



REPORT No.: SZ24100314S01

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		32.51	32.46	32.62	33.50	23.51	23.46	23.62	24.50	0.37
GPRS 1 Tx slot		32.25	32.34	32.35	33.50	23.25	23.34	23.35	24.50	
GPRS 2 Tx slots		30.34	30.54	30.33	31.50	24.34	24.54	24.33	25.50	0.21
GPRS 3 Tx slots		29.11	29.16	29.20	30.00	24.85	24.90	24.94	25.74	0.09
GPRS 4 Tx slots		28.34	28.47	28.46	29.00	25.34	25.47	25.46	26.00	0.13
EDGE 1 Tx slot		25.41	25.44	25.28	26.00	16.41	16.44	16.28	17.00	0.16
EDGE 2 Tx slots		23.55	23.63	23.42	24.50	17.55	17.63	17.42	18.50	0.21
EDGE 3 Tx slots		21.07	21.11	21.06	22.00	16.81	16.85	16.80	17.74	0.05
EDGE 4 Tx slots		19.85	19.92	20.07	21.00	16.85	16.92	17.07	18.00	0.22
Mode			Max.	32.62			Max.	25.47		
Attenuator		Cable Loss : 0.6								

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		29.35	29.26	29.24	30.00	20.35	20.26	20.24	21.00	0.44
GPRS 1 Tx slot		28.96	28.91	29.05	30.00	19.96	19.91	20.05	21.00	
GPRS 2 Tx slots		27.27	27.21	27.21	28.00	21.27	21.21	21.21	22.00	0.06
GPRS 3 Tx slots		25.46	25.44	25.46	26.00	21.20	21.18	21.20	21.74	0.02
GPRS 4 Tx slots		23.98	24.33	23.97	25.00	20.98	21.33	20.97	22.00	0.36
EDGE 1 Tx slot		25.66	25.77	25.85	26.50	16.66	16.77	16.85	17.50	0.19
EDGE 2 Tx slots		23.70	23.76	23.65	24.50	17.70	17.76	17.65	18.50	0.11
EDGE 3 Tx slots		22.32	22.30	22.37	23.00	18.06	18.04	18.11	18.74	0.07
EDGE 4 Tx slots		20.44	20.69	20.28	21.50	17.44	17.69	17.28	18.50	0.41
Mode			Max.	29.35			Max.	21.33		
Attenuator		Cable Loss : 0.8								

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	21.93	21.97	21.90	23.00	22.13	22.21	22.16	23.00	22.59	22.68	22.54	23.50
3GPP Rel 5	HSDPA Subtest-1	21.93	21.76	21.96	23.00	22.05	22.16	22.11	23.00	22.56	22.46	22.55	23.50
3GPP Rel 5	HSDPA Subtest-2	21.05	20.86	20.89	22.00	21.45	21.37	21.35	23.00	21.91	21.60	21.53	23.00
3GPP Rel 5	HSDPA Subtest-3	20.85	20.65	20.68	22.00	21.26	21.18	21.15	22.50	21.33	21.33	21.13	22.00
3GPP Rel 5	HSDPA Subtest-4	20.70	20.51	20.57	22.00	21.14	21.06	21.03	22.50	21.23	21.22	21.02	22.00
3GPP Rel 8	DC-HSDPA Subtest-1	21.78	21.41	21.64	23.00	22.12	22.00	21.87	23.00	22.64	22.32	22.26	23.50
3GPP Rel 8	DC-HSDPA Subtest-2	20.64	20.43	20.51	22.00	20.99	20.87	20.88	22.00	21.19	21.19	20.98	22.00
3GPP Rel 8	DC-HSDPA Subtest-3	20.44	20.23	20.32	21.50	20.79	20.68	20.68	22.00	20.99	20.99	20.74	22.00
3GPP Rel 8	DC-HSDPA Subtest-4	20.40	20.20	20.28	21.00	20.76	20.65	20.65	22.00	20.96	20.95	20.74	22.00
3GPP Rel 6	HSUPA Subtest-1	21.95	21.75	21.90	23.00	22.09	22.10	22.06	23.00	20.59	22.60	20.43	23.50
3GPP Rel 6	HSUPA Subtest-2	21.92	21.67	21.87	23.00	22.10	22.11	22.17	23.00	21.42	20.64	20.41	22.00
3GPP Rel 6	HSUPA Subtest-3	21.87	21.77	21.92	23.00	22.07	21.79	22.07	23.00	22.56	20.61	20.48	23.50
3GPP Rel 6	HSUPA Subtest-4	21.89	21.71	21.84	23.00	22.16	21.35	22.14	23.00	22.47	22.52	20.39	23.50
3GPP Rel 6	HSUPA Subtest-5	21.88	21.83	21.87	23.00	22.06	22.07	22.14	23.00	22.44	22.62	22.55	23.50
3GPP Rel 7	HSPA+ (16QAM) Subtest-1	21.92	21.86	21.87	23.00	22.01	22.08	22.09	23.00	22.50	22.41	22.59	23.50
Attenuator		Cable Loss				Cable Loss				Cable Loss			
Mode			Max.	21.97			Max.	22.21			Max.	22.68	

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)				1880	1880	1900	
20	QPSK	1	0	23.53	23.67	23.56	24.5
20	QPSK	1	49	23.43	23.52	23.41	
20	QPSK	1	99	23.30	23.38	23.20	
20	QPSK	50	0	22.47	22.55	22.49	
20	QPSK	50	24	22.26	22.41	22.18	23.5
20	QPSK	50	50	21.96	22.27	21.89	
20	QPSK	100	0	22.00	22.13	21.96	
20	16QAM	1	0	22.50	22.72	22.60	
20	16QAM	1	49	22.30	22.56	22.50	23.5
20	16QAM	1	99	22.20	22.38	22.50	
20	16QAM	50	0	21.41	21.71	21.35	
20	16QAM	50	24	21.15	21.43	21.20	
20	16QAM	50	50	21.10	21.29	21.13	22.5
20	16QAM	100	0	21.20	21.01	21.17	
20	64QAM	1	0	21.39	21.67	21.53	
20	64QAM	1	49	21.26	21.53	21.43	
20	64QAM	1	99	21.25	21.58	21.30	22.5
20	64QAM	50	0	21.01	21.20	21.01	
20	64QAM	50	24	20.94	21.00	20.97	
20	64QAM	50	50	20.93	20.95	20.90	
20	64QAM	100	0	20.88	21.03	20.89	21.5
Channel				18675	18900	19125	
Frequency (MHz)				1857.5	1880	1902.5	
15	QPSK	1	0	23.48	23.58	23.53	24.5
15	QPSK	1	37	23.35	23.44	23.35	
15	QPSK	1	74	23.21	23.34	23.16	
15	QPSK	36	0	22.39	22.49	22.38	
15	QPSK	36	20	22.22	22.37	22.13	23.5
15	QPSK	36	39	21.93	22.19	21.85	
15	QPSK	75	0	21.66	22.05	21.60	
15	16QAM	1	0	22.42	22.67	22.56	
15	16QAM	1	37	22.24	22.48	22.45	23.5
15	16QAM	1	74	22.14	22.32	22.47	
15	16QAM	36	0	21.36	21.66	21.30	
15	16QAM	36	20	21.07	21.36	21.16	
15	16QAM	36	39	21.04	21.21	21.06	22.5
15	16QAM	75	0	21.17	20.97	21.12	
15	64QAM	1	0	21.35	21.63	21.44	
15	64QAM	1	37	21.20	21.50	21.37	
15	64QAM	1	74	21.20	21.55	21.26	22.5
15	64QAM	36	0	20.95	21.16	20.96	
15	64QAM	36	20	20.85	20.95	20.92	
15	64QAM	36	39	20.86	20.88	20.82	
15	64QAM	75	0	20.82	20.95	20.80	21.5
Channel				18650	18900	19150	
Frequency (MHz)				1855	1880	1905	
10	QPSK	1	0	23.43	23.62	23.49	24.5
10	QPSK	1	25	23.38	23.46	23.34	
10	QPSK	1	49	23.25	23.28	23.10	
10	QPSK	25	0	22.36	22.48	22.39	
10	QPSK	25	12	22.20	22.32	22.10	23.5
10	QPSK	25	25	21.87	22.20	21.83	
10	QPSK	50	0	21.61	22.06	21.57	
10	16QAM	1	0	22.45	22.62	22.54	
10	16QAM	1	25	22.23	22.45	22.44	23.5
10	16QAM	1	49	22.14	22.28	22.41	
10	16QAM	25	0	21.32	21.62	21.30	
10	16QAM	25	12	21.09	21.38	21.13	
10	16QAM	25	25	21.05	21.20	21.04	22.5
10	16QAM	50	0	21.09	20.95	21.11	
10	64QAM	1	0	21.31	21.57	21.48	
10	64QAM	1	25	21.19	21.47	21.37	
10	64QAM	1	49	21.16	21.50	21.22	22.5
10	64QAM	25	0	20.90	21.11	20.91	
10	64QAM	25	12	20.84	20.85	20.91	
10	64QAM	25	25	20.83	20.86	20.83	
10	64QAM	50	0	20.78	20.92	20.79	21.5
Channel				18625	18900	19175	
Frequency (MHz)				1852.5	1880	1907.5	
5	QPSK	1	0	23.47	23.60	23.45	24.5
5	QPSK	1	12	23.32	23.46	23.36	
5	QPSK	1	24	23.20	23.30	23.12	
5	QPSK	12	0	22.39	22.45	22.40	
5	QPSK	12	7	22.16	22.33	22.11	23.5
5	QPSK	12	13	21.90	22.18	21.84	
5	QPSK	25	0	21.62	22.05	21.60	
5	16QAM	1	0	22.41	22.66	22.53	
5	16QAM	1	12	22.20	22.50	22.44	23.5
5	16QAM	1	24	22.14	22.29	22.40	
5	16QAM	12	0	21.35	21.62	21.25	
5	16QAM	12	7	21.07	21.37	21.14	
5	16QAM	12	13	21.04	21.21	21.03	22.5
5	16QAM	25	0	21.14	20.93	21.11	
5	64QAM	1	0	21.28	21.57	21.47	
5	64QAM	1	12	21.21	21.46	21.33	
5	64QAM	1	24	21.17	21.49	21.20	22.5
5	64QAM	12	0	20.95	21.08	20.94	
5	64QAM	12	7	20.86	20.87	20.90	
5	64QAM	12	13	20.86	20.85	20.81	
5	64QAM	25	0	20.78	20.91	20.82	21.5
Channel				18615	18900	19185	
Frequency (MHz)				1851.5	1880	1908.5	
3	QPSK	1	0	23.47	23.58	23.52	24.5
3	QPSK	1	8	23.35	23.45	23.33	
3	QPSK	1	14	23.23	23.33	23.11	
3	QPSK	8	0	22.41	22.50	22.43	
3	QPSK	8	4	22.22	22.33	22.12	23.5

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	22.98	23.08	23.06	24
20	QPSK	1	49	22.82	22.92	22.92	
20	QPSK	1	99	22.63	22.76	22.78	
20	QPSK	50	0	21.87	22.05	22.01	
20	QPSK	50	24	21.65	21.95	21.85	23
20	QPSK	50	50	21.53	21.80	21.67	
20	QPSK	100	0	21.52	21.68	21.56	
20	16QAM	1	0	22.06	22.22	22.10	
20	16QAM	1	49	21.95	22.01	21.97	23
20	16QAM	1	99	21.84	21.81	21.79	
20	16QAM	50	0	21.31	21.24	21.21	
20	16QAM	50	24	21.17	21.02	21.09	
20	16QAM	50	50	20.96	20.83	20.88	22
20	16QAM	100	0	20.76	20.66	20.71	
20	64QAM	1	0	21.20	21.07	21.11	
20	64QAM	1	49	21.12	20.99	21.06	
20	64QAM	1	99	21.06	20.95	21.01	22
20	64QAM	50	0	20.74	20.58	20.67	
20	64QAM	50	24	20.68	20.56	20.60	
20	64QAM	50	50	20.66	20.52	20.59	
20	64QAM	100	0	20.60	20.51	20.56	21
Channel				20025	20175	20325	
Frequency (MHz)				1717.5	1732.5	1747.5	
15	QPSK	1	0	22.95	23.02	23.01	24
15	QPSK	1	37	22.76	22.89	22.88	
15	QPSK	1	74	22.58	22.72	22.72	
15	QPSK	36	0	21.79	22.00	21.93	
15	QPSK	36	20	21.57	21.88	21.77	23
15	QPSK	36	39	21.49	21.74	21.62	
15	QPSK	75	0	21.39	21.54	21.42	
15	16QAM	1	0	22.00	22.18	22.04	
15	16QAM	1	37	21.86	21.96	21.89	23
15	16QAM	1	74	21.80	21.73	21.71	
15	16QAM	36	0	21.22	21.17	21.18	
15	16QAM	36	20	21.10	20.93	21.05	
15	16QAM	36	39	20.88	20.75	20.85	22
15	16QAM	75	0	20.68	20.58	20.66	
15	64QAM	1	0	21.14	21.00	21.07	
15	64QAM	1	37	21.09	20.96	21.02	
15	64QAM	1	74	21.02	20.89	20.96	22
15	64QAM	36	0	20.85	20.52	20.60	
15	64QAM	36	20	20.59	20.53	20.52	
15	64QAM	36	39	20.62	20.45	20.53	
15	64QAM	75	0	20.52	20.47	20.49	21
Channel				20000	20175	20350	
Frequency (MHz)				1715	1732.5	1750	
10	QPSK	1	0	22.83	22.93	22.98	24
10	QPSK	1	25	22.67	22.81	22.78	
10	QPSK	1	49	22.56	22.65	22.61	
10	QPSK	25	0	21.79	21.93	21.84	
10	QPSK	25	12	21.51	21.83	21.71	23
10	QPSK	25	25	21.43	21.65	21.53	
10	QPSK	50	0	21.26	21.46	21.36	
10	16QAM	1	0	21.98	22.12	21.98	
10	16QAM	1	25	21.83	21.92	21.87	23
10	16QAM	1	49	21.72	21.67	21.64	
10	16QAM	25	0	21.17	21.12	21.08	
10	16QAM	25	12	21.03	20.90	20.98	
10	16QAM	25	25	20.83	20.68	20.76	22

3	QPSK	8	7	21.90	22.23	21.84	23.5
3	QPSK	15	0	21.62	22.08	21.62	
3	16QAM	1	0	22.43	22.67	22.55	
3	16QAM	1	8	22.22	22.48	22.46	22.5
3	16QAM	1	14	22.11	22.33	22.44	
3	16QAM	8	0	21.32	21.67	21.30	
3	16QAM	8	4	21.12	21.37	21.12	22.5
3	16QAM	8	7	21.04	21.21	21.04	
3	16QAM	15	0	21.14	20.93	21.13	
3	64QAM	1	0	21.33	21.60	21.45	22.5
3	64QAM	1	8	21.21	21.46	21.35	
3	64QAM	1	14	21.19	21.55	21.27	
3	64QAM	8	0	20.93	21.08	20.93	21.5
3	64QAM	8	4	20.88	20.87	20.88	
3	64QAM	8	7	20.89	20.85	20.85	
3	64QAM	15	0	20.80	20.93	20.82	21.5
Channel				18607	18900	19193	
Frequency (MHz)				1850.7	1880	1909.3	Tune-up limit (dBm)
1.4	QPSK	1	0	23.46	23.57	23.47	24.5
1.4	QPSK	1	3	23.36	23.45	23.34	
1.4	QPSK	1	5	23.23	23.28	23.14	
1.4	QPSK	3	0	22.38	22.47	22.39	23.5
1.4	QPSK	3	1	22.16	22.33	22.11	
1.4	QPSK	3	3	21.86	22.20	21.80	
1.4	QPSK	6	0	21.63	22.02	21.58	23.5
1.4	16QAM	1	0	22.43	22.66	22.54	
1.4	16QAM	1	3	22.22	22.50	22.42	
1.4	16QAM	1	5	22.15	22.28	22.42	23.5
1.4	16QAM	3	0	21.35	21.65	21.26	
1.4	16QAM	3	1	21.05	21.35	21.13	
1.4	16QAM	3	3	21.02	21.18	21.03	22.5
1.4	16QAM	6	0	21.15	20.95	21.09	
1.4	64QAM	1	0	21.34	21.57	21.48	
1.4	64QAM	1	3	21.18	21.44	21.37	22.5
1.4	64QAM	1	5	21.17	21.48	21.25	
1.4	64QAM	3	0	20.95	21.03	20.92	
1.4	64QAM	3	1	20.83	20.86	20.87	21.5
1.4	64QAM	3	3	20.88	20.87	20.81	
1.4	64QAM	6	0	20.79	20.90	20.82	

