



REPORT No.: SZ22040163S01

Annex E Conducted Power

Note:

Conducted power unit: dBm

The target power was recorded in the manufacture document.

Full Power

Band		WCDMA Band II			Tune-up Limit (dBm)	WCDMA Band IV			Tune-up Limit (dBm)	WCDMA Band V			Tune-up Limit (dBm)
TX Channel		9262	9400	9538		1312	1413	1513		4132	4182	4233	
Rx Channel		9662	9800	9938		1537	1638	1738		4357	4407	4458	
Frequency (MHz)		1852.4	1880	1907.6		1712.4	1732.6	1752.6		826.4	836.4	846.6	
3GPP Rel 99	RMC 12.2Kbps	22.61	22.62	22.58	23.70	23.15	23.26	23.23	23.70	22.65	22.75	22.71	23.70
3GPP Rel 6	HSDPA Subtest-1	21.82	21.75	21.77	22.70	22.28	22.39	22.46	23.00	21.85	21.68	21.76	22.50
3GPP Rel 6	HSDPA Subtest-2	21.80	21.76	21.74	22.70	22.52	22.38	22.44	23.00	21.98	21.80	21.82	22.50
3GPP Rel 6	HSDPA Subtest-3	21.31	21.27	21.24	22.70	22.13	21.89	22.05	23.00	21.31	21.29	21.34	22.50
3GPP Rel 6	HSDPA Subtest-4	21.31	21.19	21.24	22.70	22.01	21.89	21.94	23.00	21.39	21.21	21.35	22.50
3GPP Rel 8	DC-HSDPA Subtest-1	21.57	21.54	21.50	22.70	22.13	22.08	22.26	23.00	21.80	21.46	21.39	22.50
3GPP Rel 8	DC-HSDPA Subtest-2	21.55	21.53	21.59	22.70	22.09	22.29	22.33	23.00	21.73	21.40	21.51	22.50
3GPP Rel 8	DC-HSDPA Subtest-3	21.06	21.03	21.00	22.70	21.71	21.72	21.81	22.50	21.29	20.92	21.07	22.50
3GPP Rel 8	DC-HSDPA Subtest-4	21.07	21.04	21.00	22.70	21.61	21.61	21.79	22.50	21.22	20.91	21.03	22.50
3GPP Rel 6	HSUPA Subtest-1	21.40	21.42	21.57	22.70	22.13	22.08	22.18	23.00	21.67	21.64	21.79	22.50
3GPP Rel 6	HSUPA Subtest-2	20.92	20.93	21.08	22.70	21.56	21.61	21.60	22.50	21.05	21.04	21.31	22.50
3GPP Rel 6	HSUPA Subtest-3	21.41	21.44	21.46	22.70	22.21	22.19	22.06	23.00	21.72	21.68	21.83	22.50
3GPP Rel 6	HSUPA Subtest-4	21.41	21.44	21.48	22.70	21.95	21.98	22.07	23.00	21.51	21.62	21.78	22.50
3GPP Rel 6	HSUPA Subtest-5	21.50	21.53	21.47	22.70	22.20	22.11	22.14	23.00	21.62	21.77	21.83	22.50
3GPP Rel 7	HSPA+ (16QAM) Subtest-1	20.97	20.89	21.01	22.70	21.88	21.61	21.69	22.50	21.34	21.24	21.36	22.50
Attenuator			Cable Loss	0.8			Cable Loss	0.8			Cable Loss	0.6	
Mode			Max.	22.62			Max.	23.26			Max.	22.75	

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	23.61	23.64	23.56	
20	QPSK	1	49	23.53	23.55	23.47	24.5
20	QPSK	1	99	23.20	23.23	23.25	
20	QPSK	50	0	22.63	22.78	22.61	
20	QPSK	50	24	22.72	22.77	22.75	23.5
20	QPSK	50	50	22.56	22.60	22.58	
20	QPSK	100	0	22.47	22.49	22.42	
20	16QAM	1	0	22.68	22.72	22.65	23.5
20	16QAM	1	49	22.60	22.63	22.57	
20	16QAM	1	99	22.47	22.50	22.41	
20	16QAM	50	0	22.46	22.52	22.49	23.5
20	16QAM	50	24	22.45	22.48	22.44	
20	16QAM	50	50	22.44	22.52	22.43	
20	16QAM	100	0	22.42	22.44	22.40	23.5
20	64QAM	1	0	22.55	22.60	22.51	
20	64QAM	1	49	22.48	22.52	22.41	
20	64QAM	1	99	22.49	22.51	22.44	23.5
20	64QAM	50	0	22.39	22.44	22.31	
20	64QAM	50	24	22.34	22.41	22.30	
20	64QAM	50	50	22.14	22.24	22.11	23.5
20	64QAM	100	0	22.12	22.20	22.10	
Channel				18675	18900	19125	Tune-up limit (dBm)
Frequency (MHz)				1857.5	1880	1902.5	
15	QPSK	1	0	23.50	23.56	23.41	
15	QPSK	1	37	23.44	23.40	23.45	24.5
15	QPSK	1	74	23.14	23.16	23.21	
15	QPSK	36	0	22.53	22.57	22.46	
15	QPSK	36	20	22.58	22.73	22.68	23.5
15	QPSK	36	39	22.55	22.47	22.50	
15	QPSK	75	0	22.48	22.51	22.51	
15	16QAM	1	0	22.73	22.82	22.75	23.5
15	16QAM	1	37	22.63	22.72	22.62	
15	16QAM	1	74	22.55	22.56	22.55	
15	16QAM	36	0	22.59	22.63	22.55	23.5
15	16QAM	36	20	22.49	22.52	22.54	
15	16QAM	36	39	22.47	22.58	22.44	
15	16QAM	75	0	22.56	22.58	22.42	23.5
15	64QAM	1	0	22.66	22.60	22.63	
15	64QAM	1	37	22.61	22.61	22.50	
15	64QAM	1	74	22.40	22.40	22.37	23.5
15	64QAM	36	0	22.28	22.29	22.18	
15	64QAM	36	20	22.23	22.31	22.20	
15	64QAM	36	39	22.11	22.23	22.04	23.5
15	64QAM	75	0	21.97	22.06	22.03	
Channel				18650	18900	19150	Tune-up limit (dBm)
Frequency (MHz)				1855	1880	1905	
10	QPSK	1	0	23.56	23.52	23.54	
10	QPSK	1	25	23.43	23.46	23.46	24.5
10	QPSK	1	49	23.11	23.16	23.14	
10	QPSK	25	0	22.61	22.58	22.54	
10	QPSK	25	12	22.65	22.68	22.74	23.5
10	QPSK	25	25	22.49	22.50	22.46	
10	QPSK	50	0	22.50	22.52	22.42	
10	16QAM	1	0	22.74	22.77	22.68	23.5
10	16QAM	1	25	22.66	22.67	22.61	
10	16QAM	1	49	22.48	22.53	22.42	
10	16QAM	25	0	22.60	22.65	22.49	23.5
10	16QAM	25	12	22.53	22.60	22.45	
10	16QAM	25	25	22.56	22.55	22.47	
10	16QAM	50	0	22.56	22.53	22.41	23.5
10	64QAM	1	0	22.57	22.70	22.65	
10	64QAM	1	25	22.50	22.55	22.47	
10	64QAM	1	49	22.43	22.37	22.38	23.5
10	64QAM	25	0	22.36	22.32	22.26	
10	64QAM	25	12	22.22	22.26	22.27	
10	64QAM	25	25	22.05	22.20	22.03	23.5
10	64QAM	50	0	21.98	22.19	22.04	
Channel				18625	18900	19175	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1880	1907.5	
5	QPSK	1	0	23.50	23.54	23.45	
5	QPSK	1	12	23.48	23.45	23.42	24.5
5	QPSK	1	24	23.16	23.17	23.18	
5	QPSK	12	0	22.54	22.53	22.48	
5	QPSK	12	7	22.63	22.63	22.61	23.5
5	QPSK	12	13	22.45	22.59	22.55	
5	QPSK	25	0	22.51	22.49	22.44	
5	16QAM	1	0	22.74	22.74	22.73	23.5
5	16QAM	1	12	22.73	22.75	22.61	
5	16QAM	1	24	22.50	22.57	22.48	
5	16QAM	12	0	22.48	22.57	22.61	23.5
5	16QAM	12	7	22.48	22.58	22.54	
5	16QAM	12	13	22.55	22.54	22.56	
5	16QAM	25	0	22.52	22.55	22.54	23.5
5	64QAM	1	0	22.60	22.61	22.55	
5	64QAM	1	12	22.57	22.62	22.44	
5	64QAM	1	24	22.48	22.39	22.38	23.5
5	64QAM	12	0	22.36	22.40	22.22	
5	64QAM	12	7	22.27	22.33	22.15	
5	64QAM	12	13	22.05	22.16	21.97	23.5
5	64QAM	25	0	22.11	22.09	22.06	
Channel				18615	18900	19185	Tune-up limit (dBm)
Frequency (MHz)				1851.5	1880	1908.5	
3	QPSK	1	0	23.51	23.55	23.46	
3	QPSK	1	8	23.47	23.50	23.36	24.5
3	QPSK	1	14	23.16	23.14	23.16	
3	QPSK	8	0	22.59	22.52	22.49	
3	QPSK	8	4	22.66	22.71	22.67	23.5
3	QPSK	8	7	22.48	22.56	22.46	

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	23.66	23.74	23.58	24.5
20	QPSK	1	49	23.58	23.64	23.47	
20	QPSK	1	99	23.39	23.49	23.41	
20	QPSK	50	0	22.58	22.60	22.51	23.5
20	QPSK	50	24	22.47	22.51	22.44	
20	QPSK	50	50	22.35	22.44	22.36	
20	QPSK	100	0	22.40	22.45	22.39	23.5
20	16QAM	1	0	22.77	22.84	22.71	
20	16QAM	1	49	22.65	22.59	22.61	
20	16QAM	1	99	22.60	22.68	22.57	23.5
20	16QAM	50	0	22.58	22.67	22.55	
20	16QAM	50	24	22.50	22.60	22.49	
20	16QAM	50	50	22.42	22.49	22.37	23.5
20	16QAM	100	0	22.43	22.53	22.45	
20	64QAM	1	0	22.69	22.71	22.70	
20	64QAM	1	49	22.51	22.62	22.59	23.5
20	64QAM	1	99	22.55	22.54	22.56	
20	64QAM	50	0	22.60	22.67	22.59	
20	64QAM	50	24	22.51	22.59	22.55	23.5
20	64QAM	50	50	22.46	22.42	22.38	
20	64QAM	100	0	22.39	22.45	22.40	
Channel				20025	20175	20325	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1732.5	1747.5	
15	QPSK	1	0	23.52	23.60	23.45	24.5
15	QPSK	1	37	23.43	23.49	23.34	
15	QPSK	1	74	23.24	23.34	23.28	
15	QPSK	36	0	22.43	22.45	22.38	23.5
15	QPSK	36	20	22.32	22.36	22.31	
15	QPSK	36	39	22.20	22.29	22.23	
15	QPSK	75	0	22.25	22.30	22.26	23.5
15	16QAM	1	0	22.62	22.69	22.58	
15	16QAM	1	37	22.50	22.44	22.48	
15	16QAM	1	74	22.45	22.53	22.44	23.5
15	16QAM	36	0	22.48	22.57	22.47	
15	16QAM	36	20	22.40	22.50	22.41	
15	16QAM	36	39	22.32	22.39	22.29	23.5
15	16QAM	75	0	22.33	22.43	22.37	
15	64QAM	1	0	22.54	22.56	22.57	
15	64QAM	1	37	22.36	22.47	22.46	23.5
15	64QAM	1	74	22.40	22.39	22.43	
15	64QAM	36	0	22.45	22.52	22.46	
15	64QAM	36	20	22.36	22.44	22.42	23.5
15	64QAM	36	39	22.31	22.27	22.25	
15	64QAM	75	0	22.24	22.30	22.27	
Channel				20000	20175	20350	Tune-up limit (dBm)
Frequency (MHz)				1715	1732.5	1750	
10	QPSK	1	0	23.58	23.65	23.51	24.5
10	QPSK	1	25	23.49	23.54	23.40	
10	QPSK	1	49	23.30	23.40	23.34	
10	QPSK	25	0	22.52	22.54	22.47	23.5
10	QPSK	25	12	22.41	22.45	22.40	
10	QPSK	25	25	22.29	22.38	22.32	
10	QPSK	50	0	22.34	22.39	22.35	23.5
10	16QAM	1	0	22.68	22.75	22.64	
10	16QAM	1	25	22.56	22.50	22.54	
10	16QAM	1	49	22.51	22.59	22.50	23.5
10	16QAM	25	0	22.49	22.58	22.48	
10	16QAM	25	12	22.41	22.51	22.42	
10	16QAM	25	25	22.33	22.40	22.30	23.5
10	16QAM	50	0	22.34	22.44	22.38	
10	64QAM	1	0	22.60	22.62	22.63	
10	64QAM	1	25	22.42	22.53	22.52	23.5
10	64QAM	1	49	22.46	22.45	22.49	
10	64QAM	25	0	22.54	22.61	22.55	
10	64QAM	25	12	22.45	22.53	22.51	23.5
10	64QAM	25	25	22.40	22.36	22.34	
10	64QAM	50	0	22.33	22.39	22.36	
Channel				19975	20175	20375	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1732.5	1752.5	
5	QPSK	1	0	23.60	23.69	23.53	24.5
5	QPSK	1	12	23.53	23.57	23.50	
5	QPSK	1	24	23.33	23.44	23.36	
5	QPSK	12	0	22.55	22.58	22.49	23.5
5	QPSK	12	7	22.44	22.49	22.42	
5	QPSK	12	13	22.32	22.42	22.34	
5	QPSK	25	0	22.37	22.43	22.37	23.5
5	16QAM	1	0	22.68	22.76	22.63	
5	16QAM	1	12	22.56	22.51	22.53	
5	16QAM	1	24	22.51	22.60	22.49	23.5
5	16QAM	12	0	22.52	22.62	22.50	
5	16QAM	12	7	22.44	22.55	22.44	
5	16QAM	12	13	22.36	22.44	22.32	23.5
5	16QAM	25	0	22.37	22.48	22.40	
5	64QAM	1	0	22.60	22.63	22.62	
5	64QAM	1	12	22.42	22.54	22.51	23.5
5	64QAM	1	24	22.46	22.46	22.48	
5	64QAM	12	0	22.52	22.62	22.57	
5	64QAM	12	7	22.42	22.54	22.53	23.5
5	64QAM	12	13	22.41	22.39	22.36	
5	64QAM	25	0	22.33	22.40	22.38	
Channel				19965	20175	20385	Tune-up limit (dBm)
Frequency (MHz)				1711.5	1732.5	1753.5	
3	QPSK	1	0	23.47	23.55	23.44	24.5
3	QPSK	1	8	23.38	23.46	23.33	
3	QPSK	1	14	23.20	23.30	23.27	
3	QPSK	8	0	22.49	22.51	22.47	23.5
3	QPSK	8	4	22.38	22.42	22.40	
3	QPSK	8	7	22.26	22.35	22.32	

3	QPSK	15	0	22.50	22.60	22.49	23.5
3	16QAM	1	0	22.75	22.80	22.66	
3	16QAM	1	8	22.67	22.67	22.67	
3	16QAM	1	14	22.57	22.64	22.41	23.5
3	16QAM	8	0	22.48	22.60	22.59	
3	16QAM	8	4	22.56	22.48	22.45	
3	16QAM	8	7	22.49	22.55	22.46	23.5
3	16QAM	15	0	22.52	22.53	22.44	
3	64QAM	1	0	22.60	22.65	22.61	
3	64QAM	1	8	22.52	22.54	22.42	23.5
3	64QAM	1	14	22.47	22.40	22.37	
3	64QAM	8	0	22.28	22.36	22.20	
3	64QAM	8	4	22.23	22.27	22.21	23.5
3	64QAM	8	7	22.06	22.09	22.03	
3	64QAM	15	0	21.97	22.10	21.97	
Channel				18607	18900	19193	Tune-up limit (dBm)
Frequency (MHz)				1850.7	1880	1909.3	
1.4	QPSK	1	0	23.60	23.58	23.55	24.5
1.4	QPSK	1	3	23.38	23.47	23.44	
1.4	QPSK	1	5	23.16	23.22	23.24	
1.4	QPSK	3	0	23.48	23.50	23.52	
1.4	QPSK	3	1	23.45	23.44	23.39	
1.4	QPSK	3	3	23.10	23.18	23.18	
1.4	QPSK	6	0	22.50	22.59	22.55	23.5
1.4	16QAM	1	0	22.69	22.76	22.71	23.5
1.4	16QAM	1	3	22.65	22.75	22.70	
1.4	16QAM	1	5	22.51	22.53	22.55	
1.4	16QAM	3	0	22.70	22.74	22.68	
1.4	16QAM	3	1	22.63	22.73	22.59	
1.4	16QAM	3	3	22.49	22.61	22.47	
1.4	16QAM	6	0	22.55	22.45	22.49	23.5
1.4	64QAM	1	0	22.64	22.63	22.56	23.5
1.4	64QAM	1	3	22.53	22.60	22.50	
1.4	64QAM	1	5	22.40	22.38	22.29	
1.4	64QAM	3	0	22.56	22.70	22.61	
1.4	64QAM	3	1	22.60	22.64	22.50	
1.4	64QAM	3	3	22.47	22.36	22.39	
1.4	64QAM	6	0	22.02	22.09	22.02	23.5

3	QPSK	15	0	22.31	22.36	22.35	23.5
3	16QAM	1	0	22.53	22.60	22.52	
3	16QAM	1	8	22.41	22.35	22.42	
3	16QAM	1	14	22.36	22.44	22.38	23.5
3	16QAM	8	0	22.43	22.52	22.45	
3	16QAM	8	4	22.35	22.45	22.39	
3	16QAM	8	7	22.27	22.34	22.27	23.5
3	16QAM	15	0	22.28	22.38	22.35	
3	64QAM	1	0	22.53	22.52	22.56	
3	64QAM	1	8	22.32	22.44	22.45	23.5
3	64QAM	1	14	22.36	22.35	22.42	
3	64QAM	8	0	22.47	22.53	22.50	
3	64QAM	8	4	22.37	22.45	22.46	23.5
3	64QAM	8	7	22.32	22.28	22.29	
3	64QAM	15	0	22.25	22.31	22.31	
Channel				19957	20175	20393	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1732.5	1754.3	
1.4	QPSK	1	0	23.58	23.66	23.53	24.5
1.4	QPSK	1	3	23.52	23.55	23.44	
1.4	QPSK	1	5	23.31	23.41	23.36	
1.4	QPSK	3	0	23.50	23.52	23.46	
1.4	QPSK	3	1	23.39	23.43	23.39	
1.4	QPSK	3	3	23.27	23.36	23.31	
1.4	QPSK	6	0	22.46	22.51	22.48	23.5
1.4	16QAM	1	0	22.66	22.73	22.63	23.5
1.4	16QAM	1	3	22.54	22.48	22.53	
1.4	16QAM	1	5	22.49	22.57	22.49	
1.4	16QAM	3	0	22.47	22.56	22.47	
1.4	16QAM	3	1	22.39	22.49	22.41	
1.4	16QAM	3	3	22.31	22.38	22.29	
1.4	16QAM	6	0	22.41	22.52	22.46	23.5
1.4	64QAM	1	0	22.58	22.60	22.62	23.5
1.4	64QAM	1	3	22.40	22.51	22.51	
1.4	64QAM	1	5	22.44	22.43	22.48	
1.4	64QAM	3	0	22.49	22.56	22.51	
1.4	64QAM	3	1	22.40	22.48	22.47	
1.4	64QAM	3	3	22.35	22.31	22.30	
1.4	64QAM	6	0	22.45	22.53	22.49	23.5

