



REPORT No.: SZ22060163S01

Annex E Conducted Power

Note:

Conducted power unit: dBm

The target power was recorded in the manufacture document.

Full Power

Band		WCDMA II			Tune-up Limit (dBm)	WCDMA IV			Tune-up Limit (dBm)
TX Channel		9262	9400	9538		1312	1413	1513	
Rx Channel		9662	9800	9938		1537	1638	1738	
Frequency (MHz)		1852.4	1880	1907.6		1712.4	1732.6	1752.6	
3GPP Rel 99	RMC 12.2Kbps	23.69	23.77	23.64	24.50	23.49	23.71	23.60	24.50
3GPP Rel 6	HSDPA Subtest-1	22.74	22.82	22.80	23.50	22.75	22.77	22.75	23.50
3GPP Rel 6	HSDPA Subtest-2	22.86	23.08	22.90	23.50	22.82	22.88	22.94	23.50
3GPP Rel 6	HSDPA Subtest-3	22.22	22.34	22.28	23.00	22.28	22.29	22.26	23.00
3GPP Rel 6	HSDPA Subtest-4	22.16	22.35	22.25	23.00	22.29	22.32	22.25	23.00
3GPP Rel 8	DC-HSDPA Subtest-1	22.95	22.87	22.89	23.50	22.76	22.84	22.73	23.50
3GPP Rel 8	DC-HSDPA Subtest-2	22.93	22.87	22.93	23.50	22.76	22.82	22.80	23.50
3GPP Rel 8	DC-HSDPA Subtest-3	22.33	22.33	22.37	23.00	22.23	22.30	22.29	23.00
3GPP Rel 8	DC-HSDPA Subtest-4	22.30	22.39	22.42	23.00	22.20	22.30	22.31	23.00
3GPP Rel 6	HSUPA Subtest-1	22.85	22.93	22.81	23.50	22.77	22.95	22.74	23.50
3GPP Rel 6	HSUPA Subtest-2	22.25	22.70	22.29	23.50	22.25	22.50	22.31	23.50
3GPP Rel 6	HSUPA Subtest-3	22.74	22.87	22.75	23.50	22.73	22.80	22.75	23.50
3GPP Rel 6	HSUPA Subtest-4	22.72	22.86	22.77	23.50	22.77	22.83	22.78	23.50
3GPP Rel 6	HSUPA Subtest-5	22.68	22.87	22.80	23.50	22.80	22.93	22.74	23.50
3GPP Rel 7	HSPA+ (16QAM) Subtest-1	22.76	22.80	22.76	23.50	22.77	22.82	22.75	23.50
Attenuator			Cable Loss	0.8			Cable Loss	0.8	
Mode			Max.	23.77			Max.	23.71	

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)				1860	1880	1900	
20	QPSK	1	0	23.59	23.63	23.52	24
20	QPSK	1	49	23.52	23.42	23.41	
20	QPSK	1	99	23.41	23.32	23.24	
20	QPSK	50	0	22.59	22.63	22.50	
20	QPSK	50	24	22.50	22.59	22.41	23
20	QPSK	50	50	22.43	22.51	22.30	
20	QPSK	100	0	22.33	22.39	22.26	
20	16QAM	1	0	22.53	22.67	22.52	
20	16QAM	1	49	22.41	22.65	22.47	23
20	16QAM	1	99	22.36	22.61	22.45	
20	16QAM	50	0	22.54	22.56	22.58	
20	16QAM	50	24	22.48	22.50	22.51	
20	16QAM	50	50	22.39	22.37	22.46	23
20	16QAM	100	0	22.36	22.33	22.39	
20	64QAM	1	0	22.34	22.59	22.54	
20	64QAM	1	49	22.24	22.53	22.51	
20	64QAM	1	99	22.19	22.42	22.38	23
20	64QAM	50	0	22.31	22.34	22.25	
20	64QAM	50	24	22.28	22.31	22.17	
20	64QAM	50	50	22.14	22.20	22.05	
20	64QAM	100	0	22.07	22.12	22.00	19
20	256QAM	1	0	18.29	18.38	18.34	
20	256QAM	1	49	18.27	18.32	18.28	
20	256QAM	1	99	18.30	18.24	18.18	
20	256QAM	50	0	17.86	17.95	17.92	18.5
20	256QAM	50	24	17.81	17.93	17.84	
20	256QAM	50	50	17.76	17.84	17.79	
20	256QAM	100	0	17.79	17.85	17.80	
Channel				18675	18900	19125	Tune-up limit (dBm)
Frequency (MHz)				1857.5	1880	1902.5	
15	QPSK	1	0	23.57	23.58	23.49	24
15	QPSK	1	37	23.49	23.39	23.38	
15	QPSK	1	74	23.36	23.31	23.18	
15	QPSK	36	0	22.55	22.61	22.45	
15	QPSK	36	20	22.48	22.54	22.39	23
15	QPSK	36	39	22.40	22.48	22.27	
15	QPSK	75	0	22.30	22.34	22.24	
15	16QAM	1	0	22.50	22.65	22.47	
15	16QAM	1	37	22.35	22.63	22.44	23
15	16QAM	1	74	22.34	22.56	22.40	
15	16QAM	36	0	22.49	22.51	22.53	
15	16QAM	36	20	22.46	22.46	22.46	
15	16QAM	36	39	22.36	22.31	22.42	23
15	16QAM	75	0	22.32	22.27	22.37	
15	64QAM	1	0	22.29	22.55	22.49	
15	64QAM	1	37	22.22	22.50	22.45	
15	64QAM	1	74	22.16	22.38	22.34	23
15	64QAM	36	0	22.30	22.28	22.21	
15	64QAM	36	20	22.24	22.27	22.11	
15	64QAM	36	39	22.08	22.16	22.03	
15	64QAM	75	0	22.02	22.08	21.96	19
15	256QAM	1	0	18.24	18.36	18.29	
15	256QAM	1	37	18.23	18.26	18.25	
15	256QAM	1	74	18.25	18.22	18.16	
15	256QAM	36	0	17.86	17.90	17.88	18.5
15	256QAM	36	20	17.80	17.91	17.79	
15	256QAM	36	39	17.74	17.79	17.75	
15	256QAM	75	0	17.78	17.79	17.76	
Channel				18650	18900	19150	Tune-up limit (dBm)
Frequency (MHz)				1855	1880	1905	
10	QPSK	1	0	23.52	23.53	23.44	24
10	QPSK	1	25	23.44	23.34	23.33	
10	QPSK	1	49	23.31	23.26	23.13	
10	QPSK	25	0	22.50	22.56	22.40	
10	QPSK	25	12	22.43	22.49	22.34	23
10	QPSK	25	25	22.35	22.43	22.22	
10	QPSK	50	0	22.25	22.29	22.19	
10	16QAM	1	0	22.45	22.60	22.42	
10	16QAM	1	25	22.30	22.58	22.39	23
10	16QAM	1	49	22.29	22.51	22.35	
10	16QAM	25	0	22.44	22.46	22.48	
10	16QAM	25	12	22.41	22.41	22.41	
10	16QAM	25	25	22.31	22.26	22.37	23
10	16QAM	50	0	22.27	22.22	22.32	
10	64QAM	1	0	22.24	22.50	22.44	
10	64QAM	1	25	22.17	22.45	22.40	
10	64QAM	1	49	22.11	22.33	22.29	23
10	64QAM	25	0	22.25	22.23	22.16	
10	64QAM	25	12	22.19	22.22	22.06	
10	64QAM	25	25	22.03	22.11	21.98	
10	64QAM	50	0	21.97	22.03	21.91	19
10	256QAM	1	0	18.19	18.31	18.24	
10	256QAM	1	25	18.18	18.21	18.20	
10	256QAM	1	49	18.20	18.17	18.11	
10	256QAM	25	0	17.81	17.85	17.83	18.5
10	256QAM	25	12	17.75	17.86	17.74	
10	256QAM	25	25	17.69	17.74	17.70	
10	256QAM	50	0	17.73	17.74	17.71	
Channel				18625	18900	19175	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1880	1907.5	
5	QPSK	1	0	23.47	23.48	23.39	24
5	QPSK	1	12	23.39	23.29	23.28	
5	QPSK	1	24	23.26	23.21	23.08	

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	23.68	23.75	23.70	24.5
20	QPSK	1	49	23.62	23.65	23.63	
20	QPSK	1	99	23.58	23.57	23.53	
20	QPSK	50	0	22.64	22.69	22.65	
20	QPSK	50	24	22.63	22.61	22.62	23
20	QPSK	50	50	22.58	22.55	22.52	
20	QPSK	100	0	22.50	22.52	22.48	
20	16QAM	1	0	22.61	22.66	22.57	
20	16QAM	1	49	22.51	22.65	22.48	23
20	16QAM	1	99	22.47	22.63	22.38	
20	16QAM	50	0	22.47	22.52	22.56	
20	16QAM	50	24	22.43	22.43	22.47	
20	16QAM	50	50	22.39	22.37	22.43	23
20	16QAM	100	0	22.33	22.35	22.40	
20	64QAM	1	0	22.68	22.49	22.70	
20	64QAM	1	49	22.66	22.48	22.68	
20	64QAM	1	99	22.60	22.44	22.64	23
20	64QAM	50	0	22.57	22.24	22.27	
20	64QAM	50	24	22.19	22.22	22.19	
20	64QAM	50	50	22.13	22.14	22.10	
20	64QAM	100	0	22.12	22.11	22.09	19
20	256QAM	1	0	18.39	18.44	18.40	
20	256QAM	1	49	18.36	18.38	18.31	
20	256QAM	1	99	18.34	18.34	18.29	
20	256QAM	50	0	17.91	17.94	17.85	18
20	256QAM	50	24	17.83	17.85	17.84	
20	256QAM	50	50	17.77	17.77	17.77	
20	256QAM	100	0	17.69	17.76	17.71	
Channel				20025	20175	20325	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1732.5	1747.5	
15	QPSK	1	0	23.67	23.73	23.65	24.5
15	QPSK	1	37	23.56	23.63	23.58	
15	QPSK	1	74	23.54	23.55	23.51	
15	QPSK	36	0	22.62	22.66	22.64	
15	QPSK	36	20	22.59	22.56	22.60	23
15	QPSK	36	39	22.56	22.53	22.50	
15	QPSK	75	0	22.48	22.46	22.46	
15	16QAM	1	0	22.56	22.63	22.52	
15	16QAM	1	37	22.48	22.61	22.45	23
15	16QAM	1	74	22.41	22.60	22.34	
15	16QAM	36	0	22.46	22.49	22.50	
15	16QAM	36	20	22.38	22.38	22.43	
15	16QAM	36	39	22.37	22.33	22.41	23
15	16QAM	75	0	22.28	22.31	22.38	
15	64QAM	1	0	22.67	22.45	22.67	
15	64QAM	1	37	22.61	22.47	22.64	
15	64QAM	1	74	22.59	22.42	22.59	23
15	64QAM	36	0	22.54	22.22	22.25	
15	64QAM	36	20	22.14	22.16	22.14	
15	64QAM	36	39	22.08	22.12	22.05	
15	64QAM	75	0	22.09	22.08	22.04	19
15	256QAM	1	0	18.36	18.38	18.35	
15	256QAM	1	37	18.32	18.33	18.29	
15	256QAM	1	74	18.30	18.31	18.27	
15	256QAM	36	0	17.87	17.92	17.83	18
15	256QAM	36	20	17.80	17.80	17.82	
15	256QAM	36	39	17.72	17.71	17.76	
15	256QAM	75	0	17.64	17.74	17.69	
Channel				20000	20175	20350	Tune-up limit (dBm)
Frequency (MHz)				1715	1732.5	1750	
10	QPSK	1	0	23.65	23.69	23.64	24.5
10	QPSK	1	25	23.57	23.57	23.56	
10	QPSK	1	49	23.52	23.49	23.47	
10	QPSK	25	0	22.50	22.63	22.58	23
10	QPSK	25	12	22.59	22.51	22.52	
10	QPSK	25	25	22.56	22.46	22.45	
10	QPSK	50	0	22.47	22.48	22.43	23
10	16QAM	1	0	22.54	22.56	22.49	
10	16QAM	1	25	22.45	22.59	22.44	
10	16QAM	1	49	22.40	22.56	22.35	23
10	16QAM	25	0	22.42	22.44	22.50	
10	16QAM	25	12	22.34	22.35	22.42	
10	16QAM	25	25	22.29	22.29	22.34	23
10	16QAM	50	0	22.26	22.30	22.35	
10	64QAM	1	0	22.62	22.41	22.65	
10	64QAM	1	25	22.62	22.41	22.57	23
10	64QAM	1	49	22.50	22.39	22.57	
10	64QAM	25	0	22.48	22.20	22.18	
10	64QAM	25	12	22.13	22.14	22.09	23
10	64QAM	25	25	22.03	22.06	22.02	
10	64QAM	50	0	22.05	22.03	21.99	
10	256QAM	1	0	18.36	18.40	18.36	19
10	256QAM	1	25	18.30	18.27	18.26	
10	256QAM	1	49	18.27	18.25	18.25	
10	256QAM	25	0	17.81	17.87	17.80	18
10	256QAM	25	12	17.79	17.77	17.80	
10	256QAM	25	25	17.71	17.71	17.70	
10	256QAM	50	0	17.62	17.65	17.60	
Channel				19975	20175	20375	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1732.5	1752.5	
5	QPSK	1	0	23.64	23.66	23.62	24.5
5	QPSK	1	12	23.53	23.51	23.52	
5	QPSK	1	24	23.50	23.44	23.43	

5	QPSK	12	0	22.45	22.51	22.35	23
5	QPSK	12	7	22.38	22.44	22.29	
5	QPSK	12	13	22.30	22.38	22.17	
5	QPSK	25	0	22.20	22.24	22.14	
5	16QAM	1	0	22.40	22.55	22.37	23
5	16QAM	1	12	22.25	22.53	22.34	
5	16QAM	1	24	22.24	22.46	22.30	
5	16QAM	12	0	22.39	22.41	22.43	
5	16QAM	12	7	22.36	22.36	22.36	23
5	16QAM	12	13	22.26	22.21	22.32	
5	16QAM	25	0	22.22	22.17	22.27	
5	64QAM	1	0	22.19	22.45	22.39	
5	64QAM	1	12	22.12	22.40	22.35	23
5	64QAM	1	24	22.06	22.28	22.24	
5	64QAM	12	0	22.20	22.18	22.11	
5	64QAM	12	7	22.14	22.17	22.01	
5	64QAM	12	13	21.98	22.06	21.93	23
5	64QAM	25	0	21.92	21.98	21.86	
5	256QAM	1	0	18.14	18.26	18.19	
5	256QAM	1	12	18.13	18.16	18.15	
5	256QAM	1	24	18.15	18.12	18.06	19
5	256QAM	12	0	17.76	17.80	17.78	
5	256QAM	12	7	17.70	17.81	17.69	
5	256QAM	12	13	17.64	17.69	17.65	
5	256QAM	25	0	17.68	17.69	17.66	18.5
Channel				18615	18900	19165	Tune-up limit (dBm)
Frequency (MHz)				1851.5	1880	1908.5	
3	QPSK	1	0	23.42	23.43	23.34	24
3	QPSK	1	8	23.34	23.24	23.23	
3	QPSK	1	14	23.21	23.16	23.03	
3	QPSK	8	0	22.40	22.46	22.30	
3	QPSK	8	4	22.33	22.39	22.24	23
3	QPSK	8	7	22.25	22.33	22.12	
3	QPSK	15	0	22.15	22.19	22.09	
3	16QAM	1	0	22.35	22.50	22.32	
3	16QAM	1	8	22.20	22.48	22.29	23
3	16QAM	1	14	22.19	22.41	22.25	
3	16QAM	8	0	22.34	22.36	22.38	
3	16QAM	8	4	22.31	22.31	22.31	
3	16QAM	8	7	22.21	22.16	22.27	23
3	16QAM	15	0	22.17	22.12	22.22	
3	64QAM	1	0	22.14	22.40	22.34	
3	64QAM	1	8	22.07	22.35	22.30	
3	64QAM	1	14	22.01	22.23	22.19	23
3	64QAM	8	0	22.15	22.13	22.06	
3	64QAM	8	4	22.09	22.12	21.96	
3	64QAM	8	7	21.93	22.01	21.88	
3	64QAM	15	0	21.87	21.93	21.81	18.5
3	256QAM	1	0	18.09	18.21	18.14	
3	256QAM	1	8	18.08	18.11	18.10	
3	256QAM	1	14	18.10	18.07	18.01	
3	256QAM	8	0	17.71	17.75	17.73	18.5
3	256QAM	8	4	17.65	17.76	17.64	
3	256QAM	8	7	17.59	17.64	17.60	
3	256QAM	15	0	17.63	17.64	17.61	
Channel				18807	18900	19193	Tune-up limit (dBm)
Frequency (MHz)				1850.7	1880	1909.3	
1.4	QPSK	1	0	23.37	23.38	23.29	24
1.4	QPSK	1	3	23.29	23.19	23.18	
1.4	QPSK	1	5	23.16	23.11	22.98	
1.4	QPSK	3	0	22.35	22.41	22.25	
1.4	QPSK	3	1	22.28	22.34	22.19	23
1.4	QPSK	3	3	22.20	22.28	22.07	
1.4	QPSK	6	0	22.10	22.14	22.04	
1.4	16QAM	1	0	22.30	22.45	22.27	
1.4	16QAM	1	3	22.15	22.43	22.24	23
1.4	16QAM	1	5	22.14	22.36	22.20	
1.4	16QAM	3	0	22.29	22.31	22.33	
1.4	16QAM	3	1	22.26	22.26	22.26	
1.4	16QAM	3	3	22.16	22.11	22.22	23
1.4	16QAM	6	0	22.12	22.07	22.17	
1.4	64QAM	1	0	22.09	22.35	22.29	
1.4	64QAM	1	3	22.02	22.30	22.25	
1.4	64QAM	1	5	21.96	22.18	22.14	23
1.4	64QAM	3	0	22.10	22.08	22.01	
1.4	64QAM	3	1	22.04	22.07	21.91	
1.4	64QAM	3	3	21.88	21.96	21.83	
1.4	64QAM	6	0	21.82	21.88	21.76	23
1.4	256QAM	1	0	18.04	18.16	18.09	
1.4	256QAM	1	3	18.03	18.06	18.05	
1.4	256QAM	1	5	18.05	18.02	17.96	
1.4	256QAM	3	0	17.66	17.70	17.68	18.5
1.4	256QAM	3	1	17.60	17.71	17.59	
1.4	256QAM	3	3	17.54	17.59	17.55	
1.4	256QAM	6	0	17.58	17.59	17.56	

5	QPSK	12	0	22.47	22.58	22.54	23	
5	QPSK	12	7	22.45	22.45	22.47		
5	QPSK	12	13	22.54	22.41	22.43		
5	QPSK	25	0	22.42	22.41	22.39		
5	16QAM	1	0	22.49	22.52	22.44	23	
5	16QAM	1	12	22.41	22.53	22.41		
5	16QAM	1	24	22.34	22.52	22.29		
5	16QAM	12	0	22.40	22.43	22.47		
5	16QAM	12	7	22.29	22.32	22.40	23	
5	16QAM	12	13	22.26	22.27	22.30		
5	16QAM	25	0	22.22	22.28	22.31		
5	64QAM	1	0	22.57	22.35	22.59		
5	64QAM	1	12	22.57	22.36	22.56	23	
5	64QAM	1	24	22.48	22.34	22.55		
5	64QAM	12	0	22.43	22.18	22.12		
5	64QAM	12	7	22.09	22.10	22.07		
5	64QAM	12	13	22.01	22.01	22.00	23	
5	64QAM	25	0	22.03	21.99	21.97		
5	256QAM	1	0	18.32	18.38	18.32		
5	256QAM	1	12	18.28	18.26	18.24		
5	256QAM	1	24	18.21	18.22	18.22	19	
5	256QAM	12	0	17.77	17.82	17.74		
5	256QAM	12	7	17.73	17.72	17.77		
5	256QAM	12	13	17.66	17.69	17.69		
5	256QAM	25	0	17.56	17.63	17.58	18	
Channel				19965	20175	20385		
Frequency (MHz)				1711.5	1732.5	1753.5		Tune-up limit (dBm)
3	QPSK	1	0	23.59	23.61	23.57	24.5	
3	QPSK	1	8	23.48	23.46	23.47		
3	QPSK	1	14	23.47	23.39	23.38		
3	QPSK	8	0	22.42	22.53	22.49		
3	QPSK	8	4	22.39	22.40	22.42	23	
3	QPSK	8	7	22.35	22.36	22.38		
3	QPSK	15	0	22.37	22.36	22.34		
3	16QAM	1	0	22.44	22.47	22.39		
3	16QAM	1	8	22.36	22.48	22.36	23	
3	16QAM	1	14	22.29	22.47	22.24		
3	16QAM	8	0	22.35	22.38	22.42		
3	16QAM	8	4	22.24	22.27	22.35		
3	16QAM	8	7	22.21	22.22	22.25	23	
3	16QAM	15	0	22.17	22.23	22.26		
3	64QAM	1	0	22.52	22.30	22.54		
3	64QAM	1	8	22.52	22.31	22.51		
3	64QAM	1	14	22.43	22.29	22.50	23	
3	64QAM	8	0	22.38	22.13	22.07		
3	64QAM	8	4	22.04	22.05	22.02		
3	64QAM	8	7	21.96	21.96	21.95		
3	64QAM	15	0	21.98	21.94	21.92	19	
3	256QAM	1	0	18.27	18.33	18.27		
3	256QAM	1	8	18.23	18.21	18.19		
3	256QAM	1	14	18.16	18.17	18.17		
3	256QAM	8	0	17.72	17.77	17.69	18	
3	256QAM	8	4	17.68	17.67	17.72		
3	256QAM	8	7	17.61	17.64	17.64		
3	256QAM	15	0	17.51	17.58	17.53		
Channel				19957	20175	20393	Tune-up limit (dBm)	
Frequency (MHz)				1710.7	1732.5	1754.3		
1.4	QPSK	1	0	23.57	23.59	23.55	24.5	
1.4	QPSK	1	3	23.46	23.44	23.45		
1.4	QPSK	1	5	23.47	23.37	23.36		
1.4	QPSK	3	0	22.42	22.51	22.47		
1.4	QPSK	3	1	22.40	22.38	22.40	23	
1.4	QPSK	3	3	22.39	22.34	22.36		
1.4	QPSK	6	0	22.35	22.34	22.32		
1.4	16QAM	1	0	22.39	22.42	22.34		
1.4	16QAM	1	3	22.31	22.43	22.31	23	
1.4	16QAM	1	5	22.24	22.42	22.19		
1.4	16QAM	3	0	22.30	22.33	22.37		
1.4	16QAM	3	1	22.19	22.22	22.30		
1.4	16QAM	3	3	22.16	22.17	22.20	23	
1.4	16QAM	6	0	22.12	22.18	22.21		
1.4	64QAM	1	0	22.47	22.25	22.49		
1.4	64QAM	1	3	22.47	22.26	22.46	23	
1.4	64QAM	1	5	22.38	22.24	22.45		
1.4	64QAM	3	0	22.33	22.08	22.02		
1.4	64QAM	3	1	21.99	22.00	21.97		
1.4	64QAM	3	3	21.91	21.91	21.90	23	
1.4	64QAM	6	0	21.93	21.89	21.87		
1.4	256QAM	1	0	18.22	18.28	18.22		
1.4	256QAM	1	3	18.18	18.16	18.14		
1.4	256QAM	1	5	18.11	18.12	18.12	19	
1.4	256QAM	3	0	17.67	17.72	17.64		
1.4	256QAM	3	1	17.63	17.62	17.67		
1.4	256QAM	3	3	17.56	17.59	17.59		
1.4	256QAM	6	0	17.46	17.53	17.48	18	

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	
Frequency (MHz)				704	707.5	711	
10	QPSK	1	0	23.97	24.08	24.00	
10	QPSK	1	25	23.88	24.02	23.94	24.5
10	QPSK	1	49	23.84	24.00	23.89	
10	QPSK	25	0	22.84	22.91	22.86	
10	QPSK	25	12	22.81	22.80	22.84	23.5
10	QPSK	25	25	22.70	22.76	22.77	
10	QPSK	50	0	22.66	22.74	22.75	
10	16QAM	1	0	22.81	22.92	22.90	23.5
10	16QAM	1	25	22.78	22.83	22.81	
10	16QAM	1	49	22.69	22.73	22.77	
10	16QAM	25	0	22.52	22.62	22.56	23.5
10	16QAM	25	12	22.43	22.51	22.54	
10	16QAM	25	25	22.32	22.48	22.49	
10	16QAM	50	0	22.29	22.39	22.38	23.5
10	64QAM	1	0	22.88	22.66	22.60	
10	64QAM	1	25	22.80	22.64	22.56	
10	64QAM	1	49	22.77	22.60	22.47	23.5
10	64QAM	25	0	22.41	22.44	22.38	
10	64QAM	25	12	22.33	22.33	22.32	
10	64QAM	25	25	22.26	22.23	22.26	23.5
10	64QAM	50	0	22.24	22.13	22.17	
10	256QAM	1	0	18.74	18.83	18.78	
10	256QAM	1	25	18.68	18.76	18.74	19.5
10	256QAM	1	49	18.65	18.69	18.69	
10	256QAM	25	0	17.90	17.96	17.86	
10	256QAM	25	12	17.88	17.88	17.76	18.5
10	256QAM	25	25	17.84	17.84	17.67	
10	256QAM	50	0	17.77	17.78	17.59	
Channel				23035	23095	23155	Tune-up limit (dBm)
Frequency (MHz)				701.5	707.5	713.5	
5	QPSK	1	0	23.92	24.03	23.95	
5	QPSK	1	12	23.83	23.97	23.89	24.5
5	QPSK	1	24	23.79	23.95	23.84	
5	QPSK	12	0	22.79	22.86	22.81	
5	QPSK	12	7	22.76	22.75	22.79	23.5
5	QPSK	12	13	22.65	22.71	22.72	
5	QPSK	25	0	22.61	22.69	22.70	
5	16QAM	1	0	22.76	22.87	22.85	23.5
5	16QAM	1	12	22.73	22.78	22.76	
5	16QAM	1	24	22.64	22.68	22.72	
5	16QAM	12	0	22.47	22.57	22.51	23.5
5	16QAM	12	7	22.38	22.46	22.49	
5	16QAM	12	13	22.27	22.43	22.44	
5	16QAM	25	0	22.24	22.34	22.33	23.5
5	64QAM	1	0	22.83	22.61	22.55	
5	64QAM	1	12	22.75	22.59	22.51	
5	64QAM	1	24	22.72	22.55	22.42	23.5
5	64QAM	12	0	22.36	22.39	22.33	
5	64QAM	12	7	22.28	22.28	22.27	
5	64QAM	12	13	22.21	22.18	22.21	23.5
5	64QAM	25	0	22.19	22.08	22.12	
5	256QAM	1	0	18.69	18.78	18.73	
5	256QAM	1	12	18.63	18.71	18.69	19.5
5	256QAM	1	24	18.60	18.64	18.64	
5	256QAM	12	0	17.85	17.91	17.81	
5	256QAM	12	7	17.83	17.83	17.71	18.5
5	256QAM	12	13	17.79	17.79	17.62	
5	256QAM	25	0	17.72	17.73	17.54	
Channel				23025	23095	23165	Tune-up limit (dBm)
Frequency (MHz)				700.5	707.5	714.5	
3	QPSK	1	0	23.87	23.98	23.90	
3	QPSK	1	8	23.78	23.92	23.84	24.5
3	QPSK	1	14	23.74	23.90	23.79	
3	QPSK	8	0	22.74	22.81	22.76	
3	QPSK	8	4	22.71	22.70	22.74	23.5
3	QPSK	8	7	22.60	22.66	22.67	
3	QPSK	15	0	22.56	22.64	22.65	
3	16QAM	1	0	22.71	22.82	22.80	23.5
3	16QAM	1	8	22.68	22.73	22.71	
3	16QAM	1	14	22.59	22.63	22.67	
3	16QAM	8	0	22.42	22.52	22.46	23.5
3	16QAM	8	4	22.33	22.41	22.44	
3	16QAM	8	7	22.22	22.38	22.39	
3	16QAM	15	0	22.19	22.29	22.28	23.5
3	64QAM	1	0	22.78	22.56	22.50	
3	64QAM	1	8	22.70	22.54	22.46	
3	64QAM	1	14	22.67	22.50	22.37	23.5
3	64QAM	8	0	22.31	22.34	22.28	
3	64QAM	8	4	22.23	22.23	22.22	
3	64QAM	8	7	22.16	22.13	22.16	23.5
3	64QAM	15	0	22.14	22.03	22.07	
3	256QAM	1	0	18.64	18.73	18.68	
3	256QAM	1	8	18.58	18.66	18.64	19.5
3	256QAM	1	14	18.55	18.59	18.59	
3	256QAM	8	0	17.80	17.86	17.76	
3	256QAM	8	4	17.78	17.78	17.66	18.5
3	256QAM	8	7	17.74	17.74	17.57	
3	256QAM	15	0	17.67	17.68	17.49	
Channel				23017	23095	23173	Tune-up limit (dBm)
Frequency (MHz)				699.7	707.5	715.3	
1.4	QPSK	1	0	23.82	23.93	23.85	
1.4	QPSK	1	3	23.73	23.87	23.79	24.5
1.4	QPSK	1	5	23.69	23.85	23.74	

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		24.11		24.5
10	QPSK	1	25		24.01		
10	QPSK	1	49		23.90		
10	QPSK	25	0		23.08		23.5
10	QPSK	25	12		22.97		
10	QPSK	25	25		22.93		
10	QPSK	50	0		22.82		23.5
10	16QAM	1	0		22.82		
10	16QAM	1	25		22.79		
10	16QAM	1	49		22.77		23.5
10	16QAM	25	0		22.35		
10	16QAM	25	12		22.28		
10	16QAM	25	25		22.21		23.5
10	16QAM	50	0		22.13		
10	64QAM	1	0		22.77		
10	64QAM	1	25		22.71		23.5
10	64QAM	1	49		22.67		
10	64QAM	25	0		22.43		
10	64QAM	25	12		22.40		23.5
10	64QAM	25	25		22.33		
10	64QAM	50	0		22.28		
10	256QAM	1	0		18.71		19
10	256QAM	1	25		18.66		
10	256QAM	1	49		18.63		
10	256QAM	25	0		17.94		18.5
10	256QAM	25	12		17.85		
10	256QAM	25	25		17.76		
10	256QAM	50	0		17.66		
Channel				23205	23230	23255	Tune-up limit (dbm)
Frequency (MHz)				779.5	782	784.5	
5	QPSK	1	0	23.92	24.07	24.01	24.5
5	QPSK	1	12	23.85	23.97	23.91	
5	QPSK	1	24	23.70	23.83	23.76	
5	QPSK	12	0	22.91	23.03	22.90	23.5
5	QPSK	12	7	22.77	22.91	22.84	
5	QPSK	12	13	22.75	22.89	22.84	
5	QPSK	25	0	22.62	22.76	22.68	23.5
5	16QAM	1	0	22.64	22.77	22.71	
5	16QAM	1	12	22.62	22.75	22.66	
5	16QAM	1	24	22.54	22.71	22.63	23.5
5	16QAM	12	0	22.16	22.31	22.24	
5	16QAM	12	7	22.14	22.21	22.21	
5	16QAM	12	13	22.03	22.15	22.10	23.5
5	16QAM	25	0	21.95	22.08	21.99	
5	64QAM	1	0	22.67	22.73	22.65	
5	64QAM	1	12	22.49	22.67	22.55	23.5
5	64QAM	1	24	22.51	22.61	22.56	
5	64QAM	12	0	22.27	22.38	22.31	
5	64QAM	12	7	22.22	22.36	22.27	23.5
5	64QAM	12	13	22.17	22.27	22.20	
5	64QAM	25	0	22.08	22.23	22.15	
5	256QAM	1	0	18.53	18.67	18.59	19
5	256QAM	1	12	18.48	18.61	18.57	
5	256QAM	1	24	18.46	18.57	18.52	
5	256QAM	12	0	17.72	17.9	17.83	19
5	256QAM	12	7	17.65	17.79	17.73	
5	256QAM	12	13	17.59	17.73	17.68	
5	256QAM	25	0	17.55	17.61	17.53	

1.4	QPSK	3	0	22.69	22.76	22.71	23.5
1.4	QPSK	3	1	22.66	22.65	22.69	
1.4	QPSK	3	3	22.55	22.61	22.62	
1.4	QPSK	6	0	22.51	22.59	22.60	23.5
1.4	16QAM	1	0	22.66	22.77	22.75	23.5
1.4	16QAM	1	3	22.63	22.68	22.66	
1.4	16QAM	1	5	22.54	22.58	22.62	
1.4	16QAM	3	0	22.37	22.47	22.41	
1.4	16QAM	3	1	22.28	22.36	22.39	
1.4	16QAM	3	3	22.17	22.33	22.34	23.5
1.4	16QAM	6	0	22.14	22.24	22.23	
1.4	64QAM	1	0	22.73	22.51	22.45	23.5
1.4	64QAM	1	3	22.65	22.49	22.41	
1.4	64QAM	1	5	22.62	22.45	22.32	
1.4	64QAM	3	0	22.26	22.29	22.23	
1.4	64QAM	3	1	22.18	22.18	22.17	
1.4	64QAM	3	3	22.11	22.08	22.11	
1.4	64QAM	6	0	22.09	21.98	22.02	23
1.4	256QAM	1	0	18.59	18.68	18.63	19.5
1.4	256QAM	1	3	18.53	18.61	18.59	
1.4	256QAM	1	5	18.50	18.54	18.54	
1.4	256QAM	3	0	17.75	17.81	17.71	
1.4	256QAM	3	1	17.73	17.73	17.61	
1.4	256QAM	3	3	17.69	17.69	17.52	
1.4	256QAM	6	0	17.62	17.63	17.44	18

Band 66

BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				132072	132322	132572	Tune-up limit (dBm)
Frequency (MHz)				1720	1745	1770	
20	QPSK	1	0	23.71	23.79	23.65	24.5
20	QPSK	1	49	23.62	23.70	23.60	
20	QPSK	1	99	23.54	23.63	23.54	
20	QPSK	50	0	22.66	22.76	22.63	23.5
20	QPSK	50	24	22.55	22.66	22.59	
20	QPSK	50	50	22.51	22.60	22.50	
20	QPSK	100	0	22.46	22.51	22.49	23.5
20	16QAM	1	0	22.70	22.74	22.72	
20	16QAM	1	49	22.63	22.71	22.64	
20	16QAM	1	99	22.54	22.65	22.54	23.5
20	16QAM	50	0	22.51	22.53	22.51	
20	16QAM	50	24	22.48	22.52	22.47	
20	16QAM	50	50	22.40	22.44	22.38	23.5
20	16QAM	100	0	22.34	22.35	22.30	
20	64QAM	1	0	22.50	22.65	22.58	
20	64QAM	1	49	22.47	22.64	22.55	23.5
20	64QAM	1	99	22.40	22.62	22.49	
20	64QAM	50	0	22.43	22.47	22.51	
20	64QAM	50	24	22.41	22.42	22.48	23.5
20	64QAM	50	50	22.36	22.36	22.45	
20	64QAM	100	0	22.26	22.34	22.41	
20	256QAM	1	0	18.33	18.43	18.39	19
20	256QAM	1	49	18.31	18.40	18.29	
20	256QAM	1	99	18.21	18.39	18.18	
20	256QAM	50	0	17.84	17.95	17.90	18.5
20	256QAM	50	24	17.82	17.91	17.83	
20	256QAM	50	50	17.79	17.81	17.81	
20	256QAM	100	0	17.75	17.72	17.77	Tune-up limit (dBm)
Channel				132047	132322	132597	
Frequency (MHz)				1717.5	1745	1772.5	Tune-up limit (dBm)
15	QPSK	1	0	23.67	23.75	23.62	
15	QPSK	1	37	23.59	23.69	23.56	24.5
15	QPSK	1	74	23.53	23.59	23.50	
15	QPSK	36	0	22.61	22.73	22.59	
15	QPSK	36	20	22.53	22.63	22.57	23.5
15	QPSK	36	39	22.46	22.57	22.46	
15	QPSK	75	0	22.44	22.48	22.46	
15	16QAM	1	0	22.66	22.71	22.68	23.5
15	16QAM	1	37	22.61	22.70	22.62	
15	16QAM	1	74	22.49	22.61	22.51	
15	16QAM	36	0	22.48	22.51	22.49	23.5
15	16QAM	36	20	22.46	22.47	22.43	
15	16QAM	36	39	22.37	22.41	22.34	
15	16QAM	75	0	22.32	22.30	22.28	23.5
15	64QAM	1	0	22.47	22.60	22.53	
15	64QAM	1	37	22.42	22.62	22.53	
15	64QAM	1	74	22.38	22.60	22.46	23.5
15	64QAM	36	0	22.41	22.45	22.49	
15	64QAM	36	20	22.36	22.39	22.45	
15	64QAM	36	39	22.33	22.32	22.43	19
15	64QAM	75	0	22.24	22.31	22.38	
15	256QAM	1	0	18.29	18.42	18.35	
15	256QAM	1	37	18.28	18.36	18.25	18.5
15	256QAM	1	74	18.18	18.34	18.15	
15	256QAM	36	0	17.82	17.91	17.85	
15	256QAM	36	20	17.78	17.86	17.79	18.5
15	256QAM	36	39	17.76	17.79	17.79	
15	256QAM	75	0	17.72	17.69	17.72	
Channel				132022	132322	132622	Tune-up limit (dBm)
Frequency (MHz)				1715	1745	1775	
10	QPSK	1	0	23.61	23.69	23.55	24.5
10	QPSK	1	25	23.52	23.60	23.50	
10	QPSK	1	49	23.44	23.53	23.44	
10	QPSK	25	0	22.56	22.66	22.53	23.5
10	QPSK	25	12	22.45	22.56	22.49	
10	QPSK	25	25	22.41	22.50	22.40	
10	QPSK	50	0	22.36	22.41	22.39	23.5
10	16QAM	1	0	22.60	22.64	22.62	
10	16QAM	1	25	22.53	22.61	22.54	
10	16QAM	1	49	22.44	22.55	22.44	23.5
10	16QAM	25	0	22.41	22.43	22.41	
10	16QAM	25	12	22.38	22.42	22.37	
10	16QAM	25	25	22.30	22.34	22.28	23.5
10	16QAM	50	0	22.24	22.25	22.20	
10	64QAM	1	0	22.40	22.55	22.48	
10	64QAM	1	25	22.37	22.54	22.45	23.5
10	64QAM	1	49	22.30	22.52	22.39	
10	64QAM	25	0	22.33	22.37	22.41	
10	64QAM	25	12	22.31	22.32	22.38	23.5
10	64QAM	25	25	22.26	22.26	22.35	
10	64QAM	50	0	22.16	22.24	22.31	
10	256QAM	1	0	18.23	18.33	18.29	19
10	256QAM	1	25	18.21	18.30	18.19	
10	256QAM	1	49	18.11	18.29	18.08	
10	256QAM	25	0	17.74	17.85	17.80	18.5
10	256QAM	25	12	17.72	17.81	17.73	
10	256QAM	25	25	17.69	17.71	17.71	
10	256QAM	50	0	17.65	17.62	17.67	Tune-up limit (dBm)
Channel				131997	132322	132647	
Frequency (MHz)				1712.5	1745	1777.5	Tune-up limit (dBm)
5	QPSK	1	0	23.56	23.64	23.50	
5	QPSK	1	12	23.47	23.55	23.45	24.5
5	QPSK	1	24	23.39	23.48	23.39	