3	QPSK	8	7	21.45	21.69	21.54	23
3	QPSK	15	0	21.30	21.48	21.39	
3	16QAM	1	0	21.98	22.10	21.99	
3	16QAM	1	8	21.84	21.90	21.87	22
3	16QAM	1	14	21.76	21.64	21.66	
3	16QAM	8	0	21.18	21.09	21.08	
3	16QAM	8	4	21.02	20.92	21.01	22
3	16QAM	8	7	20.83	20.69	20.73	
3	16QAM	15	0	20.67	20.54	20.58	
3	64QAM	1	0	21.08	20.97	20.99	22
3	64QAM	1	8	21.02	20.89	20.94	
3	64QAM	1	14	20.96	20.80	20.93	
3	64QAM	8	0	20.63	20.46	20.53	21
3	64QAM	8	4	20.55	20.44	20.50	
3	64QAM	8	7	20.50	20.41	20.51	
3	64QAM	15	0	20.50	20.39	20.48	21
Channel				19957	20175	20393	
Frequency (MHz)				1710.7	1732.5	1754.3	Tune-up limit (dBm)
1.4	QPSK	1	0	22.83	22.96	22.99	24
1.4	QPSK	1	3	22.70	22.86	22.77	
1.4	QPSK	1	5	22.54	22.67	22.64	
1.4	QPSK	3	0	21.77	21.91	21.86	23
1.4	QPSK	3	1	21.54	21.84	21.72	
1.4	QPSK	3	3	21.41	21.63	21.53	
1.4	QPSK	6	0	21.27	21.48	21.35	23
1.4	16QAM	1	0	21.93	22.11	22.03	
1.4	16QAM	1	3	21.78	21.92	21.87	
1.4	16QAM	1	5	21.75	21.70	21.67	23
1.4	16QAM	3	0	21.20	21.11	21.07	
1.4	16QAM	3	1	20.99	20.91	20.99	
1.4	16QAM	3	3	20.84	20.69	20.74	22
1.4	16QAM	6	0	20.65	20.52	20.61	
1.4	64QAM	1	0	21.05	20.95	21.01	
1.4	64QAM	1	3	21.05	20.90	20.95	22
1.4	64QAM	1	5	20.93	20.83	20.89	
1.4	64QAM	3	0	20.62	20.46	20.51	
1.4	64QAM	3	1	20.56	20.47	20.50	21
1.4	64QAM	3	3	20.55	20.44	20.50	
1.4	64QAM	6	0	20.48	20.36	20.46	

Band 5 (Celluar 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	23.10	23.14	23.13	24		
10	QPSK	1	25	22.98	23.00	22.93			
10	QPSK	1	49	22.84	22.90	22.77			
10	QPSK	25	0	22.08	22.14	22.03			
10	QPSK	25	12	21.94	21.95	21.82	23		
10	QPSK	25	25	21.77	21.81	21.68			
10	QPSK	50	0	21.67	21.68	21.59			
10	16QAM	1	0	22.27	22.38	22.17			
10	16QAM	1	25	22.08	22.18	22.00	23		
10	16QAM	1	49	21.87	22.00	21.89			
10	16QAM	25	0	21.29	21.50	21.37			
10	16QAM	25	12	21.15	21.29	21.15			
10	16QAM	25	25	20.98	21.10	20.99	22		
10	16QAM	50	0	20.82	20.93	20.87			
10	64QAM	1	0	21.21	21.33	21.28			
10	64QAM	1	25	21.19	21.26	21.22			
10	64QAM	1	49	21.12	21.24	21.16	22		
10	64QAM	25	0	20.82	20.88	20.85			
10	64QAM	25	12	20.77	20.82	20.84			
10	64QAM	25	25	20.70	20.80	20.83			
10	64QAM	50	0	20.67	20.73	20.80	21		
Channel				20425	20525	20625			
Frequency (MHz)				826.5	836.5	846.5			
5	QPSK	1	0	23.08	23.08	23.10	24		
5	QPSK	1	12	22.86	22.92	22.91			
5	QPSK	1	24	22.71	22.76	22.73			
5	QPSK	12	0	21.89	22.01	21.95			
5	QPSK	12	7	21.70	21.81	21.83	23		
5	QPSK	12	13	21.56	21.74	21.72			
5	QPSK	25	0	21.47	21.51	21.53			
5	16QAM	1	0	22.08	22.14	22.08			
5	16QAM	1	12	21.91	22.02	21.98	23		
5	16QAM	1	24	21.80	21.86	21.83			
5	16QAM	12	0	21.22	21.32	21.30			
5	16QAM	12	7	21.16	21.21	21.12			
5	16QAM	12	13	21.01	21.03	20.92	22		
5	16QAM	25	0	20.77	20.94	20.67			
5	64QAM	1	0	21.21	21.39	21.07			
5	64QAM	1	12	21.12	21.30	20.94			
5	64QAM	1	24	21.09	21.25	20.98	22		
5	64QAM	12	0	20.79	20.98	20.63			
5	64QAM	12	7	20.76	20.96	20.60			
5	64QAM	12	13	20.73	20.93	20.57			
5	64QAM	25	0	20.68	20.91	20.50	21		
Channel				20415	20525	20635			
Frequency (MHz)				825.5	836.5	847.5			
3	QPSK	1	0	23.02	23.04	23.03	24		
3	QPSK	1	8	22.82	22.88	22.93			
3	QPSK	1	14	22.62	22.69	22.64			
3	QPSK	8	0	21.87	21.97	21.91			
3	QPSK	8	4	21.64	21.77	21.74	23		
3	QPSK	8	7	21.47	21.65	21.63			
3	QPSK	15	0	21.36	21.51	21.41			
3	16QAM	1	0	22.02	22.10	22.02			
3	16QAM	1	8	21.84	21.96	21.93	23		
3	16QAM	1	14	21.74	21.79	21.81			
3	16QAM	8	0	21.18	21.28	21.22			
3	16QAM	8	4	21.05	21.11	21.03			
3	16QAM	8	7	20.95	20.98	20.85	22		
3	16QAM	15	0	20.73	20.83	20.63			
3	64QAM	1	0	21.19	21.27	21.02			
3	64QAM	1	8	21.04	21.28	20.91			
3	64QAM	1	14	21.06	21.24	20.90	22		
3	64QAM	8	0	20.72	20.88	20.59			
3	64QAM	8	4	20.70	20.85	20.56			
3	64QAM	8	7	20.67	20.87	20.50			
3	64QAM	15	0	20.68	20.80	20.50	21		
Channel				20407	20525	20643			
Frequency (MHz)				824.7	836.5	848.3			
1.4	QPSK	1	0	22.99	23.07	23.06	24		
1.4	QPSK	1	3	22.80	22.87	22.91			
1.4	QPSK	1	5	22.65	22.72	22.63			
1.4	QPSK	3	0	21.83	21.94	21.94			
1.4	QPSK	3	1	21.62	21.82	21.76	23		
1.4	QPSK	3	3	21.47	21.69	21.61			
1.4	QPSK	6	0	21.35	21.52	21.40			
1.4	16QAM	1	0	22.05	22.09	22.02			
1.4	16QAM	1	3	21.87	22.01	21.91	23		
1.4	16QAM	1	5	21.73	21.79	21.77			
1.4	16QAM	3	0	21.18	21.30	21.20			
1.4	16QAM	3	1	21.08	21.13	21.04			
1.4	16QAM	3	3	20.93	21.01	20.84	22		
1.4	16QAM	6	0	20.70	20.84	20.58			
1.4	64QAM	1	0	21.15	21.28	20.99			
1.4	64QAM	1	3	21.06	21.26	20.95			
1.4	64QAM	1	5	21.04	21.25	20.88	22		
1.4	64QAM	3	0	20.70	20.90	20.56			
1.4	64QAM	3	1	20.70	20.86	20.55			
1.4	64QAM	3	3	20.71	20.86	20.52			
1.4	64QAM	6	0	20.67	20.84	20.45	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	19.8	
20	QPSK	1	0	18.28	18.39	18.34		
20	QPSK	1	49	18.23	18.20	18.28		
20	QPSK	1	99	18.18	18.03	18.15		
20	QPSK	50	0	17.42	17.45	17.39	18.8	
20	QPSK	50	24	17.33	17.36	17.37		
20	QPSK	50	50	17.31	17.21	17.17		
20	QPSK	100	0	17.13	17.14	17.02		
20	16QAM	1	0	17.72	17.60	17.72	18.8	
20	16QAM	1	49	17.50	17.48	17.54		
20	16QAM	1	99	17.31	17.36	17.35		
20	16QAM	50	0	17.04	17.11	17.14		
20	16QAM	50	24	17.13	17.26	17.32	18.3	
20	16QAM	50	50	17.00	17.12	17.18		
20	16QAM	100	0	16.85	16.99	16.98		
20	64QAM	1	0	17.22	17.35	17.43		
20	64QAM	1	49	17.18	17.34	17.36	18.3	
20	64QAM	1	99	17.12	17.33	17.33		
20	64QAM	50	0	16.92	16.95	17.01		
20	64QAM	50	24	16.97	16.88	16.93		
20	64QAM	50	50	16.90	16.82	16.89	18.3	
20	64QAM	100	0	16.93	16.76	16.86		
Channel				20825	21100	21375		Tune-up limit (dBm)
Frequency (MHz)				2507.5	2535	2562.5		
15	QPSK	1	0	18.18	18.32	18.30	19.8	
15	QPSK	1	37	18.25	18.14	18.22		
15	QPSK	1	74	18.09	17.94	18.12		
15	QPSK	36	0	17.56	17.42	17.49		
15	QPSK	36	20	17.37	17.29	17.29	18.8	
15	QPSK	36	39	17.24	17.10	17.11		
15	QPSK	75	0	17.07	16.88	16.94		
15	16QAM	1	0	17.64	17.54	17.65		
15	16QAM	1	37	17.43	17.43	17.47	18.8	
15	16QAM	1	74	17.24	17.32	17.30		
15	16QAM	36	0	16.96	17.03	17.08		
15	16QAM	36	20	17.04	17.20	17.25		
15	16QAM	36	39	16.92	17.05	17.12	18.3	
15	16QAM	75	0	16.78	16.90	16.89		
15	64QAM	1	0	17.18	17.28	17.35		
15	64QAM	1	37	17.14	17.29	17.30		
15	64QAM	1	74	17.04	17.30	17.30	18.3	
15	64QAM	36	0	16.87	16.88	16.94		
15	64QAM	36	20	16.94	16.84	16.86		
15	64QAM	36	39	16.85	16.78	16.86		
15	64QAM	75	0	16.84	16.69	16.78	Tune-up limit (dBm)	
Channel				20800	21100	21400		
Frequency (MHz)				2505	2535	2565	19.8	
10	QPSK	1	0	18.12	18.29	18.25		
10	QPSK	1	25	18.19	18.06	18.15		
10	QPSK	1	49	18.01	17.88	18.09		
10	QPSK	25	0	17.53	17.37	17.42	18.8	
10	QPSK	25	12	17.30	17.24	17.22		
10	QPSK	25	25	17.16	17.04	17.04		
10	QPSK	50	0	16.98	16.85	16.90		
10	16QAM	1	0	17.57	17.46	17.60	18.8	
10	16QAM	1	25	17.35	17.37	17.42		
10	16QAM	1	49	17.17	17.26	17.27		
10	16QAM	25	0	16.88	16.99	17.04		
10	16QAM	25	12	16.96	17.16	17.18	18.3	
10	16QAM	25	25	16.85	17.00	17.04		
10	16QAM	50	0	16.71	16.81	16.82		
10	64QAM	1	0	17.11	17.20	17.29		
10	64QAM	1	25	17.07	17.26	17.23	18.3	
10	64QAM	1	49	16.96	17.24	17.26		
10	64QAM	25	0	16.78	16.84	16.87		
10	64QAM	25	12	16.89	16.79	16.79		
10	64QAM	25	25	16.79	16.73	16.80	Tune-up limit (dBm)	
10	64QAM	50	0	16.77	16.61	16.70		
Channel				20775	21100	21425		
Frequency (MHz)				2502.5	2535	2567.5		
5	QPSK	1	0	18.11	18.28	18.24	19.8	
5	QPSK	1	12	18.16	18.11	18.15		
5	QPSK	1	24	18.05	17.88	18.04		
5	QPSK	12	0	17.49	17.39	17.45		
5	QPSK	12	7	17.29	17.20	17.22	18.8	
5	QPSK	12	13	17.17	17.02	17.02		
5	QPSK	25	0	17.02	16.84	16.86		
5	16QAM	1	0	17.57	17.46	17.61		
5	16QAM	1	12	17.38	17.35	17.43	18.8	
5	16QAM	1	24	17.18	17.27	17.23		
5	16QAM	12	0	16.92	16.98	17.04		
5	16QAM	12	7	16.95	17.12	17.18		
5	16QAM	12	13	16.86	17.00	17.06	18.3	
5	16QAM	25	0	16.70	16.83	16.84		
5	64QAM	1	0	17.11	17.22	17.28		
5	64QAM	1	12	17.10	17.22	17.26		
5	64QAM	1	24	16.98	17.24	17.22	18.3	
5	64QAM	12	0	16.79	16.80	16.89		
5	64QAM	12	7	16.91	16.79	16.78		
5	64QAM	12	13	16.80	16.71	16.78		
5	64QAM	25	0	16.81	16.63	16.75		

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	25
Frequency (MHz)				704	707.5	711	
10	QPSK	1	0	23.67	23.71	23.65	24
10	QPSK	1	25	23.53	23.51	23.49	
10	QPSK	1	49	23.31	23.33	23.31	
10	QPSK	25	0	22.50	22.63	22.60	23
10	QPSK	25	12	22.47	22.49	22.40	
10	QPSK	25	25	22.39	22.32	22.31	
10	QPSK	50	0	22.33	22.35	22.30	22
10	16QAM	1	0	22.73	22.73	22.68	
10	16QAM	1	25	22.62	22.54	22.48	
10	16QAM	1	49	22.41	22.44	22.37	21
10	16QAM	25	0	21.88	21.83	21.80	
10	16QAM	25	12	21.69	21.62	21.64	
10	16QAM	25	25	21.57	21.43	21.43	20
10	16QAM	50	0	21.43	21.25	21.29	
10	64QAM	1	0	21.29	21.10	21.18	
10	64QAM	1	25	21.27	21.06	21.11	19
10	64QAM	1	49	21.24	21.06	21.06	
10	64QAM	25	0	20.89	20.75	20.69	
10	64QAM	25	12	20.88	20.73	20.63	18
10	64QAM	25	25	20.83	20.68	20.59	
10	64QAM	50	0	20.77	20.68	20.55	
Channel				23035	23095	23155	25
Frequency (MHz)				701.5	707.5	713.5	
5	QPSK	1	0	23.63	23.65	23.61	24
5	QPSK	1	12	23.49	23.47	23.43	
5	QPSK	1	24	23.24	23.24	23.26	
5	QPSK	12	0	22.44	22.54	22.55	23
5	QPSK	12	7	22.31	22.42	22.35	
5	QPSK	12	13	22.29	22.34	22.37	
5	QPSK	25	0	22.30	22.28	22.26	22
5	16QAM	1	0	22.69	22.67	22.60	
5	16QAM	1	12	22.57	22.46	22.39	
5	16QAM	1	24	22.32	22.35	22.32	21
5	16QAM	12	0	21.82	21.79	21.75	
5	16QAM	12	7	21.63	21.56	21.59	
5	16QAM	12	13	21.53	21.40	21.34	20
5	16QAM	25	0	21.39	21.20	21.23	
5	64QAM	1	0	21.21	21.05	21.12	
5	64QAM	1	12	21.22	21.01	21.03	19
5	64QAM	1	24	21.21	21.02	21.01	
5	64QAM	12	0	20.85	20.66	20.61	
5	64QAM	12	7	20.79	20.70	20.58	18
5	64QAM	12	13	20.79	20.63	20.53	
5	64QAM	25	0	20.72	20.60	20.47	
Channel				23025	23095	23165	25
Frequency (MHz)				700.5	707.5	714.5	
3	QPSK	1	0	23.53	23.59	23.50	24
3	QPSK	1	8	23.44	23.41	23.38	
3	QPSK	1	14	23.19	23.21	23.15	
3	QPSK	8	0	22.38	22.44	22.47	23
3	QPSK	8	4	22.25	22.34	22.30	
3	QPSK	8	7	22.27	22.28	22.39	
3	QPSK	15	0	22.22	22.31	22.24	22
3	16QAM	1	0	22.59	22.61	22.52	
3	16QAM	1	8	22.50	22.41	22.38	
3	16QAM	1	14	22.30	22.31	22.27	21
3	16QAM	8	0	21.77	21.68	21.68	
3	16QAM	8	4	21.59	21.49	21.50	
3	16QAM	8	7	21.44	21.33	21.30	20
3	16QAM	15	0	21.32	21.13	21.18	
3	64QAM	1	0	21.43	21.49	21.45	
3	64QAM	1	8	21.38	21.39	21.32	19
3	64QAM	1	14	21.35	21.42	21.37	
3	64QAM	8	0	20.80	20.64	20.55	
3	64QAM	8	4	20.76	20.60	20.53	18
3	64QAM	8	7	20.72	20.57	20.48	
3	64QAM	15	0	20.66	20.56	20.42	
Channel				23017	23095	23173	25
Frequency (MHz)				699.7	707.5	715.3	
1.4	QPSK	1	0	23.55	23.57	23.51	24
1.4	QPSK	1	3	23.43	23.37	23.41	
1.4	QPSK	1	5	23.16	23.19	23.15	
1.4	QPSK	3	0	22.38	22.46	22.50	23
1.4	QPSK	3	1	22.26	22.37	22.32	
1.4	QPSK	3	3	22.10	22.19	22.10	
1.4	QPSK	6	0	22.02	22.02	21.86	22
1.4	16QAM	1	0	22.60	22.63	22.56	
1.4	16QAM	1	3	22.48	22.41	22.40	
1.4	16QAM	1	5	22.30	22.33	22.24	21
1.4	16QAM	3	0	21.76	21.69	21.65	
1.4	16QAM	3	1	21.59	21.53	21.49	
1.4	16QAM	3	3	21.47	21.30	21.31	20
1.4	16QAM	6	0	21.29	21.10	21.17	
1.4	64QAM	1	0	21.12	20.99	21.04	
1.4	64QAM	1	3	21.17	20.98	21.00	19
1.4	64QAM	1	5	21.13	20.92	20.97	
1.4	64QAM	3	0	20.81	20.67	20.58	
1.4	64QAM	3	1	20.71	20.65	20.49	18
1.4	64QAM	3	3	20.70	20.60	20.47	
1.4	64QAM	6	0	20.65	20.54	20.41	

