



REPORT No.: SZ21110373S01

Annex E Conducted Power

Conducted Power

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	RMC 12.2Kbps	20.89	20.96	20.54	21.50	20.26	20.34	20.19	21.00	21.63	21.57	21.66	22.00				
3GPP Rel 6	HSDPA Subtest-1	20.66	20.86	20.51	22.00	20.24	20.18	20.25	21.00	20.75	20.52	20.53	21.50				
3GPP Rel 6	HSDPA Subtest-2	20.76	20.85	20.34	22.00	20.19	20.16	20.25	21.00	20.76	20.53	20.55	21.50				
3GPP Rel 6	HSDPA Subtest-3	20.48	20.35	19.86	21.50	19.68	19.57	20.13	20.50	20.23	20.02	20.02	21.00				
3GPP Rel 6	HSDPA Subtest-4	20.29	20.34	19.86	21.50	19.69	19.58	20.14	20.50	20.23	20.02	20.01	21.00				
3GPP Rel 8	DC-HSDPA Subtest-1	20.59	20.66	20.83	22.00	20.06	20.11	20.13	21.00	20.42	20.63	19.88	21.00				
3GPP Rel 8	DC-HSDPA Subtest-2	20.67	20.66	20.86	22.00	20.08	20.26	20.25	21.00	20.55	20.44	19.80	21.00				
3GPP Rel 8	DC-HSDPA Subtest-3	20.39	20.34	20.40	21.50	19.71	19.95	20.07	20.50	20.03	19.94	19.39	20.50				
3GPP Rel 8	DC-HSDPA Subtest-4	20.07	20.35	20.40	21.50	19.51	19.74	19.86	20.50	20.03	19.95	19.30	20.50				
3GPP Rel 6	HSUPA Subtest-1	19.46	19.66	16.38	20.00	19.41	18.58	19.37	20.00	19.08	20.10	19.29	20.50				
3GPP Rel 6	HSUPA Subtest-2	18.90	19.13	15.82	18.00	18.86	18.01	18.81	19.00	18.55	19.56	18.76	20.00				
3GPP Rel 6	HSUPA Subtest-3	19.46	19.69	16.37	19.00	19.44	18.66	19.43	20.00	19.12	20.11	19.31	20.50				
3GPP Rel 6	HSUPA Subtest-4	19.42	19.68	16.35	18.00	19.42	18.63	19.38	20.00	19.06	20.07	19.26	20.50				
3GPP Rel 6	HSUPA Subtest-5	19.41	19.67	16.35	20.00	19.40	18.63	19.42	20.00	19.10	20.08	19.29	20.50				
3GPP Rel 7	HSPA+ (16QAM) Subtest-1	19.64	19.68	16.55	20.00	19.50	18.74	19.44	20.00	19.08	20.05	20.63	21.00				
Attenuator		Cable Loss			0.8	Cable Loss			0.8	Cable Loss			0.6				
Mode		Max.			20.96	Max.			20.34	Max.			21.66				

Band 2 (1900MHz Band) 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)				1880	1880	1900	
20	QPSK	1	0	21.39	21.50	21.33	22
20	QPSK	1	49	21.22	21.37	21.14	
20	QPSK	1	99	21.07	21.13	21.06	
20	QPSK	50	0	20.24	20.37	20.17	
20	QPSK	50	24	20.14	20.11	20.09	21
20	QPSK	50	50	20.04	20.02	20.07	
20	QPSK	100	0	20.26	20.35	20.20	
20	16QAM	1	0	20.94	20.95	20.74	
20	16QAM	1	49	20.74	20.77	20.63	21.5
20	16QAM	1	99	20.53	20.55	20.46	
20	16QAM	50	0	19.60	19.45	19.40	
20	16QAM	50	24	19.44	19.31	19.25	
20	16QAM	50	50	19.27	19.15	19.11	20
20	16QAM	100	0	19.60	19.42	19.22	
20	64QAM	1	0	19.59	19.53	19.31	
20	64QAM	1	49	19.42	19.38	19.23	
20	64QAM	1	99	19.28	19.19	19.15	20
20	64QAM	50	0	18.64	18.76	18.51	
20	64QAM	50	24	18.43	18.65	18.47	
20	64QAM	50	50	18.81	18.92	18.73	
20	64QAM	100	0	18.69	18.73	18.56	19.5
Channel				18675	18900	19125	
Frequency (MHz)				1857.5	1880	1902.5	Tune-up limit (dBm)
15	QPSK	1	0	21.35	21.46	21.29	22
15	QPSK	1	37	21.18	21.33	21.10	
15	QPSK	1	74	21.03	21.09	21.02	
15	QPSK	36	0	20.33	20.20	20.13	
15	QPSK	36	20	20.10	20.07	20.05	21
15	QPSK	36	39	20.00	19.98	20.03	
15	QPSK	75	0	20.31	20.22	20.16	
15	16QAM	1	0	20.90	20.91	20.70	
15	16QAM	1	37	20.70	20.73	20.59	21.5
15	16QAM	1	74	20.49	20.51	20.42	
15	16QAM	36	0	19.56	19.41	19.36	
15	16QAM	36	20	19.40	19.27	19.21	
15	16QAM	36	39	19.23	19.11	19.07	20
15	16QAM	75	0	19.56	19.38	19.18	
15	64QAM	1	0	19.55	19.49	19.27	
15	64QAM	1	37	19.38	19.34	19.19	
15	64QAM	1	74	19.24	19.15	19.11	20
15	64QAM	36	0	18.60	18.72	18.47	
15	64QAM	36	20	18.39	18.61	18.43	
15	64QAM	36	39	18.77	18.88	18.69	
15	64QAM	75	0	18.65	18.69	18.52	19.5
Channel				18650	18900	19150	
Frequency (MHz)				1855	1880	1905	Tune-up limit (dBm)
10	QPSK	1	0	21.31	21.42	21.25	22
10	QPSK	1	25	21.14	21.29	21.06	
10	QPSK	1	49	20.99	21.05	20.96	
10	QPSK	25	0	20.29	20.16	20.09	
10	QPSK	25	12	20.06	20.03	20.01	21
10	QPSK	25	25	19.96	19.94	19.99	
10	QPSK	50	0	20.27	20.18	20.12	
10	16QAM	1	0	20.86	20.87	20.66	
10	16QAM	1	25	20.66	20.69	20.55	21.5
10	16QAM	1	49	20.45	20.47	20.38	
10	16QAM	25	0	19.52	19.37	19.32	
10	16QAM	25	12	19.36	19.23	19.17	
10	16QAM	25	25	19.19	19.07	19.03	20
10	16QAM	50	0	19.52	19.34	19.14	
10	64QAM	1	0	19.51	19.45	19.23	
10	64QAM	1	25	19.34	19.30	19.15	
10	64QAM	1	49	19.20	19.11	19.07	20
10	64QAM	25	0	18.56	18.68	18.43	
10	64QAM	25	12	18.35	18.57	18.39	
10	64QAM	25	25	18.73	18.84	18.65	
10	64QAM	50	0	18.61	18.65	18.48	19.5
Channel				18625	18900	19175	
Frequency (MHz)				1852.5	1880	1907.5	Tune-up limit (dBm)
5	QPSK	1	0	21.28	21.39	21.22	22
5	QPSK	1	12	21.11	21.26	21.03	
5	QPSK	1	24	20.96	21.02	20.95	
5	QPSK	12	0	20.26	20.13	20.06	
5	QPSK	12	7	20.03	20.00	19.96	21
5	QPSK	12	13	19.93	19.91	19.96	
5	QPSK	25	0	20.24	20.15	20.09	
5	16QAM	1	0	20.83	20.84	20.63	
5	16QAM	1	12	20.63	20.66	20.52	21.5
5	16QAM	1	24	20.42	20.44	20.35	
5	16QAM	12	0	19.49	19.34	19.29	
5	16QAM	12	7	19.33	19.20	19.14	
5	16QAM	12	13	19.16	19.04	19.00	20
5	16QAM	25	0	19.49	19.31	19.11	
5	64QAM	1	0	19.48	19.42	19.20	
5	64QAM	1	12	19.31	19.27	19.12	
5	64QAM	1	24	19.17	19.08	19.04	20
5	64QAM	12	0	18.53	18.65	18.40	
5	64QAM	12	7	18.32	18.54	18.36	
5	64QAM	12	13	18.70	18.81	18.62	
5	64QAM	25	0	18.58	18.62	18.45	19.5
Channel				18615	18900	19185	
Frequency (MHz)				1851.5	1880	1908.5	Tune-up limit (dBm)
3	QPSK	1	0	21.25	21.36	21.19	22
3	QPSK	1	8	21.08	21.23	21.00	
3	QPSK	1	14	20.93	20.99	20.92	
3	QPSK	8	0	20.23	20.10	20.03	
3	QPSK	8	4	20.00	19.97	19.95	21
3	QPSK	8	7	19.90	19.88	19.93	
3	QPSK	15	0	20.21	20.12	20.06	

Band 4 (AWS Band) 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	21.26	21.32	21.30	22
20	QPSK	1	49	21.11	21.13	21.15	
20	QPSK	1	99	20.83	20.92	20.87	
20	QPSK	50	0	20.16	20.24	20.21	
20	QPSK	50	24	20.07	20.15	20.12	21
20	QPSK	50	50	19.98	20.08	20.07	
20	QPSK	100	0	20.22	20.33	20.32	
20	16QAM	1	0	20.51	20.57	20.50	
20	16QAM	1	49	20.23	20.28	20.35	21
20	16QAM	1	99	20.11	20.14	20.22	
20	16QAM	50	0	19.28	19.29	19.25	
20	16QAM	50	24	19.13	19.16	19.17	
20	16QAM	50	50	19.03	19.07	19.04	20
20	16QAM	100	0	19.31	19.28	19.29	
20	64QAM	1	0	19.43	19.55	19.34	
20	64QAM	1	49	19.27	19.41	19.18	
20	64QAM	1	99	19.13	19.22	19.11	20
20	64QAM	50	0	19.31	19.44	19.23	
20	64QAM	50	24	19.22	19.35	19.14	
20	64QAM	50	50	19.12	19.27	19.04	
20	64QAM	100	0	19.33	19.42	19.18	20
Channel				20025	20175	20325	
Frequency (MHz)				1717.5	1732.5	1747.5	Tune-up limit (dBm)
15	QPSK	1	0	21.20	21.26	21.24	22
15	QPSK	1	37	21.05	21.07	21.09	
15	QPSK	1	74	20.77	20.86	20.81	
15	QPSK	36	0	20.10	20.18	20.15	
15	QPSK	36	20	20.01	20.09	20.06	21
15	QPSK	36	39	19.92	20.02	20.01	
15	QPSK	75	0	20.16	20.17	20.26	
15	16QAM	1	0	20.45	20.51	20.44	
15	16QAM	1	37	20.17	20.22	20.29	21
15	16QAM	1	74	20.05	20.08	20.16	
15	16QAM	36	0	19.22	19.23	19.19	
15	16QAM	36	20	19.07	19.10	19.11	
15	16QAM	36	39	18.97	19.01	18.98	20
15	16QAM	75	0	19.25	19.22	19.23	
15	64QAM	1	0	19.37	19.49	19.28	
15	64QAM	1	37	19.21	19.35	19.12	
15	64QAM	1	74	19.07	19.16	19.05	20
15	64QAM	36	0	19.25	19.38	19.17	
15	64QAM	36	20	19.16	19.29	19.08	
15	64QAM	36	39	19.06	19.21	18.98	
15	64QAM	75	0	19.27	19.36	19.12	20
Channel				20000	20175	20350	
Frequency (MHz)				1715	1732.5	1750	Tune-up limit (dBm)
10	QPSK	1	0	21.15	21.21	21.19	22
10	QPSK	1	25	21.00	21.02	21.04	
10	QPSK	1	49	20.72	20.81	20.76	
10	QPSK	25	0	20.05	20.13	20.10	
10	QPSK	25	12	19.96	20.04	20.01	21
10	QPSK	25	25	19.87	19.97	19.96	
10	QPSK	50	0	20.11	20.12	20.21	
10	16QAM	1	0	20.40	20.46	20.39	
10	16QAM	1	25	20.12	20.17	20.24	21
10	16QAM	1	49	20.00	20.03	20.11	
10	16QAM	25	0	19.17	19.18	19.14	
10	16QAM	25	12	19.02	19.05	19.06	
10	16QAM	25	25	18.92	18.96	18.93	20
10	16QAM	50	0	19.20	19.17	19.18	
10	64QAM	1	0	19.32	19.44	19.23	
10	64QAM	1	25	19.16	19.30	19.07	
10	64QAM	1	49	19.02	19.11	19.00	20
10	64QAM	25	0	19.20	19.33	19.12	
10	64QAM	25	12	19.11	19.24	19.03	
10	64QAM	25	25	19.01	19.16	18.93	
10	64QAM	50	0	19.22	19.31	19.07	20
Channel				19975	20175	20375	
Frequency (MHz)				1712.5	1732.5	1752.5	Tune-up limit (dBm)
5	QPSK	1	0	21.11	21.16	21.14	22
5	QPSK	1	12	20.95	20.97	20.99	
5	QPSK	1	24	20.67	20.76	20.71	
5	QPSK	12	0	20.00	20.08	20.05	
5	QPSK	12	7	19.91	19.99	19.96	21
5	QPSK	12	13	19.82	19.92	19.91	
5	QPSK	25	0	20.06	20.07	20.16	
5	16QAM	1	0	20.35	20.41	20.34	
5	16QAM	1	12	20.07	20.12	20.19	21
5	16QAM	1	24	19.95	19.98	20.06	
5	16QAM	12	0	19.12	19.13	19.09	
5	16QAM	12	7	18.97	19.00	19.01	
5	16QAM	12	13	18.87	18.91	18.88	20
5	16QAM	25	0	19.15	19.12	19.13	
5	64QAM	1	0	19.27	19.39	19.18	
5	64QAM	1	12	19.11	19.25	19.02	
5	64QAM	1	24	18.97	19.06	18.95	20
5	64QAM	12	0	19.15	19.28	19.07	
5	64QAM	12	7	19.06	19.19	18.98	
5	64QAM	12	13	18.96	19.11	18.88	
5	64QAM	25	0	19.17	19.26	19.02	20
Channel				19965	20175	20385	
Frequency (MHz)				1711.5	1732.5	1753.5	Tune-up limit (dBm)
3	QPSK	1	0	21.07	21.11	21.09	22
3	QPSK	1	8	20.90	20.92	20.94	
3	QPSK	1	14	20.62	20.71	20.66	
3	QPSK	8	0	19.95	20.03	20.00	
3	QPSK	8	4	19.86	19.94	19.91	21
3	QPSK	8	7	19.77	19.87	19.86	
3	QPSK	15	0	20.01	20.02	20.11	

