	0	23.77	24.01	23.74	
15	64QAM	1	0	23.59	23.83	23.84	25.5
15	64QAM	1	37	23.95	23.85	23.73	
15	64QAM	1	74	23.85	24.06	23.69	
15	64QAM	36	0	22.71	22.70	22.62	24.5
15	64QAM	36	20	22.99	22.74	22.80	
15	64QAM	36	39	22.97	22.86	22.74	
15	64QAM	75	0	22.79	22.63	22.80	Tune-up limit (dBm)
Channel				37800	38000	38200	
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	25.71	25.76	25.51	25.8
10	QPSK	1	25	25.59	25.60	25.65	
10	QPSK	1	49	25.69	25.63	25.28	
10	QPSK	25	0	25.53	25.23	24.72	25.8
10	QPSK	25	12	25.12	25.02	24.79	
10	QPSK	25	25	25.12	25.09	24.49	
10	QPSK	50	0	23.70	25.05	24.65	25.8
10	16QAM	1	0	25.47	25.26	24.75	
10	16QAM	1	25	25.23	25.25	25.05	
10	16QAM	1	49	25.30	25.04	24.69	25.5
10	16QAM	25	0	24.35	24.17	23.92	
10	16QAM	25	12	24.21	24.10	24.05	
10	16QAM	25	25	24.11	24.15	23.78	25.5
10	16QAM	50	0	23.78	24.04	23.86	
10	64QAM	1	0	23.48	23.86	23.75	
10	64QAM	1	25	23.81	23.87	23.82	24.5
10	64QAM	1	49	23.99	24.01	23.66	
10	64QAM	25	0	22.79	22.74	22.67	
10	64QAM	25	12	22.87	22.82	22.74	24.5
10	64QAM	25	25	23.08	23.00	22.80	
10	64QAM	50	0	22.86	22.73	22.71	
Channel				37775	38000	38225	Tune-up limit (dBm)
Frequency (MHz)				2572.5	2595	2617.5	
5	QPSK	1	0	25.82	25.72	25.34	25.8
5	QPSK	1	12	25.74	25.51	25.61	
5	QPSK	1	24	25.53	25.64	25.16	
5	QPSK	12	0	25.60	25.12	24.83	25.8
5	QPSK	12	7	25.23	25.12	24.76	
5	QPSK	12	13	25.13	25.10	24.46	
5	QPSK	25	0	23.81	25.08	24.67	25.8
5	16QAM	1	0	25.40	25.33	24.76	
5	16QAM	1	12	25.28	25.18	25.05	
5	16QAM	1	24	25.28	25.05	24.69	25.5
5	16QAM	12	0	24.40	24.21	23.94	
5	16QAM	12	7	24.23	24.10	24.03	
5	16QAM	12	13	24.14	24.14	23.78	25.5
5	16QAM	25	0	23.66	24.08	23.73	
5	64QAM	1	0	23.45	23.87	23.69	
5	64QAM	1	12	23.91	23.77	23.64	24.5
5	64QAM	1	24	23.93	23.92	23.70	
5	64QAM	12	0	22.83	22.77	22.74	
5	64QAM	12	7	22.90	22.84	22.74	24.5
5	64QAM	12	13	23.05	22.98	22.67	
5	64QAM	25	0	22.86	22.72	22.65	



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	23.28	23.29	23.11	23.25	24.2			
20	QPSK	1	49	23.40	23.10	23.14	23.08	23.12				
20	QPSK	1	99	23.26	23.24	23.06	22.98	23.11				
20	QPSK	50	0	23.24	23.00	23.21	23.10	23.19				
20	QPSK	50	24	23.19	23.15	23.03	23.13	23.09				
20	QPSK	50	50	23.10	23.05	23.09	23.04	23.16	24			
20	QPSK	100	0	23.31	23.12	23.20	23.04	23.08				
20	16QAM	1	0	23.35	23.15	23.27	23.11	23.23				
20	16QAM	1	49	23.25	23.20	23.05	23.02	23.20				
20	16QAM	1	99	23.28	23.23	23.17	23.33	23.24				
20	16QAM	50	0	22.73	22.57	22.40	22.39	22.30	23			
20	16QAM	50	24	22.54	22.47	22.37	22.30	22.24				
20	16QAM	50	50	22.56	22.34	22.44	22.45	22.47				
20	16QAM	100	0	22.46	22.49	22.32	22.35	22.28				
20	64QAM	1	0	22.42	22.14	22.10	22.15	22.14				
20	64QAM	1	49	22.27	22.12	22.09	21.96	22.06	23			
20	64QAM	1	99	22.28	22.01	22.09	22.07	22.05				
20	64QAM	50	0	21.76	21.40	21.30	21.33	21.30				
20	64QAM	50	24	21.64	21.47	21.42	21.38	21.35	22			
20	64QAM	50	50	21.57	21.41	21.43	21.43	21.41				
20	64QAM	100	0	21.49	21.34	21.33	21.35	21.18				
Channel				39725	40173	40620	41068	41515			Tune-up limit (dBm)	
Frequency (MHz)				2503.5	2548.3	2593	2637.8	2682.5				
15	QPSK	1	0	23.39	23.24	23.28	23.09	23.21	24.2			
15	QPSK	1	37	23.30	23.14	23.20	23.03	23.14				
15	QPSK	1	74	23.37	23.21	23.22	22.95	23.12				
15	QPSK	36	0	23.27	23.08	23.08	23.01	23.09				
15	QPSK	36	20	23.27	23.17	23.03	22.95	23.02				
15	QPSK	36	39	23.19	23.13	23.25	23.08	23.03	24			
15	QPSK	75	0	23.35	23.17	23.08	23.10	23.08				
15	16QAM	1	0	23.37	23.31	23.19	23.17	23.26				
15	16QAM	1	37	23.24	23.09	23.23	23.00	23.20				
15	16QAM	1	74	23.25	23.17	23.29	23.17	23.12				
15	16QAM	36	0	22.57	22.54	22.31	22.29	22.20	23			
15	16QAM	36	20	22.62	22.45	22.39	22.32	22.27				
15	16QAM	36	39	22.47	22.51	22.39	22.39	22.40				
15	16QAM	75	0	22.58	22.39	22.28	22.40	22.28				
15	64QAM	1	0	22.35	22.14	22.10	22.05	22.04				
15	64QAM	1	37	22.33	22.16	22.04	22.02	22.15	23			
15	64QAM	1	74	22.17	22.12	22.08	22.24	22.15				
15	64QAM	36	0	21.63	21.42	21.39	21.27	21.33				
15	64QAM	36	20	21.51	21.38	21.37	21.38	21.27	22			
15	64QAM	36	39	21.53	21.41	21.49	21.34	21.47				
15	64QAM	75	0	21.51	21.49	21.44	21.24	21.27				
Channel				39700	40160	40620	41080	41540			Tune-up limit (dBm)	
Frequency (MHz)				2501	2547	2593	2639	2685				
10	QPSK	1	0	23.31	23.27	23.34	23.08	23.17	24.2			
10	QPSK	1	25	23.37	23.18	23.07	23.13	23.10				
10	QPSK	1	49	23.41	23.27	23.06	23.01	22.94				
10	QPSK	25	0	23.35	23.09	23.08	23.01	23.17				
10	QPSK	25	12	23.30	23.18	23.11	23.14	23.03				
10	QPSK	25	25	23.12	23.16	23.27	23.21	22.99	24			
10	QPSK	50	0	23.31	23.24	23.21	23.14	23.22				
10	16QAM	1	0	23.35	23.24	23.17	23.21	23.21				
10	16QAM	1	25	23.40	23.10	23.10	23.03	23.16				
10	16QAM	1	49	23.32	23.17	23.26	23.17	23.28				
10	16QAM	25	0	22.63	22.39	22.34	22.29	22.27	23			
10	16QAM	25	12	22.49	22.46	22.33	22.34	22.32				
10	16QAM	25	25	22.50	22.43	22.50	22.38	22.27				
10	16QAM	50	0	22.47	22.42	22.38	22.27	22.41				
10	64QAM	1	0	22.32	22.19	22.04	22.01	22.03				
10	64QAM	1	25	22.31	22.14	22.02	21.95	22.08	23			
10	64QAM	1	49	22.23	22.16	22.22	22.25	22.01				
10	64QAM	25	0	21.56	21.56	21.46	21.40	21.37				
10	64QAM	25	12	21.53	21.51	21.45	21.26	21.38	22			
10	64QAM	25	25	21.65	21.38	21.44	21.39	21.38				
10	64QAM	50	0	21.49	21.32	21.30	21.24	21.24				
Channel				39675	40148	40620	41093	41565			Tune-up limit (dBm)	
Frequency (MHz)				2498.5	2545.8	2593	2640.30	2687.5				
5	QPSK	1	0	23.32	23.22	23.29	23.04	23.12	24.2			
5	QPSK	1	12	23.31	23.29	23.20	22.96	23.16				
5	QPSK	1	24	23.32	23.10	23.20	22.97	23.07				
5	QPSK	12	0	23.28	23.07	23.09	23.14	23.05				
5	QPSK	12	7	23.25	23.07	23.15	23.09	23.01				
5	QPSK	12	13	23.22	23.02	23.20	23.03	23.17	24			
5	QPSK	25	0	23.33	23.26	23.15	23.02	23.11				
5	16QAM	1	0	23.36	23.11	23.17	23.21	23.14				
5	16QAM	1	12	23.29	23.29	23.04	22.99	23.19				
5	16QAM	1	24	23.27	23.15	23.27	23.33	23.10				
5	16QAM	12	0	22.65	22.42	22.38	22.36	22.21	23			
5	16QAM	12	7	22.59	22.52	22.41	22.39	22.35				
5	16QAM	12	13	22.61	22.39	22.52	22.35	22.32				
5	16QAM	25	0	22.48	22.47	22.33	22.27	22.32				
5	64QAM	1	0	22.26	22.08	22.07	22.08	22.09				
5	64QAM	1	12	22.33	22.02	22.08	22.00	21.98	23			
5	64QAM	1	24	22.15	22.08	22.16	22.06	22.08				
5	64QAM	12	0	21.70	21.54	21.42	21.32	21.21				
5	64QAM	12	7	21.62	21.47	21.41	21.35	21.40	22			
5	64QAM	12	13	21.55	21.43	21.47	21.46	21.41				
5	64QAM	25	0	21.53	21.36	21.39	21.30	21.35				



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	25.62	25.68	25.56	25.62	25.33	25.8	
20	QPSK	1	49	25.60	25.66	25.70	25.72	25.62		
20	QPSK	1	99	25.70	25.65	25.22	25.37	25.64		
20	QPSK	50	0	25.63	25.20	24.76	25.04	24.80	25.8	
20	QPSK	50	24	25.18	25.20	24.73	25.07	24.90		
20	QPSK	50	50	25.12	25.17	24.54	24.96	24.86		
20	QPSK	100	0	23.66	25.07	24.61	24.95	24.86	25.8	
20	16QAM	1	0	25.38	25.30	24.82	24.94	24.67		
20	16QAM	1	49	25.43	25.26	25.19	25.13	25.05		
20	16QAM	1	99	25.37	25.15	24.75	24.69	24.97	25.5	
20	16QAM	50	0	24.40	24.19	23.96	24.07	23.86		
20	16QAM	50	24	24.28	24.08	24.07	24.10	23.95		
20	16QAM	50	50	24.23	24.11	24.01	23.83	23.95	25.5	
20	16QAM	100	0	23.87	24.17	23.77	23.95	23.93		
20	64QAM	1	0	23.53	23.97	23.77	23.88	23.59		
20	64QAM	1	49	23.94	23.88	23.85	24.17	23.76	25.5	
20	64QAM	1	99	23.98	24.12	23.66	23.53	23.55		
20	64QAM	50	0	22.90	22.69	22.78	23.14	22.92		
20	64QAM	50	24	22.96	22.89	22.77	23.12	22.99	24.5	
20	64QAM	50	50	23.16	23.03	22.83	23.04	22.66		
20	64QAM	100	0	22.88	22.74	22.68	22.87	22.75		
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	25.78	25.78	25.55	25.57	25.42	25.8	
15	QPSK	1	37	25.65	25.61	25.77	25.80	25.84		
15	QPSK	1	74	25.70	25.66	25.35	25.56	25.61		
15	QPSK	36	0	25.64	25.11	24.79	25.00	24.91	25.8	
15	QPSK	36	20	25.21	25.14	24.73	24.88	24.92		
15	QPSK	36	39	25.25	25.14	24.61	24.82	24.96		
15	QPSK	75	0	23.75	25.14	24.70	24.82	24.81	25.8	
15	16QAM	1	0	25.34	25.33	24.90	24.98	24.77		
15	16QAM	1	37	25.39	25.33	25.17	25.27	24.96		
15	16QAM	1	74	25.45	25.33	24.64	24.73	25.09	25.5	
15	16QAM	36	0	24.43	24.28	24.05	24.13	23.90		
15	16QAM	36	20	24.22	24.12	24.05	24.02	23.90		
15	16QAM	36	39	24.31	24.10	23.96	23.82	23.97	25.5	
15	16QAM	75	0	23.77	24.20	23.74	23.95	23.98		
15	64QAM	1	0	23.64	23.91	23.76	23.86	23.60		
15	64QAM	1	37	23.95	23.81	23.81	24.20	23.87	25.5	
15	64QAM	1	74	24.08	24.08	23.76	23.66	23.56		
15	64QAM	36	0	22.78	22.87	22.72	23.15	22.92		
15	64QAM	36	20	22.95	22.90	22.85	23.00	22.80	24.5	
15	64QAM	36	39	23.11	22.99	22.72	22.91	22.67		
15	64QAM	75	0	22.86	22.71	22.84	23.06	22.63		
Channel				39700	40160	40620	41080	41540	tune-up limit (dBm)	
Frequency (MHz)				2501	2547	2593	2639	2685		
10	QPSK	1	0	25.63	25.67	25.49	25.73	25.29	25.8	
10	QPSK	1	25	25.72	25.64	25.83	25.72	25.65		
10	QPSK	1	49	25.54	25.76	25.30	25.49	25.60		
10	QPSK	25	0	25.53	25.10	24.82	24.98	24.76	25.8	
10	QPSK	25	12	25.23	25.01	24.81	24.94	25.01		
10	QPSK	25	25	25.29	25.02	24.47	24.98	24.91		
10	QPSK	50	0	23.69	25.15	24.77	24.83	24.82	25.8	
10	16QAM	1	0	25.46	25.29	24.78	25.08	24.78		
10	16QAM	1	25	25.38	25.34	25.07	25.15	25.13		
10	16QAM	1	49	25.35	25.32	24.70	24.78	24.96	25.5	
10	16QAM	25	0	24.43	24.12	24.14	24.06	23.81		
10	16QAM	25	12	24.23	24.24	23.90	24.12	24.01		
10	16QAM	25	25	24.23	24.15	24.07	23.98	23.97	25.5	
10	16QAM	50	0	23.80	24.22	23.87	24.02	23.81		
10	64QAM	1	0	23.61	23.89	23.87	23.89	23.42		
10	64QAM	1	25	23.86	23.82	23.83	24.06	23.82	25.5	
10	64QAM	1	49	24.05	23.97	23.66	23.57	23.50		
10	64QAM	25	0	22.83	22.83	22.79	22.97	22.79		
10	64QAM	25	12	23.01	22.79	22.84	23.09	22.84	24.5	
10	64QAM	25	25	23.05	22.86	22.84	22.90	22.52		
10	64QAM	50	0	22.86	22.80	22.76	22.95	22.72		
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	25.74	25.76	25.53	25.70	25.29	25.8	
5	QPSK	1	12	25.64	25.67	25.68	25.74	25.77		
5	QPSK	1	24	25.65	25.68	25.26	25.48	25.55		
5	QPSK	12	0	25.62	25.14	24.78	25.11	24.76	25.8	
5	QPSK	12	7	25.37	25.09	24.84	24.90	25.01		
5	QPSK	12	13	25.25	25.05	24.65	24.85	24.93		
5	QPSK	25	0	23.73	25.04	24.71	24.85	24.82	25.8	
5	16QAM	1	0	25.43	25.19	24.88	25.01	24.63		
5	16QAM	1	12	25.47	25.36	25.16	25.30	24.99		
5	16QAM	1	24	25.38	25.28	24.64	24.83	25.02	25.5	
5	16QAM	12	0	24.47	24.26	24.12	23.98	23.84		
5	16QAM	12	7	24.21	24.06	23.93	24.14	23.95		
5	16QAM	12	13	24.35	24.22	24.00	23.92	24.07	25.5	
5	16QAM	25	0	23.69	24.07	23.90	23.92	23.84		
5	64QAM	1	0	23.52	23.95	23.75	23.92	23.54		
5	64QAM	1	12	23.96	23.84	23.81	24.16	23.87	25.5	
5	64QAM	1	24	24.00	23.96	23.79	23.52	23.44		
5	64QAM	12	0	22.81	22.81	22.72	23.05	22.90		
5	64QAM	12	7	23.10	22.77	22.73	23.14	22.91	24.5	
5	64QAM	12	13	23.10	22.87	22.82	22.96	22.51		
5	64QAM	25	0	22.74	22.82	22.69	22.87	22.74		



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	24.69	24.59	24.80	25
20	QPSK	1	49	24.53	24.57	24.80	
20	QPSK	1	99	24.69	24.64	24.70	
20	QPSK	50	0	23.76	23.92	23.88	24
20	QPSK	50	24	23.97	23.85	23.90	
20	QPSK	50	50	23.86	23.84	23.90	
20	QPSK	100	0	23.92	23.80	23.78	24
20	16QAM	1	0	23.96	23.86	23.90	
20	16QAM	1	49	24.03	24.05	23.90	
20	16QAM	1	99	23.96	23.90	24.09	23
20	16QAM	50	0	22.81	22.96	22.92	
20	16QAM	50	24	22.84	22.91	22.89	
20	16QAM	50	50	22.90	22.96	22.83	23
20	16QAM	100	0	22.94	22.93	22.81	
20	64QAM	1	0	22.73	22.91	22.86	
20	64QAM	1	49	22.86	22.95	22.76	23
20	64QAM	1	99	22.77	22.77	22.74	
20	64QAM	50	0	21.85	21.89	21.91	
20	64QAM	50	24	21.80	21.86	21.84	22
20	64QAM	50	50	21.87	21.91	21.81	
20	64QAM	100	0	21.97	21.79	21.84	
Channel				43165	43340	43515	Tune-up limit (dBm)
Frequency (MHz)				3557.5	3575	3592.5	
15	QPSK	1	0	24.72	24.72	24.72	25
15	QPSK	1	37	24.59	24.59	24.69	
15	QPSK	1	74	24.61	24.68	24.70	
15	QPSK	36	0	23.83	23.94	23.99	24
15	QPSK	36	20	23.91	23.80	23.80	
15	QPSK	36	39	23.70	23.86	23.88	
15	QPSK	75	0	23.84	23.82	23.78	24
15	16QAM	1	0	23.99	23.87	23.91	
15	16QAM	1	37	24.00	23.95	23.87	
15	16QAM	1	74	23.92	24.06	24.00	23
15	16QAM	36	0	22.76	22.88	23.06	
15	16QAM	36	20	22.80	22.91	22.95	
15	16QAM	36	39	22.78	22.82	23.00	23
15	16QAM	75	0	22.78	22.77	22.93	
15	64QAM	1	0	22.74	22.84	22.99	
15	64QAM	1	37	22.88	22.98	22.88	23
15	64QAM	1	74	22.80	22.76	22.76	
15	64QAM	36	0	21.87	21.80	21.75	
15	64QAM	36	20	21.86	21.88	22.01	22
15	64QAM	36	39	21.88	21.92	21.92	
15	64QAM	75	0	21.96	21.87	21.78	
Channel				43140	43340	43540	Tune-up limit (dBm)
Frequency (MHz)				3555	3575	3595	
10	QPSK	1	0	24.56	24.75	24.71	25
10	QPSK	1	25	24.67	24.56	24.77	
10	QPSK	1	49	24.64	24.61	24.72	
10	QPSK	25	0	23.78	23.94	23.94	24
10	QPSK	25	12	23.80	23.90	23.98	
10	QPSK	25	25	23.82	23.96	23.91	
10	QPSK	50	0	23.82	23.78	23.79	24
10	16QAM	1	0	23.91	23.97	23.89	
10	16QAM	1	25	23.83	23.97	23.80	
10	16QAM	1	49	23.95	23.93	24.01	23
10	16QAM	25	0	22.93	22.83	22.88	
10	16QAM	25	12	22.92	22.80	22.94	
10	16QAM	25	25	22.83	22.87	22.89	23
10	16QAM	50	0	22.96	22.95	22.97	
10	64QAM	1	0	22.79	22.82	22.88	
10	64QAM	1	25	22.75	22.83	22.87	23
10	64QAM	1	49	22.84	22.84	22.73	
10	64QAM	25	0	21.85	21.82	21.79	
10	64QAM	25	12	21.95	21.83	21.87	22
10	64QAM	25	25	21.88	21.93	21.93	
10	64QAM	50	0	21.81	21.93	21.83	
Channel				43115	43340	43565	Tune-up limit (dBm)
Frequency (MHz)				3552.5	3575	3597.5	
5	QPSK	1	0	24.66	24.64	24.68	25
5	QPSK	1	12	24.53	24.58	24.72	
5	QPSK	1	24	24.51	24.63	24.69	
5	QPSK	12	0	23.84	23.93	23.86	24
5	QPSK	12	7	23.87	23.83	23.83	
5	QPSK	12	13	23.70	23.96	23.83	
5	QPSK	25	0	23.89	23.74	23.92	24
5	16QAM	1	0	24.00	24.01	23.96	
5	16QAM	1	12	24.01	23.99	23.94	
5	16QAM	1	24	23.90	24.05	23.95	23
5	16QAM	12	0	22.83	22.83	23.07	
5	16QAM	12	7	22.79	22.86	22.94	
5	16QAM	12	13	22.88	22.87	22.89	23
5	16QAM	25	0	22.86	22.94	22.92	
5	64QAM	1	0	22.73	22.77	22.81	
5	64QAM	1	12	22.75	22.90	22.77	23
5	64QAM	1	24	22.79	22.88	22.82	
5	64QAM	12	0	21.78	21.97	21.81	
5	64QAM	12	7	21.82	21.87	21.90	22
5	64QAM	12	13	21.83	21.97	21.84	
5	64QAM	25	0	21.90	21.94	21.93	



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	24.88	24.99	24.91	
20	QPSK	1	49	24.98	24.88	24.96	25
20	QPSK	1	99	24.94	24.88	24.91	
20	QPSK	50	0	23.84	23.93	23.94	
20	QPSK	50	24	23.98	23.95	23.85	24
20	QPSK	50	50	23.86	23.83	23.84	
20	QPSK	100	0	23.88	23.80	23.79	
20	16QAM	1	0	23.86	23.89	23.86	24
20	16QAM	1	49	23.91	23.85	23.70	
20	16QAM	1	99	23.89	23.90	23.90	
20	16QAM	50	0	22.91	22.83	22.77	23
20	16QAM	50	24	22.90	22.88	22.89	
20	16QAM	50	50	22.71	22.94	22.74	
20	16QAM	100	0	22.87	22.81	22.72	23
20	64QAM	1	0	22.86	22.74	22.83	
20	64QAM	1	49	22.69	22.83	22.80	
20	64QAM	1	99	22.83	22.86	22.76	22
20	64QAM	50	0	21.88	21.76	22.00	
20	64QAM	50	24	21.88	21.71	21.79	
20	64QAM	50	50	21.87	21.79	21.91	22
20	64QAM	100	0	21.86	21.86	21.80	
Channel				37825	38000	38175	Tune-up limit (dBm)
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	24.84	24.98	24.95	25
15	QPSK	1	37	24.95	24.95	24.92	
15	QPSK	1	74	24.95	24.87	24.98	
15	QPSK	36	0	23.87	23.97	24.00	24
15	QPSK	36	20	23.95	23.95	23.89	
15	QPSK	36	39	23.91	23.84	23.87	
15	QPSK	75	0	23.80	23.78	23.73	24
15	16QAM	1	0	23.88	23.77	23.94	
15	16QAM	1	37	23.92	23.79	23.85	
15	16QAM	1	74	23.74	23.74	23.73	23
15	16QAM	36	0	22.78	22.71	22.88	
15	16QAM	36	20	22.85	22.92	22.78	
15	16QAM	36	39	22.81	22.91	22.75	23
15	16QAM	75	0	22.90	22.81	22.84	
15	64QAM	1	0	22.76	22.74	22.77	
15	64QAM	1	37	22.72	22.81	22.82	22
15	64QAM	1	74	22.86	22.78	22.73	
15	64QAM	36	0	21.81	21.90	21.83	
15	64QAM	36	20	21.80	21.82	21.82	22
15	64QAM	36	39	21.87	21.85	21.93	
15	64QAM	75	0	21.82	21.88	21.87	
Channel				37800	38000	38200	Tune-up limit (dBm)
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	24.93	24.91	24.89	25
10	QPSK	1	25	24.96	24.90	24.92	
10	QPSK	1	49	24.84	24.94	24.91	
10	QPSK	25	0	23.93	23.92	23.99	24
10	QPSK	25	12	23.96	23.99	23.92	
10	QPSK	25	25	23.97	23.79	23.91	
10	QPSK	50	0	23.81	23.97	23.85	24
10	16QAM	1	0	23.82	23.81	23.76	
10	16QAM	1	25	23.79	23.85	23.90	
10	16QAM	1	49	23.78	23.82	23.93	23
10	16QAM	25	0	22.81	22.81	22.90	
10	16QAM	25	12	22.97	22.85	22.92	
10	16QAM	25	25	22.79	22.88	22.77	23
10	16QAM	50	0	22.79	22.92	22.90	
10	64QAM	1	0	22.74	22.73	22.77	
10	64QAM	1	25	22.81	22.79	22.81	22
10	64QAM	1	49	22.85	22.75	22.80	
10	64QAM	25	0	21.80	21.88	21.86	
10	64QAM	25	12	21.83	21.84	21.84	22
10	64QAM	25	25	21.75	21.85	21.84	
10	64QAM	50	0	21.98	21.89	21.87	
Channel				37775	38000	38225	Tune-up limit (dBm)
Frequency (MHz)				2572.5	2595	2617.5	
5	QPSK	1	0	24.87	24.91	24.94	25
5	QPSK	1	12	24.90	24.88	24.97	
5	QPSK	1	24	24.93	24.96	24.88	
5	QPSK	12	0	23.92	23.94	23.89	24
5	QPSK	12	7	23.95	23.91	23.92	
5	QPSK	12	13	23.81	23.92	23.82	
5	QPSK	25	0	23.89	23.95	23.73	24
5	16QAM	1	0	23.89	23.94	23.81	
5	16QAM	1	12	23.89	23.87	23.79	
5	16QAM	1	24	23.74	23.86	23.78	23
5	16QAM	12	0	22.84	22.87	22.74	
5	16QAM	12	7	22.88	22.91	22.74	
5	16QAM	12	13	22.71	22.78	22.76	23
5	16QAM	25	0	22.98	22.75	22.89	
5	64QAM	1	0	22.78	22.89	22.90	
5	64QAM	1	12	22.84	22.79	22.91	23
5	64QAM	1	24	22.93	22.74	22.84	
5	64QAM	12	0	21.89	21.86	21.94	
5	64QAM	12	7	21.94	21.66	21.79	22
5	64QAM	12	13	21.72	21.82	21.81	
5	64QAM	25	0	21.84	21.78	21.82	



