



REPORT No.: SZ23060216S01

Annex B Conducted Power

Note:

Conducted power unit: dBm

The target power was recorded in the manufacture document.

Conducted Power

Band		WCDMA Band II (dBm)			Tune-up Limit (dBm)	WCDMA Band IV (dBm)			Tune-up Limit (dBm)	WCDMA Band V (dBm)			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	RMC 12.2Kbps	23.51	23.58	23.52	24.50	23.19	23.26	23.15	24.50	23.58	23.65	23.60	24.50
3GPP Rel 5	HSDPA Subtest-1	23.34	23.26	23.25	24.50	23.06	23.06	23.25	24.50	23.26	23.35	23.28	24.50
3GPP Rel 5	HSDPA Subtest-2	23.34	23.27	23.25	24.50	23.07	23.01	23.24	24.50	23.25	23.30	23.25	24.50
3GPP Rel 5	HSDPA Subtest-3	22.87	22.80	22.78	24.00	22.57	22.53	22.75	24.00	22.75	23.06	22.76	24.00
3GPP Rel 5	HSDPA Subtest-4	22.88	22.81	22.78	24.00	22.57	22.52	22.73	24.00	22.75	23.05	22.76	24.00
3GPP Rel 8	DC-HSDPA Subtest-1	23.25	23.25	23.36	24.50	23.00	23.06	23.18	24.00	23.08	23.00	22.96	24.00
3GPP Rel 8	DC-HSDPA Subtest-2	23.38	23.23	23.28	24.50	23.11	23.12	23.14	24.00	23.06	22.98	23.10	24.00
3GPP Rel 8	DC-HSDPA Subtest-3	22.78	22.87	22.77	24.00	22.63	22.55	22.80	23.50	22.55	22.56	22.65	23.50
3GPP Rel 8	DC-HSDPA Subtest-4	22.84	22.83	22.77	24.00	22.60	22.48	22.64	23.50	22.66	22.57	22.55	23.50
3GPP Rel 6	HSUPA Subtest-1	22.07	22.51	22.70	23.50	22.21	22.40	22.27	23.50	21.64	21.81	22.92	23.50
3GPP Rel 6	HSUPA Subtest-2	21.94	21.99	22.19	23.00	21.67	21.91	21.74	22.50	21.92	22.09	22.40	23.50
3GPP Rel 6	HSUPA Subtest-3	22.10	22.53	22.71	23.50	21.82	22.39	22.25	22.50	22.44	22.61	22.84	23.50
3GPP Rel 6	HSUPA Subtest-4	22.41	22.47	22.68	23.50	21.78	22.42	22.24	23.00	22.38	22.57	22.87	23.50
3GPP Rel 6	HSUPA Subtest-5	22.47	22.50	22.69	23.50	22.20	22.39	22.29	23.50	22.41	22.58	22.81	23.50
3GPP Rel 7	HSPA+ (16QAM) Subtest-1	22.78	22.78	22.91	23.50	22.96	22.83	22.63	23.50	21.83	21.68	21.30	22.50
Attenuator			Cable Loss	0.8			Cable Loss	0.8			Cable Loss	0.8	
Mode			Max.	23.58			Max.	23.26			Max.	23.65	



Band 2 (1900MHz Band) (dBm)							
Part 24E							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				18700	18900	19100	
Frequency (MHz)				1860	1880	1900	
20	QPSK	1	0	23.31	23.20	23.18	
20	QPSK	1	49	23.25	23.17	23.14	24
20	QPSK	1	99	23.16	23.12	23.10	
20	QPSK	50	0	22.36	22.25	22.23	
20	QPSK	50	24	22.24	22.20	22.15	23
20	QPSK	50	50	22.13	22.11	22.06	
20	QPSK	100	0	22.18	22.16	22.13	
20	16QAM	1	0	22.43	22.41	22.34	
20	16QAM	1	49	22.29	22.30	22.21	23
20	16QAM	1	99	22.22	22.24	22.18	
20	16QAM	50	0	21.25	21.22	21.19	
20	16QAM	50	24	21.21	21.17	21.20	22
20	16QAM	50	50	21.14	21.02	21.12	
20	16QAM	100	0	21.15	21.13	21.10	
20	64QAM	1	0	21.40	21.36	21.28	
20	64QAM	1	49	21.32	21.25	21.19	22
20	64QAM	1	99	21.26	21.23	21.21	
20	64QAM	50	0	20.24	20.21	20.16	
20	64QAM	50	24	20.20	20.15	20.13	21
20	64QAM	50	50	20.11	20.10	20.05	
20	64QAM	100	0	20.18	20.16	20.14	
Channel				18675	18900	19125	Tune-up limit (dBm)
Frequency (MHz)				1857.5	1880	1902.5	
15	QPSK	1	0	23.28	23.23	23.17	
15	QPSK	1	37	23.19	23.16	23.20	
15	QPSK	1	74	23.22	23.04	23.13	
15	QPSK	36	0	22.35	22.38	22.23	
15	QPSK	36	20	22.20	22.07	22.12	23
15	QPSK	36	39	22.25	22.13	22.23	
15	QPSK	75	0	22.26	22.35	22.32	
15	16QAM	1	0	22.55	22.49	22.19	
15	16QAM	1	37	22.34	22.51	22.44	23
15	16QAM	1	74	22.14	22.40	22.18	
15	16QAM	36	0	21.27	21.15	21.13	
15	16QAM	36	20	21.26	21.13	21.26	22
15	16QAM	36	39	21.18	21.02	21.22	
15	16QAM	75	0	21.32	20.99	21.14	
15	64QAM	1	0	21.45	21.22	21.23	
15	64QAM	1	37	21.33	21.22	21.11	22
15	64QAM	1	74	21.28	21.27	21.22	
15	64QAM	36	0	20.36	20.17	20.16	
15	64QAM	36	20	20.09	19.96	20.12	
15	64QAM	36	39	20.17	20.28	20.00	21
15	64QAM	75	0	20.26	20.04	20.10	
Channel				18650	18900	19150	Tune-up limit (dBm)
Frequency (MHz)				1855	1880	1905	
10	QPSK	1	0	23.27	23.23	23.19	
10	QPSK	1	25	23.21	23.17	22.94	
10	QPSK	1	49	23.26	23.07	23.16	
10	QPSK	25	0	22.37	22.20	22.18	
10	QPSK	25	12	22.29	22.34	22.14	23
10	QPSK	25	25	22.16	22.00	22.30	
10	QPSK	50	0	22.16	22.25	22.36	
10	16QAM	1	0	22.40	22.38	22.26	
10	16QAM	1	25	22.19	22.10	22.42	23
10	16QAM	1	49	22.37	22.29	22.34	
10	16QAM	25	0	21.24	21.34	21.13	
10	16QAM	25	12	21.38	21.30	21.31	22
10	16QAM	25	25	21.14	21.27	21.32	
10	16QAM	50	0	21.18	21.15	21.14	
10	64QAM	1	0	21.40	21.41	21.24	
10	64QAM	1	25	21.19	21.19	21.22	22
10	64QAM	1	49	21.25	21.08	21.20	
10	64QAM	25	0	20.27	20.35	20.33	
10	64QAM	25	12	20.31	20.12	20.19	21
10	64QAM	25	25	20.21	20.10	20.04	
10	64QAM	50	0	20.31	20.12	19.98	
Channel				18625	18900	19175	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1880	1907.5	
5	QPSK	1	0	23.29	23.22	23.19	
5	QPSK	1	12	23.23	23.19	23.22	
5	QPSK	1	24	23.28	23.15	23.17	
5	QPSK	12	0	22.33	22.33	22.28	
5	QPSK	12	7	22.40	22.16	22.17	23
5	QPSK	12	13	22.09	22.13	22.17	
5	QPSK	25	0	22.21	22.19	22.00	
5	16QAM	1	0	22.34	22.32	22.19	
5	16QAM	1	12	22.30	22.22	22.02	23
5	16QAM	1	24	22.04	22.26	22.13	
5	16QAM	12	0	21.37	21.24	21.17	
5	16QAM	12	7	21.27	21.18	21.08	22
5	16QAM	12	13	21.26	20.87	21.08	
5	16QAM	25	0	21.05	21.35	21.05	
5	64QAM	1	0	21.20	21.27	21.19	
5	64QAM	1	12	21.12	21.18	21.24	22
5	64QAM	1	24	21.10	21.12	21.33	
5	64QAM	12	0	20.32	20.20	20.18	
5	64QAM	12	7	20.06	20.08	20.19	21
5	64QAM	12	13	20.23	20.18	20.17	
5	64QAM	25	0	20.34	20.03	20.00	
Channel				18615	18900	19185	Tune-up limit (dBm)
Frequency (MHz)				1851.5	1880	1908.5	
3	QPSK	1	0	23.27	23.23	23.07	
3	QPSK	1	8	23.22	23.25	23.10	
3	QPSK	1	14	23.19	22.95	23.08	
3	QPSK	8	0	22.37	22.34	22.35	
3	QPSK	8	4	22.35	22.32	21.99	23
3	QPSK	8	7	22.00	22.11	22.10	

Band 4 (AWS Band) (dBm)							
Part 27L (only on channel required)							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				20050	20175	20300	
Frequency (MHz)				1720	1732.5	1745	
20	QPSK	1	0	22.82	22.80	22.76	
20	QPSK	1	49	22.80	22.66	22.68	24
20	QPSK	1	99	22.71	22.56	22.51	
20	QPSK	50	0	21.85	21.77	21.81	
20	QPSK	50	24	21.74	21.78	21.80	23
20	QPSK	50	50	21.76	21.75	21.66	
20	QPSK	100	0	21.70	21.70	21.81	
20	16QAM	1	0	21.88	21.87	21.70	
20	16QAM	1	49	21.70	21.83	21.61	23
20	16QAM	1	99	21.71	21.80	21.58	
20	16QAM	50	0	20.79	20.76	20.86	
20	16QAM	50	24	20.86	20.70	20.72	22
20	16QAM	50	50	20.56	20.66	20.54	
20	16QAM	100	0	20.83	20.77	20.78	
20	64QAM	1	0	20.95	20.89	20.75	
20	64QAM	1	49	20.96	20.91	20.89	22
20	64QAM	1	99	20.86	20.76	21.01	
20	64QAM	50	0	19.88	19.85	19.76	
20	64QAM	50	24	19.74	19.84	19.92	21
20	64QAM	50	50	19.76	19.57	19.89	
20	64QAM	100	0	19.84	19.77	19.54	
Channel				20025	20175	20325	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1732.5	1747.5	
15	QPSK	1	0	22.78	22.75	22.72	
15	QPSK	1	37	22.72	22.60	22.70	
15	QPSK	1	74	22.63	22.72	22.62	
15	QPSK	36	0	21.90	21.80	21.73	
15	QPSK	36	20	21.88	21.74	21.77	23
15	QPSK	36	39	21.74	21.63	21.66	
15	QPSK	75	0	21.83	21.60	21.71	
15	16QAM	1	0	21.85	21.88	21.75	
15	16QAM	1	37	21.78	21.85	21.63	23
15	16QAM	1	74	21.71	21.73	21.70	
15	16QAM	36	0	20.78	20.77	20.81	
15	16QAM	36	20	20.68	20.74	20.70	22
15	16QAM	36	39	20.64	20.65	20.53	
15	16QAM	75	0	20.73	20.55	20.71	
15	64QAM	1	0	20.90	20.85	20.81	
15	64QAM	1	37	20.83	20.81	20.73	22
15	64QAM	1	74	20.84	20.65	20.76	
15	64QAM	36	0	19.80	19.72	19.64	
15	64QAM	36	20	19.71	19.84	19.89	21
15	64QAM	36	39	19.89	19.75	19.63	
15	64QAM	75	0	19.82	19.81	19.79	
Channel				20000	20175	20350	Tune-up limit (dBm)
Frequency (MHz)				1715	1732.5	1750	
10	QPSK	1	0	22.79	22.77	22.74	
10	QPSK	1	25	22.77	22.71	22.60	
10	QPSK	1	49	22.61	22.54	22.75	
10	QPSK	25	0	21.85	21.76	21.84	
10	QPSK	25	12	21.79	21.77	21.79	23
10	QPSK	25	25	21.63	21.79	21.60	
10	QPSK	50	0	21.84	21.76	21.78	
10	16QAM	1	0	21.92	21.95	21.83	
10	16QAM	1	25	21.86	21.82	21.83	23
10	16QAM	1	4				