3	16QAM	1	0	20.80	20.81	20.60	21.5
3	16QAM	1	8	20.60	20.63	20.49	
3	16QAM	1	14	20.39	20.41	20.32	
3	16QAM	8	0	19.46	19.31	19.26	20
3	16QAM	8	4	19.30	19.17	19.11	
3	16QAM	8	7	19.13	19.01	18.97	
3	16QAM	15	0	19.46	19.28	19.08	20
3	64QAM	1	0	19.45	19.39	19.17	
3	64QAM	1	8	19.28	19.24	19.09	
3	64QAM	1	14	19.14	19.05	19.01	19
3	64QAM	8	0	18.50	18.62	18.37	
3	64QAM	8	4	18.29	18.51	18.33	
3	64QAM	8	7	18.67	18.78	18.59	19
3	64QAM	15	0	18.55	18.59	18.42	
Channel				1860.7	18900	19193	Tune-up limit (dBm)
Frequency (MHz)				1850.7	1880	1909.3	
1.4	QPSK	1	0	21.22	21.33	21.16	22
1.4	QPSK	1	3	21.05	21.20	20.97	
1.4	QPSK	1	5	20.90	20.96	20.89	
1.4	QPSK	3	0	20.20	20.07	20.00	
1.4	QPSK	3	1	19.97	19.94	19.92	
1.4	QPSK	3	3	19.87	19.85	19.90	
1.4	QPSK	6	0	20.18	20.09	20.03	20.5
1.4	16QAM	1	0	20.77	20.78	20.57	
1.4	16QAM	1	3	20.57	20.60	20.46	
1.4	16QAM	1	5	20.36	20.38	20.29	21.5
1.4	16QAM	3	0	19.43	19.28	19.23	
1.4	16QAM	3	1	19.27	19.14	19.08	
1.4	16QAM	3	3	19.10	18.98	18.94	20
1.4	16QAM	6	0	19.43	19.25	19.05	
1.4	64QAM	1	0	19.42	19.36	19.14	
1.4	64QAM	1	3	19.25	19.21	19.06	20
1.4	64QAM	1	5	19.11	19.02	18.98	
1.4	64QAM	3	0	18.47	18.59	18.34	
1.4	64QAM	3	1	18.26	18.48	18.30	
1.4	64QAM	3	3	18.64	18.75	18.56	
1.4	64QAM	6	0	18.52	18.56	18.39	
				18.52	18.56	18.39	19

3	16QAM	1	0	20.30	20.36	20.29	21
3	16QAM	1	8	20.02	20.07	20.14	
3	16QAM	1	14	19.90	19.93	20.01	
3	16QAM	8	0	19.07	19.08	19.04	20
3	16QAM	8	4	18.92	18.95	18.96	
3	16QAM	8	7	18.82	18.86	18.83	
3	16QAM	15	0	19.10	19.07	19.08	20
3	64QAM	1	0	19.22	19.34	19.13	
3	64QAM	1	8	19.06	19.20	19.09	
3	64QAM	1	14	19.02	19.01	19.05	20
3	64QAM	8	0	19.10	19.23	19.02	
3	64QAM	8	4	19.01	19.14	18.93	
3	64QAM	8	7	18.91	19.06	18.83	20
3	64QAM	15	0	19.12	19.21	18.97	
Channel				1995.7	2017.5	20393	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1732.5	1754.3	
1.4	QPSK	1	0	21.06	21.11	21.09	22
1.4	QPSK	1	3	20.90	20.92	20.94	
1.4	QPSK	1	5	20.62	20.71	20.66	
1.4	QPSK	3	0	19.95	20.03	20.00	
1.4	QPSK	3	1	19.86	19.94	19.91	
1.4	QPSK	3	3	19.77	19.87	19.86	
1.4	QPSK	6	0	20.01	20.02	20.11	21
1.4	16QAM	1	0	20.30	20.36	20.29	
1.4	16QAM	1	3	20.02	20.07	20.14	
1.4	16QAM	1	5	19.90	19.93	20.01	21
1.4	16QAM	3	0	19.07	19.08	19.04	
1.4	16QAM	3	1	18.92	18.95	18.96	
1.4	16QAM	3	3	18.82	18.86	18.83	20
1.4	16QAM	6	0	19.10	19.07	19.08	
1.4	16QAM	1	0	19.22	19.34	19.13	
1.4	16QAM	1	3	19.06	19.20	18.97	20
1.4	16QAM	1	5	18.92	19.01	18.90	
1.4	16QAM	3	0	19.10	19.23	19.02	
1.4	16QAM	3	1	19.01	19.14	18.93	
1.4	16QAM	3	3	18.91	19.06	18.83	
1.4	16QAM	6	0	19.12	19.21	18.97	
				19.12	19.21	18.97	20

Band 5 (Celluar Band) 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	22.50	22.60	22.57	23
10	QPSK	1	25	22.31	22.47	22.35	
10	QPSK	1	49	22.27	22.31	22.26	
10	QPSK	25	0	21.39	21.40	21.32	22
10	QPSK	25	12	21.23	21.28	21.15	
10	QPSK	25	25	21.11	21.14	21.07	
10	QPSK	50	0	21.37	21.38	21.35	22
10	16QAM	1	0	21.82	21.85	21.68	
10	16QAM	1	25	21.67	21.77	21.53	
10	16QAM	1	49	21.46	21.52	21.41	21
10	16QAM	25	0	20.34	20.44	20.37	
10	16QAM	25	12	20.25	20.31	20.21	
10	16QAM	25	25	20.17	20.23	20.16	21.5
10	16QAM	50	0	20.41	20.43	20.39	
10	64QAM	1	0	20.79	20.88	20.83	
10	64QAM	1	25	20.61	20.75	20.72	20.5
10	64QAM	1	49	20.56	20.59	20.53	
10	64QAM	25	0	19.84	19.93	19.75	
10	64QAM	25	12	19.73	19.88	19.65	20.5
10	64QAM	25	25	19.55	19.66	19.53	
10	64QAM	50	0	19.89	19.94	19.77	
Channel				20425	20525	20625	Tune-up limit (dBm)
Frequency (MHz)				826.5	836.5	846.5	
5	QPSK	1	0	22.44	22.57	22.51	23
5	QPSK	1	12	22.25	22.41	22.29	
5	QPSK	1	24	22.21	22.25	22.20	
5	QPSK	12	0	21.33	21.34	21.26	22
5	QPSK	12	7	21.17	21.22	21.09	
5	QPSK	12	13	21.05	21.08	21.01	
5	QPSK	25	0	21.31	21.30	21.29	22
5	16QAM	1	0	21.76	21.79	21.62	
5	16QAM	1	12	21.61	21.71	21.47	
5	16QAM	1	24	21.40	21.46	21.35	21
5	16QAM	12	0	20.28	20.38	20.31	
5	16QAM	12	7	20.19	20.25	20.15	
5	16QAM	12	13	20.11	20.17	20.10	21
5	16QAM	25	0	20.35	20.37	20.33	
5	64QAM	1	0	20.73	20.82	20.77	
5	64QAM	1	12	20.55	20.69	20.66	20.5
5	64QAM	1	24	20.50	20.53	20.47	
5	64QAM	12	0	19.78	19.87	19.69	
5	64QAM	12	7	19.67	19.82	19.59	20.5
5	64QAM	12	13	19.49	19.60	19.47	
5	64QAM	25	0	19.83	19.88	19.71	
Channel				20415	20525	20635	Tune-up limit (dBm)
Frequency (MHz)				825.5	836.5	847.5	
3	QPSK	1	0	22.45	22.56	22.52	23
3	QPSK	1	8	22.26	22.42	22.30	
3	QPSK	1	14	22.22	22.26	22.21	
3	QPSK	8	0	21.34	21.35	21.27	22
3	QPSK	8	4	21.18	21.23	21.10	
3	QPSK	8	7	21.06	21.09	21.02	
3	QPSK	15	0	21.32	21.31	21.30	22
3	16QAM	1	0	21.77	21.80	21.63	
3	16QAM	1	8	21.62	21.72	21.48	
3	16QAM	1	14	21.41	21.47	21.36	21
3	16QAM	8	0	20.29	20.39	20.32	
3	16QAM	8	4	20.20	20.26	20.16	
3	16QAM	8	7	20.12	20.18	20.11	21
3	16QAM	15	0	20.36	20.38	20.34	
3	64QAM	1	0	20.74	20.83	20.78	
3	64QAM	1	8	20.56	20.70	20.67	20.5
3	64QAM	1	14	20.51	20.54	20.48	
3	64QAM	8	0	19.79	19.88	19.70	
3	64QAM	8	4	19.68	19.83	19.60	20.5
3	64QAM	8	7	19.50	19.61	19.48	
3	64QAM	15	0	19.84	19.89	19.72	
Channel				20407	20525	20643	Tune-up limit (dBm)
Frequency (MHz)				824.7	836.5	848.3	
1.4	QPSK	1	0	22.46	22.55	22.53	23
1.4	QPSK	1	3	22.27	22.43	22.31	
1.4	QPSK	1	5	22.23	22.27	22.22	
1.4	QPSK	3	0	21.35	21.36	21.28	22
1.4	QPSK	3	1	21.19	21.24	21.11	
1.4	QPSK	3	3	21.07	21.10	21.03	
1.4	QPSK	6	0	21.33	21.32	21.31	22
1.4	16QAM	1	0	21.78	21.81	21.64	
1.4	16QAM	1	3	21.63	21.73	21.49	
1.4	16QAM	1	5	21.42	21.48	21.37	22
1.4	16QAM	3	0	20.30	20.40	20.33	
1.4	16QAM	3	1	20.21	20.27	20.17	
1.4	16QAM	3	3	20.13	20.19	20.12	21
1.4	16QAM	6	0	20.37	20.39	20.35	
1.4	64QAM	1	0	20.75	20.84	20.79	
1.4	64QAM	1	3	20.57	20.71	20.68	21
1.4	64QAM	1	5	20.52	20.55	20.49	
1.4	64QAM	3	0	19.80	19.89	19.71	
1.4	64QAM	3	1	19.69	19.84	19.61	20.5
1.4	64QAM	3	3	19.51	19.62	19.49	
1.4	64QAM	6	0	19.85	19.90	19.73	