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	26.85	27.00	26.97	27.5
20	QPSK	1	49	26.67	27.03	26.91	
20	QPSK	1	99	26.70	27.05	26.97	
20	QPSK	50	0	25.74	25.86	26.18	26.5
20	QPSK	50	24	25.73	25.85	26.32	
20	QPSK	50	50	25.68	25.82	25.94	
20	QPSK	100	0	25.85	25.93	26.09	26.5
20	16QAM	1	0	26.24	26.23	26.38	
20	16QAM	1	49	25.90	26.34	26.30	
20	16QAM	1	99	25.97	26.40	26.39	25.5
20	16QAM	50	0	24.95	25.01	25.28	
20	16QAM	50	24	25.03	25.17	25.22	
20	16QAM	50	50	25.08	25.20	25.27	25.5
20	16QAM	100	0	24.93	25.11	25.19	
20	64QAM	1	0	24.26	24.45	24.37	25.5
20	64QAM	1	49	24.13	24.34	24.65	
20	64QAM	1	99	24.03	24.63	24.71	
20	64QAM	50	0	23.10	23.15	23.42	24.5
20	64QAM	50	24	23.14	23.28	23.57	
20	64QAM	50	50	23.16	23.38	23.36	
20	64QAM	100	0	23.16	23.09	23.16	Tune-up limit (dBm)
Channel				37825	38000	38175	
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	26.96	26.84	26.92	
15	QPSK	1	37	26.70	27.07	26.90	27.5
15	QPSK	1	74	26.50	27.05	26.99	
15	QPSK	36	0	25.71	25.93	26.01	26.5
15	QPSK	36	20	25.75	25.90	26.19	
15	QPSK	36	39	25.66	25.79	25.92	
15	QPSK	75	0	25.90	25.98	25.98	26.5
15	16QAM	1	0	26.10	26.24	26.34	
15	16QAM	1	37	25.95	26.26	26.36	
15	16QAM	1	74	26.04	26.27	26.40	25.5
15	16QAM	36	0	24.88	25.08	25.32	
15	16QAM	36	20	24.95	25.17	25.40	
15	16QAM	36	39	25.16	25.30	25.34	25.5
15	16QAM	75	0	24.99	25.14	25.26	
15	64QAM	1	0	24.33	24.37	24.36	
15	64QAM	1	37	24.06	24.28	24.73	24.5
15	64QAM	1	74	24.12	24.53	24.70	
15	64QAM	36	0	23.07	23.15	23.51	
15	64QAM	36	20	23.05	23.32	23.48	Tune-up limit (dBm)
15	64QAM	36	39	23.03	23.42	23.52	
15	64QAM	75	0	23.05	23.07	23.27	
Channel				37800	38000	38200	
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	26.80	26.95	26.95	27.5
10	QPSK	1	25	26.61	27.05	26.89	
10	QPSK	1	49	26.70	27.01	26.90	
10	QPSK	25	0	25.78	25.88	26.12	26.5
10	QPSK	25	12	25.89	25.93	26.23	
10	QPSK	25	25	25.70	25.97	25.91	
10	QPSK	50	0	25.88	25.99	26.06	26.5
10	16QAM	1	0	26.23	26.27	26.32	
10	16QAM	1	25	25.87	26.30	26.41	
10	16QAM	1	49	25.90	26.28	26.28	25.5
10	16QAM	25	0	24.85	25.16	25.19	
10	16QAM	25	12	24.98	25.17	25.34	
10	16QAM	25	25	25.04	25.25	25.36	25.5
10	16QAM	50	0	24.96	25.06	25.10	
10	64QAM	1	0	24.28	24.32	24.37	
10	64QAM	1	25	23.94	24.37	24.76	24.5
10	64QAM	1	49	24.07	24.51	24.65	
10	64QAM	25	0	23.19	23.22	23.47	
10	64QAM	25	12	23.14	23.38	23.51	Tune-up limit (dBm)
10	64QAM	25	25	23.05	23.40	23.49	
10	64QAM	50	0	23.17	23.04	23.16	
Channel				37775	38000	38225	
Frequency (MHz)				2572.5	2595	2617.5	
5	QPSK	1	0	26.95	26.81	26.98	27.5
5	QPSK	1	12	26.55	26.94	26.95	
5	QPSK	1	24	26.50	27.00	27.05	
5	QPSK	12	0	25.73	25.85	26.18	26.5
5	QPSK	12	7	25.84	25.84	26.35	
5	QPSK	12	13	25.68	25.87	26.00	
5	QPSK	25	0	25.89	25.98	26.05	26.5
5	16QAM	1	0	26.16	26.25	26.27	
5	16QAM	1	12	25.91	26.35	26.38	
5	16QAM	1	24	26.03	26.36	26.33	25.5
5	16QAM	12	0	25.00	25.15	25.21	
5	16QAM	12	7	24.89	25.28	25.37	
5	16QAM	12	13	25.13	25.27	25.39	25.5
5	16QAM	25	0	25.01	25.06	25.17	
5	64QAM	1	0	24.41	24.39	24.37	
5	64QAM	1	12	24.02	24.38	24.76	24.5
5	64QAM	1	24	24.09	24.48	24.62	
5	64QAM	12	0	23.21	23.18	23.38	
5	64QAM	12	7	23.15	23.20	23.60	24.5
5	64QAM	12	13	23.03	23.29	23.38	
5	64QAM	25	0	23.17	23.19	23.21	



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	24.54	24.79	24.97	24.91	24.46	25	
20	QPSK	1	49	24.70	24.82	24.85	24.93	24.83		
20	QPSK	1	99	24.68	24.92	24.98	24.80	24.63		
20	QPSK	50	0	23.88	23.97	23.87	23.96	23.76		
20	QPSK	50	24	23.89	23.82	23.88	23.89	23.96	24	
20	QPSK	50	50	23.79	23.81	23.86	23.87	23.76		
20	QPSK	100	0	23.76	23.85	23.99	24.07	23.85		
20	16QAM	1	0	23.77	23.90	23.97	23.96	23.48		
20	16QAM	1	49	23.74	23.84	23.99	23.94	23.98	24	
20	16QAM	1	99	23.82	23.97	23.84	23.93	23.75		
20	16QAM	50	0	22.78	22.76	22.81	22.72	22.88		
20	16QAM	50	24	22.77	22.78	22.83	22.86	22.97		
20	16QAM	50	50	22.89	22.87	22.90	22.98	22.77	23	
20	16QAM	100	0	22.82	22.82	22.92	22.95	22.96		
20	64QAM	1	0	22.53	22.73	22.79	22.68	22.34		
20	64QAM	1	49	22.49	22.71	22.78	22.89	22.53		
20	64QAM	1	99	22.52	22.74	22.76	22.55	22.34	23	
20	64QAM	50	0	21.81	21.96	21.90	21.88	21.79		
20	64QAM	50	24	21.83	22.00	21.76	21.89	22.04		
20	64QAM	50	50	21.80	21.98	21.88	21.88	21.88		
20	64QAM	100	0	21.97	21.95	21.79	21.78	21.84	22	
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	24.70	24.83	24.84	24.79	24.51	25	
15	QPSK	1	37	24.62	24.90	24.88	24.92	24.81		
15	QPSK	1	74	24.77	24.93	24.93	24.65	24.75		
15	QPSK	36	0	23.82	23.91	23.99	23.98	23.81		
15	QPSK	36	20	23.88	24.00	23.92	23.85	23.99	24	
15	QPSK	36	39	23.80	23.87	23.95	23.82	23.82		
15	QPSK	75	0	23.90	23.86	23.83	23.81	23.78		
15	16QAM	1	0	23.75	23.84	23.90	23.95	23.56		
15	16QAM	1	37	23.68	23.96	23.84	23.99	23.96	24	
15	16QAM	1	74	23.94	23.91	23.82	23.82	23.82		
15	16QAM	36	0	22.73	22.83	22.73	22.73	22.80		
15	16QAM	36	20	22.96	22.93	22.83	22.90	22.96		
15	16QAM	36	39	22.93	22.91	22.84	22.83	22.92	23	
15	16QAM	75	0	22.89	22.79	22.76	22.93	22.91		
15	64QAM	1	0	22.53	22.63	22.89	22.75	22.22		
15	64QAM	1	37	22.39	22.80	22.66	22.81	22.56		
15	64QAM	1	74	22.55	22.74	22.78	22.46	22.31	23	
15	64QAM	36	0	21.86	21.84	21.80	21.74	21.83		
15	64QAM	36	20	21.82	21.81	21.80	21.90	21.97		
15	64QAM	36	39	21.76	21.85	21.93	21.95	21.95		
15	64QAM	75	0	21.79	22.00	21.78	21.84	21.91	22	
Channel				39700	40160	40620	41080	41540		
Frequency (MHz)				2501	2547	2593	2639	2685	Tune-up limit (dBm)	
10	QPSK	1	0	24.53	24.81	24.83	24.86	24.41	25	
10	QPSK	1	25	24.72	24.84	24.95	24.92	24.76		
10	QPSK	1	49	24.79	24.88	24.95	24.75	24.73		
10	QPSK	25	0	23.88	23.97	23.97	23.84	23.76		
10	QPSK	25	12	23.82	23.94	23.86	23.85	23.82	24	
10	QPSK	25	25	23.88	23.89	23.98	23.94	23.90		
10	QPSK	50	0	23.92	23.85	23.94	23.82	23.87		
10	16QAM	1	0	23.82	23.99	23.95	23.83	23.52		
10	16QAM	1	25	23.68	23.82	23.83	23.88	23.88	24	
10	16QAM	1	49	23.91	24.00	23.92	23.94	23.71		
10	16QAM	25	0	22.87	22.75	22.78	22.76	22.74		
10	16QAM	25	12	22.80	22.91	22.92	22.82	22.90		
10	16QAM	25	25	22.83	22.90	22.80	22.99	22.95	23	
10	16QAM	50	0	22.79	22.78	22.82	22.90	22.79		
10	64QAM	1	0	22.41	22.63	22.88	22.85	22.26		
10	64QAM	1	25	22.45	22.61	22.63	22.78	22.70		
10	64QAM	1	49	22.59	22.74	22.83	22.45	22.49	23	
10	64QAM	25	0	21.76	21.98	21.94	21.83	21.77		
10	64QAM	25	12	21.94	21.98	21.82	21.85	21.95		
10	64QAM	25	25	21.77	21.87	21.79	21.99	21.88		
10	64QAM	50	0	21.97	21.84	21.94	21.77	21.96	22	
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	24.54	24.76	24.88	24.86	24.48	25	
5	QPSK	1	12	24.67	24.92	24.89	24.86	24.80		
5	QPSK	1	24	24.72	24.96	24.96	24.68	24.69		
5	QPSK	12	0	23.84	23.94	24.00	23.96	23.82		
5	QPSK	12	7	23.91	23.87	23.84	23.95	23.81	24	
5	QPSK	12	13	23.94	24.00	23.88	23.82	23.78		
5	QPSK	25	0	23.86	23.83	23.97	23.87	23.77		
5	16QAM	1	0	23.76	23.91	23.91	23.97	23.49		
5	16QAM	1	12	23.82	23.88	23.86	23.88	23.94	24	
5	16QAM	1	24	23.87	23.96	23.83	23.89	23.71		
5	16QAM	12	0	22.87	22.91	22.74	22.73	22.86		
5	16QAM	12	7	22.80	22.82	22.76	22.97	22.91		
5	16QAM	12	13	22.89	22.80	22.80	22.91	22.92	23	
5	16QAM	25	0	22.79	22.88	22.88	22.93	22.91		
5	64QAM	1	0	22.46	22.76	22.87	22.69	22.28		
5	64QAM	1	12	22.47	22.80	22.71	22.93	22.65		
5	64QAM	1	24	22.53	22.82	22.71	22.48	22.43	23	
5	64QAM	12	0	21.71	21.94	21.90	21.74	21.81		
5	64QAM	12	7	21.81	21.90	21.94	21.83	21.88		
5	64QAM	12	13	21.92	21.82	21.84	21.98	21.87		
5	64QAM	25	0	21.94	21.84	21.84	21.87	21.76	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	25.99	26.15	26.69	26.51	26.26	27.5	
20	QPSK	1	49	26.36	25.85	26.62	26.86	26.56		
20	QPSK	1	99	26.55	25.94	26.71	26.37	26.07		
20	QPSK	50	0	25.20	24.91	25.96	25.95	25.63		
20	QPSK	50	24	25.34	24.96	25.98	26.05	25.81	26.5	
20	QPSK	50	50	25.70	24.80	26.01	25.86	25.38		
20	QPSK	100	0	24.55	24.76	25.88	25.81	25.64		
20	16QAM	1	0	25.23	25.31	26.17	25.94	25.59		
20	16QAM	1	49	25.71	25.10	26.07	26.34	25.72	26.5	
20	16QAM	1	99	25.70	24.93	25.98	25.77	25.47		
20	16QAM	50	0	24.44	24.09	25.00	25.00	24.59		
20	16QAM	50	24	24.62	24.04	24.91	25.16	24.74		
20	16QAM	50	50	24.79	23.92	24.95	24.92	24.76	25.5	
20	16QAM	100	0	24.12	23.87	24.88	24.81	24.71		
20	64QAM	1	0	23.51	23.71	24.27	24.83	24.03		
20	64QAM	1	49	23.53	23.67	24.41	25.16	23.80		
20	64QAM	1	99	24.13	23.72	24.05	24.64	23.55	25.5	
20	64QAM	50	0	22.51	22.62	23.30	24.04	23.24		
20	64QAM	50	24	22.59	22.50	23.31	24.13	22.99		
20	64QAM	50	50	22.84	22.55	23.51	23.87	22.76		
20	64QAM	100	0	22.55	22.60	23.29	23.96	22.89	24.5	
Channel				39725	40173	40620	41068	41515		
Frequency (MHz)				2503.5	2548.3	2593	2637.8	2682.5		
15	QPSK	1	0	25.86	25.96	26.65	26.68	26.26		
15	QPSK	1	37	26.31	25.83	26.58	26.91	26.39		
15	QPSK	1	74	26.58	25.85	26.59	26.44	26.22		
15	QPSK	36	0	25.11	24.99	25.90	26.02	25.64		
15	QPSK	36	20	25.48	24.89	25.87	26.16	25.79	26.5	
15	QPSK	36	39	25.75	24.78	26.05	25.97	25.44		
15	QPSK	75	0	24.60	24.94	25.96	25.80	25.66		
15	16QAM	1	0	25.34	25.25	26.15	26.03	25.54		
15	16QAM	1	37	25.65	25.07	25.94	26.21	25.79	26.5	
15	16QAM	1	74	25.73	25.10	26.09	25.82	25.57		
15	16QAM	36	0	24.37	24.16	24.86	25.11	24.69		
15	16QAM	36	20	24.77	24.09	25.05	25.03	24.69		
15	16QAM	36	39	24.77	24.01	25.04	24.97	24.73	25.5	
15	16QAM	75	0	24.26	23.84	25.00	24.97	24.76		
15	64QAM	1	0	23.65	23.76	24.34	24.79	24.08		
15	64QAM	1	37	23.64	23.55	24.52	25.22	23.78		
15	64QAM	1	74	23.97	23.60	24.19	24.54	23.51	25.5	
15	64QAM	36	0	22.59	22.58	23.31	24.09	23.22		
15	64QAM	36	20	22.57	22.55	23.38	24.05	23.00		
15	64QAM	36	39	22.95	22.60	23.38	23.95	22.75		
15	64QAM	75	0	22.56	22.60	23.31	23.90	22.85	24.5	
Channel				39700	40160	40620	41080	41540		
Frequency (MHz)				2501	2547	2593	2639	2685		
10	QPSK	1	0	25.86	25.99	26.73	26.62	26.14		
10	QPSK	1	25	26.23	25.78	26.59	26.84	26.40		
10	QPSK	1	49	26.40	25.96	26.59	26.48	26.22		
10	QPSK	25	0	25.14	24.95	26.00	26.01	25.55		
10	QPSK	25	12	25.47	24.98	25.85	25.99	25.85	26.5	
10	QPSK	25	25	25.75	24.89	25.86	25.85	25.39		
10	QPSK	50	0	24.56	24.92	26.04	25.98	25.66		
10	16QAM	1	0	25.29	25.40	26.04	25.95	25.61		
10	16QAM	1	25	25.58	25.24	25.94	26.35	25.86	26.5	
10	16QAM	1	49	25.73	25.09	26.16	25.76	25.44		
10	16QAM	25	0	24.44	24.09	24.96	25.11	24.71		
10	16QAM	25	12	24.60	24.07	24.87	25.03	24.72		
10	16QAM	25	25	24.66	23.90	24.92	24.81	24.64	25.5	
10	16QAM	50	0	24.27	23.82	24.99	24.87	24.68		
10	64QAM	1	0	23.53	23.72	24.28	24.84	24.04		
10	64QAM	1	25	23.52	23.54	24.42	25.17	23.86		
10	64QAM	1	49	24.07	23.57	24.00	24.53	23.59	25.5	
10	64QAM	25	0	22.58	22.57	23.35	24.10	23.23		
10	64QAM	25	12	22.64	22.50	23.30	24.10	23.09		
10	64QAM	25	25	22.94	22.67	23.33	23.98	22.79		
10	64QAM	50	0	22.53	22.51	23.44	23.99	22.91	24.5	
Channel				39675	40148	40620	41093	41565		
Frequency (MHz)				2498.5	2545.8	2593	2640.30	2687.5		
5	QPSK	1	0	25.93	26.14	26.72	26.60	26.17		
5	QPSK	1	12	26.28	25.77	26.61	26.81	26.41		
5	QPSK	1	24	26.43	25.85	26.59	26.41	26.16		
5	QPSK	12	0	25.11	25.00	25.82	25.94	25.66		
5	QPSK	12	7	25.47	24.85	25.84	25.99	25.75	26.5	
5	QPSK	12	13	25.67	24.86	25.96	25.91	25.56		
5	QPSK	25	0	24.62	24.93	25.92	25.89	25.67		
5	16QAM	1	0	25.30	25.37	25.98	25.95	25.60		
5	16QAM	1	12	25.70	25.19	26.05	26.18	25.85	26.5	
5	16QAM	1	24	25.87	25.06	26.12	25.78	25.59		
5	16QAM	12	0	24.33	24.11	24.84	25.10	24.66		
5	16QAM	12	7	24.62	23.99	25.00	25.18	24.87		
5	16QAM	12	13	24.78	23.88	25.01	24.83	24.71	25.5	
5	16QAM	25	0	24.18	23.92	24.99	24.91	24.79		
5	64QAM	1	0	23.59	23.74	24.25	24.74	24.10		
5	64QAM	1	12	23.58	23.52	24.54	25.16	23.77		
5	64QAM	1	24	24.11	23.60	24.06	24.72	23.53	25.5	
5	64QAM	12	0	22.56	22.58	23.32	23.96	23.12		
5	64QAM	12	7	22.75	22.55	23.27	24.09	23.09		
5	64QAM	12	13	22.99	22.66	23.34	23.93	22.87		
5	64QAM	25	0	22.55	22.60	23.44	23.85	22.90	24.5	



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	22.98	23.05	23.04	
20	QPSK	1	49	22.93	23.00	22.97	23.5
20	QPSK	1	99	22.97	22.84	23.07	
20	QPSK	50	0	22.00	22.04	22.08	
20	QPSK	50	24	22.09	22.06	22.08	22.5
20	QPSK	50	50	21.99	22.06	22.14	
20	QPSK	100	0	22.09	22.02	22.11	
20	16QAM	1	0	22.04	22.05	22.15	22.5
20	16QAM	1	49	22.10	21.99	22.05	
20	16QAM	1	99	22.00	22.04	21.97	
20	16QAM	50	0	21.09	21.01	21.23	21.5
20	16QAM	50	24	21.06	21.17	21.20	
20	16QAM	50	50	21.07	21.01	21.12	
20	16QAM	100	0	21.15	21.12	21.12	21.5
20	64QAM	1	0	20.77	20.91	20.79	
20	64QAM	1	49	20.76	20.93	20.66	
20	64QAM	1	99	20.89	20.80	20.46	20.5
20	64QAM	50	0	20.10	20.19	19.99	
20	64QAM	50	24	20.10	19.99	19.98	
20	64QAM	50	50	20.04	20.06	19.87	20.5
20	64QAM	100	0	20.08	20.01	19.91	
Channel				43165	43340	43515	Tune-up limit (dBm)
Frequency (MHz)				3557.5	3575	3592.5	
15	QPSK	1	0	22.92	23.08	23.07	23.5
15	QPSK	1	37	22.95	23.04	23.13	
15	QPSK	1	74	22.84	22.90	23.00	
15	QPSK	36	0	22.01	22.17	22.08	22.5
15	QPSK	36	20	22.12	22.06	22.15	
15	QPSK	36	39	21.97	22.15	22.02	
15	QPSK	75	0	22.00	22.06	22.09	22.5
15	16QAM	1	0	22.12	22.14	22.11	
15	16QAM	1	37	22.02	22.02	22.14	
15	16QAM	1	74	22.08	22.03	22.00	21.5
15	16QAM	36	0	21.14	21.18	21.20	
15	16QAM	36	20	21.15	20.97	21.13	
15	16QAM	36	39	21.07	21.12	21.04	21.5
15	16QAM	75	0	21.17	21.07	21.14	
15	64QAM	1	0	20.69	20.74	20.72	
15	64QAM	1	37	20.81	20.90	20.68	20.5
15	64QAM	1	74	20.75	20.75	20.48	
15	64QAM	36	0	19.96	20.20	20.08	
15	64QAM	36	20	20.09	20.09	19.99	20.5
15	64QAM	36	39	19.96	20.01	20.01	
15	64QAM	75	0	20.10	20.10	19.88	
Channel				43140	43340	43540	Tune-up limit (dBm)
Frequency (MHz)				3555	3575	3595	
10	QPSK	1	0	22.93	23.07	23.02	23.5
10	QPSK	1	25	23.04	23.07	23.15	
10	QPSK	1	49	22.88	23.00	23.06	
10	QPSK	25	0	21.98	22.11	22.14	22.5
10	QPSK	25	12	22.17	22.01	22.12	
10	QPSK	25	25	21.98	21.99	22.12	
10	QPSK	50	0	22.01	21.99	21.98	22.5
10	16QAM	1	0	22.12	22.18	22.23	
10	16QAM	1	25	22.06	22.00	22.18	
10	16QAM	1	49	22.00	22.14	22.05	21.5
10	16QAM	25	0	21.00	21.05	21.20	
10	16QAM	25	12	21.16	21.11	21.07	
10	16QAM	25	25	21.04	21.16	21.12	21.5
10	16QAM	50	0	21.14	21.08	21.19	
10	64QAM	1	0	20.68	20.87	20.83	
10	64QAM	1	25	20.65	20.74	20.73	20.5
10	64QAM	1	49	20.72	20.80	20.57	
10	64QAM	25	0	20.06	20.15	20.08	
10	64QAM	25	12	20.20	20.04	20.04	20.5
10	64QAM	25	25	19.95	20.03	19.95	
10	64QAM	50	0	20.19	20.07	19.94	
Channel				43115	43340	43565	Tune-up limit (dBm)
Frequency (MHz)				3552.5	3575	3597.5	
5	QPSK	1	0	22.97	22.98	22.97	23.5
5	QPSK	1	12	23.01	22.95	23.13	
5	QPSK	1	24	22.90	22.85	22.94	
5	QPSK	12	0	22.02	22.07	22.19	22.5
5	QPSK	12	7	22.07	22.07	22.04	
5	QPSK	12	13	22.01	22.05	22.04	
5	QPSK	25	0	22.03	21.99	22.10	22.5
5	16QAM	1	0	22.06	22.10	22.23	
5	16QAM	1	12	22.01	22.05	22.14	
5	16QAM	1	24	21.93	21.98	22.10	21.5
5	16QAM	12	0	20.95	21.16	21.24	
5	16QAM	12	7	21.04	21.17	21.10	
5	16QAM	12	13	21.08	21.17	21.11	21.5
5	16QAM	25	0	21.10	21.06	21.05	
5	64QAM	1	0	20.70	20.72	20.74	
5	64QAM	1	12	20.67	20.86	20.66	21.5
5	64QAM	1	24	20.78	20.72	20.58	
5	64QAM	12	0	20.13	20.13	19.99	
5	64QAM	12	7	20.14	20.11	20.00	20.5
5	64QAM	12	13	20.10	20.16	19.87	
5	64QAM	25	0	20.02	19.94	20.00	