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	23230		24
Frequency (MHz)				782	782		
10	QPSK	1	0		23.06		23
10	QPSK	1	25		22.93		
10	QPSK	1	49		22.81		
10	QPSK	25	0		22.10		22
10	QPSK	25	12		21.93		
10	QPSK	25	25		21.78		
10	QPSK	50	0		21.62		21
10	16QAM	1	0		22.29		
10	16QAM	1	25		22.11		
10	16QAM	1	49		21.93		20
10	16QAM	25	0		21.43		
10	16QAM	25	12		21.31		
10	16QAM	25	25		21.11		19
10	16QAM	50	0		21.01		
10	64QAM	1	0		21.35		
10	64QAM	1	25		21.32		18
10	64QAM	1	49		21.29		
10	64QAM	25	0		20.47		
10	64QAM	25	12		20.46		17
10	64QAM	25	25		20.44		
10	64QAM	50	0		20.38		
Channel				23205	23230	23255	25
Frequency (MHz)				779.5	782	784.5	
5	QPSK	1	0	22.93	22.99	22.99	24
5	QPSK	1	12	22.77	22.88	22.78	
5	QPSK	1	24	22.65	22.77	22.62	
5	QPSK	12	0	21.89	22.06	21.80	23
5	QPSK	12	7	21.73	21.88	21.59	
5	QPSK	12	13	21.63	21.70	21.39	
5	QPSK	25	0	21.53	21.55	21.16	22
5	16QAM	1	0	22.19	22.23	21.79	
5	16QAM	1	12	21.97	22.03	21.60	
5	16QAM	1	24	21.76	21.84	21.51	21
5	16QAM	12	0	21.16	21.39	21.02	
5	16QAM	12	7	21.04	21.23	20.82	
5	16QAM	12	13	20.89	21.05	20.68	20
5	16QAM	25	0	20.72	20.98	20.50	
5	64QAM	1	0	21.09	21.28	20.85	
5	64QAM	1	12	21.04	21.26	20.79	19
5	64QAM	1	24	20.97	21.26	20.78	
5	64QAM	12	0	20.18	20.44	19.99	
5	64QAM	12	7	20.11	20.40	19.92	18
5	64QAM	12	13	20.07	20.41	19.88	
5	64QAM	25	0	19.99	20.33	19.83	

Band 17 (700MHz Band) (dBm) Part 27H(only on channel required)							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				23780	23790	23800	24.8
Frequency (MHz)				709	710	711	
10	QPSK	1	0	23.54	23.63	23.52	
10	QPSK	1	25	23.44	23.40	23.40	23.8
10	QPSK	1	49	23.22	23.20	23.20	
10	QPSK	25	0	22.41	22.45	22.46	
10	QPSK	25	12	22.29	22.36	22.30	22.8
10	QPSK	25	25	22.13	22.18	22.15	
10	QPSK	50	0	22.06	22.03	21.89	
10	16QAM	1	0	22.63	22.63	22.59	21.8
10	16QAM	1	25	22.53	22.42	22.40	
10	16QAM	1	49	22.32	22.36	22.26	
10	16QAM	25	0	21.77	21.75	21.66	22.8
10	16QAM	25	12	21.57	21.51	21.53	
10	16QAM	25	25	21.48	21.34	21.32	
10	16QAM	50	0	21.35	21.10	21.20	21.8
10	64QAM	1	0	21.15	20.95	21.06	
10	64QAM	1	25	21.22	20.96	21.01	
10	64QAM	1	49	21.18	20.98	20.95	21.8
10	64QAM	25	0	20.80	20.67	20.62	
10	64QAM	25	12	20.74	20.63	20.53	
10	64QAM	25	25	20.72	20.58	20.48	21.8
10	64QAM	50	0	20.68	20.56	20.42	
Channel				23755	23790	23825	
Frequency (MHz)				706.5	710	713.5	24.8
5	QPSK	1	0	23.51	23.55	23.45	
5	QPSK	1	12	23.39	23.32	23.35	23.8
5	QPSK	1	24	23.17	23.14	23.13	
5	QPSK	12	0	22.36	22.41	22.42	
5	QPSK	12	7	22.22	22.29	22.24	23.8
5	QPSK	12	13	22.06	22.15	22.09	
5	QPSK	25	0	22.01	21.97	21.82	
5	16QAM	1	0	22.60	22.58	22.52	23.8
5	16QAM	1	12	22.47	22.33	22.33	
5	16QAM	1	24	22.27	22.32	22.17	
5	16QAM	12	0	21.68	21.70	21.58	22.8
5	16QAM	12	7	21.53	21.45	21.48	
5	16QAM	12	13	21.44	21.30	21.27	
5	16QAM	25	0	21.31	21.06	21.14	22.8
5	64QAM	1	0	21.11	20.89	21.03	
5	64QAM	1	12	21.15	20.89	20.95	
5	64QAM	1	24	21.11	20.93	20.90	21.8
5	64QAM	12	0	20.72	20.61	20.56	
5	64QAM	12	7	20.69	20.56	20.47	
5	64QAM	12	13	20.65	20.52	20.40	21.8
5	64QAM	25	0	20.60	20.50	20.38	

Band 66 (dBm)							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				132072	132322	132572	25
Frequency (MHz)				1720	1745	1770	
20	QPSK	1	0	23.71	23.72	23.66	
20	QPSK	1	49	23.50	23.52	23.45	24
20	QPSK	1	99	23.34	23.40	23.30	
20	QPSK	50	0	22.59	22.63	22.54	
20	QPSK	50	24	22.46	22.45	22.36	24
20	QPSK	50	50	22.31	22.31	22.38	
20	QPSK	100	0	22.32	22.42	22.37	
20	16QAM	1	0	22.75	22.79	22.70	24
20	16QAM	1	49	22.55	22.62	22.50	
20	16QAM	1	99	22.44	22.43	22.34	
20	16QAM	50	0	21.88	21.91	21.74	23
20	16QAM	50	24	21.67	21.73	21.60	
20	16QAM	50	50	21.53	21.59	21.49	
20	16QAM	100	0	21.34	21.43	21.36	23
20	64QAM	1	0	21.78	21.85	21.71	
20	64QAM	1	49	21.77	21.81	21.64	
20	64QAM	1	99	21.76	21.77	21.58	22.5
20	64QAM	50	0	21.43	21.46	21.25	
20	64QAM	50	24	21.37	21.42	21.22	
20	64QAM	50	50	21.36	21.34	21.22	22.5
20	64QAM	100	0	21.35	21.33	21.20	
Channel				132047	132322	132597	
Frequency (MHz)				1717.5	1745	1772.5	25
15	QPSK	1	0	23.65	23.66	23.60	
15	QPSK	1	37	23.42	23.48	23.38	24
15	QPSK	1	74	23.25	23.34	23.25	
15	QPSK	36	0	22.54	22.57	22.51	
15	QPSK	36	20	22.38	22.42	22.28	24
15	QPSK	36	39	22.25	22.23	22.15	
15	QPSK	75	0	22.06	22.07	22.02	
15	16QAM	1	0	22.67	22.75	22.62	24
15	16QAM	1	37	22.51	22.56	22.46	
15	16QAM	1	74	22.38	22.37	22.27	
15	16QAM	36	0	21.84	21.88	21.66	23
15	16QAM	36	20	21.59	21.68	21.53	
15	16QAM	36	39	21.44	21.56	21.41	
15	16QAM	75	0	21.29	21.37	21.27	23
15	64QAM	1	0	21.70	21.79	21.63	
15	64QAM	1	37	21.74	21.76	21.60	
15	64QAM	1	74	21.69	21.72	21.51	22.5
15	64QAM	36	0	21.39	21.39	21.19	
15	64QAM	36	20	21.29	21.38	21.14	
15	64QAM	36	39	21.27	21.26	21.19	22.5
15	64QAM	75	0	21.31	21.24	21.15	
Channel				132022	132322	132622	
Frequency (MHz)				1715	1745	1775	25
10	QPSK	1	0	23.48	23.61	23.57	
10	QPSK	1	25	23.41	23.42	23.33	24
10	QPSK	1	49	23.23	23.33	23.17	
10	QPSK	25	0	22.50	22.50	22.44	24
10	QPSK	25	12	22.32	22.38	22.25	
10	QPSK	25	25	22.20	22.19	22.06	
10	QPSK	50	0	22.00	22.00	22.03	24
10	16QAM	1	0	22.63	22.66	22.56	
10	16QAM	1	25	22.41	22.45	22.37	
10	16QAM	1	49	22.34	22.34	22.19	23
10	16QAM	25	0	21.80	21.81	21.61	
10	16QAM	25	12	21.58	21.64	21.48	
10	16QAM	25	25	21.43	21.47	21.37	23
10	16QAM	50	0	21.20	21.34	21.24	
10	64QAM	1	0	21.63	21.69	21.63	
10	64QAM	1	25	21.64	21.69	21.56	22.5
10	64QAM	1	49	21.61	21.64	21.48	
10	64QAM	25	0	21.29	21.34	21.17	
10	64QAM	25	12	21.24	21.28	21.12	22.5
10	64QAM	25	25	21.28	21.24	21.13	
10	64QAM	50	0	21.25	21.22	21.08	
Channel				131997	132322	132647	25
Frequency (MHz)				1712.5	1745	1777.5	
5	QPSK	1	0	23.59	23.62	23.59	24
5	QPSK	1	12	23.36	23.44	23.33	
5	QPSK	1	24	23.23	23.28	23.18	
5	QPSK	12	0	22.50	22.49	22.40	24
5	QPSK	12	7	22.35	22.39	22.23	
5	QPSK	12	13	22.15	22.22	22.05	
5	QPSK	25	0	22.06	22.09	22.08	24
5	16QAM	1	0	22.63	22.66	22.60	
5	16QAM	1	12	22.42	22.48	22.33	
5	16QAM	1	24	22.34	22.31	22.21	23
5	16QAM	12	0	21.77	21.80	21.61	
5	16QAM	12	7	21.56	21.62	21.44	
5	16QAM	12	13	21.46	21.44	21.33	23
5	16QAM	25	0	21.22	21.32	21.22	
5	64QAM	1	0	21.65	21.69	21.59	
5	64QAM	1	12	21.64	21.66	21.54	22.5
5	64QAM	1	24	21.64	21.60	21.46	
5	64QAM	12	0	21.33	21.36	21.14	
5	64QAM	12	7	21.26	21.33	21.12	22.5
5	64QAM	12	13	21.24	21.24	21.13	
5	64QAM	25	0	21.23	21.21	21.10	
Channel				131987	132322	132657	25
Frequency (MHz)				1711.5	1745	1778.5	
3	QPSK	1	0	23.61	23.63	23.55	24
3	QPSK	1	8	23.37	23.43	23.30	
3	QPSK	1	14	23.27	23.31	23.19	
3	QPSK	8	0	22.51	22.50	22.42	24
3	QPSK	8	4	22.33	22.37	22.26	

3	QPSK	8	7	22.18	22.20	22.03	24
3	QPSK	15	0	22.00	22.05	22.03	
3	16QAM	1	0	22.61	22.66	22.58	
3	16QAM	1	8	22.45	22.47	22.34	23
3	16QAM	1	14	22.37	22.35	22.17	
3	16QAM	8	0	21.80	21.81	21.57	
3	16QAM	8	4	21.56	21.59	21.49	23
3	16QAM	8	7	21.45	21.43	21.33	
3	16QAM	15	0	21.20	21.30	21.19	
3	64QAM	1	0	21.63	21.73	21.64	23
3	64QAM	1	8	21.67	21.69	21.51	
3	64QAM	1	14	21.62	21.62	21.48	
3	64QAM	8	0	21.33	21.35	21.17	22.5
3	64QAM	8	4	21.26	21.30	21.11	
3	64QAM	8	7	21.28	21.22	21.13	
3	64QAM	15	0	21.26	21.19	21.09	Tune-up limit
Channel				131979	132322	132695	
Frequency (MHz)				1710.7	1745	1779.3	
1.4	QPSK	1	0	23.60	23.59	23.54	25
1.4	QPSK	1	3	23.37	23.42	23.33	
1.4	QPSK	1	5	23.25	23.28	23.20	
1.4	QPSK	3	0	22.51	22.50	22.45	24
1.4	QPSK	3	1	22.35	22.39	22.21	
1.4	QPSK	3	3	22.18	22.22	22.07	
1.4	QPSK	6	0	21.98	22.00	21.94	24
1.4	16QAM	1	0	22.67	22.66	22.56	
1.4	16QAM	1	3	22.44	22.48	22.35	
1.4	16QAM	1	5	22.34	22.37	22.23	23
1.4	16QAM	3	0	21.79	21.84	21.60	
1.4	16QAM	3	1	21.56	21.62	21.45	
1.4	16QAM	3	3	21.47	21.44	21.35	23
1.4	16QAM	6	0	21.20	21.31	21.23	
1.4	64QAM	1	0	21.65	21.72	21.64	
1.4	64QAM	1	3	21.64	21.68	21.53	23
1.4	64QAM	1	5	21.60	21.65	21.47	
1.4	64QAM	3	0	21.31	21.32	21.17	
1.4	64QAM	3	1	21.25	21.30	21.12	22.5
1.4	64QAM	3	3	21.28	21.26	21.14	
1.4	64QAM	6	0	21.25	21.24	21.06	