Band 7 (2600MHz Band) 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	21.84	21.95	21.76	22.5
20	QPSK	1	49	21.67	21.73	21.54	
20	QPSK	1	99	21.50	21.52	21.45	
20	QPSK	50	0	20.96	20.98	20.82	21.5
20	QPSK	50	24	20.73	20.81	20.60	
20	QPSK	50	50	20.60	20.75	20.53	
20	QPSK	100	0	20.95	21.07	20.87	21.5
20	16QAM	1	0	20.93	21.17	21.07	
20	16QAM	1	49	20.86	20.94	20.82	
20	16QAM	1	99	20.68	20.78	20.67	21.5
20	16QAM	50	0	19.87	19.85	19.83	
20	16QAM	50	24	19.60	19.72	19.56	
20	16QAM	50	50	19.56	19.67	19.42	20.5
20	16QAM	100	0	19.76	19.95	19.88	
20	64QAM	1	0	19.73	19.89	19.77	
20	64QAM	1	49	19.65	19.71	19.54	20.5
20	64QAM	1	99	19.41	19.55	19.43	
20	64QAM	50	0	18.64	18.91	18.85	
20	64QAM	50	24	18.51	18.84	18.73	19.5
20	64QAM	50	50	18.43	18.69	18.67	
20	64QAM	100	0	18.57	18.83	18.79	
Channel				20825	21100	21375	Tune-up limit (dbm)
Frequency (MHz)				2507.5	2535	2562.5	
15	QPSK	1	0	21.81	21.92	21.73	22.5
15	QPSK	1	37	21.64	21.70	21.51	
15	QPSK	1	74	21.47	21.49	21.42	
15	QPSK	36	0	20.93	20.90	20.79	21.5
15	QPSK	36	20	20.70	20.78	20.57	
15	QPSK	36	39	20.57	20.72	20.50	
15	QPSK	75	0	20.92	21.04	20.84	21.5
15	16QAM	1	0	20.90	21.14	21.04	
15	16QAM	1	37	20.83	20.91	20.79	
15	16QAM	1	74	20.65	20.75	20.64	20.5
15	16QAM	36	0	19.84	19.82	19.80	
15	16QAM	36	20	19.57	19.69	19.53	
15	16QAM	36	39	19.53	19.64	19.39	20.5
15	16QAM	75	0	19.73	19.92	19.65	
15	64QAM	1	0	19.70	19.86	19.74	
15	64QAM	1	37	19.62	19.68	19.51	20.5
15	64QAM	1	74	19.38	19.52	19.40	
15	64QAM	36	0	18.61	18.88	18.82	
15	64QAM	36	20	18.48	18.81	18.70	19.5
15	64QAM	36	39	18.40	18.66	18.64	
15	64QAM	75	0	18.54	18.80	18.76	
Channel				20800	21100	21400	Tune-up limit (dbm)
Frequency (MHz)				2505	2535	2565	
10	QPSK	1	0	21.76	21.87	21.68	22.5
10	QPSK	1	25	21.59	21.65	21.46	
10	QPSK	1	49	21.42	21.44	21.37	
10	QPSK	25	0	20.88	20.85	20.74	21.5
10	QPSK	25	12	20.65	20.73	20.52	
10	QPSK	25	25	20.52	20.67	20.45	
10	QPSK	50	0	20.87	20.99	20.79	21.5
10	16QAM	1	0	20.85	21.09	20.99	
10	16QAM	1	25	20.78	20.86	20.74	
10	16QAM	1	49	20.60	20.70	20.59	20.5
10	16QAM	25	0	19.79	19.77	19.75	
10	16QAM	25	12	19.52	19.64	19.48	
10	16QAM	25	25	19.48	19.59	19.34	20.5
10	16QAM	50	0	19.68	19.87	19.60	
10	64QAM	1	0	19.65	19.81	19.69	
10	64QAM	1	25	19.57	19.63	19.46	20.5
10	64QAM	1	49	19.33	19.47	19.35	
10	64QAM	25	0	18.56	18.83	18.77	
10	64QAM	25	12	18.43	18.76	18.65	19.5
10	64QAM	25	25	18.35	18.61	18.59	
10	64QAM	50	0	18.49	18.75	18.71	
Channel				20775	21100	21425	Tune-up limit (dbm)
Frequency (MHz)				2502.5	2535	2567.5	
5	QPSK	1	0	21.71	21.82	21.63	22.5
5	QPSK	1	12	21.54	21.60	21.41	
5	QPSK	1	24	21.37	21.39	21.32	
5	QPSK	12	0	20.83	20.80	20.69	21.5
5	QPSK	12	7	20.60	20.68	20.47	
5	QPSK	12	13	20.47	20.62	20.40	
5	QPSK	25	0	20.82	20.94	20.74	21.5
5	16QAM	1	0	20.80	21.04	20.94	
5	16QAM	1	12	20.73	20.81	20.69	
5	16QAM	1	24	20.55	20.65	20.54	20.5
5	16QAM	12	0	19.74	19.72	19.70	
5	16QAM	12	7	19.47	19.59	19.43	
5	16QAM	12	13	19.43	19.54	19.29	20.5
5	16QAM	25	0	19.63	19.82	19.55	
5	64QAM	1	0	19.60	19.76	19.64	
5	64QAM	1	12	19.52	19.58	19.41	20.5
5	64QAM	1	24	19.28	19.42	19.30	
5	64QAM	12	0	18.51	18.78	18.72	
5	64QAM	12	7	18.38	18.71	18.60	19.5
5	64QAM	12	13	18.30	18.56	18.54	
5	64QAM	25	0	18.44	18.70	18.66	

Band 12 (700MHz Low Band) Part 27F(only on channel required)							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				23060	23095	23130	23
Frequency (MHz)				704	707.5	711	
10	QPSK	1	0	22.58	22.65	22.54	23
10	QPSK	1	25	22.35	22.43	22.37	
10	QPSK	1	49	22.23	22.27	22.21	
10	QPSK	25	0	21.59	21.64	21.60	
10	QPSK	25	12	21.43	21.59	21.53	22
10	QPSK	25	25	21.37	21.44	21.41	
10	QPSK	50	0	21.61	21.62	21.52	
10	16QAM	1	0	21.89	21.85	21.90	
10	16QAM	1	25	21.76	21.73	21.82	22
10	16QAM	1	49	21.66	21.63	21.75	
10	16QAM	25	0	20.61	20.62	20.56	
10	16QAM	25	12	20.43	20.52	20.41	
10	16QAM	25	25	20.26	20.32	20.24	21
10	16QAM	50	0	20.57	20.51	20.54	
10	64QAM	1	0	20.71	20.79	20.63	
10	64QAM	1	25	20.53	20.65	20.49	
10	64QAM	1	49	20.41	20.53	20.37	21
10	64QAM	25	0	19.76	19.85	19.74	
10	64QAM	25	12	19.64	19.73	19.61	
10	64QAM	25	25	19.41	19.52	19.43	
10	64QAM	50	0	19.87	19.93	19.78	20
Channel				23035	23095	23155	23
Frequency (MHz)				701.5	707.5	713.5	
5	QPSK	1	0	22.52	22.59	22.48	23
5	QPSK	1	12	22.29	22.37	22.31	
5	QPSK	1	24	22.17	22.21	22.15	
5	QPSK	12	0	21.53	21.58	21.54	
5	QPSK	12	7	21.37	21.53	21.47	22
5	QPSK	12	13	21.31	21.38	21.35	
5	QPSK	25	0	21.55	21.44	21.46	
5	16QAM	1	0	21.83	21.79	21.84	
5	16QAM	1	12	21.70	21.67	21.76	22
5	16QAM	1	24	21.60	21.57	21.69	
5	16QAM	12	0	20.55	20.56	20.50	
5	16QAM	12	7	20.37	20.46	20.35	
5	16QAM	12	13	20.20	20.26	20.18	21
5	16QAM	25	0	20.51	20.45	20.48	
5	64QAM	1	0	20.65	20.73	20.57	
5	64QAM	1	12	20.47	20.59	20.43	
5	64QAM	1	24	20.35	20.47	20.31	21
5	64QAM	12	0	19.70	19.79	19.68	
5	64QAM	12	7	19.58	19.67	19.55	
5	64QAM	12	13	19.35	19.46	19.37	
5	64QAM	25	0	19.81	19.87	19.72	20
Channel				23025	23095	23165	23
Frequency (MHz)				700.5	707.5	714.5	
3	QPSK	1	0	22.55	22.62	22.51	23
3	QPSK	1	8	22.32	22.40	22.34	
3	QPSK	1	14	22.20	22.24	22.18	
3	QPSK	8	0	21.56	21.61	21.57	
3	QPSK	8	4	21.40	21.56	21.50	22
3	QPSK	8	7	21.34	21.41	21.38	
3	QPSK	15	0	21.58	21.47	21.49	
3	16QAM	1	0	21.86	21.82	21.87	
3	16QAM	1	8	21.73	21.70	21.79	22
3	16QAM	1	14	21.63	21.60	21.72	
3	16QAM	8	0	20.58	20.59	20.53	
3	16QAM	8	4	20.40	20.49	20.38	
3	16QAM	8	7	20.23	20.29	20.21	21
3	16QAM	15	0	20.54	20.48	20.51	
3	64QAM	1	0	20.68	20.76	20.60	
3	64QAM	1	8	20.50	20.62	20.46	
3	64QAM	1	14	20.38	20.50	20.34	21
3	64QAM	8	0	19.73	19.82	19.71	
3	64QAM	8	4	19.61	19.70	19.58	
3	64QAM	8	7	19.38	19.49	19.40	
3	64QAM	15	0	19.84	19.90	19.75	20
Channel				23017	23095	23173	23
Frequency (MHz)				699.7	707.5	715.3	
1.4	QPSK	1	0	22.48	22.55	22.44	23.5
1.4	QPSK	1	3	22.25	22.33	22.27	
1.4	QPSK	1	5	22.13	22.17	22.11	
1.4	QPSK	3	0	21.49	21.54	21.50	
1.4	QPSK	3	1	21.33	21.49	21.43	22.5
1.4	QPSK	3	3	21.27	21.34	21.31	
1.4	QPSK	6	0	21.51	21.40	21.42	
1.4	16QAM	1	0	21.79	21.75	21.80	
1.4	16QAM	1	3	21.66	21.63	21.72	22.5
1.4	16QAM	1	5	21.56	21.53	21.65	
1.4	16QAM	3	0	20.51	20.52	20.46	
1.4	16QAM	3	1	20.33	20.42	20.31	
1.4	16QAM	3	3	20.16	20.22	20.14	21.5
1.4	16QAM	6	0	20.47	20.41	20.44	
1.4	64QAM	1	0	20.61	20.69	20.53	
1.4	64QAM	1	3	20.43	20.55	20.39	
1.4	64QAM	1	5	20.31	20.43	20.27	21.5
1.4	64QAM	3	0	19.66	19.75	19.64	
1.4	64QAM	3	1	19.54	19.63	19.51	
1.4	64QAM	3	3	19.31	19.42	19.33	
1.4	64QAM	6	0	19.77	19.83	19.68	20.5