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	19.57	23.35	23.41	19.56	23.5		
20	QPSK	1	49	19.55	23.14	23.00	19.25			
20	QPSK	1	99	19.48	23.13	23.00	19.29			
20	QPSK	50	0	18.65	22.31	22.34	18.41			
20	QPSK	50	24	18.69	22.21	22.20	18.39	22.5		
20	QPSK	50	50	18.53	22.22	22.05	18.40			
20	QPSK	100	0	18.64	22.17	22.24	18.40			
20	16QAM	1	0	18.83	22.29	22.42	18.59			
20	16QAM	1	49	18.52	22.18	22.10	18.39	22.5		
20	16QAM	1	99	18.55	22.07	22.09	18.35			
20	16QAM	50	0	17.82	21.22	21.23	17.65			
20	16QAM	50	24	17.76	21.21	21.19	17.37			
20	16QAM	50	50	17.61	21.24	21.15	17.35	21.5		
20	16QAM	100	0	17.69	21.22	21.16	17.54			
20	64QAM	1	0	17.44	21.10	20.75	17.36			
20	64QAM	1	49	17.34	20.83	20.79	17.18			
20	64QAM	1	99	17.32	21.01	20.57	17.10	21.5		
20	64QAM	50	0	16.69	20.33	20.04	16.50			
20	64QAM	50	24	16.77	20.20	20.04	16.39			
20	64QAM	50	50	16.63	20.25	19.98	16.42			
20	64QAM	100	0	16.67	20.19	20.13	16.48	20.5		
Channel				55315	55820	56160	56665			
Frequency (MHz)				3557.5	3608	3642	3692.5			
15	QPSK	1	0	19.70	23.36	23.31	19.57		23.5	
15	QPSK	1	37	19.38	23.06	22.97	19.41			
15	QPSK	1	74	19.59	23.10	23.02	19.29			
15	QPSK	36	0	18.80	22.19	22.25	18.61			
15	QPSK	36	20	18.63	22.27	22.21	18.37	22.5		
15	QPSK	36	39	18.52	22.26	22.17	18.31			
15	QPSK	75	0	18.58	22.20	22.12	18.51			
15	16QAM	1	0	18.71	22.46	22.48	18.60			
15	16QAM	1	37	18.65	22.27	22.16	18.49	22.5		
15	16QAM	1	74	18.63	22.10	22.09	18.33			
15	16QAM	36	0	17.69	21.23	21.20	17.60			
15	16QAM	36	20	17.82	21.37	21.29	17.36			
15	16QAM	36	39	17.72	21.12	21.16	17.34	21.5		
15	16QAM	75	0	17.73	21.33	21.29	17.44			
15	64QAM	1	0	17.49	21.16	20.83	17.46			
15	64QAM	1	37	17.35	20.82	20.77	17.23			
15	64QAM	1	74	17.43	20.93	20.64	17.09	21.5		
15	64QAM	36	0	16.71	20.34	20.18	16.52			
15	64QAM	36	20	16.80	20.17	20.14	16.49			
15	64QAM	36	39	16.59	20.25	19.99	16.48			
15	64QAM	75	0	16.69	20.28	20.00	16.44	20.5		
Channel				55290	55815	56165	56690			
Frequency (MHz)				3555	3607.5	3642.5	3695			
10	QPSK	1	0	19.65	23.24	23.28	19.59		23.5	
10	QPSK	1	25	19.51	23.15	23.02	19.40			
10	QPSK	1	49	19.41	23.11	22.89	19.25			
10	QPSK	25	0	18.66	22.17	22.41	18.56			
10	QPSK	25	12	18.71	22.20	22.27	18.50	22.5		
10	QPSK	25	25	18.64	22.14	22.14	18.25			
10	QPSK	50	0	18.64	22.16	22.11	18.53			
10	16QAM	1	0	18.66	22.49	22.28	18.72			
10	16QAM	1	25	18.60	22.09	22.03	18.36	22.5		
10	16QAM	1	49	18.61	22.26	22.15	18.30			
10	16QAM	25	0	17.67	21.33	21.24	17.51			
10	16QAM	25	12	17.78	21.19	21.15	17.49			
10	16QAM	25	25	17.59	21.16	21.20	17.30	21.5		
10	16QAM	50	0	17.67	21.20	21.29	17.57			
10	64QAM	1	0	17.42	20.98	20.73	17.52			
10	64QAM	1	25	17.28	20.86	20.85	17.12			
10	64QAM	1	49	17.44	20.87	20.58	17.04	21.5		
10	64QAM	25	0	16.65	20.23	20.09	16.44			
10	64QAM	25	12	16.80	20.32	20.02	16.42			
10	64QAM	25	25	16.66	20.26	20.04	16.31			
10	64QAM	50	0	16.65	20.17	20.03	16.48	20.5		
Channel				55265	55810	56170	56715			
Frequency (MHz)				3552.5	3607	3643	3697.5			
5	QPSK	1	0	19.55	23.30	23.40	19.43		23.5	
5	QPSK	1	12	19.47	23.14	22.96	19.26			
5	QPSK	1	24	19.40	23.14	22.87	19.24			
5	QPSK	12	0	18.76	22.24	22.39	18.54			
5	QPSK	12	7	18.60	22.28	22.21	18.44	22.5		
5	QPSK	12	13	18.61	22.25	22.18	18.30			
5	QPSK	25	0	18.62	22.33	22.12	18.40			
5	16QAM	1	0	18.77	22.44	22.28	18.63			
5	16QAM	1	12	18.65	22.14	22.18	18.35	22.5		
5	16QAM	1	24	18.68	22.10	22.11	18.34			
5	16QAM	12	0	17.75	21.14	21.25	17.66			
5	16QAM	12	7	17.67	21.24	21.21	17.38			
5	16QAM	12	13	17.56	21.22	21.05	17.44	21.5		
5	16QAM	25	0	17.74	21.17	21.14	17.40			
5	64QAM	1	0	17.46	21.11	20.83	17.34			
5	64QAM	1	12	17.39	20.84	20.73	17.12			
5	64QAM	1	24	17.40	20.98	20.68	17.06	21.5		
5	64QAM	12	0	16.72	20.22	20.10	16.56			
5	64QAM	12	7	16.77	20.30	20.14	16.46			
5	64QAM	12	13	16.71	20.13	20.00	16.47			
5	64QAM	25	0	16.74	20.30	19.95	16.52	20.5		



Band 38							
Ant 2							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				37850	38000	38150	
Frequency (MHz)				2580	2595	2610	
20	QPSK	1	0	19.54	19.70	19.47	20.2
20	QPSK	1	49	19.66	19.61	19.68	
20	QPSK	1	99	19.96	19.64	19.73	
20	QPSK	50	0	19.76	19.72	19.64	20.2
20	QPSK	50	24	19.98	19.70	19.82	
20	QPSK	50	50	19.93	19.73	19.72	
20	QPSK	100	0	19.93	19.74	19.72	20.2
20	16QAM	1	0	19.76	19.74	19.62	
20	16QAM	1	49	19.65	19.60	19.84	
20	16QAM	1	99	19.84	19.87	19.67	20.2
20	16QAM	50	0	19.85	19.71	19.72	
20	16QAM	50	24	19.93	19.71	19.68	
20	16QAM	50	50	19.96	19.83	19.93	20.2
20	16QAM	100	0	19.82	19.66	19.63	
20	64QAM	1	0	19.55	19.39	19.43	
20	64QAM	1	49	19.48	19.43	19.49	20.2
20	64QAM	1	99	19.68	19.58	19.50	
20	64QAM	50	0	19.85	19.87	19.76	
20	64QAM	50	24	19.79	19.76	19.76	20.2
20	64QAM	50	50	19.77	19.78	19.82	
20	64QAM	100	0	19.96	19.67	19.67	
Channel				37825	38000	38175	Tune-up limit (dBm)
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	19.64	19.56	19.59	20.2
15	QPSK	1	37	19.67	19.66	19.59	
15	QPSK	1	74	19.83	19.71	19.75	
15	QPSK	36	0	19.79	19.67	19.76	20.2
15	QPSK	36	20	19.93	19.70	19.73	
15	QPSK	36	39	19.90	19.76	19.83	
15	QPSK	75	0	19.80	19.77	19.66	20.2
15	16QAM	1	0	19.74	19.75	19.80	
15	16QAM	1	37	19.81	19.75	19.84	
15	16QAM	1	74	19.85	19.77	19.72	20.2
15	16QAM	36	0	19.70	19.79	19.71	
15	16QAM	36	20	19.85	19.83	19.78	
15	16QAM	36	39	19.89	19.93	19.78	20.2
15	16QAM	75	0	19.78	19.82	19.62	
15	64QAM	1	0	19.45	19.50	19.33	
15	64QAM	1	37	19.55	19.56	19.47	20.2
15	64QAM	1	74	19.55	19.44	19.42	
15	64QAM	36	0	19.83	19.67	19.72	
15	64QAM	36	20	19.62	19.78	19.81	20.2
15	64QAM	36	39	19.74	19.91	19.85	
15	64QAM	75	0	19.80	19.83	19.82	
Channel				37800	38000	38200	Tune-up limit (dBm)
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	19.53	19.60	19.46	20.2
10	QPSK	1	25	19.61	19.75	19.61	
10	QPSK	1	49	19.91	19.61	19.72	
10	QPSK	25	0	19.71	19.68	19.63	20.2
10	QPSK	25	12	19.93	19.73	19.70	
10	QPSK	25	25	19.95	19.79	19.75	
10	QPSK	50	0	19.96	19.85	19.70	20.2
10	16QAM	1	0	19.81	19.63	19.61	
10	16QAM	1	25	19.78	19.78	19.80	
10	16QAM	1	49	19.85	19.74	19.67	20.2
10	16QAM	25	0	19.73	19.76	19.77	
10	16QAM	25	12	19.86	19.72	19.63	
10	16QAM	25	25	19.91	19.87	19.93	20.2
10	16QAM	50	0	19.95	19.68	19.62	
10	64QAM	1	0	19.50	19.38	19.39	
10	64QAM	1	25	19.45	19.47	19.48	20.2
10	64QAM	1	49	19.71	19.50	19.41	
10	64QAM	25	0	19.91	19.77	19.71	
10	64QAM	25	12	19.78	19.85	19.75	20.2
10	64QAM	25	25	19.66	19.75	19.82	
10	64QAM	50	0	19.85	19.84	19.77	
Channel				37775	38000	38225	Tune-up limit (dBm)
Frequency (MHz)				2572.5	2595	2617.5	
5	QPSK	1	0	19.63	19.64	19.50	20.2
5	QPSK	1	12	19.62	19.62	19.57	
5	QPSK	1	24	19.91	19.77	19.65	
5	QPSK	12	0	19.78	19.68	19.79	20.2
5	QPSK	12	7	19.80	19.75	19.71	
5	QPSK	12	13	19.88	19.77	19.90	
5	QPSK	25	0	19.80	19.83	19.70	20.2
5	16QAM	1	0	19.78	19.82	19.74	
5	16QAM	1	12	19.72	19.79	19.66	
5	16QAM	1	24	19.87	19.78	19.64	20.2
5	16QAM	12	0	19.78	19.80	19.72	
5	16QAM	12	7	19.92	19.79	19.78	
5	16QAM	12	13	19.87	19.90	19.86	20.2
5	16QAM	25	0	19.87	19.82	19.80	
5	64QAM	1	0	19.45	19.40	19.50	
5	64QAM	1	12	19.59	19.47	19.57	20.2
5	64QAM	1	24	19.68	19.48	19.46	
5	64QAM	12	0	19.78	19.83	19.82	
5	64QAM	12	7	19.73	19.87	19.76	20.2
5	64QAM	12	13	19.67	19.87	19.73	
5	64QAM	25	0	19.89	19.80	19.85	



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	21.23	20.96	20.82	21.8
20	QPSK	1	49	20.90	20.81	20.84	
20	QPSK	1	99	21.05	20.95	20.83	
20	QPSK	50	0	21.17	21.08	20.96	
20	QPSK	50	24	20.79	20.66	20.69	21.8
20	QPSK	50	50	20.68	20.65	20.51	
20	QPSK	100	0	20.91	20.77	20.76	
20	16QAM	1	0	21.12	21.01	20.86	
20	16QAM	1	49	20.97	21.01	21.03	21.8
20	16QAM	1	99	21.13	21.13	20.95	
20	16QAM	50	0	21.11	20.92	20.71	
20	16QAM	50	24	21.08	20.96	20.84	
20	16QAM	50	50	20.99	20.89	20.98	21.8
20	16QAM	100	0	21.18	21.03	20.77	
20	64QAM	1	0	20.98	20.93	20.78	
20	64QAM	1	49	21.11	20.87	20.82	
20	64QAM	1	99	21.09	20.97	20.75	21.8
20	64QAM	50	0	21.01	20.90	20.75	
20	64QAM	50	24	21.20	21.02	20.88	
20	64QAM	50	50	21.03	20.98	20.80	
20	64QAM	100	0	20.86	21.05	20.79	
Channel				37825	38000	38175	Tune-up limit (dBm)
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	21.08	20.92	20.81	21.8
15	QPSK	1	37	21.00	20.78	20.87	
15	QPSK	1	74	21.18	20.90	20.77	
15	QPSK	36	0	21.08	21.07	21.06	
15	QPSK	36	20	20.90	20.64	20.54	21.8
15	QPSK	36	39	20.60	20.66	20.60	
15	QPSK	75	0	20.83	20.56	20.65	
15	16QAM	1	0	20.92	20.95	20.70	
15	16QAM	1	37	20.98	21.08	20.88	21.8
15	16QAM	1	74	21.20	20.92	20.89	
15	16QAM	36	0	20.99	20.91	20.67	
15	16QAM	36	20	20.97	20.99	20.84	
15	16QAM	36	39	21.00	20.88	20.74	21.8
15	16QAM	75	0	21.07	20.84	20.78	
15	64QAM	1	0	20.87	20.82	20.85	
15	64QAM	1	37	20.89	20.81	20.76	
15	64QAM	1	74	20.94	20.86	20.77	21.8
15	64QAM	36	0	20.97	20.90	20.78	
15	64QAM	36	20	21.19	20.92	20.71	
15	64QAM	36	39	20.95	20.89	20.96	
15	64QAM	75	0	20.94	20.90	20.69	
Channel				37800	38000	38200	Tune-up limit (dBm)
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	21.15	21.00	20.66	21.8
10	QPSK	1	25	20.86	20.71	20.78	
10	QPSK	1	49	20.98	20.77	20.61	
10	QPSK	25	0	21.02	20.90	20.84	
10	QPSK	25	12	20.81	20.64	20.50	21.8
10	QPSK	25	25	20.71	20.48	20.37	
10	QPSK	50	0	20.75	20.49	20.62	
10	16QAM	1	0	21.06	20.79	20.67	
10	16QAM	1	25	20.78	21.00	20.92	21.8
10	16QAM	1	49	21.06	20.95	20.79	
10	16QAM	25	0	21.02	20.92	20.71	
10	16QAM	25	12	20.97	20.84	20.59	
10	16QAM	25	25	20.93	20.73	20.82	21.8
10	16QAM	50	0	21.02	20.95	20.81	
10	64QAM	1	0	21.01	20.67	20.76	
10	64QAM	1	25	20.83	20.82	20.67	
10	64QAM	1	49	20.81	20.65	20.80	21.8
10	64QAM	25	0	21.09	20.99	20.58	
10	64QAM	25	12	21.04	20.97	20.67	
10	64QAM	25	25	20.98	20.84	20.90	
10	64QAM	50	0	20.90	20.82	20.76	
Channel				37775	38000	38225	Tune-up limit (dBm)
Frequency (MHz)				2572.5	2595	2617.5	
5	QPSK	1	0	21.09	20.88	20.62	21.8
5	QPSK	1	12	20.94	20.59	20.71	
5	QPSK	1	24	21.02	20.82	20.68	
5	QPSK	12	0	20.98	20.81	20.98	
5	QPSK	12	7	20.61	20.67	20.43	21.8
5	QPSK	12	13	20.49	20.51	20.45	
5	QPSK	25	0	20.62	20.43	20.57	
5	16QAM	1	0	20.97	20.76	20.72	
5	16QAM	1	12	20.75	20.90	20.84	21.8
5	16QAM	1	24	20.86	21.04	20.82	
5	16QAM	12	0	21.01	20.82	20.61	
5	16QAM	12	7	20.96	20.64	20.73	
5	16QAM	12	13	20.85	20.71	20.85	21.8
5	16QAM	25	0	21.08	20.72	20.85	
5	64QAM	1	0	20.86	20.79	20.60	
5	64QAM	1	12	20.95	20.62	20.66	
5	64QAM	1	24	20.90	20.81	20.74	21.8
5	64QAM	12	0	20.86	20.79	20.81	
5	64QAM	12	7	20.95	20.87	20.65	
5	64QAM	12	13	20.94	20.75	20.66	
5	64QAM	25	0	20.77	20.79	20.60	



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	19.76	19.48	19.58	19.35	19.46	20.2	
20	QPSK	1	49	19.65	19.39	19.48	19.37	19.38		
20	QPSK	1	99	19.56	19.44	19.38	19.27	19.19		
20	QPSK	50	0	19.58	19.54	19.40	19.38	19.18		
20	QPSK	50	24	19.42	19.18	19.02	18.86	18.48	20.2	
20	QPSK	50	50	19.37	19.20	19.16	19.30	18.98		
20	QPSK	100	0	19.25	19.13	19.19	18.52	19.03		
20	16QAM	1	0	19.52	19.57	19.56	19.24	18.69	20.2	
20	16QAM	1	49	19.60	19.36	19.49	19.42	19.11		
20	16QAM	1	99	19.51	19.51	19.43	18.97	19.32		
20	16QAM	50	0	19.64	19.49	19.35	19.42	19.20		
20	16QAM	50	24	19.64	19.48	19.49	19.31	19.31	20.2	
20	16QAM	50	50	19.53	19.55	19.45	19.23	19.19		
20	16QAM	100	0	19.55	19.44	19.51	19.32	19.14		
20	64QAM	1	0	19.46	19.41	19.37	19.06	18.71	20.2	
20	64QAM	1	49	19.43	19.34	19.28	19.35	19.13		
20	64QAM	1	99	19.53	19.34	19.41	18.86	19.13		
20	64QAM	50	0	19.63	19.47	19.43	19.39	19.19		
20	64QAM	50	24	19.52	19.39	19.45	19.42	19.19	20.2	
20	64QAM	50	50	19.48	19.45	19.52	19.23	19.18		
20	64QAM	100	0	19.61	19.42	19.34	19.30	19.13		
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	19.72	19.57	19.47	19.49	19.34	20.2	
15	QPSK	1	37	19.74	19.41	19.44	19.38	19.34		
15	QPSK	1	74	19.70	19.45	19.41	19.26	19.38		
15	QPSK	36	0	19.63	19.54	19.42	19.39	19.31		
15	QPSK	36	20	19.41	19.21	19.04	19.05	18.39	20.2	
15	QPSK	36	39	19.39	19.22	19.07	19.30	19.02		
15	QPSK	75	0	19.31	19.11	19.13	18.62	18.99		
15	16QAM	1	0	19.51	19.44	19.43	19.09	18.70	20.2	
15	16QAM	1	37	19.55	19.54	19.47	19.46	19.12		
15	16QAM	1	74	19.55	19.57	19.47	18.88	19.17		
15	16QAM	36	0	19.67	19.52	19.47	19.46	19.10	20.2	
15	16QAM	36	20	19.65	19.39	19.45	19.47	19.24		
15	16QAM	36	39	19.52	19.40	19.59	19.26	19.23		
15	16QAM	75	0	19.69	19.47	19.49	19.28	19.12	20.2	
15	64QAM	1	0	19.56	19.38	19.45	19.18	18.64		
15	64QAM	1	37	19.50	19.45	19.22	19.38	19.21		
15	64QAM	1	74	19.45	19.33	19.34	18.87	19.14	20.2	
15	64QAM	36	0	19.73	19.43	19.35	19.30	19.20		
15	64QAM	36	20	19.59	19.37	19.40	19.30	19.30		
15	64QAM	36	39	19.53	19.50	19.58	19.17	19.28		
15	64QAM	75	0	19.52	19.44	19.41	19.34	19.24	Tune-up limit (dBm)	
Channel				39700	40160	40620	41080	41540		
Frequency (MHz)				2501	2547	2593	2639	2685		
10	QPSK	1	0	19.70	19.59	19.45	19.42	19.30	20.2	
10	QPSK	1	25	19.58	19.38	19.49	19.40	19.40		
10	QPSK	1	49	19.56	19.53	19.44	19.27	19.30		
10	QPSK	25	0	19.66	19.45	19.33	19.23	19.18	20.2	
10	QPSK	25	12	19.43	19.11	19.21	18.87	18.49		
10	QPSK	25	25	19.30	19.22	19.06	19.16	18.96		
10	QPSK	50	0	19.29	19.11	19.14	18.70	19.12	20.2	
10	16QAM	1	0	19.52	19.47	19.56	19.26	18.79		
10	16QAM	1	25	19.61	19.37	19.51	19.43	19.22		
10	16QAM	1	49	19.63	19.56	19.52	18.91	19.23	20.2	
10	16QAM	25	0	19.64	19.53	19.40	19.45	19.15		
10	16QAM	25	12	19.58	19.52	19.48	19.31	19.36		
10	16QAM	25	25	19.52	19.49	19.56	19.29	19.20	20.2	
10	16QAM	50	0	19.66	19.39	19.36	19.26	19.10		
10	64QAM	1	0	19.57	19.38	19.32	19.18	18.79		
10	64QAM	1	25	19.45	19.31	19.32	19.40	19.17	20.2	
10	64QAM	1	49	19.46	19.40	19.39	18.93	19.04		
10	64QAM	25	0	19.59	19.42	19.48	19.40	19.03		
10	64QAM	25	12	19.58	19.54	19.37	19.40	19.30	20.2	
10	64QAM	25	25	19.51	19.40	19.54	19.15	19.26		
10	64QAM	50	0	19.53	19.51	19.50	19.14	19.10		
Channel				39675	40148	40620	41093	41565	Tune-up limit (dBm)	
Frequency (MHz)				2498.5	2545.8	2593	2640.30	2687.5		
5	QPSK	1	0	19.73	19.58	19.44	19.49	19.30	20.2	
5	QPSK	1	12	19.68	19.45	19.37	19.29	19.24		
5	QPSK	1	24	19.73	19.37	19.42	19.21	19.21		
5	QPSK	12	0	19.64	19.44	19.42	19.34	19.22	20.2	
5	QPSK	12	7	19.42	19.11	19.11	18.90	18.43		
5	QPSK	12	13	19.44	19.15	19.23	19.30	18.91		
5	QPSK	25	0	19.38	19.25	19.26	18.57	19.08	20.2	
5	16QAM	1	0	19.68	19.56	19.51	19.19	18.80		
5	16QAM	1	12	19.62	19.37	19.38	19.40	19.24		
5	16QAM	1	24	19.58	19.42	19.51	19.05	19.31	20.2	
5	16QAM	12	0	19.69	19.57	19.34	19.34	19.04		
5	16QAM	12	7	19.58	19.39	19.44	19.42	19.21		
5	16QAM	12	13	19.58	19.42	19.57	19.22	19.31	20.2	
5	16QAM	25	0	19.61	19.41	19.50	19.19	19.26		
5	64QAM	1	0	19.52	19.25	19.34	19.09	18.68		
5	64QAM	1	12	19.54	19.29	19.24	19.35	19.13	20.2	
5	64QAM	1	24	19.40	19.28	19.41	18.97	19.05		
5	64QAM	12	0	19.63	19.60	19.36	19.43	19.12		
5	64QAM	12	7	19.61	19.56	19.41	19.32	19.34	20.2	
5	64QAM	12	13	19.50	19.42	19.46	19.32	19.23		
5	64QAM	25	0	19.52	19.50	19.35	19.15	19.29		