5	QPSK	12	0	22.51	22.61	22.48	23.5
5	QPSK	12	7	22.40	22.51	22.44	
5	QPSK	12	13	22.36	22.45	22.35	
5	QPSK	25	0	22.31	22.36	22.34	23.5
5	16QAM	1	0	22.55	22.59	22.57	
5	16QAM	1	12	22.48	22.56	22.49	
5	16QAM	1	24	22.39	22.50	22.39	23.5
5	16QAM	12	0	22.36	22.38	22.36	
5	16QAM	12	7	22.33	22.37	22.32	
5	16QAM	12	13	22.25	22.29	22.23	23.5
5	16QAM	25	0	22.19	22.20	22.15	
5	64QAM	1	0	22.35	22.50	22.43	
5	64QAM	1	12	22.32	22.49	22.40	23.5
5	64QAM	1	24	22.25	22.47	22.34	
5	64QAM	12	0	22.28	22.32	22.36	
5	64QAM	12	7	22.26	22.27	22.33	23.5
5	64QAM	12	13	22.21	22.21	22.30	
5	64QAM	25	0	22.11	22.19	22.26	
5	256QAM	1	0	18.18	18.28	18.24	19
5	256QAM	1	12	18.16	18.25	18.14	
5	256QAM	1	24	18.06	18.24	18.03	
5	256QAM	12	0	17.69	17.80	17.75	18.5
5	256QAM	12	7	17.67	17.76	17.68	
5	256QAM	12	13	17.64	17.66	17.66	
5	256QAM	25	0	17.60	17.57	17.62	Tune-up limit (dBm)
Channel				131987	132322	132657	
Frequency (MHz)				1711.5	1745	1778.5	
3	QPSK	1	0	23.51	23.59	23.45	24.5
3	QPSK	1	8	23.42	23.50	23.40	
3	QPSK	1	14	23.34	23.43	23.34	
3	QPSK	8	0	22.46	22.56	22.43	23.5
3	QPSK	8	4	22.35	22.46	22.39	
3	QPSK	8	7	22.31	22.40	22.30	
3	QPSK	15	0	22.26	22.31	22.29	23.5
3	16QAM	1	0	22.50	22.54	22.52	
3	16QAM	1	8	22.43	22.51	22.44	
3	16QAM	1	14	22.34	22.45	22.34	23.5
3	16QAM	8	0	22.31	22.33	22.31	
3	16QAM	8	4	22.28	22.32	22.27	
3	16QAM	8	7	22.20	22.24	22.18	23.5
3	16QAM	15	0	22.14	22.15	22.10	
3	64QAM	1	0	22.30	22.45	22.38	
3	64QAM	1	8	22.27	22.44	22.35	23.5
3	64QAM	1	14	22.20	22.42	22.29	
3	64QAM	8	0	22.23	22.27	22.31	
3	64QAM	8	4	22.21	22.22	22.28	23.5
3	64QAM	8	7	22.16	22.16	22.25	
3	64QAM	15	0	22.06	22.14	22.21	
3	256QAM	1	0	18.13	18.23	18.19	19
3	256QAM	1	8	18.11	18.20	18.09	
3	256QAM	1	14	18.01	18.19	17.98	
3	256QAM	8	0	17.64	17.75	17.70	18.5
3	256QAM	8	4	17.62	17.71	17.63	
3	256QAM	8	7	17.59	17.61	17.61	
3	256QAM	15	0	17.55	17.52	17.57	Tune-up limit (dBm)
Channel				131979	132322	132685	
Frequency (MHz)				1710.7	1745	1779.3	
1.4	QPSK	1	0	23.46	23.54	23.40	24.5
1.4	QPSK	1	3	23.37	23.45	23.35	
1.4	QPSK	1	5	23.29	23.38	23.29	
1.4	QPSK	3	0	22.51	22.56	22.38	23.5
1.4	QPSK	3	1	22.40	22.41	22.34	
1.4	QPSK	3	3	22.36	22.35	22.30	
1.4	QPSK	6	0	22.21	22.26	22.24	23.5
1.4	16QAM	1	0	22.45	22.49	22.47	
1.4	16QAM	1	3	22.38	22.46	22.39	
1.4	16QAM	1	5	22.29	22.40	22.29	23.5
1.4	16QAM	3	0	22.26	22.28	22.26	
1.4	16QAM	3	1	22.23	22.27	22.22	
1.4	16QAM	3	3	22.15	22.19	22.13	23.5
1.4	16QAM	6	0	22.09	22.10	22.05	
1.4	64QAM	1	0	22.25	22.40	22.33	
1.4	64QAM	1	3	22.22	22.39	22.30	23.5
1.4	64QAM	1	5	22.15	22.37	22.24	
1.4	64QAM	3	0	22.18	22.22	22.26	
1.4	64QAM	3	1	22.16	22.17	22.23	23.5
1.4	64QAM	3	3	22.11	22.11	22.20	
1.4	64QAM	6	0	22.01	22.09	22.16	
1.4	256QAM	1	0	18.08	18.18	18.14	19
1.4	256QAM	1	3	18.06	18.15	18.04	
1.4	256QAM	1	5	17.96	18.14	17.93	
1.4	256QAM	3	0	17.59	17.70	17.65	18.5
1.4	256QAM	3	1	17.57	17.66	17.58	
1.4	256QAM	3	3	17.54	17.56	17.56	
1.4	256QAM	6	0	17.50	17.47	17.52	18.5

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	24.13	24.19	24.16	25
20	QPSK	1	49	24.00	24.11	24.08	
20	QPSK	1	99	21.06	24.06	24.05	
20	QPSK	50	0	23.27	23.28	23.21	24
20	QPSK	50	24	23.11	23.20	23.02	
20	QPSK	50	50	23.06	23.15	23.14	
20	QPSK	100	0	22.93	23.00	23.04	
20	16QAM	1	0	23.13	23.19	23.07	24
20	16QAM	1	49	22.87	22.92	22.88	
20	16QAM	1	99	22.94	22.18	22.20	
20	16QAM	50	0	22.23	22.24	22.17	23
20	16QAM	50	24	22.17	22.18	22.16	
20	16QAM	50	50	22.24	22.13	22.03	
20	16QAM	100	0	22.16	22.17	22.34	
20	64QAM	1	0	22.21	22.19	22.17	23
20	64QAM	1	49	22.17	22.21	22.08	
20	64QAM	1	99	22.14	22.13	22.15	
20	64QAM	50	0	21.13	21.15	21.16	22
20	64QAM	50	24	21.17	21.04	21.08	
20	64QAM	50	50	21.04	21.09	21.12	
20	64QAM	100	0	21.13	21.16	21.16	
Channel				133197	133297	133397	Tune-up limit (dBm)
Frequency (MHz)				670.5	680.5	690.5	
15	QPSK	1	0	24.08	24.14	24.08	25
15	QPSK	1	37	24.03	24.06	24.03	
15	QPSK	1	74	24.06	24.11	24.00	
15	QPSK	36	0	23.22	23.23	23.16	24
15	QPSK	36	20	23.14	23.19	23.14	
15	QPSK	36	39	23.10	23.14	23.06	
15	QPSK	75	0	23.00	23.18	23.11	
15	16QAM	1	0	23.08	23.14	23.02	24
15	16QAM	1	37	22.82	22.87	22.93	
15	16QAM	1	74	23.89	23.10	23.02	
15	16QAM	36	0	22.28	22.19	22.12	23
15	16QAM	36	20	22.17	22.27	22.17	
15	16QAM	36	39	22.19	22.18	22.26	
15	16QAM	75	0	22.11	22.12	22.13	
15	64QAM	1	0	22.18	22.14	22.22	23
15	64QAM	1	37	22.12	22.17	22.14	
15	64QAM	1	74	22.19	22.08	22.21	
15	64QAM	36	0	21.28	21.09	21.22	22
15	64QAM	36	20	21.27	21.21	21.13	
15	64QAM	36	39	21.19	21.18	21.16	
15	64QAM	75	0	21.18	21.12	21.09	
Channel				133172	133272	133422	Tune-up limit (dBm)
Frequency (MHz)				668	678	693	
10	QPSK	1	0	24.03	24.09	23.97	25
10	QPSK	1	25	23.97	23.92	23.91	
10	QPSK	1	49	23.94	23.83	23.85	
10	QPSK	25	0	23.17	23.18	23.11	24
10	QPSK	25	12	23.12	23.20	23.15	
10	QPSK	25	25	23.09	23.09	23.06	
10	QPSK	50	0	23.03	22.97	23.00	
10	16QAM	1	0	23.03	23.09	22.97	24
10	16QAM	1	25	22.97	22.92	23.01	
10	16QAM	1	49	22.94	23.00	22.85	
10	16QAM	25	0	22.24	22.31	22.19	

10	16QAM	25	12	22.27	22.27	22.24	23
10	16QAM	25	25	22.14	22.13	22.23	
10	16QAM	50	0	22.16	22.19	22.16	
10	64QAM	1	0	22.23	23.29	22.27	23
10	64QAM	1	25	22.27	22.22	22.18	
10	64QAM	1	49	22.24	22.23	22.19	
10	64QAM	25	0	21.39	21.34	21.27	22
10	64QAM	25	12	21.26	21.27	21.18	
10	64QAM	25	25	21.24	21.22	21.22	
10	64QAM	50	0	21.16	21.16	21.17	
Channel				133147	133247	133447	Tune-up limit (dBm)
Frequency (MHz)				665.5	675.5	695.5	
5	QPSK	1	0	24.01	24.04	23.92	25
5	QPSK	1	12	23.97	23.97	23.93	
5	QPSK	1	24	23.89	23.88	23.86	
5	QPSK	12	0	23.12	23.13	23.06	24
5	QPSK	12	7	22.86	22.91	22.87	
5	QPSK	12	13	22.93	22.93	22.87	
5	QPSK	25	0	22.99	22.80	22.92	
5	16QAM	1	0	22.98	23.04	22.92	24
5	16QAM	1	12	22.72	22.77	22.73	
5	16QAM	1	24	22.59	22.58	22.60	
5	16QAM	12	0	22.39	22.29	22.22	23
5	16QAM	12	7	22.22	22.17	22.23	
5	16QAM	12	13	22.29	22.18	22.15	
5	16QAM	25	0	22.31	22.22	22.19	
5	64QAM	1	0	22.18	21.91	22.21	23
5	64QAM	1	12	22.17	22.10	22.13	
5	64QAM	1	24	22.09	22.13	22.16	
5	64QAM	12	0	21.38	21.28	21.28	22
5	64QAM	12	7	21.26	21.16	21.13	
5	64QAM	12	13	21.19	21.12	21.05	
5	64QAM	25	0	21.31	21.22	21.19	

Band 48 (Full Power)

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	56150	56640	
Frequency (MHz)				3560	3609	3625	3641	3690	
20	QPSK	1	0	23.31	23.27	23.41	23.34	23.31	24
20	QPSK	1	49	23.13	23.15	23.21	23.16	23.08	
20	QPSK	1	99	23.10	23.06	23.00	23.18	23.19	
20	QPSK	50	0	22.20	22.21	22.31	22.26	22.19	23
20	QPSK	50	24	22.10	22.15	22.15	22.16	22.17	
20	QPSK	50	50	22.16	22.12	22.26	22.06	22.13	
20	QPSK	100	0	22.13	22.16	22.12	22.21	22.03	23
20	16QAM	1	0	22.31	22.19	22.21	22.11	22.26	
20	16QAM	1	49	22.18	22.06	22.06	22.26	22.17	
20	16QAM	1	99	22.20	22.21	22.10	22.07	22.09	22.5
20	16QAM	50	0	22.15	22.19	22.13	22.00	21.90	
20	16QAM	50	24	22.09	22.10	22.05	21.98	21.93	
20	16QAM	50	50	22.01	22.03	22.18	22.17	22.06	22.5
20	16QAM	100	0	22.12	22.21	22.23	22.18	22.03	
20	64QAM	1	0	22.40	22.35	22.28	22.35	22.21	
20	64QAM	1	49	22.37	22.24	22.45	22.21	22.20	22
20	64QAM	1	99	22.30	22.50	22.39	22.30	22.18	
20	64QAM	50	0	21.34	21.46	21.62	21.50	21.44	
20	64QAM	50	24	21.36	21.18	21.22	21.22	21.54	22
20	64QAM	50	50	21.42	21.33	21.20	21.06	21.33	
20	64QAM	100	0	21.22	21.12	21.33	21.34	21.21	
20	256QAM	1	0	17.55	17.33	17.32	17.41	17.62	18
20	256QAM	1	49	17.36	17.21	17.40	17.68	17.30	
20	256QAM	1	99	17.26	17.55	17.42	17.51	17.42	
20	256QAM	50	0	17.21	17.11	17.21	17.36	17.21	17.5
20	256QAM	50	24	17.15	17.20	17.12	17.02	17.11	
20	256QAM	50	50	17.11	17.09	17.26	16.88	17.21	
20	256QAM	100	0	16.89	17.02	16.95	17.00	17.30	
Channel				55315	55415	55735	56055	56765	Tune-up limit (dBm)
Frequency (MHz)				3557.5	3557.5	3589.5	3621.5	3692.5	
15	QPSK	1	0	23.20	23.16	23.30	23.23	23.20	24
15	QPSK	1	37	23.02	23.04	23.10	23.05	22.97	
15	QPSK	1	74	22.99	22.95	22.89	23.07	23.08	
15	QPSK	36	0	22.09	22.10	22.20	22.15	22.08	23
15	QPSK	36	20	21.99	22.04	22.04	22.05	22.06	
15	QPSK	36	39	22.05	22.01	22.15	21.95	22.02	
15	QPSK	75	0	22.02	22.05	22.01	22.10	21.92	23
15	16QAM	1	0	22.20	22.08	22.10	22.00	22.15	
15	16QAM	1	37	22.07	21.95	21.95	22.15	22.06	
15	16QAM	1	74	22.09	22.10	21.99	21.96	21.98	22.5
15	16QAM	36	0	22.04	22.08	22.02	21.89	21.79	
15	16QAM	36	20	21.98	21.99	21.94	21.87	21.82	
15	16QAM	36	39	21.90	21.92	22.07	22.06	21.95	22.5
15	16QAM	75	0	22.01	22.10	22.12	22.07	21.92	
15	64QAM	1	0	22.29	22.24	22.17	22.24	22.10	
15	64QAM	1	37	22.26	22.13	22.34	22.10	22.09	22
15	64QAM	1	74	22.19	22.39	22.28	22.19	22.07	
15	64QAM	36	0	21.23	21.35	21.51	21.39	21.33	
15	64QAM	36	20	21.25	21.07	21.11	21.11	21.43	22
15	64QAM	36	39	21.31	21.22	21.09	20.95	21.22	
15	64QAM	75	0	21.11	21.01	21.22	21.23	21.10	
15	256QAM	1	0	17.44	17.22	17.21	17.30	17.51	18
15	256QAM	1	37	17.25	17.10	17.29	17.57	17.19	
15	256QAM	1	74	17.15	17.44	17.31	17.40	17.31	
15	256QAM	36	0	17.10	17.00	17.10	17.25	17.10	17.5
15	256QAM	36	20	17.04	17.09	17.01	16.91	17.00	
15	256QAM	36	39	17.00	16.98	17.15	16.77	17.10	
15	256QAM	75	0	16.78	16.91	16.84	16.89	17.19	

Channel				55290	55390	55710	56030	56790	Tune-up limit (dBm)
Frequency (MHz)				3555	3555	3587	3619	3695	
10	QPSK	1	0	23.08	23.04	23.18	23.11	23.08	24
10	QPSK	1	25	22.90	22.92	22.98	22.93	22.85	
10	QPSK	1	49	22.87	22.83	22.77	22.95	22.96	
10	QPSK	25	0	21.97	21.98	22.08	22.03	21.96	23
10	QPSK	25	12	21.87	21.92	21.92	21.93	21.94	
10	QPSK	25	25	21.93	21.89	22.03	21.83	21.90	
10	QPSK	50	0	21.90	21.93	21.89	21.98	21.80	23
10	16QAM	1	0	22.08	21.96	21.98	21.88	22.03	
10	16QAM	1	25	21.95	21.83	21.83	22.03	21.94	
10	16QAM	1	49	21.97	21.98	21.87	21.84	21.86	22.5
10	16QAM	25	0	21.92	21.96	21.90	21.77	21.67	
10	16QAM	25	12	21.86	21.87	21.82	21.75	21.70	
10	16QAM	25	25	21.78	21.80	21.95	21.94	21.83	22.5
10	16QAM	50	0	21.89	21.98	22.00	21.95	21.80	
10	64QAM	1	0	22.17	22.12	22.05	22.12	21.98	
10	64QAM	1	25	22.14	22.01	22.22	21.98	21.97	22.5
10	64QAM	1	49	22.07	22.27	22.16	22.07	21.95	
10	64QAM	25	0	21.11	21.23	21.39	21.27	21.21	
10	64QAM	25	12	21.13	20.95	20.99	20.99	21.31	22
10	64QAM	25	25	21.19	21.10	20.97	20.83	21.10	
10	64QAM	50	0	20.99	20.89	21.10	21.11	20.98	
10	256QAM	1	0	17.32	17.10	17.09	17.18	17.39	18
10	256QAM	1	25	17.13	16.98	17.17	17.45	17.07	
10	256QAM	1	49	17.03	17.32	17.19	17.28	17.19	
10	256QAM	25	0	16.98	16.88	16.98	17.13	16.98	17.5
10	256QAM	25	12	16.92	16.97	16.89	16.79	16.88	
10	256QAM	25	25	16.88	16.86	17.03	16.65	16.98	
10	256QAM	50	0	16.66	16.79	16.72	16.77	17.07	
Channel				55265	55365	55685	56005	56815	Tune-up limit (dBm)
Frequency (MHz)				3552.5	3552.5	3584.5	3616.5	3697.5	
5	QPSK	1	0	22.96	22.92	23.06	22.99	22.96	23.5
5	QPSK	1	12	22.78	22.80	22.86	22.81	22.73	
5	QPSK	1	24	22.75	22.71	22.65	22.83	22.84	
5	QPSK	12	0	21.85	21.86	21.96	21.91	21.84	22.5
5	QPSK	12	7	21.75	21.80	21.80	21.81	21.82	
5	QPSK	12	13	21.81	21.77	21.91	21.71	21.78	
5	QPSK	25	0	21.78	21.81	21.77	21.86	21.68	22.5
5	16QAM	1	0	21.96	21.84	21.86	21.76	21.91	
5	16QAM	1	12	21.83	21.71	21.71	21.91	21.82	
5	16QAM	1	24	21.85	21.86	21.75	21.72	21.74	22.5
5	16QAM	12	0	21.80	21.84	21.78	21.65	21.55	
5	16QAM	12	7	21.74	21.75	21.70	21.63	21.58	
5	16QAM	12	13	21.66	21.68	21.83	21.82	21.71	22.5
5	16QAM	25	0	21.77	21.86	21.88	21.83	21.68	
5	64QAM	1	0	22.05	22.00	21.93	22.00	21.86	22.5
5	64QAM	1	12	22.02	21.89	22.10	21.86	21.85	
5	64QAM	1	24	21.95	22.15	22.04	21.95	21.83	
5	64QAM	12	0	20.99	21.11	21.27	21.15	21.09	21.5
5	64QAM	12	7	21.01	20.83	20.87	20.87	21.19	
5	64QAM	12	13	21.07	20.98	20.85	20.71	20.98	
5	64QAM	25	0	20.87	20.77	20.98	20.99	20.86	18
5	256QAM	1	0	17.20	16.98	16.97	17.06	17.27	
5	256QAM	1	12	17.01	16.86	17.05	17.33	16.95	
5	256QAM	1	24	16.91	17.20	17.07	17.16	17.07	17.5
5	256QAM	12	0	16.86	16.76	16.86	17.01	16.86	
5	256QAM	12	7	16.80	16.85	16.77	16.67	16.76	
5	256QAM	12	13	16.76	16.74	16.91	16.53	16.86	17.5
5	256QAM	25	0	16.54	16.67	16.60	16.65	16.95	

n2 (Full Power)

BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				372000	376000	380000.00	
Frequency (MHz)				1860	1880	1900.00	
20	DFT-s-OFDM PI/2 BPSK	1	1	23.54	23.45	23.27	24.00
20		1	53	23.58	23.33	22.71	
20		1	104	23.61	23.18	23.26	
20		50	1	23.72	23.51	22.73	24.00
20		50	25	23.68	23.48	23.68	
20		50	50	23.66	23.68	23.78	
20		100	0	23.18	23.26	23.76	
20	DFT-s-OFDM QPSK	1	1	23.74	24.01	23.82	24.50
20		1	53	23.69	23.77	23.19	
20		1	104	23.64	23.65	23.37	
20		50	1	23.50	23.58	23.47	24.00
20		50	25	23.49	23.27	23.42	
20		50	50	23.24	23.47	23.33	
20		100	0	23.11	23.29	23.25	
20	DFT-s-OFDM 16QAM	1	1	20.83	20.99	21.66	23.00
20	DFT-s-OFDM 64QAM	1	1	20.06	20.08	20.68	21.20
20	DFT-s-OFDM 256QAM	1	1	19.02	19.89	19.67	19.50
Channel				3715000	376000	380500.00	Tune-up limit (dBm)
Frequency (MHz)				1857.5	1880	1902.50	
15	DFT-s-OFDM QPSK	1	1	23.51	23.53	23.59	24.00
Channel				371000	376000	381000.00	Tune-up limit (dBm)
Frequency (MHz)				1855	1880	1905.00	
10	DFT-s-OFDM QPSK	1	1	23.71	23.56	23.72	24.50
Channel				370500	376000	381500.00	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1880	1907.50	
5	DFT-s-OFDM QPSK	1	1	23.76	23.53	23.72	24.50
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				372000	376000	380000.00	
Frequency (MHz)				1860	1880	1767.50	
20	CP-OFDM QPSK	1	1	23.11	22.92	23.13	23.50
20	CP-OFDM 16QAM	1	1	22.94	22.69	22.83	23.50
20	CP-OFDM 64QAM	1	1	20.99	20.52	20.85	21.50
20	CP-OFDM 256QAM	1	1	18.01	17.79	17.96	18.50

n66 (Full Power)

BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				344000	349000	354000.00	
Frequency (MHz)				1720	1745	1770.00	
20	DFT-s-OFDM PI/2 BPSK	1	1	23.29	23.34	23.47	24.00
20		1	53	23.26	23.46	23.41	
20		1	104	23.36	23.47	23.56	
20		50	1	23.00	23.02	23.06	23.50
20		50	25	23.05	23.05	23.01	
20		50	50	22.13	23.52	23.02	
20		100	0	23.01	23.00	23.07	
20	DFT-s-OFDM QPSK	1	1	23.50	23.68	23.58	23.20
20		1	53	23.45	23.50	23.52	
20		1	104	23.32	23.41	23.44	
20		50	1	23.01	23.04	23.00	23.50
20		50	25	22.84	22.96	22.93	
20		50	50	22.88	23.56	22.93	
20		100	0	22.76	22.88	22.74	
20	DFT-s-OFDM 16QAM	1	1	23.52	23.61	23.66	24.00
20	DFT-s-OFDM 64QAM	1	1	21.67	21.85	21.87	22.50
20	DFT-s-OFDM 256QAM	1	1	19.68	19.87	19.91	20.50
Channel				343500	349000	354500.00	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1745	1772.50	
15	DFT-s-OFDM QPSK	1	1	23.33	23.43	23.38	24.00
Channel				343000	349000	355000.00	Tune-up limit (dBm)
Frequency (MHz)				1715	1745	1775.00	
10	DFT-s-OFDM QPSK	1	1	23.49	23.50	23.42	24.00
Channel				3425000	349000	355500.00	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1745	1777.50	
5	DFT-s-OFDM QPSK	1	1	23.38	23.45	23.45	24.00
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				344000	349000	354000.00	
Frequency (MHz)				1720	1745	1767.50	
20	CP-OFDM QPSK	1	1	22.89	23.04	23.04	23.50
20	CP-OFDM 16QAM	1	1	22.55	22.68	22.75	23.50
20	CP-OFDM 64QAM	1	1	20.71	20.79	20.83	21.50
20	CP-OFDM 256QAM	1	1	17.76	18.06	18.10	18.50

N71 (663 ~ 698 MHz)

BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				134600	136100	137600	Tune-up limit (dBm)
Frequency (MHz)				673	680.5	688	
20	DFT-s-OFDM PI/2 BPSK	1	1	23.50	23.50	23.55	24.5
20		1	53	23.41	23.44	23.45	
20		1	104	23.42	23.33	23.33	
20		50	1	23.60	23.50	23.53	24.5
20		50	25	23.57	23.54	23.45	
20		50	50	23.49	23.49	23.45	
20		100	0	23.55	23.51	23.46	
20	DFT-s-OFDM QPSK	1	1	23.53	23.62	23.59	24.5
20		1	53	23.46	23.48	23.55	
20		1	104	23.49	23.40	23.44	
20		50	1	23.49	23.56	23.51	24.5
20		50	25	23.51	23.54	23.50	
20		50	50	23.49	23.48	23.46	
20		100	0	23.50	23.52	23.50	
20	DFT-s-OFDM 16QAM	1	1	23.55	23.54	23.52	24.5
20	DFT-s-OFDM 64QAM	1	1	22.42	22.29	22.17	23
20	DFT-s-OFDM 256QAM	1	1	20.05	19.77	19.75	22.5
Channel				134100	136100	138100	Tune-up limit (dBm)
Frequency (MHz)				670.5	680.5	690.5	
15	DFT-s-OFDM QPSK	1	1	23.51	23.43	23.41	24.5
Channel				133600	136100	138600	Tune-up limit (dBm)
Frequency (MHz)				668	680.5	693	
10	DFT-s-OFDM QPSK	1	1	23.55	23.48	23.56	24.5
Channel				133100	136100	139100	Tune-up limit (dBm)
Frequency (MHz)				665.5	680.5	695.5	
5	DFT-s-OFDM QPSK	1	1	23.45	23.48	23.57	24.5
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				134600	136100	137600	Tune-up limit (dBm)
Frequency (MHz)				663	680.5	698	
20	CP-OFDM QPSK	1	1	23.05	22.93	23.21	23.5
20	CP-OFDM 16QAM	1	1	22.91	22.63	22.69	23.5

20	CP-OFDM 64QAM	1	1	21.74	21.47	21.47	22
20	CP-OFDM 256QAM	1	1	17.95	17.79	17.73	18.5

2CC LTE Uplink for Bottom Antenna													
Configure	CA Configuration	Ant	PCC				SCC				Power		
			Band	BW (MHz)	UL Channel	UL Fre. (MHz)	UL Mode (Modulation/RB/O fset)	Band	BW (MHz)	UL Channel	UL Fre. (MHz)	Measured Power(dBm)	Tune-up limit(dBm)
Inter-band	CA_2A-71A	Ant 0	2	20	18700	1860	QPSK/1#0	71	20	68786	637	22.86	23.5
	CA_4A-71A	Ant 0	4	20	20050	1720	QPSK/1#0	71	20	68786	637	22.79	23.5
	CA_48A-71A	Ant 0	48	20	55990	3625	QPSK/1#0	71	20	68786	637	22.81	23.5
	CA_66A-71A	Ant 0	66	20	132072	1720	QPSK/1#0	71	20	68786	637	22.69	23.5
										68761			

3CC LTE Uplink for Top Antenna																	
Configure	CA Configuration	Ant	PCC					SCC 1				SCC 2				Power	
			Band	BW (MHz)	UL Channel	UL Fre. (MHz)	UL Mode (Modulation/RB/O offset)	Band	BW (MHz)	UL Channel	UL Fre. (MHz)	Band	BW (MHz)	UL Channel	UL Fre. (MHz)	Measured Power (dBm)	Tune-up limit (dB)
Inter-band	CA_2A-2A-71A	Ant 0	2	20	18700	1860	QPSK/1#0	2	20	18700	1860	71	20	68786	637	22.79	23.5
	CA_2A-4A-71A	Ant 0	2	20	18700	1860	QPSK/1#0	2	20	18700	1860	71	20	68786	637	22.81	23.5
	CA_4A-4A-71A	Ant 0	4	20	20050	1720	QPSK/1#0	4	20	20050	1720	71	20	68786	637	22.83	23.5
	CA_4A-4A-71A	Ant 0	4	20	19100	1900	QPSK/1#0	4	20	19100	1900	71	20	68786	637	22.79	23.5
	CA_4BA-4BA-71A	Ant 0	48	20	55990	3625	QPSK/1#0	48	20	55990	3625	71	20	68786	637	22.86	23.5
	CA_6A-66A-71A	Ant 0	66	20	132072	1720	QPSK/1#0	66	20	132072	1720	71	20	68786	637	23.02	23.5
	CA_4BC-4BC-71A	Ant 0	48	20	55891	3615.1	QPSK/1#0	48	20	55891	3615.1	71	20	68786	637	22.85	23.5
	CA_66C-66C-71A	Ant 0	48	20	132323	1745.1	QPSK/1#0	13	10	23230	782	71	20	68786	637	22.73	23.5

2CC LTE Downlink for Top Antenna													
Configure		CA Configuration	Ant	PCC					SCC			Power	
				Band	BW (MHz)	UL Channel	UL Freq. (MHz)	UL Mode (Modulation/RB/Offset)	Band	BW (MHz)	DL Channel	DL Freq. (MHz)	CA TX (dBm)
Intra-band	Non Continuous	CA_2A-2A	Ant 8	2	20	19100	1900	QPSK1180	2	5	1175	1987.5	23.48
		CA_4A-4A	Ant 8	4	20	20175	1732.5	QPSK1180	4	5	2375	2152.5	24.88
		CA_5A-5A	Ant 2	5	10	20450	829	QPSK1180	5	5	2522	881.2	24.37
Inter-band		CA_2A-17A	Ant 8	2	20	19100	1900	QPSK1180	17	10	5800	741	22.51
		CA_4A-17A	Ant 8	4	20	20175	1732.5	QPSK1180	17	10	5800	741	24.35

2CC LTE Downlink for Bottom Antenna														
Configure		CA Configuration	Ant	PCC					SCC				Power	
				Band	BW (MHz)	UL Channel	UL Freq. (MHz)	UL Mode (Modulation/RB/Offset)	Band	BW (MHz)	DL Channel	DL Freq. (MHz)	CA TX (dBm)	Rel B TX (dBm)
Intra-band	Non Continuous	CA_2A-2A	Ant 7	2	20	19100	1900	QPSK11849	2	5	1175	1987.5	22.36	
		CA_4A-4A	Ant 7	4	20	20175	1732.5	QPSK1180	4	5	2375	2152.5	23.61	
		CA_5A-5A	Ant 5	5	10	20525	836.5	QPSK1180	5	5	2522	881.2	23.24	
		CA_2A-17A	Ant 7	2	20	19100	1900	QPSK1180	17	10	5800	741	22.32	
Inter-band		CA_4A-17A	Ant 7	4	20	20175	1732.5	QPSK1180	17	10	5800	741	23.74	

3CC LTE Downlink for Top Antenna													
Configure		CA Configuration	Ant	PCC				SCC1				SCC2	
				Band	BW (MHz)	UL Channel	UL Fre. (MHz)	UL Mode (Modulation/RB/Offset)	Band	BW (MHz)	DL Channel	DL Fre. (MHz)	CA TX (dBm)
Inter-band		CA_2A-4A-13A	Ant 8	2	20	19100	1900	QPSK1180	4	20	2175	2132.5	13
		CA_4A-4A-13A	Ant 8	4	20	20175	1732.5	QPSK1180	4	20	2175	2132.5	13
		CA_4A-4A-71A	Ant 8	4	20	20175	1732.5	QPSK1180	4	20	2175	2132.5	71
		CA_4A-5A-12A	Ant 8	4	20	20175	1732.5	QPSK1180	5	10	2450	874	12
		CA_5A-12A-66A	Ant 8	5	10	20450	829	QPSK1180	12	10	5060	704	66
		CA_5A-12B	Ant 2	5	10	20450	829	QPSK1180	12	10	5060	704	12
		CA_25A-25A-25A	Ant 8	25	20	26365	1882.5	QPSK11849	25	20	8365	1962.5	25
		CA_25A-25A-26A	Ant 8	25	20	26365	1882.5	QPSK11849	25	20	8365	1962.5	26
		CA_26A-41C	Ant 2	26	15	26965	841.5	QPSK1180	41	20	40620	2593	41
		CA_41A-41A-41A	Ant 8	41	20	40620	2593	QPSK1180	41	20	40620	2593	41

3CC LTE Downlink for Bottom Antenna													
Configure		CA Configuration	Ant	PCC				SCC1				SCC2	
				Band	BW (MHz)	UL Channel	UL Fre. (MHz)	UL Mode (Modulation/RB/Offset)	Band	BW (MHz)	DL Channel	DL Fre. (MHz)	CA TX (dBm)
Inter-band		CA_2A-4A-13A	Ant 7	2	20	19100	1900	QPSK1180	4	20	2175	2132.5	13
		CA_4A-4A-13A	Ant 7	4	20	20175	1732.5	QPSK1180	4	20	2175	2132.5	13
		CA_4A-4A-71A	Ant 7	4	20	20175	1732.5	QPSK1180	4	20	2175	2132.5	71
		CA_4A-5A-12A	Ant 7	4	20	20175	1732.5	QPSK1180	5	10	2525	881.5	12
		CA_5A-12A-66A	Ant 7	5	10	20525	836.5	QPSK1180	12	10	5060	704	66
		CA_5A-12B	Ant 5	5	10	20525	836.5	QPSK1180	12	10	5060	704	12
		CA_25A-25A-25A	Ant 7	25	20	26140	1880	QPSK11849	25	20	8140	1940	25
		CA_25A-25A-26A	Ant 7	25	20	26140	1880	QPSK11849	25	20	8140	1940	26
		CA_26A-41C	Ant 5	26	15	26765	821.5	QPSK1180	41	20	40185	2549.5	41
		CA_41A-41A-41A	Ant 7	41	20	40185	2549.5	QPSK1180	41	20	40185	2549.5	41