Band 5 (Celluar Band) Part 22H(only on channel required)							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				20450	20525	20600	
Frequency (MHz)				829	836.5	844	
10	QPSK	1	0	23.28	23.33	23.29	24
10	QPSK	1	25	23.20	23.24	23.22	
10	QPSK	1	49	23.08	23.12	23.15	
10	QPSK	25	0	22.10	22.49	22.18	
10	QPSK	25	12	22.05	22.11	22.13	23
10	QPSK	25	25	22.33	22.38	22.39	
10	QPSK	50	0	22.24	22.30	22.29	
10	16QAM	1	0	22.39	22.48	22.46	
10	16QAM	1	25	22.33	22.39	22.31	23
10	16QAM	1	49	22.28	22.35	22.36	
10	16QAM	25	0	22.49	22.57	22.53	
10	16QAM	25	12	22.43	22.52	22.45	
10	16QAM	25	25	22.34	22.41	22.40	23
10	16QAM	50	0	22.42	22.47	22.49	
10	64QAM	1	0	22.35	22.46	22.38	
10	64QAM	1	25	22.27	22.36	22.25	
10	64QAM	1	49	22.26	22.28	22.33	23
10	64QAM	25	0	22.39	22.46	22.42	
10	64QAM	25	12	22.29	22.37	22.32	
10	64QAM	25	25	22.37	22.33	22.38	
10	64QAM	50	0	22.36	22.40	22.37	
Channel				20425	20525	20625	Tune-up limit (dBm)
Frequency (MHz)				826.5	836.5	846.5	
5	QPSK	1	0	23.22	23.28	23.19	24
5	QPSK	1	12	23.11	23.18	23.09	
5	QPSK	1	24	22.98	23.10	23.01	
5	QPSK	12	0	21.98	22.07	22.16	
5	QPSK	12	7	21.91	22.01	22.05	23
5	QPSK	12	13	21.97	21.98	21.99	
5	QPSK	25	0	21.85	21.82	21.80	
5	16QAM	1	0	22.27	22.39	22.38	
5	16QAM	1	12	22.23	22.33	22.22	23
5	16QAM	1	24	22.26	22.26	22.25	
5	16QAM	12	0	22.47	22.53	22.46	
5	16QAM	12	7	22.40	22.45	22.43	
5	16QAM	12	13	22.26	22.36	22.32	23
5	16QAM	25	0	22.38	22.38	22.46	
5	64QAM	1	0	22.28	22.43	22.37	
5	64QAM	1	12	22.24	22.22	22.19	
5	64QAM	1	24	22.17	22.16	22.20	23
5	64QAM	12	0	22.28	22.39	22.33	
5	64QAM	12	7	22.27	22.36	22.17	
5	64QAM	12	13	22.34	22.25	22.27	
5	64QAM	25	0	22.28	22.38	22.35	
Channel				20415	20525	20635	Tune-up limit (dBm)
Frequency (MHz)				825.5	836.5	847.5	
3	QPSK	1	0	23.18	23.32	23.24	24
3	QPSK	1	8	23.15	23.14	23.12	
3	QPSK	1	14	23.07	22.98	23.10	
3	QPSK	8	0	22.06	22.01	22.10	
3	QPSK	8	4	21.94	21.97	22.06	23
3	QPSK	8	7	21.90	21.97	21.96	
3	QPSK	15	0	21.84	21.87	21.94	
3	16QAM	1	0	22.34	22.40	22.35	
3	16QAM	1	8	22.19	22.36	22.27	23
3	16QAM	1	14	22.15	22.23	22.34	
3	16QAM	8	0	22.37	22.45	22.49	
3	16QAM	8	4	22.37	22.39	22.42	
3	16QAM	8	7	22.26	22.39	22.27	23
3	16QAM	15	0	22.40	22.38	22.37	
3	64QAM	1	0	22.26	22.40	22.25	
3	64QAM	1	8	22.23	22.22	22.14	
3	64QAM	1	14	22.17	22.19	22.25	23
3	64QAM	8	0	22.32	22.41	22.38	
3	64QAM	8	4	22.19	22.25	22.30	
3	64QAM	8	7	22.23	22.32	22.35	
3	64QAM	15	0	22.33	22.38	22.30	
Channel				20407	20525	20643	Tune-up limit (dBm)
Frequency (MHz)				824.7	836.5	848.3	
1.4	QPSK	1	0	23.22	23.30	23.18	24
1.4	QPSK	1	3	23.13	23.21	23.19	
1.4	QPSK	1	5	23.04	23.00	23.04	
1.4	QPSK	3	0	23.04	23.13	23.16	
1.4	QPSK	3	1	23.02	22.97	23.06	23
1.4	QPSK	3	3	22.96	22.98	22.94	
1.4	QPSK	6	0	22.09	22.18	22.15	
1.4	16QAM	1	0	22.25	22.40	22.41	
1.4	16QAM	1	3	22.18	22.29	22.20	23
1.4	16QAM	1	5	22.51	22.60	22.69	
1.4	16QAM	3	0	22.41	22.44	22.43	
1.4	16QAM	3	1	22.42	22.47	22.40	
1.4	16QAM	3	3	22.33	22.35	22.25	23
1.4	16QAM	6	0	21.27	21.44	21.48	
1.4	64QAM	1	0	22.32	22.33	22.29	
1.4	64QAM	1	3	22.15	22.28	22.20	
1.4	64QAM	1	5	22.22	22.23	22.20	23
1.4	64QAM	3	0	22.27	22.37	22.28	
1.4	64QAM	3	1	22.22	22.31	22.24	
1.4	64QAM	3	3	22.29	22.29	22.31	
1.4	64QAM	6	0	22.30	22.36	22.28	23

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	23.59	23.62	23.55	24.5
10	QPSK	1	25	23.51	23.55	23.48	
10	QPSK	1	49	23.47	23.49	23.46	
10	QPSK	25	0	22.68	22.71	22.64	
10	QPSK	25	12	22.37	22.47	22.42	23.5
10	QPSK	25	25	22.51	22.50	22.66	
10	QPSK	50	0	22.57	22.66	22.52	
10	16QAM	1	0	22.80	22.88	22.77	
10	16QAM	1	25	22.78	22.85	22.72	23.5
10	16QAM	1	49	22.79	22.83	22.69	
10	16QAM	25	0	22.52	22.58	22.45	
10	16QAM	25	12	22.50	22.55	22.49	23.5
10	16QAM	25	25	22.47	22.51	22.45	
10	16QAM	50	0	22.51	22.58	22.49	
10	64QAM	1	0	22.68	22.78	22.64	
10	64QAM	1	25	22.66	22.70	22.62	23.5
10	64QAM	1	49	22.64	22.67	22.58	
10	64QAM	25	0	22.60	22.68	22.42	
10	64QAM	25	12	22.58	22.59	22.44	
10	64QAM	25	25	22.49	22.52	22.58	23.5
10	64QAM	50	0	22.54	22.58	22.64	
Channel				23035	23095	23155	Tune-up limit (dbm)
Frequency (MHz)				701.5	707.5	713.5	
5	QPSK	1	0	23.51	23.54	23.47	24.5
5	QPSK	1	12	23.50	23.51	23.44	
5	QPSK	1	24	23.38	23.39	23.39	
5	QPSK	12	0	22.43	22.35	22.58	
5	QPSK	12	7	22.28	22.37	22.39	23.5
5	QPSK	12	13	22.42	22.46	22.62	
5	QPSK	25	0	22.44	22.47	22.41	
5	16QAM	1	0	22.69	22.78	22.72	
5	16QAM	1	12	22.67	22.78	22.68	23.5
5	16QAM	1	24	22.73	22.68	22.66	
5	16QAM	12	0	22.41	22.51	22.40	
5	16QAM	12	7	22.39	22.45	22.48	
5	16QAM	12	13	22.35	22.37	22.44	23.5
5	16QAM	25	0	22.42	22.49	22.44	
5	64QAM	1	0	22.65	22.74	22.56	
5	64QAM	1	12	22.65	22.69	22.52	
5	64QAM	1	24	22.52	22.58	22.44	23.5
5	64QAM	12	0	22.56	22.64	22.28	
5	64QAM	12	7	22.51	22.55	22.29	
5	64QAM	12	13	22.47	22.37	22.53	
5	64QAM	25	0	22.53	22.43	22.49	
Channel				23025	23095	23165	Tune-up limit (dbm)
Frequency (MHz)				700.5	707.5	714.5	
3	QPSK	1	0	23.55	23.49	23.40	24.5
3	QPSK	1	8	23.43	23.42	23.36	
3	QPSK	1	14	23.36	23.48	23.39	
3	QPSK	8	0	22.44	22.36	22.59	
3	QPSK	8	4	22.32	22.46	22.33	23.5
3	QPSK	8	7	22.36	22.44	22.59	
3	QPSK	15	0	22.42	22.38	22.41	
3	16QAM	1	0	22.76	22.73	22.73	
3	16QAM	1	8	22.68	22.82	22.70	23.5
3	16QAM	1	14	22.66	22.79	22.65	
3	16QAM	8	0	22.42	22.53	22.39	
3	16QAM	8	4	22.37	22.49	22.44	
3	16QAM	8	7	22.45	22.48	22.31	23.5
3	16QAM	15	0	22.37	22.56	22.42	
3	64QAM	1	0	22.65	22.72	22.63	
3	64QAM	1	8	22.54	22.69	22.49	
3	64QAM	1	14	22.51	22.64	22.47	23.5
3	64QAM	8	0	22.48	22.65	22.38	
3	64QAM	8	4	22.50	22.53	22.31	
3	64QAM	8	7	22.41	22.37	22.47	
3	64QAM	15	0	22.45	22.55	22.57	
Channel				23017	23095	23173	Tune-up limit (dbm)
Frequency (MHz)				699.7	707.5	715.3	
1.4	QPSK	1	0	23.55	23.58	23.53	24.5
1.4	QPSK	1	3	23.42	23.46	23.47	
1.4	QPSK	1	5	23.44	23.46	23.36	
1.4	QPSK	3	0	23.36	23.43	23.60	
1.4	QPSK	3	1	23.28	23.43	23.39	23.5
1.4	QPSK	3	3	23.50	23.44	23.51	
1.4	QPSK	6	0	22.43	22.45	22.37	
1.4	16QAM	1	0	22.67	22.75	22.73	
1.4	16QAM	1	3	22.63	22.75	22.57	23.5
1.4	16QAM	1	5	22.65	22.82	22.65	
1.4	16QAM	3	0	22.42	22.47	22.42	
1.4	16QAM	3	1	22.39	22.50	22.43	
1.4	16QAM	3	3	22.32	22.43	22.41	23.5
1.4	16QAM	6	0	21.50	21.49	21.41	
1.4	64QAM	1	0	22.65	22.67	22.53	
1.4	64QAM	1	3	22.60	22.66	22.48	
1.4	64QAM	1	5	22.49	22.59	22.51	23.5
1.4	64QAM	3	0	22.57	22.60	22.39	
1.4	64QAM	3	1	22.56	22.47	22.39	
1.4	64QAM	3	3	22.48	22.44	22.57	
1.4	64QAM	6	0	22.47	22.56	22.60	23.5

Band 13(700MHz Band) Part 27F							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				23230			
Frequency (MHz)				782			
10	QPSK	1	0		23.28		24.5
10	QPSK	1	25		23.14		
10	QPSK	1	49		23.14		
10	QPSK	25	0		22.36		23.5
10	QPSK	25	12		22.21		
10	QPSK	25	25		22.07		
10	QPSK	50	0		22.23		23.5
10	16QAM	1	0		22.28		
10	16QAM	1	25		22.35		
10	16QAM	1	49		22.33		22.5
10	16QAM	25	0		21.25		
10	16QAM	25	12		21.29		
10	16QAM	25	25		21.21		22.5
10	16QAM	50	0		21.24		
10	64QAM	1	0		21.32		
10	64QAM	1	25		21.24		22.5
10	64QAM	1	49		21.04		
10	64QAM	25	0		21.21		
10	64QAM	25	12		21.24		22.5
10	64QAM	25	25		21.18		
10	64QAM	50	0		21.16		
Channel				23205	23230	23255	Tune-up limit (dBm)
Frequency (MHz)				779.5	782	784.5	24.5
5	QPSK	1	0	23.19	23.25	23.24	
5	QPSK	1	12	23.12	23.08	23.02	
5	QPSK	1	24	23.09	23.06	23.08	23.5
5	QPSK	12	0	22.34	22.33	22.24	
5	QPSK	12	7	22.16	22.16	22.14	
5	QPSK	12	13	21.99	21.98	22.00	23.5
5	QPSK	25	0	22.15	22.17	22.14	
5	16QAM	1	0	22.19	22.16	22.25	
5	16QAM	1	12	22.33	22.27	22.32	23.5
5	16QAM	1	24	22.26	22.22	22.24	
5	16QAM	12	0	21.19	21.22	21.20	
5	16QAM	12	7	21.28	21.17	21.20	22.5
5	16QAM	12	13	21.19	21.09	21.16	
5	16QAM	25	0	21.15	21.16	21.19	
5	64QAM	1	0	21.20	21.28	21.26	22.5
5	64QAM	1	12	21.15	21.12	21.15	
5	64QAM	1	24	21.40	21.50	21.55	
5	64QAM	12	0	21.14	21.20	21.18	22.5
5	64QAM	12	7	21.18	21.22	21.20	
5	64QAM	12	13	21.09	21.12	21.11	
5	64QAM	25	0	21.09	21.08	21.09	

Band 25 (1900MHz Band) Part 24E							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				26140	26365	26590	23.5
Frequency (MHz)				1860	1882.5	1905	
20	QPSK	1	0	22.66	22.70	22.65	23.5
20	QPSK	1	49	22.53	22.65	22.51	
20	QPSK	1	99	22.39	22.49	22.33	
20	QPSK	50	0	21.83	21.88	21.80	22.5
20	QPSK	50	24	21.82	21.84	21.75	
20	QPSK	50	50	21.66	21.72	21.69	
20	QPSK	100	0	21.73	21.77	21.65	22.5
20	16QAM	1	0	21.52	21.78	21.35	
20	16QAM	1	49	21.73	21.75	21.54	
20	16QAM	1	99	21.50	21.53	21.43	22.5
20	16QAM	50	0	21.35	21.39	21.34	
20	16QAM	50	24	21.53	21.58	21.50	
20	16QAM	50	50	21.44	21.51	21.47	22.5
20	16QAM	100	0	21.42	21.45	21.38	
20	64QAM	1	0	21.56	21.62	21.52	
20	64QAM	1	49	21.54	21.56	21.45	22.5
20	64QAM	1	99	21.16	21.20	21.12	
20	64QAM	50	0	21.56	21.61	21.46	
20	64QAM	50	24	21.41	21.47	21.39	22.5
20	64QAM	50	50	21.43	21.54	21.36	
20	64QAM	100	0	21.42	21.53	21.42	
Channel				26115	26365	26615	Tune-up limit (dBm)
Frequency (MHz)				1857.5	1882.5	1907.5	23.5
15	QPSK	1	0	22.51	22.68	22.64	
15	QPSK	1	37	22.46	22.53	22.50	
15	QPSK	1	74	22.32	22.43	22.29	22.5
15	QPSK	36	0	21.47	21.56	21.55	
15	QPSK	36	20	21.47	21.47	21.44	
15	QPSK	36	39	21.40	21.36	21.41	22.5
15	QPSK	75	0	21.42	21.44	21.27	
15	16QAM	1	0	21.34	21.71	21.29	
15	16QAM	1	37	21.62	21.60	21.38	22.5
15	16QAM	1	74	21.46	21.47	21.32	
15	16QAM	36	0	21.18	21.32	21.28	
15	16QAM	36	20	21.67	21.79	21.72	22.5
15	16QAM	36	39	21.41	21.46	21.41	
15	16QAM	75	0	21.31	21.35	21.26	
15	64QAM	1	0	21.48	21.60	21.44	22.5
15	64QAM	1	37	21.45	21.49	21.39	
15	64QAM	1	74	21.23	21.20	21.31	
15	64QAM	36	0	21.51	21.59	21.36	22.5
15	64QAM	36	20	21.35	21.33	21.28	
15	64QAM	36	39	21.41	21.44	21.32	
15	64QAM	75	0	21.34	21.40	21.27	
Channel				26090	26365	26640	Tune-up limit (dBm)
Frequency (MHz)				1855	1882.5	1910	23.5
10	QPSK	1	0	22.54	22.59	22.59	
10	QPSK	1	25	22.41	22.59	22.37	
10	QPSK	1	49	22.30	22.43	22.25	22.5
10	QPSK	25	0	21.53	21.63	21.42	
10	QPSK	25	12	21.54	21.56	21.40	
10	QPSK	25	25	21.31	21.40	21.40	22.5
10	QPSK	50	0	21.46	21.44	21.29	
10	16QAM	1	0	21.39	21.62	21.29	
10	16QAM	1	25	21.63	21.67	21.41	22.5
10	16QAM	1	49	21.42	21.39	21.27	
10	16QAM	25	0	21.49	21.47	21.47	
10	16QAM	25	12	21.43	21.52	21.38	22.5
10	16QAM	25	25	21.40	21.45	21.32	
10	16QAM	50	0	21.30	21.33	21.26	
10	64QAM	1	0	21.52	21.51	21.42	22.5
10	64QAM	1	25	21.40	21.55	21.41	
10	64QAM	1	49	21.05	21.07	21.11	
10	64QAM	25	0	21.51	21.46	21.31	22.5
10	64QAM	25	12	21.39	21.43	21.27	
10	64QAM	25	25	21.35	21.46	21.28	
10	64QAM	50	0	21.38	21.42	21.31	
Channel				26065	26365	26665	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1882.5	1912.5	23.5
5	QPSK	1	0	22.52	22.57	22.64	
5	QPSK	1	12	22.48	22.57	22.46	
5	QPSK	1	24	22.28	22.48	22.26	22.5
5	QPSK	12	0	21.78	21.78	21.65	
5	QPSK	12	7	21.52	21.48	21.37	
5	QPSK	12	13	21.36	21.38	21.43	22.5
5	QPSK	25	0	21.41	21.41	21.26	
5	16QAM	1	0	21.69	21.86	21.77	
5	16QAM	1	12	21.85	21.92	21.66	22.5
5	16QAM	1	24	21.62	21.64	21.55	
5	16QAM	12	0	21.49	21.59	21.54	
5	16QAM	12	7	21.50	21.53	21.35	22.5
5	16QAM	12	13	21.35	21.38	21.34	
5	16QAM	25	0	21.28	21.34	21.26	
5	64QAM	1	0	21.44	21.54	21.41	22.5
5	64QAM	1	12	21.39	21.45	21.33	
5	64QAM	1	24	21.07	21.07	21.11	
5	64QAM	12	0	21.47	21.48	21.40	22.5
5	64QAM	12	7	21.32	21.41	21.27	
5	64QAM	12	13	21.37	21.39	21.27	
5	64QAM	25	0	21.35	21.41	21.33	
Channel				26055	26365	26675	Tune-up limit (dBm)
Frequency (MHz)				1851.5	1882.5	1913.5	23.5
3	QPSK	1	0	22.54	22.55	22.56	
3	QPSK	1	8	22.38	22.50	22.44	
3	QPSK	1	14	22.27	22.40	22.23	22.5
3	QPSK	8	0	21.54	21.59	21.46	
3	QPSK	8	4	21.45	21.51	21.37	
3	QPSK	8	7	21.35	21.44	21.40	