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	22.65	22.78	22.74	23.8
20	QPSK	1	49	22.65	22.68	22.64	
20	QPSK	1	99	22.52	22.47	22.51	
20	QPSK	50	0	21.72	21.72	21.79	22.8
20	QPSK	50	24	21.61	21.57	21.66	
20	QPSK	50	50	21.40	21.43	21.50	
20	QPSK	100	0	21.24	21.32	21.30	22.8
20	16QAM	1	0	21.93	21.91	21.91	
20	16QAM	1	49	21.73	21.75	21.74	
20	16QAM	1	99	21.59	21.61	21.56	21.8
20	16QAM	50	0	21.01	21.06	21.03	
20	16QAM	50	24	20.90	20.95	20.90	
20	16QAM	50	50	20.75	20.76	20.75	21.8
20	16QAM	100	0	20.59	20.65	20.58	
20	64QAM	1	0	20.98	21.01	21.00	
20	64QAM	1	49	20.90	21.00	20.96	21.8
20	64QAM	1	99	20.84	20.97	20.95	
20	64QAM	50	0	20.53	20.60	20.58	
20	64QAM	50	24	20.47	20.59	20.55	20.8
20	64QAM	50	50	20.42	20.51	20.50	
20	64QAM	100	0	20.37	20.45	20.50	
Channel				37825	38000	38175	Tune-up limit (dBm)
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	22.61	22.66	22.61	23.8
15	QPSK	1	37	22.42	22.51	22.45	
15	QPSK	1	74	22.31	22.30	22.29	
15	QPSK	36	0	21.49	21.50	21.50	22.8
15	QPSK	36	20	21.33	21.31	21.33	
15	QPSK	36	39	21.21	21.10	21.19	
15	QPSK	75	0	21.10	20.95	21.07	22.8
15	16QAM	1	0	21.75	21.64	21.68	
15	16QAM	1	37	21.64	21.53	21.54	
15	16QAM	1	74	21.49	21.34	21.38	21.8
15	16QAM	36	0	20.96	20.81	20.76	
15	16QAM	36	20	20.76	20.68	20.63	
15	16QAM	36	39	20.59	20.46	20.47	21.8
15	16QAM	75	0	20.40	20.30	20.34	
15	64QAM	1	0	20.77	20.64	20.74	
15	64QAM	1	37	20.75	20.58	20.73	21.8
15	64QAM	1	74	20.71	20.52	20.66	
15	64QAM	36	0	20.38	20.22	20.33	
15	64QAM	36	20	20.35	20.22	20.26	20.8
15	64QAM	36	39	20.31	20.17	20.22	
15	64QAM	75	0	20.24	20.12	20.18	
Channel				37800	38000	38200	Tune-up limit (dBm)
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	22.62	22.63	22.61	23.8
10	QPSK	1	25	22.46	22.47	22.43	
10	QPSK	1	49	22.23	22.27	22.27	
10	QPSK	25	0	21.41	21.46	21.43	22.8
10	QPSK	25	12	21.24	21.26	21.30	
10	QPSK	25	25	21.09	21.15	21.23	
10	QPSK	50	0	20.98	20.91	21.12	22.8
10	16QAM	1	0	21.62	21.55	21.67	
10	16QAM	1	25	21.42	21.45	21.55	
10	16QAM	1	49	21.31	21.24	21.42	21.8
10	16QAM	25	0	20.78	20.72	20.87	
10	16QAM	25	12	20.59	20.56	20.74	
10	16QAM	25	25	20.51	20.34	20.53	21.8
10	16QAM	50	0	20.38	20.14	20.45	
10	64QAM	1	0	20.78	20.54	20.88	
10	64QAM	1	25	20.75	20.48	20.81	20.8
10	64QAM	1	49	20.72	20.45	20.75	
10	64QAM	25	0	20.33	20.09	20.42	
10	64QAM	25	12	20.25	20.12	20.40	21.8
10	64QAM	25	25	20.23	20.07	20.36	
10	64QAM	50	0	20.22	19.99	20.29	
Channel				37775	38000	38225	Tune-up limit (dBm)
Frequency (MHz)				2572.5	2595	2617.5	
5	QPSK	1	0	22.58	22.62	22.61	23.8
5	QPSK	1	12	22.42	22.45	22.42	
5	QPSK	1	24	22.21	22.28	22.24	
5	QPSK	12	0	21.42	21.42	21.45	22.8
5	QPSK	12	7	21.21	21.29	21.35	
5	QPSK	12	13	21.12	21.15	21.24	
5	QPSK	25	0	21.00	20.95	21.10	22.8
5	16QAM	1	0	21.65	21.58	21.70	
5	16QAM	1	12	21.42	21.47	21.51	
5	16QAM	1	24	21.35	21.24	21.43	21.8
5	16QAM	12	0	20.76	20.69	20.89	
5	16QAM	12	7	20.63	20.53	20.76	
5	16QAM	12	13	20.50	20.37	20.53	21.8
5	16QAM	25	0	20.38	20.15	20.43	
5	64QAM	1	0	20.77	20.53	20.87	
5	64QAM	1	12	20.76	20.52	20.77	20.8
5	64QAM	1	24	20.69	20.45	20.73	
5	64QAM	12	0	20.34	20.09	20.43	
5	64QAM	12	7	20.25	20.06	20.41	20.8
5	64QAM	12	13	20.23	20.07	20.38	
5	64QAM	25	0	20.24	20.03	20.32	

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	22.72			24
10	QPSK	1	25	22.53			
10	QPSK	1	49	22.33			
10	QPSK	25	0	21.70			23
10	QPSK	25	12	21.44			
10	QPSK	25	25	21.32			
10	QPSK	50	0	21.15			23
10	16QAM	1	0	21.85			
10	16QAM	1	25	21.71			
10	16QAM	1	49	21.52			22
10	16QAM	25	0	20.93			
10	16QAM	25	12	20.79			
10	16QAM	25	25	20.68			
10	16QAM	50	0	20.53			22
10	64QAM	1	0	20.99			
10	64QAM	1	25	20.94			
10	64QAM	1	49	20.93			21
10	64QAM	25	0	20.57			
10	64QAM	25	12	20.54			
10	64QAM	25	25	20.46			
10	64QAM	50	0	20.41			
Channel				38725	38750	38775	Tune-up limit (dBm)
Frequency (MHz)				2307.5	2310	2312.5	
5	QPSK	1	0	22.70	22.71	22.66	24
5	QPSK	1	12	22.56	22.51	22.50	
5	QPSK	1	24	22.40	22.28	22.34	
5	QPSK	12	0	21.68	21.62	21.53	23
5	QPSK	12	7	21.51	21.41	21.34	
5	QPSK	12	13	21.37	21.25	21.19	
5	QPSK	25	0	21.15	21.13	20.99	23
5	16QAM	1	0	21.84	21.79	21.60	
5	16QAM	1	12	21.67	21.63	21.44	
5	16QAM	1	24	21.51	21.47	21.21	22
5	16QAM	12	0	20.87	20.87	20.63	
5	16QAM	12	7	20.70	20.73	20.40	
5	16QAM	12	13	20.53	20.64	20.30	22
5	16QAM	25	0	20.36	20.48	20.14	
5	64QAM	1	0	20.69	20.93	20.44	
5	64QAM	1	12	20.68	20.87	20.40	22
5	64QAM	1	24	20.61	20.86	20.38	
5	64QAM	12	0	20.32	20.52	20.07	
5	64QAM	12	7	20.31	20.48	20.07	21
5	64QAM	12	13	20.29	20.43	20.05	
5	64QAM	25	0	20.18	20.33	20.03	

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			
10	QPSK	1	0	22.75			24
10	QPSK	1	25	22.57			
10	QPSK	1	49	22.37			
10	QPSK	25	0	21.66			23
10	QPSK	25	12	21.55			
10	QPSK	25	25	21.36			
10	QPSK	50	0	21.26			23
10	16QAM	1	0	21.85			
10	16QAM	1	25	21.65			
10	16QAM	1	49	21.44			22
10	16QAM	25	0	20.85			
10	16QAM	25	12	20.73			
10	16QAM	25	25	20.59			22
10	16QAM	50	0	20.39			
10	64QAM	1	0	20.72			
10	64QAM	1	25	20.71			22
10	64QAM	1	49	20.69			
10	64QAM	25	0	20.33			
10	64QAM	25	12	20.33			21
10	64QAM	25	25	20.30			
10	64QAM	50	0	20.26			
Channel				39175	39200	39225	Tune-up limit (dBm)
Frequency (MHz)				2352.5	2355	2357.5	
5	QPSK	1	0	22.67	22.72	22.67	24
5	QPSK	1	12	22.48	22.57	22.51	
5	QPSK	1	24	22.37	22.36	22.35	
5	QPSK	12	0	21.55	21.56	21.56	23
5	QPSK	12	7	21.39	21.37	21.39	
5	QPSK	12	13	21.27	21.16	21.25	
5	QPSK	25	0	21.16	21.01	21.13	23
5	16QAM	1	0	21.81	21.70	21.74	
5	16QAM	1	12	21.70	21.59	21.60	
5	16QAM	1	24	21.55	21.40	21.44	22
5	16QAM	12	0	21.02	20.87	20.82	
5	16QAM	12	7	20.82	20.74	20.69	
5	16QAM	12	13	20.65	20.52	20.53	22
5	16QAM	25	0	20.46	20.36	20.40	
5	64QAM	1	0	20.83	20.70	20.80	
5	64QAM	1	12	20.81	20.64	20.79	22
5	64QAM	1	24	20.77	20.58	20.72	
5	64QAM	12	0	20.44	20.28	20.39	21
5	64QAM	12	7	20.41	20.28	20.32	
5	64QAM	12	13	20.37	20.23	20.28	
5	64QAM	25	0	20.30	20.18	20.24	

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	17.56	16.50	Default	97.97
		CH 6	2437	17.91	16.50	Default	
		CH 11	2462	17.80	16.50	Default	
	802.11g 6Mbps	CH 1	2412	16.62	17.50	Default	88.55
		CH 6	2437	16.80	17.50	Default	
		CH 11	2462	16.15	17.00	Default	
	802.11n-HT20 MCS0	CH 1	2412	14.31	15.00	Default	87.87
		CH 6	2437	14.51	15.50	Default	
		CH 11	2462	14.42	15.00	Default	
	802.11n-HT40 MCS0	CH 3	2422	13.69	14.50	Default	78.34
		CH 6	2437	13.57	14.50	Default	
		CH 9	2452	13.12	14.00	Default	

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	14.99	15.50	Default	89.10
		CH 44	5220	14.57	15.50	Default	
		CH 48	5240	14.25	15.00	Default	
	802.11n-HT20 MCS0	CH 36	5180	13.56	14.50	Default	87.41
		CH 44	5220	13.17	14.00	Default	
		CH 48	5240	12.83	13.50	Default	
	802.11n-HT40 MCS0	CH 38	5190	13.47	14.00	Default	74.68
		CH 46	5230	13.00	14.00	Default	
	802.11ac-VHT20 MCS0	CH 36	5180	13.33	14.00	Default	87.50
		CH 44	5220	12.95	13.50	Default	
		CH 48	5240	12.62	13.50	Default	
	802.11ac-VHT40 MCS0	CH 38	5190	13.53	14.50	Default	76.62
		CH 46	5230	12.91	13.50	Default	
	802.11ac-VHT80 MCS0	CH 42	5210	13.11	14.00	Default	63.04

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	15.11	16.00	Default	89.10
		CH 60	5300	14.67	15.50	Default	
		CH 64	5320	14.10	15.00	Default	
	802.11n-HT20 MCS0	CH 52	5260	13.66	14.50	Default	86.67
		CH 60	5300	13.25	14.00	Default	
	802.11n-HT40 MCS0	CH 64	5320	12.85	13.50	Default	77.63
		CH 54	5270	13.39	14.00	Default	
	802.11ac-VHT20 MCS0	CH 62	5310	12.93	13.50	Default	88.15
		CH 52	5260	13.50	14.50	Default	
		CH 60	5300	13.07	14.00	Default	
	802.11ac-VHT40 MCS0	CH 64	5320	12.47	13.00	Default	77.63
		CH 54	5270	13.29	14.00	Default	
	802.11ac-VHT80 MCS0	CH 62	5310	12.85	13.50	Default	65.22

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	14.75	15.50	15.00	89.10
		CH 118	5580	14.62	15.50	15.00	
		CH 140	5700	13.02	14.00	15.00	
	802.11n-HT20 MCS0	CH 100	5500	13.37	14.00	15.00	88.06
		CH 118	5580	13.27	14.00	15.00	
		CH 140	5700	11.64	12.50	15.00	
	802.11n-HT40 MCS0	CH 102	5510	13.22	14.00	15.00	78.38
		CH 110	5550	13.39	14.00	15.00	
		CH 134	5670	12.19	13.00	15.00	
	802.11ac-VHT20 MCS0	CH 100	5500	13.13	14.00	15.00	86.86
		CH 118	5580	13.03	14.00	15.00	
		CH 140	5700	11.75	12.50	15.00	
	802.11ac-VHT40 MCS0	CH 102	5510	13.17	14.00	15.00	78.67
		CH 110	5550	13.35	14.00	15.00	
		CH 134	5670	12.24	13.00	15.00	
	802.11ac-VHT80 MCS0	CH 106	5530	13.13	14.00	15.00	63.04
		CH 138	5690	12.03	13.00	15.00	

5GHz WLAN ANT 1

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Power Setting	Duty Cycle %
5.8GHz WLAN ANT 1	802.11a 6Mbps	CH 149	5745	14.21	15.00	Default	89.10
		CH 157	5785	13.68	14.50	Default	
		CH 165	5825	14.87	15.50	Default	
	802.11n-HT20 MCS0	CH 149	5745	13.28	14.00	Default	87.31
		CH 157	5785	11.92	12.50	Default	
		CH 165	5825	13.61	14.50	Default	
	802.11n-HT40 MCS0	CH 151	5755	13.07	14.00	Default	76.67
		CH 159	5795	12.77	13.50	Default	
	802.11ac-VHT20 MCS0	CH 149	5745	12.94	13.50	Default	88.15
		CH 157	5785	12.07	13.00	Default	
		CH 165	5825	13.35	14.00	Default	
	802.11ac-VHT40 MCS0	CH 151	5755	13.11	14.00	Default	76.67
		CH 159	5795	12.78	13.50	Default	
	802.11ac-VHT80 MCS0	CH 155	5775	12.57	13.50	Default	64.44

Mode	Channel	Frequency (MHz)	Average power (dBm)		
			1Mbps	2Mbps	3Mbps
BR / EDR	CH 00	2402	8.56	7.35	7.25
	CH 39	2441	7.03	6.66	6.27
	CH 78	2480	8.62	7.11	6.80
Tune-up Limit			9.5	8	8
Duty Cycle %			78.29	77.28	78.08

Mode	Channel	Frequency (MHz)	Average power (dBm)	
			1Mbps	2Mbps
LE	CH 00	2402	-2.38	-2.32
	CH 19	2440	-3.03	-2.85
	CH 39	2480	-2.10	-2.09
Tune-up Limit			0.5	0.5
Duty Cycle %			32	33.33

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		23.85	23.76	23.74	24.50	14.85	14.76	14.74	15.50
GPRS 1 Tx slot		23.46	23.41	23.55	24.50	14.46	14.41	14.55	15.50
GPRS 2 Tx slots		21.77	21.71	21.71	22.50	15.77	15.71	15.71	16.50
GPRS 3 Tx slots		19.96	19.94	19.96	20.50	15.70	15.68	15.70	16.24
GPRS 4 Tx slots		18.48	18.83	18.47	19.50	15.48	15.83	15.47	16.50
EDGE 1 Tx slot		20.66	20.77	20.85	21.00	11.66	11.77	11.85	12.00
EDGE 2 Tx slots		18.20	18.26	18.15	19.00	12.20	12.26	12.15	13.00
EDGE 3 Tx slots		15.83	15.80	15.88	16.50	11.57	11.54	11.62	12.24
EDGE 4 Tx slots		12.94	13.19	12.78	13.50	9.94	10.19	9.78	10.50
Mode			Max.	23.85			Max.	15.83	
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		15.43	15.47	15.40	16.50	17.13	17.21	17.16	18.00
3GPP Rel 5 HSDPA Subtest-1		15.43	15.26	15.46	16.50	17.05	17.16	17.11	18.00
3GPP Rel 5 HSDPA Subtest-2		14.55	14.36	14.39	15.50	16.45	16.37	16.35	18.00
3GPP Rel 5 HSDPA Subtest-3		14.35	14.15	14.18	15.50	16.26	16.18	16.15	17.50
3GPP Rel 5 HSDPA Subtest-4		14.20	14.01	14.07	15.50	16.14	16.06	16.03	17.50
3GPP Rel 8 DC-HSDPA Subtest-1		15.28	14.91	15.14	16.50	17.12	17.00	16.87	18.00
3GPP Rel 8 DC-HSDPA Subtest-2		14.14	13.93	14.01	15.50	15.99	15.87	15.88	17.00
3GPP Rel 8 DC-HSDPA Subtest-3		13.94	13.73	13.82	15.00	15.79	15.68	15.68	17.00
3GPP Rel 8 DC-HSDPA Subtest-4		13.90	13.70	13.78	14.50	15.76	15.65	15.65	17.00
3GPP Rel 6 HSUPA Subtest-1		15.45	15.25	15.40	16.50	17.09	17.10	17.06	18.00
3GPP Rel 6 HSUPA Subtest-2		15.42	15.17	15.37	16.50	17.10	17.11	17.17	18.00
3GPP Rel 6 HSUPA Subtest-3		15.37	15.27	15.42	16.50	17.07	16.79	17.07	18.00
3GPP Rel 6 HSUPA Subtest-4		15.39	15.21	15.34	16.50	17.16	16.35	17.14	18.00
3GPP Rel 6 HSUPA Subtest-5		15.38	15.33	15.37	16.50	17.06	17.07	17.14	18.00
3GPP Rel 7 HSPA+ (16QAM) Subtest-1		15.42	15.36	15.37	16.50	17.01	17.08	17.09	18.00
Attenuator			Cable Loss	0.8			Cable Loss	0.8	
Mode			Max.	15.47			Max.	17.21	