Band 13(700MHz Band) 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	22.65			23
10	QPSK	1	25	22.34			
10	QPSK	1	49	22.16			
10	QPSK	25	0	21.60			
10	QPSK	25	12	21.56			22
10	QPSK	25	25	21.43			
10	QPSK	50	0	21.57			
10	16QAM	1	0	21.47			
10	16QAM	1	25	21.23			22
10	16QAM	1	49	20.98			
10	16QAM	25	0	20.18			
10	16QAM	25	12	20.13			
10	16QAM	25	25	20.07			21
10	16QAM	50	0	20.09			
10	64QAM	1	0	19.93			
10	64QAM	1	25	19.87			
10	64QAM	1	49	19.64			20.5
10	64QAM	25	0	18.55			
10	64QAM	25	12	18.43			
10	64QAM	25	25	18.37			
10	64QAM	50	0	18.45			19
Channel				23205	23230	23255	
Frequency (MHz)				779.5	782	784.5	Tune-up limit (dbm)
5	QPSK	1	0	22.63	22.25	22.29	23
5	QPSK	1	12	22.45	22.24	22.23	
5	QPSK	1	24	22.28	22.21	22.18	
5	QPSK	12	0	21.34	21.55	21.16	
5	QPSK	12	7	21.31	21.43	21.15	22
5	QPSK	12	13	21.29	21.21	21.14	
5	QPSK	25	0	21.16	21.15	21.23	
5	16QAM	1	0	21.55	21.39	21.36	
5	16QAM	1	12	21.38	21.35	21.28	22
5	16QAM	1	24	21.34	21.28	21.19	
5	16QAM	12	0	20.19	20.09	20.23	
5	16QAM	12	7	20.15	19.98	20.19	
5	16QAM	12	13	20.08	19.79	20.08	21
5	16QAM	25	0	20.21	20.13	20.25	
5	64QAM	1	0	20.23	20.12	20.19	
5	64QAM	1	12	20.21	20.09	20.15	
5	64QAM	1	24	20.18	20.05	20.17	21
5	64QAM	12	0	19.97	19.98	19.89	
5	64QAM	12	7	19.89	19.76	19.72	
5	64QAM	12	13	19.65	19.69	19.52	
5	64QAM	25	0	19.56	19.53	19.46	20.5

Band 14 (700MHz Band)							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				23330			Tune-up limit (dBm)
Frequency (MHz)				793			
10	QPSK	1	0	22.54			23
10	QPSK	1	25	22.31			
10	QPSK	1	49	21.97			
10	QPSK	25	0	21.16			22
10	QPSK	25	12	21.14			
10	QPSK	25	25	21.11			
10	QPSK	50	0	21.09			22
10	16QAM	1	0	21.53			
10	16QAM	1	25	21.38			
10	16QAM	1	49	21.15			21
10	16QAM	25	0	20.12			
10	16QAM	25	12	20.08			
10	16QAM	25	25	19.97			21
10	16QAM	50	0	19.83			
10	64QAM	1	0	20.17			
10	64QAM	1	25	20.03			20
10	64QAM	1	49	19.95			
10	64QAM	25	0	19.12			
10	64QAM	25	12	18.97			20
10	64QAM	25	25	18.83			
10	64QAM	50	0	19.09			
Channel				23305	23330	23355	Tune-up limit (dBm)
Frequency (MHz)				790.5	793	795.5	
5	QPSK	1	0	22.41	22.50	22.34	23
5	QPSK	1	12	22.33	22.35	22.21	
5	QPSK	1	24	22.15	22.18	22.17	
5	QPSK	12	0	21.28	21.16	21.17	22
5	QPSK	12	7	21.15	21.12	21.13	
5	QPSK	12	13	21.14	21.10	21.09	
5	QPSK	25	0	21.17	21.11	21.01	22
5	16QAM	1	0	21.48	21.51	21.29	
5	16QAM	1	12	21.29	21.35	21.20	
5	16QAM	1	24	21.18	21.23	21.18	21
5	16QAM	12	0	20.13	20.17	20.19	
5	16QAM	12	7	20.08	20.09	20.12	
5	16QAM	12	13	20.06	20.02	20.09	21
5	16QAM	25	0	20.16	20.25	20.15	
5	64QAM	1	0	20.12	20.15	20.19	
5	64QAM	1	12	20.08	20.12	20.14	20.5
5	64QAM	1	24	20.02	20.09	20.07	
5	64QAM	12	0	19.98	19.76	19.83	
5	64QAM	12	7	19.75	19.68	19.69	20.5
5	64QAM	12	13	19.63	19.51	19.53	
5	64QAM	25	0	19.49	19.45	19.47	

Band 17 (700MHz Band) 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	Tune-up limit (dBm)
Frequency (MHz)				709	710	711	
10	QPSK	1	0	22.74	22.78	22.60	23.5
10	QPSK	1	25	22.56	22.62	22.41	
10	QPSK	1	49	22.37	22.46	22.35	
10	QPSK	25	0	21.53	21.57	21.52	22.5
10	QPSK	25	12	21.24	21.35	21.22	
10	QPSK	25	25	21.18	21.24	21.08	
10	QPSK	50	0	21.52	21.53	21.51	22.5
10	16QAM	1	0	21.85	21.91	21.89	
10	16QAM	1	25	21.69	21.75	21.68	
10	16QAM	1	49	21.46	21.63	21.55	21.5
10	16QAM	25	0	20.56	20.61	20.55	
10	16QAM	25	12	20.43	20.55	20.37	
10	16QAM	25	25	20.27	20.38	20.24	21.5
10	16QAM	50	0	20.53	20.63	20.59	
10	64QAM	1	0	20.71	20.83	20.65	
10	64QAM	1	25	20.53	20.61	20.44	20.5
10	64QAM	1	49	20.41	20.45	20.38	
10	64QAM	25	0	19.63	19.81	19.55	
10	64QAM	25	12	19.51	19.65	19.41	20.5
10	64QAM	25	25	19.39	19.43	19.34	
10	64QAM	50	0	19.66	19.78	19.62	
Channel				23755	23790	23825	Tune-up limit (dBm)
Frequency (MHz)				706.5	710	713.5	
5	QPSK	1	0	22.68	22.72	22.54	23.5
5	QPSK	1	12	22.50	22.56	22.35	
5	QPSK	1	24	22.31	22.40	22.29	
5	QPSK	12	0	21.47	21.41	21.46	22.5
5	QPSK	12	7	21.18	21.29	21.16	
5	QPSK	12	13	21.12	21.18	21.02	
5	QPSK	25	0	21.46	21.47	21.45	22.5
5	16QAM	1	0	21.79	21.85	21.83	
5	16QAM	1	12	21.63	21.69	21.62	
5	16QAM	1	24	21.40	21.57	21.49	21.5
5	16QAM	12	0	20.50	20.55	20.49	
5	16QAM	12	7	20.37	20.49	20.31	
5	16QAM	12	13	20.21	20.32	20.18	21.5
5	16QAM	25	0	20.47	20.57	20.53	
5	64QAM	1	0	20.65	20.77	20.59	
5	64QAM	1	12	20.47	20.55	20.38	20.5
5	64QAM	1	24	20.35	20.39	20.32	
5	64QAM	12	0	19.57	19.75	19.49	
5	64QAM	12	7	19.45	19.59	19.35	20.5
5	64QAM	12	13	19.33	19.37	19.28	
5	64QAM	25	0	19.60	19.72	19.56	

Band 25 (1900MHz Band) Part 24E							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				26140	26365	26590	
Frequency (MHz)				1860	1882.5	1905	
20	QPSK	1	0	21.50	21.86	21.53	22.5
20	QPSK	1	49	21.49	21.84	21.49	
20	QPSK	1	99	21.48	21.80	21.45	
20	QPSK	50	0	20.86	20.87	20.64	
20	QPSK	50	24	20.78	20.60	20.59	21.5
20	QPSK	50	50	20.72	20.76	20.57	
20	QPSK	100	0	20.67	20.68	20.52	
20	16QAM	1	0	20.56	20.87	20.78	
20	16QAM	1	49	20.45	20.68	20.65	21.5
20	16QAM	1	99	20.37	20.59	20.51	
20	16QAM	50	0	19.88	19.50	19.47	
20	16QAM	50	24	19.83	19.48	19.43	
20	16QAM	50	50	19.76	19.45	19.38	20.5
20	16QAM	100	0	19.78	19.52	19.40	
20	64QAM	1	0	19.72	19.43	19.48	
20	64QAM	1	49	19.63	19.31	19.39	
20	64QAM	1	99	19.46	19.28	19.26	20.5
20	64QAM	50	0	18.62	18.31	18.32	
20	64QAM	50	24	18.41	18.24	18.27	
20	64QAM	50	50	18.26	18.19	18.18	
20	64QAM	100	0	18.59	18.27	18.13	19.5
Channel				26115	26365	26615	
Frequency (MHz)				1857.5	1882.5	1907.5	Tune-up limit (dBm)
15	QPSK	1	0	21.47	21.81	21.48	22.5
15	QPSK	1	37	21.44	21.79	21.44	
15	QPSK	1	74	21.43	21.75	21.40	
15	QPSK	36	0	20.81	20.52	20.39	
15	QPSK	36	20	20.73	20.45	20.34	21.5
15	QPSK	36	39	20.67	20.41	20.32	
15	QPSK	75	0	20.62	20.52	20.17	
15	16QAM	1	0	20.51	20.82	20.73	
15	16QAM	1	37	20.40	20.63	20.60	21.5
15	16QAM	1	74	20.32	20.54	20.46	
15	16QAM	36	0	19.83	19.45	19.42	
15	16QAM	36	20	19.78	19.43	19.38	
15	16QAM	36	39	19.71	19.40	19.33	20.5
15	16QAM	75	0	19.73	19.47	19.35	
15	64QAM	1	0	19.67	19.38	19.43	
15	64QAM	1	37	19.58	19.26	19.34	
15	64QAM	1	74	19.41	19.23	19.21	20.5
15	64QAM	36	0	18.57	18.26	18.27	
15	64QAM	36	20	18.36	18.19	18.22	
15	64QAM	36	39	18.21	18.14	18.13	
15	64QAM	75	0	18.54	18.22	18.08	19.5
Channel				26090	26365	26640	
Frequency (MHz)				1855	1882.5	1910	Tune-up limit (dBm)
10	QPSK	1	0	21.44	21.76	21.43	22.5
10	QPSK	1	25	21.39	21.74	21.39	
10	QPSK	1	49	21.38	21.70	21.35	
10	QPSK	25	0	20.76	20.47	20.34	
10	QPSK	25	12	20.68	20.40	20.29	21.5
10	QPSK	25	25	20.62	20.36	20.27	
10	QPSK	50	0	20.57	20.47	20.12	
10	16QAM	1	0	20.46	20.77	20.68	
10	16QAM	1	25	20.35	20.58	20.55	21.5
10	16QAM	1	49	20.27	20.49	20.41	
10	16QAM	25	0	19.78	19.40	19.37	
10	16QAM	25	12	19.73	19.38	19.33	
10	16QAM	25	25	19.66	19.35	19.28	20.5
10	16QAM	50	0	19.68	19.42	19.30	
10	64QAM	1	0	19.62	19.33	19.38	
10	64QAM	1	25	19.53	19.21	19.29	
10	64QAM	1	49	19.36	19.18	19.16	19.5
10	64QAM	25	0	18.52	18.21	18.22	
10	64QAM	25	12	18.31	18.14	18.17	
10	64QAM	25	25	18.16	18.09	18.08	
10	64QAM	50	0	18.49	18.17	18.03	18.03
Channel				26065	26365	26665	
Frequency (MHz)				1852.5	1882.5	1912.5	Tune-up limit (dBm)
5	QPSK	1	0	21.40	21.72	21.39	22.5
5	QPSK	1	12	21.35	21.70	21.35	
5	QPSK	1	24	21.34	21.66	21.31	
5	QPSK	12	0	20.72	20.43	20.30	
5	QPSK	12	7	20.64	20.36	20.25	21.5
5	QPSK	12	13	20.58	20.32	20.23	
5	QPSK	25	0	20.53	20.43	20.08	
5	16QAM	1	0	20.42	20.73	20.64	
5	16QAM	1	12	20.31	20.54	20.51	21.5
5	16QAM	1	24	20.23	20.45	20.37	
5	16QAM	12	0	19.74	19.36	19.33	
5	16QAM	12	7	19.69	19.34	19.29	
5	16QAM	12	13	19.62	19.31	19.24	20.5
5	16QAM	25	0	19.64	19.38	19.26	
5	64QAM	1	0	19.58	19.29	19.34	
5	64QAM	1	12	19.49	19.17	19.25	
5	64QAM	1	24	19.32	19.14	19.12	20.5
5	64QAM	12	0	18.48	18.17	18.18	
5	64QAM	12	7	18.27	18.10	18.13	
5	64QAM	12	13	18.12	18.05	18.04	
5	64QAM	25	0	18.45	18.13	17.99	17.99
Channel				26055	26365	26675	
Frequency (MHz)				1851.5	1882.5	1913.5	Tune-up limit (dBm)
3	QPSK	1	0	21.36	21.68	21.35	22.5
3	QPSK	1	8	21.31	21.66	21.31	
3	QPSK	1	14	21.30	21.62	21.27	
3	QPSK	8	0	20.68	20.39	20.26	
3	QPSK	8	4	20.60	20.32	20.21	21.5
3	QPSK	8	7	20.54	20.28	20.19	
3	QPSK	15	0	20.49	20.39	20.04	