3	QPSK	15	0	21.13	21.22	21.09	22.5
3	16QAM	1	0	21.46	21.69	21.27	
3	16QAM	1	8	21.64	21.63	21.38	
3	16QAM	1	14	21.41	21.49	21.39	22.5
3	16QAM	8	0	21.25	21.34	21.25	
3	16QAM	8	4	21.21	21.31	21.12	
3	16QAM	8	7	21.19	21.23	21.22	22.5
3	16QAM	15	0	21.07	21.18	20.99	
3	64QAM	1	0	21.54	21.52	21.44	
3	64QAM	1	8	21.45	21.50	21.33	22.5
3	64QAM	1	14	21.12	21.11	21.09	
3	64QAM	8	0	21.46	21.54	21.36	
3	64QAM	8	4	21.28	21.39	21.24	22.5
3	64QAM	8	7	21.34	21.40	21.28	
3	64QAM	15	0	21.36	21.46	21.38	
Channel				26047	26365	26683	Tune-up limit (dBm)
Frequency (MHz)				1850.7	1882.5	1914.3	
1.4	QPSK	1	0	22.51	22.61	22.60	23.5
1.4	QPSK	1	3	22.44	22.62	22.49	
1.4	QPSK	1	5	22.36	22.46	22.32	
1.4	QPSK	3	0	22.58	22.57	22.57	
1.4	QPSK	3	1	22.53	22.57	22.49	
1.4	QPSK	3	3	22.18	22.15	22.09	
1.4	QPSK	6	0	21.48	21.48	21.29	22.5
1.4	16QAM	1	0	21.38	21.68	21.31	22.5
1.4	16QAM	1	3	21.64	21.69	21.46	
1.4	16QAM	1	5	21.33	21.47	21.30	
1.4	16QAM	3	0	21.31	21.33	21.16	
1.4	16QAM	3	1	21.40	21.57	21.39	
1.4	16QAM	3	3	21.33	21.40	21.34	
1.4	16QAM	6	0	21.39	21.32	21.34	22.5
1.4	64QAM	1	0	21.49	21.57	21.38	22.5
1.4	64QAM	1	3	21.43	21.43	21.35	
1.4	64QAM	1	5	21.34	21.10	21.09	
1.4	64QAM	3	0	21.45	21.50	21.42	
1.4	64QAM	3	1	21.36	21.34	21.35	
1.4	64QAM	3	3	21.41	21.48	21.39	
1.4	64QAM	6	0	21.41	21.51	21.40	22.5

Band 26 for FCC (only on channel required)							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				26765	26865	26965	
Frequency (MHz)				821.5	831.5	841.5	
15	QPSK	1	0	22.70	22.75	22.67	23.5
15	QPSK	1	37	22.64	22.67	22.61	
15	QPSK	1	74	22.61	22.63	22.60	
15	QPSK	36	0	21.77	21.79	21.75	22.5
15	QPSK	36	20	21.61	21.64	21.57	
15	QPSK	36	39	21.50	21.55	21.49	
15	QPSK	75	0	21.66	21.69	21.65	22.5
15	16QAM	1	0	21.78	21.81	21.73	
15	16QAM	1	37	21.65	21.71	21.49	
15	16QAM	1	74	21.65	21.66	21.58	22.5
15	16QAM	36	0	21.38	21.44	21.27	
15	16QAM	36	20	21.41	21.49	21.35	
15	16QAM	36	39	21.26	21.32	21.24	22.5
15	16QAM	75	0	21.30	21.38	21.27	
15	64QAM	1	0	21.68	21.75	21.65	22.5
15	64QAM	1	37	21.67	21.69	21.59	
15	64QAM	1	74	21.72	21.77	21.68	
15	64QAM	36	0	21.26	21.33	21.21	22.5
15	64QAM	36	20	21.22	21.25	21.16	
15	64QAM	36	39	21.09	21.14	21.06	
15	64QAM	75	0	21.05	21.14	21.07	
Channel				26740	26865	26990	Tune-up limit (dBm)
Frequency (MHz)				819	831.5	844	
10	QPSK	1	0	22.55	22.68	22.56	23.5
10	QPSK	1	25	22.55	22.58	22.58	
10	QPSK	1	49	22.54	22.55	22.54	
10	QPSK	25	0	21.69	21.64	21.67	22.5
10	QPSK	25	12	21.59	21.58	21.43	
10	QPSK	25	25	21.25	21.30	21.13	
10	QPSK	50	0	21.34	21.30	21.38	22.5
10	16QAM	1	0	21.76	21.79	21.58	
10	16QAM	1	25	21.62	21.63	21.42	
10	16QAM	1	49	21.50	21.59	21.57	22.5
10	16QAM	25	0	21.47	21.62	21.40	
10	16QAM	25	12	21.30	21.48	21.29	
10	16QAM	25	25	21.14	21.27	21.15	22.5
10	16QAM	50	0	21.28	21.31	21.15	
10	64QAM	1	0	21.54	21.67	21.50	
10	64QAM	1	25	21.53	21.66	21.46	22.5
10	64QAM	1	49	21.67	21.64	21.60	
10	64QAM	25	0	21.22	21.26	21.17	
10	64QAM	25	12	21.08	21.23	21.03	22.5
10	64QAM	25	25	21.04	21.04	21.02	
10	64QAM	50	0	20.94	21.03	20.95	
Channel				26715	26865	27015	Tune-up limit (dBm)
Frequency (MHz)				816.5	831.5	846.5	
5	QPSK	1	0	22.65	22.74	22.55	23.5
5	QPSK	1	12	22.62	22.60	22.49	
5	QPSK	1	24	22.50	22.49	22.51	
5	QPSK	12	0	21.72	21.64	21.65	22.5
5	QPSK	12	7	21.60	21.62	21.42	
5	QPSK	12	13	21.18	21.30	21.19	
5	QPSK	25	0	21.27	21.44	21.38	22.5
5	16QAM	1	0	21.69	21.80	21.66	
5	16QAM	1	12	21.52	21.64	21.35	
5	16QAM	1	24	21.59	21.65	21.57	22.5
5	16QAM	12	0	21.56	21.57	21.40	
5	16QAM	12	7	21.33	21.34	21.23	
5	16QAM	12	13	21.14	21.29	21.17	22.5
5	16QAM	25	0	21.26	21.31	21.23	
5	64QAM	1	0	21.55	21.68	21.63	
5	64QAM	1	12	21.54	21.58	21.57	22.5
5	64QAM	1	24	21.68	21.76	21.60	
5	64QAM	12	0	21.19	21.22	21.18	
5	64QAM	12	7	21.07	21.17	21.08	22.5
5	64QAM	12	13	20.96	21.10	21.04	
5	64QAM	25	0	21.01	21.10	21.03	
Channel				26705	26865	27025	Tune-up limit (dBm)
Frequency (MHz)				815.5	831.5	847.5	
3	QPSK	1	0	22.63	22.61	22.54	23.5
3	QPSK	1	8	22.49	22.63	22.50	
3	QPSK	1	14	22.58	22.54	22.52	
3	QPSK	8	0	21.65	21.75	21.64	22.5
3	QPSK	8	4	21.54	21.56	21.56	
3	QPSK	8	7	21.19	21.21	21.22	
3	QPSK	15	0	21.35	21.32	21.39	22.5
3	16QAM	1	0	21.77	21.71	21.58	
3	16QAM	1	8	21.64	21.62	21.44	
3	16QAM	1	14	21.63	21.56	21.55	22.5
3	16QAM	8	0	21.48	21.65	21.43	
3	16QAM	8	4	21.35	21.41	21.20	
3	16QAM	8	7	21.20	21.28	21.23	22.5
3	16QAM	15	0	21.26	21.36	21.24	
3	64QAM	1	0	21.57	21.72	21.52	
3	64QAM	1	8	21.52	21.66	21.48	22.5
3	64QAM	1	14	21.61	21.67	21.66	
3	64QAM	8	0	21.12	21.24	21.15	
3	64QAM	8	4	21.21	21.19	21.14	22.5
3	64QAM	8	7	21.08	21.12	21.05	
3	64QAM	15	0	21.04	21.12	20.92	
Channel				26997	26865	27033	Tune-up limit (dBm)
Frequency (MHz)				814.7	831.5	848.3	
1.4	QPSK	1	0	22.57	22.63	22.62	23.5
1.4	QPSK	1	3	22.58	22.65	22.49	
1.4	QPSK	1	5	22.49	22.50	22.56	
1.4	QPSK	3	0	22.62	22.70	22.63	
1.4	QPSK	3	1	22.47	22.60	22.51	
1.4	QPSK	3	3	22.41	22.42	22.46	

Band 66							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dbm)
Channel				132072	132322	132572	
Frequency (MHz)				1720	1745	1770	
20	QPSK	1	0	22.78	22.81	22.72	23.5
20	QPSK	1	49	22.69	22.72	22.65	
20	QPSK	1	99	22.65	22.68	22.62	
20	QPSK	50	0	21.72	21.84	21.81	22.5
20	QPSK	50	24	21.57	21.56	21.58	
20	QPSK	50	50	21.53	21.53	21.53	
20	QPSK	100	0	21.61	21.72	21.60	22.5
20	16QAM	1	0	21.69	21.72	21.60	
20	16QAM	1	49	21.60	21.65	21.56	
20	16QAM	1	99	21.56	21.62	21.50	22.5
20	16QAM	50	0	21.71	21.78	21.68	
20	16QAM	50	24	21.54	21.60	21.55	
20	16QAM	50	50	21.50	21.51	21.49	22.5
20	16QAM	100	0	21.41	21.49	21.42	
20	64QAM	1	0	21.75	21.88	21.84	
20	64QAM	1	49	21.66	21.72	21.68	22.5
20	64QAM	1	99	21.52	21.55	21.49	
20	64QAM	50	0	21.65	21.52	21.66	22.5
20	64QAM	50	24	21.53	21.46	21.68	
20	64QAM	50	50	21.50	21.50	21.46	
20	64QAM	100	0	21.60	21.39	21.49	
Channel				132047	132322	132597	Tune-up limit (dbm)
Frequency (MHz)				1717.5	1745	1772.5	
15	QPSK	1	0	22.73	22.71	22.65	23.5
15	QPSK	1	37	22.61	22.70	22.55	
15	QPSK	1	74	22.58	22.53	22.61	
15	QPSK	36	0	21.64	21.65	21.76	22.5
15	QPSK	36	20	21.67	21.70	21.77	
15	QPSK	36	39	21.66	21.62	21.70	
15	QPSK	75	0	21.77	21.85	21.71	22.5
15	16QAM	1	0	21.63	21.62	21.53	
15	16QAM	1	37	21.48	21.57	21.54	
15	16QAM	1	74	21.41	21.56	21.38	22.5
15	16QAM	36	0	21.12	21.13	21.12	
15	16QAM	36	20	21.51	21.50	21.46	
15	16QAM	36	39	21.49	21.41	21.39	22.5
15	16QAM	75	0	21.39	21.46	21.30	
15	64QAM	1	0	21.60	21.75	21.72	
15	64QAM	1	37	21.51	21.68	21.65	22.5
15	64QAM	1	74	21.50	21.53	21.47	
15	64QAM	36	0	21.52	21.44	21.60	22.5
15	64QAM	36	20	21.42	21.39	21.66	
15	64QAM	36	39	21.48	21.42	21.36	
15	64QAM	75	0	21.59	21.35	21.46	
Channel				132022	132322	132622	Tune-up limit (dbm)
Frequency (MHz)				1715	1745	1775	
10	QPSK	1	0	22.83	22.80	22.57	23.5
10	QPSK	1	25	22.64	22.68	22.63	
10	QPSK	1	49	22.54	22.54	22.54	
10	QPSK	25	0	21.60	21.72	21.73	22.5
10	QPSK	25	12	21.73	21.71	21.76	
10	QPSK	25	25	21.74	21.66	21.75	
10	QPSK	50	0	21.29	21.36	21.28	22.5
10	16QAM	1	0	21.59	21.65	21.45	
10	16QAM	1	25	21.58	21.59	21.52	
10	16QAM	1	49	21.44	21.56	21.42	22.5
10	16QAM	25	0	21.61	21.66	21.60	
10	16QAM	25	12	21.43	21.52	21.40	
10	16QAM	25	25	21.39	21.50	21.44	22.5
10	16QAM	50	0	21.35	21.42	21.40	
10	64QAM	1	0	21.72	21.87	21.72	
10	64QAM	1	25	21.52	21.69	21.60	22.5
10	64QAM	1	49	21.47	21.44	21.44	
10	64QAM	25	0	21.53	21.37	21.59	22.5
10	64QAM	25	12	21.39	21.44	21.64	
10	64QAM	25	25	21.41	21.46	21.40	
10	64QAM	50	0	21.51	21.32	21.41	
Channel				131997	132322	132647	Tune-up limit (dbm)
Frequency (MHz)				1712.5	1745	1777.5	
5	QPSK	1	0	22.70	22.76	22.70	23.5
5	QPSK	1	12	22.68	22.61	22.51	
5	QPSK	1	24	22.58	22.57	22.57	
5	QPSK	12	0	21.61	21.79	21.66	22.5
5	QPSK	12	7	21.80	21.69	21.77	
5	QPSK	12	13	21.72	21.71	21.73	
5	QPSK	25	0	21.78	21.82	21.70	22.5
5	16QAM	1	0	21.61	21.66	21.54	
5	16QAM	1	12	21.53	21.60	21.52	
5	16QAM	1	24	21.48	21.56	21.46	22.5
5	16QAM	12	0	21.67	21.74	21.63	
5	16QAM	12	7	21.40	21.58	21.48	
5	16QAM	12	13	21.37	21.49	21.46	22.5
5	16QAM	25	0	21.34	21.43	21.30	
5	64QAM	1	0	21.70	21.79	21.78	
5	64QAM	1	12	21.65	21.59	21.64	22.5
5	64QAM	1	24	21.44	21.42	21.43	
5	64QAM	12	0	21.51	21.48	21.59	
5	64QAM	12	7	21.40	21.40	21.61	22.5
5	64QAM	12	13	21.45	21.35	21.40	
5	64QAM	25	0	21.59	21.33	21.47	
Channel				131987	132322	132657	Tune-up limit (dbm)
Frequency (MHz)				1711.5	1745	1778.5	
3	QPSK	1	0	22.67	22.73	22.64	23.5
3	QPSK	1	8	22.59	22.67	22.58	
3	QPSK	1	14	22.54	22.57	22.58	
3	QPSK	8	0	21.70	21.74	21.67	22.5
3	QPSK	8	4	21.67	21.73	21.78	
3	QPSK	8	7	21.76	21.68	21.75	

1.4	QPSK	6	0	21.36	21.30	21.35	22.5
1.4	16QAM	1	0	21.77	21.70	21.70	22.5
1.4	16QAM	1	3	21.54	21.70	21.41	
1.4	16QAM	1	5	21.51	21.63	21.44	
1.4	16QAM	3	0	21.54	21.67	21.47	
1.4	16QAM	3	1	21.40	21.45	21.23	
1.4	16QAM	3	3	21.46	21.55	21.49	22.5
1.4	16QAM	6	0	21.19	21.35	21.24	
1.4	64QAM	1	0	21.67	21.64	21.62	22.5
1.4	64QAM	1	3	21.55	21.66	21.54	
1.4	64QAM	1	5	21.66	21.75	21.53	
1.4	64QAM	3	0	21.42	21.55	21.42	
1.4	64QAM	3	1	21.41	21.45	21.39	
1.4	64QAM	3	3	21.31	21.30	21.25	22.5
1.4	64QAM	6	0	20.97	21.03	20.98	

3	QPSK	15	0	21.20	21.37	21.25	22.5
3	16QAM	1	0	21.54	21.67	21.53	
3	16QAM	1	8	21.58	21.51	21.45	
3	16QAM	1	14	21.41	21.59	21.40	22.5
3	16QAM	8	0	21.70	21.69	21.58	
3	16QAM	8	4	21.49	21.54	21.51	
3	16QAM	8	7	21.46	21.47	21.39	
3	16QAM	15	0	21.32	21.46	21.33	
3	64QAM	1	0	21.65	21.83	21.71	22.5
3	64QAM	1	8	21.55	21.66	21.55	
3	64QAM	1	14	21.44	21.44	21.36	
3	64QAM	8	0	21.57	21.50	21.63	22.5
3	64QAM	8	4	21.51	21.36	21.60	
3	64QAM	8	7	21.35	21.35	21.38	
3	64QAM	15	0	21.54	21.24	21.48	
Channel				131979	132322	132665	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1745	1779.3	
1.4	QPSK	1	0	22.63	22.66	22.58	23.5
1.4	QPSK	1	3	22.63	22.58	22.55	
1.4	QPSK	1	5	22.54	22.64	22.58	
1.4	QPSK	3	0	22.63	22.75	22.67	
1.4	QPSK	3	1	22.77	22.72	22.73	
1.4	QPSK	3	3	22.74	22.69	22.65	22.5
1.4	QPSK	6	0	21.80	21.93	21.72	
1.4	16QAM	1	0	21.55	21.60	21.57	22.5
1.4	16QAM	1	3	21.45	21.56	21.48	
1.4	16QAM	1	5	21.53	21.48	21.47	
1.4	16QAM	3	0	21.35	21.41	21.26	
1.4	16QAM	3	1	21.24	21.28	21.15	
1.4	16QAM	3	3	21.16	21.09	21.06	22.5
1.4	16QAM	6	0	21.28	21.45	21.32	
1.4	64QAM	1	0	21.71	21.86	21.80	22.5
1.4	64QAM	1	3	21.60	21.68	21.62	
1.4	64QAM	1	5	21.37	21.52	21.40	
1.4	64QAM	3	0	21.84	21.67	21.91	
1.4	64QAM	3	1	21.68	21.63	21.90	
1.4	64QAM	3	3	21.72	21.75	21.71	22.5
1.4	64QAM	6	0	21.59	21.31	21.36	