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	18.53	18.67	18.56	19.5
20	QPSK	1	49	18.43	18.52	18.41	
20	QPSK	1	99	18.30	18.38	18.20	
20	QPSK	50	0	17.47	17.55	17.49	18.5
20	QPSK	50	24	17.26	17.41	17.18	
20	QPSK	50	50	16.96	17.27	16.89	
20	QPSK	100	0	17.00	17.13	16.96	18.5
20	16QAM	1	0	17.50	17.72	17.60	
20	16QAM	1	49	17.30	17.56	17.50	
20	16QAM	1	99	17.20	17.38	17.50	17.5
20	16QAM	50	0	16.41	16.71	16.35	
20	16QAM	50	24	16.15	16.43	16.20	
20	16QAM	50	50	16.10	16.29	16.13	17.5
20	16QAM	100	0	16.20	16.01	16.17	
20	64QAM	1	0	16.39	16.67	16.53	
20	64QAM	1	49	16.26	16.53	16.43	17.5
20	64QAM	1	99	16.25	16.58	16.30	
20	64QAM	50	0	16.01	16.20	16.01	
20	64QAM	50	24	15.94	16.00	15.97	16.5
20	64QAM	50	50	15.93	15.95	15.90	
20	64QAM	100	0	15.88	16.03	15.89	
Channel				18675	18900	19125	Tune-up limit (dBm)
Frequency (MHz)				1857.5	1880	1902.5	
15	QPSK	1	0	18.48	18.58	18.53	19.5
15	QPSK	1	37	18.35	18.44	18.35	
15	QPSK	1	74	18.21	18.34	18.16	
15	QPSK	36	0	17.39	17.49	17.38	18.5
15	QPSK	36	20	17.22	17.37	17.13	
15	QPSK	36	39	16.93	17.19	16.85	
15	QPSK	75	0	16.66	17.05	16.60	18.5
15	16QAM	1	0	17.42	17.67	17.56	
15	16QAM	1	37	17.24	17.48	17.45	
15	16QAM	1	74	17.14	17.32	17.47	18.5
15	16QAM	36	0	16.36	16.66	16.30	
15	16QAM	36	20	16.07	16.36	16.16	
15	16QAM	36	39	16.04	16.21	16.06	17.5
15	16QAM	75	0	16.17	15.97	16.12	
15	64QAM	1	0	16.35	16.63	16.44	
15	64QAM	1	37	16.20	16.50	16.37	17.5
15	64QAM	1	74	16.20	16.55	16.26	
15	64QAM	36	0	15.95	16.16	15.96	
15	64QAM	36	20	15.85	15.95	15.92	16.5
15	64QAM	36	39	15.86	15.88	15.82	
15	64QAM	75	0	15.82	15.95	15.80	
Channel				18650	18900	19150	Tune-up limit (dBm)
Frequency (MHz)				1855	1880	1905	
10	QPSK	1	0	18.43	18.62	18.49	19.5
10	QPSK	1	25	18.38	18.46	18.34	
10	QPSK	1	49	18.25	18.28	18.10	
10	QPSK	25	0	17.36	17.48	17.39	18.5
10	QPSK	25	12	17.20	17.32	17.10	
10	QPSK	25	25	16.87	17.20	16.83	
10	QPSK	50	0	16.61	17.06	16.57	18.5
10	16QAM	1	0	17.45	17.62	17.54	
10	16QAM	1	25	17.23	17.45	17.44	
10	16QAM	1	49	17.14	17.28	17.41	17.5
10	16QAM	25	0	16.32	16.62	16.30	
10	16QAM	25	12	16.09	16.38	16.13	
10	16QAM	25	25	16.05	16.20	16.04	17.5
10	16QAM	50	0	16.09	15.95	16.11	
10	64QAM	1	0	16.31	16.57	16.48	
10	64QAM	1	25	16.19	16.47	16.37	17.5
10	64QAM	1	49	16.16	16.50	16.22	
10	64QAM	25	0	15.90	16.11	15.91	
10	64QAM	25	12	15.84	15.85	15.91	16.5
10	64QAM	25	25	15.83	15.86	15.83	
10	64QAM	50	0	15.78	15.92	15.79	
Channel				18625	18900	19175	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1880	1907.5	
5	QPSK	1	0	18.47	18.60	18.45	19.5
5	QPSK	1	12	18.32	18.46	18.36	
5	QPSK	1	24	18.20	18.30	18.12	
5	QPSK	12	0	17.39	17.45	17.40	18.5
5	QPSK	12	7	17.16	17.33	17.11	
5	QPSK	12	13	16.90	17.18	16.84	
5	QPSK	25	0	16.62	17.05	16.60	18.5
5	16QAM	1	0	17.41	17.66	17.53	
5	16QAM	1	12	17.20	17.50	17.44	
5	16QAM	1	24	17.14	17.29	17.40	17.5
5	16QAM	12	0	16.35	16.62	16.25	
5	16QAM	12	7	16.07	16.37	16.14	
5	16QAM	12	13	16.04	16.21	16.03	17.5
5	16QAM	25	0	16.14	15.93	16.11	
5	64QAM	1	0	16.28	16.57	16.47	
5	64QAM	1	12	16.21	16.46	16.33	17.5
5	64QAM	1	24	16.17	16.49	16.20	
5	64QAM	12	0	15.95	16.08	15.94	
5	64QAM	12	7	15.86	15.87	15.90	16.5
5	64QAM	12	13	15.86	15.85	15.81	
5	64QAM	25	0	15.78	15.91	15.82	
Channel				18615	18900	19185	Tune-up limit (dBm)
Frequency (MHz)				1851.5	1880	1908.5	
3	QPSK	1	0	18.47	18.58	18.52	19.5
3	QPSK	1	8	18.35	18.45	18.33	
3	QPSK	1	14	18.23	18.33	18.11	
3	QPSK	8	0	17.41	17.50	17.43	18.5
3	QPSK	8	4	17.22	17.33	17.12	

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	15.48	15.58	15.56	16.5
20	QPSK	1	49	15.32	15.42	15.42	
20	QPSK	1	99	15.13	15.26	15.28	
20	QPSK	50	0	14.37	14.55	14.51	15.5
20	QPSK	50	24	14.15	14.45	14.35	
20	QPSK	50	50	14.03	14.30	14.17	
20	QPSK	100	0	14.02	14.18	14.06	15.5
20	16QAM	1	0	14.56	14.72	14.60	
20	16QAM	1	49	14.45	14.51	14.47	
20	16QAM	1	99	14.34	14.31	14.29	14.5
20	16QAM	50	0	13.81	13.74	13.71	
20	16QAM	50	24	13.67	13.52	13.59	
20	16QAM	50	50	13.46	13.33	13.38	14.5
20	16QAM	100	0	13.26	13.16	13.21	
20	64QAM	1	0	13.70	13.57	13.61	
20	64QAM	1	49	13.62	13.49	13.56	14.5
20	64QAM	1	99	13.56	13.45	13.51	
20	64QAM	50	0	13.24	13.08	13.17	
20	64QAM	50	24	13.18	13.06	13.10	13.5
20	64QAM	50	50	13.16	13.02	13.09	
20	64QAM	100	0	13.10	13.01	13.06	
Channel				20025	20175	20325	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1732.5	1747.5	
15	QPSK	1	0	15.45	15.52	15.51	16.5
15	QPSK	1	37	15.26	15.39	15.38	
15	QPSK	1	74	15.08	15.22	15.22	
15	QPSK	36	0	14.29	14.50	14.43	15.5
15	QPSK	36	20	14.07	14.38	14.27	
15	QPSK	36	39	13.99	14.24	14.12	
15	QPSK	75	0	13.89	14.04	13.92	15.5
15	16QAM	1	0	14.50	14.68	14.54	
15	16QAM	1	37	14.36	14.46	14.39	
15	16QAM	1	74	14.30	14.23	14.21	14.5
15	16QAM	36	0	13.72	13.67	13.68	
15	16QAM	36	20	13.60	13.43	13.55	
15	16QAM	36	39	13.38	13.25	13.35	14.5
15	16QAM	75	0	13.18	13.08	13.16	
15	64QAM	1	0	13.64	13.50	13.57	
15	64QAM	1	37	13.59	13.46	13.52	14.5
15	64QAM	1	74	13.52	13.39	13.46	
15	64QAM	36	0	13.15	13.02	13.10	
15	64QAM	36	20	13.09	13.03	13.02	13.5
15	64QAM	36	39	13.12	12.95	13.03	
15	64QAM	75	0	13.02	12.97	12.99	
Channel				20000	20175	20350	Tune-up limit (dBm)
Frequency (MHz)				1715	1732.5	1750	
10	QPSK	1	0	15.33	15.43	15.48	16.5
10	QPSK	1	25	15.17	15.31	15.28	
10	QPSK	1	49	15.06	15.15	15.11	
10	QPSK	25	0	14.29	14.43	14.34	15.5
10	QPSK	25	12	14.01	14.33	14.21	
10	QPSK	25	25	13.93	14.15	14.03	
10	QPSK	50	0	13.76	13.96	13.86	15.5
10	16QAM	1	0	14.48	14.62	14.48	
10	16QAM	1	25	14.33	14.42	14.37	
10	16QAM	1	49	14.22	14.17	14.14	14.5
10	16QAM	25	0	13.67	13.62	13.58	
10	16QAM	25	12	13.53	13.40	13.48	
10	16QAM	25	25	13.33	13.18	13.26	14.5
10	16QAM	50	0	13.14	13.05	13.12	
10	64QAM	1	0	13.57	13.48	13.48	
10	64QAM	1	25	13.55	13.41	13.44	14.5
10	64QAM	1	49	13.48	13.32	13.43	
10	64QAM	25	0	13.15	12.95	13.01	
10	64QAM	25	12	13.05	12.95	13.00	13.5
10	64QAM	25	25	13.05	12.95	12.97	
10	64QAM	50	0	12.99	12.91	12.98	
Channel				19975	20175	20375	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1732.5	1752.5	
5	QPSK	1	0	15.36	15.46	15.46	16.5
5	QPSK	1	12	15.18	15.33	15.31	
5	QPSK	1	24	15.06	15.16	15.12	
5	QPSK	12	0	14.23	14.40	14.37	15.5
5	QPSK	12	7	13.99	14.34	14.18	
5	QPSK	12	13	13.91	14.14	14.01	
5	QPSK	25	0	13.78	13.94	13.85	15.5
5	16QAM	1	0	14.48	14.58	14.48	
5	16QAM	1	12	14.33	14.38	14.33	
5	16QAM	1	24	14.21	14.19	14.18	14.5
5	16QAM	12	0	13.70	13.61	13.59	
5	16QAM	12	7	13.52	13.44	13.47	
5	16QAM	12	13	13.33	13.18	13.26	14.5
5	16QAM	25	0	13.19	13.02	13.13	
5	64QAM	1	0	13.58	13.45	13.49	
5	64QAM	1	12	13.53	13.39	13.41	14.5
5	64QAM	1	24	13.42	13.36	13.42	
5	64QAM	12	0	13.11	12.95	13.03	
5	64QAM	12	7	13.03	12.96	13.01	13.5
5	64QAM	12	13	13.04	12.95	12.96	
5	64QAM	25	0	13.01	12.87	12.96	
Channel				19965	20175	20385	Tune-up limit (dBm)
Frequency (MHz)				1711.5	1732.5	1753.5	
3	QPSK	1	0	15.32	15.44	15.48	16.5
3	QPSK	1	8	15.18	15.36	15.31	
3	QPSK	1	14	15.01	15.16	15.13	
3	QPSK	8	0	14.25	14.41	14.38	16.5
3	QPSK	8	4	14.02	14.35	14.18	

3	QPSK	8	7	16.90	17.23	16.84	16.5
3	QPSK	15	0	16.62	17.08	16.62	
3	16QAM	1	0	17.43	17.67	17.55	18.5
3	16QAM	1	8	17.22	17.48	17.46	
3	16QAM	1	14	17.11	17.33	17.44	17.5
3	16QAM	8	0	16.32	16.67	16.30	
3	16QAM	8	4	16.12	16.37	16.12	17.5
3	16QAM	8	7	16.04	16.21	16.04	
3	16QAM	15	0	16.14	15.93	16.13	17.5
3	64QAM	1	0	16.33	16.60	16.45	
3	64QAM	1	8	16.21	16.46	16.35	16.5
3	64QAM	1	14	16.19	16.55	16.27	
3	64QAM	8	0	15.93	16.08	15.93	16.5
3	64QAM	8	4	15.88	15.87	15.88	
3	64QAM	8	7	15.89	15.85	15.85	16.5
3	64QAM	15	0	15.80	15.93	15.82	
Channel				18607	18900	19193	Tune-up limit (dBm)
Frequency (MHz)				1850.7	1880	1909.3	
1.4	QPSK	1	0	18.46	18.57	18.47	19.5
1.4	QPSK	1	3	18.36	18.45	18.34	
1.4	QPSK	1	5	18.23	18.28	18.14	18.5
1.4	QPSK	3	0	17.38	17.47	17.39	
1.4	QPSK	3	1	17.16	17.33	17.11	18.5
1.4	QPSK	3	3	16.86	17.20	16.80	
1.4	QPSK	6	0	16.63	17.02	16.58	17.5
1.4	16QAM	1	0	17.43	17.66	17.54	
1.4	16QAM	1	3	17.22	17.50	17.42	17.5
1.4	16QAM	1	5	17.15	17.28	17.42	
1.4	16QAM	3	0	16.35	16.65	16.26	17.5
1.4	16QAM	3	1	16.05	16.35	16.13	
1.4	16QAM	3	3	16.02	16.18	16.03	17.5
1.4	16QAM	6	0	16.15	15.95	16.09	
1.4	64QAM	1	0	16.34	16.57	16.48	17.5
1.4	64QAM	1	3	16.18	16.44	16.37	
1.4	64QAM	1	5	16.17	16.48	16.25	17.5
1.4	64QAM	3	0	15.95	16.03	15.92	
1.4	64QAM	3	1	15.83	15.86	15.87	16.5
1.4	64QAM	3	3	15.88	15.87	15.81	
1.4	64QAM	6	0	15.79	15.90	15.82	16.5

3	QPSK	8	7	13.95	14.19	14.04	13.5
3	QPSK	15	0	13.80	13.98	13.89	
3	16QAM	1	0	14.48	14.60	14.49	15.5
3	16QAM	1	8	14.34	14.40	14.37	
3	16QAM	1	14	14.26	14.14	14.16	14.5
3	16QAM	8	0	13.68	13.59	13.58	
3	16QAM	8	4	13.52	13.42	13.51	14.5
3	16QAM	8	7	13.33	13.19	13.23	
3	16QAM	15	0	13.17	13.04	13.08	14.5
3	64QAM	1	0	13.58	13.47	13.49	
3	64QAM	1	8	13.52	13.39	13.44	13.5
3	64QAM	1	14	13.46	13.30	13.43	
3	64QAM	8	0	13.13	12.96	13.03	13.5
3	64QAM	8	4	13.05	12.94	13.00	
3	64QAM	8	7	13.00	12.91	13.01	13.5
3	64QAM	15	0	13.00	12.89	12.98	
Channel				19957	20175	20393	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1732.5	1754.3	
1.4	QPSK	1	0	15.33	15.46	15.49	16.5
1.4	QPSK	1	3	15.20	15.36	15.27	
1.4	QPSK	1	5	15.04	15.17	15.14	15.5
1.4	QPSK	3	0	14.27	14.41	14.36	
1.4	QPSK	3	1	14.04	14.34	14.22	15.5
1.4	QPSK	3	3	13.91	14.13	14.03	
1.4	QPSK	6	0	13.77	13.98	13.85	14.5
1.4	16QAM	1	0	14.43	14.61	14.53	
1.4	16QAM	1	3	14.28	14.42	14.37	14.5
1.4	16QAM	1	5	14.25	14.20	14.17	
1.4	16QAM	3	0	13.70	13.61	13.57	14.5
1.4	16QAM	3	1	13.49	13.41	13.49	
1.4	16QAM	3	3	13.34	13.19	13.24	13.5
1.4	16QAM	6	0	13.15	13.02	13.11	
1.4	64QAM	1	0	13.55	13.45	13.51	13.5
1.4	64QAM	1	3	13.55	13.40	13.45	
1.4	64QAM	1	5	13.43	13.33	13.39	13.5
1.4	64QAM	3	0	13.12	12.96	13.01	
1.4	64QAM	3	1	13.06	12.97	13.00	13.5
1.4	64QAM	3	3	13.05	12.94	13.00	
1.4	64QAM	6	0	13.48	13.36	13.46	13.5