3	QPSK	15	0	21.98	22.21	21.96	23
3	16QAM	1	0	22.30	22.37	22.25	
3	16QAM	1	8	22.16	22.42	22.20	
3	16QAM	1	14	22.16	22.18	22.38	
3	16QAM	8	0	21.42	21.32	21.09	
3	16QAM	8	4	21.03	21.26	21.38	
3	16QAM	8	7	21.30	21.20	21.09	
3	16QAM	15	0	21.17	20.98	21.03	
3	64QAM	1	0	21.45	21.35	21.16	
3	64QAM	1	8	21.45	21.28	21.11	
3	64QAM	1	14	21.36	21.14	21.26	
3	64QAM	8	0	20.10	20.11	20.34	
3	64QAM	8	4	20.17	20.34	20.23	
3	64QAM	8	7	20.15	20.28	20.18	
3	64QAM	15	0	20.03	20.11	20.04	
Channel				18607	18900	19193	Tune-up limit (dBm)
Frequency (MHz)				1850.7	1880	1909.3	
1.4	QPSK	1	0	23.26	23.20	23.16	24
1.4	QPSK	1	3	23.23	22.98	23.13	
1.4	QPSK	1	5	23.06	22.99	22.90	
1.4	QPSK	3	0	22.38	22.26	22.17	
1.4	QPSK	3	1	22.48	22.24	22.11	
1.4	QPSK	3	3	22.31	22.12	22.13	
1.4	QPSK	6	0	22.06	22.15	22.32	23
1.4	16QAM	1	0	22.31	22.22	22.16	23
1.4	16QAM	1	3	22.47	22.50	22.36	
1.4	16QAM	1	5	22.47	22.45	22.42	
1.4	16QAM	3	0	21.15	21.26	21.10	
1.4	16QAM	3	1	21.18	21.28	21.18	
1.4	16QAM	3	3	21.25	21.13	21.17	
1.4	16QAM	6	0	21.36	21.08	21.07	22
1.4	64QAM	1	0	21.41	21.17	21.23	22
1.4	64QAM	1	3	21.37	21.12	21.13	
1.4	64QAM	1	5	21.30	21.46	21.15	
1.4	64QAM	3	0	20.34	20.39	20.30	
1.4	64QAM	3	1	20.11	20.13	20.29	
1.4	64QAM	3	3	20.33	20.13	20.15	
1.4	64QAM	6	0	20.28	20.17	20.03	21

3	QPSK	15	0	21.76	21.76	21.64	23
3	16QAM	1	0	21.92	21.90	21.89	
3	16QAM	1	8	21.87	21.75	21.85	
3	16QAM	1	14	21.86	21.91	21.60	
3	16QAM	8	0	20.82	20.84	20.77	
3	16QAM	8	4	20.83	20.70	20.81	
3	16QAM	8	7	20.69	20.61	20.73	
3	16QAM	15	0	20.70	20.65	20.71	
3	64QAM	1	0	20.94	20.92	20.75	
3	64QAM	1	8	20.86	20.74	20.80	
3	64QAM	1	14	20.82	20.72	20.86	
3	64QAM	8	0	19.89	19.93	19.57	
3	64QAM	8	4	19.85	19.79	19.76	
3	64QAM	8	7	19.52	19.55	19.56	
3	64QAM	15	0	19.86	19.83	19.83	
Channel				19957	20175	20393	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1732.5	1754.3	
1.4	QPSK	1	0	22.77	22.75	22.76	23.5
1.4	QPSK	1	3	22.71	22.66	22.68	
1.4	QPSK	1	5	22.72	22.74	22.65	
1.4	QPSK	3	0	21.90	21.79	21.88	
1.4	QPSK	3	1	21.85	21.63	21.76	
1.4	QPSK	3	3	21.81	21.77	21.66	
1.4	QPSK	6	0	21.82	21.87	21.75	22.5
1.4	16QAM	1	0	21.89	21.84	21.73	22.5
1.4	16QAM	1	3	21.85	21.82	21.86	
1.4	16QAM	1	5	21.82	21.71	21.72	
1.4	16QAM	3	0	20.71	20.90	20.69	
1.4	16QAM	3	1	20.94	20.89	20.78	
1.4	16QAM	3	3	20.92	20.67	20.76	
1.4	16QAM	6	0	20.82	20.86	20.94	21.5
1.4	64QAM	1	0	20.80	20.87	20.73	21.5
1.4	64QAM	1	3	20.82	20.94	20.75	
1.4	64QAM	1	5	20.96	20.93	20.97	
1.4	64QAM	3	0	19.76	19.74	19.79	
1.4	64QAM	3	1	19.91	19.56	19.72	
1.4	64QAM	3	3	19.83	19.85	19.80	
1.4	64QAM	6	0	19.84	19.82	19.97	20.5

Band 5 (Cellular Band) (dBm) Part 22H(only on channel required)							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				20450	20525	20600	
Frequency (MHz)				829	836.5	844	
10	QPSK	1	0	23.09	23.15	23.19	24
10	QPSK	1	25	23.08	23.00	23.13	
10	QPSK	1	49	22.91	23.13	23.16	
10	QPSK	25	0	22.02	22.18	22.34	23
10	QPSK	25	12	22.15	22.28	22.10	
10	QPSK	25	25	21.99	22.25	22.06	
10	QPSK	50	0	22.11	22.14	22.20	23
10	16QAM	1	0	22.16	22.32	22.36	
10	16QAM	1	25	22.24	22.30	22.14	
10	16QAM	1	49	21.96	22.06	22.33	22
10	16QAM	25	0	21.03	21.06	21.17	
10	16QAM	25	12	21.06	20.98	21.11	
10	16QAM	25	25	20.93	21.08	21.03	22
10	16QAM	50	0	20.97	21.24	21.12	
10	64QAM	1	0	21.22	21.31	21.25	
10	64QAM	1	25	21.04	21.14	21.09	22
10	64QAM	1	49	21.03	21.18	21.16	
10	64QAM	25	0	20.02	20.32	20.29	
10	64QAM	25	12	20.17	20.11	20.15	21
10	64QAM	25	25	20.07	20.15	20.18	
10	64QAM	50	0	20.14	20.23	20.16	
Channel				20425	20525	20625	Tune-up limit (dBm)
Frequency (MHz)				826.5	836.5	846.5	
5	QPSK	1	0	23.06	23.11	23.16	24
5	QPSK	1	12	23.04	23.08	23.02	
5	QPSK	1	24	23.02	23.06	23.13	
5	QPSK	12	0	22.17	22.31	22.19	23
5	QPSK	12	7	22.24	22.11	22.12	
5	QPSK	12	13	22.08	22.14	22.03	
5	QPSK	25	0	21.93	22.21	22.00	23
5	16QAM	1	0	22.23	22.34	22.35	
5	16QAM	1	12	22.22	22.17	22.08	
5	16QAM	1	24	22.08	22.19	22.07	22
5	16QAM	12	0	21.08	21.27	21.20	
5	16QAM	12	7	21.12	21.15	21.14	
5	16QAM	12	13	21.12	21.09	21.19	22
5	16QAM	25	0	21.12	21.01	21.15	
5	64QAM	1	0	21.11	21.14	21.22	
5	64QAM	1	12	21.18	21.12	21.02	22
5	64QAM	1	24	21.16	21.23	21.19	
5	64QAM	12	0	20.10	20.21	20.18	
5	64QAM	12	7	20.09	19.98	20.15	21
5	64QAM	12	13	19.92	20.08	19.93	
5	64QAM	25	0	20.07	20.19	20.14	
Channel				20415	20525	20635	Tune-up limit (dBm)
Frequency (MHz)				825.5	836.5	847.5	
3	QPSK	1	0	23.05	23.17	23.15	24
3	QPSK	1	8	22.93	22.99	23.01	
3	QPSK	1	14	23.01	23.06	23.07	
3	QPSK	8	0	22.10	22.07	22.27	23
3	QPSK	8	4	22.10	22.35	22.12	
3	QPSK	8	7	21.94	22.02	22.14	
3	QPSK	15	0	22.15	22.18	22.20	23
3	16QAM	1	0	22.21	22.33	22.19	
3	16QAM	1	8	22.05	22.29	22.14	
3	16QAM	1	14	22.10	22.14	22.32	22
3	16QAM	8	0	21.15	21.31	21.31	
3	16QAM	8	4	20.95	21.29	21.23	
3	16QAM	8	7	21.10	21.10	21.21	22
3	16QAM	15	0	21.09	21.23	21.12	
3	64QAM	1	0	21.25	21.28	21.36	
3	64QAM	1	8	21.05	21.06	21.07	22
3	64QAM	1	14	21.10	21.09	21.26	
3	64QAM	8	0	20.20	20.29	20.21	
3	64QAM	8	4	20.09	20.13	20.10	21
3	64QAM	8	7	20.07	20.06	20.05	
3	64QAM	15	0	20.03	20.01	19.98	
Channel				20407	20525	20643	Tune-up limit (dBm)
Frequency (MHz)				824.7	836.5	848.3	
1.4	QPSK	1	0	23.12	23.14	23.17	24
1.4	QPSK	1	3	23.08	23.06	23.15	
1.4	QPSK	1	5	22.92	22.96	23.02	
1.4	QPSK	3	0	22.10	22.18	22.09	23
1.4	QPSK	3	1	22.12	22.03	22.08	
1.4	QPSK	3	3	22.08	22.02	22.15	
1.4	QPSK	6	0	21.88	22.02	22.00	23
1.4	16QAM	1	0	22.09	22.36	22.28	
1.4	16QAM	1	3	22.16	22.14	22.16	
1.4	16QAM	1	5	22.14	22.14	22.28	23
1.4	16QAM	3	0	21.00	21.27	21.03	
1.4	16QAM	3	1	21.20	21.21	21.29	
1.4	16QAM	3	3	21.06	21.11	21.13	22
1.4	16QAM	6	0	21.02	21.05	21.25	
1.4	64QAM	1	0	21.28	21.26	21.15	
1.4	64QAM	1	3	21.05	21.20	21.20	22
1.4	64QAM	1	5	21.09	21.27	21.08	
1.4	64QAM	3	0	20.01	20.14	20.15	
1.4	64QAM	3	1	20.07	20.16	20.01	21
1.4	64QAM	3	3	20.05	20.13	20.18	
1.4	64QAM	6	0	20.16	20.26	20.21	