4CC LTE Downlink for Top Antenna																				
Configure	CA Configuration	Ant	PCC					SCC1			SCC2			SCC3			Power Ref 8 TX (dBm)			
			Band	BW Channel (MHz)	UL Channel (MHz)	UL Fre. (MHz)	UL Mode (Modulation/RB/Offset)	Band	BW (MHz)	DL Fre. (MHz)	Band	BW (MHz)	DL Channel	DL Fre. (MHz)	Band	BW (MHz)		DL Fre. (MHz)	CA TX (dBm)	
Inter-band	CA_2A-2A-4A-4A	Ant 8	2	20	19100	1900	QPSK1180	2	20	1100	1980	4	20	2175	2132.5	5	10	2450	874	22.86
	CA_2A-2A-4A-5A	Ant 8	2	20	19100	1900	QPSK1180	2	20	1100	1980	4	20	2175	2132.5	5	10	2450	874	22.86
	CA_2A-2A-5A-66A	Ant 8	2	20	19100	1900	QPSK1180	2	20	1100	1980	5	10	2450	874	66	20	66886	2155	22.67
	CA_2A-2A-4A-12A	Ant 8	2	20	19100	1900	QPSK1180	2	20	1100	1980	4	20	2175	2132.5	12	10	5060	704	22.98
	CA_2A-2A-4A-71A	Ant 8	2	20	19100	1900	QPSK1180	2	20	1100	1980	4	20	2175	2132.5	71	20	68768	635.2	22.63
	CA_2A-2A-5A-12A	Ant 8	2	20	19100	1900	QPSK1180	2	20	1100	1980	5	10	2450	874	12	10	5060	704	22.91
	CA_2A-2A-12A-66A	Ant 8	2	20	19100	1900	QPSK1180	2	20	1100	1980	12	10	5060	704	66	20	66886	2155	22.74
	CA_2A-2A-13A-66A	Ant 8	2	20	19100	1900	QPSK1180	2	20	1100	1980	13	10	5230	751	66	20	66886	2155	22.81
	CA_2A-2A-66A-66A	Ant 8	2	20	19100	1900	QPSK1180	2	20	1100	1980	66	20	66886	2155	66	20	66886	2155	22.87
	CA_2A-2A-66A-71A	Ant 8	2	20	19100	1900	QPSK1180	2	20	1100	1980	66	20	66886	2155	71	20	68768	635.2	22.77
	CA_2A-4A-4A-5A	Ant 8	2	20	19100	1900	QPSK1180	4	20	2175	2132.5	4	20	2175	2132.5	5	10	2450	874	22.67
	CA_2A-4A-4A-12A	Ant 8	2	20	19100	1900	QPSK1180	4	20	2175	2132.5	4	20	2175	2132.5	12	10	5060	704	22.55
	CA_2A-5A-66A-66A	Ant 8	2	20	19100	1900	QPSK1180	5	10	2450	874	66	20	66886	2155	66	20	66886	2155	22.79
	CA_2A-12A-66A-66A	Ant 8	2	20	19100	1900	QPSK1180	12	10	5060	704	66	20	66886	2155	66	20	66886	2155	22.53
	CA_2A-13A-66A-66A	Ant 8	2	20	19100	1900	QPSK1180	13	10	5230	751	66	20	66886	2155	66	20	66886	2155	22.65
	CA_2A-66A-66A-66A	Ant 8	2	20	19100	1900	QPSK1180	66	20	66886	2155	66	20	66886	2155	66	20	66886	2155	22.64
	CA_2A-66A-66A-71A	Ant 8	2	20	19100	1900	QPSK1180	66	20	66886	2155	66	20	66886	2155	71	20	68768	635.2	22.54
	CA_2A-2A-5B	Ant 8	2	20	19100	1900	QPSK1180	2	20	1100	1980	5	10	2450	874	5	10	2450	874	22.63
	CA_2A-2A-66B	Ant 8	2	20	19100	1900	QPSK1180	2	20	1100	1980	66	20	66886	2155	66	20	66886	2155	22.65
	CA_2A-2A-66C	Ant 8	2	20	19100	1900	QPSK1180	2	20	1100	1980	66	20	66886	2155	66	20	66886	2155	22.58
	CA_2A-4A-12B	Ant 8	2	20	19100	1900	QPSK1180	4	20	2175	2132.5	4	20	2175	2132.5	12	10	5060	704	22.61
	CA_2A-4A-5B	Ant 8	2	20	19100	1900	QPSK1180	4	20	2175	2132.5	4	20	2175	2132.5	5	10	2450	874	22.68
	CA_2A-5A-66B	Ant 8	2	20	19100	1900	QPSK1180	5	10	2450	874	66	20	66886	2155	66	20	66886	2155	22.76
	CA_2A-5A-66C	Ant 8	2	20	19100	1900	QPSK1180	5	10	2450	874	66	20	66886	2155	66	20	66886	2155	22.81
	CA_2A-5B-66A	Ant 8	2	20	19100	1900	QPSK1180	5	10	2450	874	66	20	66886	2155	66	20	66886	2155	22.71
	CA_2A-12A-66C	Ant 8	2	20	19100	1900	QPSK1180	12	10	5060	704	66	20	66886	2155	66	20	66886	2155	22.58
	CA_2A-13A-66B	Ant 8	2	20	19100	1900	QPSK1180	13	10	5230	751	66	20	66886	2155	66	20	66886	2155	22.69
	CA_2A-13A-66C	Ant 8	2	20	19100	1900	QPSK1180	13	10	5230	751	66	20	66886	2155	66	20	66886	2155	22.44
	CA_2A-66A-66B	Ant 8	2	20	19100	1900	QPSK1180	66	20	66886	2155	66	20	66886	2155	66	20	66886	2155	22.73
	CA_2A-66C-71A	Ant 8	2	20	19100	1900	QPSK1180	66	20	66886	2155	71	20	68768	635.2	71	20	68768	635.2	22.57
	CA_2C-66A-66A	Ant 8	2	20	19100	1900	QPSK1180	66	20	66886	2155	66	20	66886	2155	66	20	66886	2155	22.49
	CA_4A-4A-12B	Ant 8	4	20	20175	1732.5	QPSK1180	4	20	2175	2132.5	12	10	5060	704	12	10	5060	704	22.43
	CA_4A-4A-5B	Ant 8	4	20	20175	1732.5	QPSK1180	4	20	2175	2132.5	5	10	2450	874	5	10	2450	874	22.32
	CA_5A-5A-66A-66A	Ant 2	5	10	20525	836.5	QPSK1180	5	10	2450	874	66	20	66886	2155	66	20	66886	2155	24.23
	CA_5A-5A-66B	Ant 2	5	10	20525	836.5	QPSK1180	5	10	2450	874	66	20	66886	2155	66	20	66886	2155	24.12
	CA_5A-5A-66C	Ant 2	5	10	20525	836.5	QPSK1180	5	10	2450	874	66	20	66886	2155	66	20	66886	2155	24.22
CA_5A-66A-66B	Ant 2	5	10	20525	836.5	QPSK1180	66	20	66886	2155	66	20	66886	2155	66	20	66886	2155	24.25	
CA_5B-66A-66A	Ant 2	5	10	20525	836.5	QPSK1180	66	20	66886	2155	66	20	66886	2155	66	20	66886	2155	24.18	
CA_5B-66B	Ant 2	5	10	20525	836.5	QPSK1180	66	20	66886	2155	66	20	66886	2155	66	20	66886	2155	24.11	
CA_5B-66C	Ant 2	5	10	20525	836.5	QPSK1180	66	20	66886	2155	66	20	66886	2155	66	20	66886	2155	24.14	
CA_12B-66A-66A	Ant 2	12	10	23060	704	QPSK1180	66	20	66886	2155	66	20	66886	2155	70	20	66886	2155	23.66	
CA_13A-66A-66A-66A	Ant 2	13	10	23230	782	QPSK11825	66	20	66886	2155	66	20	66886	2155	66	20	66886	2155	23.85	
CA_13A-66A-66B	Ant 2	13	10	23230	782	QPSK11825	66	20	66886	2155	66	20	66886	2155	66	20	66886	2155	23.69	
CA_13A-66A-66C	Ant 2	13	10	23230	782	QPSK11825	66	20	66886	2155	66	20	66886	2155	66	20	66886	2155	23.88	
CA_13A-66D	Ant 2	13	10	23230	782	QPSK11825	66	20	66886	2155	66	20	66886	2155	66	20	66886	2155	23.67	
CA_25A-25A-41C	Ant 8	25	20	26365	1862.5	QPSK11849	25	20	8365	1862.5	41	20	40620	2593	41	20	40620	2593	23.02	
CA_25A-41D	Ant 8	25	20	26365	1862.5	QPSK11849	41	20	40620	2593	41	20	40620	2593	41	20	40620	2593	23.76	
CA_41A-41A-41C	Ant 8	41	20	40620	2593	QPSK1180	41	20	40620	2593	41	20	40620	2593	41	20	40620	2593	23.81	
CA_41A-41D	Ant 8	41	20	40620	2593	QPSK1180	41	20	40620	2593	41	20	40620	2593	41	20	40620	2593	23.89	
CA_41C-41C	Ant 8	41	20	40620	2593	QPSK1180	41	20	40620	2593	41	20	40620	2593	41	20	40620	2593	23.66	
CA_41E	Ant 8	41	20	40620	2593	QPSK1180	41	20	40620	2593	41	20	40620	2593	41	20	40620	2593	23.67	

Inter-band	CA_2A-2A-66B	Ant 7	2	20	19100	1900	QPSK11#0	2	20	1100	1980	66	20	66886	2155	66	20	66886	2155	23.62	
	CA_2A-2A-66C	Ant 7	2	20	19100	1900	QPSK11#0	2	20	1100	1980	66	20	66886	2155	66	20	66886	2155	23.55	
	CA_2A-4A-12B	Ant 7	2	20	19100	1900	QPSK11#0	4	20	2175	2132.5	4	20	2175	2132.5	12	10	5060	704	23.44	
	CA_2A-4A-5B	Ant 7	2	20	19100	1900	QPSK11#0	4	20	2175	2132.5	4	20	2175	2132.5	5	10	20525	836.5	23.55	
	CA_2A-5A-66B	Ant 7	2	20	19100	1900	QPSK11#0	5	10	2525	881.5	66	20	66886	2155	66	20	66886	2155	23.44	
	CA_2A-5A-66C	Ant 7	2	20	19100	1900	QPSK11#0	5	10	2525	881.5	66	20	66886	2155	66	20	66886	2155	23.34	
	CA_2A-5B-66A	Ant 7	2	20	19100	1900	QPSK11#0	5	10	2525	881.5	66	20	66886	2155	66	20	66886	2155	23.58	
	CA_2A-12A-66C	Ant 7	2	20	19100	1900	QPSK11#0	12	10	5060	704	66	20	66886	2155	66	20	66886	2155	23.42	
	CA_2A-13A-66B	Ant 7	2	20	19100	1900	QPSK11#0	13	10	5230	751	66	20	66886	2155	66	20	66886	2155	23.72	
	CA_2A-13A-66C	Ant 7	2	20	19100	1900	QPSK11#0	13	10	5230	751	66	20	66886	2155	66	20	66886	2155	23.55	
	CA_2A-66A-66B	Ant 7	2	20	19100	1900	QPSK11#0	66	20	66886	2155	66	20	66886	2155	66	20	66886	2155	23.62	
	CA_2A-66C-71A	Ant 7	2	20	19100	1900	QPSK11#0	66	20	66886	2155	66	20	66886	2155	66	20	66886	2155	23.34	
	CA_2C-66A-66A	Ant 7	2	20	19100	1900	QPSK11#0	66	20	66886	2155	66	20	66886	2155	66	20	66886	2155	23.58	
	CA_4A-4A-12B	Ant 7	4	20	20175	1732.5	QPSK11#0	4	20	2175	2132.5	12	10	5060	704	12	10	5060	704	23.42	
	CA_4A-4A-5B	Ant 7	4	20	20175	1732.5	QPSK11#0	4	20	2175	2132.5	5	10	20525	836.5	5	10	20525	836.5	23.27	
	CA_5A-5A-66A-66A	Ant 0	5	10	20525	836.5	QPSK11#0	5	10	2450	874	66	20	66886	2155	66	20	66886	2155	23.21	
	CA_5A-5A-66B	Ant 0	5	10	20525	836.5	QPSK11#0	5	10	2525	881.5	66	20	66886	2155	66	20	66886	2155	23.48	
	CA_5A-5A-66C	Ant 0	5	10	20525	836.5	QPSK11#0	5	10	2525	881.5	66	20	66886	2155	66	20	66886	2155	23.11	
	CA_5A-66A-66B	Ant 0	5	10	20525	836.5	QPSK11#0	66	20	66886	2155	66	20	66886	2155	66	20	66886	2155	23.50	
	CA_5B-66A-66A	Ant 0	5	10	20525	836.5	QPSK11#0	66	20	66886	2155	66	20	66886	2155	66	20	66886	2155	23.41	
	CA_5B-66B	Ant 0	5	10	20525	836.5	QPSK11#0	5	10	2525	881.5	66	20	66886	2155	66	20	66886	2155	23.47	
	CA_5B-66C	Ant 0	5	10	20525	836.5	QPSK11#0	5	10	2525	881.5	66	20	66886	2155	66	20	66886	2155	23.33	
	CA_12B-66A-66A	Ant 0	12	10	23080	704	QPSK11#0	66	20	66886	2155	66	20	66886	2155	66	20	66886	2155	23.14	
	CA_13A-66A-66A-66A	Ant 0	13	10	23230	782	QPSK11#25	66	20	66886	2155	66	20	66886	2155	66	20	66886	2155	23.41	
	CA_13A-66A-66B	Ant 0	13	10	23230	782	QPSK11#25	66	20	66886	2155	66	20	66886	2155	66	20	66886	2155	23.56	
	CA_13A-66A-66C	Ant 0	13	10	23230	782	QPSK11#25	66	20	66886	2155	66	20	66886	2155	66	20	66886	2155	23.58	
	CA_13A-66D	Ant 0	13	10	23230	782	QPSK11#25	66	20	66886	2155	66	20	66886	2155	66	20	66886	2155	23.27	
	CA_25A-25A-41C	Ant 7	25	20	26366	1882.5	QPSK11#49	25	20	8140	1940	41	20	40185	2549.5	41	20	40185	2549.5	23.09	
	CA_25A-41D	Ant 7	25	20	26366	1882.5	QPSK11#49	41	20	40185	2549.5	41	20	40185	2549.5	41	20	40185	2549.5	23.22	
	CA_41A-41A-41C	Ant 7	41	20	40620	2593	QPSK11#0	41	20	40185	2549.5	41	20	40185	2549.5	41	20	40185	2549.5	23.35	
	CA_41A-41D	Ant 7	41	20	40620	2593	QPSK11#0	41	20	40185	2549.5	41	20	40185	2549.5	41	20	40185	2549.5	23.12	
	CA_41C-41C	Ant 7	41	20	40620	2593	QPSK11#0	41	20	40185	2549.5	41	20	40185	2549.5	41	20	40185	2549.5	23.42	
	CA_41E	Ant 7	41	20	40620	2593	QPSK11#0	41	20	40185	2549.5	41	20	40185	2549.5	41	20	40185	2549.5	23.34	

2.4GHz WLAN ANT 5

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Time-Up Limit	Power Setting	Duty Cycle %
2.4GHz WLAN ANT 5	802.11b Mbps	CH 1	2412	18.95	18.5	18.5	100.00
		CH 6	2437	18.58	17.0	18.5	
		CH 11	2462	18.39	17.0	18.5	
	802.11g Mbps	CH 1	2412	17.15	17.5	18	98.21
		CH 6	2437	16.22	16.5	18	
		CH 11	2462	15.23	15.5	18	
	802.11a+HT20 MCS0	CH 1	2412	16.81	17.5	18	98.59
		CH 6	2437	16.07	16.5	18	
		CH 11	2462	15.09	15.5	18	
	802.11a+HT40 MCS0	CH 3	2432	16.29	16.50	18	94.30
		CH 6	2437	16.49	17.00	18	
		CH 9	2452	16.64	17.00	18	

5GHz WLAN ANT 5

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Time-Up Limit	Power Setting	Duty Cycle %
5.2GHz WLAN ANT 5	802.11a 6Mbps	CH 36	5180	14.52	15.0	18	98.03
		CH 44	5220	14.15	14.5	18	
		CH 48	5240	14.00	14.5	18	
	802.11a+HT20 MCS0	CH 36	5180	14.62	15.0	18	98.28
		CH 44	5220	14.18	14.5	18	
		CH 48	5240	13.94	14.5	18	
	802.11a+HT40 MCS0	CH 38	5190	18.00	15.5	18	96.68
		CH 46	5230	14.77	15.5	18	
		CH 36	5180	14.50	15.0	18	
	802.11a+VHT20 MCS0	CH 44	5220	14.03	14.5	18	98.14
		CH 48	5240	13.86	14.5	18	
		CH 38	5190	14.37	15.0	18	
	802.11a+VHT40 MCS0	CH 46	5230	14.03	14.5	18	96.41
		CH 48	5230	14.03	14.5	18	
		CH 42	5210	14.00	14.5	18	

5GHz WLAN ANT 5

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Time-Up Limit	Power Setting	Duty Cycle %
5.3GHz WLAN ANT 5	802.11a 6Mbps	CH 52	5260	14.03	14.5	18	98.03
		CH 60	5300	14.46	15.0	18	
		CH 64	5320	14.69	15.0	18	
	802.11a+HT20 MCS0	CH 52	5260	13.96	14.5	18	98.28
		CH 60	5300	14.45	15.0	18	
		CH 64	5320	14.70	15.0	18	
	802.11a+HT40 MCS0	CH 54	5270	14.77	15.5	18	96.68
		CH 62	5310	18.38	16.0	18	
		CH 52	5260	13.96	14.5	18	
	802.11a+VHT20 MCS0	CH 60	5300	14.07	14.5	18	98.14
		CH 64	5320	14.48	15.0	18	
		CH 54	5270	14.21	14.5	18	
	802.11a+VHT40 MCS0	CH 62	5310	14.76	15.5	18	96.41
		CH 62	5310	14.76	15.5	18	
		CH 58	5290	14.18	14.5	18	

5GHz WLAN ANT 1

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Time-Up Limit	Power Setting	Duty Cycle %
5.5GHz WLAN ANT 5	802.11a MCS0	CH 100	5500	14.25	14.5	18	98.03
		CH 120	5680	13.42	14.0	18	
		CH 144	5720	13.63	14.0	18	
	802.11a+HT20 MCS0	CH 100	5500	14.38	14.5	18	98.28
		CH 120	5680	13.47	14.0	18	
		CH 144	5720	13.90	14.5	18	
	802.11a+HT40 MCS0	CH 102	5510	14.90	15.5	18	96.68
		CH 126	5630	13.80	14.5	18	
		CH 142	5710	14.13	14.5	18	
	802.11a+VHT20 MCS0	CH 100	5500	13.96	14.5	17.5	98.14
		CH 120	5680	13.22	14.0	17.5	
		CH 144	5720	13.27	14.0	17.5	
	802.11a+VHT40 MCS0	CH 102	5510	14.26	14.5	17.5	96.41
		CH 126	5630	13.55	14.0	17.5	
		CH 142	5710	13.61	14.0	17.5	
	802.11a+VHT80 MCS0	CH 108	5520	14.04	14.5	17.5	93.54
		CH 132	5610	13.59	14.0	17.5	
		CH 138	5680	13.76	14.5	17.5	

5GHz WLAN ANT 5

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Time-Up Limit	Power Setting	Duty Cycle %
5.8GHz WLAN ANT 5	802.11a MCS0	CH 148	5745	13.59	14.00	18	98.03
		CH 157	5785	14.10	14.50	18	
		CH 165	5825	14.27	14.50	18	
	802.11a+HT20 MCS0	CH 148	5745	13.88	14.00	18	98.28
		CH 157	5785	14.27	14.50	18	
		CH 165	5825	14.33	14.50	18	
	802.11a+HT40 MCS0	CH 151	5755	14.07	14.50	18	96.68
		CH 159	5795	14.30	14.50	18	
		CH 165	5825	13.30	14.00	18	
	802.11a+VHT20 MCS0	CH 157	5785	13.77	14.50	18	98.14
		CH 165	5825	14.03	14.50	18	
		CH 151	5755	13.64	14.00	18	
	802.11a+VHT40 MCS0	CH 159	5795	14.15	14.50	18	96.41
		CH 159	5795	14.15	14.50	18	
		CH 155	5775	13.64	14.00	18	

Mode	Channel	Frequency (MHz)	Average power (dBm)		
			1Mbps	2Mbps	5Mbps
BR / EDS	CH 00	2402	4.93	1.22	1.17
	CH 10	2441	3.87	0.74	0.79
	CH 78	2480	6.08	3.25	3.24
Time-up Limit			7.5	4	4
Duty Cycle %			76.8	77.87	77.87

Mode	Channel	Frequency (MHz)	Average power (dBm)	
			1Mbps	2Mbps
LE	CH 00	2402	-6.34	-8.74
	CH 10	2440	-6.82	-9.17
	CH 38	2480	-4.77	-8.79
Time-up Limit			4	4
Duty Cycle %			61.54	32.94

2.4GHz WLAN ANT 6

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Time-Up Limit	Power Setting	Duty Cycle %
2.4GHz WLAN ANT 6	802.11b Mbps	CH 1	2412	18.14	18.50	18.5	100.00
		CH 6	2437	18.84	18.50	18.5	
		CH 11	2462	18.04	18.50	18.5	
	802.11g Mbps	CH 1	2412	17.28	17.50	18	98.21
		CH 6	2437	16.28	16.50	18	
		CH 11	2462	17.34	17.50	18	
	802.11a+HT20 MCS0	CH 1	2412	17.16	17.50	18	98.59
		CH 6	2437	16.07	16.50	18	
		CH 11	2462	17.16	17.50	18	
	802.11a+HT40 MCS0	CH 3	2422	17.21	17.50	18	94.20
		CH 6	2437	17.47	18.00	18	
		CH 9	2452	17.70	18.50	18	

5.2GHz WLAN ANT 6

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Time-Up Limit	Power Setting	Duty Cycle %
5.2GHz WLAN ANT 6	802.11a 6Mbps	CH 36	5180	14.86	15.50	18	98.03
		CH 44	5220	14.30	15.00	18	
		CH 48	5240	14.02	14.50	18	
	802.11a+HT20 MCS0	CH 36	5180	14.73	15.50	18	98.28
		CH 44	5220	14.11	14.50	18	
		CH 48	5240	13.95	14.50	18	
	802.11a+HT40 MCS0	CH 38	5190	18.07	15.50	18	96.68
		CH 46	5230	14.47	15.00	18	
		CH 36	5180	14.39	15.00	18	
	802.11a+VHT20 MCS0	CH 44	5220	13.52	14.50	18	98.14
		CH 48	5240	13.78	14.50	18	
		CH 38	5190	14.67	15.00	18	
	802.11a+VHT40 MCS0	CH 46	5230	14.04	14.50	18	96.41
		CH 46	5230	14.04	14.50	18	
		CH 42	5210	14.45	15.00	18	

5.3GHz WLAN ANT 6

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Time-Up Limit	Power Setting	Duty Cycle %
5.3GHz WLAN ANT 6	802.11a 6Mbps	CH 52	5260	14.15	14.50	18	98.03
		CH 60	5300	14.41	15.00	18	
		CH 64	5320	14.78	15.50	18	
	802.11a+HT20 MCS0	CH 52	5260	14.11	14.50	18	98.28
		CH 60	5300	14.36	15.00	18	
		CH 64	5320	14.73	15.50	18	
	802.11a+HT40 MCS0	CH 54	5270	14.38	15.00	18	96.68
		CH 62	5310	14.96	15.50	18	
		CH 52	5260	13.97	14.50	18	
	802.11a+VHT20 MCS0	CH 60	5300	13.78	14.50	18	98.14
		CH 64	5320	14.19	14.50	18	
		CH 54	5270	14.13	14.50	18	
	802.11a+VHT40 MCS0	CH 62	5310	14.55	15.00	18	96.41
		CH 62	5310	14.55	15.00	18	
		CH 58	5290	13.95	14.50	18	

5.5 WLAN ANT 6

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Time-Up Limit	Power Setting	Duty Cycle %
5.5GHz WLAN ANT 6	802.11a 6Mbps	CH 100	5500	15.10	15.50	18	98.03
		CH 118	5580	14.19	14.50	18	
		CH 144	5720	13.52	14.50	18	
	802.11a+HT20 MCS0	CH 100	5500	14.76	15.50	18	98.28
		CH 118	5580	14.21	14.50	18	
		CH 144	5720	13.61	14.00	18	
	802.11a+HT40 MCS0	CH 102	5616	14.29	15.50	18	99.68
		CH 126	5696	14.29	15.50	18	
		CH 144	5716	14.36	15.00	18	
	802.11a+VHT12 MCS0	CH 100	5500	14.59	14.50	17.5	98.14
		CH 118	5580	13.58	14.00	17.5	
		CH 144	5720	13.05	13.50	17.5	
802.11a+VHT14 MCS0	CH 102	5616	15.02	15.50	17.5	98.41	
	CH 126	5696	13.66	14.00	17.5		
	CH 142	5716	13.70	14.50	17.5		
802.11a+VHT16 MCS0	CH 106	5736	15.30	15.50	17.5	99.54	
	CH 122	5810	14.20	14.50	17.5		
	CH 138	5960	14.16	14.50	17.5		

Reduced Power Level 1

Band		WCDMA II			Tune-up Limit (dBm)	WCDMA IV			Tune-up Limit (dBm)
TX Channel		9262	9400	9538		1312	1413	1513	
Rx Channel		9662	9800	9938		1537	1638	1738	
Frequency (MHz)		1852.4	1880	1907.6		1712.4	1732.6	1752.6	
3GPP Rel 99	RMC 12.2Kbps	18.69	18.79	18.72	19.50	18.97	19.01	18.90	19.50
3GPP Rel 6	HSDPA Subtest-1	17.74	17.82	17.80	18.50	18.05	18.07	18.05	18.50
3GPP Rel 6	HSDPA Subtest-2	17.86	18.08	17.90	18.50	18.12	18.18	18.24	18.50
3GPP Rel 6	HSDPA Subtest-3	17.22	17.34	17.28	18.00	17.58	17.59	17.56	18.00
3GPP Rel 6	HSDPA Subtest-4	17.16	17.35	17.25	18.00	17.59	17.62	17.55	18.00
3GPP Rel 8	DC-HSDPA Subtest-1	17.85	17.93	17.81	18.50	18.07	18.25	18.04	19.00
3GPP Rel 8	DC-HSDPA Subtest-2	17.25	17.70	17.29	18.50	17.55	17.80	17.61	18.50
3GPP Rel 8	DC-HSDPA Subtest-3	17.74	17.87	17.75	18.50	18.03	18.10	18.05	18.50
3GPP Rel 8	DC-HSDPA Subtest-4	17.72	17.86	17.77	18.50	18.07	18.13	18.08	18.50
3GPP Rel 6	HSUPA Subtest-1	17.68	17.87	17.80	18.50	18.10	18.23	18.04	19.00
3GPP Rel 6	HSUPA Subtest-2	17.76	17.80	17.76	18.50	18.07	18.12	18.05	18.50
3GPP Rel 6	HSUPA Subtest-3	17.95	17.87	17.89	18.50	18.06	18.14	18.03	18.50
3GPP Rel 6	HSUPA Subtest-4	17.93	17.87	17.93	18.50	18.06	18.12	18.10	18.50
3GPP Rel 6	HSUPA Subtest-5	17.33	17.33	17.37	18.00	17.53	17.60	17.59	18.00
3GPP Rel 7	HSPA+ (16QAM) Subtest-1	17.30	17.39	17.42	18.00	17.50	17.60	17.61	18.00
Attenuator			Cable Loss				Cable Loss		
Mode			Max.	18.79			Max.	19.01	

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)				1860	1880	1900	
20	QPSK	1	0	18.84	18.88	18.77	19.5
20	QPSK	1	49	18.52	18.42	18.41	
20	QPSK	1	99	18.41	18.32	18.24	
20	QPSK	50	0	17.59	17.63	17.50	18.5
20	QPSK	50	24	17.50	17.59	17.41	
20	QPSK	50	50	17.43	17.51	17.30	
20	QPSK	100	0	17.33	17.39	17.26	18.5
20	16QAM	1	0	17.53	17.67	17.52	
20	16QAM	1	49	17.41	17.65	17.47	
20	16QAM	1	99	17.36	17.61	17.45	18
20	16QAM	50	0	17.54	17.56	17.58	
20	16QAM	50	24	17.48	17.50	17.51	
20	16QAM	50	50	17.39	17.37	17.46	18
20	16QAM	100	0	17.36	17.33	17.39	
20	64QAM	1	0	17.34	17.59	17.54	
20	64QAM	1	49	17.24	17.53	17.51	17.5
20	64QAM	1	99	17.19	17.42	17.38	
20	64QAM	50	0	17.31	17.34	17.25	
20	64QAM	50	24	17.28	17.31	17.17	16.5
20	64QAM	50	50	17.14	17.20	17.05	
20	64QAM	100	0	17.07	17.12	17.00	
20	256QAM	1	0	15.89	15.98	15.94	16
20	256QAM	1	49	15.87	15.92	15.88	
20	256QAM	1	99	15.90	15.84	15.78	
20	256QAM	50	0	15.48	15.55	15.52	16
20	256QAM	50	24	15.41	15.53	15.44	
20	256QAM	50	50	15.36	15.44	15.39	
20	256QAM	100	0	15.39	15.45	15.40	
Channel				18975	18900	19125	Tune-up limit (dBm)
Frequency (MHz)				1857.5	1880	1902.5	
15	QPSK	1	0	18.81	18.85	18.74	19.5
15	QPSK	1	37	18.49	18.39	18.38	
15	QPSK	1	74	18.38	18.29	18.21	
15	QPSK	36	0	17.56	17.60	17.47	18.5
15	QPSK	36	20	17.47	17.56	17.38	
15	QPSK	36	39	17.40	17.48	17.27	
15	QPSK	75	0	17.30	17.36	17.23	18.5
15	16QAM	1	0	17.50	17.64	17.49	
15	16QAM	1	37	17.38	17.62	17.44	
15	16QAM	1	74	17.33	17.58	17.42	18
15	16QAM	36	0	17.51	17.53	17.55	
15	16QAM	36	20	17.45	17.47	17.48	
15	16QAM	36	39	17.36	17.34	17.43	18
15	16QAM	75	0	17.33	17.30	17.36	
15	64QAM	1	0	17.31	17.56	17.51	
15	64QAM	1	37	17.21	17.50	17.48	17.5
15	64QAM	1	74	17.16	17.39	17.35	
15	64QAM	36	0	17.28	17.31	17.22	
15	64QAM	36	20	17.25	17.28	17.14	16.5
15	64QAM	36	39	17.11	17.17	17.02	
15	64QAM	75	0	17.04	17.09	16.97	
15	256QAM	1	0	15.86	15.95	15.91	16
15	256QAM	1	37	15.84	15.89	15.85	
15	256QAM	1	74	15.87	15.81	15.75	
15	256QAM	36	0	15.45	15.52	15.49	16
15	256QAM	36	20	15.38	15.50	15.41	
15	256QAM	36	39	15.33	15.41	15.36	
15	256QAM	75	0	15.36	15.42	15.37	
Channel				18650	18900	19150	Tune-up limit (dBm)
Frequency (MHz)				1855	1880	1905	
10	QPSK	1	0	18.75	18.79	18.68	19.5
10	QPSK	1	25	18.43	18.33	18.32	
10	QPSK	1	49	18.32	18.23	18.15	
10	QPSK	25	0	17.50	17.54	17.41	18.5
10	QPSK	25	12	17.41	17.50	17.32	
10	QPSK	25	25	17.34	17.42	17.21	
10	QPSK	50	0	17.24	17.30	17.17	18.5
10	16QAM	1	0	17.44	17.58	17.43	
10	16QAM	1	25	17.32	17.56	17.38	
10	16QAM	1	49	17.27	17.52	17.36	18
10	16QAM	25	0	17.45	17.47	17.49	
10	16QAM	25	12	17.39	17.41	17.42	
10	16QAM	25	25	17.30	17.28	17.37	18
10	16QAM	50	0	17.27	17.24	17.30	
10	64QAM	1	0	17.25	17.50	17.45	
10	64QAM	1	25	17.15	17.44	17.42	17.5
10	64QAM	1	49	17.10	17.33	17.29	
10	64QAM	25	0	17.22	17.25	17.16	
10	64QAM	25	12	17.19	17.22	17.08	16.5
10	64QAM	25	25	17.05	17.11	16.96	
10	64QAM	50	0	16.98	17.03	16.91	
10	256QAM	1	0	15.80	15.89	15.85	16
10	256QAM	1	25	15.78	15.83	15.79	
10	256QAM	1	49	15.81	15.75	15.69	
10	256QAM	25	0	15.39	15.46	15.43	16
10	256QAM	25	12	15.32	15.44	15.35	
10	256QAM	25	25	15.27	15.35	15.30	
10	256QAM	50	0	15.30	15.36	15.31	
Channel				18625	18900	19175	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1880	1907.5	
5	QPSK	1	0	18.72	18.76	18.65	19.5
5	QPSK	1	12	18.40	18.30	18.29	
5	QPSK	1	24	18.29	18.20	18.12	

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	20.03	20.10	20.05	20.5
20	QPSK	1	49	19.97	20.00	19.98	
20	QPSK	1	99	19.93	19.92	19.88	
20	QPSK	50	0	18.99	19.04	19.00	19.5
20	QPSK	50	24	18.98	18.96	18.97	
20	QPSK	50	50	18.93	18.90	18.87	
20	QPSK	100	0	18.85	18.87	18.83	19.5
20	16QAM	1	0	18.96	19.01	18.92	
20	16QAM	1	49	18.86	19.00	18.83	
20	16QAM	1	99	18.82	18.98	18.73	19.5
20	16QAM	50	0	18.82	18.87	18.91	
20	16QAM	50	24	18.78	18.78	18.82	
20	16QAM	50	50	18.74	18.72	18.78	19.5
20	16QAM	100	0	18.68	18.70	18.75	
20	64QAM	1	0	19.03	18.84	19.05	
20	64QAM	1	49	19.01	18.83	19.03	19.5
20	64QAM	1	99	18.95	18.79	18.99	
20	64QAM	50	0	18.92	18.59	18.62	
20	64QAM	50	24	18.54	18.57	18.54	19.5
20	64QAM	50	50	18.48	18.49	18.45	
20	64QAM	100	0	18.47	18.46	18.44	
20	256QAM	1	0	16.24	16.29	16.25	17.5
20	256QAM	1	49	16.21	16.23	16.16	
20	256QAM	1	99	16.19	16.19	16.14	
20	256QAM	50	0	15.76	15.79	15.70	17
20	256QAM	50	24	15.68	15.70	15.69	
20	256QAM	50	50	15.62	15.62	15.62	
20	256QAM	100	0	15.54	15.61	15.56	
Channel				20025	20175	20325	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1732.5	1747.5	
15	QPSK	1	0	19.99	20.06	20.03	20.5
15	QPSK	1	37	19.94	19.97	19.95	
15	QPSK	1	74	19.91	19.87	19.83	
15	QPSK	36	0	18.94	19.00	18.97	19.5
15	QPSK	36	20	18.95	18.92	18.94	
15	QPSK	36	39	18.90	18.87	18.84	
15	QPSK	75	0	18.80	18.83	18.79	19.5
15	16QAM	1	0	18.91	18.99	18.89	
15	16QAM	1	37	18.83	18.95	18.80	
15	16QAM	1	74	18.78	18.94	18.69	19.5
15	16QAM	36	0	18.77	18.83	18.86	
15	16QAM	36	20	18.75	18.75	18.77	
15	16QAM	36	39	18.71	18.68	18.75	19.5
15	16QAM	75	0	18.64	18.66	18.72	
15	64QAM	1	0	18.99	18.81	19.01	
15	64QAM	1	37	18.98	18.79	19.01	19.5
15	64QAM	1	74	18.91	18.75	18.97	
15	64QAM	36	0	18.89	18.57	18.60	
15	64QAM	36	20	18.51	18.54	18.50	19.5
15	64QAM	36	39	18.43	18.44	18.43	
15	64QAM	75	0	18.45	18.43	18.41	
15	256QAM	1	0	16.21	16.24	16.21	17.5
15	256QAM	1	37	16.17	16.19	16.13	
15	256QAM	1	74	16.16	16.16	16.11	
15	256QAM	36	0	15.72	15.74	15.65	17
15	256QAM	36	20	15.65	15.68	15.67	
15	256QAM	36	39	15.57	15.59	15.59	
15	256QAM	75	0	15.52	15.58	15.53	
Channel				20000	20175	20350	Tune-up limit (dBm)
Frequency (MHz)				1715	1732.5	1750	
10	QPSK	1	0	19.94	20.04	20.00	20.5
10	QPSK	1	25	19.89	19.93	19.92	
10	QPSK	1	49	19.87	19.83	19.80	
10	QPSK	25	0	18.90	18.96	18.93	19.5
10	QPSK	25	12	18.92	18.89	18.89	
10	QPSK	50	0	18.78	18.80	18.76	
10	16QAM	1	0	18.88	18.96	18.86	19.5
10	16QAM	1	25	18.80	18.90	18.76	
10	16QAM	1	49	18.75	18.90	18.65	
10	16QAM	25	0	18.75	18.80	18.83	19.5
10	16QAM	25	12	18.71	18.72	18.74	
10	16QAM	25	25	18.67	18.64	18.71	
10	16QAM	50	0	18.60	18.63	18.68	19.5
10	64QAM	1	0	18.95	18.77	18.97	
10	64QAM	1	25	18.95	18.74	18.96	
10	64QAM	1	49	18.87	18.72	18.93	19.5
10	64QAM	25	0	18.85	18.54	18.56	
10	64QAM	25	12	18.49	18.50	18.46	
10	64QAM	25	25	18.39	18.39	18.40	19.5
10	64QAM	50	0	18.43	18.40	18.37	
10	256QAM	1	0	16.17	16.21	16.18	
10	256QAM	1	25	16.12	16.17	16.09	17.5
10	256QAM	1	49	16.13	16.12	16.08	
10	256QAM	25	0	15.67	15.69	15.61	
10	256QAM	25	12	15.61	15.64	15.63	17
10	256QAM	25	25	15.53	15.55	15.54	
10	256QAM	50	0	15.50	15.55	15.50	
Channel				19975	20175	20375	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1732.5	1752.5	
5	QPSK	1	0	19.91	20.00	19.97	20.5
5	QPSK	1	12	19.85	19.89	19.88	
5	QPSK	1	24	19.84	19.80	19.75	

5	QPSK	12	0	17.47	17.51	17.38	18.5
5	QPSK	12	7	17.38	17.47	17.29	
5	QPSK	12	13	17.31	17.39	17.18	
5	QPSK	25	0	17.21	17.27	17.14	18.5
5	16QAM	1	0	17.41	17.55	17.40	
5	16QAM	1	12	17.29	17.53	17.35	
5	16QAM	1	24	17.24	17.49	17.33	18
5	16QAM	12	0	17.42	17.44	17.46	
5	16QAM	12	7	17.36	17.38	17.39	
5	16QAM	12	13	17.27	17.25	17.34	18
5	16QAM	25	0	17.24	17.21	17.27	
5	64QAM	1	0	17.22	17.47	17.42	
5	64QAM	1	12	17.12	17.41	17.39	18
5	64QAM	1	24	17.07	17.30	17.26	
5	64QAM	12	0	17.19	17.22	17.13	
5	64QAM	12	7	17.16	17.19	17.05	17.5
5	64QAM	12	13	17.02	17.08	16.93	
5	64QAM	25	0	16.95	17.00	16.88	
5	256QAM	1	0	15.77	15.86	15.82	16.5
5	256QAM	1	12	15.75	15.80	15.76	
5	256QAM	1	24	15.78	15.72	15.66	
5	256QAM	12	0	15.36	15.43	15.40	16
5	256QAM	12	7	15.29	15.41	15.32	
5	256QAM	12	13	15.24	15.32	15.27	
5	256QAM	25	0	15.27	15.33	15.28	
Channel				18615	18900	19165	Tune-up limit (dBm)
Frequency (MHz)				1851.5	1880	1908.5	
3	QPSK	1	0	18.69	18.73	18.62	19.5
3	QPSK	1	8	18.37	18.27	18.26	
3	QPSK	1	14	18.26	18.17	18.09	
3	QPSK	8	0	17.44	17.48	17.35	18.5
3	QPSK	8	4	17.35	17.44	17.26	
3	QPSK	8	7	17.28	17.36	17.15	
3	QPSK	15	0	17.18	17.24	17.11	18.5
3	16QAM	1	0	17.38	17.52	17.37	
3	16QAM	1	8	17.26	17.50	17.32	
3	16QAM	1	14	17.21	17.46	17.30	18
3	16QAM	8	0	17.39	17.41	17.43	
3	16QAM	8	4	17.33	17.35	17.36	
3	16QAM	8	7	17.24	17.22	17.31	18
3	16QAM	15	0	17.21	17.18	17.24	
3	64QAM	1	0	17.19	17.44	17.39	
3	64QAM	1	8	17.09	17.38	17.36	18
3	64QAM	1	14	17.04	17.27	17.23	
3	64QAM	8	0	17.16	17.19	17.10	
3	64QAM	8	4	17.13	17.16	17.02	17.5
3	64QAM	8	7	16.99	17.05	16.90	
3	64QAM	15	0	16.92	16.97	16.85	
3	256QAM	1	0	15.74	15.83	15.79	16.5
3	256QAM	1	8	15.72	15.77	15.73	
3	256QAM	1	14	15.75	15.69	15.63	
3	256QAM	8	0	15.33	15.40	15.37	16
3	256QAM	8	4	15.26	15.38	15.29	
3	256QAM	8	7	15.21	15.29	15.24	
3	256QAM	15	0	15.24	15.30	15.25	
Channel				18607	18900	19193	Tune-up limit (dBm)
Frequency (MHz)				1850.7	1880	1909.3	
1.4	QPSK	1	0	18.66	18.70	18.59	19.5
1.4	QPSK	1	3	18.34	18.24	18.23	
1.4	QPSK	1	5	18.23	18.14	18.06	
1.4	QPSK	3	0	17.41	17.45	17.32	18.5
1.4	QPSK	3	1	17.32	17.41	17.23	
1.4	QPSK	3	3	17.25	17.33	17.12	
1.4	QPSK	6	0	17.15	17.21	17.08	18
1.4	16QAM	1	0	17.35	17.49	17.34	
1.4	16QAM	1	3	17.23	17.47	17.29	
1.4	16QAM	1	5	17.18	17.43	17.27	18
1.4	16QAM	3	0	17.36	17.38	17.40	
1.4	16QAM	3	1	17.30	17.32	17.33	
1.4	16QAM	3	3	17.21	17.19	17.28	18
1.4	16QAM	6	0	17.18	17.15	17.21	
1.4	64QAM	1	0	17.16	17.41	17.36	
1.4	64QAM	1	3	17.06	17.35	17.33	18
1.4	64QAM	1	5	17.01	17.24	17.20	
1.4	64QAM	3	0	17.13	17.16	17.07	
1.4	64QAM	3	1	17.10	17.13	16.99	17.5
1.4	64QAM	3	3	16.96	17.02	16.87	
1.4	64QAM	6	0	16.89	16.94	16.82	
1.4	256QAM	1	0	15.71	15.80	15.76	16.5
1.4	256QAM	1	3	15.69	15.74	15.70	
1.4	256QAM	1	5	15.72	15.66	15.60	
1.4	256QAM	3	0	15.30	15.37	15.34	16
1.4	256QAM	3	1	15.23	15.35	15.26	
1.4	256QAM	3	3	15.18	15.26	15.21	
1.4	256QAM	6	0	15.21	15.27	15.22	