Band 71							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				133222	133322	133372	
Frequency (MHz)				673	683	688	
20	QPSK	1	0	22.33	22.38	22.28	23
20	QPSK	1	49	22.26	22.31	22.23	
20	QPSK	1	99	22.18	22.22	22.19	
20	QPSK	50	0	21.37	21.45	21.35	
20	QPSK	50	24	21.22	21.28	21.19	22
20	QPSK	50	50	21.13	21.23	21.15	
20	QPSK	100	0	21.33	21.40	21.32	
20	16QAM	1	0	21.49	21.63	21.52	
20	16QAM	1	49	21.44	21.56	21.46	22
20	16QAM	1	99	21.52	21.54	21.44	
20	16QAM	50	0	21.36	21.40	21.33	
20	16QAM	50	24	21.31	21.40	21.27	
20	16QAM	50	50	21.29	21.32	21.31	22
20	16QAM	100	0	21.21	21.25	21.23	
20	64QAM	1	0	21.54	21.64	21.48	
20	64QAM	1	49	21.50	21.59	21.46	
20	64QAM	1	99	21.47	21.55	21.45	22
20	64QAM	50	0	21.25	21.30	21.36	
20	64QAM	50	24	21.26	21.31	21.27	
20	64QAM	50	50	21.33	21.28	21.29	
20	64QAM	100	0	21.29	21.32	21.24	
Channel				133197	133297	133397	Tune-up limit (dBm)
Frequency (MHz)				670.5	680.5	690.5	
15	QPSK	1	0	22.31	22.35	22.19	
15	QPSK	1	37	22.15	22.28	22.11	23
15	QPSK	1	74	22.14	22.19	22.18	
15	QPSK	36	0	21.19	21.20	21.23	
15	QPSK	36	20	21.11	21.19	21.17	
15	QPSK	36	39	21.10	21.09	21.06	22
15	QPSK	75	0	21.27	21.33	21.21	
15	16QAM	1	0	21.44	21.51	21.48	
15	16QAM	1	37	21.37	21.41	21.33	
15	16QAM	1	74	21.50	21.50	21.41	22
15	16QAM	36	0	21.27	21.39	21.20	
15	16QAM	36	20	21.19	21.35	21.22	
15	16QAM	36	39	21.24	21.23	21.28	
15	16QAM	75	0	21.13	21.10	21.13	22
15	64QAM	1	0	21.39	21.59	21.34	
15	64QAM	1	37	21.45	21.49	21.37	
15	64QAM	1	74	21.42	21.45	21.34	
15	64QAM	36	0	21.18	21.23	21.30	22
15	64QAM	36	20	21.20	21.17	21.24	
15	64QAM	36	39	21.19	21.25	21.22	
15	64QAM	75	0	21.21	21.28	21.09	
Channel				133172	133272	133422	Tune-up limit (dBm)
Frequency (MHz)				668	678	693	
10	QPSK	1	0	22.21	22.27	22.26	
10	QPSK	1	25	22.19	22.20	22.20	23
10	QPSK	1	49	22.17	22.21	22.15	
10	QPSK	25	0	21.12	21.22	21.23	
10	QPSK	25	12	21.17	21.23	21.14	
10	QPSK	25	25	21.03	21.12	21.08	22
10	QPSK	50	0	21.21	21.25	21.18	
10	16QAM	1	0	21.44	21.62	21.43	
10	16QAM	1	25	21.30	21.42	21.44	
10	16QAM	1	49	21.39	21.39	21.37	22
10	16QAM	25	0	21.24	21.34	21.29	
10	16QAM	25	12	21.22	21.26	21.17	
10	16QAM	25	25	21.14	21.20	21.16	
10	16QAM	50	0	21.11	21.20	21.14	22
10	64QAM	1	0	21.44	21.54	21.38	
10	64QAM	1	25	21.46	21.49	21.32	
10	64QAM	1	49	21.37	21.47	21.38	
10	64QAM	25	0	21.18	21.27	21.22	22
10	64QAM	25	12	21.21	21.27	21.22	
10	64QAM	25	25	21.20	21.17	21.15	
10	64QAM	50	0	21.25	21.21	21.17	
Channel				133147	133247	133447	Tune-up limit (dBm)
Frequency (MHz)				665.5	675.5	695.5	
5	QPSK	1	0	22.21	22.26	22.18	
5	QPSK	1	12	22.17	22.29	22.16	23
5	QPSK	1	24	22.12	22.11	22.15	
5	QPSK	12	0	21.21	21.22	21.21	
5	QPSK	12	7	21.13	21.15	21.13	22
5	QPSK	12	13	21.02	21.10	21.01	
5	QPSK	25	0	21.18	21.32	21.24	
5	16QAM	1	0	21.43	21.57	21.51	
5	16QAM	1	12	21.32	21.46	21.39	22
5	16QAM	1	24	21.50	21.43	21.32	
5	16QAM	12	0	21.21	21.31	21.26	
5	16QAM	12	7	21.19	21.25	21.24	
5	16QAM	12	13	21.14	21.20	21.19	22
5	16QAM	25	0	21.10	21.16	21.22	
5	64QAM	1	0	21.47	21.54	21.44	
5	64QAM	1	12	21.41	21.45	21.41	
5	64QAM	1	24	21.35	21.51	21.39	22
5	64QAM	12	0	21.19	21.19	21.23	
5	64QAM	12	7	21.24	21.16	21.23	
5	64QAM	12	13	21.18	21.20	21.28	
5	64QAM	25	0	21.22	21.30	21.13	

Band 41 (2496~2690MHz) Class 2											
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Low Channel	Middle Channel	Middle High Channel	High Channel	Tune-up limit (dBm)		
Channel				39750	40185	40620	41055	41490			
Frequency (MHz)				2506	2549.5	2593	2636.5	2680			
20	QPSK	1	0	25.62	25.76	25.96	25.70	25.60	26.5		
20	QPSK	1	49	25.52	25.48	25.73	25.36	25.31			
20	QPSK	1	99	25.63	25.64	25.74	25.37	25.22			
20	QPSK	50	0	24.73	24.74	24.84	24.77	24.69			
20	QPSK	50	24	24.42	24.39	24.68	24.46	24.38	25.5		
20	QPSK	50	50	24.48	24.64	24.63	24.44	24.47			
20	QPSK	100	0	24.63	24.60	24.69	24.46	24.41			
20	16QAM	1	0	24.35	24.54	24.67	24.61	24.66			
20	16QAM	1	49	24.66	24.60	24.64	24.47	24.38	25.5		
20	16QAM	1	99	24.77	24.94	24.38	24.46	24.57			
20	16QAM	50	0	24.27	24.40	24.49	24.36	24.36			
20	16QAM	50	24	24.23	24.27	24.39	24.36	24.35			
20	16QAM	50	50	24.19	24.26	24.35	24.34	24.26	25.5		
20	16QAM	100	0	24.60	24.62	24.32	24.37	24.29			
20	64QAM	1	0	24.76	24.78	24.94	24.90	24.70			
20	64QAM	1	49	24.83	24.83	24.89	24.79	24.62			
20	64QAM	1	99	24.89	24.82	24.91	24.68	24.37	25.5		
20	64QAM	50	0	24.36	24.56	24.63	24.29	24.41			
20	64QAM	50	24	24.58	24.53	24.60	24.31	24.26			
20	64QAM	50	50	24.55	24.49	24.61	24.18	24.20			
20	64QAM	100	0	24.63	24.56	24.60	24.52	24.33	Tune-up limit (dBm)		
Channel				39725	40173	40620	41068	41515			
Frequency (MHz)				2503.5	2548.3	2593	2637.8	2682.5			
15	QPSK	1	0	25.57	25.63	25.77	25.57	25.50	26.5		
15	QPSK	1	37	25.38	25.44	25.61	25.28	25.24			
15	QPSK	1	74	25.49	25.54	25.70	25.23	25.09			
15	QPSK	36	0	24.69	24.68	24.77	24.62	24.59			
15	QPSK	36	20	24.60	24.49	24.88	24.62	24.54	25.5		
15	QPSK	36	39	24.61	24.72	24.76	24.56	24.64			
15	QPSK	75	0	24.76	24.80	24.71	24.52	24.60			
15	16QAM	1	0	24.43	24.70	24.87	24.78	24.74			
15	16QAM	1	37	24.84	24.67	24.82	24.62	24.44	25.5		
15	16QAM	1	74	24.76	24.89	24.27	24.38	24.43			
15	16QAM	36	0	24.21	24.33	24.42	24.33	24.30			
15	16QAM	36	20	24.13	24.15	24.30	24.23	24.27			
15	16QAM	36	39	24.04	24.25	24.31	24.25	24.14	25.5		
15	16QAM	75	0	24.64	24.54	24.26	24.22	24.24			
15	64QAM	1	0	24.65	24.68	24.93	24.80	24.63			
15	64QAM	1	37	24.74	24.71	24.82	24.73	24.58			
15	64QAM	1	74	24.75	24.77	24.88	24.59	24.22	25.5		
15	64QAM	36	0	24.35	24.49	24.48	24.27	24.31			
15	64QAM	36	20	24.47	24.40	24.53	24.26	24.22			
15	64QAM	36	39	24.48	24.34	24.60	24.10	24.19			
15	64QAM	75	0	24.44	24.48	24.46	24.46	24.24	Tune-up limit (dBm)		
Channel				39700	40160	40620	41089	41540			
Frequency (MHz)				2501	2547	2593	2639	2685			
10	QPSK	1	0	25.50	25.75	25.81	25.56	25.59	26.5		
10	QPSK	1	25	25.37	25.46	25.58	25.33	25.19			
10	QPSK	1	49	25.50	25.61	25.65	25.25	25.06			
10	QPSK	25	0	24.61	24.71	24.76	24.76	24.56			
10	QPSK	25	12	24.51	24.55	24.84	24.52	24.49	25.5		
10	QPSK	25	25	24.66	24.70	24.82	24.51	24.66			
10	QPSK	50	0	24.71	24.68	24.78	24.64	24.53			
10	16QAM	1	0	24.44	24.60	24.73	24.79	24.72			
10	16QAM	1	25	24.75	24.69	24.80	24.59	24.46	25.5		
10	16QAM	1	49	24.72	24.79	24.24	24.38	24.45			
10	16QAM	25	0	24.12	24.29	24.36	24.29	24.36			
10	16QAM	25	12	24.09	24.15	24.31	24.22	24.22			
10	16QAM	25	25	24.13	24.17	24.27	24.30	24.22	25.5		
10	16QAM	50	0	24.46	24.57	24.30	24.29	24.28			
10	64QAM	1	0	24.68	24.74	24.87	24.86	24.68			
10	64QAM	1	25	24.71	24.82	24.87	24.73	24.61			
10	64QAM	1	49	24.80	24.68	24.89	24.62	24.26	25.5		
10	64QAM	25	0	24.22	24.48	24.54	24.21	24.36			
10	64QAM	25	12	24.45	24.46	24.52	24.19	24.16			
10	64QAM	25	25	24.42	24.35	24.80	24.10	24.17			
10	64QAM	50	0	24.43	24.44	24.46	24.43	24.26	Tune-up limit (dBm)		
Channel				39675	40148	40620	41093	41565			
Frequency (MHz)				2498.5	2545.8	2593	2640.30	2687.5			
5	QPSK	1	0	25.47	25.68	25.78	25.59	25.51	26.5		
5	QPSK	1	12	25.51	25.39	25.70	25.30	25.25			
5	QPSK	1	24	25.53	25.50	25.73	25.31	25.11			
5	QPSK	12	0	24.70	24.62	24.73	24.74	24.60			
5	QPSK	12	7	24.58	24.50	24.78	24.64	24.52	25.5		
5	QPSK	12	13	24.55	24.76	24.72	24.53	24.60			
5	QPSK	25	0	24.69	24.70	24.69	24.57	24.60			
5	16QAM	1	0	24.51	24.65	24.66	24.74	24.74			
5	16QAM	1	12	24.82	24.70	24.76	24.66	24.57	25.5		
5	16QAM	1	24	24.68	24.90	24.36	24.41	24.51			
5	16QAM	12	0	24.13	24.35	24.34	24.23	24.25			
5	16QAM	12	7	24.09	24.12	24.31	24.33	24.28			
5	16QAM	12	13	24.16	24.15	24.23	24.26	24.19	25.5		
5	16QAM	25	0	24.52	24.49	24.45	24.35	24.37			
5	64QAM	1	0	24.71	24.74	24.63	24.68	24.63			
5	64QAM	1	12	24.77	24.80	24.79	24.75	24.52			
5	64QAM	1	24	24.83	24.78	24.87	24.56	24.33	25.5		
5	64QAM	12	0	24.21	24.42	24.59	24.22	24.26			
5	64QAM	12	7	24.50	24.38	24.58	24.22	24.19			
5	64QAM	12	13	24.53	24.34	24.46	24.07	24.19			
5	64QAM	25	0	24.50	24.42	24.50	24.42	24.29	Tune-up limit (dBm)		

Band 41 (2496~2690MHz) Class 3											
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Low Channel	Middle Channel	Middle High Channel	High Channel	Tune-up limit (dBm)		
Channel				39750	40185	40620	41055	41490			
Frequency (MHz)				2506	2549.5	2593	2636.5	2680			
20	QPSK	1	0	23.66	23.73	23.80	23.71	23.75	24.7		
20	QPSK	1	49	23.33	23.64	23.71	23.41	23.35			
20	QPSK	1	99	23.29	23.40	23.49	23.39	23.20			
20	QPSK	50	0	22.66	22.70	22.78	22.68	22.69			
20	QPSK	50	24	22.61	22.65	22.58	22.32	22.35	23.7		
20	QPSK	50	50	22.47	22.57	22.65	22.45	22.34			

CA_41C (Class3)											
Combination:20MHz+20MHz(100RB+100RB)											
PCC Channel	PCC Channel (3GPP)	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level(dB)	Measured Power(dBm)	Tune-up limit(dBm)
				RB Size	RB Offset	RB Size	RB Offset				
39750	39750	39948	QPSK	1	0	0	0	1	0	22.78	23.5
40185	40521	40719	QPSK	1	0	0	0	1	0	22.87	23.5
40620	41292	41490	QPSK	1	0	0	0	1	0	22.55	22.5
40620	39750	39948	16QAM	1	0	0	0	1	0	21.63	22.5
41055	40521	40719	16QAM	1	0	0	0	1	0	21.55	22.5
41490	41292	41490	16QAM	1	0	0	0	1	0	21.30	22.5
40620	39750	39948	64QAM	1	0	0	0	1	0	21.31	22.5
41055	40521	40719	64QAM	1	0	0	0	1	0	21.17	22.5
41490	41292	41490	64QAM	1	0	0	0	1	0	21.58	22.5
39750	39750	39948	QPSK	50	0	0	0	1	0	21.55	22.5
40185	40521	40719	QPSK	50	0	0	0	1	0	21.47	22.5
40620	41292	41490	QPSK	50	0	0	0	1	0	21.33	22.5

CA_41C (Class2)											
Combination:20MHz+20MHz(100RB+100RB)											
PCC Channel	PCC Channel (3GPP)	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level(dB)	Measured Power(dBm)	Tune-up limit(dBm)
				RB Size	RB Offset	RB Size	RB Offset				
39750	39750	39948	QPSK	1	0	0	0	1	0	23.30	24
40185	40521	40719	QPSK	1	0	0	0	1	0	23.36	24
40620	41292	41490	QPSK	1	0	0	0	1	0	23.22	24
40620	39750	39948	16QAM	1	0	0	0	1	0	22.56	23
41055	40521	40719	16QAM	1	0	0	0	1	0	22.51	23
41490	41292	41490	16QAM	1	0	0	0	1	0	22.49	23
40620	39750	39948	64QAM	1	0	0	0	1	0	22.55	23
41055	40521	40719	64QAM	1	0	0	0	1	0	22.56	23
41490	41292	41490	64QAM	1	0	0	0	1	0	22.53	23
39750	39750	39948	QPSK	50	0	0	0	1	0	22.43	23
40185	40521	40719	QPSK	50	0	0	0	1	0	22.46	23
40620	41292	41490	QPSK	50	0	0	0	1	0	22.47	23

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	CA_2C	2	20	18801	1870.1	QPSK/1#0	2	20	18999	1889.9	23.10	23.64
	CA_2A-12A	2	20	18700	1860	QPSK/1#0	12	5	23035	701.5	23.29	23.64
	CA_2A-71A	2	20	18700	1860	QPSK/1#0	71	20	68786	637	23.24	23.64
	CA_2A-2A	2	20	18700	1860	QPSK/1#0	2	20	19100	1900	23.46	23.64
	CA_2A-4A	2	20	18700	1860	QPSK/1#0	4	20	20300	1745	23.33	23.64
	CA_2A-66A	2	20	18700	1860	QPSK/1#0	66	20	67236	2190	23.34	23.64
	CA_2A-5A	2	20	18700	1860	QPSK/1#0	5	10	20600	829	23.25	23.64
	CA_4A-12A	4	20	20050	1720	QPSK/1#0	12	5	23035	701.5	23.22	23.37
	CA_4A-71A	4	20	20050	1720	QPSK/1#0	71	20	68786	782	23.28	23.37
	CA_4A-5A	4	20	20050	1720	QPSK/1#0	5	10	20600	829	23.20	23.37
	CA_4A-4A	4	20	20050	1720	QPSK/1#0	4	20	20300	1745	23.15	23.37
	CA_5A-66A	5	10	20450	829	QPSK/1#0	66	20	67236	2190	23.14	23.33
	CA_5B	5	10	20501	834.1	QPSK/1#0	5	10	20600	844	23.20	23.33
	CA_5A-5A	5	10	20450	829	QPSK/1#0	5	10	20600	844	23.12	23.33
	CA_12A-66A	12	5	23035	701.5	QPSK/1#0	66	20	67236	2190	23.11	23.62
	CA_25A-25A	25	20	26140	1860	QPSK/1#0	25	20	26590	1905	22.42	22.70
	CA_26A-41A	26	15	26865	831.5	QPSK/1#0	41	20	41490	2680	22.37	22.75
	CA_41C	41	20	41292	2660.2	QPSK/1#0	41	20	41490	2680	25.77	25.86
	CA_41A-41A	41	20	39750	2506	QPSK/1#0	41	20	41490	2680	25.52	25.86
	CA_66A-71A	66	20	132072	1720	QPSK/1#0	71	20	68786	782	22.37	22.81
	CA_66A-66A	66	20	132072	1720	QPSK/1#0	66	20	67236	1770	22.41	22.81
	CA_66B	66	10	132523	1765.1	QPSK/1#0	66	10	132622	1775	22.58	22.81
	CA_66C	66	20	132572	1770	QPSK/1#0	66	20	67234	2189.8	22.36	22.81
	CA_2A-13A	2	20	18700	1860	QPSK/1#0	13	10	23230	782	23.11	25.86
	CA_4-13A	4	20	20050	1720	QPSK/1#0	13	10	23230	782	22.47	22.81
	CA_13A-66A	13	10	23230	782	QPSK/1#0	66	20	132422	1755	23.02	22.81
	CA_25A-26A	25	20	26140	1860	QPSK/1#0	26	15	26850	830	22.39	22.81

2.4GHz WLAN

2.4GHz WLAN ANT 1	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Power Setting	Duty Cycle %
	802.11b 1Mbps	CH 1	2412	11.54	12.00	13	98.71
		CH 7	2442	11.39	12.00	13	
		CH 13	2472	12.10	12.50	13	
	802.11g 6Mbps	CH 1	2412	8.53	9.00	10	98.31
		CH 7	2442	8.44	9.00	10	
		CH 13	2472	0.63	1.00	1	
	802.11n-HT20 MCS0	CH 1	2412	8.36	9.00	10	98.18
		CH 7	2442	8.26	9.00	10	
		CH 13	2472	-1.16	0.50	0	

5.2GHz WLAN

5.2GHz WLAN ANT 1	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Power Setting	Duty Cycle %
	802.11a 6Mbps	CH 36	5180	4.88	5.50	8	98.31
		CH 44	5220	5.60	6.00	8	
		CH 48	5240	6.02	6.50	8	
	802.11n-HT20 MCS0	CH 36	5180	4.71	5.50	8	98.18
		CH 44	5220	5.38	6.00	8	
		CH 48	5240	5.76	6.50	8	
	802.11n-HT40 MCS0	CH 38	5190	5.10	5.50	8	96.37
		CH 46	5230	6.04	7.00	8	
	802.11ac-VHT20 MCS0	CH 36	5180	3.89	4.50	8	98.19
		CH 44	5220	4.75	5.50	8	
		CH 48	5240	5.42	6.00	8	
	802.11ac-VHT40 MCS0	CH 38	5190	4.94	5.50	8	96.39
		CH 46	5230	5.96	6.50	8	
	802.11ac-VHT80 MCS0	CH 42	5210	5.30	6.00	8	92.28