Band 7 (2600MHz Band) (dBm) Part 27							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				20850	21100	21350	
Frequency (MHz)				2510	2535	2560	
20	QPSK	1	0	22.77	22.83	22.75	24
20	QPSK	1	49	22.79	22.72	22.67	
20	QPSK	1	99	22.67	22.72	22.75	
20	QPSK	50	0	21.72	21.94	21.84	23
20	QPSK	50	24	21.66	21.82	21.85	
20	QPSK	50	50	21.66	21.78	21.68	
20	QPSK	100	0	21.63	21.85	21.88	23
20	16QAM	1	0	21.74	21.88	21.79	
20	16QAM	1	49	21.69	21.77	21.85	
20	16QAM	1	99	21.75	21.82	21.78	22
20	16QAM	50	0	20.76	20.86	20.83	
20	16QAM	50	24	20.80	20.81	20.81	
20	16QAM	50	50	20.57	20.50	20.78	22
20	16QAM	100	0	20.63	20.58	20.69	
20	64QAM	1	0	20.71	20.89	20.80	
20	64QAM	1	49	20.73	20.69	20.77	22
20	64QAM	1	99	20.59	20.67	20.63	
20	64QAM	50	0	19.70	19.78	19.70	
20	64QAM	50	24	19.71	19.84	19.68	21
20	64QAM	50	50	19.52	19.71	19.71	
20	64QAM	100	0	19.75	19.63	19.75	
Channel				20825	21100	21375	Tune-up limit (dBm)
Frequency (MHz)				2507.5	2535	2562.5	
15	QPSK	1	0	22.71	22.78	22.74	24
15	QPSK	1	37	22.73	22.69	22.57	
15	QPSK	1	74	22.50	22.70	22.66	
15	QPSK	36	0	21.74	21.84	21.88	23
15	QPSK	36	20	21.67	21.77	21.78	
15	QPSK	36	39	21.56	21.61	21.61	
15	QPSK	75	0	21.67	21.81	21.68	23
15	16QAM	1	0	21.87	21.78	21.75	
15	16QAM	1	37	21.58	21.64	21.63	
15	16QAM	1	74	21.64	21.69	21.62	22
15	16QAM	36	0	20.85	20.85	20.72	
15	16QAM	36	20	20.59	20.63	20.68	
15	16QAM	36	39	20.69	20.56	20.73	22
15	16QAM	75	0	20.55	20.60	20.58	
15	64QAM	1	0	20.68	20.85	20.74	
15	64QAM	1	37	20.64	20.77	20.69	22
15	64QAM	1	74	20.79	20.72	20.75	
15	64QAM	36	0	19.79	19.64	19.61	
15	64QAM	36	20	19.56	19.64	19.60	21
15	64QAM	36	39	19.57	19.60	19.58	
15	64QAM	75	0	19.50	19.69	19.66	
Channel				20800	21100	21400	Tune-up limit (dBm)
Frequency (MHz)				2505	2535	2565	
10	QPSK	1	0	22.69	22.76	22.81	24
10	QPSK	1	25	22.60	22.67	22.60	
10	QPSK	1	49	22.62	22.61	22.68	
10	QPSK	25	0	21.84	21.79	21.69	23
10	QPSK	25	12	21.51	21.71	21.84	
10	QPSK	25	25	21.52	21.60	21.77	
10	QPSK	50	0	21.55	21.78	21.68	23
10	16QAM	1	0	21.81	21.86	21.80	
10	16QAM	1	25	21.61	21.74	21.72	
10	16QAM	1	49	21.72	21.70	21.71	22
10	16QAM	25	0	20.72	20.78	20.73	
10	16QAM	25	12	20.63	20.78	20.72	
10	16QAM	25	25	20.60	20.42	20.57	22
10	16QAM	50	0	20.63	20.84	20.81	
10	64QAM	1	0	20.83	20.78	20.88	
10	64QAM	1	25	20.58	20.78	20.76	22
10	64QAM	1	49	20.86	20.68	20.75	
10	64QAM	25	0	19.73	19.83	19.84	
10	64QAM	25	12	19.56	19.56	19.71	21
10	64QAM	25	25	19.56	19.76	19.59	
10	64QAM	50	0	19.6			

Band 12 (700MHz Low Band) (dBm) Part 27F(only on channel required)							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				23090	23095	23130	
Frequency (MHz)				704	707.5	711	
10	QPSK	1	0	23.17	23.13	23.25	
10	QPSK	1	25	23.20	23.17	23.12	
10	QPSK	1	49	23.12	23.06	23.22	
10	QPSK	25	0	22.34	22.31	22.40	23
10	QPSK	25	12	22.19	22.26	22.15	
10	QPSK	25	25	22.11	22.24	22.10	
10	QPSK	50	0	22.26	22.19	22.17	23
10	16QAM	1	0	22.21	22.41	22.45	
10	16QAM	1	25	22.28	22.23	22.36	
10	16QAM	1	49	22.31	22.33	22.23	22
10	16QAM	25	0	21.31	21.15	21.35	
10	16QAM	25	12	21.07	21.36	21.12	
10	16QAM	25	25	21.13	21.05	21.26	22
10	16QAM	50	0	21.22	21.32	21.21	
10	64QAM	1	0	21.25	21.35	21.39	
10	64QAM	1	25	21.24	21.30	21.22	22
10	64QAM	1	49	21.14	21.31	21.28	
10	64QAM	25	0	20.29	20.22	20.26	
10	64QAM	25	12	20.24	20.31	20.34	21
10	64QAM	25	25	20.17	20.29	20.22	
10	64QAM	50	0	20.10	20.22	20.10	
Channel				23035	23095	23155	
Frequency (MHz)				701.5	707.5	713.5	
5	QPSK	1	0	23.13	23.12	23.22	
5	QPSK	1	12	23.19	23.15	23.19	
5	QPSK	1	24	23.19	23.17	23.14	
5	QPSK	12	0	22.12	22.15	22.26	23
5	QPSK	12	7	22.10	22.21	22.14	
5	QPSK	12	13	22.03	22.22	22.18	
5	QPSK	25	0	22.14	22.07	22.12	23
5	16QAM	1	0	22.35	22.35	22.30	
5	16QAM	1	12	22.28	22.21	22.32	
5	16QAM	1	24	22.24	22.32	22.18	22
5	16QAM	12	0	21.15	21.13	21.18	
5	16QAM	12	7	20.97	21.16	21.28	
5	16QAM	12	13	21.14	21.07	21.26	22
5	16QAM	25	0	20.99	21.24	21.05	
5	64QAM	1	0	21.24	21.26	21.32	
5	64QAM	1	12	21.22	21.18	21.17	22
5	64QAM	1	24	21.23	21.17	21.16	
5	64QAM	12	0	20.10	20.11	20.37	
5	64QAM	12	7	20.05	20.19	20.29	21
5	64QAM	12	13	20.07	20.04	20.05	
5	64QAM	25	0	20.06	20.25	20.22	
Channel				23025	23095	23165	
Frequency (MHz)				700.5	707.5	714.5	
3	QPSK	1	0	23.16	23.20	23.20	
3	QPSK	1	8	23.15	23.05	23.18	
3	QPSK	1	14	23.05	23.12	23.02	
3	QPSK	8	0	22.16	22.20	22.14	23
3	QPSK	8	4	22.10	22.23	22.17	
3	QPSK	8	7	22.19	22.20	22.10	
3	QPSK	15	0	22.03	22.16	22.18	23
3	16QAM	1	0	22.24	22.29	22.35	
3	16QAM	1	8	22.16	22.33	22.36	
3	16QAM	1	14	22.07	22.36	22.31	22
3	16QAM	8	0	21.07	21.38	21.12	
3	16QAM	8	4	21.30	21.31	21.33	
3	16QAM	8	7	21.12	21.15	21.20	22
3	16QAM	15	0	21.11	21.03	21.01	
3	64QAM	1	0	21.31	21.36	21.24	
3	64QAM	1	8	21.26	21.29	21.41	22
3	64QAM	1	14	21.11	21.36	21.37	
3	64QAM	8	0	20.31	20.11	20.20	
3	64QAM	8	4	20.01	20.31	20.34	21
3	64QAM	8	7	20.05	20.20	20.15	
3	64QAM	15	0	20.03	20.36	20.19	
Channel				23017	23095	23173	
Frequency (MHz)				699.7	707.5	715.3	
1.4	QPSK	1	0	23.16	23.17	23.19	
1.4	QPSK	1	3	23.07	23.17	23.07	
1.4	QPSK	1	5	23.05	23.07	23.18	
1.4	QPSK	3	0	22.28	22.33	22.34	23
1.4	QPSK	3	1	22.26	22.30	22.31	
1.4	QPSK	3	3	22.23	22.13	22.17	
1.4	QPSK	6	0	22.28	22.39	22.17	23
1.4	16QAM	1	0	22.27	22.33	22.42	
1.4	16QAM	1	3	22.07	22.34	22.37	
1.4	16QAM	1	5	22.09	22.33	22.40	23
1.4	16QAM	3	0	21.15	21.19	21.20	
1.4	16QAM	3	1	21.12	21.13	21.29	
1.4	16QAM	3	3	21.10	21.25	21.27	22
1.4	16QAM	6	0	21.21	21.09	21.02	
1.4	64QAM	1	0	21.27	21.25	21.37	
1.4	64QAM	1	3	21.12	21.29	21.28	22
1.4	64QAM	1	5	21.08	21.19	21.13	
1.4	64QAM	3	0	20.03	20.27	20.18	
1.4	64QAM	3	1	20.14	20.20	20.13	21
1.4	64QAM	3	3	20.20	20.06	20.24	
1.4	64QAM	6	0	20.09	20.26	20.31	

Band 13(700MHz Band) (dBm) Part 27F							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				23230			
Frequency (MHz)				782			
10	QPSK	1	0		23.26		
10	QPSK	1	25		23.10		
10	QPSK	1	49		23.04		
10	QPSK	25	0		22.34		23
10	QPSK	25	12		22.03		
10	QPSK	25	25		22.01		
10	QPSK	50	0		22.14		23
10	16QAM	1	0		22.18		
10	16QAM	1	25		22.18		
10	16QAM	1	49		22.23		22
10	16QAM	25	0		21.14		
10	16QAM	25	12		21.17		
10	16QAM	25	25		21.09		22
10	16QAM	50	0		21.04		
10	64QAM	1	0		21.40		
10	64QAM	1	25		21.13		22
10	64QAM	1	49		21.05		
10	64QAM	25	0		20.33		
10	64QAM	25	12		20.09		21
10	64QAM	25	25		20.04		
10	64QAM	50	0		20.14		
Channel				23205	23230	23255	
Frequency (MHz)				779.5	782	784.5	
5	QPSK	1	0	23.21	23.22	23.18	
5	QPSK	1	12	23.01	23.17	23.17	
5	QPSK	1	24	23.09	23.08	23.06	
5	QPSK	12	0	22.32	22.39	22.31	23
5	QPSK	12	7	22.12	22.13	22.13	
5	QPSK	12	13	22.20	22.26	22.01	
5	QPSK	25	0	22.27	22.21	22.20	23
5	16QAM	1	0	22.35	22.36	22.32	
5	16QAM	1	12	22.24	22.31	22.16	
5	16QAM	1	24	22.26	22.32	22.13	22
5	16QAM	12	0	21.24	21.25	21.11	
5	16QAM	12	7	21.18	21.11	21.22	
5	16QAM	12	13	21.06	21.17	21.20	22
5	16QAM	25	0	20.97	21.18	21.11	
5	64QAM	1	0	21.16	21.33	21.32	
5	64QAM	1	12	21.38	21.23	21.22	22
5	64QAM	1	24	21.10	21.31	21.17	
5	64QAM	12	0	20.08	20.18	20.09	
5	64QAM	12	7	20.07	20.15	20.08	21
5	64QAM	12	13	20.11	20.06	20.10	
5	64QAM	25	0	20.27	20.17	20.30	