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	21.31	21.07	20.91	20.96	20.78	21.8	
20	QPSK	1	49	21.09	20.98	20.96	20.81	20.85		
20	QPSK	1	99	21.19	21.09	20.89	20.85	20.73		
20	QPSK	50	0	21.25	21.13	21.11	20.82	20.58		
20	QPSK	50	24	20.94	20.79	20.74	20.51	20.27	21.8	
20	QPSK	50	50	20.88	20.82	20.69	20.72	20.67		
20	QPSK	100	0	20.92	20.78	20.78	20.32	20.53		
20	16QAM	1	0	21.16	21.04	20.87	20.89	20.65		
20	16QAM	1	49	21.02	21.19	21.06	21.10	20.96	21.8	
20	16QAM	1	99	21.24	21.17	21.09	20.63	20.86		
20	16QAM	50	0	21.18	21.10	20.91	20.89	20.70		
20	16QAM	50	24	21.20	21.11	20.94	20.95	20.82		
20	16QAM	50	50	21.12	20.99	21.03	20.82	20.87	21.8	
20	16QAM	100	0	21.22	21.10	20.92	20.86	20.73		
20	64QAM	1	0	21.12	21.00	20.90	20.60	20.30		
20	64QAM	1	49	21.13	21.00	20.91	20.98	20.83		
20	64QAM	1	99	21.09	20.97	20.94	20.46	20.70	21.8	
20	64QAM	50	0	21.19	21.10	20.93	20.91	20.68		
20	64QAM	50	24	21.24	21.14	20.95	20.95	20.81		
20	64QAM	50	50	21.15	21.03	21.00	20.81	20.90		
20	64QAM	100	0	21.05	21.11	20.92	20.87	20.73	Tune-up limit (dBm)	
Channel				39725	40173	40620	41068	41515		
Frequency (MHz)				2503.5	2548.3	2593	2637.8	2682.5		
15	QPSK	1	0	21.28	21.07	20.91	20.92	20.78	21.8	
15	QPSK	1	37	21.08	20.92	20.95	20.75	20.84		
15	QPSK	1	74	21.18	21.05	20.82	20.78	20.72		
15	QPSK	36	0	21.25	21.08	21.07	20.75	20.56		
15	QPSK	36	20	20.94	20.75	20.64	20.51	20.21	21.8	
15	QPSK	36	39	20.78	20.74	20.60	20.66	20.65		
15	QPSK	75	0	20.86	20.68	20.78	20.22	20.53		
15	16QAM	1	0	21.08	20.98	20.83	20.81	20.64		
15	16QAM	1	37	21.00	21.15	21.04	21.09	20.90	21.8	
15	16QAM	1	74	21.22	21.12	20.99	20.56	20.78		
15	16QAM	36	0	21.12	21.06	20.82	20.81	20.62		
15	16QAM	36	20	21.11	21.06	20.86	20.93	20.75		
15	16QAM	36	39	21.06	20.90	20.94	20.79	20.82	21.8	
15	16QAM	75	0	21.18	21.03	20.86	20.80	20.63		
15	64QAM	1	0	21.05	20.94	20.87	20.58	20.24		
15	64QAM	1	37	21.09	20.97	20.81	20.91	20.80		
15	64QAM	1	74	21.02	20.90	20.88	20.36	20.66	21.8	
15	64QAM	36	0	21.13	21.03	20.89	20.87	20.65		
15	64QAM	36	20	21.20	21.04	20.87	20.93	20.79		
15	64QAM	36	39	21.06	21.00	20.96	20.74	20.82		
15	64QAM	75	0	20.99	21.01	20.84	20.84	20.68	Tune-up limit (dBm)	
Channel				39700	40160	40620	41080	41540		
Frequency (MHz)				2501	2547	2593	2639	2685		
10	QPSK	1	0	21.19	21.00	20.83	20.86	20.71	21.8	
10	QPSK	1	25	20.99	20.90	20.85	20.74	20.83		
10	QPSK	1	49	21.07	20.96	20.80	20.75	20.63		
10	QPSK	25	0	21.14	21.02	21.01	20.66	20.43		
10	QPSK	25	12	20.87	20.73	20.64	20.44	20.20	21.8	
10	QPSK	25	25	20.77	20.67	20.54	20.61	20.60		
10	QPSK	50	0	20.85	20.60	20.73	20.23	20.39		
10	16QAM	1	0	21.12	20.94	20.79	20.75	20.64		
10	16QAM	1	25	20.88	21.00	20.98	20.95	20.81	21.8	
10	16QAM	1	49	21.13	21.05	20.97	20.55	20.80		
10	16QAM	25	0	21.13	21.03	20.80	20.76	20.57		
10	16QAM	25	12	21.10	20.95	20.79	20.81	20.78		
10	16QAM	25	25	21.06	20.81	20.93	20.73	20.84	21.8	
10	16QAM	50	0	21.15	21.01	20.81	20.79	20.62		
10	64QAM	1	0	21.07	20.81	20.79	20.58	20.27		
10	64QAM	1	25	21.02	20.88	20.78	20.81	20.79		
10	64QAM	1	49	20.98	20.80	20.81	20.34	20.66	21.8	
10	64QAM	25	0	21.15	20.99	20.78	20.73	20.54		
10	64QAM	25	12	21.05	21.01	20.80	20.89	20.73		
10	64QAM	25	25	21.06	20.91	20.91	20.67	20.85		
10	64QAM	50	0	20.98	21.00	20.80	20.71	20.58	Tune-up limit (dBm)	
Channel				39675	40148	40620	41093	41565		
Frequency (MHz)				2498.5	2545.8	2593	2640.30	2687.5		
5	QPSK	1	0	21.12	20.93	20.65	20.80	20.64	21.8	
5	QPSK	1	12	20.95	20.79	20.82	20.67	20.73		
5	QPSK	1	24	21.05	21.02	20.69	20.73	20.50		
5	QPSK	12	0	21.08	20.96	21.04	20.68	20.34		
5	QPSK	12	7	20.73	20.73	20.55	20.45	20.06	21.8	
5	QPSK	12	13	20.63	20.64	20.59	20.60	20.52		
5	QPSK	25	0	20.82	20.62	20.61	20.16	20.46		
5	16QAM	1	0	21.00	20.93	20.81	20.66	20.56		
5	16QAM	1	12	20.89	21.03	20.87	21.01	20.86	21.8	
5	16QAM	1	24	21.03	21.08	20.86	20.38	20.64		
5	16QAM	12	0	21.03	20.95	20.74	20.78	20.62		
5	16QAM	12	7	21.07	20.84	20.88	20.66	20.63		
5	16QAM	12	13	20.95	20.87	20.85	20.69	20.76	21.8	
5	16QAM	25	0	21.09	20.88	20.87	20.82	20.51		
5	64QAM	1	0	21.01	20.85	20.66	20.46	20.15		
5	64QAM	1	12	20.96	20.82	20.78	20.88	20.70		
5	64QAM	1	24	20.97	20.84	20.82	20.29	20.55	21.8	
5	64QAM	12	0	21.05	20.88	20.81	20.75	20.45		
5	64QAM	12	7	21.03	21.07	20.80	20.91	20.71		
5	64QAM	12	13	21.05	20.85	20.77	20.67	20.74		
5	64QAM	25	0	20.86	20.97	20.78	20.72	20.44		



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	24.64	24.77	24.66	25
20	QPSK	1	49	24.61	24.74	24.70	
20	QPSK	1	99	24.49	24.65	24.69	
20	QPSK	50	0	23.77	23.89	23.99	24
20	QPSK	50	24	23.85	23.90	23.86	
20	QPSK	50	50	23.79	23.91	23.85	
20	QPSK	100	0	23.88	23.74	23.78	24
20	16QAM	1	0	24.03	23.86	23.91	
20	16QAM	1	49	23.84	23.91	23.88	
20	16QAM	1	99	24.05	23.97	24.01	23
20	16QAM	50	0	22.87	22.86	22.94	
20	16QAM	50	24	22.92	22.85	22.85	
20	16QAM	50	50	22.90	22.79	22.88	23
20	16QAM	100	0	22.98	22.75	22.84	
20	64QAM	1	0	22.89	22.73	22.97	
20	64QAM	1	49	22.80	22.81	22.86	23
20	64QAM	1	99	22.82	22.79	22.83	
20	64QAM	50	0	21.83	21.80	21.84	
20	64QAM	50	24	21.79	21.86	22.01	22
20	64QAM	50	50	21.92	21.88	21.74	
20	64QAM	100	0	21.90	21.82	21.75	
Channel				43165	43340	43515	Tune-up limit (dBm)
Frequency (MHz)				3557.5	3575	3592.5	
15	QPSK	1	0	24.65	24.61	24.67	25
15	QPSK	1	37	24.70	24.73	24.65	
15	QPSK	1	74	24.63	24.58	24.61	
15	QPSK	36	0	23.69	23.87	24.04	24
15	QPSK	36	20	23.87	23.75	23.86	
15	QPSK	36	39	23.70	23.91	23.81	
15	QPSK	75	0	23.77	23.93	23.78	24
15	16QAM	1	0	23.84	23.89	23.92	
15	16QAM	1	37	23.86	24.01	23.99	
15	16QAM	1	74	23.93	23.93	24.08	23
15	16QAM	36	0	22.90	22.87	22.95	
15	16QAM	36	20	22.81	22.91	22.87	
15	16QAM	36	39	22.83	22.98	22.81	23
15	16QAM	75	0	22.97	22.93	22.80	
15	64QAM	1	0	22.78	22.74	22.94	
15	64QAM	1	37	22.74	22.97	22.90	23
15	64QAM	1	74	22.85	22.89	22.66	
15	64QAM	36	0	21.89	21.81	21.79	
15	64QAM	36	20	21.86	21.88	21.85	22
15	64QAM	36	39	21.77	21.80	21.83	
15	64QAM	75	0	21.79	21.85	21.77	
Channel				43140	43340	43540	Tune-up limit (dBm)
Frequency (MHz)				3555	3575	3595	
10	QPSK	1	0	24.58	24.65	24.70	25
10	QPSK	1	25	24.67	24.76	24.72	
10	QPSK	1	49	24.59	24.63	24.72	
10	QPSK	25	0	23.71	23.85	24.03	24
10	QPSK	25	12	23.86	23.94	23.94	
10	QPSK	25	25	23.75	23.87	23.89	
10	QPSK	50	0	23.82	23.89	23.80	24
10	16QAM	1	0	23.88	23.93	23.95	
10	16QAM	1	25	23.93	23.87	23.93	
10	16QAM	1	49	23.93	24.01	24.03	23
10	16QAM	25	0	22.75	22.82	22.88	
10	16QAM	25	12	22.81	22.82	23.01	
10	16QAM	25	25	22.78	22.81	22.96	23
10	16QAM	50	0	22.97	22.81	22.84	
10	64QAM	1	0	22.81	22.85	22.97	
10	64QAM	1	25	22.83	22.86	22.77	23
10	64QAM	1	49	22.80	22.78	22.85	
10	64QAM	25	0	21.82	21.90	21.88	
10	64QAM	25	12	21.87	21.81	21.93	22
10	64QAM	25	25	21.92	21.85	21.77	
10	64QAM	50	0	21.95	21.80	21.76	
Channel				43115	43340	43565	Tune-up limit (dBm)
Frequency (MHz)				3552.5	3575	3597.5	
5	QPSK	1	0	24.67	24.76	24.72	25
5	QPSK	1	12	24.65	24.61	24.83	
5	QPSK	1	24	24.49	24.69	24.56	
5	QPSK	12	0	23.74	23.83	23.90	24
5	QPSK	12	7	23.90	23.74	23.86	
5	QPSK	12	13	23.82	23.93	23.98	
5	QPSK	25	0	23.86	23.93	23.83	24
5	16QAM	1	0	23.91	23.94	23.84	
5	16QAM	1	12	23.94	23.93	23.92	
5	16QAM	1	24	23.89	23.89	23.93	23
5	16QAM	12	0	22.91	22.90	23.07	
5	16QAM	12	7	22.82	22.95	22.88	
5	16QAM	12	13	22.77	22.95	22.82	23
5	16QAM	25	0	22.87	22.91	22.88	
5	64QAM	1	0	22.80	22.92	22.89	
5	64QAM	1	12	22.72	22.84	22.78	23
5	64QAM	1	24	22.90	22.90	22.73	
5	64QAM	12	0	21.83	21.83	21.92	
5	64QAM	12	7	21.92	21.86	21.88	22
5	64QAM	12	13	21.77	21.84	21.82	
5	64QAM	25	0	21.78	21.88	21.75	



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	20.90	24.44	24.55	20.98	25	
20	QPSK	1	49	20.86	24.23	24.27	20.67		
20	QPSK	1	99	20.87	24.12	24.04	20.76		
20	QPSK	50	0	19.88	23.51	23.64	20.03		
20	QPSK	50	24	19.85	23.52	23.44	20.00	24	
20	QPSK	50	50	19.82	23.42	23.39	19.76		
20	QPSK	100	0	19.84	23.45	23.45	19.89		
20	16QAM	1	0	19.85	23.66	23.58	19.96		
20	16QAM	1	49	19.88	23.36	23.51	19.84	24	
20	16QAM	1	99	19.92	23.48	23.55	19.82		
20	16QAM	50	0	18.90	22.48	22.54	19.08		
20	16QAM	50	24	19.05	22.48	22.57	18.88		
20	16QAM	50	50	18.87	22.53	22.53	18.91	23	
20	16QAM	100	0	18.98	22.60	22.62	18.80		
20	64QAM	1	0	18.78	22.37	22.19	18.92		
20	64QAM	1	49	18.51	22.13	22.16	18.70		
20	64QAM	1	99	18.76	22.26	22.08	18.58	23	
20	64QAM	50	0	17.99	21.63	21.36	17.91		
20	64QAM	50	24	17.95	21.51	21.52	17.85		
20	64QAM	50	50	17.80	21.50	21.31	17.80		
20	64QAM	100	0	17.90	21.55	21.44	17.97	22	
Channel				55315	55820	56180	56665		
Frequency (MHz)				3557.5	3608	3642	3692.5		
15	QPSK	1	0	20.91	24.48	24.51	21.03	25	
15	QPSK	1	37	20.84	24.14	24.12	20.84		
15	QPSK	1	74	20.73	24.17	24.05	20.59		
15	QPSK	36	0	20.07	23.44	23.57	19.87		
15	QPSK	36	20	19.95	23.43	23.50	19.95	24	
15	QPSK	36	39	19.92	23.48	23.45	19.71		
15	QPSK	75	0	19.96	23.53	23.56	19.78		
15	16QAM	1	0	19.95	23.66	23.65	19.84		
15	16QAM	1	37	19.84	23.45	23.48	19.83	24	
15	16QAM	1	74	19.80	23.48	23.45	19.74		
15	16QAM	36	0	18.95	22.54	22.56	18.99		
15	16QAM	36	20	18.88	22.65	22.58	18.95		
15	16QAM	36	39	18.95	22.53	22.39	18.90	23	
15	16QAM	75	0	18.93	22.54	22.43	18.89		
15	64QAM	1	0	18.79	22.31	22.20	18.80		
15	64QAM	1	37	18.67	22.23	22.18	18.57		
15	64QAM	1	74	18.75	22.17	22.01	18.53	23	
15	64QAM	36	0	18.01	21.65	21.53	18.04		
15	64QAM	36	20	17.92	21.57	21.48	17.89		
15	64QAM	36	39	17.98	21.52	21.35	17.73		
15	64QAM	75	0	18.01	21.61	21.28	17.90	22	
Channel				55290	55815	56165	56690		
Frequency (MHz)				3555	3607.5	3642.5	3695		
10	QPSK	1	0	20.93	24.41	24.59	20.86	25	
10	QPSK	1	25	20.76	24.29	24.20	20.72		
10	QPSK	1	49	20.73	24.23	24.20	20.74		
10	QPSK	25	0	20.06	23.55	23.51	19.98		
10	QPSK	25	12	20.00	23.62	23.54	19.95	24	
10	QPSK	25	25	19.97	23.38	23.37	19.84		
10	QPSK	50	0	19.84	23.47	23.58	19.84		
10	16QAM	1	0	19.90	23.70	23.75	19.82		
10	16QAM	1	25	19.83	23.56	23.38	19.81	24	
10	16QAM	1	49	19.82	23.57	23.49	19.84		
10	16QAM	25	0	19.10	22.53	22.72	18.96		
10	16QAM	25	12	19.02	22.57	22.58	19.03		
10	16QAM	25	25	18.79	22.60	22.45	18.79	23	
10	16QAM	50	0	18.85	22.58	22.62	19.00		
10	64QAM	1	0	18.77	22.34	22.19	18.78		
10	64QAM	1	25	18.68	22.27	22.04	18.61		
10	64QAM	1	49	18.71	22.34	21.93	18.59	23	
10	64QAM	25	0	17.93	21.58	21.44	17.90		
10	64QAM	25	12	18.01	21.59	21.39	17.93		
10	64QAM	25	25	17.98	21.54	21.35	17.87		
10	64QAM	50	0	17.97	21.47	21.31	17.98	22	
Channel				55265	55810	56170	56715		
Frequency (MHz)				3552.5	3607	3643	3697.5		
5	QPSK	1	0	20.80	24.43	24.53	20.96	25	
5	QPSK	1	12	20.87	24.21	24.11	20.74		
5	QPSK	1	24	20.77	24.17	24.09	20.64		
5	QPSK	12	0	19.91	23.53	23.66	19.89		
5	QPSK	12	7	19.86	23.44	23.50	19.95	24	
5	QPSK	12	13	19.82	23.39	23.48	19.75		
5	QPSK	25	0	19.92	23.61	23.54	19.81		
5	16QAM	1	0	19.86	23.71	23.69	19.87		
5	16QAM	1	12	19.89	23.44	23.46	19.83	24	
5	16QAM	1	24	19.85	23.38	23.48	19.85		
5	16QAM	12	0	19.09	22.60	22.67	18.96		
5	16QAM	12	7	18.94	22.53	22.66	19.00		
5	16QAM	12	13	18.87	22.41	22.57	18.76	23	
5	16QAM	25	0	18.89	22.68	22.56	18.80		
5	64QAM	1	0	18.69	22.42	22.17	18.97		
5	64QAM	1	12	18.61	22.21	22.19	18.67		
5	64QAM	1	24	18.76	22.30	21.91	18.46	23	
5	64QAM	12	0	18.06	21.53	21.37	18.05		
5	64QAM	12	7	18.03	21.67	21.53	17.88		
5	64QAM	12	13	17.87	21.53	21.38	17.74		
5	64QAM	25	0	17.93	21.61	21.32	17.86	22	



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	24.92	24.90	24.88	25
20	QPSK	1	49	24.91	24.81	24.92	
20	QPSK	1	99	24.84	24.90	24.91	
20	QPSK	50	0	23.94	23.06	23.97	24
20	QPSK	50	24	23.89	23.83	23.85	
20	QPSK	50	50	23.84	23.94	23.83	
20	QPSK	100	0	23.87	23.97	23.81	24
20	16QAM	1	0	23.74	23.92	23.91	
20	16QAM	1	49	23.81	23.88	23.72	
20	16QAM	1	99	23.74	23.74	23.87	23
20	16QAM	50	0	22.92	22.80	22.78	
20	16QAM	50	24	22.86	22.88	22.81	
20	16QAM	50	50	22.70	22.77	22.78	23
20	16QAM	100	0	22.89	22.85	22.90	
20	64QAM	1	0	22.79	22.79	22.72	
20	64QAM	1	49	22.80	22.84	22.93	23
20	64QAM	1	99	22.75	22.85	22.77	
20	64QAM	50	0	21.93	21.72	21.81	
20	64QAM	50	24	21.96	21.78	21.84	22
20	64QAM	50	50	21.73	21.93	21.77	
20	64QAM	100	0	21.97	21.93	21.73	
Channel				37825	38000	38175	Tune-up limit (dBm)
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	24.87	24.90	24.85	25
15	QPSK	1	37	24.91	24.85	24.90	
15	QPSK	1	74	24.86	24.84	24.86	
15	QPSK	36	0	23.94	23.77	23.87	24
15	QPSK	36	20	23.97	23.95	23.97	
15	QPSK	36	39	23.97	23.81	23.76	
15	QPSK	75	0	23.82	23.81	23.90	24
15	16QAM	1	0	23.91	23.90	23.78	
15	16QAM	1	37	23.90	23.92	23.71	
15	16QAM	1	74	23.72	23.86	23.77	23
15	16QAM	36	0	22.77	22.81	22.85	
15	16QAM	36	20	22.83	22.85	22.74	
15	16QAM	36	39	22.84	22.86	22.76	23
15	16QAM	75	0	22.84	22.77	22.84	
15	64QAM	1	0	22.78	22.86	22.73	
15	64QAM	1	37	22.72	22.91	22.75	23
15	64QAM	1	74	22.95	22.82	22.89	
15	64QAM	36	0	21.96	21.73	21.99	
15	64QAM	36	20	21.94	21.78	21.74	22
15	64QAM	36	39	21.91	21.97	21.75	
15	64QAM	75	0	21.91	21.92	21.76	
Channel				37800	38000	38200	Tune-up limit (dBm)
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	24.88	24.85	24.88	25
10	QPSK	1	25	24.87	24.91	24.92	
10	QPSK	1	49	24.89	24.86	24.83	
10	QPSK	25	0	23.92	23.79	23.86	24
10	QPSK	25	12	23.88	23.99	23.86	
10	QPSK	25	25	23.83	23.86	23.84	
10	QPSK	50	0	23.99	23.94	23.78	24
10	16QAM	1	0	23.92	23.84	23.85	
10	16QAM	1	25	23.80	23.77	23.85	
10	16QAM	1	49	23.83	23.83	23.77	23
10	16QAM	25	0	22.80	22.86	22.74	
10	16QAM	25	12	22.86	22.76	22.78	
10	16QAM	25	25	22.90	22.83	22.90	23
10	16QAM	50	0	22.80	22.84	22.79	
10	64QAM	1	0	22.76	22.78	22.89	
10	64QAM	1	25	22.75	22.91	22.84	23
10	64QAM	1	49	22.80	22.78	22.84	
10	64QAM	25	0	21.90	21.76	21.83	
10	64QAM	25	12	21.97	21.79	21.78	22
10	64QAM	25	25	21.89	21.95	21.78	
10	64QAM	50	0	21.87	21.78	21.78	
Channel				37775	38000	38225	Tune-up limit (dBm)
Frequency (MHz)				2572.5	2595	2617.5	
5	QPSK	1	0	24.91	24.87	24.88	25
5	QPSK	1	12	24.84	24.89	24.81	
5	QPSK	1	24	24.84	24.92	24.92	
5	QPSK	12	0	23.97	23.99	23.86	24
5	QPSK	12	7	23.89	23.93	23.92	
5	QPSK	12	13	23.89	23.84	23.84	
5	QPSK	25	0	23.90	23.88	23.81	24
5	16QAM	1	0	23.82	23.95	23.95	
5	16QAM	1	12	23.82	23.96	23.72	
5	16QAM	1	24	23.80	23.75	23.80	23
5	16QAM	12	0	22.87	22.84	22.72	
5	16QAM	12	7	22.79	22.93	22.87	
5	16QAM	12	13	22.73	22.78	22.82	23
5	16QAM	25	0	22.85	22.75	22.88	
5	64QAM	1	0	22.85	22.83	22.73	
5	64QAM	1	12	22.81	22.91	22.88	23
5	64QAM	1	24	22.88	22.70	22.76	
5	64QAM	12	0	21.83	21.88	21.95	
5	64QAM	12	7	21.97	21.81	21.93	22
5	64QAM	12	13	21.74	21.92	21.80	
5	64QAM	25	0	21.98	21.74	21.83	



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	26.92	26.91	27.5
20	QPSK	1	49	26.52	26.98	27.00	
20	QPSK	1	99	26.69	27.04	26.92	
20	QPSK	50	0	25.69	25.78	26.12	26.5
20	QPSK	50	24	25.74	25.92	26.36	
20	QPSK	50	50	25.71	25.87	25.98	
20	QPSK	100	0	25.91	25.85	26.01	26.5
20	16QAM	1	0	26.16	26.34	26.25	
20	16QAM	1	49	25.91	26.26	26.34	
20	16QAM	1	99	25.89	26.27	26.32	25.5
20	16QAM	50	0	24.86	25.09	25.38	
20	16QAM	50	24	24.90	25.24	25.34	
20	16QAM	50	50	25.14	25.29	25.44	25.5
20	16QAM	100	0	24.96	24.97	25.07	
20	64QAM	1	0	24.25	24.48	24.36	
20	64QAM	1	49	24.05	24.34	24.81	25.5
20	64QAM	1	99	23.96	24.60	24.73	
20	64QAM	50	0	23.24	23.07	23.33	
20	64QAM	50	24	23.19	23.22	23.52	24.5
20	64QAM	50	50	23.21	23.32	23.40	
20	64QAM	100	0	23.16	23.12	23.16	
Channel				37825	38000	38175	Tune-up limit (dBm)
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	26.88	26.88	26.85	27.5
15	QPSK	1	37	26.68	26.89	26.94	
15	QPSK	1	74	26.57	27.00	26.90	
15	QPSK	36	0	25.83	25.94	26.17	26.5
15	QPSK	36	20	25.76	25.89	26.20	
15	QPSK	36	39	25.81	25.95	26.00	
15	QPSK	75	0	25.88	26.00	26.07	26.5
15	16QAM	1	0	26.12	26.38	26.38	
15	16QAM	1	37	25.95	26.18	26.42	
15	16QAM	1	74	26.00	26.43	26.24	25.5
15	16QAM	36	0	25.03	25.18	25.29	
15	16QAM	36	20	24.88	25.22	25.36	
15	16QAM	36	39	25.01	25.18	25.43	25.5
15	16QAM	75	0	24.95	24.98	25.24	
15	64QAM	1	0	24.35	24.36	24.40	25.5
15	64QAM	1	37	24.14	24.28	24.64	
15	64QAM	1	74	23.95	24.57	24.77	
15	64QAM	36	0	23.23	23.10	23.41	24.5
15	64QAM	36	20	23.10	23.31	23.51	
15	64QAM	36	39	23.19	23.26	23.44	
15	64QAM	75	0	23.19	23.05	23.34	Tune-up limit (dBm)
Channel				37800	38000	38200	
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	26.90	26.92	26.98	27.5
10	QPSK	1	25	26.62	26.95	27.08	
10	QPSK	1	49	26.65	27.01	27.08	
10	QPSK	25	0	25.64	25.85	26.15	26.5
10	QPSK	25	12	25.71	25.87	26.36	
10	QPSK	25	25	25.80	25.97	25.94	
10	QPSK	50	0	25.91	25.98	25.97	26.5
10	16QAM	1	0	26.11	26.42	26.31	
10	16QAM	1	25	25.95	26.23	26.38	
10	16QAM	1	49	26.06	26.30	26.40	25.5
10	16QAM	25	0	24.91	25.00	25.27	
10	16QAM	25	12	25.05	25.18	25.29	
10	16QAM	25	25	25.03	25.26	25.44	25.5
10	16QAM	50	0	24.94	25.12	25.06	
10	64QAM	1	0	24.31	24.45	24.35	
10	64QAM	1	25	24.14	24.36	24.70	25.5
10	64QAM	1	49	24.01	24.58	24.73	
10	64QAM	25	0	23.23	23.10	23.40	24.5
10	64QAM	25	12	23.23	23.26	23.47	
10	64QAM	25	25	23.17	23.40	23.38	
10	64QAM	50	0	23.06	23.06	23.24	Tune-up limit (dBm)
Channel				37775	38000	38225	
Frequency (MHz)				2572.5	2595	2617.5	
5	QPSK	1	0	26.87	26.94	27.04	27.5
5	QPSK	1	12	26.59	26.91	26.91	
5	QPSK	1	24	26.58	26.92	26.91	
5	QPSK	12	0	25.73	25.94	26.16	26.5
5	QPSK	12	7	25.72	25.97	26.36	
5	QPSK	12	13	25.65	25.94	25.96	
5	QPSK	25	0	25.82	25.95	26.17	26.5
5	16QAM	1	0	26.15	26.29	26.31	
5	16QAM	1	12	25.98	26.32	26.22	
5	16QAM	1	24	25.86	26.38	26.25	25.5
5	16QAM	12	0	25.03	25.03	25.38	
5	16QAM	12	7	25.01	25.12	25.35	
5	16QAM	12	13	25.03	25.16	25.34	25.5
5	16QAM	25	0	24.93	25.12	25.17	
5	64QAM	1	0	24.27	24.41	24.51	
5	64QAM	1	12	24.11	24.41	24.79	24.5
5	64QAM	1	24	24.06	24.53	24.67	
5	64QAM	12	0	23.06	23.21	23.39	
5	64QAM	12	7	23.23	23.22	23.48	24.5
5	64QAM	12	13	23.09	23.42	23.43	
5	64QAM	25	0	23.02	23.16	23.18	



