



REPORT No.: SZ24100315S01

Annex E Conducted Power

Note:

Conducted power unit: dBm

The target power was recorded in the manufacturer's document.

Full Power

GSM850		Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)	Ch Delta > 0.5
TX Channel		128	189	251		128	189	251		
Frequency (MHz)		824.2	836.4	848.8		824.2	836.4	848.8		
GSM 1 Tx slot		32.59	32.65	32.60	33.50	23.59	23.65	23.60	24.50	0.10
GPRS 1 Tx slot		32.62	32.68	32.58	33.50	23.62	23.68	23.58	24.50	
GPRS 2 Tx slots		30.59	30.67	30.62	31.50	24.59	24.67	24.62	25.50	0.08
GPRS 3 Tx slots		28.60	28.67	28.65	29.50	24.34	24.41	24.39	25.24	0.07
GPRS 4 Tx slots		26.65	26.68	26.63	27.50	23.65	23.68	23.63	24.50	0.05
EDGE 1 Tx slot		25.39	25.45	25.41	26.50	16.39	16.45	16.41	17.50	0.06
EDGE 2 Tx slots		24.22	24.32	24.25	25.50	16.22	16.32	16.25	19.50	0.10
EDGE 3 Tx slots		21.58	21.66	21.53	22.50	17.32	17.40	17.27	18.24	0.13
EDGE 4 Tx slots		19.67	19.72	19.80	20.50	16.67	16.72	16.80	17.50	0.13
Mode			Max.	32.68			Max.	24.67		
Attenuator		Cable Loss : 0.6								
Date		11/16								

GSM1900		Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)	Ch Delta > 0.5
TX Channel		512	661	810		512	661	810		
Frequency (MHz)		1850.2	1880	1909.8		1850.2	1880	1909.8		
GSM 1 Tx slot		29.55	29.50	29.48	30.00	20.55	20.50	20.48	21.00	0.07
GPRS 1 Tx slot		29.51	29.51	29.50	30.00	20.51	20.51	20.50	21.00	
GPRS 2 Tx slots		27.20	27.25	27.21	28.00	21.20	21.25	21.21	22.00	0.05
GPRS 3 Tx slots		25.75	25.81	25.80	26.50	21.49	21.55	21.54	22.24	0.06
GPRS 4 Tx slots		23.80	23.84	23.81	24.50	20.80	20.84	20.81	21.50	0.04
EDGE 1 Tx slot		25.60	25.67	25.54	26.50	16.60	16.67	16.54	17.50	0.13
EDGE 2 Tx slots		24.15	24.25	24.20	25.00	16.15	16.25	16.20	19.00	0.10
EDGE 3 Tx slots		22.27	22.31	22.22	23.00	16.01	16.05	17.96	18.74	0.09
EDGE 4 Tx slots		19.80	19.87	19.82	20.50	16.80	16.87	16.82	17.50	0.07
Mode			Max.	29.55			Max.	21.55		
Attenuator		Cable Loss : 0.8								
Date		11/16								

Band		WCDMA Band II (dBm)			Tune-up Limit (dBm)	WCDMA Band IV (dBm)			Tune-up Limit (dBm)	WCDMA Band V (dBm)			Tune-up Limit (dBm)
TX Channel		9262	9400	9538		1312	1413	1513		4132	4182	4233	
Rx Channel		9662	9800	9938		1537	1638	1738		4357	4407	4458	
Frequency (MHz)		1852.4	1880	1907.6		1712.4	1732.6	1752.6		826.4	836.4	846.6	
3GPP Rel 99	RMC 12.2Kbps	22.71	22.76	22.70	23.50	22.62	22.70	22.62	23.50	23.07	23.15	23.11	24.00
3GPP Rel 5	HSDPA Subtest-1	21.54	21.30	21.50	22.50	21.92	21.59	21.87	22.50	21.49	21.89	21.39	22.50
3GPP Rel 5	HSDPA Subtest-2	21.32	21.01	21.20	22.00	22.03	21.74	21.94	23.00	21.26	21.53	21.05	22.50
3GPP Rel 5	HSDPA Subtest-3	20.70	20.25	20.43	21.50	22.05	21.77	21.99	23.00	21.02	21.07	20.75	22.00
3GPP Rel 5	HSDPA Subtest-4	21.23	20.93	21.11	22.00	22.08	21.82	22.02	23.00	20.91	20.96	20.65	21.50
3GPP Rel 8	DC-HSDPA Subtest-1	21.38	21.04	21.23	22.00	21.78	21.43	21.43	22.50	22.16	22.37	22.11	23.00
3GPP Rel 8	DC-HSDPA Subtest-2	20.37	19.90	20.14	21.00	20.61	20.49	20.48	21.50	20.89	20.95	20.58	22.00
3GPP Rel 8	DC-HSDPA Subtest-3	20.10	19.79	20.07	21.00	20.53	20.39	20.37	21.50	20.66	20.72	20.35	21.50
3GPP Rel 8	DC-HSDPA Subtest-4	20.06	19.77	20.05	21.00	20.51	20.37	20.35	21.50	20.63	20.68	20.33	21.50
3GPP Rel 6	HSUPA Subtest-1	21.66	21.35	21.45	22.50	21.97	21.64	21.89	23.00	22.39	22.58	22.09	23.50
3GPP Rel 6	HSUPA Subtest-2	21.55	21.29	21.47	22.50	21.88	21.55	21.82	23.00	22.35	22.55	22.34	23.50
3GPP Rel 6	HSUPA Subtest-3	21.66	21.39	21.57	22.50	21.98	21.68	21.92	23.00	22.42	22.58	22.10	23.50
3GPP Rel 6	HSUPA Subtest-4	21.53	21.22	21.44	22.50	21.86	21.51	21.78	23.00	22.30	22.52	22.19	23.50
3GPP Rel 6	HSUPA Subtest-5	21.63	21.35	21.53	22.50	21.96	21.66	21.90	23.00	22.39	22.60	22.10	23.50
3GPP Rel 7	HSPA+ (10QAM) Subtest-1	21.72	21.43	21.63	22.50	22.11	21.85	22.03	23.00	22.53	22.69	22.26	23.50
Attenuator		Cable Loss			0.8	Cable Loss			0.8	Cable Loss			0.6
Mode			Max.	22.76			Max.	22.70			Max.	23.15	
Date		11/14											

Band 2 (1900MHz Band) (dBm) Part 24E							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				18700	18900	19100	
Frequency (MHz)				1860	1880	1900	
20	QPSK	1	0	23.09	23.15	23.12	24
20	QPSK	1	49	22.76	22.94	22.83	
20	QPSK	1	99	22.69	22.72	22.75	
20	QPSK	50	0	21.83	22.02	21.94	23
20	QPSK	50	24	21.91	21.99	21.83	
20	QPSK	50	50	21.82	21.96	21.74	
20	QPSK	100	0	21.89	21.93	21.81	23
20	16QAM	1	0	22.31	22.40	22.24	
20	16QAM	1	49	22.25	22.31	22.30	
20	16QAM	1	99	22.14	22.16	22.08	22
20	16QAM	50	0	21.16	21.24	21.19	
20	16QAM	50	24	21.13	21.22	21.17	
20	16QAM	50	50	21.00	21.07	20.99	22
20	16QAM	100	0	21.04	21.23	21.08	
20	64QAM	1	0	21.53	21.65	21.54	
20	64QAM	1	49	21.38	21.57	21.46	22
20	64QAM	1	99	21.48	21.49	21.34	
20	64QAM	50	0	20.49	20.58	20.46	
20	64QAM	50	24	20.46	20.56	20.39	21
20	64QAM	50	50	20.24	20.44	20.40	
20	64QAM	100	0	20.32	20.51	20.34	
Channel				18675	18900	19125	Tune-up limit (dBm)
Frequency (MHz)				1857.5	1880	1902.5	
15	QPSK	1	0	23.01	23.07	23.04	24
15	QPSK	1	37	22.68	22.86	22.75	
15	QPSK	1	74	22.61	22.64	22.67	
15	QPSK	36	0	21.75	21.94	21.86	23
15	QPSK	36	20	21.83	21.91	21.75	
15	QPSK	36	39	21.74	21.88	21.66	
15	QPSK	75	0	21.81	21.85	21.73	23
15	16QAM	1	0	22.23	22.32	22.16	
15	16QAM	1	37	22.17	22.23	22.22	
15	16QAM	1	74	22.06	22.08	22.00	22
15	16QAM	36	0	21.08	21.16	21.11	
15	16QAM	36	20	21.05	21.14	21.09	
15	16QAM	36	39	20.92	20.99	20.91	22
15	16QAM	75	0	20.96	21.15	21.00	
15	64QAM	1	0	21.45	21.57	21.46	
15	64QAM	1	37	21.30	21.49	21.38	22
15	64QAM	1	74	21.40	21.41	21.26	
15	64QAM	36	0	20.41	20.50	20.38	
15	64QAM	36	20	20.38	20.48	20.31	21
15	64QAM	36	39	20.16	20.36	20.32	
15	64QAM	75	0	20.24	20.43	20.26	
Channel				18650	18900	19150	Tune-up limit (dBm)
Frequency (MHz)				1855	1880	1905	
10	QPSK	1	0	22.95	23.01	22.98	24
10	QPSK	1	25	22.62	22.80	22.69	
10	QPSK	1	49	22.55	22.58	22.61	
10	QPSK	25	0	21.69	21.88	21.80	23
10	QPSK	25	12	21.77	21.85	21.69	
10	QPSK	25	25	21.68	21.82	21.60	
10	QPSK	50	0	21.75	21.79	21.67	23
10	16QAM	1	0	22.17	22.26	22.10	
10	16QAM	1	25	22.11	22.17	22.16	
10	16QAM	1	49	22.00	22.02	21.94	22
10	16QAM	25	0	21.02	21.10	21.05	
10	16QAM	25	12	20.99	21.08	21.03	
10	16QAM	25	25	20.86	20.93	20.85	22
10	16QAM	50	0	20.90	21.09	20.94	
10	64QAM	1	0	21.39	21.51	21.40	
10	64QAM	1	25	21.24	21.43	21.32	22
10	64QAM	1	49	21.34	21.35	21.20	
10	64QAM	25	0	20.35	20.44	20.32	
10	64QAM	25	12	20.32	20.42	20.25	21
10	64QAM	25	25	20.10	20.30	20.26	
10	64QAM	50	0	20.18	20.37	20.20	
Channel				18625	18900	19175	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1880	1907.5	
5	QPSK	1	0	22.93	22.99	22.96	24
5	QPSK	1	12	22.60	22.78	22.67	
5	QPSK	1	24	22.53	22.56	22.59	
5	QPSK	12	0	21.67	21.86	21.78	23
5	QPSK	12	7	21.75	21.83	21.67	
5	QPSK	12	13	21.66	21.80	21.58	
5	QPSK	25	0	21.73	21.77	21.65	23
5	16QAM	1	0	22.15	22.24	22.08	
5	16QAM	1	12	22.09	22.15	22.14	
5	16QAM	1	24	21.98	22.00	21.92	22
5	16QAM	12	0	21.00	21.08	21.03	
5	16QAM	12	7	20.97	21.06	21.01	
5	16QAM	12	13	20.84	20.91	20.83	22
5	16QAM	25	0	20.88	21.07	20.92	
5	64QAM	1	0	21.37	21.49	21.38	
5	64QAM	1	12	21.22	21.41	21.30	22
5	64QAM	1	24	21.32	21.33	21.18	
5	64QAM	12	0	20.33	20.42	20.30	
5	64QAM	12	7	20.30	20.40	20.23	21
5	64QAM	12	13	20.08	20.28	20.24	
5	64QAM	25	0	20.16	20.35	20.18	
Channel				18615	18900	19185	Tune-up limit (dBm)
Frequency (MHz)				1851.5	1880	1908.5	
3	QPSK	1	0	22.89	22.95	22.92	24
3	QPSK	1	8	22.56	22.74	22.63	
3	QPSK	1	14	22.49	22.52	22.55	

Band 4 (AWS Band) (dBm) Part 27L (only on channel required)							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				20050	20175	20300	
Frequency (MHz)				1720	1732.5	1745	
20	QPSK	1	0	22.59	22.63	22.61	23.5
20	QPSK	1	49	22.42	22.50	22.43	
20	QPSK	1	99	22.47	22.54	22.45	
20	QPSK	50	0	21.50	21.52	21.49	22.5
20	QPSK	50	24	21.49	21.50	21.40	
20	QPSK	50	50	21.40	21.45	21.35	
20	QPSK	100	0	21.42	21.47	21.44	22.5
20	16QAM	1	0	21.99	22.05	22.03	
20	16QAM	1	49	21.94	22.01	21.96	
20	16QAM	1	99	21.95	21.98	21.96	21.5
20	16QAM	50	0	20.72	20.81	20.76	
20	16QAM	50	24	20.76	20.85	20.75	
20	16QAM	50	50	20.79	20.87	20.79	21.5
20	16QAM	100	0	20.81	20.84	20.87	
20	64QAM	1	0	21.17	21.19	21.13	
20	64QAM	1	49	21.11	21.13	21.07	21.5
20	64QAM	1	99	21.16	21.17	21.13	
20	64QAM	50	0	19.85	19.93	19.91	
20	64QAM	50	24	19.81	19.91	19.87	20.5
20	64QAM	50	50	19.93	19.97	19.87	
20	64QAM	100	0	19.95	20.03	19.96	
Channel				20025	20175	20325	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1732.5	1747.5	
15	QPSK	1	0	22.53	22.57	22.55	23.5
15	QPSK	1	37	22.36	22.44	22.37	
15	QPSK	1	74	22.41	22.48	22.39	
15	QPSK	36	0	21.44	21.46	21.43	22.5
15	QPSK	36	20	21.43	21.44	21.34	
15	QPSK	36	39	21.34	21.39	21.29	
15	QPSK	75	0	21.36	21.41	21.38	22.5
15	16QAM	1	0	21.93	21.99	21.97	
15	16QAM	1	37	21.88	21.95	21.90	
15	16QAM	1	74	21.89	21.92	21.90	21.5
15	16QAM	36	0	20.66	20.75	20.70	
15	16QAM	36	20	20.70	20.79	20.69	
15	16QAM	36	39	20.73	20.81	20.73	21.5
15	16QAM	75	0	20.75	20.78	20.81	
15	64QAM	1	0	21.11	21.13	21.07	
15	64QAM	1	37	21.05	21.07	21.01	21.5
15	64QAM	1	74	21.10	21.11	21.07	
15	64QAM	36	0	19.79	19.87	19.85	
15	64QAM	36	20	19.75	19.85	19.81	20.5
15	64QAM	36	39	19.87	19.91	19.81	
15	64QAM	75	0	19.89	19.97	19.90	
Channel				20000	20175	20350	Tune-up limit (dBm)
Frequency (MHz)				1715	1732.5	1750	
10	QPSK	1	0	22.46	22.50	22.48	23.5
10	QPSK	1	25	22.29	22.37	22.30	
10	QPSK	1	49	22.34	22.41	22.32	
10	QPSK	25	0	21.37	21.39	21.36	22.5
10	QPSK	25	12	21.36	21.37	21.27	
10	QPSK	25	25	21.27	21.32	21.22	
10	QPSK	50	0	21.29	21.34	21.31	22.5
10	16QAM	1	0	21.86	21.92	21.90	
10	16QAM	1	25	21.81	21.88	21.83	
10	16QAM	1	49	21.82	21.85	21.83	22.5
10	16QAM	25	0	20.59	20.68	20.63	
10	16QAM	25	12	20.63	20.72	20.62	
10	16QAM	25	25	20.66	20.74	20.66	21.5
10	16QAM	50	0	20.68	20.71	20.74	
10	64QAM	1	0	21.04	21.06	21.00	
10	64QAM	1	25	20.98	21.00	20.94	21.5
10	64QAM	1	49	21.03	21.04	21.00	
10	64QAM	25	0	19.72	19.80	19.78	
10	64QAM	25	12	19.68	19.78	19.74	20.5
10	64QAM	25	25	19.80	19.84	19.74	
10	64QAM	50	0	19.82	19.90	19.83	
Channel				19975	20175	20375	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1732.5	1752.5	
5	QPSK	1	0	22.40	22.44	22.42	23.5
5	QPSK	1	12	22.23	22.31	22.24	
5	QPSK	1	24	22.28	22.35	22.26	
5	QPSK	12	0	21.31	21.33	21.30	22.5
5	QPSK	12	7	21.30	21.31	21.21	
5	QPSK	12	13	21.21	21.26	21.16	
5	QPSK	25	0	21.23	21.28	21.25	22.5
5	16QAM	1	0	21.80	21.86	21.84	
5	16QAM	1	12	21.75	21.82	21.77	
5	16QAM	1	24	21.76	21.79	21.77	21.5
5	16QAM	12	0	20.53	20.62	20.57	
5	16QAM	12	7	20.57	20.66	20.56	
5	16QAM	12	13	20.60	20.68	20.60	21.5
5	16QAM	25	0	20.62	20.65	20.68	
5	64QAM	1	0	20.98	21.00	20.94	
5	64QAM	1	12	20.92	20.94	20.88	21.5
5	64QAM	1	24	20.97	20.98	20.94	
5	64QAM	12	0	19.66	19.74	19.72	
5	64QAM	12	7	19.62	19.72	19.68	20.5
5	64QAM	12	13	19.74	19.78	19.68	
5	64QAM	25	0	19.76	19.84	19.77	
Channel				19985	20175	20385	Tune-up limit (dBm)
Frequency (MHz)				1711.5	1732.5	1753.5	
3	QPSK	1	0	22.34	22.38	22.36	23.5
3	QPSK	1	8	22.17	22.25	22.18	
3	QPSK	1	14	22.22	22.29	22.20	

3	QPSK	8	0	21.63	21.82	21.74	23
3	QPSK	8	4	21.71	21.79	21.63	
3	QPSK	8	7	21.62	21.76	21.54	
3	QPSK	15	0	21.69	21.73	21.61	23
3	16QAM	1	0	22.11	22.20	22.04	
3	16QAM	1	8	22.05	22.11	22.10	
3	16QAM	1	14	21.94	21.96	21.88	22
3	16QAM	8	0	20.96	21.04	20.99	
3	16QAM	8	4	20.93	21.02	20.97	
3	16QAM	8	7	20.80	20.87	20.79	22
3	16QAM	15	0	20.84	21.03	20.88	
3	64QAM	1	0	21.33	21.45	21.34	
3	64QAM	1	8	21.18	21.37	21.26	21
3	64QAM	1	14	21.28	21.29	21.14	
3	64QAM	8	0	20.29	20.38	20.26	
3	64QAM	8	4	20.26	20.36	20.19	21
3	64QAM	8	7	20.04	20.24	20.20	
3	64QAM	15	0	20.12	20.31	20.14	
Channel				18607	18900	19193	Tune-up limit (dBm)
Frequency (MHz)				1850.7	1880	1909.3	
1.4	QPSK	1	0	22.86	22.92	22.89	24
1.4	QPSK	1	3	22.53	22.71	22.60	
1.4	QPSK	1	5	22.46	22.49	22.52	
1.4	QPSK	3	0	21.60	21.79	21.71	23
1.4	QPSK	3	1	21.68	21.76	21.60	
1.4	QPSK	3	3	21.59	21.73	21.51	
1.4	QPSK	6	0	21.66	21.70	21.58	23
1.4	16QAM	1	0	22.08	22.17	22.01	
1.4	16QAM	1	3	22.02	22.08	22.07	
1.4	16QAM	1	5	21.91	21.93	21.85	22
1.4	16QAM	3	0	20.93	21.01	20.96	
1.4	16QAM	3	1	20.90	20.99	20.94	
1.4	16QAM	3	3	20.77	20.84	20.76	22
1.4	16QAM	6	0	20.81	21.00	20.85	
1.4	64QAM	1	0	21.30	21.42	21.31	
1.4	64QAM	1	3	21.15	21.34	21.23	21
1.4	64QAM	1	5	21.25	21.26	21.11	
1.4	64QAM	3	0	20.26	20.35	20.23	
1.4	64QAM	3	1	20.23	20.33	20.16	21
1.4	64QAM	3	3	20.01	20.21	20.17	
1.4	64QAM	6	0	20.09	20.28	20.11	