5.8GHz WLAN

5.8GHz WLAN ANT 1	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Power Setting	Duty Cycle %
	802.11a MCS0	CH 149	5745	6.23	6.50	8	98.31
		CH 157	5785	6.61	7.00	8	
		CH 165	5825	6.54	7.00	8	
	802.11n-HT20 MCS0	CH 149	5745	6.01	6.50	8	98.18
		CH 157	5785	6.32	7.00	8	
		CH 165	5825	6.21	7.00	8	
	802.11n-HT40 MCS0	CH 151	5755	7.08	8.00	8	96.37
		CH 159	5795	7.16	8.00	8	
	802.11ac-VHT20 MCS0	CH 149	5745	6.06	6.50	8	98.19
		CH 157	5785	6.32	7.00	8	
		CH 165	5825	6.20	7.00	8	
	802.11ac-VHT40 MCS0	CH 151	5755	7.00	7.50	8	96.39
		CH 159	5795	7.11	7.50	8	
	802.11ac-VHT80 MCS0	CH 155	5775	6.85	7.50	8	92.28

Mode	Channel	Frequency (MHz)	Average power (dBm)		
			1Mbps	2Mbps	3Mbps
BR / EDR	CH 00	2402	9.06	5.98	5.09
	CH 39	2441	10.33	7.58	7.48
	CH 78	2480	10.16	7.08	7.14
Tune-up Limit			11	8	8
Duty Cycle %			77.2	77.6	78

Mode	Channel	Frequency (MHz)	Average power (dBm)	
			GFSK	
LE	CH 00	2402	2.37	
	CH 19	2440	4.51	
	CH 39	2480	4.08	
Tune-up Limit			5	
Duty Cycle %			62.82	

Reduced Power

Band		WCDMA Band II			Tune-up Limit (dBm)	WCDMA Band IV			Tune-up Limit (dBm)	WCDMA Band V			Tune-up Limit (dBm)
TX Channel		9262	9400	9538		1312	1413	1513		4132	4182	4233	
Rx Channel		9662	9800	9938		1537	1638	1738		4357	4407	4458	
Frequency (MHz)		1852.4	1880	1907.6		1712.4	1732.6	1752.6		826.4	836.4	846.6	
3GPP Rel 99	RMC 12.2Kbps	11.61	11.62	11.58	12.70	12.15	12.26	12.23	12.70	18.65	18.75	18.71	19.70
3GPP Rel 6	HSDPA Subtest-1	10.82	10.75	10.77	11.70	11.28	11.39	11.46	12.00	17.85	17.68	17.76	18.50
3GPP Rel 6	HSDPA Subtest-2	10.80	10.76	10.74	11.70	11.52	11.38	11.44	12.00	17.98	17.80	17.82	18.50
3GPP Rel 6	HSDPA Subtest-3	10.31	10.27	10.24	11.70	11.13	10.89	11.05	12.00	17.31	17.29	17.34	18.50
3GPP Rel 6	HSDPA Subtest-4	10.31	10.19	10.24	11.70	11.01	10.89	10.94	12.00	17.39	17.21	17.35	18.50
3GPP Rel 8	DC-HSDPA Subtest-1	10.57	10.54	10.50	11.70	11.13	11.08	11.26	12.00	17.80	17.46	17.39	18.50
3GPP Rel 8	DC-HSDPA Subtest-2	10.55	10.53	10.59	11.70	11.09	11.29	11.33	12.00	17.73	17.40	17.51	18.50
3GPP Rel 8	DC-HSDPA Subtest-3	10.06	10.03	10.00	11.70	10.71	10.72	10.81	11.50	17.29	16.92	17.07	18.50
3GPP Rel 8	DC-HSDPA Subtest-4	10.07	10.04	10.00	11.70	10.61	10.61	10.79	11.50	17.22	16.91	17.03	18.50
3GPP Rel 6	HSUPA Subtest-1	10.40	10.42	10.57	11.70	11.13	11.08	11.18	12.00	17.67	17.64	17.79	18.50
3GPP Rel 6	HSUPA Subtest-2	9.92	9.93	10.08	11.70	10.56	10.61	10.60	11.50	17.05	17.04	17.31	18.50
3GPP Rel 6	HSUPA Subtest-3	10.41	10.44	10.46	11.70	11.21	11.19	11.06	12.00	17.72	17.68	17.83	18.50
3GPP Rel 6	HSUPA Subtest-4	10.41	10.44	10.48	11.70	10.95	10.98	11.07	12.00	17.51	17.62	17.78	18.50
3GPP Rel 6	HSUPA Subtest-5	10.50	10.53	10.47	11.70	11.20	11.11	11.14	12.00	17.62	17.77	17.83	18.50
3GPP Rel 7	HSPA+ (16QAM) Subtest-1	9.97	9.89	10.01	11.70	10.88	10.61	10.69	11.50	17.34	17.24	17.36	18.50
Attenuator			Cable Loss	0.8			Cable Loss	0.8			Cable Loss	0.6	
Mode			Max.	11.62			Max.	12.26			Max.	18.75	

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	13.61	13.64	13.56	
20	QPSK	1	49	13.53	13.55	13.47	14.5
20	QPSK	1	99	13.20	13.23	13.25	
20	QPSK	50	0	12.63	12.78	12.61	
20	QPSK	50	24	12.72	12.77	12.75	13.5
20	QPSK	50	50	12.56	12.60	12.58	
20	QPSK	100	0	12.47	12.49	12.42	
20	16QAM	1	0	12.68	12.72	12.65	13.5
20	16QAM	1	49	12.60	12.63	12.57	
20	16QAM	1	99	12.47	12.50	12.41	
20	16QAM	50	0	12.46	12.52	12.49	13.5
20	16QAM	50	24	12.45	12.48	12.44	
20	16QAM	50	50	12.44	12.52	12.43	
20	16QAM	100	0	12.42	12.44	12.40	13.5
20	64QAM	1	0	12.55	12.60	12.51	
20	64QAM	1	49	12.48	12.52	12.41	
20	64QAM	1	99	12.49	12.51	12.44	13.5
20	64QAM	50	0	12.39	12.44	12.31	
20	64QAM	50	24	12.34	12.41	12.30	
20	64QAM	50	50	12.14	12.24	12.11	13.5
20	64QAM	100	0	12.12	12.20	12.10	
Channel				18675	18900	19125	Tune-up limit (dBm)
Frequency (MHz)				1857.5	1880	1902.5	
15	QPSK	1	0	13.50	13.56	13.41	
15	QPSK	1	37	13.44	13.40	13.45	14.5
15	QPSK	1	74	13.14	13.16	13.21	
15	QPSK	36	0	12.53	12.57	12.46	
15	QPSK	36	20	12.58	12.73	12.68	13.5
15	QPSK	36	39	12.55	12.47	12.50	
15	QPSK	75	0	12.48	12.51	12.51	
15	16QAM	1	0	12.73	12.82	12.75	13.5
15	16QAM	1	37	12.63	12.72	12.62	
15	16QAM	1	74	12.55	12.56	12.55	
15	16QAM	36	0	12.59	12.63	12.55	13.5
15	16QAM	36	20	12.49	12.52	12.54	
15	16QAM	36	39	12.47	12.58	12.44	
15	16QAM	75	0	12.56	12.58	12.42	13.5
15	64QAM	1	0	12.66	12.60	12.63	
15	64QAM	1	37	12.61	12.61	12.50	
15	64QAM	1	74	12.40	12.40	12.37	13.5
15	64QAM	36	0	12.28	12.29	12.18	
15	64QAM	36	20	12.23	12.31	12.20	
15	64QAM	36	39	12.11	12.23	12.04	13.5
15	64QAM	75	0	11.97	12.06	12.03	
Channel				18650	18900	19150	Tune-up limit (dBm)
Frequency (MHz)				1855	1880	1905	
10	QPSK	1	0	13.56	13.52	13.54	
10	QPSK	1	25	13.43	13.46	13.46	14.5
10	QPSK	1	49	13.11	13.16	13.14	
10	QPSK	25	0	12.61	12.58	12.54	
10	QPSK	25	12	12.65	12.68	12.74	13.5
10	QPSK	25	25	12.49	12.50	12.46	
10	QPSK	50	0	12.50	12.52	12.42	
10	16QAM	1	0	12.74	12.77	12.68	13.5
10	16QAM	1	25	12.66	12.67	12.61	
10	16QAM	1	49	12.48	12.53	12.42	
10	16QAM	25	0	12.60	12.65	12.49	13.5
10	16QAM	25	12	12.53	12.60	12.45	
10	16QAM	25	25	12.56	12.55	12.47	
10	16QAM	50	0	12.56	12.53	12.41	13.5
10	64QAM	1	0	12.57	12.70	12.65	
10	64QAM	1	25	12.50	12.55	12.47	
10	64QAM	1	49	12.43	12.37	12.38	13.5
10	64QAM	25	0	12.36	12.32	12.26	
10	64QAM	25	12	12.22	12.26	12.27	
10	64QAM	25	25	12.05	12.20	12.03	13.5
10	64QAM	50	0	11.98	12.19	12.04	
Channel				18625	18900	19175	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1880	1907.5	
5	QPSK	1	0	13.50	13.54	13.45	
5	QPSK	1	12	13.48	13.45	13.42	14.5
5	QPSK	1	24	13.16	13.17	13.18	
5	QPSK	12	0	12.54	12.53	12.48	
5	QPSK	12	7	12.63	12.63	12.61	13.5
5	QPSK	12	13	12.45	12.59	12.55	
5	QPSK	25	0	12.51	12.49	12.44	
5	16QAM	1	0	12.74	12.74	12.73	13.5
5	16QAM	1	12	12.73	12.75	12.61	
5	16QAM	1	24	12.50	12.57	12.48	
5	16QAM	12	0	12.48	12.57	12.61	13.5
5	16QAM	12	7	12.48	12.58	12.54	
5	16QAM	12	13	12.55	12.54	12.56	
5	16QAM	25	0	12.52	12.55	12.54	13.5
5	64QAM	1	0	12.60	12.61	12.55	
5	64QAM	1	12	12.57	12.62	12.44	
5	64QAM	1	24	12.48	12.39	12.38	13.5
5	64QAM	12	0	12.36	12.40	12.22	
5	64QAM	12	7	12.27	12.33	12.15	
5	64QAM	12	13	12.05	12.16	11.97	13.5
5	64QAM	25	0	12.11	12.09	12.06	
Channel				18615	18900	19185	Tune-up limit (dBm)
Frequency (MHz)				1851.5	1880	1908.5	
3	QPSK	1	0	13.51	13.55	13.46	
3	QPSK	1	8	13.47	13.50	13.36	14.5
3	QPSK	1	14	13.16	13.14	13.16	
3	QPSK	8	0	12.59	12.52	12.49	
3	QPSK	8	4	12.66	12.71	12.67	13.5
3	QPSK	8	7	12.48	12.56	12.46	

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	13.66	13.74	13.58	14.5
20	QPSK	1	49	13.58	13.64	13.47	
20	QPSK	1	99	13.39	13.49	13.41	
20	QPSK	50	0	12.58	12.60	12.51	13.5
20	QPSK	50	24	12.47	12.51	12.44	
20	QPSK	50	50	12.35	12.44	12.36	
20	QPSK	100	0	12.40	12.45	12.39	13.5
20	16QAM	1	0	12.77	12.84	12.71	
20	16QAM	1	49	12.65	12.59	12.61	
20	16QAM	1	99	12.60	12.68	12.57	13.5
20	16QAM	50	0	12.58	12.67	12.55	
20	16QAM	50	24	12.50	12.60	12.49	
20	16QAM	50	50	12.42	12.49	12.37	13.5
20	16QAM	100	0	12.43	12.53	12.45	
20	64QAM	1	0	12.69	12.71	12.70	
20	64QAM	1	49	12.51	12.62	12.59	13.5
20	64QAM	1	99	12.55	12.54	12.56	
20	64QAM	50	0	12.60	12.67	12.59	
20	64QAM	50	24	12.51	12.59	12.55	13.5
20	64QAM	50	50	12.46	12.42	12.38	
20	64QAM	100	0	12.39	12.45	12.40	
Channel				20025	20175	20325	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1732.5	1747.5	
15	QPSK	1	0	13.52	13.60	13.45	14.5
15	QPSK	1	37	13.43	13.49	13.34	
15	QPSK	1	74	13.24	13.34	13.28	
15	QPSK	36	0	12.43	12.45	12.38	13.5
15	QPSK	36	20	12.32	12.36	12.31	
15	QPSK	36	39	12.20	12.29	12.23	
15	QPSK	75	0	12.25	12.30	12.26	13.5
15	16QAM	1	0	12.62	12.69	12.58	
15	16QAM	1	37	12.50	12.44	12.48	
15	16QAM	1	74	12.45	12.53	12.44	13.5
15	16QAM	36	0	12.48	12.57	12.47	
15	16QAM	36	20	12.40	12.50	12.41	
15	16QAM	36	39	12.32	12.39	12.29	13.5
15	16QAM	75	0	12.33	12.43	12.37	
15	64QAM	1	0	12.54	12.56	12.57	
15	64QAM	1	37	12.36	12.47	12.46	13.5
15	64QAM	1	74	12.40	12.39	12.43	
15	64QAM	36	0	12.45	12.52	12.46	
15	64QAM	36	20	12.36	12.44	12.42	13.5
15	64QAM	36	39	12.31	12.27	12.25	
15	64QAM	75	0	12.24	12.30	12.27	
Channel				20000	20175	20350	Tune-up limit (dBm)
Frequency (MHz)				1715	1732.5	1750	
10	QPSK	1	0	13.58	13.65	13.51	14.5
10	QPSK	1	25	13.49	13.54	13.40	
10	QPSK	1	49	13.30	13.40	13.34	
10	QPSK	25	0	12.52	12.54	12.47	13.5
10	QPSK	25	12	12.41	12.45	12.40	
10	QPSK	25	25	12.29	12.38	12.32	
10	QPSK	50	0	12.34	12.39	12.35	13.5
10	16QAM	1	0	12.68	12.75	12.64	
10	16QAM	1	25	12.56	12.50	12.54	
10	16QAM	1	49	12.51	12.59	12.50	13.5
10	16QAM	25	0	12.49	12.58	12.48	
10	16QAM	25	12	12.41	12.51	12.42	
10	16QAM	25	25	12.33	12.40	12.30	13.5
10	16QAM	50	0	12.34	12.44	12.38	
10	64QAM	1	0	12.60	12.62	12.63	
10	64QAM	1	25	12.42	12.53	12.52	13.5
10	64QAM	1	49	12.46	12.45	12.49	
10	64QAM	25	0	12.54	12.61	12.55	
10	64QAM	25	12	12.45	12.53	12.51	13.5
10	64QAM	25	25	12.40	12.36	12.34	
10	64QAM	50	0	12.33	12.39	12.36	
Channel				19975	20175	20375	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1732.5	1752.5	
5	QPSK	1	0	13.60	13.69	13.53	14.5
5	QPSK	1	12	13.53	13.57	13.50	
5	QPSK	1	24	13.33	13.44	13.36	
5	QPSK	12	0	12.55	12.58	12.49	13.5
5	QPSK	12	7	12.44	12.49	12.42	
5	QPSK	12	13	12.32	12.42	12.34	
5	QPSK	25	0	12.37	12.43	12.37	13.5
5	16QAM	1	0	12.68	12.76	12.63	
5	16QAM	1	12	12.56	12.51	12.53	
5	16QAM	1	24	12.51	12.60	12.49	13.5
5	16QAM	12	0	12.52	12.62	12.50	
5	16QAM	12	7	12.44	12.55	12.44	
5	16QAM	12	13	12.36	12.44	12.32	13.5
5	16QAM	25	0	12.37	12.48	12.40	
5	64QAM	1	0	12.60	12.63	12.62	
5	64QAM	1	12	12.42	12.54	12.51	13.5
5	64QAM	1	24	12.46	12.46	12.48	
5	64QAM	12	0	12.52	12.62	12.57	
5	64QAM	12	7	12.42	12.54	12.53	13.5
5	64QAM	12	13	12.41	12.39	12.36	
5	64QAM	25	0	12.33	12.40	12.38	
Channel				19965	20175	20385	Tune-up limit (dBm)
Frequency (MHz)				1711.5	1732.5	1753.5	
3	QPSK	1	0	13.47	13.55	13.44	14.5
3	QPSK	1	8	13.38	13.46	13.33	
3	QPSK	1	14	13.20	13.30	13.27	
3	QPSK	8	0	12.49	12.51	12.47	13.5
3	QPSK	8	4	12.38	12.42	12.40	
3	QPSK	8	7	12.26	12.35	12.32	

3	QPSK	15	0	12.50	12.60	12.49	13.5
3	16QAM	1	0	12.75	12.80	12.66	
3	16QAM	1	8	12.67	12.67	12.67	
3	16QAM	1	14	12.57	12.64	12.41	13.5
3	16QAM	8	0	12.48	12.60	12.59	
3	16QAM	8	4	12.56	12.48	12.45	
3	16QAM	8	7	12.49	12.55	12.46	13.5
3	16QAM	15	0	12.52	12.53	12.44	
3	64QAM	1	0	12.60	12.65	12.61	
3	64QAM	1	8	12.52	12.54	12.42	13.5
3	64QAM	1	14	12.47	12.40	12.37	
3	64QAM	8	0	12.28	12.36	12.20	
3	64QAM	8	4	12.23	12.27	12.21	13.5
3	64QAM	8	7	12.06	12.09	12.03	
3	64QAM	15	0	11.97	12.10	11.97	
Channel				18607	18900	19193	Tune-up limit (dBm)
Frequency (MHz)				1850.7	1880	1909.3	
1.4	QPSK	1	0	13.60	13.58	13.55	14.5
1.4	QPSK	1	3	13.38	13.47	13.44	
1.4	QPSK	1	5	13.16	13.22	13.24	
1.4	QPSK	3	0	13.48	13.50	13.52	
1.4	QPSK	3	1	13.45	13.44	13.39	
1.4	QPSK	3	3	13.10	13.18	13.18	
1.4	QPSK	6	0	12.50	12.59	12.55	13.5
1.4	16QAM	1	0	12.69	12.76	12.71	
1.4	16QAM	1	3	12.65	12.75	12.70	
1.4	16QAM	1	5	12.51	12.53	12.55	13.5
1.4	16QAM	3	0	12.70	12.74	12.68	
1.4	16QAM	3	1	12.63	12.73	12.59	
1.4	16QAM	3	3	12.49	12.61	12.47	
1.4	16QAM	6	0	12.55	12.45	12.49	
1.4	64QAM	1	0	12.64	12.63	12.56	
1.4	64QAM	1	3	12.53	12.60	12.50	13.5
1.4	64QAM	1	5	12.40	12.38	12.29	
1.4	64QAM	3	0	12.56	12.70	12.61	
1.4	64QAM	3	1	12.60	12.64	12.50	
1.4	64QAM	3	3	12.47	12.36	12.39	
1.4	64QAM	6	0	12.02	12.09	12.02	