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	12.78	12.89	12.84	14.3	
20	QPSK	1	49	12.73	12.70	12.78		
20	QPSK	1	99	12.68	12.53	12.65		
20	QPSK	50	0	11.92	11.95	11.89	13.3	
20	QPSK	50	24	11.83	11.86	11.87		
20	QPSK	50	50	11.81	11.71	11.67		
20	QPSK	100	0	11.63	11.64	11.52	13.3	
20	16QAM	1	0	12.22	12.10	12.22		
20	16QAM	1	49	12.00	11.98	12.04		
20	16QAM	1	99	11.81	11.86	11.85	12.8	
20	16QAM	50	0	11.54	11.61	11.64		
20	16QAM	50	24	11.63	11.76	11.82		
20	16QAM	50	50	11.50	11.62	11.68	12.8	
20	16QAM	100	0	11.35	11.49	11.48		
20	64QAM	1	0	11.72	11.85	11.93		
20	64QAM	1	49	11.68	11.84	11.86	12.8	
20	64QAM	1	99	11.62	11.83	11.83		
20	64QAM	50	0	11.42	11.45	11.51		
20	64QAM	50	24	11.47	11.38	11.43	12.8	
20	64QAM	50	50	11.40	11.32	11.39		
20	64QAM	100	0	11.43	11.26	11.36		
Channel				20825	21100	21375	Tune-up limit (dBm)	
Frequency (MHz)				2507.5	2535	2562.5		
15	QPSK	1	0	12.68	12.82	12.80	14.3	
15	QPSK	1	37	12.75	12.64	12.72		
15	QPSK	1	74	12.59	12.44	12.62		
15	QPSK	36	0	12.06	11.92	11.99	13.3	
15	QPSK	36	20	11.87	11.79	11.79		
15	QPSK	36	39	11.74	11.60	11.61		
15	QPSK	75	0	11.57	11.38	11.44	13.3	
15	16QAM	1	0	12.14	12.04	12.15		
15	16QAM	1	37	11.93	11.93	11.97		
15	16QAM	1	74	11.74	11.82	11.80	12.8	
15	16QAM	36	0	11.46	11.53	11.58		
15	16QAM	36	20	11.54	11.70	11.75		
15	16QAM	36	39	11.42	11.55	11.62	12.8	
15	16QAM	75	0	11.28	11.40	11.39		
15	64QAM	1	0	11.68	11.78	11.85		
15	64QAM	1	37	11.64	11.79	11.80	12.8	
15	64QAM	1	74	11.54	11.80	11.80		
15	64QAM	36	0	11.37	11.38	11.44		
15	64QAM	36	20	11.44	11.34	11.36	12.8	
15	64QAM	36	39	11.35	11.28	11.36		
15	64QAM	75	0	11.34	11.19	11.28		
Channel				20800	21100	21400	Tune-up limit (dBm)	
Frequency (MHz)				2505	2535	2565		
10	QPSK	1	0	12.62	12.79	12.75	14.3	
10	QPSK	1	25	12.69	12.56	12.65		
10	QPSK	1	49	12.51	12.38	12.59		
10	QPSK	25	0	12.03	11.87	11.92	13.3	
10	QPSK	25	12	11.80	11.74	11.72		
10	QPSK	25	25	11.66	11.54	11.54		
10	QPSK	50	0	11.48	11.35	11.40	13.3	
10	16QAM	1	0	12.07	11.96	12.10		
10	16QAM	1	25	11.85	11.87	11.92		
10	16QAM	1	49	11.67	11.76	11.77	12.8	
10	16QAM	25	0	11.38	11.49	11.54		
10	16QAM	25	12	11.46	11.66	11.68		
10	16QAM	25	25	11.35	11.50	11.54	12.8	
10	16QAM	50	0	11.21	11.31	11.32		
10	64QAM	1	0	11.61	11.70	11.79		
10	64QAM	1	25	11.57	11.76	11.73	12.8	
10	64QAM	1	49	11.46	11.74	11.76		
10	64QAM	25	0	11.28	11.34	11.37		
10	64QAM	25	12	11.39	11.29	11.29	12.8	
10	64QAM	25	25	11.29	11.23	11.30		
10	64QAM	50	0	11.27	11.11	11.20		
Channel				20775	21100	21425	Tune-up limit (dBm)	
Frequency (MHz)				2502.5	2535	2567.5		
5	QPSK	1	0	12.61	12.78	12.74	14.3	
5	QPSK	1	12	12.66	12.61	12.65		
5	QPSK	1	24	12.55	12.38	12.54		
5	QPSK	12	0	11.99	11.89	11.95	13.3	
5	QPSK	12	7	11.79	11.70	11.72		
5	QPSK	12	13	11.67	11.52	11.52		
5	QPSK	25	0	11.52	11.34	11.36	13.3	
5	16QAM	1	0	12.07	11.96	12.11		
5	16QAM	1	12	11.88	11.85	11.93		
5	16QAM	1	24	11.68	11.77	11.73	12.8	
5	16QAM	12	0	11.42	11.48	11.54		
5	16QAM	12	7	11.45	11.62	11.68		
5	16QAM	12	13	11.36	11.50	11.56	12.8	
5	16QAM	25	0	11.20	11.33	11.34		
5	64QAM	1	0	11.61	11.72	11.78		
5	64QAM	1	12	11.60	11.72	11.76	12.8	
5	64QAM	1	24	11.48	11.74	11.72		
5	64QAM	12	0	11.29	11.30	11.39		
5	64QAM	12	7	11.41	11.29	11.28	12.8	
5	64QAM	12	13	11.30	11.21	11.28		
5	64QAM	25	0	11.31	11.13	11.25		

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	15.71	15.72	15.66	16.5
20	QPSK	1	49	15.50	15.52	15.45	
20	QPSK	1	99	15.34	15.40	15.30	
20	QPSK	50	0	14.59	14.63	14.54	15.5
20	QPSK	50	24	14.46	14.45	14.36	
20	QPSK	50	50	14.31	14.31	14.38	
20	QPSK	100	0	14.32	14.42	14.37	15.5
20	16QAM	1	0	14.75	14.79	14.70	
20	16QAM	1	49	14.55	14.62	14.50	
20	16QAM	1	99	14.44	14.43	14.34	14.5
20	16QAM	50	0	13.88	13.91	13.74	
20	16QAM	50	24	13.67	13.73	13.60	
20	16QAM	50	50	13.53	13.59	13.49	14.5
20	16QAM	100	0	13.34	13.43	13.36	
20	64QAM	1	0	13.78	13.85	13.71	
20	64QAM	1	49	13.77	13.81	13.64	14.5
20	64QAM	1	99	13.76	13.77	13.58	
20	64QAM	50	0	13.43	13.46	13.25	
20	64QAM	50	24	13.37	13.42	13.22	14
20	64QAM	50	50	13.36	13.34	13.22	
20	64QAM	100	0	13.35	13.33	13.20	
Channel				132047	132322	132597	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1745	1772.5	
15	QPSK	1	0	15.65	15.66	15.60	16.5
15	QPSK	1	37	15.42	15.48	15.38	
15	QPSK	1	74	15.25	15.34	15.25	
15	QPSK	36	0	14.54	14.57	14.51	15.5
15	QPSK	36	20	14.38	14.42	14.28	
15	QPSK	36	39	14.25	14.23	14.15	
15	QPSK	75	0	14.06	14.07	14.02	15.5
15	16QAM	1	0	14.67	14.75	14.62	
15	16QAM	1	37	14.51	14.56	14.46	
15	16QAM	1	74	14.38	14.37	14.27	14.5
15	16QAM	36	0	13.84	13.88	13.66	
15	16QAM	36	20	13.59	13.68	13.53	
15	16QAM	36	39	13.44	13.56	13.41	14.5
15	16QAM	75	0	13.29	13.37	13.27	
15	64QAM	1	0	13.70	13.79	13.63	
15	64QAM	1	37	13.74	13.76	13.60	14.5
15	64QAM	1	74	13.69	13.72	13.51	
15	64QAM	36	0	13.39	13.39	13.19	
15	64QAM	36	20	13.29	13.38	13.14	14
15	64QAM	36	39	13.27	13.26	13.19	
15	64QAM	75	0	13.31	13.24	13.15	
Channel				132022	132322	132622	Tune-up limit (dBm)
Frequency (MHz)				1715	1745	1775	
10	QPSK	1	0	15.48	15.61	15.57	16.5
10	QPSK	1	25	15.41	15.42	15.33	
10	QPSK	1	49	15.23	15.33	15.17	
10	QPSK	25	0	14.50	14.50	14.44	15.5
10	QPSK	25	12	14.32	14.38	14.25	
10	QPSK	25	25	14.20	14.19	14.06	
10	QPSK	50	0	14.00	14.00	14.03	15.5
10	16QAM	1	0	14.63	14.66	14.56	
10	16QAM	1	25	14.41	14.45	14.37	
10	16QAM	1	49	14.34	14.34	14.19	14.5
10	16QAM	25	0	13.80	13.81	13.61	
10	16QAM	25	12	13.58	13.64	13.48	
10	16QAM	25	25	13.43	13.47	13.37	14.5
10	16QAM	50	0	13.20	13.34	13.24	
10	64QAM	1	0	13.63	13.69	13.63	
10	64QAM	1	25	13.64	13.69	13.56	14.5
10	64QAM	1	49	13.61	13.64	13.48	
10	64QAM	25	0	13.29	13.34	13.17	
10	64QAM	25	12	13.24	13.28	13.12	14
10	64QAM	25	25	13.28	13.24	13.13	
10	64QAM	50	0	13.25	13.22	13.08	
Channel				131997	132322	132647	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1745	1777.5	
5	QPSK	1	0	15.59	15.62	15.59	16.5
5	QPSK	1	12	15.36	15.44	15.33	
5	QPSK	1	24	15.23	15.28	15.18	
5	QPSK	12	0	14.50	14.49	14.40	15.5
5	QPSK	12	7	14.35	14.39	14.23	
5	QPSK	12	13	14.15	14.22	14.05	
5	QPSK	25	0	14.06	14.09	14.08	15.5
5	16QAM	1	0	14.63	14.66	14.60	
5	16QAM	1	12	14.42	14.48	14.33	
5	16QAM	1	24	14.34	14.31	14.21	14.5
5	16QAM	12	0	13.77	13.80	13.61	
5	16QAM	12	7	13.56	13.62	13.44	
5	16QAM	12	13	13.46	13.44	13.33	14.5
5	16QAM	25	0	13.22	13.32	13.22	
5	64QAM	1	0	13.65	13.69	13.59	
5	64QAM	1	12	13.64	13.66	13.54	14.5
5	64QAM	1	24	13.64	13.60	13.46	
5	64QAM	12	0	13.33	13.36	13.14	
5	64QAM	12	7	13.26	13.33	13.12	14
5	64QAM	12	13	13.24	13.24	13.13	
5	64QAM	25	0	13.23	13.21	13.10	
Channel				131987	132322	132657	Tune-up limit (dBm)
Frequency (MHz)				1711.5	1745	1778.5	
3	QPSK	1	0	15.61	15.63	15.55	16.5
3	QPSK	1	8	15.37	15.43	15.30	
3	QPSK	1	14	15.27	15.31	15.19	
3	QPSK	8	0	14.51	14.50	14.42	16.5
3	QPSK	8	4	14.33	14.37	14.26	

3	QPSK	8	7	14.18	14.20	14.03	15.5
3	QPSK	15	0	14.00	14.05	14.03	
3	16QAM	1	0	14.61	14.66	14.58	
3	16QAM	1	8	14.45	14.47	14.34	14.5
3	16QAM	1	14	14.37	14.35	14.17	
3	16QAM	8	0	13.80	13.81	13.57	
3	16QAM	8	4	13.56	13.59	13.49	14.5
3	16QAM	8	7	13.45	13.43	13.33	
3	16QAM	15	0	13.20	13.30	13.19	
3	64QAM	1	0	13.63	13.73	13.64	14.5
3	64QAM	1	8	13.67	13.69	13.51	
3	64QAM	1	14	13.62	13.62	13.48	
3	64QAM	8	0	13.33	13.35	13.17	14
3	64QAM	8	4	13.26	13.30	13.11	
3	64QAM	8	7	13.28	13.22	13.13	
3	64QAM	15	0	13.26	13.19	13.09	Tone-up limit (dBm)
Channel				131979	132322	132665	
Frequency (MHz)				1710.7	1745	1779.3	
1.4	QPSK	1	0	15.60	15.59	15.54	16.5
1.4	QPSK	1	3	15.37	15.42	15.33	
1.4	QPSK	1	5	15.25	15.28	15.20	
1.4	QPSK	3	0	14.51	14.50	14.45	15.5
1.4	QPSK	3	1	14.35	14.39	14.21	
1.4	QPSK	3	3	14.18	14.22	14.07	
1.4	QPSK	6	0	13.98	14.00	13.94	14.5
1.4	16QAM	1	0	14.67	14.66	14.56	
1.4	16QAM	1	3	14.44	14.48	14.35	
1.4	16QAM	1	5	14.34	14.37	14.23	14.5
1.4	16QAM	3	0	13.79	13.84	13.60	
1.4	16QAM	3	1	13.56	13.62	13.45	
1.4	16QAM	3	3	13.47	13.44	13.35	14.5
1.4	16QAM	6	0	13.20	13.31	13.23	
1.4	64QAM	1	0	13.65	13.72	13.64	
1.4	64QAM	1	3	13.64	13.68	13.53	14.5
1.4	64QAM	1	5	13.60	13.65	13.47	
1.4	64QAM	3	0	13.31	13.32	13.17	
1.4	64QAM	3	1	13.25	13.30	13.12	14
1.4	64QAM	3	3	13.28	13.26	13.14	
1.4	64QAM	6	0	13.25	13.24	13.06	

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	19.8
Frequency (MHz)				2580	2595	2610	
20	QPSK	1	0	18.55	18.68	18.64	
20	QPSK	1	49	18.55	18.58	18.54	18.8
20	QPSK	1	99	18.42	18.37	18.41	
20	QPSK	50	0	17.62	17.62	17.69	
20	QPSK	50	24	17.51	17.47	17.56	18.8
20	QPSK	50	50	17.30	17.33	17.40	
20	QPSK	100	0	17.14	17.22	17.20	
20	16QAM	1	0	17.83	17.81	17.81	18.8
20	16QAM	1	49	17.63	17.65	17.64	
20	16QAM	1	99	17.49	17.51	17.46	
20	16QAM	50	0	16.91	16.96	16.93	17.8
20	16QAM	50	24	16.80	16.85	16.80	
20	16QAM	50	50	16.65	16.66	16.65	
20	16QAM	100	0	16.49	16.55	16.48	17.8
20	64QAM	1	0	16.88	16.91	16.90	
20	64QAM	1	49	16.80	16.90	16.86	
20	64QAM	1	99	16.74	16.87	16.85	16.8
20	64QAM	50	0	16.43	16.50	16.48	
20	64QAM	50	24	16.37	16.49	16.45	
20	64QAM	50	50	16.32	16.41	16.40	16.8
20	64QAM	100	0	16.27	16.35	16.40	
Channel				37825	38000	38175	19.8
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	18.51	18.56	18.51	
15	QPSK	1	37	18.32	18.41	18.35	18.8
15	QPSK	1	74	18.21	18.20	18.19	
15	QPSK	36	0	17.39	17.40	17.40	
15	QPSK	36	20	17.23	17.21	17.23	18.8
15	QPSK	36	39	17.11	17.00	17.09	
15	QPSK	75	0	17.00	16.85	16.97	
15	16QAM	1	0	17.65	17.54	17.58	18.8
15	16QAM	1	37	17.54	17.43	17.44	
15	16QAM	1	74	17.39	17.24	17.28	
15	16QAM	36	0	16.86	16.71	16.66	17.8
15	16QAM	36	20	16.66	16.58	16.53	
15	16QAM	36	39	16.49	16.36	16.37	
15	16QAM	75	0	16.30	16.20	16.24	17.8
15	64QAM	1	0	16.67	16.54	16.64	
15	64QAM	1	37	16.65	16.48	16.63	
15	64QAM	1	74	16.61	16.42	16.56	16.8
15	64QAM	36	0	16.28	16.12	16.23	
15	64QAM	36	20	16.25	16.12	16.16	
15	64QAM	36	39	16.21	16.07	16.12	16.8
15	64QAM	75	0	16.14	16.02	16.08	
Channel				37800	38000	38200	19.8
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	18.52	18.53	18.51	
10	QPSK	1	25	18.36	18.37	18.33	18.8
10	QPSK	1	49	18.13	18.17	18.17	
10	QPSK	25	0	17.31	17.36	17.33	
10	QPSK	25	12	17.14	17.16	17.20	18.8
10	QPSK	25	25	16.99	17.05	17.13	
10	QPSK	50	0	16.88	16.81	17.02	
10	16QAM	1	0	17.52	17.45	17.57	18.8
10	16QAM	1	25	17.32	17.35	17.45	
10	16QAM	1	49	17.21	17.14	17.32	
10	16QAM	25	0	16.68	16.62	16.77	17.8
10	16QAM	25	12	16.49	16.46	16.64	
10	16QAM	25	25	16.41	16.24	16.43	
10	16QAM	50	0	16.28	16.04	16.35	17.8
10	64QAM	1	0	16.68	16.44	16.78	
10	64QAM	1	25	16.65	16.38	16.71	
10	64QAM	1	49	16.62	16.35	16.65	16.8
10	64QAM	25	0	16.23	15.99	16.32	
10	64QAM	25	12	16.15	16.02	16.30	
10	64QAM	25	25	16.13	15.97	16.26	16.8
10	64QAM	50	0	16.12	15.89	16.19	
Channel				37775	38000	38225	19.8
Frequency (MHz)				2572.5	2595	2617.5	
5	QPSK	1	0	18.48	18.52	18.51	
5	QPSK	1	12	18.32	18.35	18.32	18.8
5	QPSK	1	24	18.11	18.18	18.14	
5	QPSK	12	0	17.32	17.32	17.35	
5	QPSK	12	7	17.11	17.19	17.25	18.8
5	QPSK	12	13	17.02	17.05	17.14	
5	QPSK	25	0	16.90	16.85	17.00	
5	16QAM	1	0	17.55	17.48	17.60	18.8
5	16QAM	1	12	17.32	17.37	17.41	
5	16QAM	1	24	17.25	17.14	17.33	
5	16QAM	12	0	16.66	16.59	16.79	17.8
5	16QAM	12	7	16.53	16.43	16.66	
5	16QAM	12	13	16.40	16.27	16.43	
5	16QAM	25	0	16.28	16.05	16.33	17.8
5	64QAM	1	0	16.67	16.43	16.77	
5	64QAM	1	12	16.66	16.42	16.67	
5	64QAM	1	24	16.59	16.35	16.63	16.8
5	64QAM	12	0	16.24	15.99	16.33	
5	64QAM	12	7	16.15	15.96	16.31	
5	64QAM	12	13	16.13	15.97	16.28	16.8
5	64QAM	25	0	15.94	15.73	16.02	