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	24.64	24.74	24.87	24.90	24.40	25	
20	QPSK	1	49	24.76	24.85	24.84	24.89	24.85		
20	QPSK	1	99	24.68	24.81	24.91	24.77	24.73		
20	QPSK	50	0	23.83	23.95	23.90	23.85	23.86		
20	QPSK	50	24	23.79	23.93	23.83	23.94	23.95	24	
20	QPSK	50	50	23.79	23.88	23.87	23.85	23.88		
20	QPSK	100	0	23.75	23.99	23.82	23.92	23.77		
20	16QAM	1	0	23.78	23.99	23.87	23.94	23.50		
20	16QAM	1	49	23.68	23.85	23.93	23.87	23.96	24	
20	16QAM	1	99	23.82	23.82	23.94	23.93	23.81		
20	16QAM	50	0	22.73	22.86	22.83	22.89	22.71		
20	16QAM	50	24	22.97	22.80	22.87	22.92	22.83		
20	16QAM	50	50	22.86	22.97	22.89	22.92	22.83	23	
20	16QAM	100	0	22.74	22.77	22.93	22.89	22.77		
20	64QAM	1	0	22.47	22.63	22.76	22.82	22.25		
20	64QAM	1	49	22.34	22.65	22.75	22.78	22.67		
20	64QAM	1	99	22.61	22.71	22.75	22.52	22.42	23	
20	64QAM	50	0	21.87	21.89	21.87	21.76	21.87		
20	64QAM	50	24	21.87	21.87	21.90	21.82	21.83		
20	64QAM	50	50	21.93	21.83	21.80	21.83	21.91		
20	64QAM	100	0	21.78	22.03	21.91	21.76	21.89	22	
Channel				39725	40173	40620	41068	41515		Tune-up limit (dBm)
Frequency (MHz)				2503.5	2548.3	2593	2637.8	2682.5		
15	QPSK	1	0	24.53	24.90	24.84	24.86	24.43	25	
15	QPSK	1	37	24.73	24.87	24.84	24.81	24.81		
15	QPSK	1	74	24.64	24.87	24.88	24.75	24.65		
15	QPSK	36	0	23.87	23.84	23.82	23.90	23.75		
15	QPSK	36	20	23.78	23.88	23.83	23.92	23.92	24	
15	QPSK	36	39	23.85	23.93	23.91	23.85	23.86		
15	QPSK	75	0	23.93	23.98	23.93	23.84	23.77		
15	16QAM	1	0	23.79	23.99	23.83	23.97	23.53		
15	16QAM	1	37	23.76	23.98	23.84	23.99	23.84	24	
15	16QAM	1	74	23.75	23.87	23.99	23.81	23.71		
15	16QAM	36	0	22.91	22.91	22.82	22.88	22.81		
15	16QAM	36	20	22.87	22.95	22.79	22.78	23.00		
15	16QAM	36	39	22.80	22.87	22.84	22.98	22.81	23	
15	16QAM	75	0	22.90	22.82	22.83	22.79	22.91		
15	64QAM	1	0	22.44	22.67	22.84	22.72	22.15		
15	64QAM	1	37	22.49	22.78	22.61	22.79	22.54		
15	64QAM	1	74	22.66	22.67	22.63	22.55	22.40	23	
15	64QAM	36	0	21.85	21.99	21.75	21.81	21.90		
15	64QAM	36	20	21.88	21.81	21.83	21.71	21.89		
15	64QAM	36	39	21.91	21.81	21.94	21.97	21.89		
15	64QAM	75	0	21.87	21.98	21.89	21.71	21.80	22	
Channel				39700	40160	40620	41080	41540		Tune-up limit (dBm)
Frequency (MHz)				2501	2547	2593	2639	2685		
10	QPSK	1	0	24.67	24.82	24.83	24.80	24.45	25	
10	QPSK	1	25	24.64	24.82	24.90	24.97	24.80		
10	QPSK	1	49	24.71	25.05	24.96	24.82	24.62		
10	QPSK	25	0	23.83	23.82	23.81	23.88	23.83		
10	QPSK	25	12	23.91	23.85	23.83	23.90	23.88	24	
10	QPSK	25	25	23.92	23.81	23.83	23.96	23.86		
10	QPSK	50	0	23.86	23.87	23.81	23.91	23.78		
10	16QAM	1	0	23.76	23.85	23.81	23.95	23.61		
10	16QAM	1	25	23.74	23.81	23.92	23.72	23.73	24	
10	16QAM	1	49	23.79	23.92	23.88	23.93	23.71		
10	16QAM	25	0	22.83	22.80	22.79	22.82	22.74		
10	16QAM	25	12	22.79	22.86	22.80	22.82	22.97		
10	16QAM	25	25	22.82	22.93	22.92	22.89	22.78	23	
10	16QAM	50	0	22.82	22.89	22.77	22.79	22.92		
10	64QAM	1	0	22.49	22.69	22.83	22.80	22.29		
10	64QAM	1	25	22.41	22.67	22.78	22.95	22.62		
10	64QAM	1	49	22.51	22.72	22.81	22.54	22.51	23	
10	64QAM	25	0	21.77	21.86	21.95	21.88	21.75		
10	64QAM	25	12	21.79	21.87	21.82	21.76	21.84		
10	64QAM	25	25	21.93	21.81	21.85	21.98	21.93		
10	64QAM	50	0	21.97	21.78	21.78	21.72	21.94	22	
Channel				39675	40148	40620	41093	41565		Tune-up limit (dBm)
Frequency (MHz)				2498.5	2545.8	2593	2640.30	2687.5		
5	QPSK	1	0	24.65	24.75	24.92	24.87	24.55	25	
5	QPSK	1	12	24.62	24.86	24.73	24.87	24.77		
5	QPSK	1	24	24.75	24.78	24.81	24.70	24.74		
5	QPSK	12	0	23.86	23.79	23.82	23.83	23.73		
5	QPSK	12	7	23.80	23.71	23.88	23.80	23.87	24	
5	QPSK	12	13	23.84	23.89	23.95	23.86	23.75		
5	QPSK	25	0	23.85	23.74	23.87	23.95	23.84		
5	16QAM	1	0	23.69	23.98	23.92	23.72	23.59		
5	16QAM	1	12	23.82	23.75	23.81	23.91	23.93	24	
5	16QAM	1	24	23.74	23.83	23.91	23.84	23.78		
5	16QAM	12	0	22.81	22.82	22.92	22.81	22.81		
5	16QAM	12	7	22.96	22.81	22.75	22.79	22.88		
5	16QAM	12	13	22.97	22.94	22.91	22.92	22.90	23	
5	16QAM	25	0	22.82	22.75	22.88	22.92	22.91		
5	64QAM	1	0	22.46	22.62	22.85	22.85	22.25		
5	64QAM	1	12	22.48	22.63	22.69	22.93	22.54		
5	64QAM	1	24	22.65	22.84	22.74	22.62	22.46	23	
5	64QAM	12	0	21.77	21.98	21.86	21.91	21.77		
5	64QAM	12	7	21.97	21.94	21.81	21.82	21.92		
5	64QAM	12	13	21.77	21.75	21.85	21.94	21.87		
5	64QAM	25	0	21.94	21.73	21.93	21.91	21.77	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	25.87	26.00	26.75	26.52	26.18	27.5	
20	QPSK	1	49	26.27	25.81	26.77	26.86	26.43		
20	QPSK	1	99	26.48	25.82	26.58	26.34	26.11		
20	QPSK	50	0	25.11	24.93	25.91	25.91	25.62	26.5	
20	QPSK	50	24	25.35	24.88	26.02	26.08	25.76		
20	QPSK	50	50	25.66	24.84	25.88	25.86	25.51		
20	QPSK	100	0	24.62	24.93	26.03	25.78	25.54	26.5	
20	16QAM	1	0	25.33	25.24	26.11	25.97	25.42		
20	16QAM	1	49	25.78	25.16	25.90	26.15	25.84		
20	16QAM	1	99	25.75	25.03	26.15	25.74	25.60	25.5	
20	16QAM	50	0	24.29	24.13	24.99	25.01	24.75		
20	16QAM	50	24	24.66	24.05	24.99	25.06	24.74		
20	16QAM	50	50	24.66	23.97	24.92	24.93	24.62	25.5	
20	16QAM	100	0	24.16	23.83	24.85	25.01	24.66		
20	64QAM	1	0	23.51	23.58	24.38	24.78	24.20		
20	64QAM	1	49	23.60	23.55	24.50	25.13	23.82	25.5	
20	64QAM	1	99	23.96	23.60	24.18	24.60	23.58		
20	64QAM	50	0	22.60	22.59	23.36	24.10	23.07		
20	64QAM	50	24	22.73	22.54	23.39	24.06	23.01	24.5	
20	64QAM	50	50	22.80	22.52	23.32	23.96	22.72		
20	64QAM	100	0	22.58	22.54	23.42	23.88	22.85		
Channel				39725	40173	40620	41068	41515		Tune-up limit (dBm)
Frequency (MHz)				2503.5	2548.3	2593	2637.8	2682.5		
15	QPSK	1	0	25.97	25.98	26.77	26.65	26.11	27.5	
15	QPSK	1	37	26.41	25.95	26.59	26.96	26.41		
15	QPSK	1	74	26.45	25.90	26.64	26.35	26.18		
15	QPSK	36	0	25.10	24.95	25.84	26.03	25.57	26.5	
15	QPSK	36	20	25.46	24.97	25.97	26.01	25.76		
15	QPSK	36	39	25.60	24.86	25.98	25.97	25.47		
15	QPSK	75	0	24.59	24.87	25.94	25.79	25.62	26.5	
15	16QAM	1	0	25.27	25.29	26.09	25.96	25.58		
15	16QAM	1	37	25.59	25.22	26.10	26.15	25.85		
15	16QAM	1	74	25.79	25.00	26.04	25.68	25.53	25.5	
15	16QAM	36	0	24.29	24.22	24.90	25.07	24.60		
15	16QAM	36	20	24.65	24.06	24.95	25.16	24.85		
15	16QAM	36	39	24.84	24.00	24.99	24.80	24.73	25.5	
15	16QAM	75	0	24.19	23.96	25.04	24.99	24.60		
15	64QAM	1	0	23.52	23.66	24.20	24.88	24.06		
15	64QAM	1	37	23.56	23.59	24.49	25.14	23.83	25.5	
15	64QAM	1	74	23.98	23.61	24.01	24.63	23.46		
15	64QAM	36	0	22.52	22.49	23.32	23.98	23.12		
15	64QAM	36	20	22.72	22.54	23.25	24.05	23.02	24.5	
15	64QAM	36	39	22.94	22.66	23.40	23.86	22.78		
15	64QAM	75	0	22.56	22.52	23.27	23.86	22.99		
Channel				39700	40160	40620	41080	41540		Tune-up limit (dBm)
Frequency (MHz)				2501	2547	2593	2639	2685		
10	QPSK	1	0	26.02	26.04	26.71	26.54	26.20	27.5	
10	QPSK	1	25	26.32	25.95	26.66	26.96	26.37		
10	QPSK	1	49	26.55	25.83	26.73	26.54	26.07		
10	QPSK	25	0	25.15	25.09	25.84	26.06	25.72	26.5	
10	QPSK	25	12	25.29	24.93	26.00	26.18	25.79		
10	QPSK	25	25	25.78	24.74	25.85	25.91	25.38		
10	QPSK	50	0	24.52	24.90	26.01	25.79	25.60	26.5	
10	16QAM	1	0	25.24	25.25	26.12	25.90	25.41		
10	16QAM	1	25	25.60	25.11	26.05	26.34	25.82		
10	16QAM	1	49	25.73	24.94	26.01	25.76	25.47	26.5	
10	16QAM	25	0	24.43	24.15	24.98	25.05	24.71		
10	16QAM	25	12	24.72	24.01	24.89	25.04	24.76		
10	16QAM	25	25	24.71	23.91	25.06	24.95	24.60	25.5	
10	16QAM	50	0	24.18	23.96	24.85	24.82	24.72		
10	64QAM	1	0	23.66	23.75	24.35	24.88	24.06		
10	64QAM	1	25	23.55	23.69	24.46	25.10	23.78	25.5	
10	64QAM	1	49	23.93	23.58	24.07	24.53	23.47		
10	64QAM	25	0	22.48	22.49	23.35	24.09	23.06		
10	64QAM	25	12	22.66	22.53	23.36	24.17	22.96	24.5	
10	64QAM	25	25	22.86	22.64	23.33	23.88	22.88		
10	64QAM	50	0	22.51	22.62	23.25	23.85	22.85		
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	25.95	26.13	26.62	26.60	26.22	27.5	
5	QPSK	1	12	26.40	25.90	26.72	26.92	26.43		
5	QPSK	1	24	26.39	25.78	26.58	26.43	26.07		
5	QPSK	12	0	25.26	24.97	25.96	25.91	25.70	26.5	
5	QPSK	12	7	25.33	24.93	26.00	26.10	25.73		
5	QPSK	12	13	25.60	24.76	26.01	25.88	25.46		
5	QPSK	25	0	24.59	24.89	26.04	25.91	25.63	26.5	
5	16QAM	1	0	25.32	25.20	26.17	25.96	25.61		
5	16QAM	1	12	25.78	25.20	26.05	26.18	25.76		
5	16QAM	1	24	25.86	24.99	25.98	25.82	25.54	25.5	
5	16QAM	12	0	24.30	24.20	24.87	24.96	24.57		
5	16QAM	12	7	24.74	24.09	24.91	25.20	24.71		
5	16QAM	12	13	24.76	24.03	24.97	24.94	24.57	25.5	
5	16QAM	25	0	24.21	23.83	24.95	24.86	24.80		
5	64QAM	1	0	23.67	23.61	24.39	24.83	24.05		
5	64QAM	1	12	23.62	23.59	24.37	25.21	23.81	25.5	
5	64QAM	1	24	24.05	23.75	24.10	24.64	23.47		
5	64QAM	12	0	22.54	22.45	23.31	24.14	23.23		
5	64QAM	12	7	22.63	22.54	23.43	24.06	22.97	24.5	
5	64QAM	12	13	22.91	22.65	23.49	23.80	22.85		
5	64QAM	25	0	22.57	22.63	23.42	24.00	22.88		



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	22.95	23.11	22.94	23.5
20	QPSK	1	49	23.04	23.00	23.05	
20	QPSK	1	99	22.96	22.84	22.99	
20	QPSK	50	0	22.00	22.06	22.11	22.5
20	QPSK	50	24	22.18	22.12	22.01	
20	QPSK	50	50	22.12	22.05	22.18	
20	QPSK	100	0	22.00	22.03	22.13	22.5
20	16QAM	1	0	22.16	22.15	22.10	
20	16QAM	1	49	22.12	22.16	22.20	
20	16QAM	1	99	22.04	22.14	22.06	21.5
20	16QAM	50	0	21.06	21.07	21.07	
20	16QAM	50	24	21.07	21.13	21.17	
20	16QAM	50	50	21.09	21.12	21.17	21.5
20	16QAM	100	0	21.04	21.03	21.16	
20	64QAM	1	0	20.64	20.90	20.78	
20	64QAM	1	49	20.69	20.81	20.59	21.5
20	64QAM	1	99	20.77	20.82	20.46	
20	64QAM	50	0	20.16	20.04	20.08	
20	64QAM	50	24	20.04	20.16	20.11	20.5
20	64QAM	50	50	20.11	20.05	19.98	
20	64QAM	100	0	19.99	20.10	19.97	
Channel				43165	43340	43515	Tune-up limit (dBm)
Frequency (MHz)				3557.5	3575	3592.5	
15	QPSK	1	0	23.03	23.11	23.06	23.5
15	QPSK	1	37	23.00	23.04	23.13	
15	QPSK	1	74	22.99	22.97	22.88	
15	QPSK	36	0	22.08	22.16	22.05	22.5
15	QPSK	36	20	22.17	21.96	22.08	
15	QPSK	36	39	22.00	22.09	22.03	
15	QPSK	75	0	22.10	22.06	22.03	22.5
15	16QAM	1	0	22.19	22.04	22.27	
15	16QAM	1	37	22.09	22.05	22.06	
15	16QAM	1	74	21.94	22.06	22.03	21.5
15	16QAM	36	0	21.01	21.06	21.08	
15	16QAM	36	20	21.09	20.98	21.03	
15	16QAM	36	39	20.94	21.18	21.00	21.5
15	16QAM	75	0	20.99	21.10	21.19	
15	64QAM	1	0	20.70	20.90	20.65	
15	64QAM	1	37	20.65	20.79	20.65	21.5
15	64QAM	1	74	20.87	20.81	20.50	
15	64QAM	36	0	19.98	20.03	19.96	
15	64QAM	36	20	20.05	20.10	20.14	20.5
15	64QAM	36	39	19.95	20.05	19.95	
15	64QAM	75	0	20.16	20.11	19.91	
Channel				43140	43340	43540	Tune-up limit (dBm)
Frequency (MHz)				3555	3575	3595	
10	QPSK	1	0	23.00	23.05	23.11	23.5
10	QPSK	1	25	22.95	23.04	23.11	
10	QPSK	1	49	22.83	22.98	22.92	
10	QPSK	25	0	22.08	22.03	22.15	22.5
10	QPSK	25	12	21.98	22.06	22.01	
10	QPSK	25	25	22.07	21.97	22.17	
10	QPSK	50	0	22.00	22.03	22.16	22.5
10	16QAM	1	0	22.15	22.13	22.09	
10	16QAM	1	25	22.09	22.09	22.16	
10	16QAM	1	49	21.94	22.02	22.15	21.5
10	16QAM	25	0	20.94	21.11	21.23	
10	16QAM	25	12	21.13	21.15	21.03	
10	16QAM	25	25	21.08	21.08	21.14	21.5
10	16QAM	50	0	21.16	20.95	21.01	
10	64QAM	1	0	20.72	20.77	20.80	
10	64QAM	1	25	20.72	20.79	20.69	21.5
10	64QAM	1	49	20.85	20.81	20.53	
10	64QAM	25	0	20.06	20.20	20.01	
10	64QAM	25	12	20.08	20.02	20.11	20.5
10	64QAM	25	25	19.95	20.06	19.98	
10	64QAM	50	0	20.16	20.03	19.94	
Channel				43115	43340	43565	Tune-up limit (dBm)
Frequency (MHz)				3552.5	3575	3597.5	
5	QPSK	1	0	22.89	23.04	22.97	23.5
5	QPSK	1	12	22.94	22.95	22.97	
5	QPSK	1	24	22.81	23.02	22.97	
5	QPSK	12	0	22.09	22.15	22.11	22.5
5	QPSK	12	7	22.08	22.08	21.99	
5	QPSK	12	13	22.10	22.01	22.14	
5	QPSK	25	0	22.10	22.10	21.97	22.5
5	16QAM	1	0	22.10	22.06	22.07	
5	16QAM	1	12	21.95	22.15	22.09	
5	16QAM	1	24	21.95	22.13	22.11	21.5
5	16QAM	12	0	20.94	21.12	21.19	
5	16QAM	12	7	21.17	21.16	21.17	
5	16QAM	12	13	21.05	21.17	21.16	21.5
5	16QAM	25	0	21.11	21.06	21.03	
5	64QAM	1	0	20.69	20.75	20.84	
5	64QAM	1	12	20.76	20.80	20.61	20.5
5	64QAM	1	24	20.89	20.71	20.48	
5	64QAM	12	0	20.07	20.07	19.99	
5	64QAM	12	7	20.09	20.08	20.11	20.5
5	64QAM	12	13	20.15	20.13	20.03	
5	64QAM	25	0	20.14	20.01	19.92	



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	19.63	23.31	23.45	19.55	23.5
20	QPSK	1	49	19.53	23.05	23.01	19.40	
20	QPSK	1	99	19.60	23.12	22.99	19.20	
20	QPSK	50	0	18.77	22.25	22.31	18.56	22.5
20	QPSK	50	24	18.62	22.17	22.27	18.46	
20	QPSK	50	50	18.66	22.19	22.04	18.36	
20	QPSK	100	0	18.59	22.27	22.08	18.42	22.5
20	16QAM	1	0	18.64	22.36	22.34	18.74	
20	16QAM	1	49	18.48	22.23	22.20	18.29	
20	16QAM	1	99	18.64	22.17	21.99	18.37	21.5
20	16QAM	50	0	17.81	21.23	21.25	17.54	
20	16QAM	50	24	17.69	21.19	21.26	17.45	
20	16QAM	50	50	17.66	21.27	21.19	17.44	21.5
20	16QAM	100	0	17.72	21.23	21.22	17.56	
20	64QAM	1	0	17.55	21.06	20.83	17.38	
20	64QAM	1	49	17.43	20.82	20.66	17.10	21.5
20	64QAM	1	99	17.37	20.94	20.62	17.10	
20	64QAM	50	0	16.78	20.32	20.08	16.58	
20	64QAM	50	24	16.68	20.25	20.07	16.58	20.5
20	64QAM	50	50	16.70	20.15	19.95	16.40	
20	64QAM	100	0	16.73	20.35	20.02	16.56	
Channel				55315	55820	56160	56665	Tune-up limit (dBm)
Frequency (MHz)				3557.5	3608	3642	3692.5	
15	QPSK	1	0	19.61	23.27	23.39	19.43	23.5
15	QPSK	1	37	19.53	23.16	23.01	19.32	
15	QPSK	1	74	19.48	22.96	22.90	19.20	
15	QPSK	36	0	18.62	22.21	22.25	18.47	22.5
15	QPSK	36	20	18.62	22.24	22.11	18.41	
15	QPSK	36	39	18.69	22.17	22.12	18.34	
15	QPSK	75	0	18.64	22.33	22.07	18.46	22.5
15	16QAM	1	0	18.74	22.38	22.45	18.58	
15	16QAM	1	37	18.58	22.17	22.11	18.33	
15	16QAM	1	74	18.61	22.16	21.95	18.30	21.5
15	16QAM	36	0	17.82	21.24	21.31	17.50	
15	16QAM	36	20	17.79	21.29	21.18	17.50	
15	16QAM	36	39	17.57	21.26	21.02	17.37	21.5
15	16QAM	75	0	17.59	21.21	21.14	17.45	
15	64QAM	1	0	17.47	20.97	20.69	17.47	
15	64QAM	1	37	17.29	20.99	20.80	17.09	21.5
15	64QAM	1	74	17.37	20.94	20.59	17.14	
15	64QAM	36	0	16.73	20.26	20.10	16.49	
15	64QAM	36	20	16.69	20.29	20.04	16.44	20.5
15	64QAM	36	39	16.58	20.26	20.07	16.48	
15	64QAM	75	0	16.71	20.21	20.03	16.57	
Channel				55290	55815	56165	56690	Tune-up limit (dBm)
Frequency (MHz)				3555	3607.5	3642.5	3695	
10	QPSK	1	0	19.65	23.27	23.32	19.44	23.5
10	QPSK	1	25	19.54	23.11	23.03	19.28	
10	QPSK	1	49	19.54	22.97	22.98	19.22	
10	QPSK	25	0	18.68	22.12	22.23	18.50	22.5
10	QPSK	25	12	18.75	22.25	22.19	18.46	
10	QPSK	25	25	18.65	22.10	22.08	18.36	
10	QPSK	50	0	18.61	22.20	22.08	18.52	22.5
10	16QAM	1	0	18.82	22.46	22.28	18.67	
10	16QAM	1	25	18.63	22.28	22.17	18.29	
10	16QAM	1	49	18.57	22.26	21.98	18.26	21.5
10	16QAM	25	0	17.67	21.16	21.19	17.58	
10	16QAM	25	12	17.82	21.18	21.14	17.50	
10	16QAM	25	25	17.64	21.10	21.10	17.34	21.5
10	16QAM	50	0	17.69	21.19	21.25	17.52	
10	64QAM	1	0	17.50	21.14	20.76	17.43	
10	64QAM	1	25	17.40	20.84	20.75	17.13	21.5
10	64QAM	1	49	17.29	20.87	20.72	17.09	
10	64QAM	25	0	16.84	20.35	20.09	16.45	
10	64QAM	25	12	16.62	20.17	20.02	16.50	20.5
10	64QAM	25	25	16.63	20.28	20.07	16.41	
10	64QAM	50	0	16.61	20.32	20.08	16.38	
Channel				55265	55810	56170	56715	Tune-up limit (dBm)
Frequency (MHz)				3552.5	3607	3643	3697.5	
5	QPSK	1	0	19.60	23.20	23.29	19.59	23.5
5	QPSK	1	12	19.54	23.14	23.06	19.26	
5	QPSK	1	24	19.54	23.11	22.92	19.24	
5	QPSK	12	0	18.69	22.23	22.24	18.58	22.5
5	QPSK	12	7	18.62	22.26	22.22	18.45	
5	QPSK	12	13	18.61	22.19	22.01	18.38	
5	QPSK	25	0	18.57	22.34	22.12	18.47	22.5
5	16QAM	1	0	18.72	22.30	22.35	18.60	
5	16QAM	1	12	18.64	22.20	22.08	18.29	
5	16QAM	1	24	18.57	22.25	21.99	18.30	21.5
5	16QAM	12	0	17.80	21.28	21.25	17.48	
5	16QAM	12	7	17.67	21.32	21.13	17.41	
5	16QAM	12	13	17.60	21.23	21.04	17.49	21.5
5	16QAM	25	0	17.73	21.18	21.22	17.49	
5	64QAM	1	0	17.54	21.13	20.81	17.34	
5	64QAM	1	12	17.28	20.86	20.78	17.20	20.5
5	64QAM	1	24	17.36	20.88	20.57	17.07	
5	64QAM	12	0	16.77	20.22	20.14	16.53	
5	64QAM	12	7	16.72	20.28	20.19	16.54	20.5
5	64QAM	12	13	16.67	20.25	19.97	16.43	
5	64QAM	25	0	16.63	20.33	19.95	16.45	