3	QPSK	15	0	12.31	12.36	12.35	13.5
3	16QAM	1	0	12.53	12.60	12.52	
3	16QAM	1	8	12.41	12.35	12.42	
3	16QAM	1	14	12.36	12.44	12.38	13.5
3	16QAM	8	0	12.43	12.52	12.45	
3	16QAM	8	4	12.35	12.45	12.39	
3	16QAM	8	7	12.27	12.34	12.27	13.5
3	16QAM	15	0	12.28	12.38	12.35	
3	64QAM	1	0	12.53	12.52	12.56	
3	64QAM	1	8	12.32	12.44	12.45	13.5
3	64QAM	1	14	12.36	12.35	12.42	
3	64QAM	8	0	12.47	12.53	12.50	
3	64QAM	8	4	12.37	12.45	12.46	13.5
3	64QAM	8	7	12.32	12.28	12.29	
3	64QAM	15	0	12.25	12.31	12.31	
Channel				19957	20175	20393	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1732.5	1754.3	
1.4	QPSK	1	0	13.58	13.66	13.53	14.5
1.4	QPSK	1	3	13.52	13.55	13.44	
1.4	QPSK	1	5	13.31	13.41	13.36	
1.4	QPSK	3	0	13.50	13.52	13.46	
1.4	QPSK	3	1	13.39	13.43	13.39	
1.4	QPSK	3	3	13.27	13.36	13.31	
1.4	QPSK	6	0	12.46	12.51	12.48	13.5
1.4	16QAM	1	0	12.66	12.73	12.63	
1.4	16QAM	1	3	12.54	12.48	12.53	
1.4	16QAM	1	5	12.49	12.57	12.49	13.5
1.4	16QAM	3	0	12.47	12.56	12.47	
1.4	16QAM	3	1	12.39	12.49	12.41	
1.4	16QAM	3	3	12.31	12.38	12.29	
1.4	16QAM	6	0	12.41	12.52	12.46	
1.4	64QAM	1	0	12.58	12.60	12.62	
1.4	64QAM	1	3	12.40	12.51	12.51	13.5
1.4	64QAM	1	5	12.44	12.43	12.48	
1.4	64QAM	3	0	12.49	12.56	12.51	
1.4	64QAM	3	1	12.40	12.48	12.47	
1.4	64QAM	3	3	12.35	12.31	12.30	
1.4	64QAM	6	0	12.45	12.53	12.49	

Band 5 (Celluar Band) Part 22H(only on channel required)							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				20450	20525	20600	
Frequency (MHz)				829	836.5	844	
10	QPSK	1	0	20.28	20.33	20.29	21
10	QPSK	1	25	20.20	20.24	20.22	
10	QPSK	1	49	20.08	20.12	20.15	
10	QPSK	25	0	19.10	19.49	19.18	
10	QPSK	25	12	19.05	19.11	19.13	20
10	QPSK	25	25	19.33	19.38	19.39	
10	QPSK	50	0	19.24	19.30	19.29	
10	16QAM	1	0	19.39	19.48	19.46	
10	16QAM	1	25	19.33	19.39	19.31	20
10	16QAM	1	49	19.28	19.35	19.36	
10	16QAM	25	0	19.49	19.57	19.53	
10	16QAM	25	12	19.43	19.52	19.45	
10	16QAM	25	25	19.34	19.41	19.40	20
10	16QAM	50	0	19.42	19.47	19.49	
10	64QAM	1	0	19.35	19.46	19.38	
10	64QAM	1	25	19.27	19.36	19.25	
10	64QAM	1	49	19.26	19.28	19.33	20
10	64QAM	25	0	19.39	19.46	19.42	
10	64QAM	25	12	19.29	19.37	19.32	
10	64QAM	25	25	19.37	19.33	19.38	
10	64QAM	50	0	19.36	19.40	19.37	
Channel				20425	20525	20625	Tune-up limit (dBm)
Frequency (MHz)				826.5	836.5	846.5	
5	QPSK	1	0	20.22	20.28	20.19	21
5	QPSK	1	12	20.11	20.18	20.09	
5	QPSK	1	24	19.98	20.10	20.01	
5	QPSK	12	0	18.98	19.07	19.16	
5	QPSK	12	7	18.91	19.01	19.05	20
5	QPSK	12	13	18.97	18.98	18.99	
5	QPSK	25	0	18.85	18.82	18.80	
5	16QAM	1	0	19.27	19.39	19.38	
5	16QAM	1	12	19.23	19.33	19.22	20
5	16QAM	1	24	19.26	19.26	19.25	
5	16QAM	12	0	19.47	19.53	19.46	
5	16QAM	12	7	19.40	19.45	19.43	
5	16QAM	12	13	19.26	19.36	19.32	20
5	16QAM	25	0	19.38	19.38	19.46	
5	64QAM	1	0	19.28	19.43	19.37	
5	64QAM	1	12	19.24	19.22	19.19	
5	64QAM	1	24	19.17	19.16	19.20	20
5	64QAM	12	0	19.28	19.39	19.33	
5	64QAM	12	7	19.27	19.36	19.17	
5	64QAM	12	13	19.34	19.25	19.27	
5	64QAM	25	0	19.28	19.38	19.35	
Channel				20415	20525	20635	Tune-up limit (dBm)
Frequency (MHz)				825.5	836.5	847.5	
3	QPSK	1	0	20.18	20.32	20.24	21
3	QPSK	1	8	20.15	20.14	20.12	
3	QPSK	1	14	20.07	19.98	20.10	
3	QPSK	8	0	19.06	19.01	19.10	
3	QPSK	8	4	18.94	18.97	19.06	20
3	QPSK	8	7	18.90	18.97	18.96	
3	QPSK	15	0	18.84	18.87	18.94	
3	16QAM	1	0	19.34	19.40	19.35	
3	16QAM	1	8	19.19	19.36	19.27	20
3	16QAM	1	14	19.15	19.23	19.34	
3	16QAM	8	0	19.37	19.45	19.49	
3	16QAM	8	4	19.37	19.39	19.42	
3	16QAM	8	7	19.26	19.39	19.27	20
3	16QAM	15	0	19.40	19.38	19.37	
3	64QAM	1	0	19.26	19.40	19.25	
3	64QAM	1	8	19.23	19.22	19.14	
3	64QAM	1	14	19.17	19.19	19.25	20
3	64QAM	8	0	19.32	19.41	19.38	
3	64QAM	8	4	19.19	19.25	19.30	
3	64QAM	8	7	19.23	19.32	19.35	
3	64QAM	15	0	19.33	19.38	19.30	
Channel				20407	20525	20643	Tune-up limit (dBm)
Frequency (MHz)				824.7	836.5	848.3	
1.4	QPSK	1	0	20.22	20.30	20.18	21
1.4	QPSK	1	3	20.13	20.21	20.19	
1.4	QPSK	1	5	20.04	20.00	20.04	
1.4	QPSK	3	0	20.04	20.13	20.16	
1.4	QPSK	3	1	20.02	19.97	20.06	20
1.4	QPSK	3	3	19.96	19.98	19.94	
1.4	QPSK	6	0	19.09	19.18	19.15	
1.4	16QAM	1	0	19.25	19.40	19.41	
1.4	16QAM	1	3	19.18	19.29	19.20	20
1.4	16QAM	1	5	19.51	19.60	19.69	
1.4	16QAM	3	0	19.41	19.44	19.43	
1.4	16QAM	3	1	19.42	19.47	19.40	
1.4	16QAM	3	3	19.33	19.35	19.25	20
1.4	16QAM	6	0	18.27	18.44	18.48	
1.4	64QAM	1	0	19.32	19.33	19.29	
1.4	64QAM	1	3	19.15	19.28	19.20	
1.4	64QAM	1	5	19.22	19.23	19.20	20
1.4	64QAM	3	0	19.27	19.37	19.28	
1.4	64QAM	3	1	19.22	19.31	19.24	
1.4	64QAM	3	3	19.29	19.29	19.31	
1.4	64QAM	6	0	19.30	19.36	19.28	20

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	18.59	18.62	18.55	19.5
10	QPSK	1	25	18.51	18.55	18.48	
10	QPSK	1	49	18.47	18.49	18.46	
10	QPSK	25	0	17.68	17.71	17.64	
10	QPSK	25	12	17.37	17.47	17.42	18.5
10	QPSK	25	25	17.51	17.50	17.66	
10	QPSK	50	0	17.57	17.66	17.52	
10	16QAM	1	0	17.80	17.88	17.77	
10	16QAM	1	25	17.78	17.85	17.72	18.5
10	16QAM	1	49	17.79	17.83	17.69	
10	16QAM	25	0	17.52	17.58	17.45	
10	16QAM	25	12	17.50	17.55	17.49	
10	16QAM	25	25	17.47	17.51	17.45	18.5
10	16QAM	50	0	17.51	17.58	17.49	
10	64QAM	1	0	17.68	17.78	17.64	
10	64QAM	1	25	17.66	17.70	17.62	
10	64QAM	1	49	17.64	17.67	17.58	18.5
10	64QAM	25	0	17.60	17.68	17.42	
10	64QAM	25	12	17.58	17.59	17.44	
10	64QAM	25	25	17.49	17.52	17.58	
10	64QAM	50	0	17.54	17.58	17.64	
Channel				23035	23095	23155	Tune-up limit (dbm)
Frequency (MHz)				701.5	707.5	713.5	
5	QPSK	1	0	18.51	18.54	18.47	19.5
5	QPSK	1	12	18.50	18.51	18.44	
5	QPSK	1	24	18.38	18.39	18.39	
5	QPSK	12	0	17.43	17.35	17.58	
5	QPSK	12	7	17.28	17.37	17.39	18.5
5	QPSK	12	13	17.42	17.46	17.62	
5	QPSK	25	0	17.44	17.47	17.41	
5	16QAM	1	0	17.69	17.78	17.72	
5	16QAM	1	12	17.67	17.78	17.68	18.5
5	16QAM	1	24	17.73	17.68	17.66	
5	16QAM	12	0	17.41	17.51	17.40	
5	16QAM	12	7	17.39	17.45	17.48	
5	16QAM	12	13	17.35	17.37	17.44	18.5
5	16QAM	25	0	17.42	17.49	17.44	
5	64QAM	1	0	17.65	17.74	17.56	
5	64QAM	1	12	17.65	17.69	17.52	
5	64QAM	1	24	17.52	17.58	17.44	18.5
5	64QAM	12	0	17.56	17.64	17.28	
5	64QAM	12	7	17.51	17.55	17.29	
5	64QAM	12	13	17.47	17.37	17.53	
5	64QAM	25	0	17.53	17.43	17.49	
Channel				23025	23095	23165	Tune-up limit (dbm)
Frequency (MHz)				700.5	707.5	714.5	
3	QPSK	1	0	18.55	18.49	18.40	19.5
3	QPSK	1	8	18.43	18.42	18.36	
3	QPSK	1	14	18.36	18.48	18.39	
3	QPSK	8	0	17.44	17.36	17.59	
3	QPSK	8	4	17.32	17.46	17.33	18.5
3	QPSK	8	7	17.36	17.44	17.59	
3	QPSK	15	0	17.42	17.38	17.41	
3	16QAM	1	0	17.76	17.73	17.73	
3	16QAM	1	8	17.68	17.82	17.70	18.5
3	16QAM	1	14	17.66	17.79	17.65	
3	16QAM	8	0	17.42	17.53	17.39	
3	16QAM	8	4	17.37	17.49	17.44	
3	16QAM	8	7	17.45	17.48	17.31	18.5
3	16QAM	15	0	17.37	17.56	17.42	
3	64QAM	1	0	17.65	17.72	17.63	
3	64QAM	1	8	17.54	17.69	17.49	
3	64QAM	1	14	17.51	17.64	17.47	18.5
3	64QAM	8	0	17.48	17.65	17.38	
3	64QAM	8	4	17.50	17.53	17.31	
3	64QAM	8	7	17.41	17.37	17.47	
3	64QAM	15	0	17.45	17.55	17.57	
Channel				23017	23095	23173	Tune-up limit (dbm)
Frequency (MHz)				699.7	707.5	715.3	
1.4	QPSK	1	0	16.55	16.58	16.53	19.5
1.4	QPSK	1	3	16.42	16.46	16.47	
1.4	QPSK	1	5	16.44	16.46	16.36	
1.4	QPSK	3	0	16.36	16.43	16.60	
1.4	QPSK	3	1	16.28	16.43	16.39	18.5
1.4	QPSK	3	3	16.50	16.44	16.51	
1.4	QPSK	6	0	17.43	17.45	17.37	
1.4	16QAM	1	0	17.67	17.75	17.73	
1.4	16QAM	1	3	17.63	17.75	17.57	18.5
1.4	16QAM	1	5	17.65	17.82	17.65	
1.4	16QAM	3	0	17.42	17.47	17.42	
1.4	16QAM	3	1	17.39	17.50	17.43	
1.4	16QAM	3	3	17.32	17.43	17.41	18.5
1.4	16QAM	6	0	16.50	16.49	16.41	
1.4	64QAM	1	0	17.65	17.67	17.53	
1.4	64QAM	1	3	17.60	17.66	17.48	
1.4	64QAM	1	5	17.49	17.59	17.51	18.5
1.4	64QAM	3	0	17.57	17.60	17.39	
1.4	64QAM	3	1	17.56	17.47	17.39	
1.4	64QAM	3	3	17.48	17.44	17.57	
1.4	64QAM	6	0	17.47	17.56	17.60	18.5

Band 13(700MHz Band) Part 27F							
BW (MHz)	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				23230			
Frequency (MHz)				782			
10	QPSK	1	0		19.28		20.5
10	QPSK	1	25		19.14		
10	QPSK	1	49		19.14		
10	QPSK	25	0		18.36		19.5
10	QPSK	25	12		18.21		
10	QPSK	25	25		18.07		
10	QPSK	50	0		18.23		19.5
10	16QAM	1	0		18.28		
10	16QAM	1	25		18.35		
10	16QAM	1	49		18.33		18.5
10	16QAM	25	0		17.25		
10	16QAM	25	12		17.29		
10	16QAM	25	25		17.21		18.5
10	16QAM	50	0		17.24		
10	64QAM	1	0		17.32		
10	64QAM	1	25		17.24		18.5
10	64QAM	1	49		17.04		
10	64QAM	25	0		17.21		
10	64QAM	25	12		17.24		18.5
10	64QAM	25	25		17.18		
10	64QAM	50	0		17.16		
Channel				23205	23230	23255	Tune-up limit (dBm)
Frequency (MHz)				779.5	782	784.5	
5	QPSK	1	0	19.19	19.25	19.24	20.5
5	QPSK	1	12	19.12	19.08	19.02	
5	QPSK	1	24	19.09	19.06	19.08	
5	QPSK	12	0	18.34	18.33	18.24	19.5
5	QPSK	12	7	18.16	18.16	18.14	
5	QPSK	12	13	17.99	17.98	18.00	
5	QPSK	25	0	18.15	18.17	18.14	19.5
5	16QAM	1	0	18.19	18.16	18.25	
5	16QAM	1	12	18.33	18.27	18.32	
5	16QAM	1	24	18.26	18.22	18.24	18.5
5	16QAM	12	0	17.19	17.22	17.20	
5	16QAM	12	7	17.28	17.17	17.20	
5	16QAM	12	13	17.19	17.09	17.16	18.5
5	16QAM	25	0	17.15	17.16	17.19	
5	64QAM	1	0	17.20	17.28	17.26	
5	64QAM	1	12	17.15	17.12	17.15	18.5
5	64QAM	1	24	17.40	17.50	17.55	
5	64QAM	12	0	17.14	17.20	17.18	
5	64QAM	12	7	17.18	17.22	17.20	18.5
5	64QAM	12	13	17.09	17.12	17.11	
5	64QAM	25	0	17.09	17.08	17.09	

Band 25 (1900MHz Band) Part 24E							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				26140	26365	26590	
Frequency (MHz)				1860	1882.5	1905	
20	QPSK	1	0	12.66	12.70	12.65	13.5
20	QPSK	1	49	12.53	12.65	12.51	
20	QPSK	1	99	12.39	12.49	12.33	
20	QPSK	50	0	11.83	11.88	11.80	12.5
20	QPSK	50	24	11.82	11.84	11.75	
20	QPSK	50	50	11.66	11.72	11.69	
20	QPSK	100	0	11.73	11.77	11.65	12.5
20	16QAM	1	0	11.52	11.78	11.35	
20	16QAM	1	49	11.73	11.75	11.54	
20	16QAM	1	99	11.50	11.53	11.43	12.5
20	16QAM	50	0	11.35	11.39	11.34	
20	16QAM	50	24	11.53	11.58	11.50	
20	16QAM	50	50	11.44	11.51	11.47	12.5
20	16QAM	100	0	11.42	11.45	11.38	
20	64QAM	1	0	11.56	11.62	11.52	
20	64QAM	1	49	11.54	11.56	11.45	12.5
20	64QAM	1	99	11.16	11.20	11.12	
20	64QAM	50	0	11.56	11.61	11.46	
20	64QAM	50	24	11.41	11.47	11.39	12.5
20	64QAM	50	50	11.43	11.54	11.36	
20	64QAM	100	0	11.42	11.53	11.42	
Channel				26115	26365	26615	Tune-up limit (dBm)
Frequency (MHz)				1857.5	1882.5	1907.5	
15	QPSK	1	0	12.51	12.68	12.64	13.5
15	QPSK	1	37	12.46	12.53	12.50	
15	QPSK	1	74	12.32	12.43	12.29	
15	QPSK	36	0	11.47	11.56	11.55	12.5
15	QPSK	36	20	11.47	11.47	11.44	
15	QPSK	36	39	11.40	11.36	11.41	
15	QPSK	75	0	11.42	11.44	11.27	12.5
15	16QAM	1	0	11.34	11.71	11.29	
15	16QAM	1	37	11.62	11.60	11.38	
15	16QAM	1	74	11.46	11.47	11.32	12.5
15	16QAM	36	0	11.18	11.32	11.28	
15	16QAM	36	20	11.67	11.79	11.72	
15	16QAM	36	39	11.41	11.46	11.41	12.5
15	16QAM	75	0	11.31	11.35	11.26	
15	64QAM	1	0	11.48	11.60	11.44	
15	64QAM	1	37	11.45	11.49	11.39	12.5
15	64QAM	1	74	11.23	11.20	11.31	
15	64QAM	36	0	11.51	11.59	11.36	
15	64QAM	36	20	11.35	11.33	11.28	12.5
15	64QAM	36	39	11.41	11.44	11.32	
15	64QAM	75	0	11.34	11.40	11.27	
Channel				26090	26365	26640	Tune-up limit (dBm)
Frequency (MHz)				1855	1882.5	1910	
10	QPSK	1	0	12.54	12.59	12.59	13.5
10	QPSK	1	25	12.41	12.59	12.37	
10	QPSK	1	49	12.30	12.43	12.25	
10	QPSK	25	0	11.53	11.63	11.42	12.5
10	QPSK	25	12	11.54	11.56	11.40	
10	QPSK	25	25	11.31	11.40	11.40	
10	QPSK	50	0	11.46	11.44	11.29	12.5
10	16QAM	1	0	11.39	11.62	11.29	
10	16QAM	1	25	11.63	11.67	11.41	
10	16QAM	1	49	11.42	11.39	11.27	12.5
10	16QAM	25	0	11.49	11.47	11.47	
10	16QAM	25	12	11.43	11.52	11.38	
10	16QAM	25	25	11.40	11.45	11.32	12.5
10	16QAM	50	0	11.30	11.33	11.26	
10	64QAM	1	0	11.52	11.51	11.42	
10	64QAM	1	25	11.40	11.55	11.41	12.5
10	64QAM	1	49	11.05	11.07	11.11	
10	64QAM	25	0	11.51	11.46	11.31	
10	64QAM	25	12	11.39	11.43	11.27	12.5
10	64QAM	25	25	11.35	11.46	11.28	
10	64QAM	50	0	11.38	11.42	11.31	
Channel				26065	26365	26665	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1882.5	1912.5	
5	QPSK	1	0	12.52	12.57	12.64	13.5
5	QPSK	1	12	12.48	12.57	12.46	
5	QPSK	1	24	12.28	12.48	12.26	
5	QPSK	12	0	11.78	11.78	11.65	12.5
5	QPSK	12	7	11.52	11.48	11.37	
5	QPSK	12	13	11.36	11.38	11.43	
5	QPSK	25	0	11.41	11.41	11.26	12.5
5	16QAM	1	0	11.69	11.86	11.77	
5	16QAM	1	12	11.85	11.92	11.66	
5	16QAM	1	24	11.62	11.64	11.55	12.5
5	16QAM	12	0	11.49	11.59	11.54	
5	16QAM	12	7	11.50	11.53	11.35	
5	16QAM	12	13	11.35	11.38	11.34	12.5
5	16QAM	25	0	11.28	11.34	11.26	
5	64QAM	1	0	11.44	11.54	11.41	
5	64QAM	1	12	11.39	11.45	11.33	12.5
5	64QAM	1	24	11.07	11.07	11.11	
5	64QAM	12	0	11.47	11.48	11.40	
5	64QAM	12	7	11.32	11.41	11.27	12.5
5	64QAM	12	13	11.37	11.39	11.27	
5	64QAM	25	0	11.35	11.41	11.33	
Channel				26055	26365	26675	Tune-up limit (dBm)
Frequency (MHz)				1851.5	1882.5	1913.5	
3	QPSK	1	0	12.54	12.55	12.56	13.5
3	QPSK	1	8	12.38	12.50	12.44	
3	QPSK	1	14	12.27	12.40	12.23	
3	QPSK	8	0	11.54	11.59	11.46	12.5
3	QPSK	8	4	11.45	11.51	11.37	
3	QPSK	8	7	11.35	11.44	11.40	