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	17.22			18
10	QPSK	1	25	16.53			
10	QPSK	1	49	16.33			
10	QPSK	25	0	15.70			16.5
10	QPSK	25	12	15.44			
10	QPSK	25	25	15.32			
10	QPSK	50	0	15.15			16.5
10	16QAM	1	0	15.85			
10	16QAM	1	25	15.71			
10	16QAM	1	49	15.52			16
10	16QAM	25	0	14.93			
10	16QAM	25	12	14.79			
10	16QAM	25	25	14.68			16
10	16QAM	50	0	14.53			
10	64QAM	1	0	14.99			
10	64QAM	1	25	14.94			16
10	64QAM	1	49	14.93			
10	64QAM	25	0	14.57			
10	64QAM	25	12	14.54			15
10	64QAM	25	25	14.46			
10	64QAM	50	0	14.41			
Channel				38725	38750	38775	Tune-up limit (dBm)
Frequency (MHz)				2307.5	2310	2312.5	
5	QPSK	1	0	16.70	16.71	16.66	18
5	QPSK	1	12	16.56	16.51	16.50	
5	QPSK	1	24	16.40	16.28	16.34	
5	QPSK	12	0	15.68	15.62	15.53	16.5
5	QPSK	12	7	15.51	15.41	15.34	
5	QPSK	12	13	15.37	15.25	15.19	
5	QPSK	25	0	15.15	15.13	14.99	16.5
5	16QAM	1	0	15.84	15.79	15.60	
5	16QAM	1	12	15.67	15.63	15.44	
5	16QAM	1	24	15.51	15.47	15.21	16
5	16QAM	12	0	14.87	14.87	14.63	
5	16QAM	12	7	14.70	14.73	14.40	
5	16QAM	12	13	14.53	14.64	14.30	16
5	16QAM	25	0	14.36	14.48	14.14	
5	64QAM	1	0	14.69	14.93	14.44	
5	64QAM	1	12	14.68	14.87	14.40	16
5	64QAM	1	24	14.61	14.86	14.38	
5	64QAM	12	0	14.32	14.52	14.07	
5	64QAM	12	7	14.31	14.48	14.07	15
5	64QAM	12	13	14.29	14.43	14.05	
5	64QAM	25	0	14.18	14.33	14.03	

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			18
10	QPSK	1	0	17.25			
10	QPSK	1	25	17.07			
10	QPSK	1	49	16.87			
10	QPSK	25	0	16.16			16.5
10	QPSK	25	12	16.05			
10	QPSK	25	25	15.86			
10	QPSK	50	0	15.76			
10	16QAM	1	0	16.35			16.5
10	16QAM	1	25	16.15			
10	16QAM	1	49	15.94			
10	16QAM	25	0	15.35			
10	16QAM	25	12	15.23			16
10	16QAM	25	25	15.09			
10	16QAM	50	0	14.89			
10	64QAM	1	0	15.22			
10	64QAM	1	25	15.21			16
10	64QAM	1	49	15.19			
10	64QAM	25	0	14.83			
10	64QAM	25	12	14.83			
10	64QAM	25	25	14.80			15
10	64QAM	50	0	14.76			
Channel				39175	39200	39225	Tune-up limit (dBm)
Frequency (MHz)				2352.5	2355	2357.5	
5	QPSK	1	0	16.67	23.22	23.17	18
5	QPSK	1	12	16.48	23.07	23.01	
5	QPSK	1	24	16.37	22.86	22.85	
5	QPSK	12	0	15.55	22.06	22.06	
5	QPSK	12	7	15.39	21.87	21.89	16.5
5	QPSK	12	13	15.27	21.66	21.75	
5	QPSK	25	0	15.16	21.51	21.63	
5	16QAM	1	0	15.81	22.20	22.24	
5	16QAM	1	12	15.70	22.09	22.10	16.5
5	16QAM	1	24	15.55	21.90	21.94	
5	16QAM	12	0	15.02	21.37	21.32	
5	16QAM	12	7	14.82	21.24	21.19	
5	16QAM	12	13	14.65	21.02	21.03	16
5	16QAM	25	0	14.46	20.86	20.90	
5	64QAM	1	0	14.83	21.20	21.30	
5	64QAM	1	12	14.81	21.14	21.29	
5	64QAM	1	24	14.77	21.08	21.22	16
5	64QAM	12	0	14.44	20.78	20.89	
5	64QAM	12	7	14.41	20.78	20.82	
5	64QAM	12	13	14.37	20.73	20.78	
5	64QAM	25	0	14.30	20.68	20.74	15

5GHzWLAN ANT 1

5.5GHz WLAN ANT 1	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Power Setting	Duty Cycle %
	802.11a 6Mbps	CH 100	5500	10.75	11.50	11.00	89.10
		CH 118	5580	10.62	11.50	11.00	
		CH 140	5700	9.02	10.00	11.00	
	802.11n-HT20 MCS0	CH 100	5500	9.37	10.00	11.00	88.06
		CH 118	5580	9.27	10.00	11.00	
		CH 140	5700	7.64	8.50	11.00	
	802.11n-HT40 MCS0	CH 102	5510	9.22	10.00	11.00	78.38
		CH 110	5550	9.39	10.00	11.00	
		CH 134	5670	8.19	9.00	11.00	
	802.11ac-VHT20 MCS0	CH 100	5500	9.13	10.00	11.00	86.86
		CH 118	5580	9.03	10.00	11.00	
		CH 140	5700	7.75	8.50	11.00	
	802.11ac-VHT40 MCS0	CH 102	5510	9.17	10.00	11.00	78.67
		CH 110	5550	9.35	10.00	11.00	
		CH 134	5670	8.24	9.00	11.00	
	802.11ac-VHT80 MCS0	CH 106	5530	9.13	10.00	11.00	63.04
		CH 138	5690	8.03	9.00	11.00	

5GHz 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	10.21	11.00	12.00	89.10
		CH 157	5785	9.68	10.50	12.00	
		CH 165	5825	10.87	11.50	12.00	
	802.11n-HT20 MCS0	CH 149	5745	9.28	10.00	12.00	87.31
		CH 157	5785	7.92	8.50	12.00	
		CH 165	5825	9.61	10.50	12.00	
	802.11n-HT40 MCS0	CH 151	5755	9.07	10.00	12.00	78.67
		CH 159	5795	8.77	9.50	12.00	
	802.11ac-VHT20 MCS0	CH 149	5745	8.94	9.50	12.00	88.15
		CH 157	5785	8.07	9.00	12.00	
		CH 165	5825	9.35	10.00	12.00	
	802.11ac-VHT40 MCS0	CH 151	5755	9.11	10.00	12.00	78.67
		CH 159	5795	8.78	9.50	12.00	
	802.11ac-VHT80 MCS0	CH 155	5775	8.57	9.50	12.00	64.44

Reduced Power Level 2

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		27.35	27.26	27.24	28.00	18.35	18.26	18.24	19.00
GPRS 1 Tx slot		26.96	26.91	27.05	28.00	17.96	17.91	18.05	19.00
GPRS 2 Tx slots		25.27	25.21	25.21	26.00	19.27	19.21	19.21	20.00
GPRS 3 Tx slots		23.46	23.44	23.46	24.00	19.20	19.18	19.20	19.74
GPRS 4 Tx slots		21.98	22.33	21.97	23.00	18.98	19.33	18.97	20.00
EDGE 1 Tx slot		23.66	23.77	23.85	24.50	14.66	14.77	14.85	15.50
EDGE 2 Tx slots		21.70	21.76	21.65	22.50	15.70	15.76	15.65	16.50
EDGE 3 Tx slots		20.32	20.30	20.37	21.00	16.06	16.04	16.11	16.74
EDGE 4 Tx slots		18.44	18.69	18.28	19.50	15.44	15.69	15.28	16.50
Mode			Max.	27.35			Max.	19.33	
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	19.93	19.97	19.90	21.00	20.13	20.21	20.16	21.00
3GPP Rel 5	HSDPA Subtest-1	19.93	19.76	19.96	21.00	20.05	20.16	20.11	21.00
3GPP Rel 5	HSDPA Subtest-2	19.05	18.86	18.89	20.00	19.45	19.37	19.35	21.00
3GPP Rel 5	HSDPA Subtest-3	18.85	18.65	18.68	20.00	19.26	19.18	19.15	20.50
3GPP Rel 5	HSDPA Subtest-4	18.70	18.51	18.57	20.00	19.14	19.06	19.03	20.50
3GPP Rel 8	DC-HSDPA Subtest-1	19.78	19.41	19.64	21.00	20.12	20.00	19.87	21.00
3GPP Rel 8	DC-HSDPA Subtest-2	18.64	18.43	18.51	20.00	18.99	18.87	18.88	20.00
3GPP Rel 8	DC-HSDPA Subtest-3	18.44	18.23	18.32	19.50	18.79	18.68	18.68	20.00
3GPP Rel 8	DC-HSDPA Subtest-4	18.40	18.20	18.28	19.00	18.76	18.65	18.65	20.00
3GPP Rel 6	HSUPA Subtest-1	19.95	19.75	19.90	21.00	20.09	20.10	20.06	21.00
3GPP Rel 6	HSUPA Subtest-2	19.92	19.67	19.87	21.00	20.10	20.11	20.17	21.00
3GPP Rel 6	HSUPA Subtest-3	19.87	19.77	19.92	21.00	20.07	19.79	20.07	21.00
3GPP Rel 6	HSUPA Subtest-4	19.89	19.71	19.84	21.00	20.16	19.35	20.14	21.00
3GPP Rel 6	HSUPA Subtest-5	19.88	19.83	19.87	21.00	20.06	20.07	20.14	21.00
3GPP Rel 7	HSPA+ (16QAM) Subtest-1	19.92	19.86	19.87	21.00	20.01	20.08	20.09	21.00
Attenuator			Cable Loss	0.8			Cable Loss	0.8	
Mode			Max.	19.97			Max.	20.21	

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)				1880	1880	1900	
20	QPSK	1	0	21.53	21.67	21.56	22.5
20	QPSK	1	49	21.43	21.52	21.41	
20	QPSK	1	99	21.30	21.38	21.20	
20	QPSK	50	0	20.47	20.55	20.49	
20	QPSK	50	24	20.26	20.41	20.18	21.5
20	QPSK	50	50	19.96	20.27	19.89	
20	QPSK	100	0	20.00	20.13	19.96	
20	16QAM	1	0	20.50	20.72	20.60	
20	16QAM	1	49	20.30	20.56	20.50	21.5
20	16QAM	1	99	20.20	20.38	20.50	
20	16QAM	50	0	19.41	19.71	19.35	
20	16QAM	50	24	19.15	19.43	19.20	
20	16QAM	50	50	19.10	19.29	19.13	20.5
20	16QAM	100	0	19.20	19.01	19.17	
20	64QAM	1	0	19.39	19.67	19.53	
20	64QAM	1	49	19.26	19.53	19.43	
20	64QAM	1	99	19.25	19.58	19.30	20.5
20	64QAM	50	0	19.01	19.20	19.01	
20	64QAM	50	24	18.94	19.00	18.97	
20	64QAM	50	50	18.93	18.95	18.90	
20	64QAM	100	0	18.88	19.03	18.89	19.5
Channel				18675	18900	19125	Tune-up limit (dBm)
Frequency (MHz)				1857.5	1880	1902.5	
15	QPSK	1	0	21.48	21.58	21.53	22.5
15	QPSK	1	37	21.35	21.44	21.35	
15	QPSK	1	74	21.21	21.34	21.16	
15	QPSK	36	0	20.39	20.49	20.38	
15	QPSK	36	20	20.22	20.37	20.13	21.5
15	QPSK	36	39	19.93	20.19	18.85	
15	QPSK	75	0	19.66	20.05	19.60	
15	16QAM	1	0	20.42	20.67	20.56	
15	16QAM	1	37	20.24	20.48	20.45	21.5
15	16QAM	1	74	20.14	20.32	20.47	
15	16QAM	36	0	19.36	19.66	19.30	
15	16QAM	36	20	19.07	19.36	19.16	
15	16QAM	36	39	19.04	19.21	19.06	20.5
15	16QAM	75	0	19.17	18.97	19.12	
15	64QAM	1	0	19.35	19.63	19.44	
15	64QAM	1	37	19.20	19.50	19.37	
15	64QAM	1	74	19.20	19.55	19.26	20.5
15	64QAM	36	0	18.95	19.16	18.96	
15	64QAM	36	20	18.85	18.95	18.82	
15	64QAM	36	39	18.86	18.88	18.82	
15	64QAM	75	0	18.82	18.95	18.80	19.5
Channel				18650	18900	19150	Tune-up limit (dBm)
Frequency (MHz)				1855	1880	1905	
10	QPSK	1	0	21.43	21.62	21.49	22.5
10	QPSK	1	25	21.38	21.46	21.34	
10	QPSK	1	49	21.25	21.28	21.10	
10	QPSK	25	0	20.36	20.48	20.39	
10	QPSK	25	12	20.20	20.32	20.10	21.5
10	QPSK	25	25	19.87	20.20	19.83	
10	QPSK	50	0	19.61	20.06	19.57	
10	16QAM	1	0	20.45	20.62	20.54	
10	16QAM	1	25	20.23	20.45	20.44	21.5
10	16QAM	1	49	20.14	20.28	20.41	
10	16QAM	25	0	19.32	19.62	19.30	
10	16QAM	25	12	19.09	19.38	19.13	
10	16QAM	25	25	19.05	19.20	19.04	20.5
10	16QAM	50	0	19.09	18.95	19.11	
10	64QAM	1	0	19.31	19.57	19.48	
10	64QAM	1	25	19.19	19.47	19.37	
10	64QAM	1	49	19.16	19.50	19.22	19.5
10	64QAM	25	0	18.90	19.11	18.91	
10	64QAM	25	12	18.84	18.85	18.91	
10	64QAM	25	25	18.83	18.86	18.83	
10	64QAM	50	0	18.78	18.92	18.79	
Channel				18625	18900	19175	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1880	1907.5	
5	QPSK	1	0	21.47	21.60	21.45	22.5
5	QPSK	1	12	21.32	21.46	21.36	
5	QPSK	1	24	21.20	21.30	21.12	
5	QPSK	12	0	20.39	20.45	20.40	
5	QPSK	12	7	20.16	20.33	20.11	21.5
5	QPSK	12	13	19.90	20.18	19.84	
5	QPSK	25	0	19.62	20.05	19.60	
5	16QAM	1	0	20.41	20.66	20.53	
5	16QAM	1	12	20.20	20.50	20.44	21.5
5	16QAM	1	24	20.14	20.29	20.40	
5	16QAM	12	0	19.35	19.62	19.25	
5	16QAM	12	7	19.07	19.37	19.14	
5	16QAM	12	13	19.04	19.21	19.03	20.5
5	16QAM	25	0	19.14	18.93	19.11	
5	64QAM	1	0	19.28	19.57	19.47	
5	64QAM	1	12	19.21	19.46	19.33	
5	64QAM	1	24	19.17	19.49	19.20	19.5
5	64QAM	12	0	18.95	19.08	18.94	
5	64QAM	12	7	18.86	18.87	18.90	
5	64QAM	12	13	18.86	18.85	18.81	
5	64QAM	25	0	18.78	18.91	18.82	
Channel				18615	18900	19185	Tune-up limit (dBm)
Frequency (MHz)				1851.5	1880	1908.5	
3	QPSK	1	0	21.47	21.58	21.52	22.5
3	QPSK	1	8	21.35	21.45	21.33	
3	QPSK	1	14	21.23	21.33	21.11	
3	QPSK	8	0	20.41	20.50	20.43	
3	QPSK	8	4	20.22	20.33	20.12	21.5