5	QPSK	12	0	18.87	18.93	18.89	19.5
5	QPSK	12	7	18.89	18.86	18.84	
5	QPSK	12	13	18.81	18.80	18.77	
5	QPSK	25	0	18.74	18.76	18.74	19.5
5	16QAM	1	0	18.85	18.92	18.82	
5	16QAM	1	12	18.77	18.85	18.71	
5	16QAM	1	24	18.71	18.86	18.60	19.5
5	16QAM	12	0	18.71	18.77	18.80	
5	16QAM	12	7	18.69	18.70	18.71	
5	16QAM	12	13	18.64	18.60	18.67	19.5
5	16QAM	25	0	18.55	18.60	18.65	
5	64QAM	1	0	18.91	18.73	18.95	
5	64QAM	1	12	18.92	18.69	18.92	19.5
5	64QAM	1	24	18.84	18.68	18.88	
5	64QAM	12	0	18.82	18.50	18.51	
5	64QAM	12	7	18.47	18.45	18.41	19.5
5	64QAM	12	13	18.37	18.35	18.36	
5	64QAM	25	0	18.40	18.37	18.34	
5	256QAM	1	0	16.15	16.16	16.15	17.5
5	256QAM	1	12	16.09	16.14	16.06	
5	256QAM	1	24	16.08	16.08	16.05	
5	256QAM	12	0	15.64	15.67	15.58	17
5	256QAM	12	7	15.56	15.62	15.61	
5	256QAM	12	13	15.51	15.52	15.51	
5	256QAM	25	0	15.46	15.52	15.45	
Channel				19965	20175	20385	Tune-up limit (dBm)
Frequency (MHz)				1711.5	1732.5	1753.5	
3	QPSK	1	0	19.89	19.97	19.94	20.5
3	QPSK	1	8	19.82	19.87	19.83	
3	QPSK	1	14	19.82	19.76	19.71	
3	QPSK	8	0	18.83	18.88	18.85	19.5
3	QPSK	8	4	18.85	18.81	18.80	
3	QPSK	8	7	18.79	18.76	18.73	
3	QPSK	15	0	18.69	18.73	18.70	19.5
3	16QAM	1	0	18.81	18.87	18.80	
3	16QAM	1	8	18.74	18.81	18.66	
3	16QAM	1	14	18.69	18.83	18.58	19.5
3	16QAM	8	0	18.66	18.74	18.78	
3	16QAM	8	4	18.64	18.67	18.66	
3	16QAM	8	7	18.62	18.55	18.64	19.5
3	16QAM	15	0	18.51	18.55	18.62	
3	64QAM	1	0	18.87	18.70	18.92	
3	64QAM	1	8	18.90	18.67	18.88	19.5
3	64QAM	1	14	18.79	18.63	18.85	
3	64QAM	8	0	18.77	18.46	18.47	
3	64QAM	8	4	18.43	18.42	18.37	19.5
3	64QAM	8	7	18.34	18.31	18.31	
3	64QAM	15	0	18.36	18.33	18.29	
3	256QAM	1	0	16.12	16.12	16.10	17.5
3	256QAM	1	8	16.05	16.12	16.03	
3	256QAM	1	14	16.05	16.03	16.01	
3	256QAM	8	0	15.61	15.63	15.54	17
3	256QAM	8	4	15.54	15.58	15.58	
3	256QAM	8	7	15.48	15.49	15.48	
3	256QAM	15	0	15.43	15.49	15.42	
Channel				19957	20175	20393	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1732.5	1754.3	
1.4	QPSK	1	0	19.85	19.93	19.89	20.5
1.4	QPSK	1	3	19.77	19.83	19.80	
1.4	QPSK	1	5	19.79	19.73	19.68	
1.4	QPSK	3	0	18.79	18.85	18.81	19.5
1.4	QPSK	3	1	18.82	18.77	18.75	
1.4	QPSK	3	3	18.76	18.73	18.69	
1.4	QPSK	6	0	18.65	18.70	18.68	19.5
1.4	16QAM	1	0	18.76	18.83	18.76	
1.4	16QAM	1	3	18.70	18.78	18.62	
1.4	16QAM	1	5	18.64	18.81	18.53	19.5
1.4	16QAM	3	0	18.62	18.72	18.74	
1.4	16QAM	3	1	18.62	18.63	18.62	
1.4	16QAM	3	3	18.57	18.51	18.60	19.5
1.4	16QAM	6	0	18.47	18.51	18.57	
1.4	64QAM	1	0	18.83	18.67	18.88	
1.4	64QAM	1	3	18.87	18.63	18.84	19.5
1.4	64QAM	1	5	18.75	18.60	18.82	
1.4	64QAM	3	0	18.73	18.42	18.43	
1.4	64QAM	3	1	18.40	18.38	18.32	19.5
1.4	64QAM	3	3	18.32	18.27	18.29	
1.4	64QAM	6	0	18.32	18.29	18.24	
1.4	256QAM	1	0	16.10	16.07	16.06	17.5
1.4	256QAM	1	3	16.02	16.08	16.01	
1.4	256QAM	1	5	16.01	16.01	15.99	
1.4	256QAM	3	0	15.58	15.59	15.52	17.5
1.4	256QAM	3	1	15.51	15.54	15.53	
1.4	256QAM	3	3	15.43	15.44	15.44	
1.4	256QAM	6	0	15.40	15.45	15.38	17

Band 66

BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				132072	132322	132572	Tune-up limit (dBm)
Frequency (MHz)				1720	1745	1770	
20	QPSK	1	0	20.26	20.32	20.25	21
20	QPSK	1	49	20.07	20.15	20.05	
20	QPSK	1	99	19.99	20.08	19.99	
20	QPSK	50	0	19.21	19.31	19.18	
20	QPSK	50	24	19.10	19.21	19.14	20
20	QPSK	50	50	19.06	19.15	19.05	
20	QPSK	100	0	19.01	19.06	19.04	
20	16QAM	1	0	19.40	19.44	19.42	
20	16QAM	1	49	19.33	19.41	19.34	20
20	16QAM	1	99	19.24	19.35	19.24	
20	16QAM	50	0	19.21	19.23	19.21	
20	16QAM	50	24	19.18	19.22	19.17	
20	16QAM	50	50	19.10	19.14	19.08	20
20	16QAM	100	0	19.04	19.05	19.00	
20	64QAM	1	0	19.15	19.45	19.38	
20	64QAM	1	49	19.12	19.44	19.35	
20	64QAM	1	99	19.05	19.42	19.29	20
20	64QAM	50	0	19.23	19.27	19.31	
20	64QAM	50	24	19.21	19.22	19.28	
20	64QAM	50	50	19.16	19.16	19.25	
20	64QAM	100	0	19.06	19.14	19.21	17.5
20	256QAM	1	0	16.38	16.48	16.44	
20	256QAM	1	49	16.36	16.45	16.34	
20	256QAM	1	99	16.26	16.44	16.23	
20	256QAM	50	0	15.89	16.00	15.95	16.5
20	256QAM	50	24	15.87	15.96	15.88	
20	256QAM	50	50	15.84	15.86	15.86	
20	256QAM	100	0	15.80	15.77	15.82	
Channel				132047	132322	132597	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1745	1772.5	
15	QPSK	1	0	20.21	20.30	20.21	21
15	QPSK	1	37	20.03	20.11	20.00	
15	QPSK	1	74	19.95	20.06	19.95	
15	QPSK	36	0	19.19	19.28	19.14	
15	QPSK	36	20	19.08	19.17	19.10	20
15	QPSK	36	39	19.02	19.11	19.01	
15	QPSK	75	0	18.97	19.04	18.99	
15	16QAM	1	0	19.35	19.42	19.38	
15	16QAM	1	37	19.30	19.39	19.32	20
15	16QAM	1	74	19.20	19.31	19.21	
15	16QAM	36	0	19.19	19.21	19.19	
15	16QAM	36	20	19.14	19.19	19.14	
15	16QAM	36	39	19.06	19.11	19.05	20
15	16QAM	75	0	19.01	19.03	18.98	
15	64QAM	1	0	19.11	19.41	19.34	
15	64QAM	1	37	19.08	19.39	19.31	
15	64QAM	1	74	19.01	19.39	19.26	20
15	64QAM	36	0	19.19	19.22	19.28	
15	64QAM	36	20	19.16	19.18	19.25	
15	64QAM	36	39	19.13	19.13	19.21	
15	64QAM	75	0	19.02	19.10	19.19	17.5
15	256QAM	1	0	16.34	16.44	16.41	
15	256QAM	1	37	16.33	16.40	16.29	
15	256QAM	1	74	16.21	16.39	16.18	
15	256QAM	36	0	15.86	15.96	15.92	16.5
15	256QAM	36	20	15.83	15.92	15.85	
15	256QAM	36	39	15.79	15.81	15.83	
15	256QAM	75	0	15.76	15.74	15.77	
Channel				132022	132322	132622	Tune-up limit (dBm)
Frequency (MHz)				1715	1745	1775	
10	QPSK	1	0	20.16	20.27	20.16	21
10	QPSK	1	25	19.99	20.07	19.95	
10	QPSK	1	49	19.92	20.03	19.93	
10	QPSK	25	0	19.15	19.23	19.11	
10	QPSK	25	12	19.05	19.15	19.07	20
10	QPSK	25	25	18.98	19.08	18.97	
10	QPSK	50	0	18.93	19.01	18.95	
10	16QAM	1	0	19.31	19.40	19.35	
10	16QAM	1	25	19.26	19.34	19.27	20
10	16QAM	1	49	19.18	19.27	19.16	
10	16QAM	25	0	19.14	19.17	19.16	
10	16QAM	25	12	19.10	19.16	19.12	
10	16QAM	25	25	19.02	19.09	19.01	20
10	16QAM	50	0	18.99	18.99	18.94	
10	64QAM	1	0	19.06	19.38	19.29	
10	64QAM	1	25	19.05	19.36	19.29	
10	64QAM	1	49	18.97	19.37	19.22	20
10	64QAM	25	0	19.14	19.18	19.24	
10	64QAM	25	12	19.13	19.15	19.21	
10	64QAM	25	25	19.09	19.10	19.18	
10	64QAM	50	0	19.00	19.06	19.14	17.5
10	256QAM	1	0	16.31	16.40	16.37	
10	256QAM	1	25	16.30	16.36	16.26	
10	256QAM	1	49	16.18	16.37	16.14	
10	256QAM	25	0	15.83	15.92	15.89	16.5
10	256QAM	25	12	15.81	15.88	15.82	
10	256QAM	25	25	15.75	15.78	15.79	
10	256QAM	50	0	15.71	15.70	15.75	
Channel				131997	132322	132647	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1745	1777.5	
5	QPSK	1	0	20.11	20.23	20.14	21
5	QPSK	1	12	19.95	20.03	19.92	
5	QPSK	1	24	19.87	20.01	19.91	

5	QPSK	12	0	19.11	19.19	19.08	20
5	QPSK	12	7	19.01	19.11	19.03	
5	QPSK	12	13	18.94	19.04	18.93	
5	QPSK	25	0	18.89	18.98	18.90	20
5	16QAM	1	0	19.27	19.36	19.33	
5	16QAM	1	12	19.22	19.29	19.23	
5	16QAM	1	24	19.15	19.22	19.12	20
5	16QAM	12	0	19.12	19.12	19.14	
5	16QAM	12	7	19.06	19.14	19.07	
5	16QAM	12	13	18.97	19.06	18.98	20
5	16QAM	25	0	18.94	18.95	18.91	
5	64QAM	1	0	19.03	19.35	19.26	
5	64QAM	1	12	19.01	19.31	19.27	20
5	64QAM	1	24	18.92	19.33	19.18	
5	64QAM	12	0	19.10	19.15	19.22	
5	64QAM	12	7	19.09	19.12	19.18	20
5	64QAM	12	13	19.05	19.06	19.16	
5	64QAM	25	0	18.96	19.02	19.12	
5	256QAM	1	0	16.26	16.38	16.35	17.5
5	256QAM	1	12	16.27	16.32	16.22	
5	256QAM	1	24	16.15	16.34	16.12	
5	256QAM	12	0	15.79	15.89	15.85	16.5
5	256QAM	12	7	15.78	15.85	15.79	
5	256QAM	12	13	15.71	15.74	15.75	
5	256QAM	25	0	15.68	15.66	15.71	
Channel				131987	132322	132657	Tune-up limit (dBm)
Frequency (MHz)				1711.5	1745	1778.5	
3	QPSK	1	0	20.08	20.20	20.12	21
3	QPSK	1	8	19.91	20.01	19.88	
3	QPSK	1	14	19.84	19.96	19.86	
3	QPSK	8	0	19.07	19.15	19.05	20
3	QPSK	8	4	18.98	19.07	18.98	
3	QPSK	8	7	18.92	19.02	18.89	
3	QPSK	15	0	18.86	18.95	18.86	20
3	16QAM	1	0	19.23	19.32	19.30	
3	16QAM	1	8	19.20	19.25	19.20	
3	16QAM	1	14	19.12	19.20	19.09	20
3	16QAM	8	0	19.08	19.10	19.11	
3	16QAM	8	4	19.03	19.12	19.05	
3	16QAM	8	7	18.93	19.03	18.93	20
3	16QAM	15	0	18.91	18.91	18.87	
3	64QAM	1	0	18.99	19.32	19.21	
3	64QAM	1	8	18.98	19.28	19.24	20
3	64QAM	1	14	18.90	19.31	19.14	
3	64QAM	8	0	19.06	19.11	19.18	
3	64QAM	8	4	19.07	19.08	19.14	20
3	64QAM	8	7	19.00	19.02	19.12	
3	64QAM	15	0	18.94	18.98	19.09	
3	256QAM	1	0	16.22	16.35	16.31	17.5
3	256QAM	1	8	16.22	16.30	16.17	
3	256QAM	1	14	16.11	16.30	16.08	
3	256QAM	8	0	15.76	15.86	15.82	16.5
3	256QAM	8	4	15.74	15.82	15.76	
3	256QAM	8	7	15.68	15.70	15.73	
3	256QAM	15	0	15.65	15.61	15.66	
Channel				131979	132322	132685	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1745	1779.3	
1.4	QPSK	1	0	20.06	20.15	20.07	21
1.4	QPSK	1	3	19.86	19.97	19.86	
1.4	QPSK	1	5	19.81	19.92	19.82	
1.4	QPSK	3	0	19.03	19.13	19.01	
1.4	QPSK	3	1	18.94	19.02	18.95	
1.4	QPSK	3	3	18.89	18.97	18.84	
1.4	QPSK	6	0	18.81	18.92	18.83	20
1.4	16QAM	1	0	19.19	19.29	19.27	20
1.4	16QAM	1	3	19.16	19.22	19.18	
1.4	16QAM	1	5	19.09	19.18	19.05	
1.4	16QAM	3	0	19.03	19.07	19.09	
1.4	16QAM	3	1	19.00	19.09	19.03	
1.4	16QAM	3	3	18.91	19.00	18.88	
1.4	16QAM	6	0	18.88	18.89	18.84	20
1.4	64QAM	1	0	18.95	19.27	19.17	20
1.4	64QAM	1	3	18.94	19.24	19.20	
1.4	64QAM	1	5	18.86	19.29	19.11	
1.4	64QAM	3	0	19.04	19.07	19.14	
1.4	64QAM	3	1	19.03	19.05	19.11	
1.4	64QAM	3	3	18.95	18.97	19.07	
1.4	64QAM	6	0	18.90	18.95	19.05	20
1.4	256QAM	1	0	16.18	16.32	16.26	17.5
1.4	256QAM	1	3	16.19	16.25	16.14	
1.4	256QAM	1	5	16.07	16.26	16.04	
1.4	256QAM	3	0	15.74	15.82	15.78	
1.4	256QAM	3	1	15.69	15.79	15.72	
1.4	256QAM	3	3	15.65	15.67	15.70	
1.4	256QAM	6	0	15.62	15.59	15.62	16.5

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	23.11	23.17	23.14	24
20	QPSK	1	49	22.98	23.09	23.06	
20	QPSK	1	99	20.04	23.04	23.03	
20	QPSK	50	0	22.25	22.26	22.19	23
20	QPSK	50	24	22.09	22.18	22.00	
20	QPSK	50	50	22.04	22.13	22.12	
20	QPSK	100	0	21.91	21.98	22.02	
20	16QAM	1	0	22.11	22.17	22.05	23
20	16QAM	1	49	21.85	21.90	21.86	
20	16QAM	1	99	21.92	21.16	21.18	
20	16QAM	50	0	21.21	21.22	21.15	22
20	16QAM	50	24	21.15	21.16	21.14	
20	16QAM	50	50	21.22	21.11	21.01	
20	16QAM	100	0	21.14	21.15	21.32	
20	64QAM	1	0	21.19	21.17	21.15	22
20	64QAM	1	49	21.15	21.19	21.06	
20	64QAM	1	99	21.12	21.11	21.13	
20	64QAM	50	0	20.11	20.13	20.14	21
20	64QAM	50	24	20.15	20.02	20.06	
20	64QAM	50	50	20.02	20.07	20.10	
20	64QAM	100	0	20.11	20.14	20.14	
Channel				133197	133297	133397	Tune-up limit (dBm)
Frequency (MHz)				670.5	680.5	690.5	
15	QPSK	1	0	23.06	23.12	23.06	24
15	QPSK	1	37	23.01	23.04	23.01	
15	QPSK	1	74	23.04	23.09	22.98	
15	QPSK	36	0	22.20	22.21	22.14	23
15	QPSK	36	20	22.12	22.17	22.12	
15	QPSK	36	39	22.08	22.12	22.04	
15	QPSK	75	0	21.98	22.16	22.09	
15	16QAM	1	0	22.06	22.12	22.00	23
15	16QAM	1	37	21.80	21.85	21.91	
15	16QAM	1	74	22.87	22.08	22.00	
15	16QAM	36	0	21.26	21.17	21.10	22
15	16QAM	36	20	21.15	21.25	21.15	
15	16QAM	36	39	21.17	21.16	21.24	
15	16QAM	75	0	21.09	21.10	21.11	
15	64QAM	1	0	21.16	21.12	21.20	22
15	64QAM	1	37	21.10	21.15	21.12	
15	64QAM	1	74	21.17	21.06	21.19	
15	64QAM	36	0	20.26	20.07	20.20	21
15	64QAM	36	20	20.25	20.19	20.11	
15	64QAM	36	39	20.17	20.16	20.14	
15	64QAM	75	0	20.16	20.10	20.07	
Channel				133172	133272	133422	Tune-up limit (dBm)
Frequency (MHz)				668	678	693	
10	QPSK	1	0	23.01	23.07	22.95	24
10	QPSK	1	25	22.95	22.90	22.89	
10	QPSK	1	49	22.92	22.81	22.83	
10	QPSK	25	0	22.15	22.16	22.09	23
10	QPSK	25	12	22.10	22.18	22.13	
10	QPSK	25	25	22.07	22.07	22.04	
10	QPSK	50	0	22.01	21.95	21.98	
10	16QAM	1	0	22.01	22.07	21.95	23
10	16QAM	1	25	21.95	21.90	21.99	
10	16QAM	1	49	21.92	21.98	21.83	
10	16QAM	25	0	21.22	21.29	21.17	

10	16QAM	25	12	21.25	21.25	21.22	22
10	16QAM	25	25	21.12	21.11	21.21	
10	16QAM	50	0	21.14	21.17	21.14	
10	64QAM	1	0	21.21	22.27	21.25	22
10	64QAM	1	25	21.25	21.20	21.16	
10	64QAM	1	49	21.22	21.21	21.17	
10	64QAM	25	0	20.37	20.32	20.25	21
10	64QAM	25	12	20.24	20.25	20.16	
10	64QAM	25	25	20.22	20.20	20.20	
10	64QAM	50	0	20.14	20.14	20.15	
Channel				133147	133247	133447	Tune-up limit (dBm)
Frequency (MHz)				665.5	675.5	695.5	
5	QPSK	1	0	22.99	23.02	22.90	24
5	QPSK	1	12	22.95	22.95	22.91	
5	QPSK	1	24	22.87	22.86	22.84	
5	QPSK	12	0	22.10	22.11	22.04	23
5	QPSK	12	7	21.84	21.89	21.85	
5	QPSK	12	13	21.91	21.91	21.85	
5	QPSK	25	0	21.97	21.78	21.90	
5	16QAM	1	0	21.96	22.02	21.90	23
5	16QAM	1	12	21.70	21.75	21.71	
5	16QAM	1	24	21.57	21.56	21.58	
5	16QAM	12	0	21.37	21.27	21.20	22
5	16QAM	12	7	21.20	21.15	21.21	
5	16QAM	12	13	21.27	21.16	21.13	
5	16QAM	25	0	21.29	21.20	21.17	
5	64QAM	1	0	21.16	20.89	21.19	22
5	64QAM	1	12	21.15	21.08	21.11	
5	64QAM	1	24	21.07	21.11	21.14	
5	64QAM	12	0	20.36	20.26	20.26	21
5	64QAM	12	7	20.24	20.14	20.11	
5	64QAM	12	13	20.17	20.10	20.03	
5	64QAM	25	0	20.29	20.20	20.17	

LTE Band 48 (Reduced Power Level 1)

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	56150	56640	
Frequency (MHz)				3560	3609	3625	3641	3690	
20	QPSK	1	0	22.64	22.60	22.74	22.67	22.64	23.5
20	QPSK	1	49	22.46	22.48	22.54	22.49	22.41	
20	QPSK	1	99	22.43	22.39	22.33	22.51	22.52	
20	QPSK	50	0	21.53	21.54	21.64	21.59	21.52	22.5
20	QPSK	50	24	21.43	21.48	21.48	21.49	21.50	
20	QPSK	50	50	21.49	21.45	21.59	21.39	21.46	
20	QPSK	100	0	21.46	21.49	21.45	21.54	21.36	
20	16QAM	1	0	21.64	21.52	21.54	21.44	21.59	22.5
20	16QAM	1	49	21.51	21.39	21.39	21.59	21.50	
20	16QAM	1	99	21.53	21.54	21.43	21.40	21.42	
20	16QAM	50	0	21.48	21.52	21.46	21.33	21.23	22
20	16QAM	50	24	21.42	21.43	21.38	21.31	21.26	
20	16QAM	50	50	21.34	21.36	21.51	21.50	21.39	
20	16QAM	100	0	21.45	21.54	21.56	21.51	21.36	
20	64QAM	1	0	21.73	21.68	21.61	21.68	21.54	
20	64QAM	1	49	21.70	21.57	21.78	21.54	21.53	22
20	64QAM	1	99	21.63	21.83	21.72	21.63	21.51	
20	64QAM	50	0	20.67	20.79	20.95	20.83	20.77	21.5
20	64QAM	50	24	20.69	20.51	20.55	20.55	20.87	
20	64QAM	50	50	20.75	20.66	20.53	20.39	20.66	
20	64QAM	100	0	20.55	20.45	20.66	20.67	20.54	
20	256QAM	1	0	16.88	16.66	16.65	16.74	16.95	
20	256QAM	1	49	16.69	16.54	16.73	17.01	16.63	17.5
20	256QAM	1	99	16.59	16.88	16.75	16.84	16.75	
20	256QAM	50	0	16.54	16.44	16.54	16.69	16.54	
20	256QAM	50	24	16.48	16.53	16.45	16.35	16.44	17
20	256QAM	50	50	16.44	16.42	16.59	16.21	16.54	
20	256QAM	100	0	16.22	16.35	16.28	16.33	16.63	
Channel				55315	55820	55990	56160	56665	Tune-up limit (dBm)
Frequency (MHz)				3557.5	3608	3625	3642	3692.5	
15	QPSK	1	0	22.61	22.57	22.71	22.64	22.61	23.5
15	QPSK	1	37	22.43	22.45	22.51	22.46	22.38	
15	QPSK	1	74	22.40	22.36	22.30	22.48	22.49	
15	QPSK	36	0	21.50	21.51	21.61	21.56	21.49	22.5
15	QPSK	36	20	21.40	21.45	21.45	21.46	21.47	
15	QPSK	36	39	21.46	21.42	21.56	21.36	21.43	
15	QPSK	75	0	21.43	21.46	21.42	21.51	21.33	
15	16QAM	1	0	21.61	21.49	21.51	21.41	21.56	
15	16QAM	1	37	21.48	21.36	21.36	21.56	21.47	22.5
15	16QAM	1	74	21.50	21.51	21.40	21.37	21.39	
15	16QAM	36	0	21.45	21.49	21.43	21.30	21.20	22
15	16QAM	36	20	21.39	21.40	21.35	21.28	21.23	
15	16QAM	36	39	21.31	21.33	21.48	21.47	21.36	
15	16QAM	75	0	21.42	21.51	21.53	21.48	21.33	
15	64QAM	1	0	21.70	21.65	21.58	21.65	21.51	
15	64QAM	1	37	21.67	21.54	21.75	21.51	21.50	22
15	64QAM	1	74	21.60	21.80	21.69	21.60	21.48	
15	64QAM	36	0	20.64	20.76	20.92	20.80	20.74	21.5
15	64QAM	36	20	20.66	20.48	20.52	20.52	20.84	
15	64QAM	36	39	20.72	20.63	20.50	20.36	20.63	
15	64QAM	75	0	20.52	20.42	20.63	20.64	20.51	
15	256QAM	1	0	16.85	16.63	16.62	16.71	16.92	
15	256QAM	1	37	16.66	16.51	16.70	16.98	16.60	17.5
15	256QAM	1	74	16.56	16.85	16.72	16.81	16.72	
15	256QAM	36	0	16.51	16.41	16.51	16.66	16.51	
15	256QAM	36	20	16.45	16.50	16.42	16.32	16.41	17
15	256QAM	36	39	16.41	16.39	16.56	16.18	16.51	
15	256QAM	75	0	16.19	16.32	16.25	16.30	16.60	
Channel				55290	55815	55990	56165	56690	Tune-up limit (dBm)
Frequency (MHz)				3555	3607.5	3625	3642.5	3695	
10	QPSK	1	0	22.58	22.54	22.68	22.61	22.58	23.5
10	QPSK	1	25	22.40	22.42	22.48	22.43	22.35	
10	QPSK	1	49	22.37	22.33	22.27	22.45	22.46	
10	QPSK	25	0	21.47	21.48	21.58	21.53	21.46	22.5
10	QPSK	25	12	21.37	21.42	21.42	21.43	21.44	
10	QPSK	25	25	21.43	21.39	21.53	21.33	21.40	

10	16QAM	1	25	21.45	21.33	21.33	21.53	21.44	22.5
10	16QAM	1	49	21.47	21.48	21.37	21.34	21.36	
10	16QAM	25	0	21.42	21.46	21.40	21.27	21.17	22
10	16QAM	25	12	21.36	21.37	21.32	21.25	21.20	
10	16QAM	25	25	21.28	21.30	21.45	21.44	21.33	
10	16QAM	50	0	21.39	21.48	21.50	21.45	21.30	
10	64QAM	1	0	21.67	21.62	21.55	21.62	21.48	22
10	64QAM	1	25	21.64	21.51	21.72	21.48	21.47	
10	64QAM	1	49	21.57	21.77	21.66	21.57	21.45	
10	64QAM	25	0	20.61	20.73	20.89	20.77	20.71	21.5
10	64QAM	25	12	20.63	20.45	20.49	20.49	20.81	
10	64QAM	25	25	20.69	20.60	20.47	20.33	20.60	
10	64QAM	50	0	20.49	20.39	20.60	20.61	20.48	
10	256QAM	1	0	16.82	16.60	16.59	16.68	16.89	
10	256QAM	1	25	16.63	16.48	16.67	16.95	16.57	17.5
10	256QAM	1	49	16.53	16.82	16.69	16.78	16.69	
10	256QAM	25	0	16.48	16.38	16.48	16.63	16.48	
10	256QAM	25	12	16.42	16.47	16.39	16.29	16.38	17
10	256QAM	25	25	16.38	16.36	16.53	16.15	16.48	
10	256QAM	50	0	16.16	16.29	16.22	16.27	16.57	
Channel				55265	55810	55990	56170	56175	Tune-up limit (dBm)
Frequency (MHz)				3552.5	3607	3625	3643	3697.5	
5	QPSK	1	0	22.55	22.51	22.65	22.58	22.55	23.5
5	QPSK	1	12	22.37	22.39	22.45	22.40	22.32	
5	QPSK	1	24	22.34	22.30	22.24	22.42	22.43	
5	QPSK	12	0	21.44	21.45	21.55	21.50	21.43	22.5
5	QPSK	12	7	21.34	21.39	21.39	21.40	21.41	
5	QPSK	12	13	21.40	21.36	21.50	21.30	21.37	
5	QPSK	25	0	21.37	21.40	21.36	21.45	21.27	
5	16QAM	1	0	21.55	21.43	21.45	21.35	21.50	22.5
5	16QAM	1	12	21.42	21.30	21.30	21.50	21.41	
5	16QAM	1	24	21.44	21.45	21.34	21.31	21.33	
5	16QAM	12	0	21.39	21.43	21.37	21.24	21.14	22
5	16QAM	12	7	21.33	21.34	21.29	21.22	21.17	
5	16QAM	12	13	21.25	21.27	21.42	21.41	21.30	
5	16QAM	25	0	21.36	21.45	21.47	21.42	21.27	
5	64QAM	1	0	21.64	21.59	21.52	21.59	21.45	
5	64QAM	1	12	21.61	21.48	21.69	21.45	21.44	22
5	64QAM	1	24	21.54	21.74	21.63	21.54	21.42	
5	64QAM	12	0	20.58	20.70	20.86	20.74	20.68	21.5
5	64QAM	12	7	20.60	20.42	20.46	20.46	20.78	
5	64QAM	12	13	20.66	20.57	20.44	20.30	20.57	
5	64QAM	25	0	20.46	20.36	20.57	20.58	20.45	
5	256QAM	1	0	16.79	16.57	16.56	16.65	16.86	17.5
5	256QAM	1	12	16.60	16.45	16.64	16.92	16.54	
5	256QAM	1	24	16.50	16.79	16.66	16.75	16.66	
5	256QAM	12	0	16.45	16.35	16.45	16.60	16.45	17
5	256QAM	12	7	16.39	16.44	16.36	16.26	16.35	
5	256QAM	12	13	16.35	16.33	16.50	16.12	16.45	
5	256QAM	25	0	16.13	16.26	16.19	16.24	16.54	

n2 (Reduce Power Level 1)

BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				372000	376000	380000.00	
Frequency (MHz)				1860	1880	1900.00	
20	DFT-s-OFDM PI/2 BPSK	1	1	19.84	19.75	19.57	20.50
20		1	53	19.88	19.63	19.01	
20		1	104	19.91	19.48	19.56	
20		50	1	20.02	19.81	19.03	20.00
20		50	25	19.98	19.78	19.98	
20		50	50	19.96	19.98	20.08	
20		100	0	19.48	19.56	20.06	
20	DFT-s-OFDM QPSK	1	1	20.24	20.31	20.28	21.00
20		1	53	19.99	20.07	19.49	
20		1	104	19.94	19.95	19.67	
20		50	1	19.80	19.88	19.77	20.50
20		50	25	19.79	19.57	19.72	
20		50	50	19.54	19.77	19.63	
20		100	0	19.41	19.59	19.55	
20	DFT-s-OFDM 16QAM	1	1	17.13	17.29	17.96	18.50
20	DFT-s-OFDM 64QAM	1	1	16.36	16.38	16.98	17.50
20	DFT-s-OFDM 256QAM	1	1	15.32	16.19	15.97	16.50
Channel				3715000	376000	380500.00	Tune-up limit (dBm)
Frequency (MHz)				1857.5	1880	1902.50	
15	DFT-s-OFDM QPSK	1	1	19.81	19.83	19.89	20.50
Channel				371000	376000	381000.00	Tune-up limit (dBm)
Frequency (MHz)				1855	1880	1905.00	
10	DFT-s-OFDM QPSK	1	1	20.01	19.86	20.02	20.50
Channel				370500	376000	381500.00	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1880	1907.50	
5	DFT-s-OFDM QPSK	1	1	20.06	19.83	20.02	20.50
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				372000	376000	380000.00	
Frequency (MHz)				1860	1880	1767.50	
20	CP-OFDM QPSK	1	1	19.41	19.22	19.43	20.00
20	CP-OFDM 16QAM	1	1	19.24	18.99	19.13	19.50
20	CP-OFDM 64QAM	1	1	17.29	16.82	17.15	18.00
20	CP-OFDM 256QAM	1	1	14.31	14.09	14.26	15.00

n66 (Reduce Power Level 1)

BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				344000	349000	354000.00	
Frequency (MHz)				1720	1745	1770.00	
20	DFT-s-OFDM PI/2 BPSK	1	1	19.99	20.04	20.17	21.00
20		1	53	19.96	20.16	20.11	
20		1	104	20.06	20.17	20.26	
20		50	1	19.70	19.72	19.76	20.50
20	DFT-s-OFDM QPSK	50	25	19.75	19.75	19.71	
20		50	50	18.83	20.22	19.72	
20		100	0	19.71	19.70	19.77	
20	DFT-s-OFDM 16QAM	1	1	20.20	20.38	20.28	21.00
20		1	53	20.15	20.20	20.22	
20		1	104	20.02	20.11	20.14	
20		50	1	19.71	19.74	19.70	20.50
20	DFT-s-OFDM 64QAM	50	25	19.54	19.66	19.63	
20		50	50	19.58	20.26	19.63	
20		100	0	19.46	19.58	19.44	
20	DFT-s-OFDM 256QAM	1	1	20.22	20.31	20.36	21.00
20	DFT-s-OFDM 64QAM	1	1	18.37	18.55	18.57	19.00
20	DFT-s-OFDM 256QAM	1	1	19.68	16.57	16.61	17.00
Channel				343500	349000	354500.00	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1745	1772.50	
15	DFT-s-OFDM QPSK	1	1	20.03	20.13	20.08	21.00
Channel				343000	349000	355000.00	Tune-up limit (dBm)
Frequency (MHz)				1715	1745	1775.00	
10	DFT-s-OFDM QPSK	1	1	20.19	20.20	20.12	21.00
Channel				3425000	349000	355500.00	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1745	1777.50	
5	DFT-s-OFDM QPSK	1	1	20.08	20.15	20.15	21.00
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				344000	349000	354000.00	
Frequency (MHz)				1720	1745	1767.50	
20	CP-OFDM QPSK	1	1	19.59	19.74	19.74	20.50
20	CP-OFDM 16QAM	1	1	19.25	19.38	19.45	20.00
20	CP-OFDM 64QAM	1	1	17.41	17.49	17.53	18.00
20	CP-OFDM 256QAM	1	1	14.46	14.76	14.80	15.50

Reduced Power Level 1

2.4GHz WLAN ANT 5

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Power Setting	Duty Cycle %
2.4GHz WLAN ANT 5	802.11b 1Mbps	CH 1	2412	16.01	16.5	16	100.00
		CH 6	2437	14.28	15.0	16	
		CH 11	2462	14.35	15.0	16	
	802.11g 6Mbps	CH 1	2412	15.97	16.5	16	98.21
		CH 6	2437	14.66	15.0	16	
		CH 11	2462	14.21	15.0	16	
	802.11n-HT20 MCS0	CH 1	2412	14.07	14.5	16	98.59
		CH 6	2437	14.05	14.5	16	
		CH 11	2462	13.97	14.5	16	
	802.11n-HT40 MCS0	CH 3	2422	14.02	14.50	16	94.20
		CH 6	2437	13.98	14.50	16	
		CH 9	2452	13.94	14.50	16	

2.4GHz WLAN ANT 6

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Power Setting	Duty Cycle %
2.4GHz WLAN ANT 6	802.11b 1Mbps	CH 1	2412	14.14	15.0	14	100.00
		CH 6	2437	14.67	15.0	14	
		CH 11	2462	14.05	14.5	14	
	802.11g 6Mbps	CH 1	2412	13.95	14.5	14	98.21
		CH 6	2437	14.21	14.5	14	
		CH 11	2462	14.23	14.5	14	
	802.11n-HT20 MCS0	CH 1	2412	14.11	14.5	14	98.59
		CH 6	2437	14.21	14.5	14	
		CH 11	2462	13.69	14.0	14	
	802.11n-HT40 MCS0	CH 3	2422	13.66	14.0	14	94.20
		CH 6	2437	13.67	14.0	14	
		CH 9	2452	13.71	14.0	14	

5GHz WLAN ANT 5

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Power Setting	Duty Cycle %
5.2GHz WLAN ANT 5	802.11a 6Mbps	36	5180	10.68	11.0	14	98.03
		44	5220	10.31	11.0	14	
		48	5240	10.16	11.0	14	
	802.11n-HT20 MCS0	CH 36	5180	10.23	11.0	14	98.28
		CH 44	5220	9.79	10.5	14	
		CH 48	5240	9.55	10.0	14	
	802.11n-HT40 MCS0	CH 38	5190	13.24	14.0	14	96.68
		CH 46	5230	12.63	13.0	14	
		CH 36	5180	12.36	13.0	14	
	802.11ac-VHT20 MCS0	CH 44	5220	11.89	12.5	14	98.14
		CH 48	5240	11.84	12.5	14	
		CH 38	5190	12.23	13.0	14	
	802.11ac-VHT40 MCS0	CH 46	5230	11.89	12.5	14	96.41
		CH 36	5180	12.36	13.0	14	
	802.11ac-VHT80 MCS0	CH 42	5210	11.86	12.5	14	93.54
		CH 48	5240	11.84	12.5	14	