3	QPSK	15	0	11.13	11.22	11.09	12.5
3	16QAM	1	0	11.46	11.69	11.27	
3	16QAM	1	8	11.64	11.63	11.38	
3	16QAM	1	14	11.41	11.49	11.39	12.5
3	16QAM	8	0	11.25	11.34	11.25	
3	16QAM	8	4	11.21	11.31	11.12	
3	16QAM	8	7	11.19	11.23	11.22	
3	16QAM	15	0	11.07	11.18	10.99	
3	64QAM	1	0	11.54	11.52	11.44	12.5
3	64QAM	1	8	11.45	11.50	11.33	
3	64QAM	1	14	11.12	11.11	11.09	
3	64QAM	8	0	11.46	11.54	11.36	12.5
3	64QAM	8	4	11.28	11.39	11.24	
3	64QAM	8	7	11.34	11.40	11.28	
3	64QAM	15	0	11.36	11.46	11.38	
Channel				26047	26365	26683	Tune-up limit (dBm)
Frequency (MHz)				1850.7	1882.5	1914.3	
1.4	QPSK	1	0	12.51	12.61	12.60	13.5
1.4	QPSK	1	3	12.44	12.62	12.49	
1.4	QPSK	1	5	12.36	12.46	12.32	
1.4	QPSK	3	0	12.58	12.57	12.57	
1.4	QPSK	3	1	12.53	12.57	12.49	
1.4	QPSK	3	3	12.18	12.15	12.09	
1.4	QPSK	6	0	11.48	11.48	11.29	12.5
1.4	16QAM	1	0	11.38	11.68	11.31	12.5
1.4	16QAM	1	3	11.64	11.69	11.46	
1.4	16QAM	1	5	11.33	11.47	11.30	
1.4	16QAM	3	0	11.31	11.33	11.16	
1.4	16QAM	3	1	11.40	11.57	11.39	
1.4	16QAM	3	3	11.33	11.40	11.34	
1.4	16QAM	6	0	11.39	11.32	11.34	12.5
1.4	64QAM	1	0	11.49	11.57	11.38	12.5
1.4	64QAM	1	3	11.43	11.43	11.35	
1.4	64QAM	1	5	11.34	11.10	11.09	
1.4	64QAM	3	0	11.45	11.50	11.42	
1.4	64QAM	3	1	11.36	11.34	11.35	
1.4	64QAM	3	3	11.41	11.48	11.39	
1.4	64QAM	6	0	11.41	11.51	11.40	12.5

Band 26 for FCC (only on channel required)							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				26765	26865	26965	
Frequency (MHz)				821.5	831.5	841.5	
15	QPSK	1	0	19.70	19.75	19.67	
15	QPSK	1	37	19.64	19.67	19.61	20.5
15	QPSK	1	74	19.61	19.63	19.60	
15	QPSK	36	0	18.77	18.79	18.75	
15	QPSK	36	20	18.61	18.64	18.57	19.5
15	QPSK	36	39	18.50	18.55	18.49	
15	QPSK	75	0	18.66	18.69	18.65	
15	16QAM	1	0	18.78	18.81	18.73	19.5
15	16QAM	1	37	18.65	18.71	18.49	
15	16QAM	1	74	18.65	18.66	18.58	
15	16QAM	36	0	18.38	18.44	18.27	19.5
15	16QAM	36	20	18.41	18.49	18.35	
15	16QAM	36	39	18.26	18.32	18.24	
15	16QAM	75	0	18.30	18.38	18.27	19.5
15	64QAM	1	0	18.68	18.75	18.65	
15	64QAM	1	37	18.67	18.69	18.59	
15	64QAM	1	74	18.72	18.77	18.68	19.5
15	64QAM	36	0	18.26	18.33	18.21	
15	64QAM	36	20	18.22	18.25	18.16	
15	64QAM	36	39	18.09	18.14	18.06	19.5
15	64QAM	75	0	18.05	18.14	18.07	
Channel				26740	26865	26990	Tune-up limit (dBm)
Frequency (MHz)				819	831.5	844	
10	QPSK	1	0	19.55	19.68	19.56	
10	QPSK	1	25	19.55	19.58	19.58	20.5
10	QPSK	1	49	19.54	19.55	19.54	
10	QPSK	25	0	18.69	18.64	18.67	
10	QPSK	25	12	18.59	18.58	18.43	19.5
10	QPSK	25	25	18.25	18.30	18.13	
10	QPSK	50	0	18.34	18.30	18.38	
10	16QAM	1	0	18.76	18.79	18.58	19.5
10	16QAM	1	25	18.62	18.63	18.42	
10	16QAM	1	49	18.50	18.59	18.57	
10	16QAM	25	0	18.47	18.62	18.40	19.5
10	16QAM	25	12	18.30	18.48	18.29	
10	16QAM	25	25	18.14	18.27	18.15	
10	16QAM	50	0	18.28	18.31	18.15	19.5
10	64QAM	1	0	18.54	18.67	18.50	
10	64QAM	1	25	18.53	18.66	18.46	
10	64QAM	1	49	18.67	18.64	18.60	19.5
10	64QAM	25	0	18.22	18.26	18.17	
10	64QAM	25	12	18.08	18.23	18.03	
10	64QAM	25	25	18.04	18.04	18.02	19.5
10	64QAM	50	0	17.94	18.03	17.95	
Channel				26715	26865	27015	Tune-up limit (dBm)
Frequency (MHz)				816.5	831.5	846.5	
5	QPSK	1	0	19.65	19.74	19.55	
5	QPSK	1	12	19.62	19.60	19.49	20.5
5	QPSK	1	24	19.50	19.49	19.51	
5	QPSK	12	0	18.72	18.64	18.65	
5	QPSK	12	7	18.60	18.62	18.42	19.5
5	QPSK	12	13	18.18	18.30	18.19	
5	QPSK	25	0	18.27	18.44	18.38	
5	16QAM	1	0	18.69	18.80	18.66	19.5
5	16QAM	1	12	18.52	18.64	18.35	
5	16QAM	1	24	18.59	18.65	18.57	
5	16QAM	12	0	18.56	18.57	18.40	19.5
5	16QAM	12	7	18.33	18.34	18.23	
5	16QAM	12	13	18.14	18.29	18.17	
5	16QAM	25	0	18.26	18.31	18.23	19.5
5	64QAM	1	0	18.55	18.68	18.63	
5	64QAM	1	12	18.54	18.58	18.57	
5	64QAM	1	24	18.68	18.76	18.60	19.5
5	64QAM	12	0	18.19	18.22	18.18	
5	64QAM	12	7	18.07	18.17	18.08	
5	64QAM	12	13	17.96	18.10	18.04	19.5
5	64QAM	25	0	18.01	18.10	18.03	
Channel				26705	26865	27025	Tune-up limit (dBm)
Frequency (MHz)				815.5	831.5	847.5	
3	QPSK	1	0	19.63	19.61	19.54	
3	QPSK	1	8	19.49	19.63	19.50	20.5
3	QPSK	1	14	19.58	19.54	19.52	
3	QPSK	8	0	18.65	18.75	18.64	
3	QPSK	8	4	18.54	18.56	18.56	19.5
3	QPSK	8	7	18.19	18.21	18.22	
3	QPSK	15	0	18.35	18.32	18.39	
3	16QAM	1	0	18.77	18.71	18.58	19.5
3	16QAM	1	8	18.64	18.62	18.44	
3	16QAM	1	14	18.63	18.56	18.55	
3	16QAM	8	0	18.48	18.65	18.43	19.5
3	16QAM	8	4	18.35	18.41	18.20	
3	16QAM	8	7	18.20	18.28	18.23	
3	16QAM	15	0	18.26	18.36	18.24	19.5
3	64QAM	1	0	18.57	18.72	18.52	
3	64QAM	1	8	18.52	18.66	18.48	
3	64QAM	1	14	18.61	18.67	18.66	19.5
3	64QAM	8	0	18.12	18.24	18.15	
3	64QAM	8	4	18.21	18.19	18.14	
3	64QAM	8	7	18.08	18.12	18.05	19.5
3	64QAM	15	0	18.04	18.12	17.92	
Channel				26997	26865	27033	Tune-up limit (dBm)
Frequency (MHz)				814.7	831.5	848.3	
1.4	QPSK	1	0	19.57	19.63	19.62	
1.4	QPSK	1	3	19.58	19.65	19.49	20.5
1.4	QPSK	1	5	19.49	19.50	19.56	
1.4	QPSK	3	0	19.62	19.70	19.63	
1.4	QPSK	3	1	19.47	19.60	19.51	20.5
1.4	QPSK	3	3	19.41	19.42	19.46	

Band 66							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				132072	132322	132572	
Frequency (MHz)				1720	1745	1770	
20	QPSK	1	0	12.78	12.81	12.72	
20	QPSK	1	49	12.69	12.72	12.65	13.5
20	QPSK	1	99	12.65	12.68	12.62	
20	QPSK	50	0	11.72	11.84	11.81	
20	QPSK	50	24	11.57	11.56	11.58	12.5
20	QPSK	50	50	11.53	11.53	11.53	
20	QPSK	100	0	11.61	11.72	11.60	
20	16QAM	1	0	11.69	11.72	11.60	12.5
20	16QAM	1	49	11.60	11.65	11.56	
20	16QAM	1	99	11.56	11.62	11.50	
20	16QAM	50	0	11.71	11.78	11.68	12.5
20	16QAM	50	24	11.54	11.60	11.55	
20	16QAM	50	50	11.50	11.51	11.49	
20	16QAM	100	0	11.41	11.49	11.42	12.5
20	64QAM	1	0	11.75	11.88	11.84	
20	64QAM	1	49	11.66	11.72	11.68	
20	64QAM	1	99	11.52	11.55	11.49	12.5
20	64QAM	50	0	11.65	11.52	11.66	
20	64QAM	50	24	11.53	11.46	11.68	
20	64QAM	50	50	11.50	11.50	11.46	12.5
20	64QAM	100	0	11.60	11.39	11.49	
Channel				132047	132322	132597	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1745	1772.5	
15	QPSK	1	0	12.73	12.71	12.65	
15	QPSK	1	37	12.61	12.70	12.55	13.5
15	QPSK	1	74	12.58	12.53	12.61	
15	QPSK	36	0	11.84	11.65	11.76	
15	QPSK	36	20	11.67	11.70	11.77	12.5
15	QPSK	36	39	11.66	11.62	11.70	
15	QPSK	75	0	11.77	11.85	11.71	
15	16QAM	1	0	11.63	11.62	11.53	12.5
15	16QAM	1	37	11.48	11.57	11.54	
15	16QAM	1	74	11.41	11.56	11.38	
15	16QAM	36	0	11.12	11.13	11.12	12.5
15	16QAM	36	20	11.51	11.50	11.46	
15	16QAM	36	39	11.49	11.41	11.39	
15	16QAM	75	0	11.39	11.46	11.30	12.5
15	64QAM	1	0	11.60	11.75	11.72	
15	64QAM	1	37	11.51	11.68	11.65	
15	64QAM	1	74	11.50	11.53	11.47	12.5
15	64QAM	36	0	11.52	11.44	11.60	
15	64QAM	36	20	11.42	11.39	11.66	
15	64QAM	36	39	11.46	11.42	11.36	12.5
15	64QAM	75	0	11.59	11.35	11.46	
Channel				132022	132322	132622	Tune-up limit (dBm)
Frequency (MHz)				1715	1745	1775	
10	QPSK	1	0	12.63	12.80	12.57	
10	QPSK	1	25	12.64	12.68	12.63	13.5
10	QPSK	1	49	12.54	12.54	12.54	
10	QPSK	25	0	11.60	11.72	11.73	
10	QPSK	25	12	11.73	11.71	11.76	12.5
10	QPSK	25	25	11.74	11.66	11.75	
10	QPSK	50	0	11.29	11.36	11.28	

1.4	QPSK	6	0	18.36	18.30	18.35	19.5
1.4	16QAM	1	0	18.77	18.70	18.70	19.5
1.4	16QAM	1	3	18.54	18.70	18.41	
1.4	16QAM	1	5	18.51	18.63	18.44	
1.4	16QAM	3	0	18.54	18.67	18.47	
1.4	16QAM	3	1	18.40	18.45	18.23	
1.4	16QAM	3	3	18.46	18.55	18.49	19.5
1.4	16QAM	6	0	18.19	18.35	18.24	
1.4	64QAM	1	0	18.67	18.64	18.62	19.5
1.4	64QAM	1	3	18.55	18.66	18.54	
1.4	64QAM	1	5	18.66	18.75	18.53	
1.4	64QAM	3	0	18.42	18.55	18.42	
1.4	64QAM	3	1	18.41	18.45	18.39	
1.4	64QAM	3	3	18.31	18.30	18.25	19.5
1.4	64QAM	6	0	17.97	18.03	17.98	

3	QPSK	15	0	11.20	11.37	11.25	12.5
3	16QAM	1	0	11.54	11.67	11.53	
3	16QAM	1	8	11.58	11.51	11.45	
3	16QAM	1	14	11.41	11.59	11.40	12.5
3	16QAM	8	0	11.70	11.69	11.58	
3	16QAM	8	4	11.49	11.54	11.51	
3	16QAM	8	7	11.46	11.47	11.39	
3	16QAM	15	0	11.32	11.46	11.33	
3	64QAM	1	0	11.65	11.83	11.71	12.5
3	64QAM	1	8	11.55	11.66	11.55	
3	64QAM	1	14	11.44	11.44	11.36	12.5
3	64QAM	8	0	11.57	11.50	11.63	
3	64QAM	8	4	11.51	11.36	11.60	
3	64QAM	8	7	11.35	11.35	11.38	
3	64QAM	15	0	11.54	11.24	11.48	
Channel				131979	132322	132665	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1745	1779.3	
1.4	QPSK	1	0	12.63	12.66	12.58	13.5
1.4	QPSK	1	3	12.63	12.58	12.55	
1.4	QPSK	1	5	12.54	12.64	12.58	
1.4	QPSK	3	0	12.63	12.75	12.67	
1.4	QPSK	3	1	12.77	12.72	12.73	
1.4	QPSK	3	3	12.74	12.69	12.65	12.5
1.4	QPSK	6	0	11.80	11.93	11.72	
1.4	16QAM	1	0	11.55	11.60	11.57	12.5
1.4	16QAM	1	3	11.45	11.56	11.48	
1.4	16QAM	1	5	11.53	11.48	11.47	
1.4	16QAM	3	0	11.35	11.41	11.26	
1.4	16QAM	3	1	11.24	11.28	11.15	
1.4	16QAM	3	3	11.16	11.09	11.06	12.5
1.4	16QAM	6	0	11.28	11.45	11.32	
1.4	64QAM	1	0	11.71	11.86	11.80	12.5
1.4	64QAM	1	3	11.60	11.68	11.62	
1.4	64QAM	1	5	11.37	11.52	11.40	
1.4	64QAM	3	0	11.84	11.67	11.91	
1.4	64QAM	3	1	11.68	11.63	11.90	
1.4	64QAM	3	3	11.72	11.75	11.71	12.5
1.4	64QAM	6	0	11.59	11.31	11.36	

Band 71							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				133222	133322	133372	
Frequency (MHz)				673	683	688	
20	QPSK	1	0	19.33	19.38	19.28	
20	QPSK	1	49	19.26	19.31	19.23	20
20	QPSK	1	99	19.18	19.22	19.19	
20	QPSK	50	0	18.37	18.45	18.35	
20	QPSK	50	24	18.22	18.28	18.19	19
20	QPSK	50	50	18.13	18.23	18.15	
20	QPSK	100	0	18.33	18.40	18.32	
20	16QAM	1	0	18.49	18.63	18.52	19
20	16QAM	1	49	18.44	18.56	18.46	
20	16QAM	1	99	18.52	18.54	18.44	
20	16QAM	50	0	18.36	18.40	18.33	19
20	16QAM	50	24	18.31	18.40	18.27	
20	16QAM	50	50	18.29	18.32	18.31	
20	16QAM	100	0	18.21	18.25	18.23	19
20	64QAM	1	0	18.54	18.64	18.48	
20	64QAM	1	49	18.50	18.59	18.46	
20	64QAM	1	99	18.47	18.55	18.45	19
20	64QAM	50	0	18.25	18.30	18.36	
20	64QAM	50	24	18.26	18.31	18.27	
20	64QAM	50	50	18.33	18.28	18.29	
20	64QAM	100	0	18.29	18.32	18.24	
Channel				133197	133297	133397	
Frequency (MHz)				670.5	680.5	690.5	
15	QPSK	1	0	19.31	19.35	19.19	
15	QPSK	1	37	19.15	19.28	19.11	20
15	QPSK	1	74	19.14	19.19	19.18	
15	QPSK	36	0	18.19	18.20	18.23	
15	QPSK	36	20	18.11	18.19	18.17	19
15	QPSK	36	39	18.10	18.09	18.06	
15	QPSK	75	0	18.27	18.33	18.21	
15	16QAM	1	0	18.44	18.51	18.48	19
15	16QAM	1	37	18.37	18.41	18.33	
15	16QAM	1	74	18.50	18.50	18.41	
15	16QAM	36	0	18.27	18.39	18.20	19
15	16QAM	36	20	18.19	18.35	18.22	
15	16QAM	36	39	18.24	18.23	18.28	
15	16QAM	75	0	18.13	18.10	18.13	19
15	64QAM	1	0	18.39	18.59	18.34	
15	64QAM	1	37	18.45	18.49	18.37	
15	64QAM	1	74	18.42	18.45	18.34	19
15	64QAM	36	0	18.18	18.23	18.30	
15	64QAM	36	20	18.20	18.17	18.24	
15	64QAM	36	39	18.19	18.25	18.22	
15	64QAM	75	0	18.21	18.28	18.09	
Channel				133172	133272	133422	
Frequency (MHz)				668	678	693	
10	QPSK	1	0	19.21	19.27	19.26	
10	QPSK	1	25	19.19	19.20	19.20	20
10	QPSK	1	49	19.17	19.21	19.15	
10	QPSK	25	0	18.12	18.22	18.23	
10	QPSK	25	12	18.17	18.23	18.14	19
10	QPSK	25	25	18.03	18.12	18.08	
10	QPSK	50	0	18.21	18.25	18.18	
10	16QAM	1	0	18.44	18.62	18.43	19
10	16QAM	1	25	18.30	18.42	18.44	
10	16QAM	1	49	18.39	18.39	18.37	
10	16QAM	25	0	18.24	18.34	18.29	19
10	16QAM	25	12	18.22	18.26	18.17	
10	16QAM	25	25	18.14	18.20	18.16	
10	16QAM	50	0	18.11	18.20	18.14	19
10	64QAM	1	0	18.44	18.54	18.38	
10	64QAM	1	25	18.46	18.49	18.32	
10	64QAM	1	49	18.37	18.47	18.38	19
10	64QAM	25	0	18.18	18.27	18.22	
10	64QAM	25	12	18.21	18.27	18.22	
10	64QAM	25	25	18.20	18.17	18.15	
10	64QAM	50	0	18.25	18.21	18.17	
Channel				133147	133247	133447	
Frequency (MHz)				665.5	675.5	695.5	
5	QPSK	1	0	19.21	19.26	19.18	
5	QPSK	1	12	19.17	19.29	19.16	20
5	QPSK	1	24	19.12	19.11	19.15	
5	QPSK	12	0	18.21	18.22	18.21	
5	QPSK	12	7	18.13	18.15	18.13	19
5	QPSK	12	13	18.02	18.10	18.01	
5	QPSK	25	0	18.18	18.32	18.24	
5	16QAM	1	0	18.43	18.57	18.51	19
5	16QAM	1	12	18.32	18.46	18.39	
5	16QAM	1	24	18.50	18.43	18.32	
5	16QAM	12	0	18.21	18.31	18.26	19
5	16QAM	12	7	18.19	18.25	18.24	
5	16QAM	12	13	18.14	18.20	18.19	
5	16QAM	25	0	18.10	18.16	18.22	19
5	64QAM	1	0	18.47	18.54	18.44	
5	64QAM	1	12	18.41	18.45	18.41	
5	64QAM	1	24	18.35	18.51	18.39	19
5	64QAM	12	0	18.19	18.19	18.23	
5	64QAM	12	7	18.24	18.16	18.23	
5	64QAM	12	13	18.18	18.20	18.28	
5	64QAM	25	0	18.22	18.30	18.13	
5	64QAM						