Band 14 (700MHz Band) (dBm)							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				23330			24
Frequency (MHz)				793			
10	QPSK	1	0		23.22		24
10	QPSK	1	25		23.14		
10	QPSK	1	49		23.09		
10	QPSK	25	0		22.34		23
10	QPSK	25	12		22.12		
10	QPSK	25	25		22.11		
10	QPSK	50	0		22.14		23
10	16QAM	1	0		22.33		
10	16QAM	1	25		22.28		
10	16QAM	1	49		22.13		22
10	16QAM	25	0		21.18		
10	16QAM	25	12		21.04		
10	16QAM	25	25		21.06		22
10	16QAM	50	0		21.12		
10	64QAM	1	0		21.28		
10	64QAM	1	25		21.28		22
10	64QAM	1	49		21.19		
10	64QAM	25	0		20.26		
10	64QAM	25	12		20.14		21
10	64QAM	25	25		20.05		
10	64QAM	50	0		20.13		
Channel				23305	23330	23355	24
Frequency (MHz)				790.5	793	795.5	
5	QPSK	1	0	23.09	23.20	23.11	24
5	QPSK	1	12	23.18	23.17	23.07	
5	QPSK	1	24	23.08	23.10	23.01	
5	QPSK	12	0	22.29	22.29	22.27	23
5	QPSK	12	7	22.04	22.19	22.20	
5	QPSK	12	13	22.10	22.25	22.16	
5	QPSK	25	0	22.10	22.29	22.14	23
5	16QAM	1	0	22.27	22.41	22.29	
5	16QAM	1	12	22.24	22.46	22.34	
5	16QAM	1	24	22.16	22.16	22.39	22
5	16QAM	12	0	21.09	21.24	21.11	
5	16QAM	12	7	21.20	21.13	21.20	
5	16QAM	12	13	21.21	21.19	21.13	22
5	16QAM	25	0	21.09	21.37	21.26	
5	64QAM	1	0	21.20	21.28	21.39	
5	64QAM	1	12	21.12	21.31	21.28	22
5	64QAM	1	24	21.14	21.19	21.27	
5	64QAM	12	0	20.12	20.21	20.30	
5	64QAM	12	7	20.01	20.25	20.15	21
5	64QAM	12	13	20.10	20.20	20.23	
5	64QAM	25	0	20.23	20.10	20.34	

Band 17 (700MHz Band) (dBm) Part 27H(only on channel required)							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				23780	23790	23800	24
Frequency (MHz)				709	710	711	
10	QPSK	1	0	23.05	23.18	23.15	24
10	QPSK	1	25	23.11	23.10	23.11	
10	QPSK	1	49	23.14	23.11	23.06	
10	QPSK	25	0	22.15	22.25	22.22	23
10	QPSK	25	12	22.18	22.13	22.03	
10	QPSK	25	25	22.06	22.19	21.98	
10	QPSK	50	0	21.99	21.99	22.07	23
10	16QAM	1	0	22.13	22.36	22.26	
10	16QAM	1	25	22.10	22.35	22.20	
10	16QAM	1	49	22.04	22.15	22.12	22
10	16QAM	25	0	21.25	21.23	21.21	
10	16QAM	25	12	21.08	21.09	21.20	
10	16QAM	25	25	21.02	21.08	21.24	22
10	16QAM	50	0	21.07	20.96	21.03	
10	64QAM	1	0	21.20	21.38	21.38	
10	64QAM	1	25	21.17	21.28	21.09	22
10	64QAM	1	49	21.03	21.06	21.16	
10	64QAM	25	0	20.15	20.11	20.08	
10	64QAM	25	12	20.02	20.14	20.19	21
10	64QAM	25	25	20.02	20.05	20.11	
10	64QAM	50	0	20.08	20.10	20.13	
Channel				23755	23790	23825	24
Frequency (MHz)				706.5	710	713.5	
5	QPSK	1	0	23.09	23.15	23.07	24
5	QPSK	1	12	23.10	23.07	23.01	
5	QPSK	1	24	22.96	23.06	23.12	
5	QPSK	12	0	22.09	22.31	22.14	23
5	QPSK	12	7	22.13	22.22	22.04	
5	QPSK	12	13	22.09	22.06	22.07	
5	QPSK	25	0	22.10	22.22	22.21	23
5	16QAM	1	0	22.25	22.28	22.20	
5	16QAM	1	12	22.04	22.29	22.14	
5	16QAM	1	24	22.06	22.19	22.03	22
5	16QAM	12	0	21.14	21.25	21.22	
5	16QAM	12	7	21.16	21.05	21.22	
5	16QAM	12	13	21.00	21.11	21.23	22
5	16QAM	25	0	21.02	21.02	20.97	
5	64QAM	1	0	21.26	21.39	21.33	
5	64QAM	1	12	21.31	21.26	21.07	22
5	64QAM	1	24	21.05	21.08	21.07	
5	64QAM	12	0	20.01	20.22	20.10	
5	64QAM	12	7	20.12	20.19	20.24	21
5	64QAM	12	13	20.10	20.17	20.13	
5	64QAM	25	0	20.09	20.05	20.24	

Band 25 (1900MHz Band) (dBm) Part 24E							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				26140	26365	26590	24
Frequency (MHz)				1860	1882.5	1905	
20	QPSK	1	0	23.21	23.31	23.18	24
20	QPSK	1	49	23.11	23.09	23.20	
20	QPSK	1	99	23.06	23.18	23.16	
20	QPSK	50	0	22.26	22.38	22.13	23
20	QPSK	50	24	22.06	22.03	22.09	
20	QPSK	50	50	22.08	22.09	22.06	
20	QPSK	100	0	22.09	22.02	22.10	23
20	16QAM	1	0	22.18	22.27	22.32	
20	16QAM	1	49	22.17	22.34	22.22	
20	16QAM	1	99	22.09	22.31	22.29	22
20	16QAM	50	0	21.06	21.20	21.09	
20	16QAM	50	24	21.04	21.02	21.33	
20	16QAM	50	50	21.05	21.16	21.05	22
20	16QAM	100	0	21.08	21.10	21.01	
20	64QAM	1	0	21.09	21.20	21.36	
20	64QAM	1	49	21.07	21.32	21.13	22
20	64QAM	1	99	21.18	21.38	21.33	
20	64QAM	50	0	20.12	20.38	20.30	
20	64QAM	50	24	20.08	20.06	20.27	21
20	64QAM	50	50	20.02	20.15	20.18	
20	64QAM	100	0	20.06	20.18	20.22	
Channel				26115	26365	26615	24
Frequency (MHz)				1857.5	1882.5	1907.5	
15	QPSK	1	0	23.22	23.26	23.17	24
15	QPSK	1	37	23.10	23.13	23.20	
15	QPSK	1	74	23.04	23.06	23.00	
15	QPSK	36	0	22.08	22.39	22.25	23
15	QPSK	36	20	22.24	22.08	22.06	
15	QPSK	36	39	22.05	22.04	22.10	
15	QPSK	75	0	22.15	22.10	22.16	23
15	16QAM	1	0	22.22	22.37	22.31	
15	16QAM	1	37	22.11	22.31	22.24	
15	16QAM	1	74	22.07	22.10	22.10	22
15	16QAM	36	0	21.21	21.21	21.10	
15	16QAM	36	20	21.13	21.09	21.14	
15	16QAM	36	39	21.08	21.04	21.23	22
15	16QAM	75	0	21.20	21.27	21.09	
15	64QAM	1	0	21.21	21.25	21.19	
15	64QAM	1	37	21.14	21.21	21.23	22
15	64QAM	1	74	21.24	21.10	21.18	
15	64QAM	36	0	19.96	20.19	20.16	
15	64QAM	36	20	19.86	20.15	19.99	21
15	64QAM	36	39	19.86	20.10	20.12	
15	64QAM	75	0	20.08	20.13	20.10	
Channel				26090	26365	26640	24
Frequency (MHz)				1855	1882.5	1910	
10	QPSK	1	0	23.20	23.22	23.11	24
10	QPSK	1	25	23.10	23.17	23.17	
10	QPSK	1	49	23.02	23.16	23.01	
10	QPSK	25	0	22.09	22.38	22.10	23
10	QPSK	25	12	22.06	22.25	22.08	
10	QPSK	25	25	22.09	22.10	22.13	
10	QPSK	50	0	22.17	22.16	22.05	23
10	16QAM	1	0	22.09	22.33	22.32	
10	16QAM	1	25	22.10	22.26	22.10	
10	16QAM	1	49	22.17	22.19	22.22	22
10	16QAM	25	0	21.17	21.35	21.14	
10	16QAM	25	12	21.00	21.01	21.00	
10	16QAM	25	25	21.09	21.08	21.23	22
10	16QAM	50	0	21.10	21.14	21.10	
10	64QAM	1	0	21.21	21.30	21.25	
10	64QAM	1	25	21.30	21.07	21.11	22
10	64QAM	1	49	21.09	21.15	21.26	
10	64QAM	25	0	20.14	20.28	20.30	
10	64QAM	25	12	20.07	20.25	20.03	21
10	64QAM	25	25	20.06	20.02	20.01	
10	64QAM	50	0	20.09	20.05	20.07	
Channel				26065	26365	26665	24
Frequency (MHz)				1852.5	1882.5	1912.5	
5	QPSK	1	0	23.07	23.23	23.10	24
5	QPSK	1	12	23.19	23.19	22.97	
5	QPSK	1	24	23.01	23.27	22.98	
5	QPSK	12	0	22.31	22.32	22.25	23
5	QPSK	12	7	22.21	22.29	22.05	
5	QPSK	12	13	22.08	22.18	22.10	
5	QPSK	25	0	21.94	21.96	22.21	23
5	16QAM	1	0	22.25	22.21	22.26	
5	16QAM	1	12	22.23	22.23	22.17	
5	16QAM	1	24	22.03	22.13	22.27	22
5	16QAM	12	0	21.21	21.31	21.24	
5	16QAM	12	7	21.20	21.06	21.06	
5	16QAM	12	13	21.11	21.06	21.13	22
5	16QAM	25	0	21.03	21.14	21.07	
5	64QAM	1	0	21.35	21.30	21.25	
5	64QAM	1	12	21.13	21.22	21.33	22
5	64QAM	1	24	21.12	21.31	21.24	
5	64QAM	12	0	20.06	20.20	20.08	
5	64QAM	12	7	20.10	20.15	20.15	21
5	64QAM	12	13	20.05	20.03	20.14	
5	64QAM	25	0	20.06	20.03	20.10	
Channel				26055	26365	26675	24
Frequency (MHz)				1851.5	1882.5	1913.5	
3	QPSK	1	0	23.14	23.23	23.13	24
3	QPSK	1	8	23.08	23.21	23.11	
3	QPSK	1	14	23.02	23.25	23.15	
3	QPSK	8	0	22.34	22.17	22.19	23
3	QPSK	8	4	22.03	22.18	22.26	
3	QPSK	8	7	21.91	22.03	22.10	