n2							
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				372000	376000	380000	Tune-up limit (dBm)
Frequency (MHz)				1860	1880	1900	Tune-up limit (dBm)
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	24.38	24.41	24.36	25.0
20	PI/2 BPSK	50	28	24.88	24.95	24.87	
20	PI/2 BPSK	50	56	24.76	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	20.36	20.39	20.38	20.5
Channel				371500	376000	380500	Tune-up limit (dBm)
Frequency (MHz)				1857.5	1880	1902.5	Tune-up limit (dBm)
15	PI/2 BPSK	1	1	24.90	24.95	24.88	25.0
Channel				371000	376000	381000	Tune-up limit (dBm)
Frequency (MHz)				1855	1880	1905	Tune-up limit (dBm)
10	PI/2 BPSK	1	1	24.81	24.85	24.84	25.0
Channel				370500	376000	381500	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1880	1907.5	Tune-up limit (dBm)
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				166800	167300	167800	Tune-up limit (dBm)
Frequency (MHz)				834	836.5	839	
20	PI/2 BPSK	1	1	24.68	24.78	24.70	25.0
20	PI/2 BPSK	1	53	24.58	24.56	24.55	
20	PI/2 BPSK	1	104	24.43	24.32	24.36	
20	PI/2 BPSK	50	0	24.43	24.51	24.46	25.0
20	PI/2 BPSK	50	28	24.41	24.32	24.35	
20	PI/2 BPSK	50	56	24.35	24.38	24.37	
20	PI/2 BPSK	100	0	22.58	22.58	22.57	24.5
20	QPSK	1	1	24.70	24.71	24.74	25.0
20	QPSK	1	53	24.66	24.56	24.58	
20	QPSK	1	104	24.46	24.42	24.56	
20	QPSK	50	0	24.25	24.33	24.24	25.0
20	QPSK	50	28	24.48	24.43	24.51	
20	QPSK	50	56	24.26	24.22	24.31	
20	QPSK	100	0	23.84	23.98	23.87	24.0
20	16QAM	1	1	23.55	23.63	23.67	24.0
20	64QAM	1	1	22.47	22.44	22.40	22.5
20	256QAM	1	1	20.42	20.30	20.41	20.5
Channel				166300	167300	168300	Tune-up limit (dBm)
Frequency (MHz)				831.5	836.5	841.5	
15	PI/2 BPSK	1	1	24.62	24.75	24.66	25.0
Channel				165800	167300	168800	Tune-up limit (dBm)
Frequency (MHz)				829	836.5	844	
10	PI/2 BPSK	1	1	24.60	24.77	24.68	25.0
Channel				165300	167300	169300	Tune-up limit (dBm)
Frequency (MHz)				826.5	836.5	846.5	
5	PI/2 BPSK	1	1	24.67	24.76	24.65	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				502000	507000	512000	Tune-up limit (dBm)
Frequency (MHz)				2510	2535	2560	
20	PI/2 BPSK	1	1	24.91	24.96	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	24.92	
20	PI/2 BPSK	50	0	24.52	24.65	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	24.31	24.18	24.5
20	QPSK	1	1	24.90	24.95	24.91	25.0
20	QPSK	1	53	24.88	24.82	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	23.96	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	Tune-up limit (dBm)
Frequency (MHz)				2507.5	2535	2562.5	
15	PI/2 BPSK	1	1	24.86	24.91	24.86	25.0
Channel				501000	507000	513000	Tune-up limit (dBm)
Frequency (MHz)				2505	2535	2565	
10	PI/2 BPSK	1	1	24.82	24.88	24.92	25.0
Channel				500500	507000	513500	Tune-up limit (dBm)
Frequency (MHz)				2502.5	2535	2567.5	
5	PI/2 BPSK	1	1	24.89	24.93	24.84	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				372000	376500	381000	Tune-up limit (dBm)
Frequency (MHz)				1860	1882.5	1905	
20	PI/2 BPSK	1	1	24.93	24.99	24.87	25.0
20	PI/2 BPSK	1	53	24.90	24.88	24.87	
20	PI/2 BPSK	1	104	24.77	24.75	24.81	
20	PI/2 BPSK	50	0	24.68	24.78	24.73	25.0
20	PI/2 BPSK	50	28	24.60	24.71	24.73	
20	PI/2 BPSK	50	56	24.56	24.62	24.62	
20	PI/2 BPSK	100	0	24.41	24.47	24.43	24.5
20	QPSK	1	1	24.93	24.92	24.82	25.0
20	QPSK	1	53	24.82	24.81	24.73	
20	QPSK	1	104	24.87	24.85	24.84	
20	QPSK	50	0	24.10	24.16	24.07	25.0
20	QPSK	50	28	24.78	24.77	24.85	
20	QPSK	50	56	24.13	24.10	24.15	
20	QPSK	100	0	23.80	23.86	23.85	24.0
20	16QAM	1	1	23.95	23.93	23.77	24.0
20	64QAM	1	1	22.32	22.27	22.34	22.5
20	256QAM	1	1	20.34	20.33	20.34	20.5
Channel				371500	376000	381500	Tune-up limit (dBm)
Frequency (MHz)				1857.5	1880	1907.5	
15	PI/2 BPSK	1	1	24.85	24.98	24.80	25.0
Channel				371000	376000	382000	Tune-up limit (dBm)
Frequency (MHz)				1855	1880	1910	
10	PI/2 BPSK	1	1	24.89	24.91	24.86	25.0
Channel				370500	376000	382500	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1880	1912.5	
5	PI/2 BPSK	1	1	24.83	24.95	24.85	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				134600	136100	137600	Tune-up limit (dBm)
Frequency (MHz)				673	680.5	688	Tune-up limit (dBm)
20	PI/2 BPSK	1	1	24.78	24.93	24.83	25.0
20	PI/2 BPSK	1	53	24.68	24.72	24.71	
20	PI/2 BPSK	1	104	24.59	24.65	24.66	
20	PI/2 BPSK	50	0	24.52	24.55	24.61	25.0
20	PI/2 BPSK	50	28	24.44	24.51	24.53	
20	PI/2 BPSK	50	56	24.39	24.37	24.36	
20	PI/2 BPSK	100	0	24.42	24.48	24.37	24.5
20	QPSK	1	1	24.81	24.78	24.80	25.0
20	QPSK	1	53	24.73	24.70	24.76	
20	QPSK	1	104	24.59	24.56	24.67	
20	QPSK	50	0	24.00	24.09	24.04	25.0
20	QPSK	50	28	24.71	24.75	24.76	
20	QPSK	50	56	23.88	23.91	23.93	
20	QPSK	100	0	23.82	23.79	23.87	24.0
20	16QAM	1	1	23.92	23.90	23.87	24.0
20	64QAM	1	1	22.34	22.38	22.32	22.5
20	256QAM	1	1	20.31	20.30	20.31	20.5
Channel				134100	136100	138100	Tune-up limit (dBm)
Frequency (MHz)				670.5	680.5	690.5	Tune-up limit (dBm)
15	PI/2 BPSK	1	1	24.68	24.83	24.82	25.0
Channel				133600	136100	138600	Tune-up limit (dBm)
Frequency (MHz)				668	680.5	693	Tune-up limit (dBm)
10	PI/2 BPSK	1	1	24.73	24.90	24.73	25.0
Channel				133100	136100	139100	Tune-up limit (dBm)
Frequency (MHz)				665.5	680.5	695.5	Tune-up limit (dBm)
5	PI/2 BPSK	1	1	24.74	24.93	24.81	25.0



n12							
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				141300	141500	141700	
Frequency (MHz)				706.5	707.5	708.5	
15	PI/2 BPSK	1	1	24.56	24.64	24.62	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	24.51	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	24.38	24.12	24.5
15	QPSK	1	1	24.63	24.53	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	24.54	24.58	24.52	25.0
Channel				140300	141500	142700	Tune-up limit (dBm)
Frequency (MHz)				701.5	707.5	713.5	
5	PI/2 BPSK	1	1	24.52	24.55	24.56	25.0



n66							
Ant 2							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				346000	349000	352000	25.0
Frequency (MHz)				1730	1745	1760	
40	PI/2 BPSK	1	1	24.94	24.96	24.91	
40	PI/2 BPSK	1	108	24.88	24.89	24.87	25.0
40	PI/2 BPSK	1	214	24.81	24.80	24.78	
40	PI/2 BPSK	108	0	24.60	24.67	24.59	
40	PI/2 BPSK	108	54	24.60	24.59	24.54	25.0
40	PI/2 BPSK	108	108	24.48	24.65	24.62	
40	PI/2 BPSK	216	0	24.38	24.39	24.33	
40	QPSK	1	1	24.85	24.87	24.90	25.0
40	QPSK	1	108	24.40	24.35	24.38	
40	QPSK	1	214	24.41	24.43	24.37	
40	QPSK	108	0	24.55	24.53	24.53	25.0
40	QPSK	108	54	24.68	24.62	24.66	
40	QPSK	108	108	24.53	24.55	24.60	
40	QPSK	216	0	23.50	23.48	23.48	24.0
40	16QAM	1	1	23.86	23.86	23.87	24.0
40	64QAM	1	1	22.35	22.36	22.30	22.5
40	256QAM	1	1	20.30	20.32	20.32	20.5
Channel				344000	349000	354000	Tune-up limit (dBm)
Frequency (MHz)				1720	1745	1770	
20	PI/2 BPSK	1	1	24.91	24.92	24.88	25.0
Channel				343500	349000	0	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1745	1772.5	
15	PI/2 BPSK	1	1	24.90	24.86	24.84	25.0
Channel				343000	349000	355000	Tune-up limit (dBm)
Frequency (MHz)				1715	1745	1775	
10	PI/2 BPSK	1	1	24.85	24.93	24.86	25.0
Channel				342500	349000	355500	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1745	1777.5	
5	PI/2 BPSK	1	1	24.84	24.86	24.88	25.0



n2							
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				372000	376000	380000	Tune-up limit (dBm)
Frequency (MHz)				1860	1880	1900	Tune-up limit (dBm)
20	PI/2 BPSK	1	1	24.89	24.97	24.88	25.0
20	PI/2 BPSK	1	53	24.89	24.81	24.91	
20	PI/2 BPSK	1	104	24.70	24.74	24.76	
20	PI/2 BPSK	50	0	24.66	24.69	24.69	25.0
20	PI/2 BPSK	50	28	24.89	24.87	24.93	
20	PI/2 BPSK	50	56	24.61	24.62	24.69	
20	PI/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	24.88	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	23.93	23.96	23.94	24.0
20	64QAM	1	1	22.37	22.33	22.35	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	Tune-up limit (dBm)
15	PI/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	Tune-up limit (dBm)
10	PI/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	Tune-up limit (dBm)
5	PI/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				166800	167300	167800	Tune-up limit (dBm)
Frequency (MHz)				834	836.5	839	Tune-up limit (dBm)
20	PI/2 BPSK	1	1	24.80	24.92	24.73	25.0
20	PI/2 BPSK	1	53	24.46	24.46	24.45	
20	PI/2 BPSK	1	104	24.22	24.13	24.16	
20	PI/2 BPSK	50	0	24.73	24.76	24.52	25.0
20	PI/2 BPSK	50	28	24.65	24.65	24.41	
20	PI/2 BPSK	50	56	24.53	24.51	24.07	
20	PI/2 BPSK	100	0	22.59	22.60	22.59	24.5
20	QPSK	1	1	24.62	24.55	24.52	25.0
20	QPSK	1	53	24.41	24.58	24.50	
20	QPSK	1	104	24.26	24.26	24.27	
20	QPSK	50	0	24.47	24.51	24.44	25.0
20	QPSK	50	28	24.31	24.38	24.46	
20	QPSK	50	56	24.07	24.04	24.09	
20	QPSK	100	0	23.95	23.78	23.84	24.0
20	16QAM	1	1	23.86	23.79	23.77	24.0
20	64QAM	1	1	22.26	22.32	22.33	22.5
20	256QAM	1	1	20.33	20.36	20.28	20.5
Channel				166300	167300	168300	Tune-up limit (dBm)
Frequency (MHz)				831.5	836.5	841.5	Tune-up limit (dBm)
15	PI/2 BPSK	1	1	24.80	24.82	24.69	25.0
Channel				165800	167300	168800	Tune-up limit (dBm)
Frequency (MHz)				829	836.5	844	Tune-up limit (dBm)
10	PI/2 BPSK	1	1	24.71	24.88	24.64	25.0
Channel				165300	167300	169300	Tune-up limit (dBm)
Frequency (MHz)				826.5	836.5	846.5	Tune-up limit (dBm)
5	PI/2 BPSK	1	1	24.73	24.85	24.63	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				502000	507000	512000	Tune-up limit (dBm)
Frequency (MHz)				2510	2535	2560	Tune-up limit (dBm)
20	PI/2 BPSK	1	1	24.67	24.66	24.76	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	24.56	24.61	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	24.40	24.43	24.5
20	QPSK	1	1	24.57	24.59	24.64	25.0
20	QPSK	1	53	24.61	24.56	24.53	
20	QPSK	1	104	24.62	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	23.86	23.85	24.0
20	64QAM	1	1	22.46	22.46	22.41	22.5
20	256QAM	1	1	20.43	20.46	20.41	20.5
Channel				501500	507000	512500	Tune-up limit (dBm)
Frequency (MHz)				2507.5	2535	2562.5	Tune-up limit (dBm)
15	PI/2 BPSK	1	1	24.67	24.60	24.66	25.0
Channel				501000	507000	513000	Tune-up limit (dBm)
Frequency (MHz)				2505	2535	2565	Tune-up limit (dBm)
10	PI/2 BPSK	1	1	24.59	24.62	24.74	25.0
Channel				500500	507000	513500	Tune-up limit (dBm)
Frequency (MHz)				2502.5	2535	2567.5	Tune-up limit (dBm)
5	PI/2 BPSK	1	1	24.59	24.60	24.70	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				372000	376000	381000	Tune-up limit (dBm)
Frequency (MHz)				1860	1880	1905	(dBrn)
20	PI/2 BPSK	1	1	24.91	24.87	24.86	25.0
20	PI/2 BPSK	1	53	24.67	24.76	24.68	
20	PI/2 BPSK	1	104	24.69	24.74	24.68	
20	PI/2 BPSK	50	0	24.65	24.63	24.62	25.0
20	PI/2 BPSK	50	28	24.50	24.54	24.56	
20	PI/2 BPSK	50	56	24.44	24.54	24.56	
20	PI/2 BPSK	100	0	24.38	24.37	24.36	24.5
20	QPSK	1	1	24.18	24.23	24.18	25.0
20	QPSK	1	53	24.74	24.68	24.70	
20	QPSK	1	104	24.59	24.58	24.70	
20	QPSK	50	0	24.59	24.48	24.45	25.0
20	QPSK	50	28	24.61	24.59	24.60	
20	QPSK	50	56	24.54	24.54	24.55	
20	QPSK	100	0	23.81	23.92	23.86	24.0
20	16QAM	1	1	23.76	23.72	23.78	24.0
20	64QAM	1	1	22.27	22.36	22.35	22.5
20	256QAM	1	1	20.42	20.42	20.39	20.5
Channel				371500	376000	381500	Tune-up limit (dBm)
Frequency (MHz)				1857.5	1880	1907.5	(dBrn)
15	PI/2 BPSK	1	1	24.85	24.83	24.76	25.0
Channel				371000	376000	382000	Tune-up limit (dBm)
Frequency (MHz)				1855	1880	1910	(dBrn)
10	PI/2 BPSK	1	1	24.82	24.84	24.81	25.0
Channel				370500	376000	382500	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1880	1912.5	(dBrn)
5	PI/2 BPSK	1	1	24.90	24.85	24.79	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				134600	136100	137600	Tune-up limit (dBm)
Frequency (MHz)				673	680.5	688	Tune-up limit (dBm)
20	PI/2 BPSK	1	1	24.71	24.86	24.83	25.0
20	PI/2 BPSK	1	53	24.58	24.65	24.72	
20	PI/2 BPSK	1	104	24.59	24.64	24.57	
20	PI/2 BPSK	50	0	24.47	24.63	24.55	25.0
20	PI/2 BPSK	50	28	24.56	24.59	24.40	
20	PI/2 BPSK	50	56	24.37	24.42	24.43	
20	PI/2 BPSK	100	0	22.67	22.71	22.54	24.5
20	QPSK	1	1	24.82	24.85	24.82	25.0
20	QPSK	1	53	24.82	24.76	24.77	
20	QPSK	1	104	24.67	24.73	24.73	
20	QPSK	50	0	24.06	24.02	24.17	25.0
20	QPSK	50	28	24.72	24.75	24.74	
20	QPSK	50	56	23.90	24.02	23.98	
20	QPSK	100	0	23.77	23.67	23.78	24.0
20	16QAM	1	1	23.79	23.94	23.89	24.0
20	64QAM	1	1	22.37	22.38	22.33	22.5
20	256QAM	1	1	20.31	20.29	20.29	20.5
Channel				134100	136100	138100	Tune-up limit (dBm)
Frequency (MHz)				670.5	680.5	690.5	Tune-up limit (dBm)
15	PI/2 BPSK	1	1	24.83	24.81	24.79	25.0
Channel				133600	136100	138600	Tune-up limit (dBm)
Frequency (MHz)				668	680.5	693	Tune-up limit (dBm)
10	PI/2 BPSK	1	1	24.79	24.80	24.81	25.0
Channel				133100	136100	139100	Tune-up limit (dBm)
Frequency (MHz)				665.5	680.5	695.5	Tune-up limit (dBm)
5	PI/2 BPSK	1	1	24.74	24.78	24.79	25.0



n12							
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				141800	141500	141200	25.0
Frequency (MHz)				709	708	706	
15	PI/2 BPSK	1	1	24.43	24.45	24.41	25.0
15	PI/2 BPSK	1	40	24.20	24.22	24.28	
15	PI/2 BPSK	1	77	24.13	24.10	24.06	
15	PI/2 BPSK	36	0	24.22	24.27	24.15	25.0
15	PI/2 BPSK	36	22	24.21	24.13	24.14	
15	PI/2 BPSK	36	43	24.08	24.10	24.08	
15	PI/2 BPSK	75	0	24.15	24.16	24.07	24.5
15	QPSK	1	1	24.28	24.24	24.23	25.0
15	QPSK	1	40	24.28	24.32	24.29	
15	QPSK	1	77	24.12	23.99	24.04	
15	QPSK	36	0	24.05	24.00	24.05	25.0
15	QPSK	36	22	24.06	24.05	24.19	
15	QPSK	36	43	24.01	23.90	24.04	
15	QPSK	75	0	23.87	23.85	23.86	24.0
15	16QAM	1	1	23.90	23.83	23.86	24.0
15	64QAM	1	1	22.36	22.38	22.37	22.5
15	256QAM	1	1	20.33	20.35	20.41	20.5
Channel				140800	141500	142200	Tune-up limit (dBm)
Frequency (MHz)				704	707.5	711	
10	PI/2 BPSK	1	1	24.35	24.38	24.36	25.0
Channel				140300	141500	142700	Tune-up limit (dBm)
Frequency (MHz)				701.5	707.5	713.5	
5	PI/2 BPSK	1	1	24.39	24.35	24.35	25.0



n66							
Ant 0							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				346000	349000	352000	25.0
Frequency (MHz)				1730	1745	1760	
40	PI/2 BPSK	1	1	24.73	24.78	24.79	
40	PI/2 BPSK	1	108	23.70	23.73	23.77	25.0
40	PI/2 BPSK	1	214	23.70	23.71	23.70	
40	PI/2 BPSK	108	0	24.72	24.76	24.73	
40	PI/2 BPSK	108	54	23.64	23.66	23.64	25.0
40	PI/2 BPSK	108	108	23.81	23.79	23.80	
40	PI/2 BPSK	216	0	24.34	24.39	24.37	
40	QPSK	1	1	23.69	23.78	23.79	25.0
40	QPSK	1	108	23.69	23.78	23.75	
40	QPSK	1	214	23.70	23.62	23.70	
40	QPSK	108	0	23.66	23.75	23.71	25.0
40	QPSK	108	54	24.50	24.62	24.58	
40	QPSK	108	108	24.74	24.69	24.75	
40	QPSK	216	0	23.21	23.20	23.17	24.0
40	16QAM	1	1	22.69	22.64	22.62	24.0
40	64QAM	1	1	22.36	22.35	22.30	22.5
40	256QAM	1	1	20.39	20.41	20.38	20.5
Channel				344000	349000	354000	Tune-up limit (dBm)
Frequency (MHz)				1720	1745	1770	
20	PI/2 BPSK	1	1	24.72	24.71	24.71	25.0
Channel				343500	349000	354500	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1745	1772.5	
15	PI/2 BPSK	1	1	24.65	24.78	24.73	25.0
Channel				343000	349000	355000	Tune-up limit (dBm)
Frequency (MHz)				1715	1745	1775	
10	PI/2 BPSK	1	1	24.72	24.78	24.75	25.0
Channel				342500	349000	355500	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1745	1777.5	
5	PI/2 BPSK	1	1	24.66	24.74	24.76	25.0



n2							
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				372000	376000	380000	Tune-up limit (dBm)
Frequency (MHz)				1860	1880	1900	Tune-up limit (dBm)
20	PI/2 BPSK	1	1	23.04	22.97	22.96	24.9
20	PI/2 BPSK	1	53	23.01	22.94	22.95	
20	PI/2 BPSK	1	104	22.97	22.94	22.96	
20	PI/2 BPSK	50	0	22.99	22.95	22.92	24.9
20	PI/2 BPSK	50	28	22.97	22.95	22.92	
20	PI/2 BPSK	50	56	22.93	22.90	22.91	
20	PI/2 BPSK	100	0	22.92	22.91	22.90	24.5
20	QPSK	1	1	22.96	22.94	22.92	24.9
20	QPSK	1	53	22.95	22.92	22.94	
20	QPSK	1	104	22.94	22.93	22.93	
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	22.76	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	Tune-up limit (dBm)
Frequency (MHz)				1857.5	1880	1902.5	Tune-up limit (dBm)
15	PI/2 BPSK	1	1	22.96	22.95	22.92	24.9
Channel				371000	376000	381000	Tune-up limit (dBm)
Frequency (MHz)				1855	1880	1905	Tune-up limit (dBm)
10	PI/2 BPSK	1	1	22.97	22.90	22.91	24.9
Channel				370500	376000	381500	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1880	1907.5	Tune-up limit (dBm)
5	PI/2 BPSK	1	1	22.93	22.90	22.92	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				502000	507000	512000	Tune-up limit (dBm)
Frequency (MHz)				2510	2535	2560	Tune-up limit (dBm)
20	PI/2 BPSK	1	1	20.80	20.77	20.75	22.6
20	PI/2 BPSK	1	53	20.74	20.71	20.73	
20	PI/2 BPSK	1	104	20.75	20.71	20.75	
20	PI/2 BPSK	50	0	20.76	20.72	20.72	22.6
20	PI/2 BPSK	50	28	20.72	20.74	20.73	
20	PI/2 BPSK	50	56	20.70	20.72	20.70	
20	PI/2 BPSK	100	0	20.69	20.65	20.68	22.2
20	QPSK	1	1	20.69	20.66	20.69	22.6
20	QPSK	1	53	20.68	20.63	20.63	
20	QPSK	1	104	20.71	20.62	20.61	
20	QPSK	50	0	20.71	20.71	20.69	22.6
20	QPSK	50	28	20.74	20.67	20.65	
20	QPSK	50	56	20.67	20.70	20.68	
20	QPSK	100	0	20.74	20.70	20.67	22.6
20	16QAM	1	1	20.63	20.63	20.65	22.6
20	64QAM	1	1	20.70	20.62	20.64	22.5
20	256QAM	1	1	19.29	19.06	18.99	20.5
Channel				501500	507000	512500	Tune-up limit (dBm)
Frequency (MHz)				2507.5	2535	2562.5	Tune-up limit (dBm)
15	PI/2 BPSK	1	1	20.80	20.72	20.78	22.6
Channel				501000	507000	513000	Tune-up limit (dBm)
Frequency (MHz)				2505	2535	2565	Tune-up limit (dBm)
10	PI/2 BPSK	1	1	20.73	20.68	20.68	22.6
Channel				500500	507000	513500	Tune-up limit (dBm)
Frequency (MHz)				2502.5	2535	2567.5	Tune-up limit (dBm)
5	PI/2 BPSK	1	1	20.78	20.66	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				372000	376000	381000	Tune-up limit (dBm)
Frequency (MHz)				1860	1880	1905	Tune-up limit (dBm)
20	PI/2 BPSK	1	1	23.11	23.01	22.94	24.9
20	PI/2 BPSK	1	53	23.05	22.97	22.92	
20	PI/2 BPSK	1	104	22.96	22.92	22.91	
20	PI/2 BPSK	50	0	22.95	22.95	22.93	24.9
20	PI/2 BPSK	50	28	22.90	22.95	22.92	
20	PI/2 BPSK	50	56	22.92	22.92	22.92	
20	PI/2 BPSK	100	0	22.94	22.93	22.93	24.5
20	QPSK	1	1	22.94	22.92	22.91	24.9
20	QPSK	1	53	22.93	22.91	22.92	
20	QPSK	1	104	22.92	22.91	22.90	
20	QPSK	50	0	22.87	22.65	22.52	24.0
20	QPSK	50	28	22.70	22.77	22.48	
20	QPSK	50	56	22.79	22.66	22.49	
20	QPSK	100	0	22.67	22.58	22.52	24.0
20	16QAM	1	1	22.84	22.73	22.73	24.0
20	64QAM	1	1	21.24	21.21	21.08	22.5
20	256QAM	1	1	19.28	19.15	19.08	20.5
Channel				371500	376000	381500	Tune-up limit (dBm)
Frequency (MHz)				1857.5	1880	1907.5	Tune-up limit (dBm)
15	PI/2 BPSK	1	1	23.07	22.92	22.91	24.9
Channel				371000	376000	382000	Tune-up limit (dBm)
Frequency (MHz)				1855	1880	1910	Tune-up limit (dBm)
10	PI/2 BPSK	1	1	23.01	22.90	22.91	24.9
Channel				370500	376000	382500	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1880	1912.5	Tune-up limit (dBm)
5	PI/2 BPSK	1	1	23.02	22.92	22.91	24.9