3	QPSK	8	0	21.25	21.27	21.24	22.5
3	QPSK	8	4	21.24	21.25	21.15	
3	QPSK	8	7	21.15	21.20	21.10	
3	QPSK	15	0	21.17	21.22	21.19	22.5
3	16QAM	1	0	21.74	21.80	21.78	
3	16QAM	1	8	21.69	21.76	21.71	
3	16QAM	1	14	21.70	21.73	21.71	21.5
3	16QAM	8	0	20.47	20.56	20.51	
3	16QAM	8	4	20.51	20.60	20.50	
3	16QAM	8	7	20.54	20.62	20.54	21.5
3	16QAM	15	0	20.56	20.59	20.62	
3	64QAM	1	0	20.92	20.94	20.88	
3	64QAM	1	8	20.86	20.88	20.82	20.5
3	64QAM	1	14	20.91	20.92	20.88	
3	64QAM	8	0	19.60	19.68	19.66	
3	64QAM	8	4	19.56	19.66	19.62	20.5
3	64QAM	8	7	19.68	19.72	19.62	
3	64QAM	15	0	19.70	19.78	19.71	
Channel				19957	20175	20393	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1732.5	1754.3	
1.4	QPSK	1	0	22.29	22.33	22.31	23.5
1.4	QPSK	1	3	22.12	22.20	22.13	
1.4	QPSK	1	5	22.17	22.24	22.15	
1.4	QPSK	3	0	21.20	21.22	21.19	22.5
1.4	QPSK	3	1	21.19	21.20	21.10	
1.4	QPSK	3	3	21.10	21.15	21.05	
1.4	QPSK	6	0	21.12	21.17	21.14	22.5
1.4	16QAM	1	0	21.69	21.75	21.73	
1.4	16QAM	1	3	21.64	21.71	21.66	
1.4	16QAM	1	5	21.65	21.68	21.66	21.5
1.4	16QAM	3	0	20.42	20.51	20.46	
1.4	16QAM	3	1	20.46	20.55	20.45	
1.4	16QAM	3	3	20.49	20.57	20.49	21.5
1.4	16QAM	6	0	20.51	20.54	20.57	
1.4	64QAM	1	0	20.87	20.89	20.83	
1.4	64QAM	1	3	20.81	20.83	20.77	21.5
1.4	64QAM	1	5	20.86	20.87	20.83	
1.4	64QAM	3	0	19.55	19.63	19.61	
1.4	64QAM	3	1	19.51	19.61	19.57	20.5
1.4	64QAM	3	3	19.63	19.67	19.57	
1.4	64QAM	6	0	19.65	19.73	19.66	

Band 5 (Cellular Band) (dBm) Part 22H(only on channel required)							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				20450	20525	20600	
Frequency (MHz)				829	836.5	844	
10	QPSK	1	0	23.09	23.14	23.11	24
10	QPSK	1	25	23.00	22.91	22.93	
10	QPSK	1	49	22.67	22.66	22.68	
10	QPSK	25	0	22.17	22.20	22.03	23
10	QPSK	25	12	22.08	22.13	21.95	
10	QPSK	25	25	21.92	22.05	21.81	
10	QPSK	50	0	21.83	21.92	21.88	23
10	16QAM	1	0	21.71	21.77	21.69	
10	16QAM	1	25	21.66	21.74	21.69	
10	16QAM	1	49	21.69	21.70	21.64	22
10	16QAM	25	0	20.50	20.57	20.50	
10	16QAM	25	12	20.40	20.48	20.39	
10	16QAM	25	25	20.45	20.50	20.47	22
10	16QAM	50	0	20.43	20.53	20.43	
10	64QAM	1	0	21.56	21.58	21.48	
10	64QAM	1	25	21.44	21.54	21.46	22
10	64QAM	1	49	21.49	21.50	21.46	
10	64QAM	25	0	20.43	20.48	20.41	
10	64QAM	25	12	20.41	20.45	20.35	21
10	64QAM	25	25	20.40	20.44	20.40	
10	64QAM	50	0	20.39	20.41	20.34	
Channel				20425	20525	20625	Tune-up limit (dBm)
Frequency (MHz)				826.5	836.5	846.5	
5	QPSK	1	0	23.04	23.09	23.06	24
5	QPSK	1	12	22.95	22.86	22.88	
5	QPSK	1	24	22.62	22.61	22.63	
5	QPSK	12	0	22.12	22.15	21.98	23
5	QPSK	12	7	22.03	22.08	21.90	
5	QPSK	12	13	21.87	22.00	21.76	
5	QPSK	25	0	21.78	21.87	21.83	23
5	16QAM	1	0	21.66	21.72	21.64	
5	16QAM	1	12	21.61	21.69	21.64	
5	16QAM	1	24	21.64	21.65	21.59	22
5	16QAM	12	0	20.45	20.52	20.45	
5	16QAM	12	7	20.35	20.43	20.34	
5	16QAM	12	13	20.40	20.45	20.42	22
5	16QAM	25	0	20.38	20.48	20.38	
5	64QAM	1	0	21.51	21.53	21.43	
5	64QAM	1	12	21.39	21.49	21.41	22
5	64QAM	1	24	21.44	21.45	21.41	
5	64QAM	12	0	20.38	20.43	20.36	
5	64QAM	12	7	20.36	20.40	20.30	21
5	64QAM	12	13	20.35	20.39	20.35	
5	64QAM	25	0	20.34	20.36	20.29	
Channel				20415	20525	20635	Tune-up limit (dBm)
Frequency (MHz)				825.5	836.5	847.5	
3	QPSK	1	0	22.99	23.04	23.01	24
3	QPSK	1	8	22.90	22.81	22.83	
3	QPSK	1	14	22.57	22.56	22.58	
3	QPSK	8	0	22.07	22.10	21.93	23
3	QPSK	8	4	21.98	22.03	21.85	
3	QPSK	8	7	21.82	21.95	21.71	
3	QPSK	15	0	21.73	21.82	21.78	23
3	16QAM	1	0	21.61	21.67	21.59	
3	16QAM	1	8	21.56	21.64	21.59	
3	16QAM	1	14	21.59	21.60	21.54	22
3	16QAM	8	0	20.40	20.47	20.40	
3	16QAM	8	4	20.30	20.38	20.29	
3	16QAM	8	7	20.35	20.40	20.37	22
3	16QAM	15	0	20.33	20.43	20.33	
3	64QAM	1	0	21.46	21.48	21.38	
3	64QAM	1	8	21.34	21.44	21.36	22
3	64QAM	1	14	21.39	21.40	21.36	
3	64QAM	8	0	20.33	20.38	20.31	
3	64QAM	8	4	20.31	20.35	20.25	21
3	64QAM	8	7	20.30	20.34	20.30	
3	64QAM	15	0	20.29	20.31	20.24	
Channel				20407	20525	20643	Tune-up limit (dBm)
Frequency (MHz)				824.7	836.5	848.3	
1.4	QPSK	1	0	22.96	23.01	22.98	24
1.4	QPSK	1	3	22.87	22.78	22.80	
1.4	QPSK	1	5	22.54	22.53	22.55	
1.4	QPSK	3	0	22.04	22.07	21.90	23
1.4	QPSK	3	1	21.95	22.00	21.82	
1.4	QPSK	3	3	21.79	21.92	21.68	
1.4	QPSK	6	0	21.70	21.79	21.75	23
1.4	16QAM	1	0	21.58	21.64	21.56	
1.4	16QAM	1	3	21.53	21.61	21.56	
1.4	16QAM	1	5	21.56	21.57	21.51	23
1.4	16QAM	3	0	20.37	20.44	20.37	
1.4	16QAM	3	1	20.27	20.35	20.26	
1.4	16QAM	3	3	20.32	20.37	20.34	22
1.4	16QAM	6	0	20.30	20.40	20.30	
1.4	64QAM	1	0	21.43	21.45	21.35	
1.4	64QAM	1	3	21.31	21.41	21.33	22
1.4	64QAM	1	5	21.36	21.37	21.33	
1.4	64QAM	3	0	20.30	20.35	20.28	
1.4	64QAM	3	1	20.28	20.32	20.22	21
1.4	64QAM	3	3	20.27	20.31	20.27	
1.4	64QAM	6	0	20.26	20.28	20.21	

Band 7 (2600MHz Band) (dBm) Part 27							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				20850	21100	21350	
Frequency (MHz)				2510	2535	2560	
20	QPSK	1	0	20.25	20.26	20.21	21
20	QPSK	1	49	20.02	20.11	20.12	
20	QPSK	1	99	19.79	19.80	19.88	
20	QPSK	50	0	18.93	19.06	19.04	20
20	QPSK	50	24	19.01	19.02	18.93	
20	QPSK	50	50	18.92	19.06	18.84	
20	QPSK	100	0	18.99	19.03	18.91	20
20	16QAM	1	0	19.32	19.41	19.25	
20	16QAM	1	49	19.26	19.32	19.31	
20	16QAM	1	99	19.15	19.17	19.09	19
20	16QAM	50	0	18.17	18.25	18.20	
20	16QAM	50	24	18.14	18.23	18.18	
20	16QAM	50	50	18.01	18.08	18.00	19
20	16QAM	100	0	18.05	18.24	18.09	
20	64QAM	1	0	18.54	18.66	18.55	
20	64QAM	1	49	18.39	18.58	18.47	19
20	64QAM	1	99	18.49	18.50	18.35	
20	64QAM	50	0	17.50	17.59	17.47	
20	64QAM	50	24	17.47	17.57	17.40	18
20	64QAM	50	50	17.25	17.45	17.41	
20	64QAM	100	0	17.33	17.52	17.35	
Channel				20825	21100	21375	
Frequency (MHz)				2507.5	2535	2562.5	
15	QPSK	1	0	20.17	20.18	20.13	21
15	QPSK	1	37	19.94	20.03	20.04	
15	QPSK	1	74	19.71	19.72	19.80	
15	QPSK	36	0	18.85	18.98	18.96	20
15	QPSK	36	20	18.93	18.94	18.85	
15	QPSK	36	39	18.84	18.98	18.76	
15	QPSK	75	0	18.91	18.95	18.83	20
15	16QAM	1	0	19.24	19.33	19.17	
15	16QAM	1	37	19.18	19.24	19.23	
15	16QAM	1	74	19.07	19.09	19.01	19
15	16QAM	36	0	18.09	18.17	18.12	
15	16QAM	36	20	18.06	18.15	18.10	
15	16QAM	36	39	17.93	18.00	17.92	19
15	16QAM	75	0	17.97	18.16	18.01	
15	64QAM	1	0	18.46	18.58	18.47	
15	64QAM	1	37	18.31	18.50	18.39	19
15	64QAM	1	74	18.41	18.42	18.27	
15	64QAM	36	0	17.42	17.51	17.39	
15	64QAM	36	20	17.39	17.49	17.32	18
15	64QAM	36	39	17.17	17.37	17.33	
15	64QAM	75	0	17.75	17.94	17.77	
Channel				20800	21100	21400	
Frequency (MHz)				2505	2535	2565	
10	QPSK	1	0	20.10	20.11	20.06	21
10	QPSK	1	25	19.87	19.96	19.97	
10	QPSK	1	49	19.64	19.65	19.73	
10	QPSK	25	0	18.78	18.91	18.89	20
10	QPSK	25	12	18.86	18.87	18.78	
10	QPSK	25	25	18.77	18.91	18.69	
10	QPSK	50	0	18.84	18.88	18.76	20
10	16QAM	1	0	19.17	19.26	19.10	
10	16QAM	1	25	19.11	19.17	19.16	
10	16QAM	1	49	19.00	19.02	18.94	19
10	16QAM	25	0	18.02	18.10	18.05	
10	16QAM	25	12	17.99	18.08	18.03	
10	16QAM	25	25	17.86	17.93	17.85	19
10	16QAM	50	0	17.90	18.09	17.94	
10	64QAM	1	0	18.39	18.51	18.40	
10	64QAM	1	25	18.24	18.43	18.32	19
10	64QAM	1	49	18.34	18.35	18.20	
10	64QAM	25	0	17.35	17.44	17.32	
10	64QAM	25	12	17.32	17.42	17.25	18
10	64QAM	25	25	17.10	17.30	17.26	
10	64QAM	50	0	17.68	17.87	17.70	
Channel				20775	21100	21425	
Frequency (MHz)				2502.5	2535	2567.5	
5	QPSK	1	0	20.04	20.05	20.00	21
5	QPSK	1	12	19.81	19.90	19.91	
5	QPSK	1	24	19.58	19.59	19.67	
5	QPSK	12	0	18.72	18.85	18.83	20
5	QPSK	12	7	18.80	18.81	18.72	
5	QPSK	12	13	18.71	18.85	18.63	
5	QPSK	25	0	18.78	18.82	18.70	20
5	16QAM	1	0	19.11	19.20	19.04	
5	16QAM	1	12	19.05	19.11	19.10	
5	16QAM	1	24	18.94	18.96	18.88	19
5	16QAM	12	0	17.96	18.04	17.99	
5	16QAM	12	7	17.93	18.02	17.97	
5	16QAM	12	13	17.80	17.87	17.79	19
5	16QAM	25	0	17.84	18.03	17.88	
5	64QAM	1	0	18.33	18.45	18.34	
5	64QAM	1	12	18.18	18.37	18.26	19
5	64QAM	1	24	18.28	18.29	18.14	
5	64QAM	12	0	17.29	17.38	17.26	
5	64QAM	12	7	17.26	17.36	17.19	18
5	64QAM	12	13	17.04	17.24	17.20	
5	64QAM	25	0	17.62	17.81	17.64	

Band 12 (700MHz Low Band) (dBm) Part 27F(only on channel required)							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				23060	23095	23130	24
Frequency (MHz)				704	707.5	711	
10	QPSK	1	0	23.14	23.16	23.09	24
10	QPSK	1	25	23.13	23.15	23.08	
10	QPSK	1	49	23.05	23.12	23.09	
10	QPSK	25	0	22.19	22.31	22.20	23
10	QPSK	25	12	22.23	22.17	22.15	
10	QPSK	25	25	22.20	22.23	22.16	
10	QPSK	50	0	22.23	22.24	22.13	23
10	16QAM	1	0	22.50	22.41	22.24	
10	16QAM	1	25	22.38	22.47	22.42	
10	16QAM	1	49	22.48	22.25	22.52	22
10	16QAM	25	0	21.19	21.14	21.18	
10	16QAM	25	12	21.40	21.25	21.24	
10	16QAM	25	25	21.27	21.30	21.32	22
10	16QAM	50	0	21.25	21.27	21.23	
10	64QAM	1	0	21.35	21.49	21.44	
10	64QAM	1	25	21.38	21.42	21.32	22
10	64QAM	1	49	21.48	21.36	21.18	
10	64QAM	25	0	20.33	20.22	20.22	
10	64QAM	25	12	20.16	20.17	20.24	21
10	64QAM	25	25	20.29	20.22	20.27	
10	64QAM	50	0	20.21	20.24	20.23	
Channel				23035	23095	23155	24
Frequency (MHz)				701.5	707.5	713.5	
5	QPSK	1	0	23.06	23.08	23.01	24
5	QPSK	1	12	23.05	23.07	23.00	
5	QPSK	1	24	22.97	23.04	23.01	
5	QPSK	12	0	22.11	22.23	22.12	23
5	QPSK	12	7	22.15	22.09	22.07	
5	QPSK	12	13	22.12	22.15	22.08	
5	QPSK	25	0	22.15	22.16	22.05	23
5	16QAM	1	0	22.42	22.33	22.16	
5	16QAM	1	12	22.30	22.39	22.34	
5	16QAM	1	24	22.40	22.17	22.44	22
5	16QAM	12	0	21.11	21.06	21.10	
5	16QAM	12	7	21.32	21.17	21.16	
5	16QAM	12	13	21.19	21.22	21.24	22
5	16QAM	25	0	21.17	21.19	21.15	
5	64QAM	1	0	21.27	21.41	21.36	
5	64QAM	1	12	21.30	21.34	21.24	22
5	64QAM	1	24	21.40	21.28	21.10	
5	64QAM	12	0	20.25	20.14	20.14	
5	64QAM	12	7	20.08	20.09	20.16	21
5	64QAM	12	13	20.21	20.14	20.19	
5	64QAM	25	0	20.13	20.16	20.15	
Channel				23025	23095	23165	24
Frequency (MHz)				700.5	707.5	714.5	
3	QPSK	1	0	22.99	23.01	22.94	24
3	QPSK	1	8	22.98	23.00	22.93	
3	QPSK	1	14	22.90	22.97	22.94	
3	QPSK	8	0	22.04	22.16	22.05	23
3	QPSK	8	4	22.08	22.02	22.00	
3	QPSK	8	7	22.05	22.08	22.01	
3	QPSK	15	0	22.08	22.09	21.98	23
3	16QAM	1	0	22.35	22.26	22.09	
3	16QAM	1	8	22.23	22.32	22.27	
3	16QAM	1	14	22.33	22.10	22.37	22
3	16QAM	8	0	21.04	20.99	21.03	
3	16QAM	8	4	21.25	21.10	21.09	
3	16QAM	8	7	21.12	21.15	21.17	22
3	16QAM	15	0	21.10	21.12	21.08	
3	64QAM	1	0	21.20	21.34	21.29	
3	64QAM	1	8	21.23	21.27	21.17	22
3	64QAM	1	14	21.33	21.21	21.03	
3	64QAM	8	0	20.18	20.07	20.07	
3	64QAM	8	4	20.01	20.02	20.09	21
3	64QAM	8	7	20.14	20.07	20.12	
3	64QAM	15	0	20.06	20.09	20.08	
Channel				23017	23095	23173	24
Frequency (MHz)				699.7	707.5	715.3	
1.4	QPSK	1	0	22.92	22.94	22.87	24
1.4	QPSK	1	3	22.91	22.93	22.86	
1.4	QPSK	1	5	22.83	22.90	22.87	
1.4	QPSK	3	0	21.97	22.09	21.98	23
1.4	QPSK	3	1	22.01	21.95	21.93	
1.4	QPSK	3	3	21.98	22.01	21.94	
1.4	QPSK	6	0	22.01	22.02	21.91	23
1.4	16QAM	1	0	22.28	22.19	22.02	
1.4	16QAM	1	3	22.16	22.25	22.20	
1.4	16QAM	1	5	22.26	22.03	22.30	22
1.4	16QAM	3	0	20.97	20.92	20.96	
1.4	16QAM	3	1	21.18	21.03	21.02	
1.4	16QAM	3	3	21.05	21.08	21.10	22
1.4	16QAM	6	0	21.03	21.05	21.01	
1.4	64QAM	1	0	21.13	21.27	21.22	
1.4	64QAM	1	3	21.16	21.20	21.10	22
1.4	64QAM	1	5	21.26	21.14	20.96	
1.4	64QAM	3	0	20.11	20.00	20.00	
1.4	64QAM	3	1	19.94	19.95	20.02	21
1.4	64QAM	3	3	20.07	20.00	20.05	
1.4	64QAM	6	0	19.99	20.02	20.01	21