Band 26 for FCC (dBm) (only on channel required)							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				26765	26865	26965	24
Frequency (MHz)				821.5	831.5	841.5	
15	QPSK	1	0	23.11	23.16	23.09	24
15	QPSK	1	37	23.03	23.05	22.90	
15	QPSK	1	74	22.91	23.03	22.98	
15	QPSK	36	0	22.02	22.25	21.93	23
15	QPSK	36	20	22.04	22.18	22.13	
15	QPSK	36	39	22.04	22.09	21.99	
15	QPSK	75	0	22.04	22.20	22.12	23
15	16QAM	1	0	22.13	22.23	22.07	
15	16QAM	1	37	22.01	22.21	22.10	
15	16QAM	1	74	22.03	22.08	22.15	22
15	16QAM	36	0	21.09	21.15	21.11	
15	16QAM	36	20	20.95	20.91	21.00	
15	16QAM	36	39	21.04	20.96	20.92	22
15	16QAM	75	0	20.85	20.88	20.95	
15	64QAM	1	0	21.06	21.25	21.09	
15	64QAM	1	37	21.11	21.01	21.06	22
15	64QAM	1	74	21.06	21.07	21.01	
15	64QAM	36	0	20.04	20.06	20.15	
15	64QAM	36	20	19.75	20.16	19.90	21
15	64QAM	36	39	19.75	19.98	20.07	
15	64QAM	75	0	20.05	20.11	20.04	
Channel				26740	26865	26990	24
Frequency (MHz)				819	831.5	844	
10	QPSK	1	0	23.03	23.13	23.12	24
10	QPSK	1	25	22.86	22.90	23.04	
10	QPSK	1	49	22.89	23.02	23.10	
10	QPSK	25	0	22.05	22.22	22.10	23
10	QPSK	25	12	21.89	22.21	21.89	
10	QPSK	25	25	22.06	21.81	21.95	
10	QPSK	50	0	22.09	22.16	22.01	23
10	16QAM	1	0	22.16	22.30	22.32	
10	16QAM	1	25	22.16	22.28	22.07	
10	16QAM	1	49	22.04	22.18	22.17	22
10	16QAM	25	0	21.03	21.18	21.16	
10	16QAM	25	12	21.05	21.14	20.99	
10	16QAM	25	25	21.02	21.06	20.88	22
10	16QAM	50	0	20.93	20.96	21.05	
10	64QAM	1	0	21.22	21.27	21.19	
10	64QAM	1	25	21.07	21.05	21.17	22
10	64QAM	1	49	21.08	21.16	21.07	
10	64QAM	25	0	20.08	20.11	20.02	
10	64QAM	25	12	19.82	19.85	19.91	21
10	64QAM	25	25	19.94	19.86	19.90	
10	64QAM	50	0	19.96	20.01	20.08	
Channel				26715	26865	27015	24
Frequency (MHz)				816.5	831.5	846.5	
5	QPSK	1	0	22.89	23.14	23.05	24
5	QPSK	1	12	22.92	22.94	22.86	
5	QPSK	1	24	22.92	23.03	22.87	
5	QPSK	12	0	22.12	22.19	22.25	23
5	QPSK	12	7	22.14	21.98	21.90	
5	QPSK	12	13	21.97	22.14	21.96	
5	QPSK	25	0	21.98	22.09	21.95	23
5	16QAM	1	0	22.00	22.21	22.27	
5	16QAM	1	12	21.95	22.08	21.98	
5	16QAM	1	24	21.93	22.24	22.19	22
5	16QAM	12	0	21.12	21.16	21.11	
5	16QAM	12	7	20.91	21.20	21.04	
5	16QAM	12	13	20.98	20.94	20.93	22
5	16QAM						



3	QPSK	15	0	22.11	21.96	22.27	23
3	16QAM	1	0	22.39	22.44	22.19	
3	16QAM	1	8	22.09	22.38	22.16	
3	16QAM	1	14	22.01	22.12	22.08	22
3	16QAM	8	0	21.06	21.13	21.10	
3	16QAM	8	4	21.01	21.04	21.28	
3	16QAM	8	7	20.90	21.10	20.97	22
3	16QAM	15	0	20.92	21.03	21.15	
3	64QAM	1	0	21.10	21.20	21.11	
3	64QAM	1	8	21.27	21.09	21.04	22
3	64QAM	1	14	20.92	21.08	21.19	
3	64QAM	8	0	20.19	20.11	19.98	
3	64QAM	8	4	20.05	20.22	19.98	21
3	64QAM	8	7	19.77	20.20	20.15	
3	64QAM	15	0	20.12	20.10	20.29	
Channel				26047	26365	26683	Tune-up limit (dBm)
Frequency (MHz)				1850.7	1882.5	1914.3	
1.4	QPSK	1	0	23.18	23.24	23.03	24
1.4	QPSK	1	3	22.92	23.14	23.15	
1.4	QPSK	1	5	23.14	23.11	23.13	
1.4	QPSK	3	0	22.31	22.33	22.17	
1.4	QPSK	3	1	22.15	22.33	22.11	
1.4	QPSK	3	3	22.12	22.13	22.15	
1.4	QPSK	6	0	22.01	22.25	22.16	23
1.4	16QAM	1	0	22.15	22.29	22.28	
1.4	16QAM	1	3	22.03	22.10	22.18	
1.4	16QAM	1	5	22.08	22.38	22.25	22
1.4	16QAM	3	0	21.12	21.37	21.24	
1.4	16QAM	3	1	21.06	21.29	21.11	
1.4	16QAM	3	3	21.11	21.03	21.13	
1.4	16QAM	6	0	21.11	21.27	21.14	
1.4	64QAM	1	0	21.33	21.20	21.14	
1.4	64QAM	1	3	21.07	21.34	21.10	22
1.4	64QAM	1	5	21.11	21.18	21.29	
1.4	64QAM	3	0	20.10	20.05	20.19	
1.4	64QAM	3	1	20.04	20.19	20.21	
1.4	64QAM	3	3	20.13	20.21	20.01	
1.4	64QAM	6	0	20.14	20.27	19.99	
							21

1.4	QPSK	6	0	21.80	22.02	21.86	23
1.4	16QAM	1	0	22.09	22.11	22.35	
1.4	16QAM	1	3	21.96	22.28	22.04	23
1.4	16QAM	1	5	22.07	22.01	22.06	
1.4	16QAM	3	0	21.12	21.08	21.05	
1.4	16QAM	3	1	21.00	21.08	21.04	
1.4	16QAM	3	3	21.02	21.07	21.16	
1.4	16QAM	6	0	20.78	20.90	20.84	
1.4	64QAM	1	0	21.27	21.39	21.32	22
1.4	64QAM	1	3	21.02	20.99	20.98	
1.4	64QAM	1	5	21.16	21.17	21.14	
1.4	64QAM	3	0	20.07	20.04	20.07	
1.4	64QAM	3	1	20.10	20.04	20.18	
1.4	64QAM	3	3	20.01	20.09	20.03	
1.4	64QAM	6	0	20.05	20.09	20.18	21



Band 30 (dBm)							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				27710			24
Frequency (MHz)				2310			
10	QPSK	1	0	22.87			24
10	QPSK	1	25	22.82			
10	QPSK	1	49	22.81			
10	QPSK	25	0	21.73			23
10	QPSK	25	12	21.81			
10	QPSK	25	25	21.52			
10	QPSK	50	0	21.78			23
10	16QAM	1	0	21.81			
10	16QAM	1	25	21.71			
10	16QAM	1	49	21.69			22
10	16QAM	25	0	20.73			
10	16QAM	25	12	20.62			
10	16QAM	25	25	20.66			22
10	16QAM	50	0	20.71			
10	64QAM	1	0	20.82			
10	64QAM	1	25	20.85			22
10	64QAM	1	49	20.79			
10	64QAM	25	0	19.78			
10	64QAM	25	12	19.84			21
10	64QAM	25	25	19.79			
10	64QAM	50	0	19.72			
Channel				27885	27710	27735	24
Frequency (MHz)				2307.5	2310	2312.5	
5	QPSK	1	0	22.76	22.82	22.74	24
5	QPSK	1	12	22.65	22.80	22.66	
5	QPSK	1	24	22.50	22.71	22.68	
5	QPSK	12	0	21.83	21.88	21.81	23
5	QPSK	12	7	21.65	21.68	21.74	
5	QPSK	12	13	21.61	21.82	21.51	
5	QPSK	25	0	21.52	21.87	21.85	23
5	16QAM	1	0	21.78	21.85	21.87	
5	16QAM	1	12	21.81	21.82	21.67	
5	16QAM	1	24	21.59	21.73	21.68	22
5	16QAM	12	0	20.71	20.86	20.89	
5	16QAM	12	7	20.86	20.80	20.81	
5	16QAM	12	13	20.66	20.78	20.66	22
5	16QAM	25	0	20.66	20.88	20.57	
5	64QAM	1	0	20.71	20.87	20.81	
5	64QAM	1	12	20.80	20.81	20.70	22
5	64QAM	1	24	20.56	20.75	20.68	
5	64QAM	12	0	19.84	19.91	19.75	
5	64QAM	12	7	19.82	19.68	19.61	21
5	64QAM	12	13	19.59	19.87	19.64	
5	64QAM	25	0	19.69	19.63	19.76	

Band 66 (dBm)							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				132072	132322	132572	24
Frequency (MHz)				1720	1745	1770	
20	QPSK	1	0	22.72	22.81	22.78	24
20	QPSK	1	49	22.74	22.67	22.59	
20	QPSK	1	99	22.51	22.69	22.62	
20	QPSK	50	0	21.79	21.90	21.88	23
20	QPSK	50	24	21.74	21.69	21.56	
20	QPSK	50	50	21.66	21.71	21.68	
20	QPSK	100	0	21.55	21.79	21.68	23
20	16QAM	1	0	21.73	21.85	21.83	
20	16QAM	1	49	21.56	21.71	21.76	
20	16QAM	1	99	21.69	21.66	21.71	22
20	16QAM	50	0	20.81	20.86	20.72	
20	16QAM	50	24	20.81	20.62	20.84	
20	16QAM	50	50	20.52	20.76	20.60	22
20	16QAM	100	0	20.72	20.58	20.76	
20	64QAM	1	0	20.82	20.80	20.74	
20	64QAM	1	49	20.70	20.76	20.70	22
20	64QAM	1	99	20.56	20.65	20.67	
20	64QAM	50	0	19.73	19.84	19.71	
20	64QAM	50	24	19.63	19.56	19.76	21
20	64QAM	50	50	19.57	19.60	19.79	
20	64QAM	100	0	19.77	19.69	19.73	
Channel				132047	132322	132597	24
Frequency (MHz)				1717.5	1745	1772.5	
15	QPSK	1	0	22.73	22.75	22.68	24
15	QPSK	1	37	22.72	22.68	22.70	
15	QPSK	1	74	22.63	22.66	22.66	
15	QPSK	36	0	21.76	21.87	21.86	23
15	QPSK	36	20	21.83	21.70	21.62	
15	QPSK	36	39	21.59	21.75	21.65	
15	QPSK	75	0	21.50	21.59	21.70	23
15	16QAM	1	0	21.75	21.85	21.85	
15	16QAM	1	37	21.70	21.80	21.76	
15	16QAM	1	74	21.82	21.86	21.78	22
15	16QAM	36	0	20.71	20.83	20.73	
15	16QAM	36	20	20.66	20.80	20.95	
15	16QAM	36	39	20.63	20.67	20.87	22
15	16QAM	75	0	20.67	20.65	20.51	
15	64QAM	1	0	20.73	20.83	20.74	
15	64QAM	1	37	20.64	20.74	20.61	22
15	64QAM	1	74	20.77	20.81	20.83	
15	64QAM	36	0	19.65	19.75	19.82	
15	64QAM	36	20	19.73	19.76	19.56	21
15	64QAM	36	39	19.58	19.84	19.69	
15	64QAM	75	0	19.51	19.71	19.84	
Channel				132022	132322	132622	24
Frequency (MHz)				1715	1745	1775	
10	QPSK	1	0	22.74	22.79	22.75	24
10	QPSK	1	25	22.81	22.69	22.59	
10	QPSK	1	49	22.62	22.75	22.53	
10	QPSK	25	0	21.62	21.89	21.74	23
10	QPSK	25	12	21.82	21.87	21.85	
10	QPSK	25	25	21.66	21.61	21.66	
10	QPSK	50	0	21.69	21.91	21.61	23
10	16QAM	1	0	21.76	21.80	21.82	
10	16QAM	1	25	21.83	21.76	21.75	
10	16QAM	1	49	21.68	21.69	21.83	22
10	16QAM	25	0	20.82	20.88	20.86	
10	16QAM	25	12	20.65	20.86	20.62	
10	16QAM	25	25	20.59	20.53	20.67	22
10	16QAM	50	0	20.69	20.77	20.60	
10	64QAM	1	0	20.76	20.88	20.85	
10	64QAM	1	25	20.82	20.67	20.75	21
10	64QAM	1	49	20.57	20.71	20.76	
10	64QAM	25	0	19.52	19.77	19.63	
10	64QAM	25	12	19.65	19.73	19.77	21
10	64QAM	25	25	19.59	19.75	19.54	
10	64QAM	50	0	19.69	19.80	19.54	
Channel				131997	132322	132647	24
Frequency (MHz)				1712.5	1745	1777.5	
5	QPSK	1	0	22.66	22.78	22.73	24
5	QPSK	1	12	22.77	22.71	22.71	
5	QPSK	1	24	22.71	22.76	22.50	
5	QPSK	12	0	21.72	21.76	21.76	23
5	QPSK	12	7	21.80	21.63	21.58	
5	QPSK	12	13	21.60	21.62	21.51	
5	QPSK	25	0	21.84	21.65	21.79	23
5	16QAM	1	0	21.88	21.86	21.73	
5	16QAM	1	12	21.83	21.75	21.72	
5	16QAM	1	24	21.59	21.77	21.66	22
5	16QAM	12	0	20.71	20.69	20.76	
5	16QAM	12	7	20.64	20.75	20.81	
5	16QAM	12	13	20.51	20.57	20.54	22
5	16QAM	25	0	20.40	20.60	20.65	
5	64QAM	1	0	20.68	20.79	20.72	
5	64QAM	1	12	20.89	20.84	20.82	22
5	64QAM	1	24	20.52	20.63	20.73	
5	64QAM	12	0	19.83	19.70	19.77	
5	64QAM	12	7	19.66	19.80	19.78	21
5	64QAM	12	13	19.59	19.75	19.78	
5	64QAM	25	0	19.56	19.70	19.65	
Channel				131987	132322	132657	24
Frequency (MHz)				1711.5	1745	1778.5	
3	QPSK	1	0	22.68	22.77	22.68	24
3	QPSK	1	8	22.59	22.71	22.59	
3	QPSK	1	14	22.60	22.63	22.75	
3	QPSK	8	0	21.65	21.77	21.78	23
3	QPSK	8	4	21.75	21.79	21.71	
3	QPSK	8	7	21.57	21.64	21.46	