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				502000	507000	512000	Tune-up limit (dBm)
Frequency (MHz)				2510	2535	2560	Tune-up limit (dBm)
20	PI/2 BPSK	1	1	23.84	23.76	23.71	25.0
20	PI/2 BPSK	1	53	23.83	23.71	23.68	
20	PI/2 BPSK	1	104	23.82	23.72	23.64	
20	PI/2 BPSK	50	0	23.78	23.74	23.70	25.0
20	PI/2 BPSK	50	28	23.78	23.69	23.72	
20	PI/2 BPSK	50	56	23.77	23.68	23.67	
20	PI/2 BPSK	100	0	23.73	23.67	23.61	24.5
20	QPSK	1	1	23.77	23.82	23.61	25.0
20	QPSK	1	53	23.77	23.74	23.65	
20	QPSK	1	104	23.73	23.80	23.64	
20	QPSK	50	0	23.77	23.74	23.65	25.0
20	QPSK	50	28	23.76	23.78	23.70	
20	QPSK	50	56	23.81	23.73	23.70	
20	QPSK	100	0	22.79	22.75	22.56	24.0
20	16QAM	1	1	22.85	22.74	22.74	24.0
20	64QAM	1	1	21.36	21.29	21.20	22.5
20	256QAM	1	1	19.32	19.22	19.26	20.5
Channel				501500	507000	512500	Tune-up limit (dBm)
Frequency (MHz)				2507.5	2535	2562.5	Tune-up limit (dBm)
15	PI/2 BPSK	1	1	23.78	23.70	23.65	25.0
Channel				501000	507000	513000	Tune-up limit (dBm)
Frequency (MHz)				2505	2535	2565	Tune-up limit (dBm)
10	PI/2 BPSK	1	1	23.81	23.66	23.69	25.0
Channel				500500	507000	513500	Tune-up limit (dBm)
Frequency (MHz)				2502.5	2535	2567.5	Tune-up limit (dBm)
5	PI/2 BPSK	1	1	23.74	23.74	23.69	25.0



n2							
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				372000	376000	380000	Tune-up limit (dBm)
Frequency (MHz)				1860	1880	1900	Tune-up limit (dBm)
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	22.76	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	Tune-up limit (dBm)
Frequency (MHz)				1857.5	1880	1902.5	Tune-up limit (dBm)
15	PI/2 BPSK	1	1	22.86	22.76	22.76	24.1
Channel				371000	376000	381000	Tune-up limit (dBm)
Frequency (MHz)				1855	1880	1905	Tune-up limit (dBm)
10	PI/2 BPSK	1	1	22.67	22.59	22.71	24.1
Channel				370500	376000	381500	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1880	1907.5	Tune-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.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				502000	507000	512000	Tune-up limit (dBm)
Frequency (MHz)				2510	2535	2560	
20	PI/2 BPSK	1	1	18.17	17.94	17.69	19.2
20	PI/2 BPSK	1	53	18.09	17.91	17.69	
20	PI/2 BPSK	1	104	18.05	17.86	17.61	
20	PI/2 BPSK	50	0	17.98	17.83	17.59	19.2
20	PI/2 BPSK	50	28	17.81	17.74	17.49	
20	PI/2 BPSK	50	56	17.69	17.67	17.56	
20	PI/2 BPSK	100	0	17.85	17.69	17.57	19.2
20	QPSK	1	1	18.14	17.75	17.73	19.2
20	QPSK	1	53	18.06	17.87	17.64	
20	QPSK	1	104	18.14	17.81	17.52	
20	QPSK	50	0	17.81	17.65	17.54	19.2
20	QPSK	50	28	17.75	17.64	17.53	
20	QPSK	50	56	17.72	17.69	17.50	
20	QPSK	100	0	17.72	17.67	17.63	19.2
20	16QAM	1	1	17.73	17.63	17.45	19.2
20	64QAM	1	1	17.47	17.64	17.60	19.2
20	256QAM	1	1	17.28	17.06	17.43	19.2
Channel				501500	507000	512500	Tune-up limit (dBm)
Frequency (MHz)				2507.5	2535	2562.5	
15	PI/2 BPSK	1	1	18.09	17.86	17.62	19.2
Channel				501000	507000	513000	Tune-up limit (dBm)
Frequency (MHz)				2505	2535	2565	
10	PI/2 BPSK	1	1	18.08	17.87	17.65	19.2
Channel				500500	507000	513500	Tune-up limit (dBm)
Frequency (MHz)				2502.5	2535	2567.5	
5	PI/2 BPSK	1	1	18.15	17.85	17.65	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				372000	376000	381000	Tune-up limit (dBm)
Frequency (MHz)				1860	1880	1905	Tune-up limit (dBm)
20	PI/2 BPSK	1	1	22.94	22.91	22.74	24.1
20	PI/2 BPSK	1	53	22.89	22.87	22.77	
20	PI/2 BPSK	1	104	22.90	22.82	22.73	
20	PI/2 BPSK	50	0	22.85	22.80	22.58	24.1
20	PI/2 BPSK	50	28	22.80	22.79	22.57	
20	PI/2 BPSK	50	56	22.78	22.72	22.57	
20	PI/2 BPSK	100	0	22.76	22.69	22.47	24.1
20	QPSK	1	1	22.84	22.85	22.71	24.0
20	QPSK	1	53	22.93	22.81	22.67	
20	QPSK	1	104	22.86	22.76	22.65	
20	QPSK	50	0	22.87	22.65	22.52	24.0
20	QPSK	50	28	22.70	22.77	22.48	
20	QPSK	50	56	22.79	22.66	22.49	
20	QPSK	100	0	22.67	22.58	22.52	24.0
20	16QAM	1	1	22.84	22.73	22.73	24.0
20	64QAM	1	1	21.24	21.21	21.08	22.5
20	256QAM	1	1	19.28	19.15	19.08	20.5
Channel				371500	376000	381500	Tune-up limit (dBm)
Frequency (MHz)				1857.5	1880	1907.5	Tune-up limit (dBm)
15	PI/2 BPSK	1	1	22.87	22.89	22.71	24.1
Channel				371000	376000	382000	Tune-up limit (dBm)
Frequency (MHz)				1855	1880	1910	Tune-up limit (dBm)
10	PI/2 BPSK	1	1	22.87	22.90	22.71	24.1
Channel				370500	376000	382500	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1880	1912.5	Tune-up limit (dBm)
5	PI/2 BPSK	1	1	22.87	22.81	22.66	24.1



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				502000	507000	512000	Tune-up limit (dBm)
Frequency (MHz)				2510	2535	2560	Tune-up limit (dBm)
20	PI/2 BPSK	1	1	23.84	23.76	23.71	24.8
20	PI/2 BPSK	1	53	23.83	23.71	23.68	
20	PI/2 BPSK	1	104	23.82	23.72	23.64	
20	PI/2 BPSK	50	0	23.78	23.74	23.70	24.8
20	PI/2 BPSK	50	28	23.78	23.69	23.72	
20	PI/2 BPSK	50	56	23.77	23.68	23.67	
20	PI/2 BPSK	100	0	23.73	23.67	23.61	24.5
20	QPSK	1	1	23.77	23.82	23.61	24.8
20	QPSK	1	53	23.77	23.74	23.65	
20	QPSK	1	104	23.73	23.80	23.64	
20	QPSK	50	0	23.77	23.74	23.65	24.8
20	QPSK	50	28	23.76	23.78	23.70	
20	QPSK	50	56	23.81	23.73	23.70	
20	QPSK	100	0	22.79	22.75	22.56	24.0
20	16QAM	1	1	22.85	22.74	22.74	24.0
20	64QAM	1	1	21.36	21.29	21.20	22.5
20	256QAM	1	1	19.32	19.22	19.26	20.5
Channel				501500	507000	512500	Tune-up limit (dBm)
Frequency (MHz)				2507.5	2535	2562.5	Tune-up limit (dBm)
15	PI/2 BPSK	1	1	23.78	23.70	23.65	24.8
Channel				501000	507000	513000	Tune-up limit (dBm)
Frequency (MHz)				2505	2535	2565	Tune-up limit (dBm)
10	PI/2 BPSK	1	1	23.81	23.66	23.69	24.8
Channel				500500	507000	513500	Tune-up limit (dBm)
Frequency (MHz)				2502.5	2535	2567.5	Tune-up limit (dBm)
5	PI/2 BPSK	1	1	23.74	23.74	23.69	24.8



n2							
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				372000	376000	380000	Tune-up limit (dBm)
Frequency (MHz)				1860	1880	1900	Tune-up limit (dBm)
20	PI/2 BPSK	1	1	23.04	22.97	22.96	24.1
20	PI/2 BPSK	1	53	23.01	22.94	22.95	
20	PI/2 BPSK	1	104	22.97	22.94	22.96	
20	PI/2 BPSK	50	0	22.99	22.95	22.92	24.1
20	PI/2 BPSK	50	28	22.97	22.95	22.92	
20	PI/2 BPSK	50	56	22.93	22.90	22.91	
20	PI/2 BPSK	100	0	22.92	22.91	22.90	24.1
20	QPSK	1	1	22.96	22.94	22.92	24.1
20	QPSK	1	53	22.95	22.92	22.94	
20	QPSK	1	104	22.94	22.93	22.93	
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	22.76	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	Tune-up limit (dBm)
Frequency (MHz)				1857.5	1880	1902.5	Tune-up limit (dBm)
15	PI/2 BPSK	1	1	22.96	22.95	22.92	24.1
Channel				371000	376000	381000	Tune-up limit (dBm)
Frequency (MHz)				1855	1880	1905	Tune-up limit (dBm)
10	PI/2 BPSK	1	1	22.97	22.90	22.91	24.1
Channel				370500	376000	381500	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1880	1907.5	Tune-up limit (dBm)
5	PI/2 BPSK	1	1	22.93	22.90	22.92	24.1



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				502000	507000	512000	Tune-up limit (dBm)
Frequency (MHz)				2510	2535	2560	Tune-up limit (dBm)
20	PI/2 BPSK	1	1	20.80	20.77	20.75	21.8
20	PI/2 BPSK	1	53	20.74	20.71	20.73	
20	PI/2 BPSK	1	104	20.75	20.71	20.75	
20	PI/2 BPSK	50	0	20.76	20.72	20.72	21.8
20	PI/2 BPSK	50	28	20.72	20.74	20.73	
20	PI/2 BPSK	50	56	20.70	20.72	20.70	
20	PI/2 BPSK	100	0	20.69	20.65	20.68	21.8
20	QPSK	1	1	20.69	20.66	20.69	21.8
20	QPSK	1	53	20.68	20.63	20.63	
20	QPSK	1	104	20.71	20.62	20.61	
20	QPSK	50	0	20.71	20.71	20.69	21.8
20	QPSK	50	28	20.74	20.67	20.65	
20	QPSK	50	56	20.67	20.70	20.68	
20	QPSK	100	0	20.74	20.70	20.67	21.8
20	16QAM	1	1	20.63	20.63	20.65	21.8
20	64QAM	1	1	20.70	20.62	20.64	21.8
20	256QAM	1	1	19.29	19.06	18.99	20.5
Channel				501500	507000	512500	Tune-up limit (dBm)
Frequency (MHz)				2507.5	2535	2562.5	Tune-up limit (dBm)
15	PI/2 BPSK	1	1	20.80	20.72	20.78	21.8
Channel				501000	507000	513000	Tune-up limit (dBm)
Frequency (MHz)				2505	2535	2565	Tune-up limit (dBm)
10	PI/2 BPSK	1	1	20.73	20.68	20.68	21.8
Channel				500500	507000	513500	Tune-up limit (dBm)
Frequency (MHz)				2502.5	2535	2567.5	Tune-up limit (dBm)
5	PI/2 BPSK	1	1	20.78	20.66	20.61	21.8



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				372000	376000	381000	Tune-up limit (dBm)
Frequency (MHz)				1860	1880	1905	Tune-up limit (dBm)
20	PI/2 BPSK	1	1	23.11	23.01	22.94	24.1
20	PI/2 BPSK	1	53	23.05	22.97	22.92	
20	PI/2 BPSK	1	104	22.96	22.92	22.91	
20	PI/2 BPSK	50	0	22.95	22.95	22.93	24.1
20	PI/2 BPSK	50	28	22.90	22.95	22.92	
20	PI/2 BPSK	50	56	22.92	22.92	22.92	
20	PI/2 BPSK	100	0	22.94	22.93	22.93	24.1
20	QPSK	1	1	22.94	22.92	22.91	24.0
20	QPSK	1	53	22.93	22.91	22.92	
20	QPSK	1	104	22.92	22.91	22.90	
20	QPSK	50	0	22.87	22.65	22.52	24.0
20	QPSK	50	28	22.70	22.77	22.48	
20	QPSK	50	56	22.79	22.66	22.49	
20	QPSK	100	0	22.67	22.58	22.52	24.0
20	16QAM	1	1	22.84	22.73	22.73	24.0
20	64QAM	1	1	21.24	21.21	21.08	22.5
20	256QAM	1	1	19.28	19.15	19.08	20.5
Channel				371500	376000	381500	Tune-up limit (dBm)
Frequency (MHz)				1857.5	1880	1907.5	Tune-up limit (dBm)
15	PI/2 BPSK	1	1	23.07	22.92	22.91	24.1
Channel				371000	376000	382000	Tune-up limit (dBm)
Frequency (MHz)				1855	1880	1910	Tune-up limit (dBm)
10	PI/2 BPSK	1	1	23.01	22.90	22.91	24.1
Channel				370500	376000	382500	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1880	1912.5	Tune-up limit (dBm)
5	PI/2 BPSK	1	1	23.02	22.92	22.91	24.1



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				502000	507000	512000	Tune-up limit (dBm)
Frequency (MHz)				2510	2535	2560	Tune-up limit (dBm)
20	PI/2 BPSK	1	1	23.84	23.76	23.71	24.8
20	PI/2 BPSK	1	53	23.83	23.71	23.68	
20	PI/2 BPSK	1	104	23.82	23.72	23.64	
20	PI/2 BPSK	50	0	23.78	23.74	23.72	24.8
20	PI/2 BPSK	50	28	23.78	23.69	23.70	
20	PI/2 BPSK	50	56	23.77	23.68	23.67	
20	PI/2 BPSK	100	0	23.73	23.67	23.61	24.5
20	QPSK	1	1	23.77	23.82	23.61	24.8
20	QPSK	1	53	23.77	23.74	23.65	
20	QPSK	1	104	23.73	23.80	23.64	
20	QPSK	50	0	23.77	23.74	23.65	24.8
20	QPSK	50	28	23.76	23.78	23.70	
20	QPSK	50	56	23.81	23.73	23.70	
20	QPSK	100	0	22.79	22.75	22.56	24.0
20	16QAM	1	1	22.85	22.74	22.74	24.0
20	64QAM	1	1	21.36	21.29	21.20	22.5
20	256QAM	1	1	19.32	19.22	19.26	20.5
Channel				501500	507000	512500	Tune-up limit (dBm)
Frequency (MHz)				2507.5	2535	2562.5	Tune-up limit (dBm)
15	PI/2 BPSK	1	1	23.78	23.70	23.65	24.8
Channel				501000	507000	513000	Tune-up limit (dBm)
Frequency (MHz)				2505	2535	2565	Tune-up limit (dBm)
10	PI/2 BPSK	1	1	23.81	23.66	23.69	24.8
Channel				500500	507000	513500	Tune-up limit (dBm)
Frequency (MHz)				2502.5	2535	2567.5	Tune-up limit (dBm)
5	PI/2 BPSK	1	1	23.74	23.74	23.69	24.8



n41							
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				509202	518598	528000	
Frequency (MHz)				2546.01	2592.99	2640	
100	PI/2 BPSK	1	1	24.49	24.47	24.32	25.0
100	PI/2 BPSK	1	137	24.46	24.36	24.23	
100	PI/2 BPSK	1	271	24.47	24.27	24.32	
100	PI/2 BPSK	135	0	24.45	24.41	24.29	25.0
100	PI/2 BPSK	135	69	24.44	24.38	24.21	
100	PI/2 BPSK	135	138	24.38	24.41	24.24	
100	PI/2 BPSK	270	0	24.36	24.34	24.29	24.5
100	QPSK	1	1	24.42	24.34	24.19	25.0
100	QPSK	1	137	24.46	24.33	24.25	
100	QPSK	1	271	24.43	24.34	24.25	
100	QPSK	135	0	24.45	24.39	24.27	25.0
100	QPSK	135	69	24.48	24.29	24.25	
100	QPSK	135	138	24.49	24.28	24.26	
100	QPSK	270	0	23.53	23.42	23.35	24.0
100	16QAM	1	1	23.46	23.44	23.35	24.0
100	64QAM	1	1	21.43	21.32	21.24	22.5
100	256QAM	1	1	20.35	20.31	20.17	20.5
Channel				508200	518598	528996	Tune-up limit (dBm)
Frequency (MHz)				2541	2592.99	2644.98	
90	PI/2 BPSK	1	1	24.46	24.42	24.22	25.0
Channel				507204	518598	529998	Tune-up limit (dBm)
Frequency (MHz)				2536.02	2592.99	2649.99	
80	PI/2 BPSK	1	1	24.46	24.47	24.26	25.0
Channel				505200	518598	531996	Tune-up limit (dBm)
Frequency (MHz)				2526	2592.99	2659.98	
60	PI/2 BPSK	1	1	24.41	24.41	24.25	25.0
Channel				504204	518598	532998	Tune-up limit (dBm)
Frequency (MHz)				2521.02	2592.99	2664.99	
50	PI/2 BPSK	1	1	24.45	24.43	24.28	25.0
Channel				503202	518598	534000	Tune-up limit (dBm)
Frequency (MHz)				2516.01	2592.99	2670	
40	PI/2 BPSK	1	1	24.48	24.41	24.29	25.0
Channel				501204	518598	535998	Tune-up limit (dBm)
Frequency (MHz)				2506.02	2592.99	2679.99	
20	PI/2 BPSK	1	1	24.42	24.43	24.24	25.0
Channel				500700	518598	536496	Tune-up limit (dBm)
Frequency (MHz)				2503.5	2592.99	2682.48	
15	PI/2 BPSK	1	1	24.39	24.42	24.23	25.0
Channel				500202	518598	537000	Tune-up limit (dBm)
Frequency (MHz)				2501.01	2592.99	2685	
10	PI/2 BPSK	1	1	24.46	24.46	24.32	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				509202	518598	528000	27.5
Frequency (MHz)				2546.01	2592.99	2640	
100	PI/2 BPSK	1	1	27.07	27.28	26.17	
100	PI/2 BPSK	1	137	27.03	27.16	26.21	27.5
100	PI/2 BPSK	1	271	27.12	27.08	26.09	
100	PI/2 BPSK	135	0	26.99	27.09	26.16	
100	PI/2 BPSK	135	69	27.02	27.04	26.14	27.0
100	PI/2 BPSK	135	138	27.00	27.08	26.21	
100	PI/2 BPSK	270	0	26.98	26.96	26.10	
100	QPSK	1	1	27.09	27.23	26.12	27.5
100	QPSK	1	137	27.12	27.19	26.14	
100	QPSK	1	271	26.97	27.18	26.14	
100	QPSK	135	0	27.11	27.17	26.21	27.5
100	QPSK	135	69	27.09	27.07	26.17	
100	QPSK	135	138	27.12	27.16	26.19	
100	QPSK	270	0	26.15	26.18	25.15	26.5
100	16QAM	1	1	26.10	26.16	25.16	26.5
100	64QAM	1	1	25.14	25.09	24.15	25.0
100	256QAM	1	1	23.19	23.04	22.19	23.0
Channel				508200	518598	528996	Tune-up limit (dBm)
Frequency (MHz)				2541	2592.99	2644.98	
90	PI/2 BPSK	1	1	27.04	27.26	26.10	
Channel				507204	518598	529998	Tune-up limit (dBm)
Frequency (MHz)				2536.02	2592.99	2649.99	
80	PI/2 BPSK	1	1	26.98	27.22	26.10	
Channel				505200	518598	531996	Tune-up limit (dBm)
Frequency (MHz)				2526	2592.99	2659.98	
60	PI/2 BPSK	1	1	27.04	27.21	26.10	
Channel				504204	518598	532998	Tune-up limit (dBm)
Frequency (MHz)				2521.02	2592.99	2664.99	
50	PI/2 BPSK	1	1	27.01	27.25	26.16	
Channel				503202	518598	534000	Tune-up limit (dBm)
Frequency (MHz)				2516.01	2592.99	2670	
40	PI/2 BPSK	1	1	26.97	27.23	26.15	
Channel				501204	518598	535998	Tune-up limit (dBm)
Frequency (MHz)				2506.02	2592.99	2679.99	
20	PI/2 BPSK	1	1	27.02	27.20	26.17	
Channel				500700	518598	536496	Tune-up limit (dBm)
Frequency (MHz)				2503.5	2592.99	2682.48	
15	PI/2 BPSK	1	1	27.03	27.19	26.14	
Channel				500202	518598	537000	Tune-up limit (dBm)
Frequency (MHz)				2501.01	2592.99	2685	
10	PI/2 BPSK	1	1	27.04	27.23	26.11	



n41							
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				509202	518598	528000	25.0
Frequency (MHz)				2546.01	2592.99	2640	
100	PI/2 BPSK	1	1	24.53	24.65	24.37	
100	PI/2 BPSK	1	137	24.43	24.57	24.31	25.0
100	PI/2 BPSK	1	271	24.49	24.50	24.30	
100	PI/2 BPSK	135	0	24.40	24.56	24.32	
100	PI/2 BPSK	135	69	24.39	24.55	24.30	25.0
100	PI/2 BPSK	135	138	24.37	24.53	24.27	
100	PI/2 BPSK	270	0	24.16	24.37	24.18	
100	QPSK	1	1	24.52	24.56	24.45	25.0
100	QPSK	1	137	24.42	24.55	24.31	
100	QPSK	1	271	24.46	24.57	24.32	
100	QPSK	135	0	24.48	24.55	24.31	25.0
100	QPSK	135	69	24.43	24.53	24.35	
100	QPSK	135	138	24.49	24.56	24.24	
100	QPSK	270	0	23.44	23.54	23.31	24.0
100	16QAM	1	1	23.35	23.55	23.31	24.0
100	64QAM	1	1	21.91	22.02	21.86	22.5
100	256QAM	1	1	19.91	20.03	19.83	20.5
Channel				508200	518598	528996	Tune-up limit (dBm)
Frequency (MHz)				2541	2592.99	2644.98	
90	PI/2 BPSK	1	1	24.46	24.59	24.36	
Channel				507204	518598	529998	Tune-up limit (dBm)
Frequency (MHz)				2536.02	2592.99	2649.99	
80	PI/2 BPSK	1	1	24.53	24.61	24.29	
Channel				505200	518598	531996	Tune-up limit (dBm)
Frequency (MHz)				2526	2592.99	2659.98	
60	PI/2 BPSK	1	1	24.52	24.60	24.33	
Channel				504204	518598	532998	Tune-up limit (dBm)
Frequency (MHz)				2521.02	2592.99	2664.99	
50	PI/2 BPSK	1	1	24.45	24.61	24.29	
Channel				503202	518598	534000	Tune-up limit (dBm)
Frequency (MHz)				2516.01	2592.99	2670	
40	PI/2 BPSK	1	1	24.52	24.59	24.30	
Channel				501204	518598	535998	Tune-up limit (dBm)
Frequency (MHz)				2506.02	2592.99	2679.99	
20	PI/2 BPSK	1	1	24.45	24.65	24.36	
Channel				500700	518598	536496	Tune-up limit (dBm)
Frequency (MHz)				2503.5	2592.99	2682.48	
15	PI/2 BPSK	1	1	24.47	24.63	24.33	
Channel				500202	518598	537000	Tune-up limit (dBm)
Frequency (MHz)				2501.01	2592.99	2685	
10	PI/2 BPSK	1	1	24.46	24.58	24.28	



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				509202	518598	528000	25.2
Frequency (MHz)				2546.01	2592.99	2640	
100	PI/2 BPSK	1	1	24.15	24.06	23.93	
100	PI/2 BPSK	1	137	24.12	23.97	23.82	25.2
100	PI/2 BPSK	1	271	24.07	23.92	23.87	
100	PI/2 BPSK	135	0	23.90	23.77	23.76	
100	PI/2 BPSK	135	69	23.94	23.79	23.71	25.2
100	PI/2 BPSK	135	138	23.87	23.73	23.71	
100	PI/2 BPSK	270	0	23.91	23.67	23.57	
100	QPSK	1	1	24.09	23.93	24.07	25.2
100	QPSK	1	137	24.07	23.87	24.04	
100	QPSK	1	271	24.05	23.93	23.99	
100	QPSK	135	0	24.10	23.90	23.96	25.2
100	QPSK	135	69	24.05	23.87	24.01	
100	QPSK	135	138	24.02	23.91	24.01	
100	QPSK	270	0	23.95	23.87	23.94	25.2
100	16QAM	1	1	23.90	23.88	23.98	25.2
100	64QAM	1	1	23.89	23.86	23.88	25.2
100	256QAM	1	1	21.60	21.64	21.77	23.5
Channel				508200	518598	528996	Tune-up limit (dBm)
Frequency (MHz)				2541	2592.99	2644.98	25.2
90	PI/2 BPSK	0	0	24.09	24.02	23.84	25.2
Channel				507204	518598	529998	Tune-up limit (dBm)
Frequency (MHz)				2536.02	2592.99	2649.99	25.2
80	PI/2 BPSK	1	1	24.09	23.97	23.86	25.2
Channel				505200	518598	531996	Tune-up limit (dBm)
Frequency (MHz)				2526	2592.99	2659.98	25.2
60	PI/2 BPSK	1	1	24.09	23.99	23.86	25.2
Channel				504204	518598	532998	Tune-up limit (dBm)
Frequency (MHz)				2521.02	2592.99	2664.99	25.2
50	PI/2 BPSK	1	1	24.08	23.98	23.92	25.2
Channel				503202	518598	534000	Tune-up limit (dBm)
Frequency (MHz)				2516.01	2592.99	2670	25.2
40	PI/2 BPSK	1	1	24.15	23.99	23.91	25.2
Channel				501204	518598	535998	Tune-up limit (dBm)
Frequency (MHz)				2506.02	2592.99	2679.99	25.2
20	PI/2 BPSK	1	1	24.05	24.04	23.84	25.2
Channel				500700	518598	536496	Tune-up limit (dBm)
Frequency (MHz)				2503.5	2592.99	2682.48	25.2
15	PI/2 BPSK	1	1	24.14	24.02	23.93	25.2
Channel				500202	518598	537000	Tune-up limit (dBm)
Frequency (MHz)				2501.01	2592.99	2685	25.2
10	PI/2 BPSK	1	1	24.07	24.02	23.93	25.2