Band 13(700MHz Band) (dBm)							
Part 27F							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				23230			
Frequency (MHz)				782			
10	QPSK	1	0		23.37		24.5
10	QPSK	1	25		23.34		
10	QPSK	1	49		23.24		
10	QPSK	25	0		22.42		23.5
10	QPSK	25	12		22.34		
10	QPSK	25	25		22.35		
10	QPSK	50	0		22.36		23.5
10	16QAM	1	0		22.51		
10	16QAM	1	25		22.48		
10	16QAM	1	49		22.59		22.5
10	16QAM	25	0		21.45		
10	16QAM	25	12		21.45		
10	16QAM	25	25		21.37		22.5
10	16QAM	50	0		21.41		
10	64QAM	1	0		21.53		
10	64QAM	1	25		21.62		22.5
10	64QAM	1	49		21.56		
10	64QAM	25	0		21.43		
10	64QAM	25	12		21.40		21.5
10	64QAM	25	25		21.44		
10	64QAM	50	0		21.35		
Channel				23205	23230	23255	Tune-up limit (dBm)
Frequency (MHz)				779.5	782	784.5	
5	QPSK	1	0	23.26	23.27	23.24	24.5
5	QPSK	1	12	23.21	23.17	23.23	
5	QPSK	1	24	23.08	23.05	23.14	
5	QPSK	12	0	22.31	22.27	22.28	23.5
5	QPSK	12	7	22.26	22.23	22.26	
5	QPSK	12	13	22.25	22.23	22.17	
5	QPSK	25	0	22.17	22.23	22.17	23.5
5	16QAM	1	0	22.40	22.41	22.40	
5	16QAM	1	12	22.31	22.37	22.31	
5	16QAM	1	24	22.44	22.41	22.42	22.5
5	16QAM	12	0	21.31	21.32	21.34	
5	16QAM	12	7	21.27	21.28	21.30	
5	16QAM	12	13	21.20	21.23	21.26	22.5
5	16QAM	25	0	21.29	21.22	21.29	
5	64QAM	1	0	21.42	21.36	21.42	
5	64QAM	1	12	21.44	21.49	21.51	22.5
5	64QAM	1	24	21.37	21.40	21.37	
5	64QAM	12	0	21.33	21.33	21.24	
5	64QAM	12	7	21.26	21.21	21.28	21.5
5	64QAM	12	13	21.33	21.31	21.28	
5	64QAM	25	0	21.20	21.23	21.22	

Band 17 (700MHz Band) (dBm) Part 27H(only on channel required)							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				23780	23790	23800	
Frequency (MHz)				709	710	711	
10	QPSK	1	0	23.10	23.12	22.97	24
10	QPSK	1	25	23.09	23.11	23.07	
10	QPSK	1	49	23.00	23.08	23.10	
10	QPSK	25	0	22.20	22.21	22.19	23
10	QPSK	25	12	22.17	22.16	22.16	
10	QPSK	25	25	22.18	22.12	22.13	
10	QPSK	50	0	22.19	22.17	22.17	23
10	16QAM	1	0	22.31	22.47	22.14	
10	16QAM	1	25	22.13	22.19	22.24	
10	16QAM	1	49	22.27	22.33	22.35	22
10	16QAM	25	0	21.20	21.24	21.12	
10	16QAM	25	12	21.26	21.28	21.27	
10	16QAM	25	25	21.28	21.22	21.21	22
10	16QAM	50	0	21.13	21.17	21.18	
10	64QAM	1	0	21.18	21.37	21.26	
10	64QAM	1	25	21.41	21.45	21.32	22
10	64QAM	1	49	21.26	21.25	21.23	
10	64QAM	25	0	20.34	20.46	20.35	
10	64QAM	25	12	20.33	20.40	20.37	21
10	64QAM	25	25	20.41	20.44	20.40	
10	64QAM	50	0	20.37	20.33	20.38	
Channel				23755	23790	23825	Tune-up limit (dBm)
Frequency (MHz)				706.5	710	713.5	
5	QPSK	1	0	23.04	23.06	22.91	24
5	QPSK	1	12	23.03	23.05	23.01	
5	QPSK	1	24	22.94	23.02	23.04	
5	QPSK	12	0	22.14	22.15	22.13	23
5	QPSK	12	7	22.11	22.10	22.10	
5	QPSK	12	13	22.12	22.06	22.07	
5	QPSK	25	0	22.13	22.11	22.11	23
5	16QAM	1	0	22.25	22.41	22.08	
5	16QAM	1	12	22.07	22.13	22.18	
5	16QAM	1	24	22.21	22.27	22.29	22
5	16QAM	12	0	21.14	21.18	21.06	
5	16QAM	12	7	21.20	21.22	21.21	
5	16QAM	12	13	21.22	21.16	21.15	22
5	16QAM	25	0	21.07	21.11	21.12	
5	64QAM	1	0	21.12	21.31	21.20	
5	64QAM	1	12	21.35	21.39	21.26	22
5	64QAM	1	24	21.20	21.19	21.17	
5	64QAM	12	0	20.28	20.40	20.29	
5	64QAM	12	7	20.27	20.34	20.31	21
5	64QAM	12	13	20.35	20.38	20.34	
5	64QAM	25	0	20.31	20.27	20.32	

Band 66 (dBm)							
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	23.30	23.31	23.26	24.5
20	QPSK	1	49	23.28	23.22	23.29	
20	QPSK	1	99	23.27	23.29	22.96	
20	QPSK	50	0	22.39	22.42	22.33	23.5
20	QPSK	50	24	22.35	22.39	22.25	
20	QPSK	50	50	22.40	22.41	22.35	
20	QPSK	100	0	22.37	22.31	22.28	23.5
20	16QAM	1	0	22.39	22.23	22.37	
20	16QAM	1	49	22.23	22.26	22.24	
20	16QAM	1	99	22.10	22.20	22.15	22.5
20	16QAM	50	0	21.36	21.37	21.30	
20	16QAM	50	24	21.09	21.30	21.29	
20	16QAM	50	50	21.35	21.38	21.36	22.5
20	16QAM	100	0	21.41	21.40	21.34	
20	64QAM	1	0	21.26	21.38	21.39	
20	64QAM	1	49	21.42	21.38	21.35	22.5
20	64QAM	1	99	21.25	21.23	21.11	
20	64QAM	50	0	20.50	20.40	20.44	
20	64QAM	50	24	20.41	20.43	20.32	21.5
20	64QAM	50	50	20.45	20.47	20.43	
20	64QAM	100	0	20.41	20.51	20.36	
Channel				132047	132322	132597	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1745	1772.5	
15	QPSK	1	0	23.24	23.25	23.20	24.5
15	QPSK	1	37	23.22	23.16	23.23	
15	QPSK	1	74	23.21	23.23	22.90	
15	QPSK	36	0	22.33	22.36	22.27	23.5
15	QPSK	36	20	22.29	22.33	22.19	
15	QPSK	36	39	22.34	22.35	22.29	
15	QPSK	75	0	22.31	22.25	22.22	23.5
15	16QAM	1	0	22.33	22.17	22.31	
15	16QAM	1	37	22.17	22.20	22.18	
15	16QAM	1	74	22.04	22.14	22.09	22.5
15	16QAM	36	0	21.30	21.31	21.24	
15	16QAM	36	20	21.03	21.24	21.23	
15	16QAM	36	39	21.29	21.32	21.30	22.5
15	16QAM	75	0	21.35	21.34	21.28	
15	64QAM	1	0	21.20	21.32	21.33	
15	64QAM	1	37	21.36	21.32	21.29	22.5
15	64QAM	1	74	21.19	21.17	21.05	
15	64QAM	36	0	20.44	20.34	20.38	
15	64QAM	36	20	20.35	20.37	20.26	21.5
15	64QAM	36	39	20.39	20.41	20.37	
15	64QAM	75	0	20.35	20.45	20.30	
Channel				132022	132322	132622	Tune-up limit (dBm)
Frequency (MHz)				1715	1745	1775	
10	QPSK	1	0	23.17	23.18	23.13	24.5
10	QPSK	1	25	23.15	23.09	23.16	
10	QPSK	1	49	23.14	23.16	22.83	
10	QPSK	25	0	22.26	22.29	22.20	23.5
10	QPSK	25	12	22.22	22.26	22.12	
10	QPSK	25	25	22.27	22.28	22.22	
10	QPSK	50	0	22.24	22.18	22.15	23.5
10	16QAM	1	0	22.26	22.10	22.24	
10	16QAM	1	25	22.10	22.13	22.11	
10	16QAM	1	49	21.97	22.07	22.02	22.5
10	16QAM	25	0	21.23	21.24	21.17	
10	16QAM	25	12	20.96	21.17	21.16	
10	16QAM	25	25	21.22	21.25	21.23	22.5
10	16QAM	50	0	21.28	21.27	21.21	
10	64QAM	1	0	21.13	21.25	21.26	
10	64QAM	1	25	21.29	21.25	21.22	22.5
10	64QAM	1	49	21.12	21.10	20.98	
10	64QAM	25	0	20.37	20.27	20.31	
10	64QAM	25	12	20.28	20.30	20.19	21.5
10	64QAM	25	25	20.32	20.34	20.30	
10	64QAM	50	0	20.28	20.38	20.23	
Channel				131997	132322	132647	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1745	1777.5	
5	QPSK	1	0	23.09	23.10	23.05	24.5
5	QPSK	1	12	23.07	23.01	23.08	
5	QPSK	1	24	23.06	23.08	22.75	
5	QPSK	12	0	22.18	22.21	22.12	23.5
5	QPSK	12	7	22.14	22.18	22.04	
5	QPSK	12	13	22.19	22.20	22.14	
5	QPSK	25	0	22.16	22.10	22.07	23.5
5	16QAM	1	0	22.18	22.02	22.16	
5	16QAM	1	12	22.02	22.05	22.03	
5	16QAM	1	24	21.89	21.99	21.94	22.5
5	16QAM	12	0	21.15	21.16	21.09	
5	16QAM	12	7	20.88	21.09	21.08	
5	16QAM	12	13	21.14	21.17	21.15	22.5
5	16QAM	25	0	21.20	21.19	21.13	
5	64QAM	1	0	21.05	21.17	21.18	
5	64QAM	1	12	21.21	21.17	21.14	22.5
5	64QAM	1	24	21.04	21.02	20.90	
5	64QAM	12	0	20.29	20.19	20.23	
5	64QAM	12	7	20.20	20.22	20.11	21.5
5	64QAM	12	13	20.24	20.26	20.22	
5	64QAM	25	0	20.20	20.30	20.15	
Channel				131987	132322	132657	Tune-up limit (dBm)
Frequency (MHz)				1711.5	1745	1778.5	
3	QPSK	1	0	23.02	23.03	22.98	24.5
3	QPSK	1	8	23.00	22.94	23.01	
3	QPSK	1	14	22.99	23.01	22.68	

3	QPSK	8	0	22.11	22.14	22.05	23.5
3	QPSK	8	4	22.07	22.11	21.97	
3	QPSK	8	7	22.12	22.13	22.07	
3	QPSK	15	0	22.09	22.03	22.00	
3	16QAM	1	0	22.11	21.95	22.09	23.5
3	16QAM	1	8	21.95	21.98	21.96	
3	16QAM	1	14	21.82	21.92	21.87	
3	16QAM	8	0	21.08	21.09	21.02	
3	16QAM	8	4	20.81	21.02	21.01	22.5
3	16QAM	8	7	21.07	21.10	21.08	
3	16QAM	15	0	21.13	21.12	21.06	
3	64QAM	1	0	20.98	21.10	21.11	
3	64QAM	1	8	21.14	21.10	21.07	22.5
3	64QAM	1	14	20.97	20.95	20.83	
3	64QAM	8	0	20.22	20.12	20.16	
3	64QAM	8	4	20.13	20.15	20.04	
3	64QAM	8	7	20.17	20.19	20.15	21.5
3	64QAM	15	0	20.13	20.23	20.08	
Channel				131979	132322	132685	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1745	1779.3	
1.4	QPSK	1	0	23.00	23.01	22.96	24.5
1.4	QPSK	1	3	22.98	22.92	22.99	
1.4	QPSK	1	5	22.97	22.99	22.66	
1.4	QPSK	3	0	22.09	22.12	22.03	
1.4	QPSK	3	1	22.05	22.09	21.95	
1.4	QPSK	3	3	22.10	22.11	22.05	
1.4	QPSK	6	0	22.07	22.01	21.98	23.5
1.4	16QAM	1	0	22.09	21.93	22.07	23.5
1.4	16QAM	1	3	21.93	21.96	21.94	
1.4	16QAM	1	5	21.80	21.90	21.85	
1.4	16QAM	3	0	21.06	21.07	21.00	
1.4	16QAM	3	1	20.79	21.00	20.99	
1.4	16QAM	3	3	21.05	21.08	21.06	
1.4	16QAM	6	0	21.11	21.10	21.04	22.5
1.4	64QAM	1	0	20.96	21.08	21.09	22.5
1.4	64QAM	1	3	21.12	21.08	21.05	
1.4	64QAM	1	5	20.95	20.93	20.81	
1.4	64QAM	3	0	20.20	20.10	20.14	
1.4	64QAM	3	1	20.11	20.13	20.02	
1.4	64QAM	3	3	20.15	20.17	20.13	
1.4	64QAM	6	0	20.11	20.21	20.06	21.5

Band 38(only on channel required) (dBm)							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				37850	38000	38150	
Frequency (MHz)				2580	2595	2610	
20	QPSK	1	0	23.09	23.13	23.11	24
20	QPSK	1	49	22.96	23.09	22.93	
20	QPSK	1	99	23.08	23.05	22.87	
20	QPSK	50	0	22.08	22.15	22.10	23
20	QPSK	50	24	22.11	22.12	21.98	
20	QPSK	50	50	22.08	22.01	21.94	
20	QPSK	100	0	22.11	22.14	22.01	23
20	16QAM	1	0	22.21	22.22	22.10	
20	16QAM	1	49	22.11	22.14	22.18	
20	16QAM	1	99	22.03	22.07	22.04	22
20	16QAM	50	0	21.08	21.15	20.96	
20	16QAM	50	24	21.16	21.11	21.13	
20	16QAM	50	50	20.98	21.03	20.96	22
20	16QAM	100	0	21.07	21.08	21.02	
20	64QAM	1	0	21.12	21.19	21.10	
20	64QAM	1	49	20.94	21.02	21.05	22
20	64QAM	1	99	21.01	21.03	21.04	
20	64QAM	50	0	21.00	21.05	21.00	
20	64QAM	50	24	21.04	21.00	20.96	22
20	64QAM	50	50	20.91	20.98	20.85	
20	64QAM	100	0	20.83	21.01	20.87	
Channel				37825	38000	38175	Tune-up limit (dBm)
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	23.02	23.06	23.04	24
15	QPSK	1	37	22.89	23.02	22.86	
15	QPSK	1	74	23.01	22.98	22.80	
15	QPSK	36	0	22.01	22.08	22.03	23
15	QPSK	36	20	22.04	22.05	21.91	
15	QPSK	36	39	22.01	21.94	21.87	
15	QPSK	75	0	22.04	22.07	21.94	23
15	16QAM	1	0	22.14	22.15	22.03	
15	16QAM	1	37	22.04	22.07	22.11	
15	16QAM	1	74	21.96	22.00	21.97	22
15	16QAM	36	0	21.01	21.08	20.89	
15	16QAM	36	20	21.09	21.04	21.06	
15	16QAM	36	39	20.91	20.96	20.89	22
15	16QAM	75	0	21.00	21.01	20.95	
15	64QAM	1	0	21.05	21.12	21.03	
15	64QAM	1	37	20.87	20.95	20.98	22
15	64QAM	1	74	20.94	20.96	20.97	
15	64QAM	36	0	20.93	20.98	20.93	
15	64QAM	36	20	20.97	20.93	20.89	22
15	64QAM	36	39	20.84	20.91	20.78	
15	64QAM	75	0	20.76	20.94	20.80	
Channel				37800	38000	38200	Tune-up limit (dBm)
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	22.96	23.00	22.98	24
10	QPSK	1	25	22.83	22.96	22.80	
10	QPSK	1	49	22.95	22.92	22.74	
10	QPSK	25	0	21.95	22.02	21.97	23
10	QPSK	25	12	21.98	21.99	21.85	
10	QPSK	25	25	21.95	21.88	21.81	
10	QPSK	50	0	21.98	22.01	21.88	23
10	16QAM	1	0	22.08	22.09	21.97	
10	16QAM	1	25	21.98	22.01	22.05	
10	16QAM	1	49	21.90	21.94	21.91	22
10	16QAM	25	0	20.95	21.02	20.83	
10	16QAM	25	12	21.03	20.98	21.00	
10	16QAM	25	25	20.85	20.90	20.83	22
10	16QAM	50	0	20.94	20.95	20.89	
10	64QAM	1	0	20.99	21.06	20.97	
10	64QAM	1	25	20.81	20.89	20.92	22
10	64QAM	1	49	20.88	20.90	20.91	
10	64QAM	25	0	20.87	20.92	20.87	
10	64QAM	25	12	20.91	20.87	20.83	22
10	64QAM	25	25	20.78	20.85	20.72	
10	64QAM	50	0	20.70	20.88	20.74	
Channel				37775	38000	38225	Tune-up limit (dBm)
Frequency (MHz)				2572.5	2595	2617.5	
5	QPSK	1	0	22.91	22.95	22.93	24
5	QPSK	1	12	22.78	22.91	22.75	
5	QPSK	1	24	22.90	22.87	22.69	
5	QPSK	12	0	21.90	21.97	21.92	23
5	QPSK	12	7	21.93	21.94	21.80	
5	QPSK	12	13	21.90	21.83	21.76	
5	QPSK	25	0	21.93	21.96	21.83	23
5	16QAM	1	0	22.03	22.04	21.92	
5	16QAM	1	12	21.93	21.96	22.00	
5	16QAM	1	24	21.85	21.89	21.86	22
5	16QAM	12	0	20.90	20.97	20.78	
5	16QAM	12	7	20.98	20.93	20.95	
5	16QAM	12	13	20.80	20.85	20.78	22
5	16QAM	25	0	20.89	20.90	20.84	
5	64QAM	1	0	20.94	21.01	20.92	
5	64QAM	1	12	20.76	20.84	20.87	22
5	64QAM	1	24	20.83	20.85	20.86	
5	64QAM	12	0	20.82	20.87	20.82	
5	64QAM	12	7	20.86	20.82	20.78	22
5	64QAM	12	13	20.73	20.80	20.67	
5	64QAM	25	0	20.65	20.83	20.69	