5.2GHz WLAN ANT 6

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Power Setting	Duty Cycle %
5.2GHz WLAN ANT 6	802.11a 6Mbps	36	5180	11.54	12.0	14.5	98.03
		44	5220	10.98	11.5	14.5	
		48	5240	10.70	11.0	14.5	
	802.11n-HT20 MCS0	CH 36	5180	10.50	11.0	14.5	98.28
		CH 44	5220	9.88	10.5	14.5	
		CH 48	5240	9.72	10.5	14.5	
	802.11n-HT40 MCS0	CH 38	5190	13.18	14.0	14.5	96.68
		CH 46	5230	12.36	13.0	14.5	
	802.11ac-VHT20 MCS0	CH 36	5180	12.28	13.0	14.5	98.14
		CH 44	5220	11.81	12.5	14.5	
		CH 48	5240	11.65	12.5	14.5	
	802.11ac-VHT40 MCS0	CH 38	5190	12.56	13.0	14.5	96.41
		CH 46	5230	11.93	12.5	14.5	
	802.11ac-VHT80 MCS0	CH 42	5210	12.34	12.5	14.5	93.54
		CH 48	5240	11.65	12.5	14.5	

5GHz WLAN ANT 5

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Power Setting	Duty Cycle %
5.3GHz WLAN ANT 5	802.11a 6Mbps	CH 52	5260	10.19	11.0	14	98.03
		CH 60	5300	10.62	11.0	14	
		CH 64	5320	10.85	11.5	14	
	802.11n-HT20 MCS0	CH 52	5260	9.59	10.0	14	98.28
		CH 60	5300	10.06	10.5	14	
		CH 64	5320	10.31	11.0	14	
	802.11n-HT40 MCS0	CH 54	5270	12.31	13.0	14	96.68
		CH 62	5310	12.63	13.0	14	
	802.11ac-VHT20 MCS0	CH 52	5260	11.62	12.5	14	98.14
		CH 60	5300	11.93	12.5	14	
		CH 64	5320	12.34	13.0	14	
	802.11ac-VHT40 MCS0	CH 54	5270	12.07	12.5	14	96.41
		CH 62	5310	12.62	13.0	14	
	802.11ac-VHT80 MCS0	CH 58	5290	12.04	12.5	14	93.54
		CH 64	5320	12.34	13.0	14	

5.3GHz WLAN ANT 6

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Power Setting	Duty Cycle %
5.3GHz WLAN ANT 6	802.11a 6Mbps	CH 52	5260	10.83	11.5	14.5	98.03
		CH 60	5300	11.09	11.5	14.5	
		CH 64	5320	11.46	12.0	14.5	
	802.11n-HT20 MCS0	CH 52	5260	9.88	10.5	14.5	98.28
		CH 60	5300	10.13	10.5	14.5	
		CH 64	5320	10.50	11.0	14.5	
	802.11n-HT40 MCS0	CH 54	5270	12.25	13.0	14.5	96.68
		CH 62	5310	12.84	13.5	14.5	
	802.11ac-VHT20 MCS0	CH 52	5260	11.86	12.5	14.5	98.14
		CH 60	5300	11.67	12.0	14.5	
		CH 64	5320	12.08	12.5	14.5	
	802.11ac-VHT40 MCS0	CH 54	5270	12.02	12.5	14.5	96.41
		CH 62	5310	12.44	13.0	14.5	
	802.11ac-VHT80 MCS0	CH 58	5290	11.84	12.5	14.5	93.54
		CH 64	5320	12.08	12.5	14.5	

5GHz WLAN ANT 5

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Power Setting	Duty Cycle %
5.5GHz WLAN ANT 5	802.11a 6Mbps	CH 100	5500	10.11	12.0	13.5	98.03
		CH 120	5600	9.28	10.0	13.5	
		CH 144	5720	9.49	10.0	13.5	
	802.11n-HT20 MCS0	CH 100	5500	12.13	13.0	13.5	98.28
		CH 120	5600	11.22	12.0	13.5	
		CH 144	5720	11.65	12.0	13.5	
	802.11n-HT40 MCS0	CH 102	5510	12.76	13.0	13.5	96.68
		CH 126	5630	11.66	12.0	13.5	
		CH 142	5710	11.99	12.5	13.5	
	802.11ac-VHT20 MCS0	CH 100	5500	11.82	12.5	13.5	98.14
		CH 120	5600	11.08	11.5	13.5	
		CH 144	5720	11.13	11.5	13.5	
	802.11ac-VHT40 MCS0	CH 102	5510	12.12	13.0	13.5	96.41
		CH 126	5630	11.41	12.0	13.5	
		CH 142	5710	11.47	12.0	13.5	
	802.11ac-VHT80 MCS0	CH 106	5530	11.90	12.5	13.5	93.54
		CH 138	5690	11.62	12.0	13.5	

5.5 WLAN ANT 6

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Power Setting	Duty Cycle %
5.5GHz WLAN ANT 6	802.11a 6Mbps	CH 100	5500	9.68	10.0	15	98.03
		CH 116	5580	9.55	10.0	15	
		CH 144	5720	9.28	10.0	15	
	802.11n-HT20 MCS0	CH 100	5500	12.65	13.0	15	98.28
		CH 116	5580	12.10	13.0	15	
		CH 144	5720	11.50	12.0	15	
	802.11n-HT40 MCS0	CH 102	5510	12.25	12.5	15	96.68
		CH 126	5630	12.07	12.5	15	
		CH 142	5710	12.08	12.5	15	
	802.11ac-VHT20 MCS0	CH 100	5500	12.08	12.5	15	98.14
		CH 116	5580	11.47	12.0	15	
		CH 144	5720	10.94	11.5	15	
	802.11ac-VHT40 MCS0	CH 102	5510	12.17	12.5	15	96.41
		CH 126	5630	11.55	12.0	15	
		CH 142	5710	11.79	12.5	15	
	802.11ac-VHT80 MCS0	CH 106	5530	12.67	13.0	15	93.54
		CH 138	5690	12.05	12.5	15	

5GHz WLAN ANT 5

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Power Setting	Duty Cycle %
5.8GHz WLAN ANT 5	802.11a MCS0	CH 149	5745	9.45	10.0	13.5	98.03
		CH 157	5785	9.96	10.5	13.5	
		CH 165	5825	10.13	10.5	13.5	
	802.11n-HT20 MCS0	CH 149	5745	11.63	12.0	13.5	98.28
		CH 157	5785	12.02	12.5	13.5	
		CH 165	5825	12.16	12.5	13.5	
	802.11n-HT40 MCS0	CH 151	5755	11.93	12.5	13.5	96.68
		CH 159	5795	12.01	12.5	13.5	
	802.11ac-VHT20 MCS0	CH 149	5745	11.16	12.0	13.5	98.14
		CH 157	5785	11.63	12.0	13.5	
		CH 165	5825	11.89	12.5	13.5	
	802.11ac-VHT40 MCS0	CH 151	5755	11.50	12.0	13.5	96.41
CH 159		5795	12.02	12.5	13.5		
802.11ac-VHT80 MCS0	CH 155	5775	11.50	12.0	13.5	93.54	

Reduced Power Level 2

Band		WCDMA II			Tune-up Limit (dBm)	WCDMA IV			Tune-up Limit (dBm)
TX Channel		9262	9400	9538		1312	1413	1513	
Rx Channel		9662	9800	9938		1537	1638	1738	
Frequency (MHz)		1852.4	1880	1907.6		1712.4	1732.6	1752.6	
3GPP Rel 99	RMC 12.2Kbps	12.57	12.65	12.52	13.00	13.07	13.29	13.18	14.00
3GPP Rel 6	HSDPA Subtest-1	11.62	11.70	11.68	12.50	12.33	12.35	12.33	13.00
3GPP Rel 6	HSDPA Subtest-2	11.74	11.96	11.78	12.50	12.40	12.46	12.52	13.00
3GPP Rel 6	HSDPA Subtest-3	11.10	11.22	11.16	12.00	11.86	11.87	11.84	12.50
3GPP Rel 6	HSDPA Subtest-4	11.04	11.23	11.13	12.00	11.87	11.90	11.83	12.50
3GPP Rel 6	DC-HSDPA Subtest-1	11.83	11.75	11.77	12.50	12.34	12.42	12.31	13.00
3GPP Rel 8	DC-HSDPA Subtest-2	11.81	11.75	11.81	12.50	12.34	12.40	12.38	13.00
3GPP Rel 8	DC-HSDPA Subtest-3	11.21	11.21	11.25	12.00	11.81	11.88	11.87	12.50
3GPP Rel 8	DC-HSDPA Subtest-4	11.18	11.27	11.30	12.00	11.78	11.88	11.89	12.50
3GPP Rel 6	HSUPA Subtest-1	11.73	11.81	11.69	12.50	12.35	12.53	12.32	13.00
3GPP Rel 6	HSUPA Subtest-2	11.13	11.58	11.17	12.00	11.83	12.08	11.89	12.50
3GPP Rel 6	HSUPA Subtest-3	11.62	11.75	11.63	12.00	12.31	12.38	12.33	13.00
3GPP Rel 6	HSUPA Subtest-4	11.60	11.74	11.65	12.00	12.35	12.41	12.36	13.00
3GPP Rel 6	HSUPA Subtest-5	11.56	11.75	11.68	12.00	12.38	12.51	12.32	13.00
3GPP Rel 7	HSPA+ (16QAM) Subtest-1	11.64	11.68	11.64	12.00	12.35	12.40	12.33	13.00
Attenuator			Cable Loss	0.8			Cable Loss	0.8	
Mode			Max.	12.65			Max.	13.29	

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)				1860	1880	1900	
20	QPSK	1	0	15.27	15.51	15.41	16
20	QPSK	1	49	15.10	15.00	14.99	
20	QPSK	1	99	14.99	14.90	14.82	
20	QPSK	50	0	14.17	14.21	14.08	
20	QPSK	50	24	14.08	14.17	13.99	15
20	QPSK	50	50	14.01	14.09	13.88	
20	QPSK	100	0	13.91	13.97	13.84	
20	16QAM	1	0	14.11	14.25	14.10	
20	16QAM	1	49	13.99	14.23	14.05	15
20	16QAM	1	99	13.94	14.19	14.03	
20	16QAM	50	0	14.12	14.14	14.16	
20	16QAM	50	24	14.06	14.08	14.09	
20	16QAM	50	50	13.97	13.95	14.04	14.5
20	16QAM	100	0	13.94	13.91	13.97	
20	64QAM	1	0	13.92	14.17	14.12	
20	64QAM	1	49	13.82	14.11	14.09	
20	64QAM	1	99	13.77	14.00	13.96	14.5
20	64QAM	50	0	13.89	13.92	13.83	
20	64QAM	50	24	13.86	13.89	13.75	
20	64QAM	50	50	13.72	13.78	13.63	
20	64QAM	100	0	13.65	13.70	13.58	10.5
20	256QAM	1	0	9.87	9.96	9.92	
20	256QAM	1	49	9.85	9.90	9.86	
20	256QAM	1	99	9.88	9.82	9.76	
20	256QAM	50	0	9.46	9.53	9.50	10
20	256QAM	50	24	9.39	9.51	9.42	
20	256QAM	50	50	9.34	9.42	9.37	
20	256QAM	100	0	9.37	9.43	9.38	
Channel				18975	18900	19125	Tune-up limit (dBm)
Frequency (MHz)				1857.5	1880	1902.5	
15	QPSK	1	0	15.06	15.10	14.99	16
15	QPSK	1	37	14.99	14.89	14.88	
15	QPSK	1	74	14.88	14.79	14.71	
15	QPSK	36	0	14.06	14.10	13.97	
15	QPSK	36	20	13.97	14.06	13.88	15
15	QPSK	36	39	13.90	13.98	13.77	
15	QPSK	75	0	13.80	13.86	13.73	
15	16QAM	1	0	14.00	14.14	13.99	
15	16QAM	1	37	13.88	14.12	13.94	15
15	16QAM	1	74	13.83	14.08	13.92	
15	16QAM	36	0	14.01	14.03	14.05	
15	16QAM	36	20	13.95	13.97	13.98	
15	16QAM	36	39	13.86	13.84	13.93	14.5
15	16QAM	75	0	13.83	13.80	13.86	
15	64QAM	1	0	13.81	14.06	14.01	
15	64QAM	1	37	13.71	14.00	13.98	
15	64QAM	1	74	13.66	13.89	13.85	14.5
15	64QAM	36	0	13.78	13.81	13.72	
15	64QAM	36	20	13.75	13.78	13.64	
15	64QAM	36	39	13.61	13.67	13.52	
15	64QAM	75	0	13.54	13.59	13.47	10.5
15	256QAM	1	0	9.76	9.85	9.81	
15	256QAM	1	37	9.74	9.79	9.75	
15	256QAM	1	74	9.77	9.71	9.65	
15	256QAM	36	0	9.35	9.42	9.39	10
15	256QAM	36	20	9.28	9.40	9.31	
15	256QAM	36	39	9.23	9.31	9.26	
15	256QAM	75	0	9.26	9.32	9.27	
Channel				18650	18900	19150	Tune-up limit (dBm)
Frequency (MHz)				1855	1880	1905	
10	QPSK	1	0	14.96	15.00	14.89	24
10	QPSK	1	25	14.89	14.79	14.78	
10	QPSK	1	49	14.78	14.69	14.61	
10	QPSK	25	0	13.96	14.00	13.87	
10	QPSK	25	12	13.87	13.96	13.78	23
10	QPSK	25	25	13.80	13.88	13.67	
10	QPSK	50	0	13.70	13.76	13.63	
10	16QAM	1	0	13.90	14.04	13.89	
10	16QAM	1	25	13.78	14.02	13.84	23
10	16QAM	1	49	13.73	13.98	13.82	
10	16QAM	25	0	13.91	13.93	13.95	
10	16QAM	25	12	13.85	13.87	13.88	
10	16QAM	25	25	13.76	13.74	13.83	23
10	16QAM	50	0	13.73	13.70	13.76	
10	64QAM	1	0	13.71	13.96	13.91	
10	64QAM	1	25	13.61	13.90	13.88	
10	64QAM	1	49	13.56	13.79	13.75	23
10	64QAM	25	0	13.68	13.71	13.62	
10	64QAM	25	12	13.65	13.68	13.54	
10	64QAM	25	25	13.51	13.57	13.42	
10	64QAM	50	0	13.44	13.49	13.37	19
10	256QAM	1	0	9.66	9.75	9.71	
10	256QAM	1	25	9.64	9.69	9.65	
10	256QAM	1	49	9.67	9.61	9.55	
10	256QAM	25	0	9.25	9.32	9.29	18.5
10	256QAM	25	12	9.18	9.30	9.21	
10	256QAM	25	25	9.13	9.21	9.16	
10	256QAM	50	0	9.16	9.22	9.17	
Channel				18625	18900	19175	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1880	1907.5	
5	QPSK	1	0	14.83	14.87	14.76	15.5
5	QPSK	1	12	14.76	14.66	14.65	
5	QPSK	1	24	14.65	14.56	14.48	

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	14.57	14.64	14.59	15
20	QPSK	1	49	14.51	14.54	14.52	
20	QPSK	1	99	14.47	14.46	14.42	
20	QPSK	50	0	13.53	13.58	13.54	
20	QPSK	50	24	13.52	13.50	13.51	14
20	QPSK	50	50	13.47	13.44	13.41	
20	QPSK	100	0	13.39	13.41	13.37	
20	16QAM	1	0	13.50	13.55	13.46	
20	16QAM	1	49	13.40	13.54	13.37	14
20	16QAM	1	99	13.36	13.52	13.27	
20	16QAM	50	0	13.36	13.41	13.45	
20	16QAM	50	24	13.32	13.32	13.36	
20	16QAM	50	50	13.28	13.26	13.32	14
20	16QAM	100	0	13.22	13.24	13.29	
20	64QAM	1	0	13.57	13.38	13.59	
20	64QAM	1	49	13.55	13.37	13.57	
20	64QAM	1	99	13.49	13.33	13.53	13.5
20	64QAM	50	0	13.46	13.13	13.16	
20	64QAM	50	24	13.08	13.11	13.08	
20	64QAM	50	50	13.02	13.03	12.99	
20	64QAM	100	0	13.01	13.00	12.98	10
20	256QAM	1	0	9.28	9.33	9.29	
20	256QAM	1	49	9.25	9.27	9.20	
20	256QAM	1	99	9.23	9.23	9.18	
20	256QAM	50	0	8.80	8.83	8.74	9.5
20	256QAM	50	24	8.72	8.74	8.73	
20	256QAM	50	50	8.66	8.66	8.66	
20	256QAM	100	0	8.58	8.65	8.60	
Channel				20025	20175	20325	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1732.5	1747.5	
15	QPSK	1	0	14.46	14.53	14.48	15
15	QPSK	1	37	14.40	14.43	14.41	
15	QPSK	1	74	14.36	14.35	14.31	
15	QPSK	36	0	13.42	13.47	13.43	
15	QPSK	36	20	13.41	13.39	13.40	14
15	QPSK	36	39	13.36	13.33	13.30	
15	QPSK	75	0	13.28	13.30	13.26	
15	16QAM	1	0	13.39	13.44	13.35	
15	16QAM	1	37	13.29	13.43	13.26	14
15	16QAM	1	74	13.25	13.41	13.16	
15	16QAM	36	0	13.25	13.30	13.34	
15	16QAM	36	20	13.21	13.21	13.25	
15	16QAM	36	39	13.17	13.15	13.21	14
15	16QAM	75	0	13.11	13.13	13.18	
15	64QAM	1	0	13.46	13.27	13.48	
15	64QAM	1	37	13.44	13.26	13.46	
15	64QAM	1	74	13.38	13.22	13.42	13.5
15	64QAM	36	0	13.35	13.02	13.05	
15	64QAM	36	20	12.97	13.00	12.97	
15	64QAM	36	39	12.91	12.92	12.88	
15	64QAM	75	0	12.90	12.89	12.87	10
15	256QAM	1	0	9.17	9.22	9.18	
15	256QAM	1	37	9.14	9.16	9.09	
15	256QAM	1	74	9.12	9.12	9.07	
15	256QAM	36	0	8.69	8.72	8.63	9.5
15	256QAM	36	20	8.61	8.63	8.62	
15	256QAM	36	39	8.55	8.55	8.55	
15	256QAM	75	0	8.47	8.54	8.49	
Channel				20000	20175	20350	Tune-up limit (dBm)
Frequency (MHz)				1715	1732.5	1750	
10	QPSK	1	0	14.33	14.40	14.35	15
10	QPSK	1	25	14.27	14.30	14.28	
10	QPSK	1	49	14.23	14.22	14.18	
10	QPSK	25	0	13.29	13.34	13.30	
10	QPSK	25	12	13.28	13.26	13.27	14
10	QPSK	25	25	13.23	13.20	13.17	
10	QPSK	50	0	13.15	13.17	13.13	
10	16QAM	1	0	13.26	13.31	13.22	
10	16QAM	1	25	13.16	13.30	13.13	14
10	16QAM	1	49	13.12	13.28	13.03	
10	16QAM	25	0	13.12	13.17	13.21	
10	16QAM	25	12	13.08	13.08	13.12	
10	16QAM	25	25	13.04	13.02	13.08	14
10	16QAM	50	0	12.98	13.00	13.05	
10	64QAM	1	0	13.33	13.14	13.35	
10	64QAM	1	25	13.31	13.13	13.33	
10	64QAM	1	49	13.25	13.09	13.29	13.5
10	64QAM	25	0	13.22	12.89	12.92	
10	64QAM	25	12	12.84	12.87	12.84	
10	64QAM	25	25	12.78	12.79	12.75	
10	64QAM	50	0	12.77	12.76	12.74	9.5
10	256QAM	1	0	9.04	9.09	9.05	
10	256QAM	1	25	9.01	9.03	8.96	
10	256QAM	1	49	8.99	8.99	8.94	
10	256QAM	25	0	8.56	8.59	8.50	9
10	256QAM	25	12	8.48	8.50	8.49	
10	256QAM	25	25	8.42	8.42	8.42	
10	256QAM	50	0	8.34	8.41	8.36	
Channel				19975	20175	20375	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1732.5	1752.5	
5	QPSK	1	0	14.22	14.29	14.24	15
5	QPSK	1	12	14.16	14.19	14.17	
5	QPSK	1	24	14.12	14.11	14.07	

5	QPSK	12	0	13.83	13.87	13.74	14.5
5	QPSK	12	7	13.74	13.83	13.65	
5	QPSK	12	13	13.67	13.75	13.54	
5	QPSK	25	0	13.57	13.63	13.50	14.5
5	16QAM	1	0	13.77	13.91	13.76	
5	16QAM	1	12	13.65	13.89	13.71	
5	16QAM	1	24	13.60	13.85	13.69	14.5
5	16QAM	12	0	13.78	13.80	13.82	
5	16QAM	12	7	13.72	13.74	13.75	
5	16QAM	12	13	13.63	13.61	13.70	14.5
5	16QAM	25	0	13.60	13.57	13.63	
5	64QAM	1	0	13.58	13.63	13.78	
5	64QAM	1	12	13.48	13.77	13.75	14.5
5	64QAM	1	24	13.43	13.66	13.62	
5	64QAM	12	0	13.55	13.58	13.49	
5	64QAM	12	7	13.52	13.55	13.41	14
5	64QAM	12	13	13.38	13.44	13.29	
5	64QAM	25	0	13.31	13.36	13.24	
5	256QAM	1	0	9.53	9.62	9.58	10
5	256QAM	1	12	9.51	9.56	9.52	
5	256QAM	1	24	9.54	9.48	9.42	
5	256QAM	12	0	9.12	9.19	9.16	9.5
5	256QAM	12	7	9.05	9.17	9.08	
5	256QAM	12	13	9.00	9.08	9.03	
5	256QAM	25	0	9.03	9.09	9.04	
Channel				18615	18900	19165	Tune-up limit (dBm)
Frequency (MHz)				1851.5	1880	1908.5	
3	QPSK	1	0	14.72	14.76	14.65	15.5
3	QPSK	1	8	14.65	14.55	14.54	
3	QPSK	1	14	14.54	14.45	14.37	
3	QPSK	8	0	13.72	13.76	13.63	14.5
3	QPSK	8	4	13.63	13.72	13.54	
3	QPSK	8	7	13.56	13.64	13.43	
3	QPSK	15	0	13.46	13.52	13.39	14.5
3	16QAM	1	0	13.66	13.80	13.65	
3	16QAM	1	8	13.54	13.78	13.60	
3	16QAM	1	14	13.49	13.74	13.58	14.5
3	16QAM	8	0	13.67	13.69	13.71	
3	16QAM	8	4	13.61	13.63	13.64	
3	16QAM	8	7	13.52	13.50	13.59	14.5
3	16QAM	15	0	13.49	13.46	13.52	
3	64QAM	1	0	13.47	13.72	13.67	
3	64QAM	1	8	13.37	13.66	13.64	14.5
3	64QAM	1	14	13.32	13.55	13.51	
3	64QAM	8	0	13.44	13.47	13.38	
3	64QAM	8	4	13.41	13.44	13.30	14
3	64QAM	8	7	13.27	13.33	13.18	
3	64QAM	15	0	13.20	13.25	13.13	
3	256QAM	1	0	9.42	9.51	9.47	10
3	256QAM	1	8	9.40	9.45	9.41	
3	256QAM	1	14	9.43	9.37	9.31	
3	256QAM	8	0	9.01	9.08	9.05	9.5
3	256QAM	8	4	8.94	9.06	8.97	
3	256QAM	8	7	8.89	8.97	8.92	
3	256QAM	15	0	8.92	8.98	8.93	
Channel				18607	18900	19193	Tune-up limit (dBm)
Frequency (MHz)				1850.7	1880	1909.3	
1.4	QPSK	1	0	14.60	14.64	14.53	15
1.4	QPSK	1	3	14.53	14.43	14.42	
1.4	QPSK	1	5	14.42	14.33	14.25	
1.4	QPSK	3	0	13.60	13.64	13.51	14
1.4	QPSK	3	1	13.51	13.60	13.42	
1.4	QPSK	3	3	13.44	13.52	13.31	
1.4	QPSK	6	0	13.34	13.40	13.27	14
1.4	16QAM	1	0	13.54	13.68	13.53	
1.4	16QAM	1	3	13.42	13.66	13.48	
1.4	16QAM	1	5	13.37	13.62	13.46	14
1.4	16QAM	3	0	13.55	13.57	13.59	
1.4	16QAM	3	1	13.49	13.51	13.52	
1.4	16QAM	3	3	13.40	13.38	13.47	14
1.4	16QAM	6	0	13.37	13.34	13.40	
1.4	64QAM	1	0	13.35	13.60	13.55	
1.4	64QAM	1	3	13.25	13.54	13.52	14
1.4	64QAM	1	5	13.20	13.43	13.39	
1.4	64QAM	3	0	13.32	13.35	13.26	
1.4	64QAM	3	1	13.29	13.32	13.18	13.5
1.4	64QAM	3	3	13.15	13.21	13.06	
1.4	64QAM	6	0	13.08	13.13	13.01	
1.4	256QAM	1	0	9.30	9.39	9.35	10
1.4	256QAM	1	3	9.28	9.33	9.29	
1.4	256QAM	1	5	9.31	9.25	9.19	
1.4	256QAM	3	0	8.89	8.96	8.93	9.5
1.4	256QAM	3	1	8.82	8.94	8.85	
1.4	256QAM	3	3	8.77	8.85	8.80	
1.4	256QAM	6	0	8.80	8.86	8.81	

5	QPSK	12	0	13.18	13.23	13.19	14
5	QPSK	12	7	13.17	13.15	13.16	
5	QPSK	12	13	13.12	13.09	13.06	
5	QPSK	25	0	13.04	13.06	13.02	14
5	16QAM	1	0	13.15	13.20	13.11	
5	16QAM	1	12	13.05	13.19	13.02	
5	16QAM	1	24	13.01	13.17	12.92	14
5	16QAM	12	0	13.01	13.06	13.10	
5	16QAM	12	7	12.97	12.97	13.01	
5	16QAM	12	13	12.93	12.91	12.97	14
5	16QAM	25	0	12.87	12.89	12.94	
5	64QAM	1	0	13.22	13.03	13.24	
5	64QAM	1	12	13.20	13.02	13.22	14
5	64QAM	1	24	13.14	12.98	13.18	
5	64QAM	12	0	13.11	12.78	12.81	
5	64QAM	12	7	12.73	12.76	12.73	13.5
5	64QAM	12	13	12.67	12.68	12.64	
5	64QAM	25	0	12.66	12.65	12.63	
5	256QAM	1	0	8.93	8.98	8.94	9.5
5	256QAM	1	12	8.90	8.92	8.85	
5	256QAM	1	24	8.88	8.88	8.83	
5	256QAM	12	0	8.45	8.48	8.39	9
5	256QAM	12	7	8.37	8.39	8.38	
5	256QAM	12	13	8.31	8.31	8.31	
5	256QAM	25	0	8.23	8.30	8.25	
Channel				19965	20175	20385	Tune-up limit (dBm)
Frequency (MHz)				1711.5	1732.5	1753.5	
3	QPSK	1	0	14.10	14.17	14.12	15
3	QPSK	1	8	14.04	14.07	14.05	
3	QPSK	1	14	14.00	13.99	13.95	
3	QPSK	8	0	13.06	13.11	13.07	13.5
3	QPSK	8	4	13.05	13.03	13.04	
3	QPSK	8	7	13.00	12.97	12.94	
3	QPSK	15	0	12.92	12.94	12.90	13.5
3	16QAM	1	0	13.03	13.08	12.99	
3	16QAM	1	8	12.93	13.07	12.90	
3	16QAM	1	14	12.89	13.05	12.80	13.5
3	16QAM	8	0	12.89	12.94	12.98	
3	16QAM	8	4	12.85	12.85	12.89	
3	16QAM	8	7	12.81	12.79	12.85	13.5
3	16QAM	15	0	12.75	12.77	12.82	
3	64QAM	1	0	13.10	12.91	13.12	
3	64QAM	1	8	13.08	12.90	13.10	13.5
3	64QAM	1	14	13.02	12.86	13.06	
3	64QAM	8	0	12.99	12.66	12.69	13
3	64QAM	8	4	12.61	12.64	12.61	
3	64QAM	8	7	12.55	12.56	12.52	
3	64QAM	15	0	12.54	12.53	12.51	9.5
3	256QAM	1	0	8.81	8.86	8.82	
3	256QAM	1	8	8.78	8.80	8.73	
3	256QAM	1	14	8.76	8.76	8.71	9
3	256QAM	8	0	8.33	8.36	8.27	
3	256QAM	8	4	8.25	8.27	8.26	
3	256QAM	8	7	8.19	8.19	8.19	9
3	256QAM	15	0	8.11	8.18	8.13	
Channel				19957	20175	20393	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1732.5	1754.3	
1.4	QPSK	1	0	13.98	14.05	14.00	14.5
1.4	QPSK	1	3	13.92	13.95	13.93	
1.4	QPSK	1	5	13.88	13.87	13.83	
1.4	QPSK	3	0	12.94	12.99	12.95	13.5
1.4	QPSK	3	1	12.93	12.91	12.92	
1.4	QPSK	3	3	12.88	12.85	12.82	
1.4	QPSK	6	0	12.80	12.82	12.78	13.5
1.4	16QAM	1	0	12.91	12.96	12.87	
1.4	16QAM	1	3	12.81	12.95	12.78	
1.4	16QAM	1	5	12.77	12.93	12.68	13.5
1.4	16QAM	3	0	12.77	12.82	12.86	
1.4	16QAM	3	1	12.73	12.73	12.77	
1.4	16QAM	3	3	12.69	12.67	12.73	13.5
1.4	16QAM	6	0	12.63	12.65	12.70	
1.4	64QAM	1	0	12.98	12.79	13.00	
1.4	64QAM	1	3	12.96	12.78	12.98	13.5
1.4	64QAM	1	5	12.90	12.74	12.94	
1.4	64QAM	3	0	12.87	12.54	12.57	
1.4	64QAM	3	1	12.49	12.52	12.49	13
1.4	64QAM	3	3	12.43	12.44	12.40	
1.4	64QAM	6	0	12.42	12.41	12.39	
1.4	256QAM	1	0	8.69	8.74	8.70	9.5
1.4	256QAM	1	3	8.66	8.68	8.61	
1.4	256QAM	1	5	8.64	8.64	8.59	9.5
1.4	256QAM	3	0	8.21	8.24	8.15	
1.4	256QAM	3	1	8.13	8.15	8.14	
1.4	256QAM	3	3	8.07	8.07	8.07	8.5
1.4	256QAM	6	0	7.99	8.06	8.01	

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	Tune-up limit (dBm)
Frequency (MHz)				704	707.5	711	
10	QPSK	1	0	23.97	24.08	24.00	24.5
10	QPSK	1	25	23.88	24.02	23.94	
10	QPSK	1	49	23.84	24.00	23.89	
10	QPSK	25	0	22.84	22.91	22.86	23.5
10	QPSK	25	12	22.81	22.80	22.84	
10	QPSK	25	25	22.70	22.76	22.77	
10	QPSK	50	0	22.66	22.74	22.75	23.5
10	16QAM	1	0	22.81	22.92	22.90	
10	16QAM	1	25	22.78	22.83	22.81	
10	16QAM	1	49	22.69	22.73	22.77	23.5
10	16QAM	25	0	22.52	22.62	22.56	
10	16QAM	25	12	22.43	22.51	22.54	
10	16QAM	25	25	22.32	22.48	22.49	23.5
10	16QAM	50	0	22.29	22.39	22.38	
10	64QAM	1	0	22.88	22.66	22.60	
10	64QAM	1	25	22.80	22.64	22.56	23.5
10	64QAM	1	49	22.77	22.60	22.47	
10	64QAM	25	0	22.41	22.44	22.38	
10	64QAM	25	12	22.33	22.33	22.32	23.5
10	64QAM	25	25	22.26	22.23	22.26	
10	64QAM	50	0	22.24	22.13	22.17	
10	256QAM	1	0	18.74	18.83	18.78	19.5
10	256QAM	1	25	18.68	18.76	18.74	
10	256QAM	1	49	18.65	18.69	18.69	
10	256QAM	25	0	17.90	17.96	17.86	18.5
10	256QAM	25	12	17.88	17.88	17.76	
10	256QAM	25	25	17.84	17.84	17.67	
10	256QAM	50	0	17.77	17.78	17.59	18.5
Channel				23035	23095	23155	
Frequency (MHz)				701.5	707.5	713.5	Tune-up limit (dBm)
5	QPSK	1	0	23.92	24.03	23.95	24.5
5	QPSK	1	12	23.83	23.97	23.89	
5	QPSK	1	24	23.79	23.95	23.84	
5	QPSK	12	0	22.79	22.86	22.81	23.5
5	QPSK	12	7	22.76	22.75	22.79	
5	QPSK	12	13	22.65	22.71	22.72	
5	QPSK	25	0	22.61	22.69	22.70	23.5
5	16QAM	1	0	22.76	22.87	22.85	
5	16QAM	1	12	22.73	22.78	22.76	
5	16QAM	1	24	22.64	22.68	22.72	23.5
5	16QAM	12	0	22.47	22.57	22.51	
5	16QAM	12	7	22.38	22.46	22.49	
5	16QAM	12	13	22.27	22.43	22.44	23.5
5	16QAM	25	0	22.24	22.34	22.33	
5	64QAM	1	0	22.83	22.61	22.55	
5	64QAM	1	12	22.75	22.59	22.51	23.5
5	64QAM	1	24	22.72	22.55	22.42	
5	64QAM	12	0	22.36	22.39	22.33	
5	64QAM	12	7	22.28	22.28	22.27	23.5
5	64QAM	12	13	22.21	22.18	22.21	
5	64QAM	25	0	22.19	22.08	22.12	
5	256QAM	1	0	18.69	18.78	18.73	19.5
5	256QAM	1	12	18.63	18.71	18.69	
5	256QAM	1	24	18.60	18.64	18.64	
5	256QAM	12	0	17.85	17.91	17.81	18.5
5	256QAM	12	7	17.83	17.83	17.71	
5	256QAM	12	13	17.79	17.79	17.62	
5	256QAM	25	0	17.72	17.73	17.54	18.5
Channel				23025	23095	23165	
Frequency (MHz)				700.5	707.5	714.5	Tune-up limit (dBm)
3	QPSK	1	0	23.87	23.98	23.90	24.5
3	QPSK	1	8	23.78	23.92	23.84	
3	QPSK	1	14	23.74	23.90	23.79	
3	QPSK	8	0	22.74	22.81	22.76	23.5
3	QPSK	8	4	22.71	22.70	22.74	
3	QPSK	8	7	22.60	22.66	22.67	
3	QPSK	15	0	22.56	22.64	22.65	23.5
3	16QAM	1	0	22.71	22.82	22.80	
3	16QAM	1	8	22.68	22.73	22.71	
3	16QAM	1	14	22.59	22.63	22.67	23.5
3	16QAM	8	0	22.42	22.52	22.46	
3	16QAM	8	4	22.33	22.41	22.44	
3	16QAM	8	7	22.22	22.38	22.39	23.5
3	16QAM	15	0	22.19	22.29	22.28	
3	64QAM	1	0	22.78	22.56	22.50	
3	64QAM	1	8	22.70	22.54	22.46	23.5
3	64QAM	1	14	22.67	22.50	22.37	
3	64QAM	8	0	22.31	22.34	22.28	
3	64QAM	8	4	22.23	22.23	22.22	23.5
3	64QAM	8	7	22.16	22.13	22.16	
3	64QAM	15	0	22.14	22.03	22.07	
3	256QAM	1	0	18.64	18.73	18.68	19.5
3	256QAM	1	8	18.58	18.66	18.64	
3	256QAM	1	14	18.55	18.59	18.59	
3	256QAM	8	0	17.80	17.86	17.76	18.5
3	256QAM	8	4	17.78	17.78	17.66	
3	256QAM	8	7	17.74	17.74	17.57	
3	256QAM	15	0	17.67	17.68	17.49	18.5
Channel				23017	23095	23173	
Frequency (MHz)				699.7	707.5	715.3	Tune-up limit (dBm)
1.4	QPSK	1	0	23.82	23.93	23.85	24.5
1.4	QPSK	1	3	23.73	23.87	23.79	
1.4	QPSK	1	5	23.69	23.85	23.74	

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			Tune-up limit (dbm)
Frequency (MHz)				782			
10	QPSK	1	0	24.11			24.5
10	QPSK	1	25	24.01			
10	QPSK	1	49	23.90			
10	QPSK	25	0	23.08			23.5
10	QPSK	25	12	22.97			
10	QPSK	25	25	22.93			
10	QPSK	50	0	22.82			23.5
10	16QAM	1	0	22.82			
10	16QAM	1	25	22.79			
10	16QAM	1	49	22.77			23.5
10	16QAM	25	0	22.35			
10	16QAM	25	12	22.28			
10	16QAM	25	25	22.21			23.5
10	16QAM	50	0	22.13			
10	64QAM	1	0	22.77			
10	64QAM	1	25	22.71			23.5
10	64QAM	1	49	22.67			
10	64QAM	25	0	22.43			
10	64QAM	25	12	22.40			23.5
10	64QAM	25	25	22.33			
10	64QAM	50	0	22.28			
10	256QAM	1	0	18.71			19
10	256QAM	1	25	18.66			
10	256QAM	1	49	18.63			
10	256QAM	25	0	17.94			18.5
10	256QAM	25	12	17.85			
10	256QAM	25	25	17.76			
10	256QAM	50	0	17.66			
Channel				23205	23230	23255	Tune-up limit (dbm)
Frequency (MHz)				779.5	782	784.5	
5	QPSK	1	0	23.92	24.07	24.01	24.5
5	QPSK	1	12	23.85	23.97	23.91	
5	QPSK	1	24	23.70	23.83	23.76	
5	QPSK	12	0	22.91	23.03	22.90	23.5
5	QPSK	12	7	22.77	22.91	22.84	
5	QPSK	12	13	22.75	22.89	22.84	
5	QPSK	25	0	22.62	22.76	22.68	23.5
5	16QAM	1	0	22.64	22.77	22.71	
5	16QAM	1	12	22.62	22.75	22.66	
5	16QAM	1	24	22.54	22.71	22.63	23.5
5	16QAM	12	0	22.16	22.31	22.24	
5	16QAM	12	7	22.14	22.21	22.21	
5	16QAM	12	13	22.03	22.15	22.10	23.5
5	16QAM	25	0	21.95	22.08	21.99	
5	64QAM	1	0	22.67	22.73	22.65	
5	64QAM	1	12	22.49	22.67	22.55	23.5
5	64QAM	1	24	22.51	22.61	22.56	
5	64QAM	12	0	22.27	22.38	22.31	
5	64QAM	12	7	22.22	22.36	22.27	23.5
5	64QAM	12	13	22.17	22.27	22.20	
5	64QAM	25	0	22.08	22.23	22.15	
5	256QAM	1	0	18.53	18.67	18.59	19
5	256QAM	1	12	18.48	18.61	18.57	
5	256QAM	1	24	18.46	18.57	18.52	
5	256QAM	12	0	17.72	17.90	17.83	19
5	256QAM	12	7	17.65	17.79	17.73	
5	256QAM	12	13	17.59	17.73	17.68	
5	256QAM	25	0	17.55	17.61	17.53	