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				509202	518598	528000	24.4
Frequency (MHz)				2546.01	2592.99	2640	
100	PI/2 BPSK	1	1	24.15	24.06	23.93	
100	PI/2 BPSK	1	137	24.12	23.97	23.82	24.4
100	PI/2 BPSK	1	271	24.07	23.92	23.87	
100	PI/2 BPSK	135	0	23.90	23.77	23.76	
100	PI/2 BPSK	135	69	23.94	23.79	23.71	24.4
100	PI/2 BPSK	135	138	23.87	23.73	23.71	
100	PI/2 BPSK	270	0	23.91	23.67	23.57	
100	QPSK	1	1	24.09	23.93	24.07	24.4
100	QPSK	1	137	24.07	23.87	24.04	
100	QPSK	1	271	24.05	23.93	23.99	
100	QPSK	135	0	24.10	23.90	23.96	24.4
100	QPSK	135	69	24.05	23.87	24.01	
100	QPSK	135	138	24.02	23.91	24.01	
100	QPSK	270	0	23.95	23.87	23.94	24.4
100	16QAM	1	1	23.90	23.88	23.98	24.4
100	64QAM	1	1	23.89	23.86	23.88	24.4
100	256QAM	1	1	21.60	21.64	21.77	23.5
Channel				508200	518598	528996	Tune-up limit (dBm)
Frequency (MHz)				2541	2592.99	2644.98	
90	PI/2 BPSK	0	0	24.09	24.02	23.84	24.4
Channel				507204	518598	529998	Tune-up limit (dBm)
Frequency (MHz)				2536.02	2592.99	2649.99	
80	PI/2 BPSK	1	1	24.09	23.97	23.86	24.4
Channel				505200	518598	531996	Tune-up limit (dBm)
Frequency (MHz)				2526	2592.99	2659.98	
60	PI/2 BPSK	1	1	24.09	23.99	23.86	24.4
Channel				504204	518598	532998	Tune-up limit (dBm)
Frequency (MHz)				2521.02	2592.99	2664.99	
50	PI/2 BPSK	1	1	24.08	23.98	23.92	24.4
Channel				503202	518598	534000	Tune-up limit (dBm)
Frequency (MHz)				2516.01	2592.99	2670	
40	PI/2 BPSK	1	1	24.15	23.99	23.91	24.4
Channel				501204	518598	535998	Tune-up limit (dBm)
Frequency (MHz)				2506.02	2592.99	2679.99	
20	PI/2 BPSK	1	1	24.05	24.04	23.84	24.4
Channel				500700	518598	536496	Tune-up limit (dBm)
Frequency (MHz)				2503.5	2592.99	2682.48	
15	PI/2 BPSK	1	1	24.14	24.02	23.93	24.4
Channel				500202	518598	537000	Tune-up limit (dBm)
Frequency (MHz)				2501.01	2592.99	2685	
10	PI/2 BPSK	1	1	24.07	24.02	23.93	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	Not required	18.50	97.64	Not required	18.50	98.11	Not required	18.50	98.11	Not required	18.50	Not required	Not required	Not required	21.5
		6	2437		22.00			22.00			22.00			22.00				25.0
		11	2462		18.00			18.00			18.00			18.00				21.0
		12	2467		12.50			12.50			12.50			12.50				15.5
		13	2472		2.00			-2.00			2.00			-2.00				3.5
	802.11n-HT20 MCS0	1	2412	Not required	18.00	97.73	Not required	18.00	97.72	Not required	18.00	97.72	Not required	18.00	Not required	Not required	Not required	21.0
		6	2437		22.50			22.50			22.50			22.50				25.5
		11	2462		17.50			17.50			17.50			17.50				20.5
		12	2467		10.50			10.50			10.50			10.50				13.5
		13	2472		2.00			-2.00			2.00			-2.00				3.5
	802.11ac-VHT40 MCS0	1	2412	Not required	18.00	97.98	Not required	18.00	97.97	Not required	18.00	97.97	Not required	18.00	Not required	Not required	Not required	21.0
		6	2437		22.50			22.50			22.50			22.50				25.5
		11	2462		17.50			17.50			17.50			17.50				20.5
		12	2467		10.50			10.50			10.50			10.50				13.5
		13	2472		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	Not required	18.50	98.11	Not required	18.50	97.88	Not required	18.50	97.88	Not required	18.50	Not required	Not required	Not required	21.5
		40	5200		18.50			18.50			18.50			18.50				21.5
		44	5220		18.50			18.50			18.50			18.50				21.5
		48	5240		17.50			17.50			17.50			17.50				20.5
		48	5240		18.50			18.50			18.50			18.50				21.5
	802.11n-HT20 MCS0	36	5180	Not required	18.50	97.47	Not required	18.50	97.97	Not required	18.50	97.97	Not required	18.50	Not required	Not required	Not required	21.5
		40	5200		18.50			18.50			18.50			18.50				21.5
		44	5220		18.50			18.50			18.50			18.50				21.5
		48	5240		18.50			18.50			18.50			18.50				21.5
		48	5240		18.50			18.50			18.50			18.50				21.5
	802.11n-HT40 MCS0	38	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
		38	5190	Not required	18.50	97.93	Not required	18.50	97.49	Not required	18.50	97.49	Not required	18.50	Not required	Not required	Not required	21.5
		40	5200		18.50			18.50			18.50			18.50				21.5
		44	5220		18.50			18.50			18.50			18.50				21.5
	802.11ac-VHT40 MCS0	38	5190	Not required	18.50	95.48	Not required	18.50	95.96	Not required	18.50	95.96	Not required	18.50	Not required	Not required	Not required	21.5
		48	5240		13.00			13.00			13.00			13.00				16.0
		46	5230		21.00			21.00			21.00			21.00				24.0
		42	5210		12.50			12.50			12.50			12.50				15.5
		42	5210		12.50			12.50			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	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	Not required	17.50	97.88	Not required	17.50	Not required	17.50	Not required	20.5	98.11
		56	5280		17.50			17.50			17.50		20.5			
		60	5300		17.50			17.50			17.50		20.5			
		64	5320		17.50			17.50			17.50		20.5			
	802.11n-HT20 MCS0	52	5260	Not required	18.00	97.47	Not required	18.00	97.97	Not required	18.00	Not required	18.00	Not required	21.0	97.72
		56	5280		18.00			18.00			18.00		21.0			
		60	5300		18.00			18.00			18.00		21.0			
		64	5320		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	19.90	21.00	23.11	24.0	94.95
		62	5310	13.50	13.50		12.50	13.50		12.50	13.50	16.04	16.5			
	802.11ac-VHT20 MCS0	52	5260	Not required	18.00	97.93	Not required	18.00	97.49	Not required	18.00	Not required	18.00	Not required	21.0	97.98
		56	5280		18.00			18.00			18.00		21.0			
		60	5300		18.00			18.00			18.00		21.0			
		64	5320		18.00			18.00			18.00		21.0			
	802.11ac-VHT40 MCS0	54	5270	Not required	21.00	95.48	Not required	21.00	95.96	Not required	21.00	Not required	21.00	Not required	24.0	95.48
		62	5310		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	15.0	92.06	



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	Not required	18.00	97.88	Not required	18.00	97.88	18.00	18.00	18.00	21.0	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	Not required	18.00	97.97		18.00	97.97		18.00	97.97	18.00	18.00	18.00	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	Not required	16.50	95.45		16.50	95.45		16.50	95.45	Not required	16.50	Not required	19.5	94.95			
		110	5550		21.00			21.00			21.00			21.00		21.00		24.0		
		126	5630		21.00			21.00			21.00			21.00		21.00		24.0		
		134	5670		21.00			21.00			21.00			21.00		21.00		24.0		
		142	5710		20.50			20.50			20.50			20.50		20.50		23.5		
		100	5500		18.00			18.00			18.00			18.00		18.00		21.0		
	802.11ac-VHT20 MCS0	116	5580	Not required	18.00	97.49		18.00	97.49		18.00	97.49	Not required	18.00	Not required	18.00	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	Not required	21.00	95.96		21.00	95.96		21.00	95.96	Not required	21.00	Not required	21.00	95.48			
		126	5630		21.00			21.00			21.00			21.00		21.00		24.0		
		134	5670		20.50			20.50			20.50			20.50		20.50		23.5		
		142	5710		20.50			20.50			20.50			20.50		20.50		23.5		
	802.11ac-VHT80 MCS0	106	5530	12.80	13.00	92.06		12.90	13.00		12.80	13.00	12.90	13.00	15.86	16.00		92.00	16.0	
		122	5610	19.90	21.00			20.80	21.00		23.38	24.0	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	97.88	21.00	21.00	21.00	24.0	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	Not required	21.00	97.47		21.00	97.97		21.00	97.97	21.00	21.00	21.00	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	Not required	21.00	95.45		21.00	95.45		21.00	95.45	Not required	21.00	Not required	24.0	94.95			
		159	5795		21.00			21.00			21.00			21.00		21.00		24.0		
		149	5745		21.00			21.00			21.00			21.00		21.00		24.0		
	802.11ac-VHT20 MCS0	157	5785	Not required	20.50	97.93		20.50	97.49		20.50	97.49	Not required	20.50	Not required	23.5	97.98			
		165	5825		20.50			20.50			20.50			20.50		20.50		23.5		
		151	5755		21.00			21.00			21.00			21.00		21.00		24.0		
	802.11ac-VHT40 MCS0	159	5795	Not required	21.00	95.48		21.00	95.96		21.00	95.96	Not required	21.00	Not required	24.0	95.48			
		155	5775		21.00			20.10	21.00		20.10	21.00		20.10		23.26		24.0		
	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	24.0	92.00	24.0		



Transmit Antenna						Ant 4		Ant 3			Ant 4+3(4)		Ant 4+3(3)		Ant 4+3		
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %	
2.4GHz WLAN	802.11b 1Mbps	1	2412	17.10	17.50	100.00	16.80	17.50	100.00		17.50		17.50		20.5	100.00	
		6	2437	17.30	17.50		16.73	17.50			17.50		17.50				
		11	2462	17.31	17.50		16.88	17.50			17.50		17.50				
		12	2467	16.98	17.50		17.02	17.50			17.50		17.50				
		13	2472	17.15	17.50		17.27	17.50			17.50		17.50				
	802.11g 6Mbps	1	2412		17.50	97.64		17.50	98.11		17.50		17.50		20.5	98.11	
		6	2437		17.50			17.50			17.50		17.50				
		11	2462		17.50			17.50			17.50		17.50				
		12	2467		12.50			12.50			12.50		15.5				
		13	2472		2.00			0.00					4.1				
	802.11n-HT20 MCS0	1	2412		17.50	97.73		17.50	97.72	Not required	17.50	Not required	17.50	Not required	20.5	97.96	
		6	2437		17.50			17.50			17.50		17.50				
		11	2462	Not required	17.50			17.50			17.50		17.50				
		12	2467		11.00			10.50			11.00		13.8				
		13	2472		2.00			0.00					4.1				
	802.11ac-VHT20 MCS0	1	2412		17.50	97.98		17.50	97.97		17.50		17.50		20.5	97.97	
		6	2437		17.50			17.50			17.50		17.50				
		11	2462		17.50			17.50			17.50		17.50				
		12	2467		11.00			11.00			11.00		14.0				
		13	2472		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	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.2GHz WLAN	802.11a 6Mbps	36	5180	Not required	11.00	98.11	Not required	14.50	97.88	Not required	11.00	Not required	14.50	Not required	16.1	98.11
		40	5200		11.00			14.50			11.00		14.50			
		44	5220		11.00			14.50			11.00		14.50			
		48	5240		11.00			14.50			11.00		14.50			
	802.11n-HT20 MCS0	36	5180	Not required	11.00	97.47	Not required	14.50	97.97	Not required	11.00	Not required	14.50	Not required	16.1	97.72
		40	5200		11.00			14.50			11.00		14.50			
		44	5220		11.00			14.50			11.00		14.50			
		48	5240		11.00			14.50			11.00		14.50			
	802.11n-HT40 MCS0	38	5190	Not required	11.00	95.45	Not required	14.22	95.45	Not required	11.00	Not required	14.50	Not required	16.1	94.95
		46	5230		14.05			14.50			11.00		14.50			
	802.11ac-VHT20 MCS0	36	5180	Not required	11.00	97.93	Not required	14.50	97.49	Not required	11.00	Not required	14.50	Not required	16.1	97.98
		40	5200		11.00			14.50			11.00		14.50			
		44	5220		11.00			14.50			11.00		14.50			
		48	5240		11.00			14.50			11.00		14.50			
	802.11ac-VHT40 MCS0	38	5190	Not required	11.00	95.48	Not required	14.50	95.96	Not required	11.00	Not required	14.50	Not required	16.1	95.48
		46	5230		14.50			14.50			11.00		14.50			
	802.11ac-VHT80 MCS0	42	5210	10.16	11.00	92.06	12.50	92.06	11.00	11.00	12.50	12.50	14.8	92.00	14.8	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 %	
5.3GHz WLAN	802.11a 6Mbps	52	5260		10.50	98.11	Not required	14.50	97.88	10.50	14.50	10.50	14.50	16.0	98.11	16.0	
		56	5280		10.50			14.50			14.50		10.50				14.50
		60	5300		10.50			14.50			14.50		10.50				14.50
		64	5320		10.50			14.50			14.50		10.50				14.50
	802.11n-HT20 MCS0	52	5260	Not required	10.50	97.47	Not required	14.50	97.97	10.50	10.50	14.50	14.50	16.0	97.72	16.0	
		56	5280		10.50			14.50			14.50		10.50				14.50
		60	5300		10.50			14.50			14.50		10.50				14.50
		64	5320		10.50			14.50			14.50		10.50				14.50
	802.11n-HT40 MCS0	54	5270	Not required	10.50	95.45	14.23	14.50	95.45	Not required	10.50	Not required	14.50	Not required	16.0	94.95	
		62	5310		10.50			13.62			14.50		10.50				14.50
	802.11ac-VHT20 MCS0	52	5260	Not required	10.50	97.93	Not required	14.50	97.49	10.50	10.50	14.50	14.50	16.0	97.98	16.0	
		56	5280		10.50			14.50			14.50		10.50				14.50
		60	5300		10.50			14.50			14.50		10.50				14.50
		64	5320		10.50			14.50			14.50		10.50				14.50
	802.11ac-VHT40 MCS0	54	5270	Not required	10.50	95.48	14.50	14.50	95.96	10.50	10.50	14.50	14.50	16.0	95.48	16.0	
		62	5310		10.50			14.50			14.50		10.50				14.50
	802.11ac-VHT80 MCS0	58	5290	10.25	10.50	92.06	12.00	92.06	10.50	10.50	12.00	12.00	14.3	92.00	14.3	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	10.50	97.88	Not required	12.00	97.88	Not required	10.50	Not required	12.00	Not required	14.3	98.11		
		116	5580		10.50			12.00			10.50		12.00		14.3			
		124	5620		10.50			12.00			10.50		12.00		14.3			
		132	5660		10.50			12.00			10.50		12.00		14.3			
		140	5700		10.50			12.00			10.50		12.00		14.3			
		144	5720		10.50			12.00			10.50		12.00		14.3			
	802.11n-HT20 MCS0	100	5500		10.50	97.97		12.00	97.97		10.50		12.00		14.3	97.72		
		116	5580		10.50			12.00			10.50		12.00		14.3			
		124	5620		10.50			12.00			10.50		12.00		14.3			
		132	5660		10.50			12.00			10.50		12.00		14.3			
		140	5700		10.50			12.00			10.50		12.00		14.3			
		144	5720		10.50			12.00			10.50		12.00		14.3			
	802.11n-HT40 MCS0	102	5510	Not required	10.50	95.45		12.00	95.45		10.50	Not required	12.00	Not required	14.3	94.95		
		110	5550		10.50			12.00			10.50		12.00		14.3			
		126	5630		10.50			12.00			10.50		12.00		14.3			
		134	5670		10.50			12.00			10.50		12.00		14.3			
		142	5710		10.50			12.00			10.50		12.00		14.3			
		100	5500		10.50			12.00			10.50		12.00		14.3			
	802.11ac-VHT20 MCS0	116	5580		10.50	97.49		12.00	97.49		10.50		12.00		14.3	97.98		
		124	5620		10.50			12.00			10.50		12.00		14.3			
		132	5660		10.50			12.00			10.50		12.00		14.3			
		140	5700		10.50			12.00			10.50		12.00		14.3			
		144	5720		10.50			12.00			10.50		12.00		14.3			
		102	5510		10.50			12.00			10.50		12.00		14.3			
	802.11ac-VHT40 MCS0	110	5550		10.50	95.96		12.00	95.96		10.50		12.00		14.3	95.48		
		126	5630		10.50			12.00			10.50		12.00		14.3			
		134	5670		10.50			12.00			10.50		12.00		14.3			
		142	5710		10.50			12.00			10.50		12.00		14.3			
		802.11ac-VHT80 MCS0	106	5530	9.23	10.50	92.06	11.92	12.00	92.06	10.50	12.00	14.3	92.00				
			122	5610	8.93	10.50		11.76	12.00		10.50	12.00	14.3					
138	5690		10.28	10.50	11.10	12.00		10.50	12.00		14.3							

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	10.50	98.11	13.50	97.88	Not required	10.50	Not required	13.50	Not required	15.3	98.11		
		157	5785		10.50		13.50			10.50		13.50		15.3			
		165	5825		10.50		13.50			10.50		13.50		15.3			
	802.11n-HT20 MCS0	149	5745		10.50	97.47		13.50		97.97		10.50		13.50	15.3	97.72	
		157	5785		10.50			13.50				10.50		13.50	15.3		
		165	5825		10.50			13.50				10.50		13.50	15.3		
	802.11n-HT40 MCS0	151	5755	Not required	10.50	95.45		13.50		95.45		10.50	Not required	13.50	Not required	15.3	94.95
		159	5795		10.50			13.50				10.50		13.50		15.3	
		149	5745		10.50			13.50				10.50		13.50		15.3	
	802.11ac-VHT20 MCS0	157	5785		10.50	97.93		13.50		97.49		10.50		13.50		15.3	97.98
		165	5825		10.50			13.50				10.50		13.50		15.3	
		151	5755		10.50			13.50				10.50		13.50		15.3	
	802.11ac-VHT40 MCS0	151	5755	Not required	10.50	95.48		13.50		95.96		10.50		13.50		15.3	95.48
		159	5795		10.50			13.50				10.50		13.50		15.3	
	802.11ac-VHT80 MCS0	155	5775	10.13	10.50	92.06	13.02	13.50		92.06	10.50	13.50	13.50	15.3	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	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	22.20	23.00	25.57	26.0	100.00	
		6	2437	22.80	23.00		22.10	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	21.70	23.00	25.13	26.0		
		12	2467	17.80	18.50		18.20	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	13.70	14.00	16.66	17.0		
	802.11g 6Mbps	1	2412	Not required	18.50	97.64	18.50	98.11	18.50	97.72	18.50	Not required	18.50	Not required	18.50	21.5	98.11
		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		3.5				
	802.11n-HT20 MCS0	1	2412	Not required	18.00	97.73	18.00	97.72	18.00	Not required	18.00	Not required	18.00	Not required	18.00	21.0	97.96
		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		3.5				
	802.11ac-VHT20 MCS0	1	2412	Not required	18.00	97.98	18.00	97.97	18.00	Not required	18.00	Not required	18.00	Not required	18.00	21.0	97.97
		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		3.5				

Transmit Antenna							Ant 4			Ant 3			Ant 4+3(4)		Ant 4+3(3)		Ant 4+3		
5.2GHz WLAN	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	Average power (dBm)	Tune-Up Limit	Duty Cycle %	
	802.11a 6Mbps	36	5180	Not required	17.00	98.11	Not required	17.00	97.88	Not required	17.00	Not required	17.00	Not required	17.00	Not required	20.0	98.11	
		40	5200		18.50			18.50			18.50		18.50		21.3				
		44	5220		18.50			18.50			18.50		18.50		21.0				
		48	5240		17.50			17.50			17.50		17.50		20.3				
	802.11n-HT20 MCS0	36	5180	Not required	17.50	97.47	Not required	17.50	97.97	Not required	17.50	Not required	17.50	Not required	17.50	Not required	20.5	97.72	
		40	5200		18.50			18.50			18.50		18.50		21.5				
		44	5220		16.50			16.50			16.50		16.50		19.5				
		48	5240		18.50			18.50			18.50		18.50		21.5				
	802.11n-HT40 MCS0	38	5190	12.00	13.00	95.45	12.70	13.00	95.45	12.00	13.00	12.70	13.00	15.37	16.0	94.95			
		46	5230	20.30	21.00		19.90	20.50		19.90	20.50	23.11	23.8						
	802.11ac-VHT20 MCS0	36	5180	Not required	18.50	97.93	Not required	18.50	97.49	Not required	18.50	Not required	18.50	Not required	18.50	Not required	21.5	97.98	
		40	5200		18.50			18.50			18.50		18.50		21.5				
		44	5220		18.50			18.50			18.50		18.50		21.5				
		48	5240		18.50			18.50			18.50		18.50		21.5				
	802.11ac-VHT40 MCS0	38	5190	Not required	13.00	95.48	Not required	13.00	95.96	Not required	13.00	Not required	13.00	Not required	16.0	95.48			
		46	5230		21.00			20.50			21.00		20.50		23.8				
	802.11ac-VHT80 MCS0	42	5210	Not required	12.50	92.06	Not required	12.50	92.06	Not required	12.50	Not required	12.50	Not required	15.5	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 %
5.3GHz WLAN	802.11a 6Mbps	52	5260	Not required	17.50	98.11	Not required	17.50	97.88	Not required	17.50	Not required	17.50	Not required	20.5	98.11
		56	5280		17.50			17.50			17.50		20.5			
		60	5300		17.50			17.50			17.50		20.5			
		64	5320		17.50			17.50			17.50		20.5			
	802.11n-HT20 MCS0	52	5260	Not required	18.00	97.47	Not required	18.00	97.97	Not required	18.00	Not required	18.00	Not required	21.0	97.72
		56	5280		18.00			18.00			18.00		21.0			
		60	5300		18.00			18.00			18.00		21.0			
		64	5320		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	19.90	21.00	23.11	24.0	94.95
		62	5310	13.50	13.50		12.50	13.50		12.50	13.50	16.04	16.5			
	802.11ac-VHT20 MCS0	52	5260	Not required	18.00	97.93	Not required	18.00	97.49	Not required	18.00	Not required	18.00	Not required	21.0	97.98
		56	5280		18.00			18.00			18.00		21.0			
		60	5300		18.00			18.00			18.00		21.0			
		64	5320		18.00			18.00			18.00		21.0			
	802.11ac-VHT40 MCS0	54	5270	Not required	21.00	95.48	Not required	21.00	95.96	Not required	21.00	Not required	21.00	Not required	24.0	95.48
		62	5310		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		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	Not required	18.00	97.88	Not required	18.00	Not required	18.00	Not required	21.0	98.11			
		116	5580		18.00			18.00			18.00		21.0						
		124	5620		18.00			18.00			18.00		21.0						
		132	5660		18.00			18.00			18.00		21.0						
		140	5700		18.00			18.00			18.00		21.0						
		144	5720		18.00			18.00			18.00		21.0						
	802.11n-HT20 MCS0	100	5500	Not required	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		21.0						
		124	5620		18.00			18.00			18.00		21.0						
		132	5660		18.00			18.00			18.00		21.0						
		140	5700		18.00			18.00			18.00		21.0						
		144	5720		18.00			18.00			18.00		21.0						
	802.11n-HT40 MCS0	102	5510	Not required	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			21.00		23.5						
		126	5630		20.00			20.00			20.00		23.5						
		134	5670		20.00			20.00			21.00		23.5						
	802.11ac-VHT20 MCS0	142	5710	Not required	20.00	97.49		20.50	97.49		20.00	Not required	20.50	Not required	23.3	97.98			
		100	5500		18.00			18.00			18.00		21.0						
		116	5580		18.00			18.00			18.00		21.0						
		124	5620		18.00			18.00			18.00		21.0						
		132	5660		18.00			18.00			18.00		21.0						
		140	5700		18.00			18.00			18.00		21.0						
	802.11ac-VHT40 MCS0	144	5720	Not required	18.00	95.96		18.00	95.96		18.00	Not required	18.00	Not required	21.0	95.48			
		102	5510		16.00			16.00			16.00		19.0						
		110	5550		20.00			21.00			21.00		23.5						
		126	5630		20.00			21.00			21.00		23.5						
	802.11ac-VHT80 MCS0	134	5670	Not required	20.00	92.06		20.50	92.06		20.00	Not required	20.50	Not required	23.3	92.00			
		142	5710		20.00			20.50			20.50		23.3						
		106	5530		12.80			13.00			12.80		13.00		12.90		13.00	15.86	16.0
		122	5610		19.90			20.00			20.80		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				

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		21.00	98.11	Not required	21.00	97.88	Not required	21.00	Not required	21.00	Not required	24.0	98.11		
		157	5785		21.00			21.00			21.00		24.0					
		165	5825		21.00			21.00			21.00		24.0					
	802.11n-HT20 MCS0	149	5745	21.00	97.47	21.00		97.97	21.00		Not required	21.00	Not required	21.00	Not required	24.0	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		21.00	Not required	21.00	Not required	21.00	Not required	24.0	94.95
		159	5795	21.00	21.00			21.00			24.0							
		149	5745	21.00	21.00			21.00			24.0							
	802.11ac-VHT20 MCS0	157	5785		20.50	97.93		20.50	97.49		20.50		20.50		20.50		23.5	97.98
		165	5825		20.50			20.50			20.50		23.5					
		151	5755		21.00			21.00			21.00		24.0					
	802.11ac-VHT40 MCS0	159	5795		21.00	95.48		21.00	95.96		21.00		21.00		21.00		24.0	95.48
155		5775	20.40		21.00			21.00			24.0							
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	24.0	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