Band 40 (2.3G Band-1) (dBm) Part 27D-1 2305MHz ~ 2315MHz							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				38750			
Frequency (MHz)				2310			
10	QPSK	1	0	22.68			23.5
10	QPSK	1	25	22.64			
10	QPSK	1	49	22.59			
10	QPSK	25	0	21.81			22.5
10	QPSK	25	12	21.69			
10	QPSK	25	25	21.73			
10	QPSK	50	0	21.75			22.5
10	16QAM	1	0	21.78			
10	16QAM	1	25	21.74			
10	16QAM	1	49	21.71			21.5
10	16QAM	25	0	20.83			
10	16QAM	25	12	20.79			
10	16QAM	25	25	20.70			21.5
10	16QAM	50	0	20.76			
10	64QAM	1	0	20.77			
10	64QAM	1	25	20.74			21.5
10	64QAM	1	49	20.68			
10	64QAM	25	0	19.82			
10	64QAM	25	12	19.73			20.5
10	64QAM	25	25	19.75			
10	64QAM	50	0	19.66			
Channel				38725	38750	38775	Tune-up limit (dBm)
Frequency (MHz)				2307.5	2310	2312.5	
5	QPSK	1	0	22.53	22.56	22.49	23.5
5	QPSK	1	12	22.48	22.54	22.45	
5	QPSK	1	24	22.38	22.50	22.51	
5	QPSK	12	0	21.67	21.78	21.68	22.5
5	QPSK	12	7	21.66	21.63	21.50	
5	QPSK	12	13	21.50	21.74	21.52	
5	QPSK	25	0	21.71	21.79	21.58	22.5
5	16QAM	1	0	21.73	21.71	21.61	
5	16QAM	1	12	21.50	21.47	21.62	
5	16QAM	1	24	21.55	21.56	21.40	22.5
5	16QAM	12	0	20.65	20.77	20.74	
5	16QAM	12	7	20.48	20.58	20.51	
5	16QAM	12	13	20.51	20.75	20.46	21.5
5	16QAM	25	0	20.64	20.68	20.65	
5	64QAM	1	0	20.66	20.82	20.65	
5	64QAM	1	12	20.76	20.59	20.59	21.5
5	64QAM	1	24	20.55	20.60	20.69	
5	64QAM	12	0	19.56	19.73	19.78	
5	64QAM	12	7	19.70	19.71	19.69	20.5
5	64QAM	12	13	19.68	19.72	19.76	
5	64QAM	25	0	19.48	19.59	19.58	

Band 40 (2.3G Band-2) (dBm)							
Part 27D-2 2350MHz ~ 2360MHz							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				39200			Tune-up limit (dBm)
Frequency (MHz)				2355			
10	QPSK	1	0	22.47			23.5
10	QPSK	1	25	22.43			
10	QPSK	1	49	22.34			
10	QPSK	25	0	21.58			22.5
10	QPSK	25	12	21.44			
10	QPSK	25	25	21.49			
10	QPSK	50	0	21.41			22.5
10	16QAM	1	0	21.50			
10	16QAM	1	25	21.49			
10	16QAM	1	49	21.40			21.5
10	16QAM	25	0	20.46			
10	16QAM	25	12	20.57			
10	16QAM	25	25	20.43			21.5
10	16QAM	50	0	20.50			
10	64QAM	1	0	20.52			21.5
10	64QAM	1	25	20.48			
10	64QAM	1	49	20.41			20.5
10	64QAM	25	0	19.60			
10	64QAM	25	12	19.56			
10	64QAM	25	25	19.47			20.5
10	64QAM	50	0	19.52			
Channel				39175	39200	39225	Tune-up limit (dBm)
Frequency (MHz)				2352.5	2355	2357.5	
5	QPSK	1	0	22.37	22.40	22.35	23.5
5	QPSK	1	12	22.21	22.38	22.24	
5	QPSK	1	24	22.29	22.27	22.11	
5	QPSK	12	0	21.48	21.58	21.55	22.5
5	QPSK	12	7	21.32	21.58	21.35	
5	QPSK	12	13	21.38	21.36	21.30	
5	QPSK	25	0	21.32	21.46	21.33	22.5
5	16QAM	1	0	21.48	21.45	21.43	
5	16QAM	1	12	21.33	21.46	21.44	
5	16QAM	1	24	21.29	21.30	21.33	21.5
5	16QAM	12	0	20.44	20.49	20.48	
5	16QAM	12	7	20.48	20.35	20.35	
5	16QAM	12	13	20.42	20.33	20.50	21.5
5	16QAM	25	0	20.37	20.50	20.31	
5	64QAM	1	0	20.46	20.60	20.38	
5	64QAM	1	12	20.39	20.53	20.39	21.5
5	64QAM	1	24	20.38	20.43	20.36	
5	64QAM	12	0	19.37	19.41	19.49	20.5
5	64QAM	12	7	19.33	19.51	19.45	
5	64QAM	12	13	19.40	19.30	19.30	
5	64QAM	25	0	19.23	19.36	19.35	

2.4GHz WLAN ANT 1

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Power Setting	Duty Cycle %
2.4GHz WLAN ANT 1	802.11b 1Mbps	CH 1	2412	17.59	18.50	default	97.85
		CH 6	2437	16.86	17.50	default	97.97
		CH 11	2462	16.53	17.50	default	97.97
	802.11g 6Mbps	CH 1	2412	16.42	17.50	default	89.12
		CH 6	2437	16.00	17.00	default	89.12
		CH 11	2462	15.77	16.50	default	83.25
	802.11n-HT20 MCS0	CH 1	2412	14.71	15.50	default	87.87
		CH 6	2437	14.28	15.00	default	86.71
		CH 11	2462	13.99	15.00	default	82.93
	802.11n-HT40 MCS0	CH 3	2422	14.19	15.00	default	76.50
		CH 6	2437	13.90	15.00	default	77.57
		CH 9	2452	12.81	13.50	default	78.34

5GHz WLAN ANT 1

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Power Setting	Duty Cycle %
5.2GHz WLAN ANT 1	802.11a 6Mbps	CH 36	5180	17.88	18.50	default	89.10
		CH 44	5220	17.59	18.50	default	88.61
		CH 48	5240	17.25	18.00	default	84.34
	802.11n-HT20 MCS0	CH 36	5180	16.58	17.50	default	88.06
		CH 44	5220	16.32	17.50	default	87.41
		CH 48	5240	16.02	17.00	default	87.31
	802.11n-HT40 MCS0	CH 38	5190	16.81	17.50	default	77.63
		CH 46	5230	16.42	17.50	default	69.88
		CH 36	5180	16.38	17.50	default	86.76
	802.11ac-VHT20 MCS0	CH 44	5220	16.13	17.00	default	83.22
		CH 48	5240	15.85	16.50	default	85.00
		CH 38	5190	16.56	17.50	default	74.68
	802.11ac-VHT40 MCS0	CH 46	5230	16.22	17.00	default	77.63
		CH 42	5210	16.53	17.50	default	65.22

5GHz WLAN ANT 1

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Power Setting	Duty Cycle %
5.3GHz WLAN ANT 1	802.11a 6Mbps	CH 52	5260	18.27	19.00	default	88.54
		CH 60	5300	17.58	18.50	default	89.10
		CH 64	5320	17.24	18.00	default	88.54
	802.11n-HT20 MCS0	CH 52	5260	16.98	18.00	default	88.06
		CH 60	5300	16.30	17.00	default	84.17
		CH 64	5320	15.96	17.00	default	85.51
	802.11n-HT40 MCS0	CH 54	5270	16.95	18.00	default	77.63
		CH 62	5310	16.49	17.50	default	73.42
		CH 52	5260	16.77	17.50	default	87.50
	802.11ac-VHT20 MCS0	CH 60	5300	16.08	17.00	default	87.41
		CH 64	5320	15.74	16.50	default	87.41
		CH 54	5270	16.73	17.50	default	77.63
	802.11ac-VHT40 MCS0	CH 62	5310	16.23	17.00	default	78.67
		802.11ac-VHT80 MCS0	CH 58	5290	16.56	17.50	default

5GHz WLAN ANT 1

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Power Setting	Duty Cycle %
5.5GHz WLAN ANT 1	802.11a 6Mbps	CH 100	5500	18.53	19.50	default	89.10
		CH 118	5580	18.43	19.50	default	88.54
		CH 140	5700	17.21	18.00	default	89.17
	802.11n-HT20 MCS0	CH 100	5500	17.33	18.00	default	86.67
		CH 118	5580	17.26	18.00	default	87.41
		CH 140	5700	15.98	17.00	default	85.40
	802.11n-HT40 MCS0	CH 102	5510	17.55	18.50	default	78.67
		CH 112	5550	17.74	18.50	default	73.42
		CH 136	5670	16.44	17.50	default	69.05
	802.11ac-VHT20 MCS0	CH 100	5500	17.07	18.00	default	86.86
		CH 118	5580	16.96	18.00	default	87.50
		CH 140	5700	15.77	16.50	default	88.15
	802.11ac-VHT40 MCS0	CH 102	5510	17.51	18.50	default	76.62
		CH 112	5550	17.68	18.50	default	75.95
		CH 136	5670	16.36	17.00	default	78.67
	802.11ac-VHT80 MCS0	CH 106	5530	17.27	18.00	default	64.44
		CH 122	5610	17.13	18.00	default	59.18

5GHz WLAN ANT 1

5.8GHz WLAN ANT 1							
5.8GHz WLAN ANT 1	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Power Setting	Duty Cycle %
	802.11a 6Mbps	CH 149	5745	16.93	18.00	default	89.17
		CH 157	5785	16.93	18.00	default	87.42
		CH 165	5825	17.84	18.50	default	84.76
	802.11n-HT20 MCS0	CH 149	5745	15.74	16.50	default	87.31
		CH 157	5785	15.63	16.50	default	87.31
		CH 165	5825	16.55	17.50	default	86.67
	802.11n-HT40 MCS0	CH 151	5755	15.93	17.00	default	93.65
		CH 159	5795	16.31	17.00	default	77.33
		CH 149	5745	15.55	16.50	default	88.06
	802.11ac-VHT20 MCS0	CH 157	5785	15.46	16.50	default	87.41
		CH 165	5825	16.32	17.00	default	87.50
		CH 151	5755	16.08	17.00	default	73.75
	802.11ac-VHT40 MCS0	CH 159	5795	16.17	17.00	default	77.63
CH 155		5775	15.82	16.50	default	61.70	

Mode	Channel	Frequency (MHz)	Average power (dBm)								
			1Mbps	Tune-up Limit	Duty Cycle %	2Mbps	Tune-up Limit	Duty Cycle %	3Mbps	Tune-up Limit	Duty Cycle %
BR / EDR	CH 00	2402	8.91	9.50	77.65	6.93	8.00	78.05	7.20	8.00	78.04
	CH 39	2441	7.14	8.00	77.60	6.32	7.00	78.08	6.37	7.00	77.33
	CH 75	2480	8.20	9.00	77.60	6.65	7.50	78.03	6.72	7.50	77.33

Mode	Channel	Frequency (MHz)	Average power (dBm)					
			1Mbps	Tune-up Limit	Duty Cycle %	2Mbps	Tune-up Limit	Duty Cycle %
LE	CH 00	2402	-2.50	0.00	31.88	-2.45	0.00	30.77
	CH 39	2441	-3.01	0.00	31.84	-3.25	0.00	32.72
	CH 75	2480	-2.12	0.00	31.88	-2.06	0.00	34.62

Reduced Power Level 1

GSM1900		Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
TX Channel		512	661	810		512	661	810	
Frequency (MHz)		1850.2	1880	1909.8		1850.2	1880	1909.8	
GSM 1 Tx slot		27.55	27.50	27.48	28.00	18.55	18.50	18.48	19.00
GPRS 1 Tx slot		27.51	27.51	27.50	28.00	18.51	18.51	18.50	19.00
GPRS 2 Tx slots		25.20	25.25	25.21	26.00	19.20	19.25	19.21	20.00
GPRS 3 Tx slots		23.75	23.81	23.80	24.50	19.49	19.55	19.54	20.24
GPRS 4 Tx slots		21.80	21.84	21.81	22.50	18.80	18.84	18.81	19.50
EDGE 1 Tx slot		23.60	23.67	23.54	24.50	14.60	14.67	14.54	15.50
EDGE 2 Tx slots		22.15	22.25	22.20	23.00	16.15	16.25	16.20	17.00
EDGE 3 Tx slots		20.27	20.31	20.22	21.00	16.01	16.05	15.96	16.74
EDGE 4 Tx slots		17.80	17.87	17.82	18.50	14.80	14.87	14.82	15.50
Mode			Max.	27.55			Max.	19.55	
Attenuator		Cable Loss : 0.8							

Band		WCDMA Band II (dBm)			Tune-up Limit (dBm)	WCDMA Band IV (dBm)			Tune-up Limit (dBm)
TX Channel		9262	9400	9538		1312	1413	1513	
Rx Channel		9662	9800	9938		1537	1638	1738	
Frequency (MHz)		1852.4	1880	1907.6		1712.4	1732.6	1752.6	
3GPP Rel 99	RMC 12.2Kbps	20.21	20.26	20.20	21.00	20.62	20.70	20.62	21.50
3GPP Rel 5	HSDPA Subtest-1	19.04	18.80	19.00	19.50	19.92	19.59	19.87	20.00
3GPP Rel 5	HSDPA Subtest-2	18.82	18.51	18.70	19.50	20.03	19.74	19.94	20.50
3GPP Rel 5	HSDPA Subtest-3	18.20	17.75	17.93	19.00	20.05	19.77	19.99	20.50
3GPP Rel 5	HSDPA Subtest-4	18.73	18.43	18.61	19.00	20.08	19.82	20.02	20.50
3GPP Rel 8	DC-HSDPA Subtest-1	18.88	18.54	18.73	19.50	19.78	19.43	19.43	20.00
3GPP Rel 8	DC-HSDPA Subtest-2	17.87	17.40	17.64	19.00	18.61	18.49	18.48	20.00
3GPP Rel 8	DC-HSDPA Subtest-3	17.60	17.29	17.57	19.00	18.53	18.39	18.37	19.50
3GPP Rel 8	DC-HSDPA Subtest-4	17.56	17.27	17.55	19.00	18.51	18.37	18.35	19.50
3GPP Rel 6	HSUPA Subtest-1	19.16	18.85	18.95	19.50	19.97	19.64	19.89	20.50
3GPP Rel 6	HSUPA Subtest-2	19.05	18.79	18.97	19.50	19.88	19.55	19.82	20.50
3GPP Rel 6	HSUPA Subtest-3	19.16	18.89	19.07	19.50	19.98	19.68	19.92	20.50
3GPP Rel 6	HSUPA Subtest-4	19.03	18.72	18.94	19.50	19.86	19.51	19.78	20.50
3GPP Rel 6	HSUPA Subtest-5	19.13	18.85	19.03	19.50	19.96	19.66	19.90	20.50
3GPP Rel 7	HSPA+ (16QAM) Subtest-1	19.22	18.93	19.13	19.50	20.11	19.85	20.03	20.50
Attenuator		Cable Loss			0.8	Cable Loss			0.8
Mode			Max.	20.26			Max.	20.70	

Band 2 (1900MHz Band) (dBm) Part 24E							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				18700	18900	19100	
Frequency (MHz)				1860	1880	1900	
20	QPSK	1	0	17.09	17.15	17.12	18
20	QPSK	1	49	16.76	16.94	16.83	
20	QPSK	1	99	16.69	16.72	16.75	
20	QPSK	50	0	15.83	16.02	15.94	17
20	QPSK	50	24	15.91	15.99	15.83	
20	QPSK	50	50	15.82	15.96	15.74	
20	QPSK	100	0	15.89	15.93	15.81	17
20	16QAM	1	0	16.31	16.40	16.24	
20	16QAM	1	49	16.25	16.31	16.30	
20	16QAM	1	99	16.14	16.16	16.08	16
20	16QAM	50	0	15.16	15.24	15.19	
20	16QAM	50	24	15.13	15.22	15.17	
20	16QAM	50	50	15.00	15.07	15.00	16
20	16QAM	100	0	15.04	15.23	15.08	
20	64QAM	1	0	15.53	15.65	15.54	
20	64QAM	1	49	15.38	15.57	15.46	16
20	64QAM	1	99	15.48	15.49	15.34	
20	64QAM	50	0	14.49	14.58	14.46	
20	64QAM	50	24	14.46	14.56	14.39	15
20	64QAM	50	50	14.24	14.44	14.40	
20	64QAM	100	0	14.32	14.51	14.34	
Channel				18675	18900	19125	Tune-up limit (dBm)
Frequency (MHz)				1857.5	1880	1902.5	
15	QPSK	1	0	17.01	17.07	17.04	18
15	QPSK	1	37	16.68	16.86	16.75	
15	QPSK	1	74	16.61	16.64	16.67	
15	QPSK	36	0	15.75	15.94	15.86	17
15	QPSK	36	20	15.83	15.91	15.75	
15	QPSK	36	39	15.74	15.88	15.66	
15	QPSK	75	0	15.81	15.85	15.73	17
15	16QAM	1	0	16.23	16.32	16.16	
15	16QAM	1	37	16.17	16.23	16.22	
15	16QAM	1	74	16.06	16.08	16.00	16
15	16QAM	36	0	15.08	15.16	15.11	
15	16QAM	36	20	15.05	15.14	15.09	
15	16QAM	36	39	14.92	14.99	14.91	16
15	16QAM	75	0	14.96	15.15	15.00	
15	64QAM	1	0	15.45	15.57	15.46	
15	64QAM	1	37	15.30	15.49	15.38	16
15	64QAM	1	74	15.40	15.41	15.26	
15	64QAM	36	0	14.41	14.50	14.38	
15	64QAM	36	20	14.38	14.48	14.31	15
15	64QAM	36	39	14.16	14.36	14.32	
15	64QAM	75	0	14.24	14.43	14.26	
Channel				18650	18900	19150	Tune-up limit (dBm)
Frequency (MHz)				1855	1880	1905	
10	QPSK	1	0	16.95	17.01	16.98	18
10	QPSK	1	25	16.62	16.80	16.69	
10	QPSK	1	49	16.55	16.58	16.61	
10	QPSK	25	0	15.69	15.88	15.80	17
10	QPSK	25	12	15.77	15.85	15.69	
10	QPSK	25	25	15.68	15.82	15.60	
10	QPSK	50	0	15.75	15.79	15.67	17
10	16QAM	1	0	16.17	16.26	16.10	
10	16QAM	1	25	16.11	16.17	16.16	
10	16QAM	1	49	16.00	16.02	15.94	16
10	16QAM	25	0	15.02	15.10	15.05	
10	16QAM	25	12	14.99	15.08	15.03	
10	16QAM	25	25	14.86	14.93	14.85	16
10	16QAM	50	0	14.90	15.09	14.94	
10	64QAM	1	0	15.39	15.51	15.40	
10	64QAM	1	25	15.24	15.43	15.32	16
10	64QAM	1	49	15.34	15.35	15.20	
10	64QAM	25	0	14.35	14.44	14.32	
10	64QAM	25	12	14.32	14.42	14.25	15
10	64QAM	25	25	14.10	14.30	14.26	
10	64QAM	50	0	14.18	14.37	14.20	
Channel				18625	18900	19175	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1880	1907.5	
5	QPSK	1	0	16.93	16.99	16.96	18
5	QPSK	1	12	16.60	16.78	16.67	
5	QPSK	1	24	16.53	16.56	16.59	
5	QPSK	12	0	15.67	15.86	15.78	17
5	QPSK	12	7	15.75	15.83	15.67	
5	QPSK	12	13	15.66	15.80	15.58	
5	QPSK	25	0	15.73	15.77	15.65	17
5	16QAM	1	0	16.15	16.24	16.08	
5	16QAM	1	12	16.09	16.15	16.14	
5	16QAM	1	24	15.98	16.00	15.92	16
5	16QAM	12	0	15.00	15.08	15.03	
5	16QAM	12	7	14.97	15.06	15.01	
5	16QAM	12	13	14.84	14.91	14.83	16
5	16QAM	25	0	14.88	15.07	14.92	
5	64QAM	1	0	15.37	15.49	15.38	
5	64QAM	1	12	15.22	15.41	15.30	16
5	64QAM	1	24	15.32	15.33	15.18	
5	64QAM	12	0	14.33	14.42	14.30	
5	64QAM	12	7	14.30	14.40	14.23	15
5	64QAM	12	13	14.08	14.28	14.24	
5	64QAM	25	0	14.16	14.35	14.18	
Channel				18615	18900	19185	Tune-up limit (dBm)
Frequency (MHz)				1851.5	1880	1908.5	
3	QPSK	1	0	16.89	16.95	16.92	18
3	QPSK	1	8	16.56	16.74	16.63	
3	QPSK	1	14	16.49	16.52	16.55	
3	QPSK	8	0	15.63	15.82	15.74	17
3	QPSK	8	4	15.71	15.79	15.63	
3	QPSK	8	7	15.62	15.76	15.54	