1.4	QPSK	3	0	22.69	22.76	22.71	23.5
1.4	QPSK	3	1	22.66	22.65	22.69	
1.4	QPSK	3	3	22.55	22.61	22.62	
1.4	QPSK	6	0	22.51	22.59	22.60	23.5
1.4	16QAM	1	0	22.66	22.77	22.75	23.5
1.4	16QAM	1	3	22.63	22.68	22.66	
1.4	16QAM	1	5	22.54	22.58	22.62	
1.4	16QAM	3	0	22.37	22.47	22.41	
1.4	16QAM	3	1	22.28	22.36	22.39	
1.4	16QAM	3	3	22.17	22.33	22.34	23.5
1.4	16QAM	6	0	22.14	22.24	22.23	
1.4	64QAM	1	0	22.73	22.51	22.45	23.5
1.4	64QAM	1	3	22.65	22.49	22.41	
1.4	64QAM	1	5	22.62	22.45	22.32	
1.4	64QAM	3	0	22.26	22.29	22.23	
1.4	64QAM	3	1	22.18	22.18	22.17	
1.4	64QAM	3	3	22.11	22.08	22.11	23
1.4	64QAM	6	0	22.09	21.98	22.02	
1.4	256QAM	1	0	18.59	18.68	18.63	19.5
1.4	256QAM	1	3	18.53	18.61	18.59	
1.4	256QAM	1	5	18.50	18.54	18.54	
1.4	256QAM	3	0	17.75	17.81	17.71	
1.4	256QAM	3	1	17.73	17.73	17.61	
1.4	256QAM	3	3	17.69	17.69	17.52	18
1.4	256QAM	6	0	17.62	17.63	17.44	

Band 66

BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				132072	132322	132572	Tune-up limit (dBm)
Frequency (MHz)				1720	1745	1770	
20	QPSK	1	0	14.61	14.69	14.55	15
20	QPSK	1	49	14.52	14.60	14.50	
20	QPSK	1	99	14.44	14.53	14.44	
20	QPSK	50	0	13.51	13.66	13.53	14
20	QPSK	50	24	13.45	13.56	13.49	
20	QPSK	50	50	13.41	13.50	13.40	
20	QPSK	100	0	13.36	13.41	13.39	14
20	16QAM	1	0	13.60	13.64	13.62	
20	16QAM	1	49	13.53	13.61	13.54	
20	16QAM	1	99	13.44	13.55	13.44	14
20	16QAM	50	0	13.41	13.43	13.41	
20	16QAM	50	24	13.38	13.42	13.37	
20	16QAM	50	50	13.30	13.34	13.28	14
20	16QAM	100	0	13.24	13.25	13.20	
20	64QAM	1	0	13.40	13.55	13.48	
20	64QAM	1	49	13.37	13.54	13.45	14
20	64QAM	1	99	13.30	13.52	13.39	
20	64QAM	50	0	13.33	13.37	13.41	
20	64QAM	50	24	13.31	13.32	13.38	14
20	64QAM	50	50	13.26	13.26	13.35	
20	64QAM	100	0	13.16	13.24	13.31	
20	256QAM	1	0	9.23	9.33	9.29	10
20	256QAM	1	49	9.21	9.30	9.19	
20	256QAM	1	99	9.11	9.29	9.08	
20	256QAM	50	0	8.74	8.85	8.80	9.5
20	256QAM	50	24	8.72	8.81	8.73	
20	256QAM	50	50	8.69	8.71	8.71	
20	256QAM	100	0	8.65	8.62	8.67	Tune-up limit (dBm)
Channel				132047	132322	132597	
Frequency (MHz)				1717.5	1745	1772.5	Tune-up limit (dBm)
15	QPSK	1	0	14.48	14.56	14.42	
15	QPSK	1	37	14.39	14.47	14.37	15
15	QPSK	1	74	14.31	14.40	14.31	
15	QPSK	36	0	13.43	13.53	13.40	14
15	QPSK	36	20	13.32	13.43	13.36	
15	QPSK	36	39	13.28	13.37	13.27	
15	QPSK	75	0	13.23	13.28	13.26	14
15	16QAM	1	0	13.47	13.51	13.49	
15	16QAM	1	37	13.40	13.48	13.41	
15	16QAM	1	74	13.31	13.42	13.31	14
15	16QAM	36	0	13.28	13.30	13.28	
15	16QAM	36	20	13.25	13.29	13.24	
15	16QAM	36	39	13.17	13.21	13.15	14
15	16QAM	75	0	13.11	13.12	13.07	
15	64QAM	1	0	13.27	13.42	13.35	
15	64QAM	1	37	13.24	13.41	13.32	14
15	64QAM	1	74	13.17	13.39	13.26	
15	64QAM	36	0	13.20	13.24	13.28	14
15	64QAM	36	20	13.18	13.19	13.25	
15	64QAM	36	39	13.13	13.13	13.22	
15	64QAM	75	0	13.03	13.11	13.18	10
15	256QAM	1	0	9.10	9.20	9.16	
15	256QAM	1	37	9.08	9.17	9.06	
15	256QAM	1	74	8.98	9.16	8.95	9.5
15	256QAM	36	0	8.61	8.72	8.67	
15	256QAM	36	20	8.59	8.68	8.60	
15	256QAM	36	39	8.56	8.58	8.58	Tune-up limit (dBm)
15	256QAM	75	0	8.52	8.49	8.54	
Channel				132022	132322	132622	Tune-up limit (dBm)
Frequency (MHz)				1715	1745	1775	
10	QPSK	1	0	14.36	14.44	14.30	15
10	QPSK	1	25	14.27	14.35	14.25	
10	QPSK	1	49	14.19	14.28	14.19	
10	QPSK	25	0	13.31	13.41	13.28	14
10	QPSK	25	12	13.20	13.31	13.24	
10	QPSK	25	25	13.16	13.25	13.15	
10	QPSK	50	0	13.11	13.16	13.14	14
10	16QAM	1	0	13.35	13.39	13.37	
10	16QAM	1	25	13.28	13.36	13.29	
10	16QAM	1	49	13.19	13.30	13.19	13.5
10	16QAM	25	0	13.16	13.18	13.16	
10	16QAM	25	12	13.13	13.17	13.12	
10	16QAM	25	25	13.05	13.09	13.03	14
10	16QAM	50	0	12.99	13.00	12.95	
10	64QAM	1	0	13.15	13.30	13.23	
10	64QAM	1	25	13.12	13.29	13.20	14
10	64QAM	1	49	13.05	13.27	13.14	
10	64QAM	25	0	13.08	13.12	13.16	
10	64QAM	25	12	13.06	13.07	13.13	13.5
10	64QAM	25	25	13.01	13.01	13.10	
10	64QAM	50	0	12.91	12.99	13.06	
10	256QAM	1	0	8.98	9.08	9.04	9.5
10	256QAM	1	25	8.96	9.05	8.94	
10	256QAM	1	49	8.86	9.04	8.83	
10	256QAM	25	0	8.49	8.60	8.55	9
10	256QAM	25	12	8.47	8.56	8.48	
10	256QAM	25	25	8.44	8.46	8.46	
10	256QAM	50	0	8.40	8.37	8.42	Tune-up limit (dBm)
Channel				131997	132322	132647	
Frequency (MHz)				1712.5	1745	1777.5	Tune-up limit (dBm)
5	QPSK	1	0	14.24	14.32	14.18	
5	QPSK	1	12	14.15	14.23	14.13	15
5	QPSK	1	24	14.07	14.16	14.07	

5	QPSK	12	0	13.19	13.29	13.16	14
5	QPSK	12	7	13.08	13.19	13.12	
5	QPSK	12	13	13.04	13.13	13.03	
5	QPSK	25	0	12.99	13.04	13.02	14
5	16QAM	1	0	13.23	13.27	13.25	
5	16QAM	1	12	13.16	13.24	13.17	
5	16QAM	1	24	13.07	13.18	13.07	13.5
5	16QAM	12	0	13.04	13.06	13.04	
5	16QAM	12	7	13.01	13.05	13.00	
5	16QAM	12	13	12.93	12.97	12.91	14
5	16QAM	25	0	12.87	12.88	12.83	
5	64QAM	1	0	13.03	13.18	13.11	
5	64QAM	1	12	13.00	13.17	13.08	13.5
5	64QAM	1	24	12.93	13.15	13.02	
5	64QAM	12	0	12.96	13.00	13.04	
5	64QAM	12	7	12.94	12.95	13.01	9.5
5	64QAM	12	13	12.89	12.89	12.98	
5	64QAM	25	0	12.79	12.87	12.94	
5	256QAM	1	0	8.86	8.96	8.92	9
5	256QAM	1	12	8.84	8.93	8.82	
5	256QAM	1	24	8.74	8.92	8.71	
5	256QAM	12	0	8.37	8.48	8.43	
5	256QAM	12	7	8.35	8.44	8.36	
5	256QAM	12	13	8.32	8.34	8.34	
5	256QAM	25	0	8.28	8.25	8.30	
Channel				131987	132322	132657	Tune-up limit (dBm)
Frequency (MHz)				1711.5	1745	1778.5	
3	QPSK	1	0	14.13	14.21	14.07	14.5
3	QPSK	1	8	14.04	14.12	14.02	
3	QPSK	1	14	13.96	14.05	13.96	
3	QPSK	8	0	13.08	13.18	13.05	13.5
3	QPSK	8	4	12.97	13.08	13.01	
3	QPSK	8	7	12.93	13.02	12.92	
3	QPSK	15	0	12.88	12.93	12.91	13.5
3	16QAM	1	0	13.12	13.16	13.14	
3	16QAM	1	8	13.05	13.13	13.06	
3	16QAM	1	14	12.96	13.07	12.96	13.5
3	16QAM	8	0	12.93	12.95	12.93	
3	16QAM	8	4	12.90	12.94	12.89	
3	16QAM	8	7	12.82	12.86	12.80	13.5
3	16QAM	15	0	12.76	12.77	12.72	
3	64QAM	1	0	12.92	13.07	13.00	
3	64QAM	1	8	12.89	13.06	12.97	13.5
3	64QAM	1	14	12.82	13.04	12.91	
3	64QAM	8	0	12.85	12.89	12.93	
3	64QAM	8	4	12.83	12.84	12.90	13.5
3	64QAM	8	7	12.78	12.78	12.87	
3	64QAM	15	0	12.68	12.76	12.83	
3	256QAM	1	0	8.75	8.85	8.81	9.5
3	256QAM	1	8	8.73	8.82	8.71	
3	256QAM	1	14	8.63	8.81	8.60	
3	256QAM	8	0	8.26	8.37	8.32	9
3	256QAM	8	4	8.24	8.33	8.25	
3	256QAM	8	7	8.21	8.23	8.23	
3	256QAM	15	0	8.17	8.14	8.19	
Channel				131979	132322	132685	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1745	1779.3	
1.4	QPSK	1	0	14.02	14.10	13.96	14.5
1.4	QPSK	1	3	13.93	14.01	13.91	
1.4	QPSK	1	5	13.85	13.94	13.85	
1.4	QPSK	3	0	12.97	13.07	12.94	
1.4	QPSK	3	1	12.86	12.97	12.90	
1.4	QPSK	3	3	12.82	12.91	12.81	
1.4	QPSK	6	0	12.77	12.82	12.80	13.5
1.4	16QAM	1	0	13.01	13.05	13.03	13.5
1.4	16QAM	1	3	12.94	13.02	12.95	
1.4	16QAM	1	5	12.85	12.96	12.85	
1.4	16QAM	3	0	12.82	12.84	12.82	
1.4	16QAM	3	1	12.79	12.83	12.78	
1.4	16QAM	3	3	12.71	12.75	12.69	
1.4	16QAM	6	0	12.65	12.66	12.61	13
1.4	64QAM	1	0	12.81	12.96	12.89	13.5
1.4	64QAM	1	3	12.78	12.95	12.86	
1.4	64QAM	1	5	12.71	12.93	12.80	
1.4	64QAM	3	0	12.74	12.78	12.82	
1.4	64QAM	3	1	12.72	12.73	12.79	
1.4	64QAM	3	3	12.67	12.67	12.76	
1.4	64QAM	6	0	12.57	12.65	12.72	13.5
1.4	256QAM	1	0	8.64	8.74	8.70	9.5
1.4	256QAM	1	3	8.62	8.71	8.60	
1.4	256QAM	1	5	8.52	8.70	8.49	
1.4	256QAM	3	0	8.15	8.26	8.21	
1.4	256QAM	3	1	8.13	8.22	8.14	
1.4	256QAM	3	3	8.10	8.12	8.12	
1.4	256QAM	6	0	8.06	8.03	8.08	8.5

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	23.11	23.17	23.14	24
20	QPSK	1	49	22.98	23.09	23.06	
20	QPSK	1	99	20.04	23.04	23.03	
20	QPSK	50	0	22.25	22.26	22.19	23
20	QPSK	50	24	22.09	22.18	22.00	
20	QPSK	50	50	22.04	22.13	22.12	
20	QPSK	100	0	21.91	21.98	22.02	
20	16QAM	1	0	22.11	22.17	22.05	23
20	16QAM	1	49	21.85	21.90	21.86	
20	16QAM	1	99	21.92	21.16	21.18	
20	16QAM	50	0	21.21	21.22	21.15	22
20	16QAM	50	24	21.15	21.16	21.14	
20	16QAM	50	50	21.22	21.11	21.01	
20	16QAM	100	0	21.14	21.15	21.32	
20	64QAM	1	0	21.19	21.17	21.15	22
20	64QAM	1	49	21.15	21.19	21.06	
20	64QAM	1	99	21.12	21.11	21.13	
20	64QAM	50	0	20.11	20.13	20.14	21
20	64QAM	50	24	20.15	20.02	20.06	
20	64QAM	50	50	20.02	20.07	20.10	
20	64QAM	100	0	20.11	20.14	20.14	
Channel				133197	133297	133397	Tune-up limit (dBm)
Frequency (MHz)				670.5	680.5	690.5	
15	QPSK	1	0	23.06	23.12	23.06	24
15	QPSK	1	37	23.01	23.04	23.01	
15	QPSK	1	74	23.04	23.09	22.98	
15	QPSK	36	0	22.20	22.21	22.14	23
15	QPSK	36	20	22.12	22.17	22.12	
15	QPSK	36	39	22.08	22.12	22.04	
15	QPSK	75	0	21.98	22.16	22.09	
15	16QAM	1	0	22.06	22.12	22.00	23
15	16QAM	1	37	21.80	21.85	21.91	
15	16QAM	1	74	22.87	22.08	22.00	
15	16QAM	36	0	21.26	21.17	21.10	22
15	16QAM	36	20	21.15	21.25	21.15	
15	16QAM	36	39	21.17	21.16	21.24	
15	16QAM	75	0	21.09	21.10	21.11	
15	64QAM	1	0	21.16	21.12	21.20	22
15	64QAM	1	37	21.10	21.15	21.12	
15	64QAM	1	74	21.17	21.06	21.19	
15	64QAM	36	0	20.26	20.07	20.20	21
15	64QAM	36	20	20.25	20.19	20.11	
15	64QAM	36	39	20.17	20.16	20.14	
15	64QAM	75	0	20.16	20.10	20.07	
Channel				133172	133272	133422	Tune-up limit (dBm)
Frequency (MHz)				668	678	693	
10	QPSK	1	0	23.01	23.07	22.95	24
10	QPSK	1	25	22.95	22.90	22.89	
10	QPSK	1	49	22.92	22.81	22.83	
10	QPSK	25	0	22.15	22.16	22.09	23
10	QPSK	25	12	22.10	22.18	22.13	
10	QPSK	25	25	22.07	22.07	22.04	
10	QPSK	50	0	22.01	21.95	21.98	
10	16QAM	1	0	22.01	22.07	21.95	23
10	16QAM	1	25	21.95	21.90	21.99	
10	16QAM	1	49	21.92	21.98	21.83	
10	16QAM	25	0	21.22	21.29	21.17	

10	16QAM	25	12	21.25	21.25	21.22	22
10	16QAM	25	25	21.12	21.11	21.21	
10	16QAM	50	0	21.14	21.17	21.14	
10	64QAM	1	0	21.21	22.27	21.25	22
10	64QAM	1	25	21.25	21.20	21.16	
10	64QAM	1	49	21.22	21.21	21.17	
10	64QAM	25	0	20.37	20.32	20.25	21
10	64QAM	25	12	20.24	20.25	20.16	
10	64QAM	25	25	20.22	20.20	20.20	
10	64QAM	50	0	20.14	20.14	20.15	
Channel				133147	133247	133447	Tune-up limit (dBm)
Frequency (MHz)				665.5	675.5	695.5	
5	QPSK	1	0	22.99	23.02	22.90	24
5	QPSK	1	12	22.95	22.95	22.91	
5	QPSK	1	24	22.87	22.86	22.84	
5	QPSK	12	0	22.10	22.11	22.04	23
5	QPSK	12	7	21.84	21.89	21.85	
5	QPSK	12	13	21.91	21.91	21.85	
5	QPSK	25	0	21.97	21.78	21.90	
5	16QAM	1	0	21.96	22.02	21.90	23
5	16QAM	1	12	21.70	21.75	21.71	
5	16QAM	1	24	21.57	21.56	21.58	
5	16QAM	12	0	21.37	21.27	21.20	22
5	16QAM	12	7	21.20	21.15	21.21	
5	16QAM	12	13	21.27	21.16	21.13	
5	16QAM	25	0	21.29	21.20	21.17	
5	64QAM	1	0	21.16	20.89	21.19	22
5	64QAM	1	12	21.15	21.08	21.11	
5	64QAM	1	24	21.07	21.11	21.14	
5	64QAM	12	0	20.36	20.26	20.26	21
5	64QAM	12	7	20.24	20.14	20.11	
5	64QAM	12	13	20.17	20.10	20.03	
5	64QAM	25	0	20.29	20.20	20.17	

Band 48 (Reduced Power Level 2)

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	56150	56640	
Frequency (MHz)				3560	3609	3625	3641	3690	
20	QPSK	1	0	8.01	7.97	8.11	8.04	8.01	8.5
20	QPSK	1	49	7.83	7.85	7.91	7.86	7.78	
20	QPSK	1	99	7.80	7.76	7.70	7.88	7.89	
20	QPSK	50	0	6.90	6.91	7.01	6.96	6.89	7.5
20	QPSK	50	24	6.80	6.85	6.85	6.86	6.87	
20	QPSK	50	50	6.86	6.82	6.96	6.76	6.83	
20	QPSK	100	0	6.83	6.86	6.82	6.91	6.73	
20	16QAM	1	0	7.01	6.89	6.91	6.81	6.96	7.5
20	16QAM	1	49	6.88	6.76	6.76	6.96	6.87	
20	16QAM	1	99	6.90	6.91	6.80	6.77	6.79	
20	16QAM	50	0	6.85	6.89	6.83	6.70	6.60	7.5
20	16QAM	50	24	6.79	6.80	6.75	6.68	6.63	
20	16QAM	50	50	6.71	6.73	6.88	6.87	6.76	
20	16QAM	100	0	6.82	6.91	6.93	6.88	6.73	
20	64QAM	1	0	7.10	7.05	6.98	7.05	6.91	7.5
20	64QAM	1	49	7.07	6.94	7.15	6.91	6.90	
20	64QAM	1	99	7.00	7.20	7.09	7.00	6.88	
20	64QAM	50	0	6.04	6.16	6.32	6.20	6.14	6.5
20	64QAM	50	24	6.06	5.88	5.92	5.92	6.24	
20	64QAM	50	50	6.12	6.03	5.90	5.76	6.03	
20	64QAM	100	0	5.92	5.82	6.03	6.04	5.91	
20	64QAM	1	0	2.25	2.03	2.02	2.11	2.32	3
20	64QAM	1	49	2.06	1.91	2.10	2.38	2.00	
20	64QAM	1	99	1.96	2.25	2.12	2.21	2.12	
20	64QAM	50	0	1.91	1.81	1.91	2.06	1.91	2.5
20	64QAM	50	24	1.85	1.90	1.82	1.72	1.81	
20	64QAM	50	50	1.81	1.79	1.96	1.58	1.91	
20	64QAM	100	0	1.59	1.72	1.65	1.70	2.00	
Channel				55315	55820	55990	56160	56665	Tune-up limit (dBm)
Frequency (MHz)				3557.5	3608	3625	3642	3692.5	
15	QPSK	1	0	7.90	7.86	8.00	7.93	7.90	8.5
15	QPSK	1	37	7.72	7.74	7.80	7.75	7.67	
15	QPSK	1	74	7.69	7.65	7.59	7.77	7.78	
15	QPSK	36	0	6.79	6.80	6.90	6.85	6.78	7.5
15	QPSK	36	20	6.69	6.74	6.74	6.75	6.76	
15	QPSK	36	39	6.75	6.71	6.85	6.65	6.72	
15	QPSK	75	0	6.72	6.75	6.71	6.80	6.62	
15	16QAM	1	0	6.90	6.78	6.80	6.70	6.85	7.5
15	16QAM	1	37	6.77	6.65	6.65	6.85	6.76	
15	16QAM	1	74	6.79	6.80	6.69	6.66	6.68	
15	16QAM	36	0	6.74	6.78	6.72	6.59	6.49	7.5
15	16QAM	36	20	6.68	6.69	6.64	6.57	6.52	
15	16QAM	36	39	6.60	6.62	6.77	6.76	6.65	
15	16QAM	75	0	6.71	6.80	6.82	6.77	6.62	
15	64QAM	1	0	6.99	6.94	6.87	6.94	6.80	7.5
15	64QAM	1	37	6.96	6.83	7.04	6.80	6.79	
15	64QAM	1	74	6.89	7.09	6.98	6.89	6.77	
15	64QAM	36	0	5.93	6.05	6.21	6.09	6.03	6.5
15	64QAM	36	20	5.95	5.77	5.81	5.81	6.13	
15	64QAM	36	39	6.01	5.92	5.79	5.65	5.92	
15	64QAM	75	0	5.81	5.71	5.92	5.93	5.80	
15	256QAM	1	0	2.14	1.92	1.91	2.00	2.21	3
15	256QAM	1	37	1.95	1.80	1.99	2.27	1.89	
15	256QAM	1	74	1.85	2.14	2.01	2.10	2.01	
15	256QAM	36	0	1.80	1.70	1.80	1.95	1.80	2.5
15	256QAM	36	20	1.74	1.79	1.71	1.61	1.70	
15	256QAM	36	39	1.70	1.68	1.85	1.47	1.80	
15	256QAM	75	0	1.48	1.61	1.54	1.59	1.89	

Channel				55290	55815	55990	56165	56690	Tune-up limit (dBm)
Frequency (MHz)				3555	3607.5	3625	3642.5	3695	
10	QPSK	1	0	7.80	7.76	7.90	7.83	7.80	8.5
10	QPSK	1	25	7.62	7.64	7.70	7.65	7.57	
10	QPSK	1	49	7.59	7.55	7.53	7.67	7.68	
10	QPSK	25	0	6.69	6.70	6.80	6.75	6.72	7.5
10	QPSK	25	12	6.59	6.64	6.64	6.65	6.66	
10	QPSK	25	25	6.65	6.61	6.75	6.55	6.62	
10	QPSK	50	0	6.62	6.65	6.61	6.70	6.52	
10	16QAM	1	0	6.80	6.68	6.70	6.60	6.75	7.5
10	16QAM	1	25	6.67	6.55	6.55	6.75	6.66	
10	16QAM	1	49	6.69	6.70	6.59	6.56	6.58	
10	16QAM	25	0	6.64	6.68	6.62	6.49	6.39	7.5
10	16QAM	25	12	6.58	6.59	6.54	6.47	6.42	
10	16QAM	25	25	6.50	6.52	6.67	6.66	6.55	
10	16QAM	50	0	6.61	6.70	6.72	6.67	6.52	
10	64QAM	1	0	6.89	6.84	6.77	6.84	6.70	7.5
10	64QAM	1	25	6.86	6.73	6.94	6.70	6.69	
10	64QAM	1	49	6.79	6.99	6.88	6.79	6.67	
10	64QAM	25	0	5.83	5.95	6.11	5.99	5.93	6.5
10	64QAM	25	12	5.85	5.67	5.71	5.71	6.03	
10	64QAM	25	25	5.91	5.82	5.69	5.55	5.82	
10	64QAM	50	0	5.71	5.61	5.82	5.83	5.70	
10	256QAM	1	0	2.04	1.82	1.81	1.90	2.11	3
10	256QAM	1	25	1.85	1.70	1.89	2.17	1.79	
10	256QAM	1	49	1.75	2.04	1.91	2.00	1.91	
10	256QAM	25	0	1.70	1.60	1.70	1.85	1.70	2.5
10	256QAM	25	12	1.64	1.69	1.61	1.51	1.60	
10	256QAM	25	25	1.60	1.58	1.75	1.58	1.70	
10	256QAM	50	0	1.55	1.51	1.42	1.49	1.79	
Channel				55265	55810	55990	56170	56175	Tune-up limit (dBm)
Frequency (MHz)				3552.5	3607	3625	3643	3697.5	
5	QPSK	1	0	7.68	7.64	7.78	7.71	7.68	8.5
5	QPSK	1	12	7.50	7.52	7.58	7.53	7.45	
5	QPSK	1	24	7.47	7.43	7.37	7.55	7.56	
5	QPSK	12	0	6.57	6.58	6.68	6.63	6.56	7
5	QPSK	12	7	6.47	6.52	6.52	6.53	6.54	
5	QPSK	12	13	6.53	6.49	6.63	6.43	6.50	
5	QPSK	25	0	6.50	6.53	6.49	6.58	6.40	
5	16QAM	1	0	6.68	6.56	6.58	6.48	6.63	7
5	16QAM	1	12	6.55	6.43	6.43	6.63	6.54	
5	16QAM	1	24	6.57	6.58	6.47	6.44	6.46	
5	16QAM	12	0	6.52	6.56	6.50	6.37	6.27	7
5	16QAM	12	7	6.46	6.47	6.42	6.35	6.30	
5	16QAM	12	13	6.38	6.40	6.55	6.54	6.43	
5	16QAM	25	0	6.49	6.58	6.60	6.55	6.40	
5	64QAM	1	0	6.77	6.72	6.65	6.72	6.58	7
5	64QAM	1	12	6.74	6.61	6.82	6.58	6.57	
5	64QAM	1	24	6.67	6.87	6.76	6.67	6.55	
5	64QAM	12	0	5.71	5.83	5.99	5.87	5.81	6.5
5	64QAM	12	7	5.73	5.55	5.59	5.59	5.91	
5	64QAM	12	13	5.79	5.70	5.57	5.43	5.70	
5	64QAM	25	0	5.59	5.49	5.70	5.71	5.58	
5	256QAM	1	0	1.92	1.70	1.69	1.78	1.99	2.5
5	256QAM	1	12	1.73	1.58	1.77	2.05	1.67	
5	256QAM	1	24	1.63	1.92	1.79	1.88	1.79	
5	256QAM	12	0	1.58	1.48	1.58	1.73	1.58	2
5	256QAM	12	7	1.52	1.57	1.49	1.39	1.48	
5	256QAM	12	13	1.48	1.46	1.63	1.25	1.58	
5	256QAM	25	0	1.26	1.39	1.32	1.37	1.67	

N71 (663 ~ 698 MHz)

BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				134600	136100	137600	Tune-up limit (dBm)
Frequency (MHz)				673	680.5	688	
20	DFT-s-OFDM PI/2 BPSK	1	1	21.48	21.48	21.53	22.5
20		1	53	21.39	21.42	21.43	
20		1	104	21.40	21.31	21.31	
20		50	1	21.58	21.48	21.51	22.5
20		50	25	21.55	21.52	21.43	
20		50	50	21.47	21.47	21.43	
20		100	0	21.53	21.49	21.44	
20	DFT-s-OFDM QPSK	1	1	21.51	21.60	21.57	22.5
20		1	53	21.44	21.46	21.53	
20		1	104	21.47	21.38	21.42	
20		50	1	21.47	21.54	21.49	22.5
20		50	25	21.49	21.52	21.48	
20		50	50	21.47	21.46	21.44	
20		100	0	21.48	21.50	21.48	
20	DFT-s-OFDM 16QAM	1	1	21.53	21.52	21.50	22.5
20	DFT-s-OFDM 64QAM	1	1	20.40	20.27	20.15	21
20	DFT-s-OFDM 256QAM	1	1	18.03	17.75	17.73	19
Channel				134100	136100	138100	Tune-up limit (dBm)
Frequency (MHz)				670.5	680.5	690.5	
15	DFT-s-OFDM QPSK	1	1	21.49	21.41	21.39	22.5
Channel				133600	136100	138600	Tune-up limit (dBm)
Frequency (MHz)				668	680.5	693	
10	DFT-s-OFDM QPSK	1	1	21.53	21.46	21.54	22.5
Channel				133100	136100	139100	Tune-up limit (dBm)
Frequency (MHz)				665.5	680.5	695.5	
5	DFT-s-OFDM QPSK	1	1	21.43	21.46	21.55	22.5
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				134600	136100	137600	Tune-up limit (dBm)
Frequency (MHz)				663	680.5	698	
20	CP-OFDM QPSK	1	1	21.03	20.91	21.19	22
20	CP-OFDM 16QAM	1	1	20.89	20.61	20.67	21.5

20	CP-OFDM 64QAM	1	1	19.72	19.45	19.45	20.5
20	CP-OFDM 256QAM	1	1	15.93	15.77	15.71	18.5

2.4GHz WLAN ANT 5

2.4GHz WLAN ANT 5	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Power Setting	Duty Cycle %
	802.11b 1Mbps	CH 1	2412	13.54	14.0	14.5	100.00
		CH 6	2437	12.19	13.0	14.5	
		CH 11	2462	11.70	12.5	14.5	
	802.11g 6Mbps	CH 1	2412	12.71	13.5	14	98.21
		CH 6	2437	11.75	12.5	14	
		CH 11	2462	11.51	12.0	14	
	802.11n-HT20 MCS0	CH 1	2412	12.50	13.0	14	98.59
		CH 6	2437	11.65	12.5	14	
		CH 11	2462	11.47	12.0	14	
	802.11n-HT40 MCS0	CH 3	2422	11.81	12.50	14	94.20
		CH 6	2437	12.09	12.50	14	
		CH 9	2452	12.22	13.00	14	

5GHz WLAN ANT 5

5.2GHz WLAN ANT 5	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Power Setting	Duty Cycle %
	802.11a 6Mbps	CH 36	5180	7.04	7.5	11	98.03
		CH 44	5220	7.11	8.0	11	
		CH 48	5240	7.00	7.5	11	
	802.11n-HT20 MCS0	CH 36	5180	7.55	8.0	11	98.28
		CH 44	5220	7.14	8.0	11	
		CH 48	5240	7.84	8.5	11	
	802.11n-HT40 MCS0	CH 38	5190	7.88	8.5	11	96.68
		CH 46	5230	6.87	7.5	11	
		CH 36	5180	7.45	8.0	11	
	802.11ac-VHT20 MCS0	CH 44	5220	7.03	7.5	11	98.14
		CH 48	5240	6.99	7.5	11	
		CH 38	5190	7.37	8.0	11	
	802.11ac-VHT40 MCS0	CH 46	5230	7.03	7.5	11	96.41
		CH 42	5210	7.00	7.5	11	

5GHz WLAN ANT 5

5.3GHz WLAN ANT 5	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Power Setting	Duty Cycle %
	802.11a 6Mbps	CH 52	5260	7.01	7.5	11	98.03
		CH 60	5300	7.44	8.0	11	
		CH 64	5320	7.61	8.5	11	
	802.11n-HT20 MCS0	CH 52	5260	7.78	8.5	11	98.28
		CH 60	5300	7.44	8.0	11	
		CH 64	5320	7.70	8.5	11	
	802.11n-HT40 MCS0	CH 54	5270	6.89	7.5	11	96.68
		CH 62	5310	8.39	9.0	11	
		CH 52	5260	6.90	7.5	11	
	802.11ac-VHT20 MCS0	CH 60	5300	7.07	7.5	11	98.14
		CH 64	5320	7.47	8.0	11	
		CH 54	5270	7.22	8.0	11	
	802.11ac-VHT40 MCS0	CH 62	5310	6.76	7.5	11	96.41
		CH 58	5290	7.18	8.0	11	

5GHz WLAN ANT 5

5.5GHz WLAN ANT 5	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Power Setting	Duty Cycle %
	802.11a 6Mbps	CH 100	5500	6.22	7.0	9	98.03
		CH 120	5600	5.41	6.0	9	
		CH 144	5720	5.52	6.0	9	
	802.11n-HT20 MCS0	CH 100	5500	6.33	7.0	9	98.28
		CH 120	5600	6.41	7.0	9	
		CH 144	5720	6.90	7.5	9	
	802.11n-HT40 MCS0	CH 102	5510	6.99	7.5	9	96.68
		CH 126	5630	5.47	6.0	9	
		CH 142	5710	4.13	5.0	9	
	802.11ac-VHT20 MCS0	CH 100	5500	5.96	6.5	8.5	98.14
		CH 120	5600	5.22	6.0	8.5	
		CH 144	5720	5.21	6.0	8.5	
	802.11ac-VHT40 MCS0	CH 102	5510	5.43	6.0	8.5	96.41
		CH 126	5630	5.55	6.0	8.5	
		CH 142	5710	5.61	6.5	8.5	
	802.11ac-VHT80 MCS0	CH 106	5530	6.04	6.5	8.5	93.54
		CH 138	5690	5.69	6.5	8.5	

5GHz WLAN ANT 5

5.8GHz WLAN ANT 5	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Power Setting	Duty Cycle %
	802.11a MCS0	CH 149	5745	4.59	6.00	8	98.03
		CH 157	5785	4.11	5.00	8	
		CH 165	5825	4.21	5.00	8	
	802.11n-HT20 MCS0	CH 149	5745	4.91	5.00	8	98.28
		CH 157	5785	4.21	5.00	8	
		CH 165	5825	5.67	6.50	8	
	802.11n-HT40 MCS0	CH 151	5755	4.07	4.50	8	96.68
		CH 159	5795	5.55	6.00	8	
		CH 149	5745	4.30	5.00	8	
	802.11ac-VHT20 MCS0	CH 157	5785	4.71	5.50	8	98.14
		CH 165	5825	4.03	5.00	8	
		CH 151	5755	4.61	5.50	8	
	802.11ac-VHT40 MCS0	CH 159	5795	4.15	5.00	8	96.41
		CH 155	5775	4.11	5.00	8	

2.4GHz WLAN ANT 6

2.4GHz WLAN ANT 6	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Power Setting	Duty Cycle %
	802.11b 1Mbps	CH 1	2412	14.44	15.00	15	100.00
		CH 6	2437	14.74	15.50	15	
		CH 11	2462	14.04	14.50	15	
	802.11g 6Mbps	CH 1	2412	13.28	14.00	14.5	98.21
		CH 6	2437	13.26	14.00	14.5	
		CH 11	2462	12.31	13.00	14.5	
	802.11n-HT20 MCS0	CH 1	2412	12.56	13.00	14.5	98.59
		CH 6	2437	13.07	13.50	14.5	
		CH 11	2462	12.11	12.50	14.5	
	802.11n-HT40 MCS0	CH 3	2422	11.85	12.50	14.5	94.20
		CH 6	2437	12.14	13.00	14.5	
		CH 9	2452	12.27	13.00	14.5	

5.2GHz WLAN ANT 6

5.2GHz WLAN ANT 6	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Power Setting	Duty Cycle %
	802.11a 6Mbps	CH 36	5180	7.86	8.50	8.5	98.03
		CH 44	5220	7.30	8.00	8.5	
		CH 48	5240	7.01	7.50	8.5	
	802.11n-HT20 MCS0	CH 36	5180	7.73	8.50	8.5	98.28
		CH 44	5220	7.15	8.00	8.5	
		CH 48	5240	7.95	8.50	8.5	
	802.11n-HT40 MCS0	CH 38	5190	8.57	9.00	8.5	96.68
		CH 46	5230	6.68	7.50	8.5	
		CH 36	5180	7.69	8.50	8.5	
	802.11ac-VHT20 MCS0	CH 44	5220	7.15	8.00	8.5	98.14
		CH 48	5240	7.05	7.50	8.5	
		CH 38	5190	7.67	8.50	8.5	
	802.11ac-VHT40 MCS0	CH 46	5230	7.04	7.50	8.5	96.41
		CH 42	5210	7.45	8.00	8.5	

5.3GHz WLAN ANT 6

5.3GHz WLAN ANT 6	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Power Setting	Duty Cycle %
	802.11a 6Mbps	CH 52	5260	7.11	8.00	8.5	98.03
		CH 60	5300	7.39	8.00	8.5	
		CH 64	5320	7.66	8.50	8.5	
	802.11n-HT20 MCS0	CH 52	5260	7.88	8.50	8.5	98.28
		CH 60	5300	7.45	8.00	8.5	
		CH 64	5320	7.84	8.50	8.5	
	802.11n-HT40 MCS0	CH 54	5270	7.04	7.50	8.5	96.68
		CH 62	5310	8.55	9.00	8.5	
		CH 52	5260	7.11	8.00	8.5	
	802.11ac-VHT20 MCS0	CH 60	5300	7.21	8.00	8.5	98.14
		CH 64	5320	7.68	8.50	8.5	
		CH 54	5270	7.46	8.00	8.5	
	802.11ac-VHT40 MCS0	CH 62	5310	6.87	7.50	8.5	96.41
		CH 58	5290	7.59	8.00	8.5	