Band 26 for FCC (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	
Frequency (MHz)				821.5	831.5	841.5	
15	QPSK	1	0	22.49	22.56	22.54	23
15	QPSK	1	37	22.37	22.41	22.38	
15	QPSK	1	74	22.23	22.36	22.27	
15	QPSK	36	0	21.48	21.58	21.44	
15	QPSK	36	20	21.35	21.43	21.31	22
15	QPSK	36	39	21.23	21.32	21.22	
15	QPSK	75	0	21.46	21.47	21.43	
15	16QAM	1	0	21.87	21.86	21.83	
15	16QAM	1	37	21.76	21.79	21.74	22
15	16QAM	1	74	21.59	21.68	21.65	
15	16QAM	36	0	20.43	20.53	20.44	
15	16QAM	36	20	20.32	20.41	20.32	
15	16QAM	36	39	20.19	20.25	20.21	21
15	16QAM	75	0	20.49	20.48	20.38	
15	64QAM	1	0	20.83	20.91	20.74	
15	64QAM	1	37	20.77	20.84	20.67	
15	64QAM	1	74	20.63	20.71	20.58	21
15	64QAM	36	0	19.37	19.41	19.32	
15	64QAM	36	20	19.18	19.24	19.15	
15	64QAM	36	39	19.11	19.16	19.08	
15	64QAM	75	0	19.06	19.09	19.03	20
Channel				26740	26865	26990	
Frequency (MHz)				819	831.5	844	Tune-up limit (dBm)
10	QPSK	1	0	22.43	22.50	22.48	23
10	QPSK	1	25	22.31	22.35	22.32	
10	QPSK	1	49	22.17	22.30	22.21	
10	QPSK	25	0	21.42	21.52	21.38	
10	QPSK	25	12	21.29	21.37	21.25	22
10	QPSK	25	25	21.17	21.26	21.16	
10	QPSK	50	0	21.40	21.41	21.37	
10	16QAM	1	0	21.81	21.80	21.77	
10	16QAM	1	25	21.70	21.73	21.68	22
10	16QAM	1	49	21.53	21.62	21.59	
10	16QAM	25	0	20.37	20.47	20.38	
10	16QAM	25	12	20.26	20.35	20.26	
10	16QAM	25	25	20.13	20.19	20.15	21
10	16QAM	50	0	20.43	20.42	20.32	
10	64QAM	1	0	20.77	20.85	20.68	
10	64QAM	1	25	20.71	20.78	20.61	
10	64QAM	1	49	20.57	20.65	20.52	21
10	64QAM	25	0	19.31	19.35	19.26	
10	64QAM	25	12	19.12	19.18	19.09	
10	64QAM	25	25	19.05	19.10	19.02	
10	64QAM	50	0	19.00	19.03	18.97	20
Channel				26715	26865	27015	
Frequency (MHz)				816.5	831.5	846.5	Tune-up limit (dBm)
5	QPSK	1	0	22.40	22.47	22.45	23
5	QPSK	1	12	22.28	22.32	22.29	
5	QPSK	1	24	22.14	22.27	22.18	
5	QPSK	12	0	21.39	21.49	21.35	
5	QPSK	12	7	21.26	21.34	21.22	22
5	QPSK	12	13	21.14	21.23	21.13	
5	QPSK	25	0	21.37	21.38	21.34	
5	16QAM	1	0	21.78	21.77	21.74	
5	16QAM	1	12	21.67	21.70	21.65	22
5	16QAM	1	24	21.50	21.59	21.56	
5	16QAM	12	0	20.34	20.44	20.35	
5	16QAM	12	7	20.23	20.32	20.23	
5	16QAM	12	13	20.10	20.16	20.12	21
5	16QAM	25	0	20.40	20.39	20.29	
5	64QAM	1	0	20.74	20.82	20.65	
5	64QAM	1	12	20.68	20.75	20.58	
5	64QAM	1	24	20.54	20.62	20.49	21
5	64QAM	12	0	19.28	19.32	19.23	
5	64QAM	12	7	19.09	19.15	19.06	
5	64QAM	12	13	19.02	19.07	18.99	
5	64QAM	25	0	18.97	19.00	18.94	20
Channel				26705	26865	27025	
Frequency (MHz)				815.5	831.5	847.5	Tune-up limit (dBm)
3	QPSK	1	0	22.37	22.44	22.42	23
3	QPSK	1	8	22.25	22.29	22.26	
3	QPSK	1	14	22.11	22.24	22.15	
3	QPSK	8	0	21.36	21.46	21.32	
3	QPSK	8	4	21.23	21.31	21.19	22
3	QPSK	8	7	21.11	21.20	21.10	
3	QPSK	15	0	21.34	21.35	21.31	
3	16QAM	1	0	21.75	21.74	21.71	
3	16QAM	1	8	21.64	21.67	21.62	22
3	16QAM	1	14	21.47	21.56	21.53	
3	16QAM	8	0	20.31	20.41	20.32	
3	16QAM	8	4	20.20	20.29	20.20	
3	16QAM	8	7	20.07	20.13	20.09	21
3	16QAM	15	0	20.37	20.36	20.26	
3	64QAM	1	0	20.71	20.79	20.62	
3	64QAM	1	8	20.65	20.72	20.55	
3	64QAM	1	14	20.51	20.59	20.46	21
3	64QAM	8	0	19.25	19.29	19.20	
3	64QAM	8	4	19.06	19.12	19.03	
3	64QAM	8	7	18.99	19.04	18.96	
3	64QAM	15	0	18.94	18.97	18.91	20
Channel				26697	26865	27033	
Frequency (MHz)				814.7	831.5	848.3	Tune-up limit (dBm)
1.4	QPSK	1	0	22.36	22.43	22.41	23
1.4	QPSK	1	3	22.24	22.28	22.25	
1.4	QPSK	1	5	22.10	22.23	22.14	
1.4	QPSK	3	22	21.35	21.45	21.31	
1.4	QPSK	3	1	21.22	21.30	21.18	
1.4	QPSK	3	3	21.10	21.19	21.09	
1.4	QPSK	6	0	21.33	21.34	21.30	22

3	16QAM	1	0	20.38	20.69	20.60	21.5
3	16QAM	1	8	20.27	20.50	20.47	
3	16QAM	1	14	20.19	20.41	20.33	
3	16QAM	8	0	19.70	19.32	19.29	20.5
3	16QAM	8	4	19.65	19.30	19.25	
3	16QAM	8	7	19.58	19.27	19.20	
3	16QAM	15	0	19.60	19.34	19.22	20
3	16QAM	1	0	19.54	19.25	19.30	
3	16QAM	1	8	19.45	19.13	19.21	
3	16QAM	1	14	19.28	19.10	19.08	19
3	16QAM	8	0	18.44	18.13	18.14	
3	16QAM	8	4	18.23	18.06	18.09	
3	16QAM	8	7	18.08	18.01	18.00	
3	16QAM	15	0	18.41	18.09	17.95	
Channel				26047	26365	26683	Tune-up limit (dBm)
Frequency (MHz)				1850.7	1882.5	1914.3	
1.4	QPSK	1	0	21.30	21.62	21.29	22.5
1.4	QPSK	1	3	21.25	21.60	21.25	
1.4	QPSK	1	5	21.24	21.56	21.21	
1.4	QPSK	3	0	20.62	20.33	20.20	
1.4	QPSK	3	1	20.54	20.26	20.15	
1.4	QPSK	3	3	20.48	20.22	20.13	
1.4	QPSK	6	0	20.43	20.33	19.98	21.5
1.4	16QAM	1	0	20.32	20.63	20.54	21.5
1.4	16QAM	1	3	20.21	20.44	20.41	
1.4	16QAM	1	5	20.13	20.35	20.27	
1.4	16QAM	3	0	19.64	19.26	19.23	
1.4	16QAM	3	1	19.59	19.24	19.19	
1.4	16QAM	3	3	19.52	19.21	19.14	20.5
1.4	16QAM	6	0	19.54	19.28	19.16	
1.4	16QAM	1	0	19.48	19.19	19.24	
1.4	16QAM	1	3	19.39	19.07	19.15	20.5
1.4	16QAM	1	5	19.22	19.04	19.02	
1.4	16QAM	3	0	18.38	18.07	18.08	
1.4	16QAM	3	1	18.17	18.00	18.03	
1.4	16QAM	3	3	18.02	17.95	17.94	
1.4	16QAM	6	0	18.35	18.03	17.89	19

1.4	16QAM	1	0	21.74	21.73	21.70	22
1.4	16QAM	1	3	21.63	21.66	21.61	
1.4	16QAM	1	5	21.46	21.55	21.52	
1.4	16QAM	3	0	20.30	20.40	20.31	
1.4	16QAM	3	1	20.19	20.28	20.19	
1.4	16QAM	3	3	20.06	20.12	20.08	21
1.4	16QAM	6	0	20.36	20.35	20.25	
1.4	16QAM	1	0	20.70	20.78	20.61	
1.4	16QAM	1	3	20.64	20.71	20.54	
1.4	16QAM	1	5	20.50	20.58	20.45	
1.4	16QAM	3	0	19.24	19.28	19.19	19.5
1.4	16QAM	3	1	19.05	19.11	19.02	
1.4	16QAM	3	3	18.98	19.03	18.95	
1.4	16QAM	6	0	18.93	18.96	18.90	19.5