Band 4 (AWS Band) (dBm) Part 27L (only on channel required)							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				20050	20175	20300	
Frequency (MHz)				1720	1732.5	1745	
20	QPSK	1	0	16.59	16.63	16.61	17.5
20	QPSK	1	49	16.42	16.50	16.43	
20	QPSK	1	99	16.47	16.54	16.45	
20	QPSK	50	0	15.50	15.52	15.49	16.5
20	QPSK	50	24	15.49	15.50	15.40	
20	QPSK	50	50	15.40	15.45	15.35	
20	QPSK	100	0	15.42	15.47	15.44	16.5
20	16QAM	1	0	15.99	16.05	16.03	
20	16QAM	1	49	15.94	16.01	15.96	
20	16QAM	1	99	15.95	15.98	15.96	15.5
20	16QAM	50	0	14.72	14.81	14.76	
20	16QAM	50	24	14.76	14.85	14.75	
20	16QAM	50	50	14.79	14.87	14.79	15.5
20	16QAM	100	0	14.81	14.84	14.87	
20	64QAM	1	0	15.17	15.19	15.13	
20	64QAM	1	49	15.11	15.13	15.07	14.5
20	64QAM	1	99	15.16	15.17	15.13	
20	64QAM	50	0	13.85	13.93	13.91	
20	64QAM	50	24	13.81	13.91	13.87	14.5
20	64QAM	50	50	13.93	13.97	13.87	
20	64QAM	100	0	13.95	14.03	13.96	
Channel				20025	20175	20325	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1732.5	1747.5	
15	QPSK	1	0	16.53	16.57	16.55	17.5
15	QPSK	1	37	16.36	16.44	16.37	
15	QPSK	1	74	16.41	16.48	16.39	
15	QPSK	36	0	15.44	15.46	15.43	16.5
15	QPSK	36	20	15.43	15.44	15.34	
15	QPSK	36	39	15.34	15.39	15.29	
15	QPSK	75	0	15.36	15.41	15.38	16.5
15	16QAM	1	0	15.93	15.99	15.97	
15	16QAM	1	37	15.88	15.95	15.90	
15	16QAM	1	74	15.89	15.92	15.90	15.5
15	16QAM	36	0	14.66	14.75	14.70	
15	16QAM	36	20	14.70	14.79	14.69	
15	16QAM	36	39	14.73	14.81	14.73	15.5
15	16QAM	75	0	14.75	14.78	14.81	
15	64QAM	1	0	15.11	15.13	15.07	
15	64QAM	1	37	15.05	15.07	15.01	14.5
15	64QAM	1	74	15.10	15.11	15.07	
15	64QAM	36	0	13.79	13.87	13.85	
15	64QAM	36	20	13.75	13.85	13.81	14.5
15	64QAM	36	39	13.67	13.91	13.81	
15	64QAM	75	0	13.89	13.97	13.90	
Channel				20000	20175	20350	Tune-up limit (dBm)
Frequency (MHz)				1715	1732.5	1750	
10	QPSK	1	0	16.46	16.50	16.48	17.5
10	QPSK	1	25	16.29	16.37	16.30	
10	QPSK	1	49	16.34	16.41	16.32	
10	QPSK	25	0	15.37	15.39	15.36	16.5
10	QPSK	25	12	15.36	15.37	15.27	
10	QPSK	25	25	15.27	15.32	15.22	

3	QPSK	15	0	15.69	15.73	15.61	17
3	16QAM	1	0	16.11	16.20	16.04	
3	16QAM	1	8	16.05	16.11	16.10	
3	16QAM	1	14	15.94	15.96	15.88	
3	16QAM	8	0	14.96	15.04	14.99	16
3	16QAM	8	4	14.93	15.02	14.97	
3	16QAM	8	7	14.80	14.87	14.79	
3	16QAM	15	0	14.84	15.03	14.88	
3	64QAM	1	0	15.33	15.45	15.34	16
3	64QAM	1	8	15.18	15.37	15.26	
3	64QAM	1	14	15.28	15.29	15.14	
3	64QAM	8	0	14.29	14.38	14.26	
3	64QAM	8	4	14.26	14.36	14.19	15
3	64QAM	8	7	14.04	14.24	14.20	
3	64QAM	15	0	14.12	14.31	14.14	
Channel				18607	18900	19193	Tune-up limit (dBm)
Frequency (MHz)				1850.7	1880	1909.3	
1.4	QPSK	1	0	16.86	16.92	16.89	18
1.4	QPSK	1	3	16.53	16.71	16.60	
1.4	QPSK	1	5	16.46	16.49	16.52	
1.4	QPSK	3	0	15.60	15.79	15.71	
1.4	QPSK	3	1	15.68	15.76	15.60	
1.4	QPSK	3	3	15.59	15.73	15.51	
1.4	QPSK	6	0	15.66	15.70	15.58	17
1.4	16QAM	1	0	16.08	16.17	16.01	
1.4	16QAM	1	3	16.02	16.08	16.07	17
1.4	16QAM	1	5	15.91	15.93	15.85	
1.4	16QAM	3	0	14.93	15.01	14.96	
1.4	16QAM	3	1	14.90	14.99	14.94	
1.4	16QAM	3	3	14.77	14.84	14.76	
1.4	16QAM	6	0	14.81	15.00	14.85	16
1.4	64QAM	1	0	15.30	15.42	15.31	
1.4	64QAM	1	3	15.15	15.34	15.23	16
1.4	64QAM	1	5	15.25	15.26	15.11	
1.4	64QAM	3	0	14.26	14.35	14.23	
1.4	64QAM	3	1	14.23	14.33	14.16	
1.4	64QAM	3	3	14.01	14.21	14.17	
1.4	64QAM	6	0	14.09	14.28	14.11	15

3	QPSK	15	0	15.17	15.22	15.19	16.5
3	16QAM	1	0	15.74	15.80	15.78	
3	16QAM	1	8	15.69	15.76	15.71	
3	16QAM	1	14	15.70	15.73	15.71	
3	16QAM	8	0	14.47	14.56	14.51	15.5
3	16QAM	8	4	14.51	14.60	14.50	
3	16QAM	8	7	14.54	14.62	14.54	
3	16QAM	15	0	14.56	14.59	14.62	
3	64QAM	1	0	14.92	14.94	14.88	15.5
3	64QAM	1	8	14.86	14.88	14.82	
3	64QAM	1	14	14.91	14.92	14.88	
3	64QAM	8	0	13.60	13.68	13.66	
3	64QAM	8	4	13.56	13.66	13.62	14.5
3	64QAM	8	7	13.68	13.72	13.62	
3	64QAM	15	0	13.70	13.78	13.71	
Channel				19957	20175	20393	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1732.5	1754.3	
1.4	QPSK	1	0	16.29	16.33	16.31	17.5
1.4	QPSK	1	3	16.12	16.20	16.13	
1.4	QPSK	1	5	16.17	16.24	16.15	
1.4	QPSK	3	0	15.20	15.22	15.19	
1.4	QPSK	3	1	15.19	15.20	15.10	
1.4	QPSK	3	3	15.10	15.15	15.05	
1.4	QPSK	6	0	15.12	15.17	15.14	16.5
1.4	16QAM	1	0	15.69	15.75	15.73	
1.4	16QAM	1	3	15.64	15.71	15.66	16.5
1.4	16QAM	1	5	15.65	15.68	15.66	
1.4	16QAM	3	0	14.42	14.51	14.46	
1.4	16QAM	3	1	14.46	14.55	14.45	
1.4	16QAM	3	3	14.49	14.57	14.49	
1.4	16QAM	6	0	14.51	14.54	14.57	15.5
1.4	64QAM	1	0	14.87	14.89	14.83	
1.4	64QAM	1	3	14.81	14.83	14.77	15.5
1.4	64QAM	1	5	14.86	14.87	14.83	
1.4	64QAM	3	0	13.55	13.63	13.61	
1.4	64QAM	3	1	13.51	13.61	13.57	
1.4	64QAM	3	3	13.63	13.67	13.57	
1.4	64QAM	6	0	13.65	13.73	13.66	14.5

Band 7 (2600MHz Band) (dBm)							
Part 27							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				20850	21100	21350	
Frequency (MHz)				2510	2535	2560	
20	QPSK	1	0	13.25	13.26	13.21	
20	QPSK	1	49	13.02	13.11	13.12	14
20	QPSK	1	99	12.79	12.80	12.88	
20	QPSK	50	0	11.93	12.06	12.04	
20	QPSK	50	24	12.01	12.02	11.93	13
20	QPSK	50	50	11.92	12.06	11.84	
20	QPSK	100	0	11.99	12.03	11.91	
20	16QAM	1	0	12.32	12.41	12.25	13
20	16QAM	1	49	12.26	12.32	12.31	
20	16QAM	1	99	12.15	12.17	12.09	
20	16QAM	50	0	11.17	11.25	11.20	12
20	16QAM	50	24	11.14	11.23	11.18	
20	16QAM	50	50	11.01	11.08	11.00	
20	16QAM	100	0	11.05	11.24	11.09	12
20	64QAM	1	0	11.54	11.66	11.55	
20	64QAM	1	49	11.39	11.58	11.47	
20	64QAM	1	99	11.49	11.50	11.35	11
20	64QAM	50	0	10.50	10.59	10.47	
20	64QAM	50	24	10.47	10.57	10.40	
20	64QAM	50	50	10.25	10.45	10.41	11
20	64QAM	100	0	10.33	10.52	10.35	
Channel				20825	21100	21375	Tune-up limit (dBm)
Frequency (MHz)				2507.5	2535	2562.5	
15	QPSK	1	0	13.17	13.18	13.13	
15	QPSK	1	37	12.94	13.03	13.04	14
15	QPSK	1	74	12.71	12.72	12.80	
15	QPSK	36	0	11.85	11.98	11.96	13
15	QPSK	36	20	11.93	11.94	11.85	
15	QPSK	36	39	11.84	11.98	11.76	
15	QPSK	75	0	11.91	11.95	11.83	13
15	16QAM	1	0	12.24	12.33	12.17	
15	16QAM	1	37	12.18	12.24	12.23	
15	16QAM	1	74	12.07	12.09	12.01	12
15	16QAM	36	0	11.09	11.17	11.12	
15	16QAM	36	20	11.06	11.15	11.10	
15	16QAM	36	39	10.93	11.00	10.92	12
15	16QAM	75	0	10.97	11.16	11.01	
15	64QAM	1	0	11.46	11.58	11.47	
15	64QAM	1	37	11.31	11.50	11.39	12
15	64QAM	1	74	11.41	11.42	11.27	
15	64QAM	36	0	10.42	10.51	10.39	
15	64QAM	36	20	10.39	10.49	10.32	11
15	64QAM	36	39	10.17	10.37	10.33	
15	64QAM	75	0	10.75	10.94	10.77	
Channel				20800	21100	21400	Tune-up limit (dBm)
Frequency (MHz)				2505	2535	2565	
10	QPSK	1	0	13.10	13.11	13.06	
10	QPSK	1	25	12.87	12.96	12.97	14
10	QPSK	1	49	12.64	12.65	12.73	
10	QPSK	25	0	11.78	11.91	11.89	13
10	QPSK	25	12	11.86	11.87	11.78	
10	QPSK	25	25	11.77	11.91	11.69	
10	QPSK	50	0	11.84	11.88	11.76	13
10	16QAM	1	0	12.17	12.26	12.10	
10	16QAM	1	25	12.11	12.17	12.16	
10	16QAM	1	49	12.00	12.02	11.94	12
10	16QAM	25	0	11.02	11.10	11.05	
10	16QAM	25	12	10.99	11.08	11.03	
10	16QAM	25	25	10.86	10.93	10.85	12
10	16QAM	50	0	10.90	11.09	10.94	
10	64QAM	1	0	11.39	11.51	11.40	
10	64QAM	1	25	11.24	11.43	11.32	12
10	64QAM	1	49	11.34	11.35	11.20	
10	64QAM	25	0	10.35	10.44	10.32	
10	64QAM	25	12	10.32	10.42	10.25	11
10	64QAM	25	25	10.10	10.30	10.26	
10	64QAM	50	0	10.68	10.87	10.70	
Channel				20775	21100	21425	Tune-up limit (dBm)
Frequency (MHz)				2502.5	2535	2567.5	
5	QPSK	1	0	13.04	13.05	13.00	
5	QPSK	1	12	12.81	12.90	12.91	14
5	QPSK	1	24	12.58	12.59	12.67	
5	QPSK	12	0	11.72	11.85	11.83	13
5	QPSK	12	7	11.80	11.81	11.72	
5	QPSK	12	13	11.71	11.85	11.63	
5	QPSK	25	0	11.78	11.82	11.70	13
5	16QAM	1	0	12.11	12.20	12.04	
5	16QAM	1	12	12.05	12.11	12.10	
5	16QAM	1	24	11.94	11.96	11.88	12
5	16QAM	12	0	10.96	11.04	10.99	
5	16QAM	12	7	10.93	11.02	10.97	
5	16QAM	12	13	10.80	10.87	10.79	12
5	16QAM	25	0	10.84	11.03	10.88	
5	64QAM	1	0	11.33	11.45	11.34	
5	64QAM	1	12	11.18	11.37	11.26	12
5	64QAM	1	24	11.28	11.29	11.14	
5	64QAM	12	0	10.29	10.38	10.26	
5	64QAM	12	7	10.26	10.36	10.19	11
5	64QAM	12	13	10.04	10.24	10.20	
5	64QAM	25	0	10.62	10.81	10.64	

Band 66 (dBm)							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				132072	132322	132572	(dBm)
Frequency (MHz)				1720	1745	1770	
20	QPSK	1	0	17.30	17.31	17.26	18.5
20	QPSK	1	49	17.28	17.22	17.29	
20	QPSK	1	99	17.27	17.29	16.96	
20	QPSK	50	0	16.39	16.42	16.33	17.5
20	QPSK	50	24	16.35	16.39	16.25	
20	QPSK	50	50	16.40	16.41	16.35	
20	QPSK	100	0	16.37	16.31	16.28	17.5
20	16QAM	1	0	16.39	16.23	16.37	
20	16QAM	1	49	16.23	16.26	16.24	
20	16QAM	1	99	16.10	16.20	16.15	16.5
20	16QAM	50	0	15.36	15.37	15.30	
20	16QAM	50	24	15.09	15.30	15.29	
20	16QAM	50	50	15.35	15.38	15.36	16.5
20	16QAM	100	0	15.41	15.40	15.34	
20	64QAM	1	0	15.26	15.38	15.39	
20	64QAM	1	49	15.42	15.38	15.35	16.5
20	64QAM	1	99	15.25	15.23	15.11	
20	64QAM	50	0	14.50	14.40	14.44	
20	64QAM	50	24	14.41	14.43	14.32	15.5
20	64QAM	50	50	14.45	14.47	14.43	
20	64QAM	100	0	14.41	14.51	14.36	
Channel				132047	132322	132597	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1745	1772.5	
15	QPSK	1	0	17.24	17.25	17.20	18.5
15	QPSK	1	37	17.22	17.16	17.23	
15	QPSK	1	74	17.21	17.23	16.90	
15	QPSK	36	0	16.33	16.36	16.27	17.5
15	QPSK	36	20	16.29	16.33	16.19	
15	QPSK	36	39	16.34	16.35	16.29	
15	QPSK	75	0	16.31	16.25	16.22	17.5
15	16QAM	1	0	16.33	16.17	16.31	
15	16QAM	1	37	16.17	16.20	16.18	
15	16QAM	1	74	16.04	16.14	16.09	16.5
15	16QAM	36	0	15.30	15.31	15.24	
15	16QAM	36	20	15.03	15.24	15.23	
15	16QAM	36	39	15.29	15.32	15.30	16.5
15	16QAM	75	0	15.35	15.34	15.28	
15	64QAM	1	0	15.20	15.32	15.33	
15	64QAM	1	37	15.36	15.32	15.29	16.5
15	64QAM	1	74	15.19	15.17	15.05	
15	64QAM	36	0	14.44	14.34	14.38	
15	64QAM	36	20	14.35	14.37	14.26	15.5
15	64QAM	36	39	14.39	14.41	14.37	
15	64QAM	75	0	14.35	14.45	14.30	
Channel				132022	132322	132622	Tune-up limit (dBm)
Frequency (MHz)				1715	1745	1775	
10	QPSK	1	0	17.17	17.18	17.13	18.5
10	QPSK	1	25	17.15	17.09	17.16	
10	QPSK	1	49	17.14	17.16	16.83	
10	QPSK	25	0	16.26	16.29	16.20	17.5
10	QPSK	25	12	16.22	16.26	16.12	
10	QPSK	25	25	16.27	16.28	16.22	
10	QPSK	50	0	16.24	16.18	16.15	17.5
10	16QAM	1	0	16.26	16.10	16.24	
10	16QAM	1	25	16.10	16.13	16.11	
10	16QAM	1	49	15.97	16.07	16.02	16.5
10	16QAM	25	0	15.23	15.24	15.17	
10	16QAM	25	12	14.96	15.17	15.16	
10	16QAM	25	25	15.22	15.25	15.23	16.5
10	16QAM	50	0	15.28	15.27	15.21	
10	64QAM	1	0	15.13	15.25	15.26	
10	64QAM	1	25	15.29	15.25	15.22	16.5
10	64QAM	1	49	15.12	15.10	14.98	
10	64QAM	25	0	14.37	14.27	14.31	
10	64QAM	25	12	14.28	14.30	14.19	15.5
10	64QAM	25	25	14.32	14.34	14.30	
10	64QAM	50	0	14.28	14.38	14.23	
Channel				131997	132322	132647	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1745	1777.5	
5	QPSK	1	0	17.09	17.10	17.05	18.5
5	QPSK	1	12	17.07	17.01	17.08	
5	QPSK	1	24	17.06	17.08	16.75	
5	QPSK	12	0	16.18	16.21	16.12	17.5
5	QPSK	12	7	16.14	16.18	16.04	
5	QPSK	12	13	16.19	16.20	16.14	
5	QPSK	25	0	16.16	16.10	16.07	17.5
5	16QAM	1	0	16.18	16.02	16.16	
5	16QAM	1	12	16.02	16.05	16.03	
5	16QAM	1	24	15.89	15.99	15.94	16.5
5	16QAM	12	0	15.15	15.16	15.09	
5	16QAM	12	7	14.88	15.09	15.08	
5	16QAM	12	13	15.14	15.17	15.15	16.5
5	16QAM	25	0	15.20	15.19	15.13	
5	64QAM	1	0	15.05	15.17	15.18	
5	64QAM	1	12	15.21	15.17	15.14	16.5
5	64QAM	1	24	15.04	15.02	14.90	
5	64QAM	12	0	14.29	14.19	14.23	
5	64QAM	12	7	14.20	14.22	14.11	15.5
5	64QAM	12	13	14.24	14.26	14.22	
5	64QAM	25	0	14.20	14.30	14.15	
Channel				131987	132322	132657	Tune-up limit (dBm)
Frequency (MHz)				1711.5	1745	1778.5	
3	QPSK	1	0	17.02	17.03	16.98	18.5
3	QPSK	1	8	17.00	16.94	17.01	
3	QPSK	1	14	16.99	17.01	16.68	
3	QPSK	8	0	16.11	16.14	16.05	17.5
3	QPSK	8	4	16.07	16.11	15.97	
3	QPSK	8	7	16.12	16.13	16.07	