3	QPSK	15	0	21.74	21.60	21.63	23
3	16QAM	1	0	21.77	21.86	21.84	
3	16QAM	1	8	21.87	21.83	21.69	
3	16QAM	1	14	21.68	21.82	21.77	22
3	16QAM	8	0	20.68	20.71	20.90	
3	16QAM	8	4	20.69	20.72	20.88	
3	16QAM	8	7	20.62	20.57	20.70	
3	16QAM	15	0	20.65	20.80	20.53	
3	64QAM	1	0	20.73	20.87	20.81	22
3	64QAM	1	8	20.82	20.82	20.82	
3	64QAM	1	14	20.58	20.69	20.73	
3	64QAM	8	0	19.69	19.81	19.83	
3	64QAM	8	4	19.62	19.66	19.62	
3	64QAM	8	7	19.61	19.70	19.56	21
3	64QAM	15	0	19.64	19.75	19.87	
Channel				131979	132322	132665	
Frequency (MHz)				1710.7	1745	1779.3	
1.4	QPSK	1	0	22.70	22.76	22.65	23.5
1.4	QPSK	1	3	22.57	22.72	22.69	
1.4	QPSK	1	5	22.60	22.65	22.61	
1.4	QPSK	3	0	21.65	21.72	21.67	
1.4	QPSK	3	1	21.66	21.65	21.86	
1.4	QPSK	3	3	21.73	21.80	21.69	22.5
1.4	QPSK	6	0	21.77	21.60	21.80	
1.4	16QAM	1	0	21.81	21.83	21.79	
1.4	16QAM	1	3	21.69	21.82	21.74	
1.4	16QAM	1	5	21.55	21.87	21.77	
1.4	16QAM	3	0	20.57	20.76	20.71	22.5
1.4	16QAM	3	1	20.65	20.85	20.85	
1.4	16QAM	3	3	20.52	20.69	20.83	
1.4	16QAM	6	0	20.65	20.83	20.68	
1.4	64QAM	1	0	20.71	20.86	20.80	
1.4	64QAM	1	3	20.84	20.78	20.81	21.5
1.4	64QAM	1	5	20.56	20.68	20.72	
1.4	64QAM	3	0	19.65	19.89	19.90	
1.4	64QAM	3	1	19.57	19.75	19.85	
1.4	64QAM	3	3	19.58	19.60	19.53	
1.4	64QAM	6	0	19.54	19.58	19.70	20.5



Band 71 (dBm)							
BW (MHz)	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				133222	133322	133372	
Frequency (MHz)				673	683	688	
20	QPSK	1	0	23.05	23.15	23.07	24
20	QPSK	1	49	23.04	23.12	23.03	
20	QPSK	1	99	23.00	22.98	22.91	
20	QPSK	50	0	22.22	22.11	22.19	23
20	QPSK	50	24	21.96	22.21	21.99	
20	QPSK	50	50	21.90	22.02	21.93	
20	QPSK	100	0	21.95	21.86	21.99	23
20	16QAM	1	0	22.15	22.28	22.18	
20	16QAM	1	49	22.06	22.10	21.98	
20	16QAM	1	99	21.96	22.15	22.01	22
20	16QAM	50	0	21.14	21.15	21.04	
20	16QAM	50	24	21.10	20.91	20.93	
20	16QAM	50	50	20.94	20.98	20.90	22
20	16QAM	100	0	20.94	21.11	21.08	
20	64QAM	1	0	21.22	21.22	21.00	
20	64QAM	1	49	21.09	21.30	21.22	22
20	64QAM	1	99	21.03	21.17	21.08	
20	64QAM	50	0	20.05	20.12	20.07	
20	64QAM	50	24	19.86	20.18	19.99	21
20	64QAM	50	50	19.97	20.05	19.98	
20	64QAM	100	0	20.02	20.14	20.19	
Channel				133197	133297	133397	
Frequency (MHz)				670.5	680.5	690.5	
15	QPSK	1	0	23.04	23.12	23.07	24
15	QPSK	1	37	22.98	23.11	23.06	
15	QPSK	1	74	23.04	23.05	23.02	
15	QPSK	36	0	22.23	22.25	22.14	23
15	QPSK	36	20	22.10	22.07	22.07	
15	QPSK	36	39	21.90	22.09	21.91	
15	QPSK	75	0	21.80	21.86	21.83	23
15	16QAM	1	0	22.31	22.36	22.13	
15	16QAM	1	37	22.11	22.35	22.20	
15	16QAM	1	74	22.06	22.23	22.12	22
15	16QAM	36	0	21.02	21.11	21.10	
15	16QAM	36	20	20.97	21.10	21.08	
15	16QAM	36	39	20.94	20.86	21.15	22
15	16QAM	75	0	21.06	21.12	21.01	
15	64QAM	1	0	21.14	21.34	21.12	
15	64QAM	1	37	21.17	21.21	21.10	22
15	64QAM	1	74	21.15	21.02	21.16	
15	64QAM	36	0	20.01	20.07	19.90	
15	64QAM	36	20	19.82	20.10	19.93	21
15	64QAM	36	39	20.01	19.62	19.95	
15	64QAM	75	0	20.07	19.98	19.90	
Channel				133172	133272	133422	
Frequency (MHz)				668	678	693	
10	QPSK	1	0	22.99	23.11	23.08	24
10	QPSK	1	25	23.04	22.89	22.95	
10	QPSK	1	49	23.02	22.88	23.03	
10	QPSK	25	0	22.16	22.20	22.09	23
10	QPSK	25	12	22.06	22.18	21.93	
10	QPSK	25	25	21.87	21.91	21.85	
10	QPSK	50	0	21.98	22.07	22.16	23
10	16QAM	1	0	22.32	22.33	22.24	
10	16QAM	1	25	22.06	22.16	22.24	
10	16QAM	1	49	22.04	21.99	22.06	22
10	16QAM	25	0	21.06	21.14	21.22	
10	16QAM	25	12	20.90	21.07	21.15	
10	16QAM	25	25	20.94	20.99	21.06	22
10	16QAM	50	0	21.04	20.93	21.09	
10	64QAM	1	0	21.04	21.23	21.25	
10	64QAM	1	25	21.15	21.03	21.05	22
10	64QAM	1	49	21.12	21.20	21.05	
10	64QAM	25	0	20.12	20.13	20.06	
10	64QAM	25	12	19.93	19.99	20.08	21
10	64QAM	25	25	19.98	19.91	19.89	
10	64QAM	50	0	20.01	20.10	20.14	
Channel				133147	133247	133447	
Frequency (MHz)				665.5	675.5	695.5	
5	QPSK	1	0	23.09	23.10	22.89	24
5	QPSK	1	12	22.81	23.07	22.99	
5	QPSK	1	24	22.87	22.90	22.82	
5	QPSK	12	0	21.92	22.11	22.11	23
5	QPSK	12	7	21.80	21.90	22.03	
5	QPSK	12	13	21.80	22.06	21.94	
5	QPSK	25	0	22.00	22.16	22.10	23
5	16QAM	1	0	22.20	22.36	22.27	
5	16QAM	1	12	22.05	22.07	22.02	
5	16QAM	1	24	22.05	22.07	21.98	22
5	16QAM	12	0	21.05	21.07	21.09	
5	16QAM	12	7	20.82	20.91	21.01	
5	16QAM	12	13	20.99	20.98	20.96	22
5	16QAM	25	0	21.05	20.99	21.00	
5	64QAM	1	0	21.16	21.12	20.99	
5	64QAM	1	12	20.98	20.98	21.12	22
5	64QAM	1	24	20.91	21.15	21.17	
5	64QAM	12	0	19.95	20.11	20.01	
5	64QAM	12	7	20.10	20.09	19.99	21
5	64QAM	12	13	19.82	19.85	19.98	
5	64QAM	25	0	20.03	20.08	20.17	