Band 66									
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)		
Channel				132072	132322	132572			
Frequency (MHz)				1720	1745	1770			
20	QPSK	1	0	21.24	21.54	21.30	22		
20	QPSK	1	49	21.15	21.46	21.23			
20	QPSK	1	99	21.14	21.37	21.15			
20	QPSK	50	0	20.17	20.53	20.49			
20	QPSK	50	24	20.16	20.45	20.36			
20	QPSK	50	50	20.23	20.38	20.25			
20	QPSK	100	0	20.20	20.49	20.47	21		
20	16QAM	1	0	20.69	20.88	20.96			
20	16QAM	1	49	20.55	20.67	20.78			
20	16QAM	1	99	20.47	20.51	20.59	21		
20	16QAM	50	0	19.25	19.40	19.56			
20	16QAM	50	24	19.18	19.23	19.30			
20	16QAM	50	50	19.12	19.14	19.16	20		
20	16QAM	100	0	19.16	19.33	19.50			
20	64QAM	1	0	19.35	19.60	19.55			
20	64QAM	1	49	19.27	19.46	19.34	20		
20	64QAM	1	99	19.19	19.28	19.20			
20	64QAM	50	0	18.08	18.10	18.13			
20	64QAM	50	24	17.97	17.82	17.91	19		
20	64QAM	50	50	17.84	17.67	17.72			
20	64QAM	100	0	17.96	18.09	18.29			
Channel				132047	132322	132597	Tune-up limit (dBm)		
Frequency (MHz)				1717.5	1745	1772.5			
15	QPSK	1	0	21.18	21.48	21.24	22		
15	QPSK	1	37	21.09	21.40	21.17			
15	QPSK	1	74	21.08	21.31	21.09			
15	QPSK	36	0	20.11	20.27	20.43	21		
15	QPSK	36	20	20.10	20.19	20.30			
15	QPSK	36	39	20.07	20.12	20.19			
15	QPSK	75	0	20.14	20.23	20.41	21		
15	16QAM	1	0	20.63	20.82	20.90			
15	16QAM	1	37	20.49	20.61	20.72			
15	16QAM	1	74	20.41	20.45	20.53	21		
15	16QAM	36	0	19.19	19.34	19.50			
15	16QAM	36	20	19.12	19.17	19.24			
15	16QAM	36	39	19.06	19.08	19.10	20		
15	16QAM	75	0	19.10	19.27	19.44			
15	64QAM	1	0	19.29	19.54	19.49			
15	64QAM	1	37	19.21	19.40	19.28	20		
15	64QAM	1	74	19.13	19.22	19.14			
15	64QAM	36	0	18.02	18.04	18.07			
15	64QAM	36	20	17.91	17.76	17.85	19		
15	64QAM	36	39	17.78	17.61	17.66			
15	64QAM	75	0	17.90	18.03	18.23			
Channel				132022	132322	132622	Tune-up limit (dBm)		
Frequency (MHz)				1715	1745	1775			
10	QPSK	1	0	21.15	21.45	21.21	22		
10	QPSK	1	25	21.06	21.37	21.14			
10	QPSK	1	49	21.05	21.28	21.06			
10	QPSK	25	0	20.08	20.24	20.40	21		
10	QPSK	25	12	20.07	20.16	20.27			
10	QPSK	25	25	20.04	20.09	20.16			
10	QPSK	50	0	20.11	20.20	20.38	21		
10	16QAM	1	0	20.60	20.79	20.87			
10	16QAM	1	25	20.46	20.58	20.69			
10	16QAM	1	49	20.38	20.42	20.50	21		
10	16QAM	25	0	19.16	19.31	19.47			
10	16QAM	25	12	19.09	19.14	19.21			
10	16QAM	25	25	19.03	19.05	19.07	20		
10	16QAM	50	0	19.07	19.24	19.41			
10	64QAM	1	0	19.26	19.51	19.46			
10	64QAM	1	25	19.18	19.37	19.25	20		
10	64QAM	1	49	19.10	19.19	19.11			
10	64QAM	25	0	17.99	18.01	18.04			
10	64QAM	25	12	17.88	17.73	17.82	19		
10	64QAM	25	25	17.75	17.58	17.63			
10	64QAM	50	0	17.87	18.00	18.20			
Channel				131997	132322	132647	Tune-up limit (dBm)		
Frequency (MHz)				1712.5	1745	1777.5			
5	QPSK	1	0	21.11	21.41	21.17	22		
5	QPSK	1	12	21.02	21.33	21.10			
5	QPSK	1	24	21.01	21.24	21.02			
5	QPSK	12	0	20.04	20.20	20.36	21		
5	QPSK	12	7	20.03	20.12	20.23			
5	QPSK	12	13	20.00	20.05	20.12			
5	QPSK	25	0	20.07	20.16	20.34	21		
5	16QAM	1	0	20.56	20.75	20.83			
5	16QAM	1	12	20.42	20.54	20.65			
5	16QAM	1	24	20.34	20.38	20.46	21		
5	16QAM	12	0	19.12	19.27	19.43			
5	16QAM	12	7	19.05	19.10	19.17			
5	16QAM	12	13	18.99	19.01	19.03	20		
5	16QAM	25	0	19.03	19.20	19.37			
5	64QAM	1	0	19.22	19.47	19.42			
5	64QAM	1	12	19.14	19.33	19.21	20		
5	64QAM	1	24	19.06	19.15	19.07			
5	64QAM	12	0	17.95	17.97	18.00			
5	64QAM	12	7	17.84	17.69	17.78	19		
5	64QAM	12	13	17.71	17.54	17.59			
5	64QAM	25	0	17.83	17.96	18.16			
Channel				131987	132322	132657	Tune-up limit (dBm)		
Frequency (MHz)				1711.5	1745	1778.5			
3	QPSK	1	0	21.08	21.38	21.14	22		
3	QPSK	1	8	20.99	21.30	21.07			
3	QPSK	1	14	20.98	21.21	20.99			
3	QPSK	8	0	20.01	20.17	20.33	21		
3	QPSK	8	4	20.00	20.09	20.20			
3	QPSK	8	7	19.97	20.02	20.09			
3	QPSK	15	0	20.04	20.13	20.31			

Band 71									
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	22.77	22.97	22.81	23.5		
20	QPSK	1	49	22.64	22.74	22.71			
20	QPSK	1	99	22.61	22.58	22.57			
20	QPSK	50	0	22.09	22.13	22.12	23		
20	QPSK	50	24	21.95	21.99	22.06			
20	QPSK	50	50	22.08	22.17	21.90			
20	QPSK	100	0	22.02	22.04	22.01	23		
20	16QAM	1	0	22.26	22.43	22.39			
20	16QAM	1	49	22.12	22.27	22.30			
20	16QAM	1	99	21.94	22.25	22.15	22.5		
20	16QAM	50	0	21.31	21.47	21.40			
20	16QAM	50	24	21.17	21.34	21.33			
20	16QAM	50	50	21.15	21.20	21.25	22.5		
20	16QAM	100	0	20.99	21.02	21.11			
20	64QAM	1	0	22.09	22.14	21.95			
20	64QAM	1	49	21.99	22.03	21.84	22.5		
20	64QAM	1	99	21.86	21.93	21.71			
20	64QAM	50	0	20.75	20.83	20.84			
20	64QAM	50	24	20.72	20.77	20.80	21.5		
20	64QAM	50	50	20.65	20.71	20.51			
20	64QAM	100	0	20.62	20.74	20.53			
Channel				133197	133297	133397	Tune-up limit (dBm)		
Frequency (MHz)				670.5	680.5	690.5			
15	QPSK	1	0	22.72	22.91	22.74	23.5		
15	QPSK	1	37	22.57	22.72	22.63			
15	QPSK	1	74	22.57	22.53	22.52			
15	QPSK	36	0	22.01	22.06	22.09	23		
15	QPSK	36	20	21.91	21.94	22.02			
15	QPSK	36	39	22.04	22.10	21.84			
15	QPSK	75	0	21.96	21.97	21.96	23		
15	16QAM	1	0	22.19	22.39	22.34			
15	16QAM	1	37	22.07	22.25	22.26			
15	16QAM	1	74	21.91	22.21	22.13	22.5		
15	16QAM	36	0	21.27	21.39	21.34			
15	16QAM	36	20	21.16	21.31	21.27			
15	16QAM	36	39	21.07	21.13	21.19	22.5		
15	16QAM	75	0	20.94	20.97	21.06			
15	64QAM	1	0	22.02	22.07	21.91			
15	64QAM	1	37	21.95	22.01	21.76	22.5		
15	64QAM	1	74	21.78	21.87	21.65			
15	64QAM	36	0	20.72	20.76	20.76			
15	64QAM	36	20	20.69	20.75	20.79	21.5		
15	64QAM	36	39	20.63	20.67	20.47			
15	64QAM	75	0	20.57	20.68	20.50			
Channel				133172	133272	133422	Tune-up limit (dBm)		
Frequency (MHz)				668	678	693			
10	QPSK	1	0	22.67	22.88	22.68	23.5		
10	QPSK	1	25	22.55	22.66	22.59			
10	QPSK	1	49	22.54	22.47	22.45			
10	QPSK	25	0	21.98	22.03	22.05	23		
10	QPSK	25	12	21.87	21.90	21.95			
10	QPSK	25	25	22.00	22.08	21.83			
10	QPSK	50	0	21.92	21.92	21.89	23		
10	16QAM	1	0	22.17	22.36	22.26			
10	16QAM	1	25	22.04	22.23	22.18			
10	16QAM	1	49	21.89	22.19	22.07	22.5		
10	16QAM	25	0	21.25	21.38	21.29			
10	16QAM	25	12	21.13	21.24	21.23			
10	16QAM	25	25	21.02	21.10	21.18	22.5		
10	16QAM	50	0	20.92	20.93	20.99			
10	64QAM	1	0	21.96	22.01	21.88			
10	64QAM	1	25	21.93	21.98	21.69	22.5		
10	64QAM	1	49	21.76	21.81	21.57			
10	64QAM	25	0	20.67	20.69	20.70			
10	64QAM	25	12	20.67	20.68	20.76	21.5		
10	64QAM	25	25	20.57	20.60	20.40			
10	64QAM	50	0	20.50	20.66	20.47			
Channel				133147	133247	133447	Tune-up limit (dBm)		
Frequency (MHz)				665.5	675.5	695.5			
5	QPSK	1	0	22.65	22.82	22.65	23.5		
5	QPSK	1	12	22.53	22.63	22.52			
5	QPSK	1	24	22.49	22.41	22.41			
5	QPSK	12	0	21.93	21.97	21.99	23		
5	QPSK	12	7	21.80	21.86	21.93			
5	QPSK	12	13	21.98	22.06	21.77			
5	QPSK	25	0	21.91	21.86	21.87	23		
5	16QAM	1	0	22.09	22.31	22.21			
5	16QAM	1	12	21.98	22.19	22.17			
5	16QAM	1	24	21.84	22.15	22.00	22.5		
5	16QAM	12	0	21.18	21.35	21.28			
5	16QAM	12	7	21.05	21.22	21.16			
5	16QAM	12	13	20.97	21.05	21.17	22.5		
5	16QAM	25	0	20.86	20.88	20.96			
5	64QAM	1	0	21.90	21.94	21.86			
5	64QAM	1	12	21.87	21.93	21.63	22.5		
5	64QAM	1	24	21.73	21.78	21.53			
5	64QAM	12	0	20.62	20.66	20.66			
5	64QAM	12	7	20.62	20.67	20.70	21.5		
5	64QAM	12	13	20.53	20.54	20.36			
5	64QAM	25	0	20.47	20.60	20.41			

3	16QAM	1	0	20.53	20.72	20.80	21
3	16QAM	1	8	20.39	20.51	20.62	
3	16QAM	1	14	20.31	20.35	20.43	
3	16QAM	8	0	19.09	19.24	19.40	20
3	16QAM	8	4	19.02	19.07	19.14	
3	16QAM	8	7	18.96	18.96	19.00	
3	16QAM	15	0	19.00	19.17	19.34	20
3	64QAM	1	0	19.19	19.44	19.39	
3	64QAM	1	8	19.11	19.30	19.18	
3	64QAM	1	14	19.03	19.12	19.04	18.5
3	64QAM	8	0	17.92	17.94	17.97	
3	64QAM	8	4	17.81	17.66	17.75	
3	64QAM	8	7	17.88	17.51	17.58	18.5
3	64QAM	15	0	17.80	17.93	18.13	
Channel				1319/9	132322	132685	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1745	1779.3	
1.4	QPSK	1	0	21.05	21.35	21.11	22
1.4	QPSK	1	3	20.98	21.27	21.04	
1.4	QPSK	1	5	20.95	21.18	20.98	
1.4	QPSK	3	0	19.98	20.14	20.30	
1.4	QPSK	3	1	19.97	20.06	20.17	
1.4	QPSK	3	3	19.94	19.99	20.06	
1.4	QPSK	6	0	20.01	20.10	20.28	21
1.4	16QAM	1	0	20.50	20.69	20.77	21
1.4	16QAM	1	3	20.36	20.48	20.59	
1.4	16QAM	1	5	20.28	20.32	20.40	
1.4	16QAM	3	0	19.06	19.21	19.37	
1.4	16QAM	3	1	18.99	19.04	19.11	
1.4	16QAM	3	3	18.93	18.95	18.97	
1.4	16QAM	6	0	18.97	19.14	19.31	20
1.4	64QAM	1	0	19.16	19.41	19.36	20
1.4	64QAM	1	3	19.08	19.27	19.15	
1.4	64QAM	1	5	19.00	19.09	19.01	
1.4	64QAM	3	0	17.89	17.91	17.94	
1.4	64QAM	3	1	17.78	17.63	17.72	
1.4	64QAM	3	3	17.65	17.48	17.53	
1.4	64QAM	6	0	17.77	17.90	18.10	18.5