3	QPSK	15	0	16.09	16.03	16.00	17.5
3	16QAM	1	0	16.11	15.95	16.09	
3	16QAM	1	8	15.95	15.98	15.96	
3	16QAM	1	14	15.82	15.92	15.87	16.5
3	16QAM	8	0	15.08	15.09	15.02	
3	16QAM	8	4	14.81	15.02	15.01	
3	16QAM	8	7	15.07	15.10	15.08	16.5
3	16QAM	15	0	15.13	15.12	15.06	
3	64QAM	1	0	14.98	15.10	15.11	
3	64QAM	1	8	15.14	15.10	15.07	15.5
3	64QAM	1	14	14.97	14.95	14.83	
3	64QAM	8	0	14.22	14.12	14.16	
3	64QAM	8	4	14.13	14.15	14.04	15.5
3	64QAM	8	7	14.17	14.19	14.15	
3	64QAM	15	0	14.13	14.23	14.08	
Channel				131979	132322	132665	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1745	1779.3	
1.4	QPSK	1	0	17.00	17.01	16.96	18.5
1.4	QPSK	1	3	16.98	16.92	16.99	
1.4	QPSK	1	5	16.97	16.99	16.66	
1.4	QPSK	3	0	16.09	16.12	16.03	
1.4	QPSK	3	1	16.05	16.09	15.95	
1.4	QPSK	3	3	16.10	16.11	16.05	17.5
1.4	QPSK	6	0	16.07	16.01	15.98	
1.4	16QAM	1	0	16.09	15.93	16.07	
1.4	16QAM	1	3	15.93	15.96	15.94	17.5
1.4	16QAM	1	5	15.80	15.90	15.85	
1.4	16QAM	3	0	15.06	15.07	15.00	
1.4	16QAM	3	1	14.79	15.00	14.99	
1.4	16QAM	3	3	15.05	15.08	15.06	
1.4	16QAM	6	0	15.11	15.10	15.04	16.5
1.4	64QAM	1	0	14.96	15.08	15.09	16.5
1.4	64QAM	1	3	15.12	15.08	15.05	
1.4	64QAM	1	5	14.95	14.93	14.81	
1.4	64QAM	3	0	14.20	14.10	14.14	
1.4	64QAM	3	1	14.11	14.13	14.02	
1.4	64QAM	3	3	14.15	14.17	14.13	15.5
1.4	64QAM	6	0	14.11	14.21	14.08	

Band 38(only on channel required) (dBm)							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				37850	38000	38150	
Frequency (MHz)				2580	2595	2610	
20	QPSK	1	0	19.59	19.63	19.61	
20	QPSK	1	49	19.46	19.59	19.43	20.5
20	QPSK	1	99	19.58	19.55	19.37	
20	QPSK	50	0	18.58	18.65	18.60	
20	QPSK	50	24	18.61	18.62	18.48	19.5
20	QPSK	50	50	18.58	18.51	18.44	
20	QPSK	100	0	18.61	18.64	18.51	
20	16QAM	1	0	18.71	18.72	18.60	19.5
20	16QAM	1	49	18.61	18.64	18.68	
20	16QAM	1	99	18.53	18.57	18.54	
20	16QAM	50	0	17.58	17.65	17.46	18.5
20	16QAM	50	24	17.66	17.61	17.63	
20	16QAM	50	50	17.48	17.53	17.46	
20	16QAM	100	0	17.57	17.58	17.52	18.5
20	64QAM	1	0	17.62	17.69	17.60	
20	64QAM	1	49	17.44	17.52	17.55	
20	64QAM	1	99	17.51	17.53	17.54	22
20	64QAM	50	0	17.50	17.55	17.50	
20	64QAM	50	24	17.54	17.50	17.46	
20	64QAM	50	50	17.41	17.48	17.35	
20	64QAM	100	0	17.33	17.51	17.37	
Channel				37825	38000	38175	Tune-up limit (dBm)
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	19.52	19.56	19.54	
15	QPSK	1	37	19.39	19.52	19.36	20.5
15	QPSK	1	74	19.51	19.48	19.30	
15	QPSK	36	0	18.51	18.58	18.53	
15	QPSK	36	20	18.54	18.55	18.41	19.5
15	QPSK	36	39	18.51	18.44	18.37	
15	QPSK	75	0	18.54	18.57	18.44	
15	16QAM	1	0	18.64	18.65	18.53	19.5
15	16QAM	1	37	18.54	18.57	18.61	
15	16QAM	1	74	18.46	18.50	18.47	
15	16QAM	36	0	17.51	17.58	17.39	18.5
15	16QAM	36	20	17.59	17.54	17.56	
15	16QAM	36	39	17.41	17.46	17.39	
15	16QAM	75	0	17.50	17.51	17.45	18.5
15	64QAM	1	0	17.55	17.62	17.53	
15	64QAM	1	37	17.37	17.45	17.48	
15	64QAM	1	74	17.44	17.46	17.47	22
15	64QAM	36	0	17.43	17.48	17.43	
15	64QAM	36	20	17.47	17.43	17.39	
15	64QAM	36	39	17.34	17.41	17.28	
15	64QAM	75	0	17.26	17.44	17.30	
Channel				37800	38000	38200	Tune-up limit (dBm)
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	19.46	19.50	19.48	
10	QPSK	1	25	19.33	19.46	19.30	20.5
10	QPSK	1	49	19.45	19.42	19.24	
10	QPSK	25	0	18.45	18.52	18.47	
10	QPSK	25	12	18.48	18.49	18.35	19.5
10	QPSK	25	25	18.45	18.38	18.31	
10	QPSK	50	0	18.48	18.51	18.38	
10	16QAM	1	0	18.58	18.59	18.47	19.5
10	16QAM	1	25	18.48	18.51	18.55	
10	16QAM	1	49	18.40	18.44	18.41	
10	16QAM	25	0	17.45	17.52	17.33	18.5
10	16QAM	25	12	17.53	17.48	17.50	
10	16QAM	25	25	17.35	17.40	17.33	
10	16QAM	50	0	17.44	17.45	17.39	18.5
10	64QAM	1	0	17.49	17.56	17.47	
10	64QAM	1	25	17.31	17.39	17.42	
10	64QAM	1	49	17.38	17.40	17.41	22
10	64QAM	25	0	17.37	17.42	17.37	
10	64QAM	25	12	17.41	17.37	17.33	
10	64QAM	25	25	17.28	17.35	17.22	
10	64QAM	50	0	17.20	17.38	17.24	
Channel				37775	38000	38225	Tune-up limit (dBm)
Frequency (MHz)				2572.5	2595	2617.5	
5	QPSK	1	0	19.41	19.45	19.43	
5	QPSK	1	12	19.28	19.41	19.25	20.5
5	QPSK	1	24	19.40	19.37	19.19	
5	QPSK	12	0	18.40	18.47	18.42	
5	QPSK	12	7	18.43	18.44	18.30	19.5
5	QPSK	12	13	18.40	18.33	18.26	
5	QPSK	25	0	18.43	18.46	18.33	
5	16QAM	1	0	18.53	18.54	18.42	19.5
5	16QAM	1	12	18.43	18.46	18.50	
5	16QAM	1	24	18.35	18.39	18.36	
5	16QAM	12	0	17.40	17.47	17.28	18.5
5	16QAM	12	7	17.48	17.43	17.45	
5	16QAM	12	13	17.30	17.35	17.28	
5	16QAM	25	0	17.39	17.40	17.34	18.5
5	64QAM	1	0	17.44	17.51	17.42	
5	64QAM	1	12	17.26	17.34	17.37	
5	64QAM	1	24	17.33	17.35	17.36	22
5	64QAM	12	0	17.32	17.37	17.32	
5	64QAM	12	7	17.36	17.32	17.28	
5	64QAM	12	13	17.23	17.30	17.17	
5	64QAM	25	0	17.15	17.33	17.19	

Band 40 (2.3G Band-1) (dBm) Part 27D-1 2305MHz ~ 2315MHz							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				38750			
Frequency (MHz)				2310			
10	QPSK	1	0	20.68			21.5
10	QPSK	1	25	20.64			
10	QPSK	1	49	20.59			
10	QPSK	25	0	19.81			20.5
10	QPSK	25	12	19.69			
10	QPSK	25	25	19.73			
10	QPSK	50	0	19.75			20.5
10	16QAM	1	0	19.78			
10	16QAM	1	25	19.74			
10	16QAM	1	49	19.71			19.5
10	16QAM	25	0	18.83			
10	16QAM	25	12	18.79			
10	16QAM	25	25	18.70			19.5
10	16QAM	50	0	18.76			
10	64QAM	1	0	18.77			
10	64QAM	1	25	18.74			19.5
10	64QAM	1	49	18.68			
10	64QAM	25	0	17.82			
10	64QAM	25	12	17.73			18.5
10	64QAM	25	25	17.75			
10	64QAM	50	0	17.66			
Channel				38725	38750	38775	Tune-up limit (dBm)
Frequency (MHz)				2307.5	2310	2312.5	
5	QPSK	1	0	20.53	20.56	20.49	21.5
5	QPSK	1	12	20.48	20.54	20.45	
5	QPSK	1	24	20.38	20.50	20.51	
5	QPSK	12	0	19.67	19.78	19.68	20.5
5	QPSK	12	7	19.66	19.63	19.50	
5	QPSK	12	13	19.50	19.74	19.52	
5	QPSK	25	0	19.71	19.79	19.58	20.5
5	16QAM	1	0	19.73	19.71	19.61	
5	16QAM	1	12	19.50	19.47	19.62	
5	16QAM	1	24	19.55	19.56	19.40	19.5
5	16QAM	12	0	18.65	18.77	18.74	
5	16QAM	12	7	18.48	18.58	18.51	
5	16QAM	12	13	18.51	18.75	18.46	19.5
5	16QAM	25	0	18.64	18.68	18.65	
5	64QAM	1	0	18.66	18.82	18.65	
5	64QAM	1	12	18.76	18.59	18.59	19.5
5	64QAM	1	24	18.55	18.60	18.69	
5	64QAM	12	0	17.56	17.73	17.78	
5	64QAM	12	7	17.70	17.71	17.69	18.5
5	64QAM	12	13	17.68	17.72	17.76	
5	64QAM	25	0	17.48	17.59	17.58	

Band 40 (2.3G Band-2) (dBm)							
Part 27D-2 2350MHz ~ 2360MHz							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				39200			Tune-up limit (dBm)
Frequency (MHz)				2355			
10	QPSK	1	0	20.47			21.5
10	QPSK	1	25	20.43			
10	QPSK	1	49	20.34			
10	QPSK	25	0	19.58			20.5
10	QPSK	25	12	19.44			
10	QPSK	25	25	19.49			
10	QPSK	50	0	19.41			20.5
10	16QAM	1	0	19.50			
10	16QAM	1	25	19.49			
10	16QAM	1	49	19.40			19.5
10	16QAM	25	0	18.46			
10	16QAM	25	12	18.57			
10	16QAM	25	25	18.43			19.5
10	16QAM	50	0	18.50			
10	64QAM	1	0	18.52			19.5
10	64QAM	1	25	18.48			
10	64QAM	1	49	18.41			18.5
10	64QAM	25	0	17.60			
10	64QAM	25	12	17.56			
10	64QAM	25	25	17.47			18.5
10	64QAM	50	0	17.52			
Channel				39175	39200	39225	Tune-up limit (dBm)
Frequency (MHz)				2352.5	2355	2357.5	
5	QPSK	1	0	20.37	20.40	20.35	21.5
5	QPSK	1	12	20.21	20.38	20.24	
5	QPSK	1	24	20.29	20.27	20.11	
5	QPSK	12	0	19.48	19.58	19.55	20.5
5	QPSK	12	7	19.32	19.58	19.35	
5	QPSK	12	13	19.38	19.36	19.30	
5	QPSK	25	0	19.32	19.46	19.33	20.5
5	16QAM	1	0	19.48	19.45	19.43	
5	16QAM	1	12	19.33	19.46	19.44	
5	16QAM	1	24	19.29	19.30	19.33	19.5
5	16QAM	12	0	18.44	18.49	18.48	
5	16QAM	12	7	18.48	18.35	18.35	
5	16QAM	12	13	18.42	18.33	18.50	19.5
5	16QAM	25	0	18.37	18.50	18.31	
5	64QAM	1	0	18.46	18.60	18.38	
5	64QAM	1	12	18.39	18.53	18.39	19.5
5	64QAM	1	24	18.38	18.43	18.36	
5	64QAM	12	0	17.37	17.41	17.49	18.5
5	64QAM	12	7	17.33	17.51	17.45	
5	64QAM	12	13	17.40	17.30	17.30	
5	64QAM	25	0	17.23	17.36	17.35	

5GHz WLAN ANT 1

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Power Setting	Duty Cycle %
5.2GHz WLAN ANT 1	802.11a 6Mbps	CH 36	5180	16.88	17.50	16.00	89.10
		CH 44	5220	16.59	17.50	16.00	88.61
		CH 48	5240	16.25	17.00	16.00	84.34
	802.11n-HT20 MCS0	CH 36	5180	15.58	16.50	16.00	88.06
		CH 44	5220	15.32	16.50	16.00	87.41
		CH 48	5240	15.02	16.00	16.00	87.31
	802.11n-HT40 MCS0	CH 38	5190	15.81	16.50	16.00	77.63
		CH 46	5230	15.42	16.50	16.00	69.88
	802.11ac-VHT20 MCS0	CH 36	5180	15.38	16.50	16.00	86.76
		CH 44	5220	15.13	16.00	16.00	83.22
		CH 48	5240	14.85	15.50	16.00	85.00
	802.11ac-VHT40 MCS0	CH 38	5190	15.56	16.50	16.00	74.68
		CH 46	5230	15.22	16.00	16.00	77.63
	802.11ac-VHT80 MCS0	CH 42	5210	15.53	16.50	16.00	65.22

5GHz WLAN ANT 1

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Power Setting	Duty Cycle %
5.3GHz WLAN ANT 1	802.11a 6Mbps	CH 52	5260	16.27	17.00	14.00	88.54
		CH 60	5300	15.58	16.50	14.00	89.10
		CH 64	5320	15.24	16.00	14.00	88.54
	802.11n-HT20 MCS0	CH 52	5260	14.98	16.00	14.00	88.06
		CH 60	5300	14.30	15.00	14.00	84.17
		CH 64	5320	13.96	15.00	14.00	85.51
	802.11n-HT40 MCS0	CH 54	5270	14.95	16.00	14.00	77.63
		CH 62	5310	14.49	15.50	14.00	73.42
	802.11ac-VHT20 MCS0	CH 52	5260	14.77	15.50	14.00	87.50
		CH 60	5300	14.08	15.00	14.00	87.41
		CH 64	5320	13.74	14.50	14.00	87.41
	802.11ac-VHT40 MCS0	CH 54	5270	14.73	15.50	14.00	77.63
		CH 62	5310	14.23	15.00	14.00	78.67
	802.11ac-VHT80 MCS0	CH 58	5290	14.56	15.50	14.00	63.04

Reduced Power Level 2

GSM1900	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
	512	661	810		512	661	810	
TX Channel	1850.2	1880	1909.8		1850.2	1880	1909.8	
Frequency (MHz)	1850.2	1880	1909.8		1850.2	1880	1909.8	
GSM 1 Tx slot	27.55	27.50	27.48	28.00	18.55	18.50	18.48	19.00
GPRS 1 Tx slot	27.51	27.51	27.50	28.00	18.51	18.51	18.50	19.00
GPRS 2 Tx slots	25.20	25.25	25.21	26.00	19.20	19.25	19.21	20.00
GPRS 3 Tx slots	23.75	23.81	23.80	24.50	19.49	19.55	19.54	20.24
GPRS 4 Tx slots	21.80	21.84	21.81	22.50	18.80	18.84	18.81	19.50
EDGE 1 Tx slot	23.60	23.67	23.54	24.50	14.60	14.67	14.54	15.50
EDGE 2 Tx slots	22.15	22.25	22.20	23.00	16.15	16.25	16.20	17.00
EDGE 3 Tx slots	20.27	20.31	20.22	21.00	16.01	16.05	15.96	16.74
EDGE 4 Tx slots	17.80	17.87	17.82	18.50	14.80	14.87	14.82	15.50
Attenuator	Cable Loss : 0.8							
Date	11/16							

Band	WCDMA Band II (dBm)			Tune-up Limit (dBm)	WCDMA Band IV (dBm)			Tune-up Limit (dBm)
TX Channel	9262	9400	9538		1312	1413	1513	
Rx Channel	9662	9800	9938		1537	1638	1738	
Frequency (MHz)	1852.4	1880	1907.6		1712.4	1732.6	1752.6	
3GPP Rel 99 RMC 12.2Kbps	20.71	20.76	20.70	21.50	20.62	20.70	20.62	21.50
3GPP Rel 5 HSDPA Subtest-1	19.54	19.30	19.50	20.00	19.92	19.59	19.87	20.00
3GPP Rel 5 HSDPA Subtest-2	19.32	19.01	19.20	20.00	20.03	19.74	19.94	20.50
3GPP Rel 5 HSDPA Subtest-3	18.70	18.25	18.43	19.50	20.05	19.77	19.99	20.50
3GPP Rel 5 HSDPA Subtest-4	19.23	18.93	19.11	19.50	20.08	19.82	20.02	20.50
3GPP Rel 8 DC-HSDPA Subtest-1	19.38	19.04	19.23	20.00	19.78	19.43	19.43	20.00
3GPP Rel 8 DC-HSDPA Subtest-2	18.37	17.90	18.14	19.50	18.61	18.49	18.48	20.00
3GPP Rel 8 DC-HSDPA Subtest-3	18.10	17.79	18.07	19.50	18.53	18.39	18.37	19.50
3GPP Rel 8 DC-HSDPA Subtest-4	18.06	17.77	18.05	19.50	18.51	18.37	18.35	19.50
3GPP Rel 6 HSUPA Subtest-1	19.66	19.35	19.45	20.00	19.97	19.64	19.89	20.50
3GPP Rel 6 HSUPA Subtest-2	19.55	19.29	19.47	20.00	19.88	19.55	19.82	20.50
3GPP Rel 6 HSUPA Subtest-3	19.66	19.39	19.57	20.00	19.98	19.68	19.92	20.50
3GPP Rel 6 HSUPA Subtest-4	19.53	19.22	19.44	20.00	19.86	19.51	19.78	20.50
3GPP Rel 6 HSUPA Subtest-5	19.63	19.35	19.53	20.00	19.96	19.66	19.90	20.50
3GPP Rel 7 HSPA+ (16QAM) Subtest-1	19.72	19.43	19.63	20.00	20.11	19.85	20.03	20.50
Attenuator	Cable Loss			0.8	Cable Loss			0.8
Mode	Max.			20.76	Max.			20.70
Date	11/14							