Band 41 (2496~2690MHz) (dBm)										
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Low Channel	Middle Channel	Middle High Channel	High Channel	Tune-up limit (dBm)	
Channel				39750	40185	40620	41055	41490		
Frequency (MHz)				2506	2549.5	2593	2636.5	2680		
20	QPSK	1	0	23.20	23.24	23.26	23.10	23.15	24	
20	QPSK	1	45	23.05	23.09	23.10	23.15	23.08		
20	QPSK	1	90	23.06	23.01	23.11	23.10	23.06		
20	QPSK	50	0	22.27	22.25	22.33	22.15	22.18		
20	QPSK	50	24	22.07	22.10	22.19	22.08	22.02	23	
20	QPSK	50	50	22.14	22.10	22.09	22.08	22.06		
20	QPSK	100	0	22.09	22.08	22.10	22.11	21.89		
20	16QAM	1	0	22.25	22.19	22.31	22.28	22.17		
20	16QAM	1	49	22.25	22.07	22.11	22.02	22.06	23	
20	16QAM	1	99	22.19	22.06	22.00	22.21	22.16		
20	16QAM	50	0	21.02	21.12	21.22	21.18	21.08		
20	16QAM	50	24	20.99	21.07	21.07	21.18	21.06		
20	16QAM	50	50	20.95	21.06	21.10	21.17	21.01	22	
20	16QAM	100	0	21.02	21.03	21.07	21.00	20.95		
20	64QAM	1	0	21.20	21.26	21.41	21.21	21.37		
20	64QAM	1	49	21.25	21.14	21.26	21.07	21.05		
20	64QAM	1	99	21.19	21.01	21.09	21.09	21.03	22	
20	64QAM	50	0	19.94	20.04	20.15	20.17	20.18		
20	64QAM	50	24	19.86	19.96	20.13	19.99	19.88		
20	64QAM	50	50	20.14	20.05	19.99	20.02	19.81		
20	64QAM	100	0	19.88	19.90	19.87	20.04	19.93	21	
Channel				39725	40173	40620	41055	41515		
Frequency (MHz)				2502.5	2547.3	2593	2637.5	2682.5		
15	QPSK	1	0	23.06	23.11	23.20	23.20	23.04		
15	QPSK	1	37	22.90	23.11	22.97	23.09	22.97		
15	QPSK	1	74	22.88	22.89	23.14	22.97	22.98		
15	QPSK	36	0	22.28	22.03	22.23	22.20	22.01		
15	QPSK	36	20	22.06	21.89	22.19	21.91	21.94	23	
15	QPSK	36	39	21.88	21.94	22.04	22.10	21.92		
15	QPSK	75	0	22.19	21.95	21.91	22.16	22.03		
15	16QAM	1	0	22.16	22.28	22.28	22.27	22.17		
15	16QAM	1	37	22.20	21.99	22.27	22.16	22.23	23	
15	16QAM	1	74	22.20	22.06	22.12	21.97	22.28		
15	16QAM	36	0	20.95	21.05	21.15	20.94	21.03		
15	16QAM	36	20	20.95	21.06	21.18	21.21	21.13		
15	16QAM	36	39	20.84	20.91	20.87	20.90	20.96	22	
15	16QAM	75	0	21.16	20.96	21.17	21.01	21.01		
15	64QAM	1	0	21.02	21.02	21.07	21.06	21.11		
15	64QAM	1	37	21.27	20.99	21.08	20.98	21.22		
15	64QAM	1	74	20.93	20.99	21.17	21.01	21.05	22	
15	64QAM	36	0	20.09	20.00	20.24	20.09	20.26		
15	64QAM	36	20	20.19	20.10	20.06	20.11	20.13		
15	64QAM	36	39	19.93	19.99	20.15	19.91	20.08		
15	64QAM	75	0	20.19	19.99	20.21	20.15	19.97	21	
Channel				39700	40160	40620	41050	41540		
Frequency (MHz)				2501	2547	2593	2639	2685		
10	QPSK	1	0	23.14	22.94	23.16	23.12	23.01		
10	QPSK	1	25	22.89	23.03	22.97	23.08	23.03		
10	QPSK	1	49	22.89	23.03	23.05	23.12	22.93		
10	QPSK	25	0	22.12	22.00	22.16	21.94	22.20		
10	QPSK	25	12	22.24	22.07	22.04	22.04	21.90	23	
10	QPSK	25	25	22.05	21.92	22.15	21.99	22.06		
10	QPSK	50	0	22.15	21.85	22.00	22.15	22.10		
10	16QAM	1	0	22.35	22.11	22.38	22.35	22.35		
10	16QAM	1	25	22.17	22.00	22.04	22.19	22.03	23	
10	16QAM	1	49	22.09	22.09	22.24	22.05	22.26		
10	16QAM	25	0	20.97	20.97	21.15	20.92	21.04		
10	16QAM	25	12	21.19	21.02	20.95	21.06	21.12		
10	16QAM	25	25	20.95	20.95	20.99	20.98	20.93	22	
10	16QAM	50	0	20.89	21.02	21.15	21.09	20.89		
10	64QAM	1	0	21.27	21.06	21.19	21.07	21.16		
10	64QAM	1	25	21.18	21.05	21.03	21.12	21.05		
10	64QAM	1	49	21.07	20.99	21.18	20.98	21.13	22	
10	64QAM	25	0	20.07	20.12	20.21	19.93	20.18		
10	64QAM	25	12	20.16	19.90	19.98	19.98	19.87		
10	64QAM	25	25	19.90	19.97	20.11	20.04	19.95		
10	64QAM	50	0	20.12	19.93	19.96	20.14	20.07	21	
Channel				39675	40148	40620	41083	41555		
Frequency (MHz)				2498.5	2545.3	2593	2638.3	2683.5		
5	QPSK	1	0	23.12	23.00	23.19	22.90	22.99		
5	QPSK	1	12	23.02	23.13	23.19	22.91	22.95		
5	QPSK	1	24	23.12	22.90	23.08	22.90	23.03		
5	QPSK	12	0	22.09	22.21	22.23	21.96	22.09		
5	QPSK	12	7	22.11	22.12	22.05	21.97	22.21	23	
5	QPSK	12	13	21.95	21.92	22.00	21.95	22.11		
5	QPSK	25	0	22.15	21.90	22.18	22.11	22.14		
5	16QAM	1	0	22.14	22.06	22.11	22.29	22.13		
5	16QAM	1	12	22.02	22.15	22.05	22.10	22.01	23	
5	16QAM	1	24	22.17	22.05	22.16	21.94	21.95		
5	16QAM	12	0	21.16	20.97	21.00	20.98	21.13		
5	16QAM	12	7	20.90	20.82	20.95	20.93	21.12		
5	16QAM	12	13	21.01	20.94	21.04	21.07	21.04	22	
5	16QAM	25	0	20.85	20.88	21.15	20.89	20.84		
5	64QAM	1	0	21.22	20.98	21.15	21.03	21.09		
5	64QAM	1	12	21.28	21.10	21.25	21.00	21.06		
5	64QAM	1	24	21.18	21.13	21.04	21.22	21.02	22	
5	64QAM	12	0	19.97	19.89	20.05	20.20	20.16		
5	64QAM	12	7	20.14	19.95	20.13	19.91	20.00		
5	64QAM	12	13	20.14	19.93	20.09	20.01	20.15		
5	64QAM	25	0	20.02	19.90	20.01	20.19	20.04	21	

Band 41 HPUE (2496~2690MHz) (dBm)										
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Low Channel	Middle Channel	Middle High Channel	High Channel	Tune-up limit (dBm)	
Channel				39750	40185	40620	41055	41490		
Frequency (MHz)				2506	2549.5	2593	2636.5	2680		
20	QPSK	1	0	25.60	25.51	25.68	25.59	25.42	27	
20	QPSK	1	45	25.63	25.38	25.40	25.62	25.55		
20	QPSK	1	90	25.42	25.49	25.54	25.43	25.47		
20	QPSK	50	0	24.61	24.60	24.80	24.77	24.60		
20	QPSK	50	24	24.65	24.64	24.85	24.66	24.70	26	
20	QPSK	50	50	24.58	24.53	24.62	24.58	24.57		
20	QPSK	100	0	24.65	24.45	24.52	24.35	24.69		
20	16QAM	1	0	24.55	24.52	24.64	24.62	24.70		
20	16QAM	1	49	24.84	24.60	24.68	24.63	24.56	26	
20	16QAM	1	99	24.52	24.59	24.67	24.56	24.72		
20	16QAM	50	0	23.62	23.60	23.61	23.50	23.67		
20	16QAM	50	24	23.58	23.46	23.69	23.49	23.43		
20	16QAM	50	50	23.49	23.62	23.60	23.35	23.53	25	
20	16QAM	100	0	23.45	23.50	23.58	23.48	23.48		
20	64QAM	1	0	23.56	23.61	23.81	23.68	23.68		
20	64QAM	1	49	23.87	23.60	23.77	23.63	23.54		
20	64QAM	1	99	23.61	23.60	23.58	23.57	23.73	25	
20	64QAM	50	0	22.54	22.46	22.52	22.56	22.46		
20	64QAM	50	24	22.43	22.49	22.54	22.45	22.47		
20	64QAM	50	50	22.42	22.45	22.63	22.25	22.48		
20	64QAM	100	0	22.49	22.38	22.58	22.36	22.59	24	
Channel				39725	40173	40620	41055	41515		
Frequency (MHz)				2502.5	2547.3	2593	2637.5	2682.5		
15	QPSK	1	0	25.56	25.54	25.65	25.63	25.40		
15	QPSK	1	37	25.43	25.32	25.42	25.58	25.57		
15	QPSK	1	74	25.35	25.54	25.34	25.54	25.63		
15	QPSK	36	0	24.51	24.73	24.79	24.59	24.80		
15	QPSK	36	20	24.51	24.61	24.61	24.56	24.82	26	
15	QPSK	36	39	24.50	24.52	24.65	24.64	24.54		
15	QPSK	75	0	24.37	24.38	24.68	24.64	24.55		
15	16QAM	1	0	24.69	24.74	24.82	24.82	24.82		
15	16QAM	1	37	24.83	24.51	24.56	24.72	24.71	26	
15	16QAM	1	74	24.46	24.54	24.53	24.46	24.64		
15	16QAM	36	0	23.55	23.63	23.64	23.51	23.54		
15	16QAM	36	20	23.65	23.49	23.59	23.51	23.57		
15	16QAM	36	39	23.54	23.30	23.30	23.59	23.31	25	
15	16QAM	75	0	23.34	23.25	23.36	23.30	23.58		
15	64QAM	1	0	23.82	23.80	23.83	23.81	23.82		
15	64QAM	1	37	23.50	23.52	23.70	23.59	23.58		
15	64QAM	1	74	23.62	23.56	23.68	23.53	23.68	25	
15	64QAM	36	0	22.47	22.56	22.53	22.50	22.72		
15	64QAM	36	20	22.44	22.57	22.67	22.49	22.48		
15	64QAM	36	39	22.57	22.45	22.55	22.41	22.37		
15	64QAM	75	0							