5.5 WLAN ANT 6

5.5GHz WLAN ANT 6	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Power Setting	Duty Cycle %
	802.11a 6Mbps	CH 100	5500	6.21	7.00	8	98.03
		CH 116	5580	5.40	6.00	8	
		CH 144	5720	5.49	6.00	8	
	802.11n-HT20 MCS0	CH 100	5500	6.55	7.00	8	98.28
		CH 116	5580	6.57	7.00	8	
		CH 144	5720	6.99	7.50	8	
	802.11n-HT40 MCS0	CH 102	5510	7.07	7.50	8	96.68
		CH 126	5630	5.67	6.50	8	
		CH 142	5710	4.36	5.00	8	
	802.11ac-VHT20 MCS0	CH 100	5500	5.99	6.50	8.5	98.14
		CH 116	5580	5.58	6.00	8.5	
		CH 144	5720	5.63	6.50	8.5	
	802.11ac-VHT40 MCS0	CH 102	5510	5.55	6.00	8.5	96.41
		CH 126	5630	5.66	6.50	8.5	
		CH 142	5710	5.71	6.50	8.5	
	802.11ac-VHT80 MCS0	CH 106	5530	6.78	7.50	8.5	93.54
		CH 138	5690	5.77	6.50	8.5	

5.8 WLAN ANT 6

5.8GHz WLAN ANT 6	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Power Setting	Duty Cycle %
	802.11a MCS0	CH 149	5745	4.68	5.50	9.5	98.03
		CH 157	5785	4.15	5.00	9.5	
		CH 165	5825	4.28	5.00	9.5	
	802.11n-HT20 MCS0	CH 149	5745	4.98	5.50	9.5	98.28
		CH 157	5785	4.25	5.00	9.5	
		CH 165	5825	4.59	5.00	9.5	
	802.11n-HT40 MCS0	CH 151	5755	5.11	6.00	9.5	96.68
		CH 159	5795	5.91	6.00	9.5	
	802.11ac-VHT20 MCS0	CH 149	5745	4.78	5.50	9.5	98.14
		CH 157	5785	4.89	5.50	9.5	
		CH 165	5825	4.23	5.00	9.5	
	802.11ac-VHT40 MCS0	CH 151	5755	4.81	5.50	9.5	96.41
		CH 159	5795	4.55	5.00	9.5	
	802.11ac-VHT80 MCS0	CH 155	5775	4.52	5.00	9.5	93.54

2CC Uplink Carrier Aggregation for Intra-band										
CA_48C 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)
				RB Size	RB Offset	RB Size	RB Offset			
55340	55340	55538	QPSK	1	0	0	0	1	0	13.31
55990	55891	56089	QPSK	1	0	0	0	1	0	13.67
56640	56442	56640	QPSK	1	0	0	0	1	0	13.55

CA_48E Combination:20MHz+20MHz(100RB+100RB)															
PCC Channel	PCC Channel (3GPP)	SCC Channel	SCC Channel	SCC Channel	Modulation	PCC		SCC		SCC		SCC		Total RB Size	Target MPR Level(dB)
						RB Size	RB Offset	RB Size	RB Offset	RB Size	RB Offset	RB Size	RB Offset		
55340	55340	55538	55736	55736	QPSK	1	0	1	0	1	0	1	0	1	13.23
55990	55891	56089	56188	56188	QPSK	1	0	1	0	1	0	1	0	1	13.54
56640	56442	56640	56640	56640	QPSK	1	0	1	0	1	0	1	0	1	13.41

Reduced Power Level 3

2CC Uplink Carrier Aggregation for Inter-band										
CA_4A_13A										
Combination:20MHz+10MHz(100RB+50RB)										
PCC Channel	PCC Channel (3GPP)	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level(dB)	Measured Power(dBm)
				RB Size	RB Offset	RB Size	RB Offset			
20050	20050	23230	QPSK	1	0	0	0	1	0	14.39
20175	20175	23230	QPSK	1	0	0	0	1	0	14.06
20300	20300	23230	QPSK	1	0	0	0	1	0	14.03

CA_2A_13A										
Combination:20MHz+10MHz(100RB+50RB)										
PCC Channel	PCC Channel (3GPP)	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level(dB)	Measured Power(dBm)
				RB Size	RB Offset	RB Size	RB Offset			
18700	18700	23230	QPSK	1	0	0	0	1	0	14.13
18900	18900	23230	QPSK	1	0	0	0	1	0	15.01
19100	19100	23230	QPSK	1	0	0	0	1	0	15.44

CA_13A_66A										
Combination:10MHz+20MHz(50RB+100RB)										
PCC Channel	PCC Channel (3GPP)	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level(dB)	Measured Power(dBm)
				RB Size	RB Offset	RB Size	RB Offset			
23230	23230	132072	QPSK	1	0	0	0	1	0	23.91
23230	23230	132322	QPSK	1	0	0	0	1	0	23.89
23230	23230	132572	QPSK	1	0	0	0	1	0	24.03

2CC LTE Downlink													
Configure		CA Configuration	PCC					SCC				Power	
			Band	BW (MHz)	UL Channel	UL Fre (MHz)	UL Mode (Modulation/RB/Offset)	Band	BW (MHz)	DL Channel	DL Fre (MHz)	CA Tx (dBm)	Rel.8 Tx (dBm)
Intra-band	Non Continuous	CA_2A_2A	2	20	18700	1860	QPSK/1#0	2	20	19100	1900	22.25	
		CA_4A_4A	4	20	20050	1720	QPSK/1#0	4	20	20300	1745	22.59	
		CA_66A_66A	66	20	132072	1720	QPSK/1#0	66	20	132597	1772.5	22.55	
Inter-band		CA_13A_48A	13	10	23230	782	QPSK/1#0	48	20	55792	3605.2	23.81	

4CC LTE Downlink for Top Antenna																			
Configure	CA Configuration	PCC					SCC1				SCC2				SCC3			Power	
		Band	BW (MHz)	UL Channel	UL Fre. (MHz)	UL Mode (Modulation/RB/Offset)	Band	BW (MHz)	DL Channel	DL Fre. (MHz)	Band	BW (MHz)	DL Channel	DL Fre. (MHz)	Band	DL Channel	DL Fre. (MHz)	CA TX (dBm)	Rel.8 TX (dBm)
Inter-band	CA_13A_48D	13	10	23230	782	QPSK(1#0)	48	20	55792	3605.2	48	20	55990	3625	48	20	56188	3644.8	23.61

2CC LTE Uplink for Bottom Antenna													
Configure	CA Configuration	Ant	PCC				SCC				Power		
			Band	BW (MHz)	UL Channel	UL Fre. (MHz)	UL Mode (Modulation/RB/O fset)	Band	BW (MHz)	UL Channel	UL Fre. (MHz)	Measured Power(dBm)	Tune-up limit(dBm)
Inter-band	CA_2A-71A	Ant 0	2	20	18700	1860	QPSK/1#0	71	20	68786	637	16.86	17.5
	CA_4A-71A	Ant 0	4	20	20050	1720	QPSK/1#0	71	20	68786	637	16.79	17.5
	CA_48A-71A	Ant 0	48	20	55990	3625	QPSK/1#0	71	20	68786	637	16.81	17.5
	CA_66A-71A	Ant 0	66	20	132072	1720	QPSK/1#0	71	20	68786	637	16.69	17.5
										68761			

3CC LTE Uplink for Top Antenna																	
Configure	CA Configuration	Ant	PCC					SCC 1				SCC 2				Power	
			Band	BW (MHz)	UL Channel	UL Fre. (MHz)	UL Mode (Modulation/RB/O offset)	Band	BW (MHz)	UL Channel	UL Fre. (MHz)	Band	BW (MHz)	UL Channel	UL Fre. (MHz)	Measured Power(dBm)	Tune-up limit(dBm)
Inter-band	CA_2A-2A-71A	Ant 0	2	20	18700	1860	QPSK1#0	2	20	18700	1860	71	20	68786	637	16.79	17.5
	CA_2A-4A-71A	Ant 0	2	20	18700	1860	QPSK1#0	2	20	18700	1860	71	20	68786	637	16.81	17.5
	CA_4A-4A-71A	Ant 0	4	20	20050	1720	QPSK1#0	4	20	20050	1720	71	20	68786	637	16.83	17.5
	CA_4A-4A-71A	Ant 0	4	20	19100	1900	QPSK1#0	4	20	19100	1900	71	20	68786	637	16.79	17.5
	CA_4A-4A-71A	Ant 0	48	20	55990	3625	QPSK1#0	48	20	55990	3625	71	20	68786	637	16.86	17.5
	CA_6A-6A-71A	Ant 0	66	20	132072	1720	QPSK1#0	66	20	132072	1720	71	20	68786	637	17.02	17.5
	CA_4B-4B-71A	Ant 0	48	20	55891	3615.1	QPSK1#0	48	20	55891	3615.1	71	20	68786	637	16.85	17.5
	CA_6B-6B-71A	Ant 0	48	20	132323	1745.1	QPSK1#0	13	10	23230	782	71	20	68786	637	16.73	17.5

Band 2 (1900MHz Band)(Reduced Power Level 4) 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	10.96	11.08	11.10	11.5
20	QPSK	1	49	10.79	10.89	10.88	
20	QPSK	1	99	10.68	10.59	10.51	
20	QPSK	50	0	9.86	9.90	9.77	10.5
20	QPSK	50	24	9.77	9.86	9.68	
20	QPSK	50	50	9.70	9.78	9.57	
20	QPSK	100	0	9.60	9.66	9.53	10.5
20	16QAM	1	0	9.80	9.94	9.79	
20	16QAM	1	49	9.68	9.92	9.74	
20	16QAM	1	99	9.63	9.88	9.72	10.5
20	16QAM	50	0	9.81	9.83	9.85	
20	16QAM	50	24	9.75	9.77	9.78	
20	16QAM	50	50	9.66	9.64	9.73	10.5
20	16QAM	100	0	9.63	9.60	9.66	
20	64QAM	1	0	9.61	9.86	9.81	
20	64QAM	1	49	9.51	9.80	9.78	10.5
20	64QAM	1	99	9.46	9.69	9.65	
20	64QAM	50	0	9.58	9.61	9.52	
20	64QAM	50	24	9.55	9.58	9.44	10
20	64QAM	50	50	9.41	9.47	9.32	
20	64QAM	100	0	9.34	9.39	9.27	
20	256QAM	1	0	5.56	5.65	5.61	6
20	256QAM	1	49	5.54	5.59	5.55	
20	256QAM	1	99	5.57	5.51	5.45	
20	256QAM	50	0	5.15	5.22	5.19	5.5
20	256QAM	50	24	5.08	5.20	5.11	
20	256QAM	50	50	5.03	5.11	5.06	
20	256QAM	100	0	5.06	5.12	5.07	
Channel				18675	18900	19125	Tune-up limit (dBm)
Frequency (MHz)				1857.5	1880	1902.5	
15	QPSK	1	0	10.86	10.98	11.00	11.5
15	QPSK	1	37	10.69	10.59	10.58	
15	QPSK	1	74	10.58	10.49	10.41	
15	QPSK	36	0	9.76	9.80	9.67	10.5
15	QPSK	36	20	9.67	9.76	9.58	
15	QPSK	36	39	9.60	9.68	9.47	
15	QPSK	75	0	9.50	9.56	9.43	10.5
15	16QAM	1	0	9.70	9.84	9.69	
15	16QAM	1	37	9.58	9.82	9.64	
15	16QAM	1	74	9.53	9.78	9.62	10.5
15	16QAM	36	0	9.71	9.73	9.75	
15	16QAM	36	20	9.65	9.67	9.68	
15	16QAM	36	39	9.56	9.54	9.63	10.5
15	16QAM	75	0	9.53	9.50	9.56	
15	64QAM	1	0	9.51	9.76	9.71	
15	64QAM	1	37	9.41	9.70	9.68	10.5
15	64QAM	1	74	9.36	9.59	9.55	
15	64QAM	36	0	9.48	9.51	9.42	
15	64QAM	36	20	9.45	9.48	9.34	10
15	64QAM	36	39	9.31	9.37	9.22	
15	64QAM	75	0	9.24	9.29	9.17	
15	256QAM	1	0	5.46	5.55	5.51	6
15	256QAM	1	37	5.44	5.49	5.45	
15	256QAM	1	74	5.47	5.41	5.35	
15	256QAM	36	0	5.05	5.12	5.09	5.5
15	256QAM	36	20	4.98	5.10	5.01	
15	256QAM	36	39	4.93	5.01	4.96	
15	256QAM	75	0	4.96	5.02	4.97	
Channel				18650	18900	19150	Tune-up limit (dBm)
Frequency (MHz)				1855	1880	1905	
10	QPSK	1	0	10.74	10.86	10.88	11.5
10	QPSK	1	25	10.57	10.47	10.46	
10	QPSK	1	49	10.46	10.37	10.29	
10	QPSK	25	0	9.64	9.68	9.55	10
10	QPSK	25	12	9.55	9.64	9.46	
10	QPSK	25	25	9.48	9.56	9.35	
10	QPSK	50	0	9.38	9.44	9.31	10.5
10	16QAM	1	0	9.58	9.72	9.57	
10	16QAM	1	25	9.46	9.70	9.52	
10	16QAM	1	49	9.41	9.66	9.50	10
10	16QAM	25	0	9.59	9.61	9.63	
10	16QAM	25	12	9.53	9.55	9.56	
10	16QAM	25	25	9.44	9.42	9.51	10
10	16QAM	50	0	9.41	9.38	9.44	
10	64QAM	1	0	9.39	9.64	9.59	
10	64QAM	1	25	9.29	9.58	9.56	10
10	64QAM	1	49	9.24	9.47	9.43	
10	64QAM	25	0	9.36	9.39	9.30	
10	64QAM	25	12	9.33	9.36	9.22	10
10	64QAM	25	25	9.19	9.25	9.10	
10	64QAM	50	0	9.12	9.17	9.05	
10	256QAM	1	0	5.34	5.43	5.39	6
10	256QAM	1	25	5.32	5.37	5.33	
10	256QAM	1	49	5.35	5.29	5.23	
10	256QAM	25	0	4.93	5.00	4.97	5.5
10	256QAM	25	12	4.86	4.98	4.89	
10	256QAM	25	25	4.81	4.89	4.84	
10	256QAM	50	0	4.84	4.90	4.85	
Channel				18625	18900	19175	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1880	1907.5	
5	QPSK	1	0	10.63	10.75	10.77	11.5
5	QPSK	1	12	10.46	10.36	10.35	
5	QPSK	1	24	10.35	10.26	10.18	

Band 4 (AWS Band)(Reduced Power Level 4) 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	11.02	11.08	11.04	11.5
20	QPSK	1	49	10.96	10.99	10.97	
20	QPSK	1	99	10.92	10.91	10.87	
20	QPSK	50	0	9.98	10.03	9.99	10.5
20	QPSK	50	24	9.97	9.95	9.96	
20	QPSK	50	50	9.92	9.89	9.86	
20	QPSK	100	0	9.84	9.86	9.82	10.5
20	16QAM	1	0	9.95	10.00	9.91	
20	16QAM	1	49	9.85	9.99	9.82	
20	16QAM	1	99	9.81	9.97	9.72	10.5
20	16QAM	50	0	9.81	9.86	9.90	
20	16QAM	50	24	9.77	9.77	9.81	
20	16QAM	50	50	9.73	9.71	9.77	10
20	16QAM	100	0	9.67	9.69	9.74	
20	64QAM	1	0	10.02	9.83	10.04	
20	64QAM	1	49	10.00	9.82	10.02	10
20	64QAM	1	99	9.94	9.78	9.98	
20	64QAM	50	0	9.91	9.58	9.61	
20	64QAM	50	24	9.53	9.56	9.53	10
20	64QAM	50	50	9.47	9.48	9.44	
20	64QAM	100	0	9.46	9.45	9.43	
20	256QAM	1	0	5.73	5.78	5.74	6.5
20	256QAM	1	49	5.70	5.72	5.65	
20	256QAM	1	99	5.68	5.68	5.63	
20	256QAM	50	0	5.25	5.28	5.19	5.5
20	256QAM	50	24	5.17	5.19	5.18	
20	256QAM	50	50	5.11	5.11	5.11	
20	256QAM	100	0	5.03	5.10	5.05	
Channel				20025	20175	20325	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1732.5	1747.5	
15	QPSK	1	0	10.90	10.97	10.92	11.5
15	QPSK	1	37	10.84	10.87	10.85	
15	QPSK	1	74	10.80	10.79	10.75	
15	QPSK	36	0	9.86	9.91	9.87	10.5
15	QPSK	36	20	9.85	9.83	9.84	
15	QPSK	36	39	9.80	9.77	9.74	
15	QPSK	75	0	9.72	9.74	9.70	10.5
15	16QAM	1	0	9.83	9.88	9.79	
15	16QAM	1	37	9.73	9.87	9.70	
15	16QAM	1	74	9.69	9.85	9.60	10.5
15	16QAM	36	0	9.69	9.74	9.78	
15	16QAM	36	20	9.65	9.65	9.69	
15	16QAM	36	39	9.61	9.59	9.65	10.5
15	16QAM	75	0	9.55	9.57	9.62	
15	64QAM	1	0	9.90	9.71	9.92	
15	64QAM	1	37	9.88	9.70	9.90	10
15	64QAM	1	74	9.82	9.66	9.86	
15	64QAM	36	0	9.79	9.46	9.49	
15	64QAM	36	20	9.41	9.44	9.41	10
15	64QAM	36	39	9.35	9.36	9.32	
15	64QAM	75	0	9.34	9.33	9.31	
15	256QAM	1	0	5.61	5.66	5.62	6.5
15	256QAM	1	37	5.58	5.60	5.53	
15	256QAM	1	74	5.56	5.56	5.51	
15	256QAM	36	0	5.13	5.16	5.07	5.5
15	256QAM	36	20	5.05	5.07	5.06	
15	256QAM	36	39	4.99	4.99	4.99	
15	256QAM	75	0	4.91	4.98	4.93	
Channel				20000	20175	20350	Tune-up limit (dBm)
Frequency (MHz)				1715	1732.5	1750	
10	QPSK	1	0	10.80	10.87	10.82	10.5
10	QPSK	1	25	10.74	10.77	10.75	
10	QPSK	1	49	10.70	10.69	10.65	
10	QPSK	25	0	9.76	9.81	9.77	10.5
10	QPSK	25	12	9.75	9.73	9.74	
10	QPSK	25	25	9.70	9.67	9.64	
10	QPSK	50	0	9.62	9.64	9.60	10.5
10	16QAM	1	0	9.73	9.78	9.69	
10	16QAM	1	25	9.63	9.77	9.60	
10	16QAM	1	49	9.59	9.75	9.50	10
10	16QAM	25	0	9.59	9.64	9.68	
10	16QAM	25	12	9.55	9.55	9.59	
10	16QAM	25	25	9.51	9.49	9.55	10
10	16QAM	50	0	9.45	9.47	9.52	
10	64QAM	1	0	9.80	9.61	9.82	
10	64QAM	1	25	9.78	9.60	9.80	10.5
10	64QAM	1	49	9.72	9.56	9.76	
10	64QAM	25	0	9.59	9.36	9.39	
10	64QAM	25	12	9.31	9.34	9.31	10
10	64QAM	25	25	9.25	9.26	9.22	
10	64QAM	50	0	9.24	9.23	9.21	
10	256QAM	1	0	5.51	5.56	5.52	6
10	256QAM	1	25	5.48	5.50	5.43	
10	256QAM	1	49	5.46	5.46	5.41	
10	256QAM	25	0	5.03	5.06	4.97	5.5
10	256QAM	25	12	4.95	4.97	4.96	
10	256QAM	25	25	4.89	4.89	4.89	
10	256QAM	50	0	4.81	4.88	4.83	
Channel				19975	20175	20375	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1732.5	1752.5	
5	QPSK	1	0	10.69	10.76	10.71	11.5
5	QPSK	1	12	10.63	10.66	10.64	
5	QPSK	1	24	10.59	10.58	10.54	

5	QPSK	12	0	9.53	9.57	9.44	10
5	QPSK	12	7	9.44	9.53	9.35	
5	QPSK	12	13	9.37	9.45	9.24	
5	QPSK	25	0	9.27	9.33	9.20	10
5	16QAM	1	0	9.47	9.61	9.46	
5	16QAM	1	12	9.35	9.59	9.41	
5	16QAM	1	24	9.30	9.55	9.39	10
5	16QAM	12	0	9.48	9.50	9.52	
5	16QAM	12	7	9.42	9.44	9.45	
5	16QAM	12	13	9.33	9.31	9.40	10
5	16QAM	25	0	9.30	9.27	9.33	
5	64QAM	1	0	9.28	9.53	9.48	
5	64QAM	1	12	9.18	9.47	9.45	10
5	64QAM	1	24	9.13	9.36	9.32	
5	64QAM	12	0	9.25	9.28	9.19	
5	64QAM	12	7	9.22	9.25	9.11	10
5	64QAM	12	13	9.08	9.14	8.99	
5	64QAM	25	0	9.01	9.06	8.94	
5	256QAM	1	0	5.23	5.32	5.28	6
5	256QAM	1	12	5.21	5.26	5.22	
5	256QAM	1	24	5.24	5.18	5.12	
5	256QAM	12	0	4.82	4.89	4.86	5.5
5	256QAM	12	7	4.75	4.87	4.78	
5	256QAM	12	13	4.70	4.78	4.73	
5	256QAM	25	0	4.73	4.79	4.74	
Channel				18615	18900	19165	Tune-up limit (dBm)
Frequency (MHz)				1851.5	1880	1908.5	
3	QPSK	1	0	10.53	10.65	10.67	11
3	QPSK	1	8	10.36	10.26	10.25	
3	QPSK	1	14	10.25	10.16	10.08	
3	QPSK	8	0	9.43	9.47	9.34	10
3	QPSK	8	4	9.34	9.43	9.25	
3	QPSK	8	7	9.27	9.35	9.14	
3	QPSK	15	0	9.17	9.23	9.10	10
3	16QAM	1	0	9.37	9.51	9.36	
3	16QAM	1	8	9.25	9.49	9.31	
3	16QAM	1	14	9.20	9.45	9.29	10
3	16QAM	8	0	9.38	9.40	9.42	
3	16QAM	8	4	9.32	9.34	9.35	
3	16QAM	8	7	9.23	9.21	9.30	10
3	16QAM	15	0	9.20	9.17	9.23	
3	64QAM	1	0	9.18	9.43	9.38	
3	64QAM	1	8	9.08	9.37	9.35	10
3	64QAM	1	14	9.03	9.26	9.22	
3	64QAM	8	0	9.15	9.18	9.09	
3	64QAM	8	4	9.12	9.15	9.01	10
3	64QAM	8	7	8.98	9.04	8.89	
3	64QAM	15	0	8.91	8.96	8.84	
3	256QAM	1	0	5.13	5.22	5.18	6
3	256QAM	1	8	5.11	5.16	5.12	
3	256QAM	1	14	5.14	5.08	5.02	
3	256QAM	8	0	4.72	4.79	4.76	5.5
3	256QAM	8	4	4.65	4.77	4.68	
3	256QAM	8	7	4.60	4.68	4.63	
3	256QAM	15	0	4.63	4.69	4.64	
Channel				18607	18900	19193	Tune-up limit (dBm)
Frequency (MHz)				1850.7	1880	1909.3	
1.4	QPSK	1	0	10.41	10.53	10.55	11
1.4	QPSK	1	3	10.24	10.14	10.13	
1.4	QPSK	1	5	10.13	10.04	9.96	
1.4	QPSK	3	0	9.31	9.35	9.22	9.5
1.4	QPSK	3	1	9.22	9.31	9.13	
1.4	QPSK	3	3	9.15	9.23	9.02	
1.4	QPSK	6	0	9.05	9.11	8.98	10
1.4	16QAM	1	0	9.25	9.39	9.24	
1.4	16QAM	1	3	9.13	9.37	9.19	
1.4	16QAM	1	5	9.08	9.33	9.17	10
1.4	16QAM	3	0	9.26	9.28	9.30	
1.4	16QAM	3	1	9.20	9.22	9.23	
1.4	16QAM	3	3	9.11	9.09	9.18	9.5
1.4	16QAM	6	0	9.08	9.05	9.11	
1.4	64QAM	1	0	9.06	9.31	9.26	
1.4	64QAM	1	3	8.96	9.25	9.23	10
1.4	64QAM	1	5	8.91	9.14	9.10	
1.4	64QAM	3	0	9.03	9.06	8.97	
1.4	64QAM	3	1	9.00	9.03	8.89	9.5
1.4	64QAM	3	3	8.86	8.92	8.77	
1.4	64QAM	6	0	8.79	8.84	8.72	
1.4	256QAM	1	0	5.01	5.10	5.06	5.5
1.4	256QAM	1	3	4.99	5.04	5.00	
1.4	256QAM	1	5	5.02	4.96	4.90	
1.4	256QAM	3	0	4.60	4.67	4.64	5
1.4	256QAM	3	1	4.53	4.65	4.56	
1.4	256QAM	3	3	4.48	4.56	4.51	
1.4	256QAM	6	0	4.51	4.57	4.52	

5	QPSK	12	0	9.65	9.70	9.66	10.5
5	QPSK	12	7	9.64	9.62	9.63	
5	QPSK	12	13	9.59	9.56	9.53	
5	QPSK	25	0	9.51	9.53	9.49	10
5	16QAM	1	0	9.62	9.67	9.58	
5	16QAM	1	12	9.52	9.66	9.49	
5	16QAM	1	24	9.48	9.64	9.39	10
5	16QAM	12	0	9.48	9.53	9.57	
5	16QAM	12	7	9.44	9.44	9.48	
5	16QAM	12	13	9.40	9.38	9.44	10
5	16QAM	25	0	9.34	9.36	9.41	
5	64QAM	1	0	9.69	9.50	9.71	
5	64QAM	1	12	9.67	9.49	9.69	10
5	64QAM	1	24	9.61	9.45	9.65	
5	64QAM	12	0	9.58	9.25	9.28	
5	64QAM	12	7	9.20	9.23	9.20	10
5	64QAM	12	13	9.14	9.15	9.11	
5	64QAM	25	0	9.13	9.12	9.10	
5	256QAM	1	0	5.40	5.45	5.41	6
5	256QAM	1	12	5.37	5.39	5.32	
5	256QAM	1	24	5.35	5.35	5.30	
5	256QAM	12	0	4.92	4.95	4.86	5.5
5	256QAM	12	7	4.84	4.86	4.85	
5	256QAM	12	13	4.78	4.78	4.78	
5	256QAM	25	0	4.70	4.77	4.72	
Channel				19965	20175	20385	Tune-up limit (dBm)
Frequency (MHz)				1711.5	1732.5	1753.5	
3	QPSK	1	0	10.57	10.64	10.59	11
3	QPSK	1	8	10.51	10.54	10.52	
3	QPSK	1	14	10.47	10.46	10.42	
3	QPSK	8	0	9.53	9.58	9.54	10
3	QPSK	8	4	9.52	9.50	9.51	
3	QPSK	8	7	9.47	9.44	9.41	
3	QPSK	15	0	9.39	9.41	9.37	10
3	16QAM	1	0	9.50	9.55	9.46	
3	16QAM	1	8	9.40	9.54	9.37	
3	16QAM	1	14	9.36	9.52	9.27	10
3	16QAM	8	0	9.36	9.41	9.45	
3	16QAM	8	4	9.32	9.32	9.36	
3	16QAM	8	7	9.28	9.26	9.32	10
3	16QAM	15	0	9.22	9.24	9.29	
3	64QAM	1	0	9.57	9.38	9.59	
3	64QAM	1	8	9.55	9.37	9.57	10
3	64QAM	1	14	9.49	9.33	9.53	
3	64QAM	8	0	9.46	9.13	9.16	
3	64QAM	8	4	9.08	9.11	9.08	9.5
3	64QAM	8	7	9.02	9.03	8.99	
3	64QAM	15	0	9.01	9.00	8.98	
3	256QAM	1	0	5.28	5.33	5.29	6
3	256QAM	1	8	5.25	5.27	5.20	
3	256QAM	1	14	5.23	5.23	5.18	
3	256QAM	8	0	4.80	4.83	4.74	5.5
3	256QAM	8	4	4.72	4.74	4.73	
3	256QAM	8	7	4.66	4.66	4.66	
3	256QAM	15	0	4.58	4.65	4.60	
Channel				19957	20175	20393	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1732.5	1754.3	
1.4	QPSK	1	0	10.47	10.54	10.49	11
1.4	QPSK	1	3	10.41	10.44	10.42	
1.4	QPSK	1	5	10.37	10.36	10.32	
1.4	QPSK	3	0	9.43	9.48	9.44	10
1.4	QPSK	3	1	9.42	9.40	9.41	
1.4	QPSK	3	3	9.37	9.34	9.31	
1.4	QPSK	6	0	9.29	9.31	9.27	10
1.4	16QAM	1	0	9.40	9.45	9.36	
1.4	16QAM	1	3	9.30	9.44	9.27	
1.4	16QAM	1	5	9.26	9.42	9.17	10
1.4	16QAM	3	0	9.26	9.31	9.35	
1.4	16QAM	3	1	9.22	9.22	9.26	
1.4	16QAM	3	3	9.18	9.16	9.22	10
1.4	16QAM	6	0	9.12	9.14	9.19	
1.4	64QAM	1	0	9.47	9.28	9.49	
1.4	64QAM	1	3	9.45	9.27	9.47	10
1.4	64QAM	1	5	9.39	9.23	9.43	
1.4	64QAM	3	0	9.36	9.03	9.06	
1.4	64QAM	3	1	8.98	9.01	8.98	9.5
1.4	64QAM	3	3	8.92	8.93	8.89	
1.4	64QAM	6	0	8.91	8.90	8.88	
1.4	256QAM	1	0	5.18	5.23	5.19	6
1.4	256QAM	1	3	5.15	5.17	5.10	
1.4	256QAM	1	5	5.13	5.13	5.08	
1.4	256QAM	3	0	4.70	4.73	4.64	5
1.4	256QAM	3	1	4.62	4.64	4.63	
1.4	256QAM	3	3	4.56	4.56	4.56	
1.4	256QAM	6	0	4.48	4.55	4.50	

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	Tune-up limit (dBm)
Frequency (MHz)				829	836.5	844	
10	QPSK	1	0	24.06	24.15	24.09	24.5
10	QPSK	1	25	23.98	24.06	24.01	
10	QPSK	1	49	23.95	24.02	23.98	
10	QPSK	25	0	23.04	23.06	23.02	
10	QPSK	25	12	22.96	22.96	22.99	23.5
10	QPSK	25	25	22.87	22.91	22.96	
10	QPSK	50	0	22.79	22.80	22.94	
10	16QAM	1	0	22.64	22.70	22.62	
10	16QAM	1	25	22.60	22.64	22.55	23.5
10	16QAM	1	49	22.57	22.61	22.54	
10	16QAM	25	0	22.46	22.42	22.38	
10	16QAM	25	12	22.44	22.35	22.32	
10	16QAM	25	25	22.34	22.28	22.29	23.5
10	16QAM	50	0	22.27	22.24	22.24	
10	64QAM	1	0	22.50	22.59	22.60	
10	64QAM	1	25	22.47	22.55	22.55	
10	64QAM	1	49	22.39	22.51	22.51	23.5
10	64QAM	25	0	22.32	22.25	22.34	
10	64QAM	25	12	22.23	22.13	22.23	
10	64QAM	25	25	22.19	22.08	22.15	
10	64QAM	50	0	22.13	21.97	22.08	19.5
10	256QAM	1	0	18.64	18.69	18.62	
10	256QAM	1	25	18.59	18.60	18.59	
10	256QAM	1	49	18.56	18.52	18.57	
10	256QAM	25	0	17.78	17.90	17.74	
10	256QAM	25	12	17.72	17.85	17.66	18.5
10	256QAM	25	25	17.67	17.75	17.57	
10	256QAM	50	0	17.64	17.73	17.48	
Channel				20425	20525	20625	Tune-up limit (dBm)
Frequency (MHz)				826.5	836.5	846.5	
5	QPSK	1	0	24.01	24.10	24.04	24.5
5	QPSK	1	12	23.93	24.01	23.96	
5	QPSK	1	24	23.90	23.97	23.93	
5	QPSK	12	0	22.99	23.01	22.97	
5	QPSK	12	7	22.91	22.91	22.94	23.5
5	QPSK	12	13	22.82	22.86	22.91	
5	QPSK	25	0	22.74	22.75	22.69	
5	16QAM	1	0	22.59	22.65	22.57	
5	16QAM	1	12	22.55	22.59	22.50	23.5
5	16QAM	1	24	22.52	22.56	22.49	
5	16QAM	12	0	22.41	22.37	22.33	
5	16QAM	12	7	22.39	22.30	22.27	
5	16QAM	12	13	22.29	22.23	22.24	23.5
5	16QAM	25	0	22.22	22.19	22.19	
5	64QAM	1	0	22.45	22.54	22.55	
5	64QAM	1	12	22.42	22.50	22.50	
5	64QAM	1	24	22.34	22.46	22.46	23.5
5	64QAM	12	0	22.27	22.20	22.29	
5	64QAM	12	7	22.18	22.08	22.18	
5	64QAM	12	13	22.14	22.03	22.10	
5	64QAM	25	0	22.08	21.92	22.03	19.5
5	256QAM	1	0	18.59	18.64	18.57	
5	256QAM	1	12	18.54	18.55	18.54	
5	256QAM	1	24	18.51	18.47	18.52	
5	256QAM	12	0	17.73	17.85	17.69	18.5
5	256QAM	12	7	17.67	17.80	17.61	
5	256QAM	12	13	17.62	17.70	17.52	
5	256QAM	25	0	17.59	17.68	17.43	
Channel				20415	20525	20635	Tune-up limit (dBm)
Frequency (MHz)				825.5	836.5	847.5	
3	QPSK	1	0	23.97	24.06	24.00	24.5
3	QPSK	1	8	23.89	23.97	23.92	
3	QPSK	1	14	23.86	23.93	23.89	
3	QPSK	8	0	22.95	22.97	22.93	
3	QPSK	8	4	22.87	22.87	22.90	23.5
3	QPSK	8	7	22.78	22.82	22.87	
3	QPSK	15	0	22.70	22.71	22.85	
3	16QAM	1	0	22.55	22.61	22.53	
3	16QAM	1	8	22.51	22.55	22.46	23
3	16QAM	1	14	22.48	22.52	22.45	
3	16QAM	8	0	22.37	22.33	22.29	
3	16QAM	8	4	22.35	22.26	22.23	
3	16QAM	8	7	22.25	22.19	22.20	23
3	16QAM	15	0	22.18	22.15	22.15	
3	64QAM	1	0	22.41	22.50	22.51	
3	64QAM	1	8	22.38	22.46	22.46	
3	64QAM	1	14	22.30	22.42	22.42	23
3	64QAM	8	0	22.23	22.16	22.25	
3	64QAM	8	4	22.14	22.04	22.14	
3	64QAM	8	7	22.10	21.99	22.06	
3	64QAM	15	0	22.04	21.88	21.99	19
3	256QAM	1	0	18.55	18.60	18.53	
3	256QAM	1	8	18.50	18.51	18.50	
3	256QAM	1	14	18.47	18.43	18.48	
3	256QAM	8	0	17.69	17.61	17.65	18
3	256QAM	8	4	17.63	17.76	17.57	
3	256QAM	8	7	17.58	17.66	17.48	
3	256QAM	15	0	17.55	17.64	17.39	
Channel				20407	20525	20643	Tune-up limit (dBm)
Frequency (MHz)				824.7	836.5	848.3	
1.4	QPSK	1	0	23.94	24.03	23.97	24.5
1.4	QPSK	1	3	23.86	23.94	23.89	
1.4	QPSK	1	5	23.83	23.90	23.86	

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	Tune-up limit (dBm)
Frequency (MHz)				704	707.5	711	
10	QPSK	1	0	20.42	20.53	20.45	21
10	QPSK	1	25	20.33	20.47	20.39	
10	QPSK	1	49	20.29	20.45	20.34	
10	QPSK	25	0	19.29	19.36	19.31	
10	QPSK	25	12	19.26	19.25	19.29	20
10	QPSK	25	25	19.15	19.21	19.22	
10	QPSK	50	0	19.11	19.19	19.20	
10	16QAM	1	0	19.26	19.37	19.35	
10	16QAM	1	25	19.23	19.28	19.26	20
10	16QAM	1	49	19.14	19.18	19.22	
10	16QAM	25	0	18.97	19.07	19.01	
10	16QAM	25	12	18.88	18.96	18.99	
10	16QAM	25	25	18.77	18.93	18.94	19.5
10	16QAM	50	0	18.74	18.84	18.83	
10	64QAM	1	0	19.33	19.11	19.05	
10	64QAM	1	25	19.25	19.09	19.01	
10	64QAM	1	49	19.22	19.05	18.92	19.5
10	64QAM	25	0	18.86	18.89	18.83	
10	64QAM	25	12	18.78	18.78	18.77	
10	64QAM	25	25	18.71	18.68	18.71	
10	64QAM	50	0	18.69	18.58	18.62	16
10	256QAM	1	0	15.19	15.28	15.23	
10	256QAM	1	25	15.13	15.21	15.19	
10	256QAM	1	49	15.10	15.14	15.14	
10	256QAM	25	0	14.35	14.41	14.31	15
10	256QAM	25	12	14.33	14.33	14.21	
10	256QAM	25	25	14.29	14.29	14.12	
10	256QAM	50	0	14.22	14.23	14.04	
Channel				23035	23095	23155	Tune-up limit (dBm)
Frequency (MHz)				701.5	707.5	713.5	
5	QPSK	1	0	20.29	20.40	20.32	21
5	QPSK	1	12	20.20	20.34	20.26	
5	QPSK	1	24	20.16	20.32	20.21	
5	QPSK	12	0	19.16	19.23	19.18	
5	QPSK	12	7	19.13	19.12	19.16	20
5	QPSK	12	13	19.02	19.08	19.09	
5	QPSK	25	0	18.98	19.06	19.07	
5	16QAM	1	0	19.13	19.24	19.22	
5	16QAM	1	12	19.10	19.15	19.13	20
5	16QAM	1	24	19.01	19.05	19.09	
5	16QAM	12	0	18.84	18.94	18.88	
5	16QAM	12	7	18.75	18.83	18.86	
5	16QAM	12	13	18.84	18.80	18.81	19.5
5	16QAM	25	0	18.61	18.71	18.70	
5	64QAM	1	0	19.20	18.98	18.92	
5	64QAM	1	12	19.12	18.96	18.88	
5	64QAM	1	24	19.09	18.92	18.79	19
5	64QAM	12	0	18.73	18.76	18.70	
5	64QAM	12	7	18.65	18.65	18.64	
5	64QAM	12	13	18.58	18.55	18.58	
5	64QAM	25	0	18.56	18.45	18.49	15.5
5	256QAM	1	0	15.06	15.15	15.10	
5	256QAM	1	12	15.00	15.08	15.06	
5	256QAM	1	24	14.97	15.01	15.01	
5	256QAM	12	0	14.22	14.28	14.18	15
5	256QAM	12	7	14.20	14.20	14.08	
5	256QAM	12	13	14.16	14.16	13.99	
5	256QAM	25	0	14.09	14.10	13.91	
Channel				23025	23095	23165	Tune-up limit (dBm)
Frequency (MHz)				700.5	707.5	714.5	