Band 41 (2496~2690MHz) Class 2										
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Low Channel	Middle Channel	Middle High Channel	High Channel	Tune-up limit (dBm)	
Channel				39750	40185	40620	41055	41490		
Frequency (MHz)				2506	2549.5	2593	2636.5	2680		
20	QPSK	1	0	18.62	18.76	18.96	18.70	18.60	19.5	
20	QPSK	1	49	18.52	18.48	18.73	18.36	18.31		
20	QPSK	1	99	18.63	18.64	18.74	18.32	18.22		
20	QPSK	50	0	17.73	17.74	17.84	17.77	17.69		
20	QPSK	50	24	17.42	17.39	17.68	17.48	17.38		
20	QPSK	50	50	17.48	17.64	17.63	17.44	17.47	18.5	
20	QPSK	100	0	17.63	17.60	17.69	17.46	17.41		
20	16QAM	1	0	17.35	17.54	17.67	17.61	17.66		
20	16QAM	1	49	17.66	17.60	17.64	17.47	17.38		
20	16QAM	1	99	17.77	17.54	17.38	17.46	17.57		
20	16QAM	50	0	17.27	17.40	17.48	17.36	17.39	18.5	
20	16QAM	50	24	17.23	17.27	17.39	17.36	17.35		
20	16QAM	50	50	17.19	17.26	17.35	17.34	17.26		
20	16QAM	100	0	17.60	17.62	17.32	17.37	17.29		
20	64QAM	1	0	17.76	17.78	17.94	17.90	17.70		
20	64QAM	1	49	17.83	17.83	17.89	17.79	17.62	18.5	
20	64QAM	1	99	17.89	17.82	17.91	17.68	17.37		
20	64QAM	50	0	17.36	17.56	17.63	17.29	17.41		
20	64QAM	50	24	17.58	17.53	17.60	17.31	17.26		
20	64QAM	50	50	17.55	17.49	17.61	17.16	17.20		
20	64QAM	100	0	17.53	17.56	17.60	17.52	17.33	18.5	
Channel				39725	40173	40620	41068	41515	Tune-up limit (dBm)	
Frequency (MHz)				2503.5	2548.3	2593	2637.8	2682.5		
15	QPSK	1	0	18.57	18.63	18.77	18.57	18.50	19.5	
15	QPSK	1	37	18.38	18.44	18.61	18.28	18.24		
15	QPSK	1	74	18.49	18.54	18.70	18.23	18.09		
15	QPSK	36	0	17.69	17.68	17.77	17.62	17.59		
15	QPSK	36	20	17.60	17.49	17.88	17.62	17.54		
15	QPSK	36	39	17.61	17.72	17.76	17.56	17.64	18.5	
15	QPSK	75	0	17.76	17.80	17.71	17.52	17.60		
15	16QAM	1	0	17.43	17.70	17.87	17.78	17.74		
15	16QAM	1	37	17.84	17.67	17.82	17.62	17.44		
15	16QAM	1	74	17.76	17.89	17.27	17.38	17.43		
15	16QAM	36	0	17.21	17.33	17.42	17.33	17.30	18.5	
15	16QAM	36	20	17.13	17.15	17.30	17.23	17.27		
15	16QAM	36	39	17.04	17.25	17.31	17.25	17.14		
15	16QAM	75	0	17.54	17.54	17.26	17.22	17.24		
15	64QAM	1	0	17.65	17.68	17.63	17.80	17.63		
15	64QAM	1	37	17.74	17.71	17.82	17.73	17.58	18.5	
15	64QAM	1	74	17.75	17.77	17.88	17.59	17.22		
15	64QAM	36	0	17.35	17.49	17.48	17.27	17.31		
15	64QAM	36	20	17.47	17.40	17.53	17.26	17.22		
15	64QAM	36	39	17.48	17.34	17.60	17.10	17.19		
15	64QAM	75	0	17.44	17.48	17.46	17.46	17.24	18.5	
Channel				39700	40160	40620	41089	41540	Tune-up limit (dBm)	
Frequency (MHz)				2501	2547	2593	2639	2685		
10	QPSK	1	0	18.50	18.75	18.81	18.56	18.59	19.5	
10	QPSK	1	25	18.37	18.46	18.58	18.33	18.19		
10	QPSK	1	49	18.50	18.61	18.65	18.25	18.06		
10	QPSK	25	0	17.61	17.71	17.76	17.76	17.56		
10	QPSK	25	12	17.51	17.55	17.84	17.52	17.49		
10	QPSK	25	25	17.66	17.70	17.82	17.51	17.66	18.5	
10	QPSK	50	0	17.71	17.68	17.78	17.64	17.53		
10	16QAM	1	0	17.44	17.60	17.73	17.79	17.72		
10	16QAM	1	25	17.75	17.69	17.80	17.59	17.46		
10	16QAM	1	49	17.72	17.79	17.24	17.38	17.45		
10	16QAM	25	0	17.12	17.29	17.36	17.29	17.36	18.5	
10	16QAM	25	12	17.09	17.15	17.31	17.22	17.22		
10	16QAM	25	25	17.13	17.17	17.27	17.30	17.22		
10	16QAM	50	0	17.46	17.57	17.30	17.29	17.28		
10	64QAM	1	0	17.68	17.74	17.87	17.86	17.68		
10	64QAM	1	25	17.71	17.82	17.87	17.73	17.61	18.5	
10	64QAM	1	49	17.80	17.68	17.89	17.62	17.26		
10	64QAM	25	0	17.22	17.48	17.54	17.21	17.36		
10	64QAM	25	12	17.45	17.46	17.52	17.19	17.16		
10	64QAM	25	25	17.42	17.35	17.60	17.10	17.17		
10	64QAM	50	0	17.43	17.44	17.46	17.43	17.26	18.5	
Channel				39875	40148	40620	41093	41555	Tune-up limit (dBm)	
Frequency (MHz)				2498.5	2545.8	2593	2640.30	2687.5		
5	QPSK	1	0	18.47	18.68	18.78	18.59	18.51	19.5	
5	QPSK	1	12	18.51	18.39	18.70	18.30	18.25		
5	QPSK	1	24	18.53	18.50	18.73	18.31	18.11		
5	QPSK	12	0	17.70	17.62	17.73	17.74	17.60		
5	QPSK	12	7	17.58	17.50	17.78	17.64	17.52		
5	QPSK	12	13	17.55	17.76	17.72	17.51	17.60	18.5	
5	QPSK	25	0	17.69	17.70	17.69	17.57	17.60		
5	16QAM	1	0	17.51	17.65	17.86	17.74	17.74		
5	16QAM	1	12	17.62	17.70	17.76	17.66	17.57		
5	16QAM	1	24	17.68	17.90	17.36	17.41	17.51		
5	16QAM	12	0	17.13	17.35	17.34	17.23	17.25	18.5	
5	16QAM	12	7	17.09	17.12	17.31	17.33	17.28		
5	16QAM	12	13	17.16	17.15	17.23	17.26	17.19		
5	16QAM	25	0	17.52	17.49	17.45	17.35	17.37		
5	64QAM	1	0	17.71	17.74	17.83	17.86	17.63		
5	64QAM	1	12	17.77	17.80	17.79	17.75	17.52	18.5	
5	64QAM	1	24	17.83	17.78	17.87	17.56	17.33		
5	64QAM	12	0	17.21	17.42	17.59	17.22	17.26		
5	64QAM	12	7	17.50	17.38	17.58	17.22	17.19		
5	64QAM	12	13	17.53	17.34	17.46	17.07	17.19		
5	64QAM	25	0	17.50	17.42	17.50	17.42	17.29	18.5	

Band 41 (2496~2690MHz) Class 3											
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Low Channel	Middle Channel	Middle High Channel	High Channel		Tune-up limit (dBm)	
Channel				39750	40185	40620	41055	41490			
Frequency (MHz)				2506	2549.5	2593	2636.5	2680			
20	QPSK	1	0	14.66	14.73	14.80	14.71	14.75	15.7		
20	QPSK	1	49	14.33	14.64	14.71	14.41	14.35			
20	QPSK	1	99	14.29	14.40	14.49	14.39	14.20			
20	QPSK	50	0	13.66	13.70	13.78	13.68	13.69			
20	QPSK	50	24	13.61	13.65	13.58	13.32	13.35			
20	QPSK	50	50	13.47	13.57	13.65	13.45	13.34	14.7		
20	QPSK	100	0	13.65	13.60	13.74	13.67	13.64			
20	16QAM	1	0	13.46	13.36	13.68	13.56	13.43			
20	16QAM	1	49	13.52	13.64	13.62	13.33	13.25			
20	16QAM	1	99	13.49	13.48	13.42	13.11	13.02			
20	16QAM	50	0	13.29	13.37	13.42	13.24	13.02	14.7		
20	16QAM	50	24	13.25	13.29	13.20	13.21	12.99			
20	16QAM	50	50	13.31	13.26	13.15	12.75	12.88			
20	16QAM	100	0	13.13	13.29	13.23	12.94	12.99			
20	64QAM	1	0	13.45	13.53	13.60	13.46	13.40			
20	64QAM	1	49	13.24	13.33	13.49	13.35	13.33	14.7		
20	64QAM	1	99	13.15	13.28	13.34	13.21	13.18			
20	64QAM	50	0	13.13	13.28	13.38	13.21	12.96			
20	64QAM	50	24	13.10	13.21	13.31	13.16	13.04			
20	64QAM	50	50	13.03	13.05	13.18	13.00	12.91			
20	64QAM	100	0	12.86	13.00	13.08	12.98	12.93	14.7		
Channel				39725	40173	40620	41068	41515			Tune-up limit (dBm)
Frequency (MHz)				2503.5	2548.3	2593	2637.8	2682.5			
15	QPSK	1	0	15.49	14.58	14.67	14.55	14.40		15.7	
15	QPSK	1	37	14.20	14.51	14.36	14.28	14.22			
15	QPSK	1	74	14.18	14.27	14.36	14.26	14.16			
15	QPSK	36	0	13.53	13.57	13.65	13.45	13.36			
15	QPSK	36	20	13.48	13.57	13.45	13.19	13.32			
15	QPSK	36	39	13.64	13.64	13.52	13.14	13.21	14.7		
15	QPSK	75	0	13.45	13.53	13.47	13.24	13.16			
15	16QAM	1	0	13.26	13.37	13.31	13.47	13.34			
15	16QAM	1	37	13.73	13.55	13.40	13.24	13.16			
15	16QAM	1	74	13.40	13.39	13.33	13.20	13.19			
15	16QAM	36	0	13.09	13.16	13.31	13.21	13.02	14.7		
15	16QAM	36	20	13.14	13.18	13.09	13.10	12.88			
15	16QAM	36	39	13.10	13.05	13.04	12.88	12.91			
15	16QAM	75	0	12.93	12.98	12.97	12.93	12.83			
15	64QAM	1	0	13.42	13.50	13.59	13.53	13.47			
15	64QAM	1	37	13.71	13.20	13.13	13.20	13.22	14.7		
15	64QAM	1	74	13.30	13.15	13.21	13.18	13.15			
15	64QAM	36	0	13.20	13.24	13.32	12.98	12.93			
15	64QAM	36	20	13.17	13.18	12.98	12.73	12.71			
15	64QAM	36	39	13.00	13.12	13.05	12.77	12.78			
15	64QAM	75	0	12.83	12.97	13.13	12.75	12.90	14.7		
Channel				39700	40160	40620	41080	41540			Tune-up limit (dBm)
Frequency (MHz)				2501	2547	2593	2639	2685			
10	QPSK	1	0	14.44	14.62	14.71	14.62	14.39		15.7	
10	QPSK	1	25	14.24	14.55	14.59	14.42	14.27			
10	QPSK	1	49	14.20	14.31	14.40	14.30	14.16			
10	QPSK	25	0	13.57	13.71	13.44	13.49	13.30			
10	QPSK	25	12	13.52	13.61	13.49	13.23	13.26			
10	QPSK	25	25	13.68	13.68	13.56	13.18	13.25	14.7		
10	QPSK	50	0	13.71	13.72	13.51	13.28	13.25			
10	16QAM	1	0	13.37	13.67	13.73	13.47	13.34			
10	16QAM	1	25	13.43	13.55	13.43	13.24	13.16			
10	16QAM	1	49	13.40	13.39	13.33	13.18	13.13			
10	16QAM	25	0	13.20	13.28	13.33	13.14	13.13	14.7		
10	16QAM	25	12	13.16	13.20	13.11	13.12	12.90			
10	16QAM	25	25	13.22	13.17	13.06	12.97	12.92			
10	16QAM	50	0	12.86	13.20	13.25	12.85	12.81			
10	64QAM	1	0	13.22	13.36	13.59	13.49	13.39			
10	64QAM	1	25	13.15	13.24	13.25	13.24	13.14	14.7		
10	64QAM	1	49	12.67	13.74	13.80	13.74	13.59			
10	64QAM	25	0	12.94	13.10	13.16	13.12	12.87			
10	64QAM	25	12	13.11	13.22	13.02	12.77	12.85			
10	64QAM	25	25	13.04	13.16	13.09	12.91	12.82			
10	64QAM	50	0	12.87	13.21	13.17	13.09	12.94	14.7		
Channel				39675	40146	40620	41093	41585			Tune-up limit (dBm)
Frequency (MHz)				2498.5	2543.8	2589	2635.3	2681.5			
5	QPSK	1	0	14.36	14.44	14.60	14.49	14.34		15.7	
5	QPSK	1	24	14.12	14.49	14.51	14.26	14.15			
5	QPSK	12	0	13.51	13.65	13.68	13.43	13.24			
5	QPSK	12	7	13.46	13.55	13.43	13.17	13.20			
5	QPSK	12	13	13.62	13.62	13.50	13.12	13.19			
5	QPSK	25	0	13.65	13.66	13.45	13.22	13.19	14.7		
5	16QAM	1	0	13.46	13.35	13.69	13.56	13.41			
5	16QAM	1	12	13.52	13.04	13.55	13.33	13.25			
5	16QAM	1	24	13.49	13.39	13.39	13.19	13.13			
5	16QAM	12	0	12.99	13.29	13.40	13.24	13.02			
5	16QAM	12	7	13.05	13.21	13.12	12.91	12.89	14.7		
5	16QAM	12	13	13.21	13.26	13.15	12.75	12.68			
5	16QAM	25	0	12.95	13.19	13.23	12.94	12.69			
5	16QAM	25	6	13.45	13.50	13.53	13.46	13.37			
5	16QAM	25	12	13.24	13.13	13.13	13.13	13.28			
5	64QAM	1	24	13.31	13.28	13.34	13.21	13.15	14.7		
5	64QAM	12	0	13.13	13.08	13.25	12.91	12.96			
5	64QAM	12	7	13.05	13.21	13.11	12.86	12.84			
5	64QAM	12	13	13.08	13.15	13.15	12.88	12.81			
5	64QAM	25	0	12.99	13.10	13.08	13.18	13.03			

CA_41C (Class3)											
Combination:20MHz+20MHz(100RB+100RB)											
PCC Channel	PCC Channel (3GPP)	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level(dB)	Measured Power(dBm)	Tune-up limit(dBm)
				RB Size	RB Offset	RB Size	RB Offset				
39750	39750	39948	QPSK	1	0	0	0	1	0	13.78	14.5
40185	40521	40719	QPSK	1	0	0	0	1	0	13.87	14.5
40620	41292	41490	QPSK	1	0	0	0	1	0	13.55	13.5
40620	39750	39948	16QAM	1	0	0	0	1	0	12.63	13.5
41055	40521	40719	16QAM	1	0	0	0	1	0	12.55	13.5
41490	41292	41490	16QAM	1	0	0	0	1	0	12.30	13.5
40620	39750	39948	64QAM	1	0	0	0	1	0	12.31	13.5
41055	40521	40719	64QAM	1	0	0	0	1	0	12.17	13.5
41490	41292	41490	64QAM	1	0	0	0	1	0	12.58	13.5
39750	39750	39948	QPSK	50	0	0	0	1	0	12.55	13.5
40185	40521	40719	QPSK	50	0	0	0	1	0	12.47	13.5
40620	41292	41490	QPSK	50	0	0	0	1	0	12.33	13.5

CA_41C (Class2)											
Combination:20MHz+20MHz(100RB+100RB)											
PCC Channel	PCC Channel (3GPP)	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level(dB)	Measured Power(dBm)	Tune-up limit(dBm)
				RB Size	RB Offset	RB Size	RB Offset				
39750	39750	39948	QPSK	1	0	0	0	1	0	16.30	17
40185	40521	40719	QPSK	1	0	0	0	1	0	16.36	17
40620	41292	41490	QPSK	1	0	0	0	1	0	16.22	17
40620	39750	39948	16QAM	1	0	0	0	1	0	15.56	16
41055	40521	40719	16QAM	1	0	0	0	1	0	15.51	16
41490	41292	41490	16QAM	1	0	0	0	1	0	15.49	16
40620	39750	39948	64QAM	1	0	0	0	1	0	15.55	16
41055	40521	40719	64QAM	1	0	0	0	1	0	15.56	16
41490	41292	41490	64QAM	1	0	0	0	1	0	15.53	16
39750	39750	39948	QPSK	50	0	0	0	1	0	15.43	16
40185	40521	40719	QPSK	50	0	0	0	1	0	15.46	16
40620	41292	41490	QPSK	50	0	0	0	1	0	15.47	16