Band 2 (1900MHz Band) (dBm) Part 24E							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				18700	18900	19100	
Frequency (MHz)				1860	1880	1900	
20	QPSK	1	0	21.09	21.15	21.12	22
20	QPSK	1	49	20.76	20.94	20.83	
20	QPSK	1	99	20.69	20.72	20.75	
20	QPSK	50	0	19.83	20.02	19.94	21
20	QPSK	50	24	19.91	19.99	19.83	
20	QPSK	50	50	19.82	19.96	19.74	
20	QPSK	100	0	19.89	19.93	19.81	21
20	16QAM	1	0	20.31	20.40	20.24	
20	16QAM	1	49	20.25	20.31	20.30	
20	16QAM	1	99	20.14	20.16	20.08	20
20	16QAM	50	0	19.16	19.24	19.19	
20	16QAM	50	24	19.13	19.22	19.17	
20	16QAM	50	50	19.00	19.07	18.99	20
20	16QAM	100	0	19.04	19.23	19.08	
20	64QAM	1	0	19.53	19.65	19.54	
20	64QAM	1	49	19.38	19.57	19.46	20
20	64QAM	1	99	19.48	19.49	19.34	
20	64QAM	50	0	18.49	18.58	18.46	
20	64QAM	50	24	18.46	18.56	18.39	19
20	64QAM	50	50	18.24	18.44	18.40	
20	64QAM	100	0	18.32	18.51	18.34	
Channel				18675	18900	19125	Tune-up limit (dBm)
Frequency (MHz)				1857.5	1880	1902.5	
15	QPSK	1	0	21.01	21.07	21.04	22
15	QPSK	1	37	20.68	20.86	20.75	
15	QPSK	1	74	20.61	20.64	20.67	
15	QPSK	36	0	19.75	19.94	19.86	21
15	QPSK	36	20	19.83	19.91	19.75	
15	QPSK	36	39	19.74	19.88	19.66	
15	QPSK	75	0	19.81	19.85	19.73	21
15	16QAM	1	0	20.23	20.32	20.16	
15	16QAM	1	37	20.17	20.23	20.22	
15	16QAM	1	74	20.06	20.08	20.00	20
15	16QAM	36	0	19.08	19.16	19.11	
15	16QAM	36	20	19.05	19.14	19.09	
15	16QAM	36	39	18.92	18.99	18.91	20
15	16QAM	75	0	18.96	19.15	19.00	
15	64QAM	1	0	19.45	19.57	19.46	
15	64QAM	1	37	19.30	19.49	19.38	20
15	64QAM	1	74	19.40	19.41	19.26	
15	64QAM	36	0	18.41	18.50	18.38	
15	64QAM	36	20	18.38	18.48	18.31	19
15	64QAM	36	39	18.16	18.36	18.32	
15	64QAM	75	0	18.24	18.43	18.26	
Channel				18650	18900	19150	Tune-up limit (dBm)
Frequency (MHz)				1855	1880	1905	
10	QPSK	1	0	20.95	21.01	20.98	22
10	QPSK	1	25	20.62	20.80	20.69	
10	QPSK	1	49	20.55	20.58	20.61	
10	QPSK	25	0	19.69	19.88	19.80	21
10	QPSK	25	12	19.77	19.85	19.69	
10	QPSK	25	25	19.68	19.82	19.60	
10	QPSK	50	0	19.75	19.79	19.67	21
10	16QAM	1	0	20.17	20.26	20.10	
10	16QAM	1	25	20.11	20.17	20.16	
10	16QAM	1	49	20.00	20.02	19.94	20
10	16QAM	25	0	19.02	19.10	19.05	
10	16QAM	25	12	18.99	19.08	19.03	
10	16QAM	25	25	18.86	18.93	18.85	20
10	16QAM	50	0	18.90	19.09	18.94	
10	64QAM	1	0	19.39	19.51	19.40	
10	64QAM	1	25	19.24	19.43	19.32	20
10	64QAM	1	49	19.34	19.35	19.20	
10	64QAM	25	0	18.35	18.44	18.32	
10	64QAM	25	12	18.32	18.42	18.25	19
10	64QAM	25	25	18.10	18.30	18.26	
10	64QAM	50	0	18.18	18.37	18.20	
Channel				18625	18900	19175	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1880	1907.5	
5	QPSK	1	0	20.93	20.99	20.96	22
5	QPSK	1	12	20.60	20.78	20.67	
5	QPSK	1	24	20.53	20.56	20.59	
5	QPSK	12	0	19.67	19.86	19.78	21
5	QPSK	12	7	19.75	19.83	19.67	
5	QPSK	12	13	19.66	19.80	19.58	
5	QPSK	25	0	19.73	19.77	19.65	21
5	16QAM	1	0	20.15	20.24	20.08	
5	16QAM	1	12	20.09	20.15	20.14	
5	16QAM	1	24	19.98	20.00	19.92	20
5	16QAM	12	0	19.00	19.08	19.03	
5	16QAM	12	7	18.97	19.06	19.01	
5	16QAM	12	13	18.84	18.91	18.83	20
5	16QAM	25	0	18.88	19.07	18.92	
5	64QAM	1	0	19.37	19.49	19.38	
5	64QAM	1	12	19.22	19.41	19.30	20
5	64QAM	1	24	19.32	19.33	19.18	
5	64QAM	12	0	18.33	18.42	18.30	
5	64QAM	12	7	18.30	18.40	18.23	19
5	64QAM	12	13	18.08	18.28	18.24	
5	64QAM	25	0	18.16	18.35	18.18	
Channel				18615	18900	19185	Tune-up limit (dBm)
Frequency (MHz)				1851.5	1880	1908.5	
3	QPSK	1	0	20.89	20.95	20.92	22
3	QPSK	1	8	20.56	20.74	20.63	
3	QPSK	1	14	20.49	20.52	20.55	
3	QPSK	8	0	19.63	19.82	19.74	21
3	QPSK	8	4	19.71	19.79	19.63	
3	QPSK	8	7	19.62	19.76	19.54	

Band 4 (AWS Band) (dBm) Part 27L (only on channel required)							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				20050	20175	20300	
Frequency (MHz)				1720	1732.5	1745	
20	QPSK	1	0	20.59	20.63	20.61	21.5
20	QPSK	1	49	20.42	20.50	20.43	
20	QPSK	1	99	20.47	20.54	20.45	
20	QPSK	50	0	19.50	19.52	19.49	20.5
20	QPSK	50	24	19.49	19.50	19.40	
20	QPSK	50	50	19.40	19.45	19.35	
20	QPSK	100	0	19.42	19.47	19.44	20.5
20	16QAM	1	0	19.99	20.05	20.03	
20	16QAM	1	49	19.94	20.01	19.96	
20	16QAM	1	99	19.95	19.98	19.96	19.5
20	16QAM	50	0	18.72	18.81	18.76	
20	16QAM	50	24	18.76	18.85	18.75	
20	16QAM	50	50	18.79	18.87	18.79	19.5
20	16QAM	100	0	18.81	18.84	18.87	
20	64QAM	1	0	19.17	19.19	19.13	
20	64QAM	1	49	19.11	19.13	19.07	18.5
20	64QAM	1	99	19.16	19.17	19.13	
20	64QAM	50	0	17.85	17.93	17.91	
20	64QAM	50	24	17.81	17.91	17.87	18.5
20	64QAM	50	50	17.93	17.97	17.87	
20	64QAM	100	0	17.95	18.03	17.96	
Channel				20025	20175	20325	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1732.5	1747.5	
15	QPSK	1	0	20.53	20.57	20.55	21.5
15	QPSK	1	37	20.36	20.44	20.37	
15	QPSK	1	74	20.41	20.48	20.39	
15	QPSK	36	0	19.44	19.46	19.43	20.5
15	QPSK	36	20	19.43	19.44	19.34	
15	QPSK	36	39	19.34	19.39	19.29	
15	QPSK	75	0	19.36	19.41	19.38	20.5
15	16QAM	1	0	19.93	19.99	19.97	
15	16QAM	1	37	19.88	19.95	19.90	
15	16QAM	1	74	19.89	19.92	19.90	19.5
15	16QAM	36	0	18.66	18.75	18.70	
15	16QAM	36	20	18.70	18.79	18.69	
15	16QAM	36	39	18.73	18.81	18.73	19.5
15	16QAM	75	0	18.75	18.78	18.81	
15	64QAM	1	0	19.11	19.13	19.07	
15	64QAM	1	37	19.05	19.07	19.01	18.5
15	64QAM	1	74	19.10	19.11	19.07	
15	64QAM	36	0	17.79	17.87	17.85	
15	64QAM	36	20	17.75	17.85	17.81	18.5
15	64QAM	36	39	17.87	17.91	17.81	
15	64QAM	75	0	17.89	17.97	17.90	
Channel				20000	20175	20350	Tune-up limit (dBm)
Frequency (MHz)				1715	1732.5	1750	
10	QPSK	1	0	20.46	20.50	20.48	21.5
10	QPSK	1	25	20.29	20.37	20.30	
10	QPSK	1	49	20.34	20.41	20.32	
10	QPSK	25	0	19.37	19.39	19.36	20.5
10	QPSK	25	12	19.36	19.37	19.27	
10	QPSK	25	25	19.27	19.32	19.22	

3	QPSK	15	0	19.69	19.73	19.61	21
3	16QAM	1	0	20.11	20.20	20.04	
3	16QAM	1	8	20.05	20.11	20.10	
3	16QAM	1	14	19.94	19.96	19.88	
3	16QAM	8	0	18.96	19.04	18.99	20
3	16QAM	8	4	18.93	19.02	18.97	
3	16QAM	8	7	18.80	18.87	18.79	
3	16QAM	15	0	18.84	19.03	18.88	
3	64QAM	1	0	19.33	19.45	19.34	20
3	64QAM	1	8	19.18	19.37	19.26	
3	64QAM	1	14	19.28	19.29	19.14	
3	64QAM	8	0	18.29	18.38	18.26	
3	64QAM	8	4	18.26	18.36	18.19	19
3	64QAM	8	7	18.04	18.24	18.20	
3	64QAM	15	0	18.12	18.31	18.14	
3	64QAM	15	0	18.12	18.31	18.14	
Channel				18607	18900	19193	Tune-up limit (dBm)
Frequency (MHz)				1850.7	1880	1909.3	
1.4	QPSK	1	0	20.86	20.92	20.89	22
1.4	QPSK	1	3	20.53	20.71	20.60	
1.4	QPSK	1	5	20.46	20.49	20.52	
1.4	QPSK	3	0	19.60	19.79	19.71	
1.4	QPSK	3	1	19.68	19.76	19.60	
1.4	QPSK	3	3	19.59	19.73	19.51	
1.4	QPSK	6	0	19.66	19.70	19.58	21
1.4	16QAM	1	0	20.08	20.17	20.01	
1.4	16QAM	1	3	20.02	20.08	20.07	21
1.4	16QAM	1	5	19.91	19.93	19.85	
1.4	16QAM	3	0	18.93	19.01	18.96	
1.4	16QAM	3	1	18.90	18.99	18.94	
1.4	16QAM	3	3	18.77	18.84	18.76	
1.4	16QAM	6	0	18.81	19.00	18.85	
1.4	64QAM	1	0	19.30	19.42	19.31	20
1.4	64QAM	1	3	19.15	19.34	19.23	
1.4	64QAM	1	5	19.25	19.26	19.11	
1.4	64QAM	3	0	18.26	18.35	18.23	
1.4	64QAM	3	1	18.23	18.33	18.16	
1.4	64QAM	3	3	18.01	18.21	18.17	
1.4	64QAM	6	0	18.09	18.28	18.11	19

3	QPSK	15	0	19.17	19.22	19.19	20.5
3	16QAM	1	0	19.74	19.80	19.78	
3	16QAM	1	8	19.69	19.76	19.71	
3	16QAM	1	14	19.70	19.73	19.71	
3	16QAM	8	0	18.47	18.56	18.51	19.5
3	16QAM	8	4	18.51	18.60	18.50	
3	16QAM	8	7	18.54	18.62	18.54	
3	16QAM	15	0	18.56	18.59	18.62	
3	64QAM	1	0	18.92	18.94	18.88	19.5
3	64QAM	1	8	18.86	18.88	18.82	
3	64QAM	1	14	18.91	18.92	18.88	
3	64QAM	8	0	17.60	17.68	17.66	
3	64QAM	8	4	17.56	17.66	17.62	18.5
3	64QAM	8	7	17.68	17.72	17.62	
3	64QAM	15	0	17.70	17.78	17.71	
3	64QAM	15	0	17.70	17.78	17.71	
Channel				19957	20175	20393	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1732.5	1754.3	
1.4	QPSK	1	0	20.29	20.33	20.31	21.5
1.4	QPSK	1	3	20.12	20.20	20.13	
1.4	QPSK	1	5	20.17	20.24	20.15	
1.4	QPSK	3	0	19.20	19.22	19.19	
1.4	QPSK	3	1	19.19	19.20	19.10	
1.4	QPSK	3	3	19.10	19.15	19.05	
1.4	QPSK	6	0	19.12	19.17	19.14	20.5
1.4	16QAM	1	0	19.69	19.75	19.73	
1.4	16QAM	1	3	19.64	19.71	19.66	20.5
1.4	16QAM	1	5	19.65	19.68	19.66	
1.4	16QAM	3	0	18.42	18.51	18.46	
1.4	16QAM	3	1	18.46	18.55	18.45	
1.4	16QAM	3	3	18.49	18.57	18.49	
1.4	16QAM	6	0	18.51	18.54	18.57	
1.4	64QAM	1	0	18.87	18.89	18.83	19.5
1.4	64QAM	1	3	18.81	18.83	18.77	
1.4	64QAM	1	5	18.86	18.87	18.83	
1.4	64QAM	3	0	17.55	17.63	17.61	
1.4	64QAM	3	1	17.51	17.61	17.57	
1.4	64QAM	3	3	17.63	17.67	17.57	
1.4	64QAM	6	0	17.65	17.73	17.66	18.5

Band 7 (2600MHz Band) (dBm)							
Part 27							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				20850	21100	21350	
Frequency (MHz)				2510	2535	2560	
20	QPSK	1	0	16.25	16.26	16.21	
20	QPSK	1	49	16.02	16.11	16.12	17
20	QPSK	1	99	15.79	15.80	15.88	
20	QPSK	50	0	14.93	15.06	15.04	
20	QPSK	50	24	15.01	15.02	14.93	16
20	QPSK	50	50	14.92	15.06	14.84	
20	QPSK	100	0	14.99	15.03	14.91	
20	16QAM	1	0	15.32	15.41	15.25	16
20	16QAM	1	49	15.26	15.32	15.31	
20	16QAM	1	99	15.15	15.17	15.09	
20	16QAM	50	0	14.17	14.25	14.20	15
20	16QAM	50	24	14.14	14.23	14.18	
20	16QAM	50	50	14.01	14.08	14.00	
20	16QAM	100	0	14.05	14.24	14.09	15
20	64QAM	1	0	14.54	14.66	14.55	
20	64QAM	1	49	14.39	14.58	14.47	
20	64QAM	1	99	14.49	14.50	14.35	14
20	64QAM	50	0	13.50	13.59	13.47	
20	64QAM	50	24	13.47	13.57	13.40	
20	64QAM	50	50	13.25	13.45	13.41	14
20	64QAM	100	0	13.33	13.52	13.35	
Channel				20825	21100	21375	Tune-up limit (dBm)
Frequency (MHz)				2507.5	2535	2562.5	
15	QPSK	1	0	16.17	16.18	16.13	
15	QPSK	1	37	15.94	16.03	16.04	17
15	QPSK	1	74	15.71	15.72	15.80	
15	QPSK	36	0	14.85	14.98	14.96	
15	QPSK	36	20	14.93	14.94	14.85	16
15	QPSK	36	39	14.84	14.98	14.76	
15	QPSK	75	0	14.91	14.95	14.83	
15	16QAM	1	0	15.24	15.33	15.17	16
15	16QAM	1	37	15.18	15.24	15.23	
15	16QAM	1	74	15.07	15.09	15.01	
15	16QAM	36	0	14.09	14.17	14.12	15
15	16QAM	36	20	14.06	14.15	14.10	
15	16QAM	36	39	13.93	14.00	13.92	
15	16QAM	75	0	13.97	14.16	14.01	15
15	64QAM	1	0	14.46	14.58	14.47	
15	64QAM	1	37	14.31	14.50	14.39	
15	64QAM	1	74	14.41	14.42	14.27	14
15	64QAM	36	0	13.42	13.51	13.39	
15	64QAM	36	20	13.39	13.49	13.32	
15	64QAM	36	39	13.17	13.37	13.33	14
15	64QAM	75	0	13.75	13.94	13.77	
Channel				20800	21100	21400	Tune-up limit (dBm)
Frequency (MHz)				2505	2535	2565	
10	QPSK	1	0	16.10	16.11	16.06	
10	QPSK	1	25	15.87	15.96	15.97	17
10	QPSK	1	49	15.64	15.65	15.73	
10	QPSK	25	0	14.78	14.91	14.89	
10	QPSK	25	12	14.86	14.87	14.78	16
10	QPSK	25	25	14.77	14.91	14.69	
10	QPSK	50	0	14.84	14.88	14.76	
10	16QAM	1	0	15.17	15.26	15.10	16
10	16QAM	1	25	15.11	15.17	15.16	
10	16QAM	1	49	15.00	15.02	14.94	
10	16QAM	25	0	14.02	14.10	14.05	15
10	16QAM	25	12	13.99	14.08	14.03	
10	16QAM	25	25	13.86	13.93	13.85	
10	16QAM	50	0	13.90	14.09	13.94	15
10	64QAM	1	0	14.39	14.51	14.40	
10	64QAM	1	25	14.24	14.43	14.32	
10	64QAM	1	49	14.34	14.35	14.20	14
10	64QAM	25	0	13.35	13.44	13.32	
10	64QAM	25	12	13.32	13.42	13.25	
10	64QAM	25	25	13.10	13.30	13.26	14
10	64QAM	50	0	13.68	13.87	13.70	
Channel				20775	21100	21425	Tune-up limit (dBm)
Frequency (MHz)				2502.5	2535	2567.5	
5	QPSK	1	0	16.04	16.05	16.00	
5	QPSK	1	12	15.81	15.90	15.91	17
5	QPSK	1	24	15.58	15.59	15.67	
5	QPSK	12	0	14.72	14.85	14.83	
5	QPSK	12	7	14.80	14.81	14.72	16
5	QPSK	12	13	14.71	14.85	14.63	
5	QPSK	25	0	14.78	14.82	14.70	
5	16QAM	1	0	15.11	15.20	15.04	16
5	16QAM	1	12	15.05	15.11	15.10	
5	16QAM	1	24	14.94	14.96	14.88	
5	16QAM	12	0	13.96	14.04	13.99	15
5	16QAM	12	7	13.93	14.02	13.97	
5	16QAM	12	13	13.80	13.87	13.79	
5	16QAM	25	0	13.84	14.03	13.88	15
5	64QAM	1	0	14.33	14.45	14.34	
5	64QAM	1	12	14.18	14.37	14.26	
5	64QAM	1	24	14.28	14.29	14.14	14
5	64QAM	12	0	13.29	13.38	13.26	
5	64QAM	12	7	13.26	13.36	13.19	
5	64QAM	12	13	13.04	13.24	13.20	14
5	64QAM	25	0	13.62	13.81	13.64	