Band 48 (3.5G Band) (dBm)										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Middle-Low Channel	Middle-Low Channel	Middle-High Channel	High Channel	Tune-up limit (dBm)	
Channel				55340	55830	55990	56190	56640		
Frequency (MHz)				3500	3609	3625	3641	3690		
20	QPSK	1	0	22.50	22.85	22.88	22.86	22.83	24	
20	QPSK	1	49	22.51	22.71	22.87	22.71	22.79		
20	QPSK	1	99	22.89	22.80	22.83	22.74	22.68		
20	QPSK	50	0	21.50	21.71	21.91	21.90	21.78		
20	QPSK	50	24	21.57	21.79	21.83	21.87	21.71	23	
20	QPSK	50	50	21.59	21.81	21.72	21.74	21.80		
20	QPSK	100	0	21.64	21.85	21.81	21.76	21.78		
20	16QAM	1	0	21.67	21.89	21.90	21.81	21.84		
20	16QAM	1	49	21.66	21.84	21.82	21.89	21.85	23	
20	16QAM	1	99	21.52	21.86	21.85	21.82	21.83		
20	16QAM	50	0	20.55	20.67	20.58	20.68	20.92		
20	16QAM	50	24	20.44	20.85	20.88	20.85	20.86		
20	16QAM	50	50	20.46	20.74	20.67	20.91	20.74	22	
20	16QAM	100	0	20.64	20.82	20.78	20.69	20.71		
20	64QAM	1	0	20.79	20.85	20.92	20.88	20.92		
20	64QAM	1	49	20.65	20.68	20.82	20.71	20.78		
20	64QAM	1	99	20.63	20.82	20.77	20.83	20.84	22	
20	64QAM	50	0	19.68	19.75	19.92	19.85	19.92		
20	64QAM	50	24	19.51	19.84	19.92	19.92	19.92		
20	64QAM	50	50	19.63	19.53	19.80	19.87	19.68		
20	64QAM	100	0	19.60	19.61	19.71	19.89	19.78	21	
Channel				55315	55520	55990	56160	56640		
Frequency (MHz)				3572.5	3609	3625	3642	3692.5		
15	QPSK	1	0	22.53	22.82	22.85	22.78	22.85		
15	QPSK	1	37	22.81	22.70	22.79	22.72	22.69		
15	QPSK	1	74	22.49	22.67	22.79	22.60	22.85		
15	QPSK	36	0	21.62	21.74	21.85	21.80	21.84		
15	QPSK	36	20	21.65	21.84	21.85	21.79	21.73	23	
15	QPSK	36	39	21.66	21.49	21.76	21.82	21.84		
15	QPSK	75	0	21.61	21.62	21.80	21.78	21.85		
15	16QAM	1	0	21.68	21.84	21.92	21.84	21.91		
15	16QAM	1	37	21.78	21.90	21.83	21.82	21.86	23	
15	16QAM	1	74	21.60	21.81	21.84	21.84	21.83		
15	16QAM	36	0	20.56	20.75	20.81	20.72	20.79		
15	16QAM	36	20	20.66	20.87	20.79	20.83	20.74		
15	16QAM	36	39	20.60	20.58	20.73	20.82	20.87	22	
15	16QAM	75	0	20.34	20.74	20.78	20.66	20.72		
15	64QAM	1	0	20.87	20.79	20.94	20.79	20.78		
15	64QAM	1	37	20.58	20.90	20.81	20.76	20.83		
15	64QAM	1	74	20.71	20.64	20.86	20.82	20.87	21	
15	64QAM	36	0	19.58	19.86	19.71	19.89	19.87		
15	64QAM	36	20	19.65	19.60	19.73	19.91	19.93		
15	64QAM	36	39	19.53	19.56	19.73	19.86	19.72		
15	64QAM	75	0	19.69	19.64	19.96	19.68	19.97	21	
Channel				55290	55815	55990	56165	56640		
Frequency (MHz)				3555	3607.5	3625	3642.5	3695		
10	QPSK	1	0	22.63	22.79	22.83	22.72	22.76		
10	QPSK	1	5	22.66	22.74	22.81	22.77	22.72		
10	QPSK	1	49	22.51	22.55	22.74	22.75	22.70		
10	QPSK	25	0	21.60	21.75	21.80	21.89	21.91		
10	QPSK	25	12	21.55	21.74	21.91	21.92	21.89	23	
10	QPSK	25	25	21.61	21.69	21.85	21.75	21.68		
10	QPSK	50	0	21.51	21.73	21.83	21.83	21.72		
10	16QAM	1	0	21.78	21.85	21.91	21.91	21.89		
10	16QAM	1	25	21.72	21.93	21.85	21.86	21.80	23	
10	16QAM	1	49	21.53	21.59	21.86	21.74	21.95		
10	16QAM	25	0	20.73	20.77	20.82	20.85	20.73		
10	16QAM	25	12	20.59	20.86	20.67	20.83	20.86		
10	16QAM	25	25	20.52	20.68	20.81	20.62	20.57	22	
10	16QAM	50	0	20.57	20.62	20.79	20.89	20.76		
10	64QAM	1	0	20.75	20.85	20.90	20.81	20.84		
10	64QAM	1	25	20.63	20.81	20.88	20.73	20.78		
10	64QAM	1	49	20.76	20.74	20.80	20.84	20.87	22	
10	64QAM	25	0	19.68	19.74	19.81	19.76	19.84		
10	64QAM	25	12	19.57	19.62	19.86	19.70	19.74		
10	64QAM	25	25	19.62	19.60	19.60	19.60	19.86		
10	64QAM	50	0	19.44	19.55	19.75	19.72	19.82	21	
Channel				55265	55810	55990	56170	56175		
Frequency (MHz)				3522.5	3607	3625	3643	3697.5		
5	QPSK	1	0	22.42	22.71	22.85	22.81	22.76		
5	QPSK	1	12	22.72	22.84	22.83	22.74	22.83		
5	QPSK	1	24	22.42	22.62	22.79	22.68	22.70		
5	QPSK	12	0	21.58	21.93	22.06	21.79	22.08		
5	QPSK	12	7	21.66	21.83	21.92	21.67	21.83	23	
5	QPSK	12	13	21.35	21.63	21.63	21.69	21.94		
5	QPSK	25	0	21.40	21.58	21.89	21.71	21.72		
5	16QAM	1	0	21.66	21.89	22.01	21.90	21.95		
5	16QAM	1	12	21.85	21.77	22.05	21.67	22.11	23	
5	16QAM	1	24	21.48	21.75	21.99	21.82	22.04		
5	16QAM	12	0	20.87	20.84	20.89	20.89	20.83		
5	16QAM	12	7	20.89	20.90	20.85	20.79	20.93		
5	16QAM	12	13	20.55	20.54	20.52	20.70	20.86	22	
5	16QAM	25	0	20.42	20.65	20.71	20.88	20.89		
5	64QAM	1	0	20.87	21.07	20.94	21.12	21.12		
5	64QAM	1	12	20.75	21.02	20.79	20.86	20.89		
5	64QAM	1	24	20.55	20.86	20.81	21.06	20.88	22	
5	64QAM	12	0	19.43	19.59	20.01	19.76	19.79		
5	64QAM	12	7	19.50	19.71	19.75	19.72	19.95		
5	64QAM	12	13	19.48	19.79	19.62	19.67	19.76		
5	64QAM	25	0	19.48	19.61	19.67	19.63	19.85	21	
Channel				55240	55805	55990	56160	56640		
Frequency (MHz)				3500	3607.5	3625	3642.5	3695		
5	QPSK	1	0	22.63	22.79	22.83	22.72	22.76		
5	QPSK	1	5	22.66	22.74	22.81	22.77	22.72		
5	QPSK	1	49	22.51	22.55	22.74	22.75	22.70		
5	QPSK	25	0	21.60	21.75	21.80	21.89	21.91		
5	QPSK	25	12	21.55	21.74	21.91	21.92	21.89	23	
5	QPSK	25	25	21.61	21.69	21.85	21.75	21.68		
5	QPSK	50	0	21.51	21.73	21.83	21.83	21.72		
5	16QAM	1	0	21.78	21.85	21.91	21.91	21.89		
5	16QAM	1	25	21.72	21.93	21.85	21.86	21.80	23	
5	16QAM	1	49	21.53	21.59	21.86	21.74	21.95		
5	16QAM	25	0	20.73	20.77	20.82	20.85	20.73		
5	16QAM	25	12	20.59	20.86	20.67	20.83	20.86		
5	16QAM	25	25	20.52	20.68	20.81	20.62	20.57	22	
5	16QAM	50	0	20.57	20.62	20.79	20.89	20.76		
5	64QAM	1	0	20.75	20.85	20.90	20.81	20.84		
5	64QAM	1	25	20.63	20.81	20.88	20.73	20.78		
5	64QAM	1	49	20.76	20.74	20.80	20.84	20.87	22	
5	64QAM	25	0	19.68	19.74	19.81	19.76	19.84		
5	64QAM	25	12	19.57	19.62	19.86	19.70	19.74		
5	64QAM	25	25	19.62	19.60	19.60	19.60	19.86		
5	64QAM	50	0	19.44	19.55	19.75	19.72	19.82	21	
Channel				55215	55810	55990	56170	56175		
Frequency (MHz)				3477.5	3607	3625	3643	3697.5		
5	QPSK	1	0	22.42	22.71	22.85	22.81	22.76		
5	QPSK	1	12	22.72	22.84	22.83	22.74	22.83		
5	QPSK	1	24	22.42	22.62	22.79	22.68	22.70		
5	QPSK	12	0	21.58	21.93	22.06	21.79	22.08		
5	QPSK	12	7	21.66	21.83	21.92	21.67	21.83	23	
5	QPSK	12	13	21.35	21.63	21.63	21.69	21.94		
5	QPSK	25	0	21.40	21.58	21.89	21.71	21.72		
5	16QAM	1	0	21.66	21.89	22.01	21.90	21.95		
5	16QAM	1	12	21.85	21.77	22.05	21.67	22.11		

CA_5B											
Combination:10MHz+10MHz(50RB+50RB)											
PCC Channel	PCC Channel (3GPP)	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level(dB)	Measured Power(dBm)	Tune-up limit(dBm)
				RB Size	RB Offset	RB Size	RB Offset				
20450	20450	20549	QPSK	1	0	0	0	1	0	22.76	23.50
20525	20476	20575	QPSK	1	0	0	0	1	0	22.80	23.50
20600	20501	20600	QPSK	1	0	0	0	1	0	22.73	23.50
20450	20450	20549	16QAM	1	0	0	0	1	0	21.85	22.50
20525	20476	20575	16QAM	1	0	0	0	1	0	21.91	22.50
20600	20501	20600	16QAM	1	0	0	0	1	0	21.87	22.50
20450	20450	20549	64QAM	1	0	0	0	1	0	20.90	21.50
20525	20476	20575	64QAM	1	0	0	0	1	0	20.96	21.50
20600	20501	20600	64QAM	1	0	0	0	1	0	20.91	21.50
20450	20450	20549	QPSK	25	0	0	0	1	0	21.84	22.50
20525	20476	20575	QPSK	25	0	0	0	1	0	21.85	22.50
20600	20501	20600	QPSK	25	0	0	0	1	0	21.77	22.50

CA_7C											
Combination:20MHz+20MHz(100RB+100RB)											
PCC Channel	PCC Channel (3GPP)	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level(dB)	Measured Power(dBm)	Tune-up limit(dBm)
				RB Size	RB Offset	RB Size	RB Offset				
20850	20850	21048	QPSK	1	0	0	0	1	0	22.59	23.50
21100	21001	21199	QPSK	1	0	0	0	1	0	22.62	23.50
21350	21152	21350	QPSK	1	0	0	0	1	0	22.57	23.50
20850	20850	21048	16QAM	1	0	0	0	1	0	21.65	22.50
21100	21001	21199	16QAM	1	0	0	0	1	0	21.70	22.50
21350	21152	21350	16QAM	1	0	0	0	1	0	21.63	22.50
20850	20850	21048	64QAM	1	0	0	0	1	0	21.52	22.50
21100	21001	21199	64QAM	1	0	0	0	1	0	21.56	22.50
21350	21152	21350	64QAM	1	0	0	0	1	0	21.51	22.50
20850	20850	21048	QPSK	50	0	0	0	1	0	21.48	22.50
21100	21001	21199	QPSK	50	0	0	0	1	0	21.53	22.50
21350	21152	21350	QPSK	50	0	0	0	1	0	21.50	22.50

CA_41C											
Combination:20MHz+20MHz(100RB+100RB)											
PCC Channel	PCC Channel (3GPP)	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level(dB)	Measured Power(dBm)	Tune-up limit(dBm)
				RB Size	RB Offset	RB Size	RB Offset				
39750	39750	39948	QPSK	1	0	0	0	1	0	24.60	25.50
40521	40521	40719	QPSK	1	0	0	0	1	0	24.63	25.50
41292	41292	41490	QPSK	1	0	0	0	1	0	24.59	25.50
39750	39750	39948	16QAM	1	0	0	0	1	0	24.33	25.00
40521	40521	40719	16QAM	1	0	0	0	1	0	24.38	25.00
41292	41292	41490	16QAM	1	0	0	0	1	0	24.29	25.00
39750	39750	39948	64QAM	1	0	0	0	1	0	23.11	24.00
40521	40521	40719	64QAM	1	0	0	0	1	0	23.13	24.00
41292	41292	41490	64QAM	1	0	0	0	1	0	23.09	24.00
39750	39750	39948	QPSK	50	0	0	0	1	0	23.88	24.50
40521	40521	40719	QPSK	50	0	0	0	1	0	23.91	24.50
41292	41292	41490	QPSK	50	0	0	0	1	0	23.84	24.50