1.4	QPSK	3	0	22.92	22.94	22.90	23.5
1.4	QPSK	3	1	22.84	22.84	22.87	
1.4	QPSK	3	3	22.75	22.79	22.84	
1.4	QPSK	6	0	22.67	22.68	22.82	23
1.4	16QAM	1	0	22.52	22.58	22.50	
1.4	16QAM	1	3	22.48	22.52	22.43	
1.4	16QAM	1	5	22.45	22.49	22.42	
1.4	16QAM	3	0	22.34	22.30	22.26	
1.4	16QAM	3	1	22.32	22.23	22.20	
1.4	16QAM	3	3	22.22	22.16	22.17	23
1.4	16QAM	6	0	22.15	22.12	22.12	
1.4	64QAM	1	0	22.38	22.47	22.48	23
1.4	64QAM	1	3	22.35	22.43	22.43	
1.4	64QAM	1	5	22.27	22.39	22.39	
1.4	64QAM	3	0	22.20	22.13	22.22	
1.4	64QAM	3	1	22.11	22.01	22.11	
1.4	64QAM	3	3	22.07	21.96	22.03	22.5
1.4	64QAM	6	0	22.01	21.85	21.96	
1.4	256QAM	1	0	18.52	18.57	18.50	19
1.4	256QAM	1	3	18.47	18.48	18.47	
1.4	256QAM	1	5	18.44	18.40	18.45	
1.4	256QAM	3	0	17.66	17.78	17.62	
1.4	256QAM	3	1	17.60	17.73	17.54	
1.4	256QAM	3	3	17.55	17.63	17.45	18
1.4	256QAM	6	0	17.52	17.61	17.36	

1.4	QPSK	3	0	18.94	19.01	18.96	19.5
1.4	QPSK	3	1	18.91	18.90	18.94	
1.4	QPSK	3	3	18.80	18.86	18.87	
1.4	QPSK	6	0	18.76	18.84	18.85	19.5
1.4	16QAM	1	0	18.91	19.02	19.00	
1.4	16QAM	1	3	18.88	18.93	18.91	
1.4	16QAM	1	5	18.79	18.83	18.87	
1.4	16QAM	3	0	18.62	18.72	18.66	
1.4	16QAM	3	1	18.53	18.61	18.64	
1.4	16QAM	3	3	18.42	18.58	18.59	19
1.4	16QAM	6	0	18.39	18.49	18.48	
1.4	64QAM	1	0	18.96	18.76	18.70	19.5
1.4	64QAM	1	3	18.90	18.74	18.66	
1.4	64QAM	1	5	18.67	18.70	18.57	
1.4	64QAM	3	0	18.51	18.54	18.48	
1.4	64QAM	3	1	18.43	18.43	18.42	
1.4	64QAM	3	3	18.36	18.33	18.36	19
1.4	64QAM	6	0	18.34	18.23	18.27	
1.4	256QAM	1	0	14.84	14.93	14.88	15.5
1.4	256QAM	1	3	14.78	14.86	14.84	
1.4	256QAM	1	5	14.75	14.79	14.79	
1.4	256QAM	3	0	14.00	14.06	13.96	
1.4	256QAM	3	1	13.98	13.98	13.86	
1.4	256QAM	3	3	13.94	13.94	13.77	14.5
1.4	256QAM	6	0	13.87	13.88	13.69	

Band 13(700MHz Band)(Reduced Power Level 4) 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	22.53			23
10	QPSK	1	25	22.43			
10	QPSK	1	49	22.32			
10	QPSK	25	0	21.50			22
10	QPSK	25	12	21.39			
10	QPSK	25	25	21.35			
10	QPSK	50	0	21.24			22
10	16QAM	1	0	21.24			
10	16QAM	1	25	21.21			
10	16QAM	1	49	21.19			21.5
10	16QAM	25	0	20.77			
10	16QAM	25	12	20.70			
10	16QAM	25	25	20.63			21.5
10	16QAM	50	0	20.55			
10	64QAM	1	0	21.19			
10	64QAM	1	25	21.13			21.5
10	64QAM	1	49	21.09			
10	64QAM	25	0	20.85			
10	64QAM	25	12	20.82			21.5
10	64QAM	25	25	20.75			
10	64QAM	50	0	20.70			
10	256QAM	1	0	17.13			18
10	256QAM	1	25	17.08			
10	256QAM	1	49	17.05			
10	256QAM	25	0	16.36			17
10	256QAM	25	12	16.27			
10	256QAM	25	25	16.18			
10	256QAM	50	0	16.08			
Channel				23205	23230	23255	Tune-up limit (dBm)
Frequency (MHz)				779.5	782	784.5	
5	QPSK	1	0	22.46	22.61	22.55	23
5	QPSK	1	12	22.39	22.51	22.45	
5	QPSK	1	24	22.24	22.37	22.30	
5	QPSK	12	0	21.45	21.57	21.44	22
5	QPSK	12	7	21.31	21.45	21.38	
5	QPSK	12	13	21.29	21.43	21.38	
5	QPSK	25	0	21.16	21.30	21.22	22
5	16QAM	1	0	21.18	21.31	21.25	
5	16QAM	1	12	21.16	21.29	21.20	
5	16QAM	1	24	21.08	21.25	21.17	21.5
5	16QAM	12	0	20.70	20.85	20.78	
5	16QAM	12	7	20.68	20.75	20.75	
5	16QAM	12	13	20.57	20.69	20.64	22
5	16QAM	25	0	20.49	20.62	20.53	
5	64QAM	1	0	21.21	21.27	21.19	
5	64QAM	1	12	21.03	21.21	21.09	21.5
5	64QAM	1	24	21.05	21.15	21.10	
5	64QAM	12	0	20.81	20.92	20.85	
5	64QAM	12	7	20.76	20.90	20.81	21.5
5	64QAM	12	13	20.71	20.81	20.74	
5	64QAM	25	0	20.62	20.77	20.69	
5	256QAM	1	0	17.07	17.21	17.13	18
5	256QAM	1	12	17.02	17.15	17.11	
5	256QAM	1	24	17.00	17.11	17.06	
5	256QAM	12	0	16.26	16.44	16.37	17
5	256QAM	12	7	16.19	16.33	16.27	
5	256QAM	12	13	16.13	16.27	16.22	
5	256QAM	25	0	16.09	16.15	16.07	

Band 66(Reduced Power Level 4)							
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	11.02	11.05	11.00	11.5
20	QPSK	1	49	10.97	11.01	10.95	
20	QPSK	1	99	10.89	10.98	10.89	
20	QPSK	50	0	9.96	10.11	9.98	10.5
20	QPSK	50	24	9.90	10.01	9.94	
20	QPSK	50	50	9.86	9.95	9.85	
20	QPSK	100	0	9.81	9.86	9.84	10.5
20	16QAM	1	0	10.05	10.09	10.07	
20	16QAM	1	49	9.98	10.06	9.99	
20	16QAM	1	99	9.89	10.00	9.89	10.5
20	16QAM	50	0	9.86	9.88	9.86	
20	16QAM	50	24	9.83	9.87	9.82	
20	16QAM	50	50	9.75	9.79	9.73	10.5
20	16QAM	100	0	9.69	9.70	9.65	
20	64QAM	1	0	9.85	10.00	9.93	
20	64QAM	1	49	9.82	9.99	9.90	10.5
20	64QAM	1	99	9.75	9.97	9.84	
20	64QAM	50	0	9.78	9.82	9.86	
20	64QAM	50	24	9.76	9.77	9.83	10.5
20	64QAM	50	50	9.71	9.71	9.80	
20	64QAM	100	0	9.61	9.69	9.76	
20	256QAM	1	0	5.68	5.78	5.74	6.5
20	256QAM	1	49	5.66	5.75	5.64	
20	256QAM	1	99	5.56	5.74	5.53	
20	256QAM	50	0	5.19	5.30	5.25	6
20	256QAM	50	24	5.17	5.26	5.18	
20	256QAM	50	50	5.14	5.16	5.16	
20	256QAM	100	0	5.10	5.07	5.12	
Channel				132047	132322	132597	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1745	1772.5	
15	QPSK	1	0	10.90	10.93	10.88	11.5
15	QPSK	1	37	10.85	10.89	10.83	
15	QPSK	1	74	10.77	10.86	10.77	
15	QPSK	36	0	9.84	9.99	9.86	10.5
15	QPSK	36	20	9.78	9.89	9.82	
15	QPSK	36	39	9.74	9.83	9.73	
15	QPSK	75	0	9.69	9.74	9.72	10.5
15	16QAM	1	0	9.93	9.97	9.95	
15	16QAM	1	37	9.86	9.94	9.87	
15	16QAM	1	74	9.77	9.88	9.77	10.5
15	16QAM	36	0	9.74	9.76	9.74	
15	16QAM	36	20	9.71	9.75	9.70	
15	16QAM	36	39	9.63	9.67	9.61	10.5
15	16QAM	75	0	9.57	9.58	9.53	
15	64QAM	1	0	9.73	9.88	9.81	
15	64QAM	1	37	9.70	9.87	9.78	10.5
15	64QAM	1	74	9.63	9.85	9.72	
15	64QAM	36	0	9.66	9.70	9.74	
15	64QAM	36	20	9.64	9.65	9.71	10.5
15	64QAM	36	39	9.59	9.59	9.68	
15	64QAM	75	0	9.49	9.57	9.64	
15	256QAM	1	0	5.56	5.66	5.62	6.5
15	256QAM	1	37	5.54	5.63	5.52	
15	256QAM	1	74	5.44	5.62	5.41	
15	256QAM	36	0	5.07	5.18	5.13	6
15	256QAM	36	20	5.05	5.14	5.06	
15	256QAM	36	39	5.02	5.04	5.04	
15	256QAM	75	0	4.98	4.95	5.00	
Channel				132022	132322	132022	Tune-up limit (dBm)
Frequency (MHz)				1715	1745	1775	
10	QPSK	1	0	10.78	10.81	10.76	11.5
10	QPSK	1	25	10.73	10.77	10.71	
10	QPSK	1	49	10.65	10.74	10.65	
10	QPSK	25	0	9.72	9.87	9.74	10.5
10	QPSK	25	12	9.66	9.77	9.70	
10	QPSK	25	25	9.62	9.71	9.61	
10	QPSK	50	0	9.57	9.62	9.60	10.5
10	16QAM	1	0	9.81	9.85	9.83	
10	16QAM	1	25	9.74	9.82	9.75	
10	16QAM	1	49	9.65	9.76	9.65	10
10	16QAM	25	0	9.62	9.64	9.62	
10	16QAM	25	12	9.59	9.63	9.58	
10	16QAM	25	25	9.51	9.55	9.49	10.5
10	16QAM	50	0	9.45	9.46	9.41	
10	64QAM	1	0	9.61	9.76	9.69	
10	64QAM	1	25	9.58	9.75	9.66	10.5
10	64QAM	1	49	9.51	9.73	9.60	
10	64QAM	25	0	9.54	9.58	9.62	
10	64QAM	25	12	9.52	9.53	9.59	10
10	64QAM	25	25	9.47	9.47	9.56	
10	64QAM	50	0	9.37	9.45	9.52	
10	256QAM	1	0	5.44	5.54	5.50	6
10	256QAM	1	25	5.42	5.51	5.40	
10	256QAM	1	49	5.32	5.50	5.29	
10	256QAM	25	0	4.95	5.06	5.01	5.5
10	256QAM	25	12	4.93	5.02	4.94	
10	256QAM	25	25	4.90	4.92	4.92	
10	256QAM	50	0	4.86	4.83	4.88	
Channel				131997	132322	132647	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1745	1777.5	
5	QPSK	1	0	10.67	10.70	10.65	11.5
5	QPSK	1	12	10.62	10.66	10.60	
5	QPSK	1	24	10.54	10.63	10.54	

5	QPSK	12	0	9.61	9.76	9.63	10.5
5	QPSK	12	7	9.55	9.66	9.59	
5	QPSK	12	13	9.51	9.60	9.50	
5	QPSK	25	0	9.46	9.51	9.49	10.5
5	16QAM	1	0	9.70	9.74	9.72	
5	16QAM	1	12	9.63	9.71	9.64	
5	16QAM	1	24	9.54	9.65	9.54	10
5	16QAM	12	0	9.51	9.53	9.51	
5	16QAM	12	7	9.48	9.52	9.47	
5	16QAM	12	13	9.40	9.44	9.38	10
5	16QAM	25	0	9.34	9.35	9.30	
5	64QAM	1	0	9.50	9.65	9.58	
5	64QAM	1	12	9.47	9.64	9.55	10
5	64QAM	1	24	9.40	9.62	9.49	
5	64QAM	12	0	9.43	9.47	9.51	
5	64QAM	12	7	9.41	9.42	9.48	10
5	64QAM	12	13	9.36	9.36	9.45	
5	64QAM	25	0	9.26	9.34	9.41	
5	256QAM	1	0	5.33	5.43	5.39	6
5	256QAM	1	12	5.31	5.40	5.29	
5	256QAM	1	24	5.21	5.39	5.18	
5	256QAM	12	0	4.84	4.95	4.90	5.5
5	256QAM	12	7	4.82	4.91	4.83	
5	256QAM	12	13	4.79	4.81	4.81	
5	256QAM	25	0	4.75	4.72	4.77	
Channel				131987	132322	132657	Tune-up limit (dBm)
Frequency (MHz)				1711.5	1745	1778.5	
3	QPSK	1	0	10.57	10.60	10.55	11
3	QPSK	1	8	10.52	10.56	10.50	
3	QPSK	1	14	10.44	10.53	10.44	
3	QPSK	8	0	9.51	9.66	9.53	10
3	QPSK	8	4	9.45	9.56	9.49	
3	QPSK	8	7	9.41	9.50	9.40	
3	QPSK	15	0	9.36	9.41	9.39	10
3	16QAM	1	0	9.60	9.64	9.62	
3	16QAM	1	8	9.53	9.61	9.54	
3	16QAM	1	14	9.44	9.55	9.44	10
3	16QAM	8	0	9.41	9.43	9.41	
3	16QAM	8	4	9.38	9.42	9.37	
3	16QAM	8	7	9.30	9.34	9.28	10
3	16QAM	15	0	9.24	9.25	9.20	
3	64QAM	1	0	9.40	9.55	9.48	
3	64QAM	1	8	9.37	9.54	9.45	10
3	64QAM	1	14	9.30	9.52	9.39	
3	64QAM	8	0	9.33	9.37	9.41	
3	64QAM	8	4	9.31	9.32	9.38	10
3	64QAM	8	7	9.26	9.26	9.35	
3	64QAM	15	0	9.16	9.24	9.31	
3	256QAM	1	0	5.23	5.33	5.29	6
3	256QAM	1	8	5.21	5.30	5.19	
3	256QAM	1	14	5.11	5.29	5.08	
3	256QAM	8	0	4.74	4.85	4.80	5.5
3	256QAM	8	4	4.72	4.81	4.73	
3	256QAM	8	7	4.69	4.71	4.71	
3	256QAM	15	0	4.65	4.62	4.67	
Channel				131979	132322	132665	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1745	1779.3	
1.4	QPSK	1	0	10.46	10.49	10.44	11
1.4	QPSK	1	3	10.41	10.45	10.39	
1.4	QPSK	1	5	10.33	10.42	10.33	
1.4	QPSK	3	0	9.40	9.55	9.42	10
1.4	QPSK	3	1	9.34	9.45	9.38	
1.4	QPSK	3	3	9.30	9.39	9.29	
1.4	QPSK	6	0	9.25	9.30	9.28	10
1.4	16QAM	1	0	9.49	9.53	9.51	10
1.4	16QAM	1	3	9.42	9.50	9.43	
1.4	16QAM	1	5	9.33	9.44	9.33	
1.4	16QAM	3	0	9.30	9.32	9.30	9.5
1.4	16QAM	3	1	9.27	9.31	9.26	
1.4	16QAM	3	3	9.19	9.23	9.17	
1.4	16QAM	6	0	9.13	9.14	9.09	10
1.4	64QAM	1	0	9.29	9.44	9.37	
1.4	64QAM	1	3	9.26	9.43	9.34	
1.4	64QAM	1	5	9.19	9.41	9.28	9.5
1.4	64QAM	3	0	9.22	9.26	9.30	
1.4	64QAM	3	1	9.20	9.21	9.27	
1.4	64QAM	3	3	9.15	9.15	9.24	6
1.4	64QAM	6	0	9.05	9.13	9.20	
1.4	256QAM	1	0	5.12	5.22	5.18	
1.4	256QAM	1	3	5.10	5.19	5.08	5
1.4	256QAM	1	5	5.00	5.18	4.97	
1.4	256QAM	3	0	4.63	4.74	4.69	
1.4	256QAM	3	1	4.61	4.70	4.62	
1.4	256QAM	3	3	4.58	4.60	4.60	
1.4	256QAM	6	0	4.54	4.51	4.56	

LTE Band 48(Reduced Power Level 4)

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	56150	56640	
Frequency (MHz)				3560	3609	3625	3641	3690	
20	QPSK	1	0	8.01	7.97	8.11	8.04	8.01	8.5
20	QPSK	1	49	7.83	7.85	7.91	7.86	7.78	
20	QPSK	1	99	7.80	7.76	7.70	7.88	7.89	
20	QPSK	50	0	6.90	6.91	7.01	6.96	6.89	7.5
20	QPSK	50	24	6.80	6.85	6.85	6.86	6.87	
20	QPSK	50	50	6.86	6.82	6.96	6.76	6.83	
20	QPSK	100	0	6.83	6.86	6.82	6.91	6.73	7.5
20	16QAM	1	0	7.01	6.89	6.91	6.81	6.96	
20	16QAM	1	49	6.88	6.76	6.76	6.96	6.87	
20	16QAM	1	99	6.90	6.91	6.80	6.77	6.79	7.5
20	16QAM	50	0	6.85	6.89	6.83	6.70	6.60	
20	16QAM	50	24	6.79	6.80	6.75	6.68	6.63	
20	16QAM	50	50	6.71	6.73	6.88	6.87	6.76	7.5
20	16QAM	100	0	6.82	6.91	6.93	6.88	6.73	
20	64QAM	1	0	7.10	7.05	6.98	7.05	6.91	7.5
20	64QAM	1	49	7.07	6.94	7.15	6.91	6.90	
20	64QAM	1	99	7.00	7.20	7.09	7.00	6.88	
20	64QAM	50	0	6.04	6.16	6.32	6.20	6.14	6.5
20	64QAM	50	24	6.06	5.88	5.92	5.92	6.24	
20	64QAM	50	50	6.12	6.03	5.90	5.76	6.03	
20	64QAM	100	0	5.92	5.82	6.03	6.04	5.91	3
20	256QAM	1	0	2.25	2.03	2.02	2.11	2.32	
20	256QAM	1	49	2.06	1.91	2.10	2.38	2.00	
20	256QAM	1	99	1.96	2.25	2.12	2.21	2.12	2.5
20	256QAM	50	0	1.91	1.81	1.91	2.06	1.91	
20	256QAM	50	24	1.85	1.90	1.82	1.72	1.81	
20	256QAM	50	50	1.81	1.79	1.96	1.58	1.91	2.5
20	256QAM	100	0	1.59	1.72	1.65	1.70	2.00	
Channel				55315	55820	55990	56160	56665	Tune-up limit (dBm)
Frequency (MHz)				3557.5	3608	3625	3642	3692.5	
15	QPSK	1	0	7.90	7.86	8.00	7.93	7.90	8.5
15	QPSK	1	37	7.72	7.74	7.80	7.75	7.67	
15	QPSK	1	74	7.69	7.65	7.59	7.77	7.78	
15	QPSK	36	0	6.79	6.80	6.90	6.85	6.78	7.5
15	QPSK	36	20	6.69	6.74	6.74	6.75	6.76	
15	QPSK	36	39	6.75	6.71	6.85	6.65	6.72	
15	QPSK	75	0	6.72	6.75	6.71	6.80	6.62	7.5
15	16QAM	1	0	6.90	6.78	6.80	6.70	6.85	
15	16QAM	1	37	6.77	6.65	6.65	6.85	6.76	
15	16QAM	1	74	6.79	6.80	6.69	6.66	6.68	7.5
15	16QAM	36	0	6.74	6.78	6.72	6.59	6.49	
15	16QAM	36	20	6.68	6.69	6.64	6.57	6.52	
15	16QAM	36	39	6.60	6.62	6.77	6.76	6.65	7.5
15	16QAM	75	0	6.71	6.80	6.82	6.77	6.62	
15	64QAM	1	0	6.99	6.94	6.87	6.94	6.80	
15	64QAM	1	37	6.96	6.83	7.04	6.80	6.79	7.5
15	64QAM	1	74	6.89	7.09	6.98	6.89	6.77	
15	64QAM	36	0	5.93	6.05	6.21	6.09	6.03	
15	64QAM	36	20	5.95	5.77	5.81	5.81	6.13	6.5
15	64QAM	36	39	6.01	5.92	5.79	5.65	5.92	
15	64QAM	75	0	5.81	5.71	5.92	5.93	5.80	
15	256QAM	1	0	2.14	1.92	1.91	2.00	2.21	3
15	256QAM	1	37	1.95	1.80	1.99	2.27	1.89	
15	256QAM	1	74	1.85	2.14	2.01	2.10	2.01	
15	256QAM	36	0	1.80	1.70	1.80	1.95	1.80	2.5
15	256QAM	36	20	1.74	1.79	1.71	1.61	1.70	
15	256QAM	36	39	1.70	1.68	1.85	1.47	1.80	
15	256QAM	75	0	1.48	1.61	1.54	1.59	1.89	Tune-up limit (dBm)
Channel				55290	55815	55990	56165	56690	
Frequency (MHz)				3555	3607.5	3625	3642.5	3695	Tune-up limit (dBm)
10	QPSK	1	0	7.80	7.76	7.90	7.83	7.80	
10	QPSK	1	25	7.62	7.64	7.70	7.65	7.57	8.5
10	QPSK	1	49	7.59	7.55	7.53	7.67	7.68	
10	QPSK	25	0	6.69	6.70	6.80	6.75	6.72	
10	QPSK	25	12	6.59	6.64	6.64	6.65	6.66	7.5
10	QPSK	25	25	6.65	6.61	6.75	6.55	6.62	
10	QPSK	50	0	6.62	6.65	6.61	6.70	6.52	
10	16QAM	1	0	6.80	6.68	6.70	6.60	6.75	7.5
10	16QAM	1	25	6.67	6.55	6.55	6.75	6.66	
10	16QAM	1	49	6.69	6.70	6.59	6.56	6.58	
10	16QAM	25	0	6.64	6.68	6.62	6.49	6.39	7.5
10	16QAM	25	12	6.58	6.59	6.54	6.47	6.42	
10	16QAM	25	25	6.50	6.52	6.67	6.66	6.55	

10	16QAM	50	0	6.61	6.70	6.72	6.67	6.52	7.5
10	64QAM	1	0	6.89	6.84	6.77	6.84	6.70	
10	64QAM	1	25	6.86	6.73	6.94	6.70	6.69	
10	64QAM	1	49	6.79	6.99	6.88	6.79	6.67	
10	64QAM	25	0	5.83	5.95	6.11	5.99	5.93	6.5
10	64QAM	25	12	5.85	5.67	5.71	5.71	6.03	
10	64QAM	25	25	5.91	5.82	5.69	5.55	5.82	
10	64QAM	50	0	5.71	5.61	5.82	5.83	5.70	
10	256QAM	1	0	2.04	1.82	1.81	1.90	2.11	3
10	256QAM	1	25	1.85	1.70	1.89	2.17	1.79	
10	256QAM	1	49	1.75	2.04	1.91	2.00	1.91	
10	256QAM	25	0	1.70	1.60	1.70	1.85	1.70	
10	256QAM	25	12	1.64	1.69	1.61	1.51	1.60	2.5
10	256QAM	25	25	1.60	1.58	1.75	1.58	1.70	
10	256QAM	50	0	1.55	1.51	1.42	1.49	1.79	
Channel				55265	55810	55990	56170	56175	Tune-up limit (dBm)
Frequency (MHz)				3552.5	3607	3625	3643	3697.5	
5	QPSK	1	0	7.68	7.64	7.78	7.71	7.68	8.5
5	QPSK	1	12	7.50	7.52	7.58	7.53	7.45	
5	QPSK	1	24	7.47	7.43	7.37	7.55	7.56	
5	QPSK	12	0	6.57	6.58	6.68	6.63	6.56	
5	QPSK	12	7	6.47	6.52	6.52	6.53	6.54	7
5	QPSK	12	13	6.53	6.49	6.63	6.43	6.50	
5	QPSK	25	0	6.50	6.53	6.49	6.58	6.40	
5	16QAM	1	0	6.68	6.56	6.58	6.48	6.63	
5	16QAM	1	12	6.55	6.43	6.43	6.63	6.54	7
5	16QAM	1	24	6.57	6.58	6.47	6.44	6.46	
5	16QAM	12	0	6.52	6.56	6.50	6.37	6.27	
5	16QAM	12	7	6.46	6.47	6.42	6.35	6.30	
5	16QAM	12	13	6.38	6.40	6.55	6.54	6.43	7
5	16QAM	25	0	6.49	6.58	6.60	6.55	6.40	
5	64QAM	1	0	6.77	6.72	6.65	6.72	6.58	
5	64QAM	1	12	6.74	6.61	6.82	6.58	6.57	
5	64QAM	1	24	6.67	6.87	6.76	6.67	6.55	6.5
5	64QAM	12	0	5.71	5.83	5.99	5.87	5.81	
5	64QAM	12	7	5.73	5.55	5.59	5.59	5.91	
5	64QAM	12	13	5.79	5.70	5.57	5.43	5.70	
5	64QAM	25	0	5.59	5.49	5.70	5.71	5.58	2.5
5	256QAM	1	0	1.92	1.70	1.69	1.78	1.99	
5	256QAM	1	12	1.73	1.58	1.77	2.05	1.67	
5	256QAM	1	24	1.63	1.92	1.79	1.88	1.79	
5	256QAM	12	0	1.58	1.48	1.58	1.73	1.58	2
5	256QAM	12	7	1.52	1.57	1.49	1.39	1.48	
5	256QAM	12	13	1.48	1.46	1.63	1.25	1.58	
5	256QAM	25	0	1.26	1.39	1.32	1.37	1.67	

2.4GHz WLAN ANT 5

Mode	Channel	Frequency (MHz)	Average power (dBm)	Turn-Up Limit	Power Setting	Duty Cycle %
2.4GHz WLAN ANT 5	802.11b Mbps	CH 1	2412	9.20	9.5	9.5
		CH 6	2437	9.36	9.5	9.5
		CH 11	2462	9.17	9.5	9.5
	802.11g Mbps	CH 1	2412	9.25	9.5	9.5
		CH 6	2437	9.10	8.5	9.5
		CH 11	2462	9.26	8.5	9.5
	802.11n-HT20 MCS0	CH 1	2412	8.24	8.5	9.5
		CH 6	2437	8.12	8.5	9.5
		CH 11	2462	8.40	8.5	9.5
	802.11n-HT40 MCS0	CH 3	2422	8.42	8.5	9.5
		CH 6	2437	8.04	8.5	9.5
		CH 9	2452	8.02	8.5	9.5

5.2GHz WLAN ANT 5

Mode	Channel	Frequency (MHz)	Average power (dBm)	Turn-Up Limit	Power Setting	Duty Cycle %
5.2GHz WLAN ANT 5	802.11a 8Mbps	CH 36	5180	8.4	9.0	9
		CH 44	5200	8.27	8.5	9
		CH 48	5240	8.12	8.5	9
	802.11n-HT20 MCS0	CH 36	5180	8.31	8.5	9
		CH 44	5200	8.15	8.5	9
		CH 48	5240	7.82	8.5	9
	802.11n-HT40 MCS0	CH 36	5190	8.46	9.0	9
		CH 48	5230	8.42	9.0	9
	802.11ac-VHT20 MCS0	CH 36	5180	8.34	9.0	9
		CH 44	5200	8.18	8.5	9
		CH 48	5240	7.85	8.5	9
	802.11ac-VHT40 MCS0	CH 36	5190	8.30	9.0	9
		CH 48	5230	8.45	9.0	9
	802.11ac-VHT80 MCS0	CH 42	5210	8.00	8.5	9

5GHz WLAN ANT 5

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Turn-Up Limit	Power Setting	Duty Cycle %
5.0GHz WLAN ANT 5	802.11a 8Mbps	CH 52	5260	8.48	7.0	7.5	98.03
		CH 60	5300	8.00	6.5	7.5	
		CH 64	5320	8.40	7.0	7.5	
	802.11n-HT20 MCS0	CH 52	5260	8.05	7.0	7.5	98.28
		CH 60	5300	8.11	6.5	7.5	
		CH 64	5320	8.16	6.5	7.5	
	802.11n-HT40 MCS0	CH 54	5270	8.60	7.0	7.5	98.68
		CH 62	5310	8.16	7.0	7.5	
		CH 52	5260	8.66	7.0	7.5	
	802.11ac-VHT20 MCS0	CH 52	5260	8.14	6.5	7.5	98.14
		CH 64	5320	8.10	6.5	7.5	
		CH 54	5270	8.44	7.0	7.5	
	802.11ac-VHT40 MCS0	CH 62	5310	8.57	7.0	7.5	98.41
		802.11ac-VHT80 MCS0	CH 58	5290	8.18	6.5	7.5

5GHz WLAN ANT 5

Mode	Channel	Frequency (MHz)	Average power (dBm)	Turn-Up Limit	Power Setting	Duty Cycle %
5.0GHz WLAN ANT 5	802.11a 8Mbps	CH 100	5500	5.54	5.5	5
		CH 120	5580	5.05	5.5	5
		CH 144	5720	4.90	5.5	5
	802.11n-HT20 MCS0	CH 100	5500	5.15	5.5	5
		CH 120	5580	5.11	5.5	5
		CH 144	5720	5.04	5.5	5
	802.11n-HT40 MCS0	CH 102	5510	5.28	5.5	5
		CH 126	5630	5.02	5.5	5
		CH 142	5710	4.40	5.0	5
	802.11ac-VHT20 MCS0	CH 100	5500	5.18	5.5	5
		CH 120	5580	5.14	5.5	5
		CH 144	5720	5.07	5.5	5
	802.11ac-VHT40 MCS0	CH 102	5510	4.74	5.0	5
		CH 126	5630	4.61	5.0	5
		CH 142	5710	4.32	5.0	5
	802.11ac-VHT80 MCS0	CH 108	5530	4.05	5.0	5
		CH 122	5610	4.11	5.0	5
		CH 138	5690	4.03	5.0	5

5GHz WLAN ANT 5

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Turn-Up Limit	Power Setting	Duty Cycle %
5.0GHz WLAN ANT 5	802.11a MCS0	CH 149	5745	5.04	5.50	4.5	98.03
		CH 157	5785	5.07	5.50	4.5	
		CH 165	5825	5.12	5.50	4.5	
	802.11n-HT20 MCS0	CH 149	5745	5.18	5.50	4.5	98.28
		CH 157	5785	5.21	5.50	4.5	
		CH 165	5825	5.24	5.50	4.5	
	802.11n-HT40 MCS0	CH 151	5755	5.19	5.50	4.5	98.68
		CH 159	5795	5.47	6.00	4.5	
	802.11ac-VHT20 MCS0	CH 149	5745	5.12	5.50	4.5	98.14
		CH 157	5785	5.06	5.50	4.5	
		CH 165	5825	5.15	5.50	4.5	
	802.11ac-VHT40 MCS0	CH 151	5755	4.92	6.00	4.5	96.41
		CH 159	5795	4.30	5.00	4.5	
	802.11ac-VHT80 MCS0	CH 155	5775	4.90	5.50	4.5	93.54

Reduced Power Level 5

2.4GHz WLAN ANT 5

Mode	Channel	Frequency (MHz)	Average power (dBm)	Turn-Up Limit	Power Setting	Duty Cycle %
2.4GHz WLAN ANT 5	802.11b Mbps	CH 1	2412	10.80	11.50	10
		CH 6	2437	10.94	11.50	10
		CH 11	2462	10.18	10.50	10
	802.11g Mbps	CH 1	2412	10.61	11.00	10
		CH 6	2437	10.87	11.50	10
		CH 11	2462	10.95	11.00	10
	802.11n-HT20 MCS0	CH 1	2412	10.67	11.50	10
		CH 6	2437	10.87	11.50	10
		CH 11	2462	10.33	11.00	10
	802.11n-HT40 MCS0	CH 3	2422	10.32	11.00	10
		CH 6	2437	10.35	11.00	10
		CH 9	2452	10.37	11.00	10

5.2GHz WLAN ANT 5

Mode	Channel	Frequency (MHz)	Average power (dBm)	Turn-Up Limit	Power Setting	Duty Cycle %
5.2GHz WLAN ANT 5	802.11a 8Mbps	CH 36	5180	4.69	5.00	4.5
		CH 44	5200	4.55	5.00	4.5
		CH 48	5240	4.51	5.00	4.5
	802.11n-HT20 MCS0	CH 36	5180	4.37	5.00	4.5
		CH 44	5200	4.21	4.50	4.5
		CH 48	5240	3.88	4.50	4.5
	802.11n-HT40 MCS0	CH 36	5190	5.28	5.50	4.5
		CH 48	5230	4.48	5.00	4.5
	802.11ac-VHT20 MCS0	CH 36	5180	4.40	5.00	4.5
		CH 44	5200	3.34	4.50	4.5
		CH 48	5240	3.91	4.50	4.5
	802.11ac-VHT40 MCS0	CH 36	5190	4.36	5.00	4.5
		CH 48	5230	4.51	5.00	4.5
	802.11ac-VHT80 MCS0	CH 42	5210	4.06	5.00	4.5

5.3GHz WLAN ANT 5

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Turn-Up Limit	Power Setting	Duty Cycle %
5.3GHz WLAN ANT B	802.11a 8Mbps	CH 52	5260	3.58	4.00	4.5	98.03
		CH 60	5300	3.35	4.00	4.5	
		CH 64	5320	3.66	4.00	4.5	
	802.11n-HT20 MCS0	CH 52	5260	3.69	4.00	4.5	98.28
		CH 60	5300	3.37	4.00	4.5	
		CH 64	5320	3.42	4.00	4.5	
	802.11n-HT40 MCS0	CH 54	5270	3.86	4.50	4.5	98.68
		CH 62	5310	3.97	4.50	4.5	
		CH 52	5260	3.92	4.50	4.5	
	802.11ac-VHT20 MCS0	CH 52	5260	3.40	4.00	4.5	98.14
		CH 64	5320	3.45	4.00	4.5	
		CH 54	5270	3.36	4.00	4.5	
	802.11ac-VHT40 MCS0	CH 62	5310	3.37	4.00	4.5	98.41
		802.11ac-VHT80 MCS0	CH 58	5290	3.44	4.00	

5.5 WLAN ANT 5

Mode	Channel	Frequency (MHz)	Average power (dBm)	Turn-Up Limit	Power Setting	Duty Cycle %
5.5GHz WLAN ANT 5	802.11a 8Mbps	CH 100	5500	4.73	5.50	5
		CH 120	5580	4.68	5.50	5
		CH 144	5720	4.78	5.50	5
	802.11n-HT20 MCS0	CH 100	5500	4.81	5.50	5
		CH 120	5580	5.08	5.50	5
		CH 144	5720	5.01	5.50	5
	802.11n-HT40 MCS0	CH 102	5510	5.12	5.50	5
		CH 126	5630	4.51	5.00	5
		CH 142	5710	4.66	5.00	5
	802.11ac-VHT20 MCS0	CH 100	5500	4.70	5.00	5
		CH 120	5580	4.66	5.00	5
		CH 144	5720	4.72	5.00	5
	802.11ac-VHT40 MCS0	CH 102	5510	4.71	5.50	5
		CH 126	5630	4.58	5.00	5
		CH 142	5710	4.29	5.00	5
	802.11ac-VHT80 MCS0	CH 108	5530	4.02	5.00	5
		CH 122	5610	4.17	5.00	5
		CH 138	5690	4.00	5.00	5

5.5 WLAN ANT 5

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Turn-Up Limit	Power Setting	Duty Cycle %
5 GHz WLAN ANT 5	802.11a MCS0	CH 149	5745	5.09	5.50	5.5	98.03
		CH 157	5785	5.12	5.50	5.5	
		CH 165	5825	5.17	5.50	5.5	
	802.11n-HT20 MCS0	CH 149	5745	5.18	5.50	5.5	98.28
		CH 157	5785	5.26	5.50	5.5	
		CH 165	5825	5.11	5.50	5.5	
	802.11n-HT40 MCS0	CH 151	5755	5.18	5.50	5.5	98.68
		CH 159	5795	5.27	5.50	5.5	
		CH 149	5745	5.10	5.50	5.5	
	802.11ac-VHT20 MCS0	CH 157	5785	5.08	5.50	5.5	98.14
		CH 165	5825	5.20	5.50	5.5	
		CH 151	5755	4.57	5.00	5.5	
	802.11ac-VHT40 MCS0	CH 159	5795	4.44	5.00	5.5	98.41
		802.11ac-VHT80 MCS0	CH 155	5775	4.95	5.50	
							93.64

2.4GHz WLAN ANT 5+6

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Turn-Up Limit (dBm)	Duty Cycle %
2.4GHz WLAN ANT 5+6	802.11b Mbps	CH 1	2412	N/A	N/A	100.00
		CH 6	2437	N/A	N/A	
		CH 11	2412	N/A	N/A	
		CH 1	2412	N/A	N/A	
		CH 6	2437	N/A	N/A	
	802.11b Mbps	CH 11	2462	N/A	N/A	98.21
		CH 1	2412	19.78	20.50	
		CH 6	2437	19.82	20.50	
		CH 11	2462	19.40	20.50	
		CH 3	2402	19.42	21.50	
802.11n+40 MHz	CH 3	2437	20.33	21.00	94.20	
	CH 9	2482	20.64	21.00		