Band 66 (dBm)							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				132072	132322	132572	
Frequency (MHz)				1720	1745	1770	
20	QPSK	1	0	21.30	21.31	21.26	22.5
20	QPSK	1	49	21.28	21.22	21.29	
20	QPSK	1	99	21.27	21.29	20.96	
20	QPSK	50	0	20.39	20.42	20.33	21.5
20	QPSK	50	24	20.35	20.39	20.25	
20	QPSK	50	50	20.40	20.41	20.35	
20	QPSK	100	0	20.37	20.31	20.28	21.5
20	16QAM	1	0	20.39	20.23	20.37	
20	16QAM	1	49	20.23	20.26	20.24	
20	16QAM	1	99	20.10	20.20	20.15	20.5
20	16QAM	50	0	19.36	19.37	19.30	
20	16QAM	50	24	19.09	19.30	19.29	
20	16QAM	50	50	19.35	19.38	19.36	20.5
20	16QAM	100	0	19.41	19.40	19.34	
20	64QAM	1	0	19.26	19.38	19.39	
20	64QAM	1	49	19.42	19.38	19.35	20.5
20	64QAM	1	99	19.25	19.23	19.11	
20	64QAM	50	0	18.50	18.40	18.44	
20	64QAM	50	24	18.41	18.43	18.32	19.5
20	64QAM	50	50	18.45	18.47	18.43	
20	64QAM	100	0	18.41	18.51	18.36	
Channel				132047	132322	132597	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1745	1772.5	
15	QPSK	1	0	21.24	21.25	21.20	22.5
15	QPSK	1	37	21.22	21.16	21.23	
15	QPSK	1	74	21.21	21.23	20.90	
15	QPSK	36	0	20.33	20.36	20.27	21.5
15	QPSK	36	20	20.29	20.33	20.19	
15	QPSK	36	39	20.34	20.35	20.29	
15	QPSK	75	0	20.31	20.25	20.22	21.5
15	16QAM	1	0	20.33	20.17	20.31	
15	16QAM	1	37	20.17	20.20	20.18	
15	16QAM	1	74	20.04	20.14	20.09	20.5
15	16QAM	36	0	19.30	19.31	19.24	
15	16QAM	36	20	19.03	19.24	19.23	
15	16QAM	36	39	19.29	19.32	19.30	20.5
15	16QAM	75	0	19.35	19.34	19.28	
15	64QAM	1	0	19.20	19.32	19.33	
15	64QAM	1	37	19.36	19.32	19.29	20.5
15	64QAM	1	74	19.19	19.17	19.05	
15	64QAM	36	0	18.44	18.34	18.38	
15	64QAM	36	20	18.35	18.37	18.26	19.5
15	64QAM	36	39	18.39	18.41	18.37	
15	64QAM	75	0	18.35	18.45	18.30	
Channel				132022	132322	132622	Tune-up limit (dBm)
Frequency (MHz)				1715	1745	1775	
10	QPSK	1	0	21.17	21.18	21.13	22.5
10	QPSK	1	25	21.15	21.09	21.16	
10	QPSK	1	49	21.14	21.16	20.83	
10	QPSK	25	0	20.26	20.29	20.20	21.5
10	QPSK	25	12	20.22	20.26	20.12	
10	QPSK	25	25	20.27	20.28	20.22	
10	QPSK	50	0	20.24	20.18	20.15	21.5
10	16QAM	1	0	20.26	20.10	20.24	
10	16QAM	1	25	20.10	20.13	20.11	
10	16QAM	1	49	19.97	20.07	20.02	20.5
10	16QAM	25	0	19.23	19.24	19.17	
10	16QAM	25	12	18.96	19.17	19.16	
10	16QAM	25	25	19.22	19.25	19.23	20.5
10	16QAM	50	0	19.28	19.27	19.21	
10	64QAM	1	0	19.13	19.25	19.26	
10	64QAM	1	25	19.29	19.25	19.22	20.5
10	64QAM	1	49	19.12	19.10	18.98	
10	64QAM	25	0	18.37	18.27	18.31	
10	64QAM	25	12	18.28	18.30	18.19	19.5
10	64QAM	25	25	18.32	18.34	18.30	
10	64QAM	50	0	18.28	18.38	18.23	
Channel				131997	132322	132647	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1745	1777.5	
5	QPSK	1	0	21.09	21.10	21.05	22.5
5	QPSK	1	12	21.07	21.01	21.08	
5	QPSK	1	24	21.06	21.08	20.75	
5	QPSK	12	0	20.18	20.21	20.12	21.5
5	QPSK	12	7	20.14	20.18	20.04	
5	QPSK	12	13	20.19	20.20	20.14	
5	QPSK	25	0	20.16	20.10	20.07	21.5
5	16QAM	1	0	20.18	20.02	20.16	
5	16QAM	1	12	20.02	20.05	20.03	
5	16QAM	1	24	19.89	19.99	19.94	20.5
5	16QAM	12	0	19.15	19.16	19.09	
5	16QAM	12	7	18.88	19.09	19.08	
5	16QAM	12	13	19.14	19.17	19.15	20.5
5	16QAM	25	0	19.20	19.19	19.13	
5	64QAM	1	0	19.05	19.17	19.18	
5	64QAM	1	12	19.21	19.17	19.14	20.5
5	64QAM	1	24	19.04	19.02	18.90	
5	64QAM	12	0	18.29	18.19	18.23	
5	64QAM	12	7	18.20	18.22	18.11	19.5
5	64QAM	12	13	18.24	18.26	18.22	
5	64QAM	25	0	18.20	18.30	18.15	
Channel				131987	132322	132657	Tune-up limit (dBm)
Frequency (MHz)				1711.5	1745	1778.5	
3	QPSK	1	0	21.02	21.03	20.98	22.5
3	QPSK	1	8	21.00	20.94	21.01	
3	QPSK	1	14	20.99	21.01	20.68	
3	QPSK	8	0	20.11	20.14	20.05	21.5
3	QPSK	8	4	20.07	20.11	19.97	
3	QPSK	8	7	20.12	20.13	20.07	

3	QPSK	15	0	20.09	20.03	20.00	21.5
3	16QAM	1	0	20.11	19.95	20.09	
3	16QAM	1	8	19.95	19.98	19.96	
3	16QAM	1	14	19.82	19.92	19.87	20.5
3	16QAM	8	0	19.08	19.09	19.02	
3	16QAM	8	4	18.81	19.02	19.01	
3	16QAM	8	7	19.07	19.10	19.08	20.5
3	16QAM	15	0	19.13	19.12	19.06	
3	64QAM	1	0	18.98	19.10	19.11	
3	64QAM	1	8	19.14	19.10	19.07	19.5
3	64QAM	1	14	18.97	18.95	18.83	
3	64QAM	8	0	18.22	18.12	18.16	
3	64QAM	8	4	18.13	18.15	18.04	19.5
3	64QAM	8	7	18.17	18.19	18.15	
3	64QAM	15	0	18.13	18.23	18.08	
Channel				131979	132322	132665	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1745	1779.3	
1.4	QPSK	1	0	21.00	21.01	20.96	22.5
1.4	QPSK	1	3	20.98	20.92	20.99	
1.4	QPSK	1	5	20.97	20.99	20.86	
1.4	QPSK	3	0	20.09	20.12	20.03	
1.4	QPSK	3	1	20.05	20.09	19.95	
1.4	QPSK	3	3	20.10	20.11	20.05	21.5
1.4	QPSK	6	0	20.07	20.01	19.98	
1.4	16QAM	1	0	20.09	19.93	20.07	
1.4	16QAM	1	3	19.93	19.96	19.94	21.5
1.4	16QAM	1	5	19.80	19.90	19.85	
1.4	16QAM	3	0	19.06	19.07	19.00	
1.4	16QAM	3	1	18.79	19.00	18.99	
1.4	16QAM	3	3	19.05	19.08	19.06	
1.4	16QAM	6	0	19.11	19.10	19.04	20.5
1.4	64QAM	1	0	18.96	19.08	19.09	
1.4	64QAM	1	3	19.12	19.08	19.05	
1.4	64QAM	1	5	18.95	18.93	18.81	20.5
1.4	64QAM	3	0	18.20	18.10	18.14	
1.4	64QAM	3	1	18.11	18.13	18.02	
1.4	64QAM	3	3	18.15	18.17	18.13	
1.4	64QAM	6	0	18.11	18.21	18.06	
							19.5

Band 38(only on channel required) (dBm)							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				37850	38000	38150	
Frequency (MHz)				2580	2595	2610	
20	QPSK	1	0	21.09	21.13	21.11	22
20	QPSK	1	49	20.96	21.09	20.93	
20	QPSK	1	99	21.08	21.05	20.87	
20	QPSK	50	0	20.08	20.15	20.10	21
20	QPSK	50	24	20.11	20.12	19.98	
20	QPSK	50	50	20.08	20.01	19.94	
20	QPSK	100	0	20.11	20.14	20.01	21
20	16QAM	1	0	20.21	20.22	20.10	
20	16QAM	1	49	20.11	20.14	20.18	
20	16QAM	1	99	20.03	20.07	20.04	20
20	16QAM	50	0	19.08	19.15	18.96	
20	16QAM	50	24	19.16	19.11	19.13	
20	16QAM	50	50	18.98	19.03	18.96	20
20	16QAM	100	0	19.07	19.08	19.02	
20	64QAM	1	0	19.12	19.19	19.10	
20	64QAM	1	49	18.94	19.02	19.05	20
20	64QAM	1	99	19.01	19.03	19.04	
20	64QAM	50	0	19.00	19.05	19.00	
20	64QAM	50	24	19.04	19.00	18.96	22
20	64QAM	50	50	18.91	18.98	18.85	
20	64QAM	100	0	18.83	19.01	18.87	
Channel				37825	38000	38175	Tune-up limit (dBm)
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	21.02	21.06	21.04	22
15	QPSK	1	37	20.89	21.02	20.86	
15	QPSK	1	74	21.01	20.98	20.80	
15	QPSK	36	0	20.01	20.08	20.03	21
15	QPSK	36	20	20.04	20.05	19.91	
15	QPSK	36	39	20.01	19.94	19.87	
15	QPSK	75	0	20.04	20.07	19.94	21
15	16QAM	1	0	20.14	20.15	20.03	
15	16QAM	1	37	20.04	20.07	20.11	
15	16QAM	1	74	19.96	20.00	19.97	20
15	16QAM	36	0	19.01	19.08	18.89	
15	16QAM	36	20	19.09	19.04	19.06	
15	16QAM	36	39	18.91	18.96	18.89	20
15	16QAM	75	0	19.00	19.01	18.95	
15	64QAM	1	0	19.05	19.12	19.03	
15	64QAM	1	37	18.87	18.95	18.98	20
15	64QAM	1	74	18.94	18.96	18.97	
15	64QAM	36	0	18.93	18.98	18.93	
15	64QAM	36	20	18.97	18.93	18.89	22
15	64QAM	36	39	18.84	18.91	18.78	
15	64QAM	75	0	18.76	18.94	18.80	
Channel				37800	38000	38200	Tune-up limit (dBm)
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	20.96	21.00	20.98	22
10	QPSK	1	25	20.83	20.96	20.80	
10	QPSK	1	49	20.95	20.92	20.74	
10	QPSK	25	0	19.95	20.02	19.97	21
10	QPSK	25	12	19.98	19.99	19.85	
10	QPSK	25	25	19.95	19.88	19.81	
10	QPSK	50	0	19.98	20.01	19.88	21
10	16QAM	1	0	20.08	20.09	19.97	
10	16QAM	1	25	19.98	20.01	20.05	
10	16QAM	1	49	19.90	19.94	19.91	20
10	16QAM	25	0	18.95	19.02	18.83	
10	16QAM	25	12	19.03	18.98	19.00	
10	16QAM	25	25	18.85	18.90	18.83	20
10	16QAM	50	0	18.94	18.95	18.89	
10	64QAM	1	0	18.99	19.06	18.97	
10	64QAM	1	25	18.81	18.89	18.92	20
10	64QAM	1	49	18.88	18.90	18.91	
10	64QAM	25	0	18.87	18.92	18.87	
10	64QAM	25	12	18.91	18.87	18.83	22
10	64QAM	25	25	18.78	18.85	18.72	
10	64QAM	50	0	18.70	18.88	18.74	
Channel				37775	38000	38225	Tune-up limit (dBm)
Frequency (MHz)				2572.5	2595	2617.5	
5	QPSK	1	0	20.91	20.95	20.93	22
5	QPSK	1	12	20.78	20.91	20.75	
5	QPSK	1	24	20.90	20.87	20.69	
5	QPSK	12	0	19.90	19.97	19.92	21
5	QPSK	12	7	19.93	19.94	19.80	
5	QPSK	12	13	19.90	19.83	19.76	
5	QPSK	25	0	19.93	19.96	19.83	21
5	16QAM	1	0	20.03	20.04	19.92	
5	16QAM	1	12	19.93	19.96	20.00	
5	16QAM	1	24	19.85	19.89	19.86	20
5	16QAM	12	0	18.90	18.97	18.78	
5	16QAM	12	7	18.98	18.93	18.95	
5	16QAM	12	13	18.80	18.85	18.78	20
5	16QAM	25	0	18.89	18.90	18.84	
5	64QAM	1	0	18.94	19.01	18.92	
5	64QAM	1	12	18.76	18.84	18.87	20
5	64QAM	1	24	18.83	18.85	18.86	
5	64QAM	12	0	18.82	18.87	18.82	
5	64QAM	12	7	18.86	18.82	18.78	22
5	64QAM	12	13	18.73	18.80	18.67	
5	64QAM	25	0	18.65	18.83	18.69	

Band 40 (2.3G Band-1) (dBm) Part 27D-1 2305MHz ~ 2315MHz							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				38750			
Frequency (MHz)				2310			
10	QPSK	1	0	20.68			21.5
10	QPSK	1	25	20.64			
10	QPSK	1	49	20.59			
10	QPSK	25	0	19.81			20.5
10	QPSK	25	12	19.69			
10	QPSK	25	25	19.73			
10	QPSK	50	0	19.75			20.5
10	16QAM	1	0	19.78			
10	16QAM	1	25	19.74			
10	16QAM	1	49	19.71			19.5
10	16QAM	25	0	18.83			
10	16QAM	25	12	18.79			
10	16QAM	25	25	18.70			19.5
10	16QAM	50	0	18.76			
10	64QAM	1	0	18.77			
10	64QAM	1	25	18.74			19.5
10	64QAM	1	49	18.68			
10	64QAM	25	0	17.82			
10	64QAM	25	12	17.73			18.5
10	64QAM	25	25	17.75			
10	64QAM	50	0	17.66			
Channel				38725	38750	38775	Tune-up limit (dBm)
Frequency (MHz)				2307.5	2310	2312.5	
5	QPSK	1	0	20.53	20.56	20.49	21.5
5	QPSK	1	12	20.48	20.54	20.45	
5	QPSK	1	24	20.38	20.50	20.51	
5	QPSK	12	0	19.67	19.78	19.68	20.5
5	QPSK	12	7	19.66	19.63	19.50	
5	QPSK	12	13	19.50	19.74	19.52	
5	QPSK	25	0	19.71	19.79	19.58	20.5
5	16QAM	1	0	19.73	19.71	19.61	
5	16QAM	1	12	19.50	19.47	19.62	
5	16QAM	1	24	19.55	19.56	19.40	19.5
5	16QAM	12	0	18.65	18.77	18.74	
5	16QAM	12	7	18.48	18.58	18.51	
5	16QAM	12	13	18.51	18.75	18.46	19.5
5	16QAM	25	0	18.64	18.68	18.65	
5	64QAM	1	0	18.66	18.82	18.65	
5	64QAM	1	12	18.76	18.59	18.59	19.5
5	64QAM	1	24	18.55	18.60	18.69	
5	64QAM	12	0	17.56	17.73	17.78	
5	64QAM	12	7	17.70	17.71	17.69	18.5
5	64QAM	12	13	17.68	17.72	17.76	
5	64QAM	25	0	17.48	17.59	17.58	

Band 40 (2.3G Band-2) (dBm)								
Part 27D-2 2350MHz ~ 2360MHz								
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)	
Channel				39200				
Frequency (MHz)				2355			21.5	
10	QPSK	1	0	20.47				
10	QPSK	1	25	20.43				
10	QPSK	1	49	20.34				
10	QPSK	25	0	19.58				
10	QPSK	25	12	19.44			20.5	
10	QPSK	25	25	19.49				
10	QPSK	50	0	19.41				
10	16QAM	1	0	19.50				
10	16QAM	1	25	19.49				
10	16QAM	1	49	19.40			20.5	
10	16QAM	25	0	18.46				
10	16QAM	25	12	18.57				
10	16QAM	25	25	18.43				
10	16QAM	50	0	18.50				
10	64QAM	1	0	18.52			19.5	
10	64QAM	1	25	18.48				
10	64QAM	1	49	18.41				
10	64QAM	25	0	17.60				
10	64QAM	25	12	17.56				
10	64QAM	25	25	17.47			18.5	
10	64QAM	50	0	17.52				
Channel				39175	39200	39225		Tune-up limit (dBm)
Frequency (MHz)				2352.5	2355	2357.5		
5	QPSK	1	0	20.37	20.40	20.35		21.5
5	QPSK	1	12	20.21	20.38	20.24		
5	QPSK	1	24	20.29	20.27	20.11		
5	QPSK	12	0	19.48	19.58	19.55		
5	QPSK	12	7	19.32	19.58	19.35		
5	QPSK	12	13	19.38	19.36	19.30	20.5	
5	QPSK	25	0	19.32	19.46	19.33		
5	16QAM	1	0	19.48	19.45	19.43		
5	16QAM	1	12	19.33	19.46	19.44		
5	16QAM	1	24	19.29	19.30	19.33		
5	16QAM	12	0	18.44	18.49	18.48	19.5	
5	16QAM	12	7	18.48	18.35	18.35		
5	16QAM	12	13	18.42	18.33	18.50		
5	16QAM	25	0	18.37	18.50	18.31		
5	64QAM	1	0	18.46	18.60	18.38		
5	64QAM	1	12	18.39	18.53	18.39	19.5	
5	64QAM	1	24	18.38	18.43	18.36		
5	64QAM	12	0	17.37	17.41	17.49		
5	64QAM	12	7	17.33	17.51	17.45		
5	64QAM	12	13	17.40	17.30	17.30		
5	64QAM	25	0	17.23	17.36	17.35	18.5	