Band 41 (2496~2690MHz)

BW [MHz]	Modulation	RB Size	RB Offset	for IC Low channel	Low Channel	Middle Low Channel	Middle Channel	Middle High Channel	High Channel	Tune-up limit (dBm)
Channel				39790	39750	40185	40620	41055	41490	
Frequency (MHz)				2510	2506	2549.5	2593	2636.5	2680	
20	QPSK	1	0	23.53	23.37	23.85	22.98	23.17	22.93	24.5
20	QPSK	1	49	23.35	23.16	23.23	22.57	22.78	22.55	
20	QPSK	1	99	23.14	23.08	23.16	22.52	22.55	22.67	
20	QPSK	50	0	23.55	23.10	23.79	23.05	23.57	23.25	24
20	QPSK	50	24	23.31	22.89	23.68	22.87	23.26	22.98	
20	QPSK	50	50	23.26	22.68	23.45	22.68	23.13	22.67	
20	QPSK	100	0	23.20	23.51	23.68	23.23	23.42	22.67	23
20	16QAM	1	0	21.53	22.60	22.80	22.05	21.76	21.19	
20	16QAM	1	49	22.78	22.35	22.56	21.78	21.54	21.56	
20	16QAM	1	99	22.46	22.13	22.43	21.43	21.27	21.35	23
20	16QAM	50	0	22.09	21.80	22.38	22.36	22.89	22.02	
20	16QAM	50	24	21.75	21.67	22.21	22.25	22.67	21.83	
20	16QAM	50	50	21.37	21.43	21.14	22.13	22.54	21.76	22.5
20	16QAM	100	0	22.16	22.39	22.32	22.69	22.78	21.67	
20	64QAM	1	0	21.90	21.98	21.89	21.95	21.92	21.90	
20	64QAM	1	49	21.84	21.87	21.75	21.86	21.83	21.85	21.5
20	64QAM	1	99	21.67	21.72	21.68	21.72	21.76	21.73	
20	64QAM	50	0	20.75	20.85	20.82	20.86	20.15	20.13	
20	64QAM	50	24	20.53	20.75	20.68	20.75	20.11	20.11	21.5
20	64QAM	50	50	20.46	20.57	20.53	20.61	20.09	20.07	
20	64QAM	100	0	20.37	20.42	20.40	20.53	20.05	20.05	
Channel				39765	39725	40173	40620	41068	41515	
Frequency (MHz)				2507.5	2503.5	2548.3	2593	2637.8	2682.5	
15	QPSK	1	0	23.50	23.34	23.42	22.95	22.84	22.40	24.5
15	QPSK	1	37	23.32	23.13	23.20	22.54	22.45	22.22	
15	QPSK	1	74	23.11	23.05	23.13	22.45	22.22	22.14	
15	QPSK	36	0	23.52	23.07	23.82	23.02	23.54	23.22	24
15	QPSK	36	20	23.28	22.86	23.65	22.84	23.23	22.95	
15	QPSK	36	39	23.23	22.65	23.42	22.65	23.10	22.64	
15	QPSK	75	0	23.17	23.48	23.61	23.20	23.39	22.64	23
15	16QAM	1	0	21.00	22.57	22.77	22.02	21.73	21.76	
15	16QAM	1	37	22.75	22.32	22.53	21.75	21.51	21.53	
15	16QAM	1	74	22.43	22.10	22.40	21.40	21.24	21.32	23
15	16QAM	36	0	22.06	21.77	22.35	22.33	22.86	21.99	
15	16QAM	36	20	21.72	21.64	22.18	22.22	22.64	21.80	
15	16QAM	36	39	21.34	21.40	21.11	22.10	22.51	21.73	22.5
15	16QAM	75	0	22.13	22.36	22.29	22.66	22.75	21.64	
15	64QAM	1	0	21.87	21.95	21.86	21.92	21.89	21.87	
15	64QAM	1	37	21.81	21.84	21.72	21.83	21.80	21.82	21.5
15	64QAM	1	74	21.64	21.69	21.65	21.69	21.73	21.70	
15	64QAM	36	0	20.72	20.82	20.79	20.83	20.12	20.10	
15	64QAM	36	20	20.50	20.72	20.65	20.72	20.08	20.08	21.5
15	64QAM	36	39	20.43	20.54	20.50	20.58	20.06	20.04	
15	64QAM	75	0	20.34	20.39	20.37	20.50	20.02	20.02	
Channel				39740	39700	40160	40620	41080	41540	
Frequency (MHz)				2505	2501	2547	2593	2639	2685	
10	QPSK	1	0	23.47	23.31	23.39	22.92	22.81	22.37	24.5
10	QPSK	1	25	23.29	23.10	23.17	22.51	22.42	22.19	
10	QPSK	1	49	23.08	23.02	23.10	22.26	22.19	22.11	
10	QPSK	25	0	23.49	23.04	23.79	22.99	23.51	23.19	24
10	QPSK	25	12	23.25	22.83	23.62	22.81	23.20	22.92	
10	QPSK	25	25	23.20	22.62	23.39	22.62	23.07	22.61	
10	QPSK	50	0	23.14	23.45	23.58	23.17	23.36	22.61	23
10	16QAM	1	0	20.97	22.54	22.74	21.99	21.70	20.73	
10	16QAM	1	25	22.72	22.29	22.50	21.72	21.48	20.50	
10	16QAM	1	49	22.40	22.07	22.37	21.37	21.21	20.29	23
10	16QAM	25	0	22.03	21.74	22.32	22.30	22.83	21.96	
10	16QAM	25	12	21.69	21.61	22.15	22.19	22.61	21.77	
10	16QAM	25	25	21.31	21.37	21.08	22.07	22.48	21.70	22.5
10	16QAM	50	0	22.10	22.33	22.26	22.63	22.72	21.61	
10	16QAM	1	0	21.84	21.92	21.83	21.89	21.86	21.84	
10	16QAM	1	25	21.78	21.81	21.69	21.80	21.77	21.79	21.5
10	16QAM	1	49	21.61	21.66	21.62	21.66	21.70	21.67	
10	16QAM	25	0	20.69	20.79	20.76	20.80	20.09	20.07	
10	16QAM	25	12	20.47	20.69	20.62	20.69	20.05	20.05	21.5
10	16QAM	25	25	20.40	20.51	20.47	20.55	20.03	20.01	
10	16QAM	50	0	20.31	20.36	20.34	20.47	19.99	19.99	
Channel				39715	39675	40148	40620	41093	41565	
Frequency (MHz)				2502.5	2498.5	2545.8	2593	2640.30	2687.5	
5	QPSK	1	0	23.43	23.27	23.35	22.88	22.77	22.33	24.5
5	QPSK	1	12	23.25	23.06	23.13	22.47	22.38	22.15	
5	QPSK	1	24	23.04	22.98	23.06	22.22	22.15	22.07	
5	QPSK	12	0	23.45	23.00	23.75	22.95	23.47	23.15	24
5	QPSK	12	7	23.21	22.79	23.58	22.77	23.16	22.88	
5	QPSK	12	13	23.16	22.58	23.35	22.58	23.03	22.57	
5	QPSK	25	0	23.10	23.41	23.54	23.13	23.32	22.57	23.5
5	16QAM	1	0	20.93	22.50	22.70	21.95	21.66	20.69	
5	16QAM	1	12	22.68	22.25	22.46	21.68	21.44	20.46	
5	16QAM	1	24	22.36	22.03	22.33	21.33	21.17	20.25	23
5	16QAM	12	0	21.99	21.70	22.28	22.26	22.79	21.92	
5	16QAM	12	7	21.65	21.57	22.11	22.15	22.57	21.73	
5	16QAM	12	13	21.27	21.33	21.04	22.03	22.44	21.66	22.5
5	16QAM	25	0	22.06	22.29	22.22	22.59	22.68	21.57	
5	64QAM	1	0	21.80	21.88	21.79	21.85	21.82	21.80	
5	64QAM	1	12	21.74	21.77	21.65	21.76	21.73	21.75	21.5
5	64QAM	1	24	21.57	21.62	21.58	21.62	21.66	21.63	
5	64QAM	12	0	20.65	20.75	20.72	20.76	20.05	20.03	
5	64QAM	12	7	20.43	20.65	20.58	20.65	20.01	20.01	21.5
5	64QAM	12	13	20.36	20.47	20.43	20.51	19.99	19.97	
5	64QAM	25	0	20.27	20.32	20.30	20.43	19.95	19.95	

Band 48 (3.5G Band)							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Middle-Low Channel	High Channel	Tune-up limit (dBm)
Channel				55340	55990	56640	
Frequency (MHz)				3560	3625	3690	
20	QPSK	1	0	23.29	22.41	21.47	24
20	QPSK	1	49	22.98	22.36	21.35	
20	QPSK	1	99	22.67	22.18	21.21	
20	QPSK	50	0	21.79	21.44	20.73	23
20	QPSK	50	24	21.56	21.32	20.56	
20	QPSK	50	50	21.34	21.23	20.38	
20	QPSK	100	0	21.75	21.40	20.66	23
20	16QAM	1	0	22.42	22.53	20.80	
20	16QAM	1	49	22.36	22.35	20.69	
20	16QAM	1	99	22.24	22.18	20.35	22
20	16QAM	50	0	20.86	20.53	19.77	
20	16QAM	50	24	20.68	20.36	19.56	
20	16QAM	50	50	20.47	20.19	19.39	22
20	16QAM	100	0	20.85	20.44	19.68	
20	64QAM	1	0	20.95	20.52	19.81	
20	64QAM	1	49	20.78	20.35	19.67	21
20	64QAM	1	99	20.63	20.17	19.46	
20	64QAM	50	0	19.84	19.48	18.77	
20	64QAM	50	24	19.75	19.35	18.58	21
20	64QAM	50	50	19.59	19.23	18.32	
20	64QAM	100	0	19.85	19.44	18.69	
Channel				55315	55990	56665	Tune-up limit (dBm)
Frequency (MHz)				3557.5	3625	3692.5	
15	QPSK	1	0	23.26	22.38	21.44	24
15	QPSK	1	37	22.95	22.33	21.32	
15	QPSK	1	74	22.64	22.15	21.18	
15	QPSK	36	0	21.74	21.41	20.70	23
15	QPSK	36	20	21.53	21.29	20.53	
15	QPSK	36	39	21.31	21.20	20.35	
15	QPSK	75	0	21.76	21.37	20.63	23
15	16QAM	1	0	22.39	22.50	20.77	
15	16QAM	1	37	22.33	22.32	20.66	
15	16QAM	1	74	22.21	22.15	20.32	22
15	16QAM	36	0	20.83	20.50	19.74	
15	16QAM	36	20	20.65	20.33	19.53	
15	16QAM	36	39	20.44	20.16	19.36	22
15	16QAM	75	0	20.82	20.41	19.65	
15	64QAM	1	0	20.92	20.49	19.78	
15	64QAM	1	37	20.75	20.32	19.64	21.5
15	64QAM	1	74	20.60	20.14	19.43	
15	64QAM	36	0	19.81	19.45	18.74	
15	64QAM	36	20	19.72	19.32	18.55	21.5
15	64QAM	36	39	19.56	19.20	18.29	
15	64QAM	75	0	19.82	19.41	18.66	
Channel				55290	55990	56690	Tune-up limit (dBm)
Frequency (MHz)				3555	3625	3695	
10	QPSK	1	0	23.21	22.33	21.39	24
10	QPSK	1	25	22.90	22.28	21.27	
10	QPSK	1	49	22.59	22.10	21.13	
10	QPSK	25	0	21.69	21.36	20.65	23
10	QPSK	25	12	21.48	21.24	20.48	
10	QPSK	25	25	21.26	21.15	20.30	
10	QPSK	50	0	21.71	21.32	20.58	23
10	16QAM	1	0	22.34	22.45	20.72	
10	16QAM	1	25	22.28	22.27	20.61	
10	16QAM	1	49	22.16	22.10	20.27	21.5
10	16QAM	25	0	20.78	20.45	19.69	
10	16QAM	25	12	20.60	20.28	19.48	
10	16QAM	25	25	20.39	20.11	19.31	21.5
10	16QAM	50	0	20.77	20.36	19.60	
10	64QAM	1	0	20.87	20.44	19.73	
10	64QAM	1	25	20.70	20.27	19.59	21.5
10	64QAM	1	49	20.55	20.09	19.38	
10	64QAM	25	0	19.76	19.40	18.69	
10	64QAM	25	12	19.67	19.27	18.50	20.5
10	64QAM	25	25	19.51	19.15	18.24	
10	64QAM	50	0	19.77	19.36	18.61	
Channel				55265	55990	56175	Tune-up limit (dBm)
Frequency (MHz)				3552.5	3625	3697.5	
5	QPSK	1	0	23.15	22.27	21.33	23.5
5	QPSK	1	12	22.84	22.22	21.21	
5	QPSK	1	24	22.53	22.04	21.07	
5	QPSK	12	0	21.63	21.30	20.59	22.5
5	QPSK	12	7	21.42	21.18	20.42	
5	QPSK	12	13	21.20	21.09	20.24	
5	QPSK	25	0	21.65	21.26	20.52	22.5
5	16QAM	1	0	22.28	22.39	20.66	
5	16QAM	1	12	22.22	22.21	20.55	
5	16QAM	1	24	22.10	22.04	20.21	21.5
5	16QAM	12	0	20.72	20.39	19.63	
5	16QAM	12	7	20.54	20.22	19.42	
5	16QAM	12	13	20.33	20.05	19.25	21.5
5	16QAM	25	0	20.71	20.30	19.54	
5	64QAM	1	0	20.81	20.38	19.67	
5	64QAM	1	12	20.64	20.21	19.53	20.5
5	64QAM	1	24	20.49	20.03	19.32	
5	64QAM	12	0	19.70	19.34	18.63	
5	64QAM	12	7	19.61	19.21	18.44	20.5
5	64QAM	12	13	19.45	19.09	18.18	
5	64QAM	25	0	19.71	19.30	18.55	

CA Full Power											
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 Power(dBm)
				RB Size	RB Offset	RB Size	RB Offset				
20850	20850	21048	QPSK	1	0	100	0	1	0	20.01	20.5
21100	21001	21199	QPSK	1	0	100	0	1	0	19.92	20.5
21350	21152	21350	QPSK	1	0	100	0	1	0	19.82	20.5

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 Power(dBm)
				RB Size	RB Offset	RB Size	RB Offset				
39750	39750	39948	QPSK	1	0	100	0	1	0	20.34	21.0
40620	40521	40719	QPSK	1	0	100	0	1	0	19.78	20.5
41490	41292	41490	QPSK	1	0	100	0	1	0	19.02	20.5

2.4GHz WLAN ANT 0

Mode	Channel	Frequency (MHz)	Average power (dBm)	Time-Up Limit	Power Setting	Duty Cycle %
2.4GHz WLAN ANT 0	802.11b 1Mbps	CH 1	2412	13.83	14.0	13
		CH 6	2437	13.14	14.0	13
		CH 11	2462	13.36	14.0	13
	802.11g 6Mbps	CH 1	2412	13.03	14.0	13
		CH 6	2437	12.34	13.0	13
		CH 11	2462	12.32	13.0	13
	802.11n-HT20 MCS0	CH 1	2412	12.82	13.5	13
		CH 6	2437	12.14	13.0	13
		CH 11	2462	12.04	13.0	13
	802.11n-HT40 MCS0	CH 3	2422	13.25	14.0	13
		CH 6	2437	10.87	11.5	13
		CH 9	2452	10.06	11.0	13

5GHz WLAN ANT 0

Mode	Channel	Frequency (MHz)	Average power (dBm)	Time-Up Limit	Power Setting	Duty Cycle %
5.2GHz WLAN ANT 0	802.11a 6Mbps	CH 36	5180	12.11	13.0	13
		CH 44	5205	12.25	13.0	13
		CH 48	5240	12.27	13.0	13
	802.11n-HT20 MCS0	CH 36	5180	11.77	13.0	13
		CH 44	5220	12.07	13.0	13
		CH 48	5240	11.86	13.0	13
	802.11n-HT40 MCS0	CH 36	5180	12.29	13.0	13
		CH 48	5230	12.48	13.0	13
		CH 36	5180	11.91	12.5	13
	802.11ac-VHT20 MCS0	CH 44	5220	11.97	12.5	13
		CH 48	5240	11.86	12.5	13
		CH 36	5180	12.37	13.0	13
	802.11ac-VHT40 MCS0	CH 48	5230	12.44	13.0	13
		CH 42	5210	11.83	12.5	13
						90.14

5GHz WLAN ANT 0

Mode	Channel	Frequency (MHz)	Average power (dBm)	Time-Up Limit	Power Setting	Duty Cycle %
5.8GHz WLAN ANT 0	802.11a MCS0	CH 148	5745	15.31	16.0	13
		CH 157	5766	12.26	15.0	13
		CH 165	5825	12.17	15.0	13
	802.11n-HT20 MCS0	CH 148	5745	15.07	15.5	13
		CH 157	5766	12.26	15.0	13
		CH 165	5825	11.91	12.5	13
	802.11n-HT40 MCS0	CH 148	5745	15.47	16.0	13
		CH 157	5766	12.26	15.0	13
		CH 148	5745	15.13	15.5	13
	802.11ac-VHT20 MCS0	CH 157	5766	12.46	13.0	13
		CH 165	5825	11.99	12.5	13
		CH 151	5765	15.87	16.0	13
	802.11ac-VHT40 MCS0	CH 158	5795	12.61	13.5	13
		CH 155	5775	14.73	15.0	13
						90.14

2.4GHz WLAN ANT 1

Mode	Channel	Frequency (MHz)	Average power (dBm)	Time-Up Limit	Power Setting	Duty Cycle %
2.4GHz WLAN ANT 1	802.11b 1Mbps	CH 1	2412	12.89	13.5	13
		CH 6	2437	12.79	13.5	13
		CH 11	2462	12.55	13.0	13
	802.11g 6Mbps	CH 1	2412	12.16	13.0	13
		CH 6	2437	12.19	13.0	13
		CH 11	2462	12.07	13.0	13
	802.11n-HT20 MCS0	CH 1	2412	11.91	12.5	13
		CH 6	2437	11.86	12.5	13
		CH 11	2462	11.83	12.5	13
	802.11n-HT40 MCS0	CH 3	2422	11.87	12.5	13
		CH 6	2437	11.52	12.0	13
		CH 9	2452	11.07	12.0	13

5.2GHz WLAN ANT 1

Mode	Channel	Frequency (MHz)	Average power (dBm)	Time-Up Limit	Power Setting	Duty Cycle %
5.2GHz WLAN ANT 1	802.11a 6Mbps	CH 36	5180	12.05	12.5	11
		CH 44	5220	12.06	12.5	11
		CH 48	5240	12.04	12.5	11
	802.11n-HT20 MCS0	CH 36	5180	11.73	12.0	11
		CH 44	5220	11.80	12.5	11
		CH 48	5240	11.76	12.5	11
	802.11n-HT40 MCS0	CH 36	5180	12.13	12.5	11
		CH 48	5230	12.12	12.5	11
		CH 36	5180	11.86	12.5	11
	802.11ac-VHT20 MCS0	CH 44	5220	11.73	12.5	11
		CH 48	5240	11.72	12.5	11
		CH 36	5180	12.10	12.5	11
	802.11ac-VHT40 MCS0	CH 48	5230	12.21	12.5	11
		CH 42	5210	10.94	11.5	11
						90.14

5.8 WLAN ANT 1

Mode	Channel	Frequency (MHz)	Average power (dBm)	Time-Up Limit	Power Setting	Duty Cycle %
5.8GHz WLAN ANT 1	802.11a MCS0	CH 148	5745	13.01	13.5	11
		CH 157	5766	12.06	13.0	11
		CH 165	5825	12.55	13.0	11
	802.11n-HT20 MCS0	CH 148	5745	12.74	13.0	11
		CH 157	5766	12.26	13.0	11
		CH 165	5825	12.27	13.0	11
	802.11n-HT40 MCS0	CH 148	5745	12.11	12.5	11
		CH 157	5766	12.10	13.0	11
		CH 155	5795	12.70	13.0	11
	802.11ac-VHT20 MCS0	CH 148	5745	12.87	13.0	11
		CH 157	5766	12.33	13.0	11
		CH 165	5825	12.23	13.0	11
	802.11ac-VHT40 MCS0	CH 151	5765	15.87	15.0	11
		CH 158	5795	12.46	13.5	11
		CH 155	5775	12.49	13.0	11
						90.14

2.4GHz WLAN ANT 0+1

Mode	Channel	Frequency (MHz)	Average power (dBm)	Duty Cycle %
2.4GHz WLAN ANT 0+1	802.11b 1Mbps	CH 1	2412	N/A
		CH 6	2437	N/A
		CH 11	2462	N/A
	802.11g 6Mbps	CH 1	2412	N/A
		CH 6	2437	N/A
		CH 11	2462	N/A
	802.11n-HT20 MCS0	CH 1	2412	15.36
		CH 6	2437	15.31
		CH 11	2462	15.19
	802.11n-HT40 MCS0	CH 3	2422	16.02
		CH 6	2437	14.62
		CH 9	2452	13.36

5.2GHz WLAN ANT 0+1

Mode	Channel	Frequency (MHz)	Average power (dBm)	Duty Cycle %
5.2GHz WLAN ANT 0+1	802.11a 6Mbps	CH 36	5180	N/A
		CH 44	5220	N/A
		CH 48	5240	N/A
	802.11n-HT20 MCS0	CH 36	5180	14.91
		CH 44	5220	15.19
		CH 48	5240	15.16
	802.11n-HT40 MCS0	CH 36	5180	15.06
		CH 48	5230	15.68
		CH 36	5180	15.05
	802.11ac-VHT20 MCS0	CH 44	5220	15.05
		CH 48	5240	15.05
		CH 36	5180	15.68
	802.11ac-VHT40 MCS0	CH 48	5230	15.80
		CH 42	5210	15.31
				90.14

5.8 WLAN ANT 0+1

Mode	Channel	Frequency (MHz)	Average power (dBm)	Duty Cycle %
5.8GHz WLAN ANT 0+1	802.11a MCS0	CH 148	5745	N/A
		CH 157	5766	N/A
		CH 165	5825	N/A
	802.11n-HT20 MCS0	CH 148	5745	17.32
		CH 157	5766	15.56
		CH 165	5825	15.31
	802.11n-HT40 MCS0	CH 148	5745	17.76
		CH 157	5766	15.02
		CH 155	5795	15.02
	802.11ac-VHT20 MCS0	CH 148	5745	17.32
		CH 157	5766	15.68
		CH 165	5825	15.31
	802.11ac-VHT40 MCS0	CH 151	5765	17.96
		CH 158	5795	16.23
		CH 155	5775	17.63
				90.14