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	20.98	21.08	21.06	22
20	QPSK	1	49	20.82	20.92	20.92	
20	QPSK	1	99	20.63	20.76	20.78	
20	QPSK	50	0	19.87	20.05	20.01	
20	QPSK	50	24	19.65	19.95	19.85	21
20	QPSK	50	50	19.53	19.80	19.67	
20	QPSK	100	0	19.52	19.68	19.56	
20	16QAM	1	0	20.06	20.22	20.10	
20	16QAM	1	49	19.95	20.01	19.97	21
20	16QAM	1	99	19.84	19.81	19.79	
20	16QAM	50	0	19.31	19.24	19.21	
20	16QAM	50	24	19.17	19.02	19.09	
20	16QAM	50	50	18.96	18.83	18.88	20
20	16QAM	100	0	18.76	18.66	18.71	
20	64QAM	1	0	19.20	19.07	19.11	
20	64QAM	1	49	19.12	18.99	19.06	
20	64QAM	1	99	19.06	18.95	19.01	20
20	64QAM	50	0	18.74	18.58	18.67	
20	64QAM	50	24	18.68	18.56	18.60	
20	64QAM	50	50	18.66	18.52	18.59	
20	64QAM	100	0	18.60	18.51	18.56	19
Channel				20025	20175	20325	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1732.5	1747.5	
15	QPSK	1	0	20.95	21.02	21.01	22
15	QPSK	1	37	20.76	20.89	20.88	
15	QPSK	1	74	20.58	20.72	20.72	
15	QPSK	36	0	19.79	20.00	19.93	
15	QPSK	36	20	19.57	19.88	19.77	21
15	QPSK	36	39	19.49	19.74	19.62	
15	QPSK	75	0	19.39	19.54	19.42	
15	16QAM	1	0	20.00	20.18	20.04	
15	16QAM	1	37	19.86	19.96	19.89	21
15	16QAM	1	74	19.80	19.73	19.71	
15	16QAM	36	0	19.22	19.17	19.18	
15	16QAM	36	20	19.10	18.93	19.05	
15	16QAM	36	39	18.88	18.75	18.85	20
15	16QAM	75	0	18.68	18.58	18.66	
15	64QAM	1	0	19.14	19.00	19.07	
15	64QAM	1	37	19.09	18.96	19.02	
15	64QAM	1	74	19.02	18.89	18.96	20
15	64QAM	36	0	18.65	18.52	18.60	
15	64QAM	36	20	18.59	18.53	18.52	
15	64QAM	36	39	18.62	18.45	18.53	
15	64QAM	75	0	18.52	18.47	18.49	19
Channel				20000	20175	20350	Tune-up limit (dBm)
Frequency (MHz)				1715	1732.5	1750	
10	QPSK	1	0	20.83	20.93	20.98	22
10	QPSK	1	25	20.67	20.81	20.78	
10	QPSK	1	49	20.56	20.65	20.61	
10	QPSK	25	0	19.79	19.93	19.84	
10	QPSK	25	12	19.51	19.83	19.71	21
10	QPSK	25	25	19.43	19.65	19.53	
10	QPSK	50	0	19.26	19.46	19.36	
10	16QAM	1	0	19.98	20.12	19.98	
10	16QAM	1	25	19.83	19.92	19.87	21
10	16QAM	1	49	19.72	19.67	19.64	
10	16QAM	25	0	19.17	19.12	19.08	
10	16QAM	25	12	19.03	18.90	18.96	
10	16QAM	25	25	18.83	18.68	18.76	20
10	16QAM	50	0	18.64	18.55	18.62	
10	64QAM	1	0	19.07	18.98	18.98	
10	64QAM	1	25	19.05	18.91	18.94	
10	64QAM	1	49	18.98	18.82	18.93	20
10	64QAM	25	0	18.65	18.45	18.51	
10	64QAM	25	12	18.55	18.45	18.50	
10	64QAM	25	25	18.55	18.45	18.47	
10	64QAM	50	0	18.49	18.41	18.48	19
Channel				19975	20175	20375	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1732.5	1752.5	
5	QPSK	1	0	20.86	20.96	20.96	22
5	QPSK	1	12	20.68	20.83	20.81	
5	QPSK	1	24	20.56	20.66	20.62	
5	QPSK	12	0	19.73	19.90	19.87	
5	QPSK	12	7	19.49	19.84	19.68	21
5	QPSK	12	13	19.41	19.64	19.51	
5	QPSK	25	0	19.28	19.44	19.35	
5	16QAM	1	0	19.98	20.08	19.98	
5	16QAM	1	12	19.83	19.88	19.83	21
5	16QAM	1	24	19.71	19.69	19.68	
5	16QAM	12	0	19.20	19.11	19.09	
5	16QAM	12	7	19.02	18.94	18.97	
5	16QAM	12	13	18.83	18.68	18.76	20
5	16QAM	25	0	18.69	18.52	18.63	
5	64QAM	1	0	19.08	18.95	18.99	
5	64QAM	1	12	19.03	18.89	18.91	
5	64QAM	1	24	18.92	18.86	18.92	20
5	64QAM	12	0	18.61	18.45	18.53	
5	64QAM	12	7	18.53	18.46	18.51	
5	64QAM	12	13	18.54	18.45	18.46	
5	64QAM	25	0	18.51	18.37	18.46	19
Channel				19965	20175	20385	Tune-up limit (dBm)
Frequency (MHz)				1711.5	1732.5	1753.5	
3	QPSK	1	0	20.82	20.94	20.98	22
3	QPSK	1	8	20.68	20.86	20.81	
3	QPSK	1	14	20.51	20.66	20.63	
3	QPSK	8	0	19.75	19.91	19.88	
3	QPSK	8	4	19.52	19.85	19.68	

3	QPSK	8	7	19.90	20.23	19.84	21.5
3	QPSK	15	0	19.62	20.08	19.62	
3	16QAM	1	0	20.43	20.67	20.55	
3	16QAM	1	8	20.22	20.48	20.46	20.5
3	16QAM	1	14	20.11	20.33	20.44	
3	16QAM	8	0	19.32	19.67	19.30	
3	16QAM	8	4	19.12	19.37	19.12	20.5
3	16QAM	8	7	19.04	19.21	19.04	
3	16QAM	15	0	19.14	18.93	19.13	
3	64QAM	1	0	19.33	19.60	19.45	20.5
3	64QAM	1	8	19.21	19.46	19.35	
3	64QAM	1	14	19.19	19.55	19.27	
3	64QAM	8	0	18.93	19.08	18.93	19.5
3	64QAM	8	4	18.88	18.87	18.88	
3	64QAM	8	7	18.89	18.85	18.85	
3	64QAM	15	0	18.80	18.93	18.82	Tune-up limit (dBm)
Channel				18607	18900	19193	
Frequency (MHz)				1850.7	1880	1909.3	
1.4	QPSK	1	0	21.46	21.57	21.47	22.5
1.4	QPSK	1	3	21.36	21.45	21.34	
1.4	QPSK	1	5	21.23	21.28	21.14	
1.4	QPSK	3	0	20.38	20.47	20.39	21.5
1.4	QPSK	3	1	20.16	20.33	20.11	
1.4	QPSK	3	3	19.86	20.20	19.80	
1.4	QPSK	6	0	19.63	20.02	19.58	21.5
1.4	16QAM	1	0	20.43	20.66	20.54	
1.4	16QAM	1	3	20.22	20.50	20.42	
1.4	16QAM	1	5	20.15	20.28	20.42	21.5
1.4	16QAM	3	0	19.35	19.65	19.26	
1.4	16QAM	3	1	19.05	19.35	19.13	
1.4	16QAM	3	3	19.02	19.18	19.03	20.5
1.4	16QAM	6	0	19.15	18.95	19.09	
1.4	64QAM	1	0	19.34	19.57	19.48	
1.4	64QAM	1	3	19.18	19.44	19.37	20.5
1.4	64QAM	1	5	19.17	19.48	19.25	
1.4	64QAM	3	0	18.95	19.03	18.92	
1.4	64QAM	3	1	18.83	18.86	18.87	19.5
1.4	64QAM	3	3	18.88	18.87	18.81	
1.4	64QAM	6	0	18.79	18.90	18.82	

3	QPSK	8	7	19.45	19.69	19.54	21
3	QPSK	15	0	19.30	19.48	19.39	
3	16QAM	1	0	19.98	20.10	19.99	
3	16QAM	1	8	19.84	19.90	19.87	20
3	16QAM	1	14	19.76	19.64	19.66	
3	16QAM	8	0	19.18	19.09	19.08	
3	16QAM	8	4	19.02	18.92	19.01	20
3	16QAM	8	7	18.83	18.69	18.73	
3	16QAM	15	0	18.67	18.54	18.58	
3	64QAM	1	0	19.08	18.97	18.99	20
3	64QAM	1	8	19.02	18.89	18.94	
3	64QAM	1	14	18.96	18.80	18.93	
3	64QAM	8	0	18.63	18.46	18.53	19
3	64QAM	8	4	18.55	18.44	18.50	
3	64QAM	8	7	18.50	18.41	18.51	
3	64QAM	15	0	18.50	18.39	18.48	Tune-up limit (dBm)
Channel				19957	20175	20393	
Frequency (MHz)				1710.7	1732.5	1754.3	
1.4	QPSK	1	0	20.83	20.96	20.99	22
1.4	QPSK	1	3	20.70	20.86	20.77	
1.4	QPSK	1	5	20.54	20.67	20.64	
1.4	QPSK	3	0	19.77	19.91	19.86	21
1.4	QPSK	3	1	19.54	19.84	19.72	
1.4	QPSK	3	3	19.41	19.63	19.53	
1.4	QPSK	6	0	19.27	19.48	19.35	21
1.4	16QAM	1	0	19.93	20.11	20.03	
1.4	16QAM	1	3	19.78	19.92	19.67	
1.4	16QAM	1	5	19.75	19.70	19.67	21
1.4	16QAM	3	0	19.20	19.11	19.07	
1.4	16QAM	3	1	18.99	18.91	18.99	
1.4	16QAM	3	3	18.84	18.69	18.74	20
1.4	16QAM	6	0	18.65	18.52	18.61	
1.4	64QAM	1	0	19.05	18.95	19.01	
1.4	64QAM	1	3	19.05	18.90	18.95	20
1.4	64QAM	1	5	18.93	18.83	18.89	
1.4	64QAM	3	0	18.62	18.46	18.51	
1.4	64QAM	3	1	18.56	18.47	18.50	19
1.4	64QAM	3	3	18.55	18.44	18.50	
1.4	64QAM	6	0	18.48	18.36	18.46	

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	17.3	
20	QPSK	1	0	15.78	15.89	15.84		
20	QPSK	1	49	15.73	15.70	15.78		
20	QPSK	1	99	15.68	15.53	15.65		
20	QPSK	50	0	14.92	14.95	14.89	16.3	
20	QPSK	50	24	14.83	14.86	14.87		
20	QPSK	50	50	14.81	14.71	14.67		
20	QPSK	100	0	14.63	14.64	14.52		
20	16QAM	1	0	15.22	15.10	15.22	16.3	
20	16QAM	1	49	15.00	14.98	15.04		
20	16QAM	1	99	14.81	14.86	14.85		
20	16QAM	50	0	14.54	14.61	14.64		
20	16QAM	50	24	14.63	14.76	14.82	15.8	
20	16QAM	50	50	14.50	14.62	14.68		
20	16QAM	100	0	14.35	14.49	14.48		
20	64QAM	1	0	14.72	14.85	14.93		
20	64QAM	1	49	14.68	14.84	14.86	15.8	
20	64QAM	1	99	14.62	14.83	14.83		
20	64QAM	50	0	14.42	14.45	14.51		
20	64QAM	50	24	14.47	14.38	14.43		
20	64QAM	50	50	14.40	14.32	14.39	15.8	
20	64QAM	100	0	14.43	14.26	14.36		
Channel				20825	21100	21375		Tune-up limit (dBm)
Frequency (MHz)				2507.5	2535	2562.5		
15	QPSK	1	0	15.68	15.82	15.80	17.3	
15	QPSK	1	37	15.75	15.64	15.72		
15	QPSK	1	74	15.59	15.44	15.62		
15	QPSK	36	0	15.06	14.92	14.99		
15	QPSK	36	20	14.87	14.79	14.79	16.3	
15	QPSK	36	39	14.74	14.60	14.61		
15	QPSK	75	0	14.57	14.38	14.44		
15	16QAM	1	0	15.14	15.04	15.15		
15	16QAM	1	37	14.93	14.93	14.97	16.3	
15	16QAM	1	74	14.74	14.82	14.80		
15	16QAM	36	0	14.46	14.53	14.58		
15	16QAM	36	20	14.54	14.70	14.75		
15	16QAM	36	39	14.42	14.55	14.62	15.8	
15	16QAM	75	0	14.28	14.40	14.39		
15	64QAM	1	0	14.68	14.78	14.85		
15	64QAM	1	37	14.64	14.79	14.80		
15	64QAM	1	74	14.54	14.80	14.80	15.8	
15	64QAM	36	0	14.37	14.38	14.44		
15	64QAM	36	20	14.44	14.34	14.36		
15	64QAM	36	39	14.35	14.28	14.36		
15	64QAM	75	0	14.34	14.19	14.28	15.8	
Channel				20800	21100	21400		Tune-up limit (dBm)
Frequency (MHz)				2505	2535	2565		
10	QPSK	1	0	15.62	15.79	15.75	17.3	
10	QPSK	1	25	15.69	15.56	15.65		
10	QPSK	1	49	15.51	15.38	15.59		
10	QPSK	25	0	15.03	14.87	14.92		
10	QPSK	25	12	14.80	14.74	14.72	16.3	
10	QPSK	25	25	14.66	14.54	14.54		
10	QPSK	50	0	14.48	14.35	14.40		
10	16QAM	1	0	15.07	14.96	15.10		
10	16QAM	1	25	14.85	14.87	14.92	16.3	
10	16QAM	1	49	14.67	14.76	14.77		
10	16QAM	25	0	14.38	14.49	14.54		
10	16QAM	25	12	14.46	14.66	14.68		
10	16QAM	25	25	14.35	14.50	14.54	15.8	
10	16QAM	50	0	14.21	14.31	14.32		
10	64QAM	1	0	14.61	14.70	14.79		
10	64QAM	1	25	14.57	14.76	14.73		
10	64QAM	1	49	14.46	14.74	14.76	15.8	
10	64QAM	25	0	14.28	14.34	14.37		
10	64QAM	25	12	14.39	14.29	14.29		
10	64QAM	25	25	14.29	14.23	14.30		
10	64QAM	50	0	14.27	14.11	14.20	15.8	
Channel				20775	21100	21425		Tune-up limit (dBm)
Frequency (MHz)				2502.5	2535	2567.5		
5	QPSK	1	0	15.61	15.78	15.74	17.3	
5	QPSK	1	12	15.66	15.61	15.65		
5	QPSK	1	24	15.55	15.38	15.54		
5	QPSK	12	0	14.99	14.89	14.95		
5	QPSK	12	7	14.79	14.70	14.72	16.3	
5	QPSK	12	13	14.67	14.52	14.52		
5	QPSK	25	0	14.52	14.34	14.36		
5	16QAM	1	0	15.07	14.96	15.11		
5	16QAM	1	12	14.88	14.85	14.93	16.3	
5	16QAM	1	24	14.68	14.77	14.73		
5	16QAM	12	0	14.42	14.48	14.54		
5	16QAM	12	7	14.45	14.62	14.68		
5	16QAM	12	13	14.36	14.50	14.56	15.8	
5	16QAM	25	0	14.20	14.33	14.34		
5	64QAM	1	0	14.61	14.72	14.78		
5	64QAM	1	12	14.60	14.72	14.76		
5	64QAM	1	24	14.48	14.74	14.72	15.8	
5	64QAM	12	0	14.29	14.30	14.39		
5	64QAM	12	7	14.41	14.29	14.28		
5	64QAM	12	13	14.30	14.21	14.28		
5	64QAM	25	0	14.31	14.13	14.25	15.8	

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	21.71	21.72	21.66	23
20	QPSK	1	49	21.50	21.52	21.45	
20	QPSK	1	99	21.34	21.40	21.30	
20	QPSK	50	0	20.59	20.63	20.54	
20	QPSK	50	24	20.46	20.45	20.36	22
20	QPSK	50	50	20.31	20.31	20.38	
20	QPSK	100	0	20.32	20.42	20.37	
20	16QAM	1	0	20.75	20.79	20.70	
20	16QAM	1	49	20.55	20.62	20.50	22
20	16QAM	1	99	20.44	20.43	20.34	
20	16QAM	50	0	19.88	19.91	19.74	
20	16QAM	50	24	19.67	19.73	19.60	
20	16QAM	50	50	19.53	19.59	19.49	21
20	16QAM	100	0	19.34	19.43	19.36	
20	64QAM	1	0	19.78	19.85	19.71	
20	64QAM	1	49	19.77	19.81	19.64	
20	64QAM	1	99	19.76	19.77	19.58	21
20	64QAM	50	0	19.43	19.46	19.25	
20	64QAM	50	24	19.37	19.42	19.22	
20	64QAM	50	50	19.36	19.34	19.22	
20	64QAM	100	0	19.35	19.33	19.20	20.5
Channel				132047	132322	132597	
Frequency (MHz)				1717.5	1745	1772.5	
15	QPSK	1	0	21.65	21.66	21.60	
15	QPSK	1	37	21.42	21.48	21.38	
15	QPSK	1	74	21.25	21.34	21.25	23
15	QPSK	36	0	20.54	20.57	20.51	
15	QPSK	36	20	20.38	20.42	20.28	
15	QPSK	36	39	20.25	20.23	20.15	
15	QPSK	75	0	20.06	20.07	20.02	22
15	16QAM	1	0	20.67	20.75	20.62	
15	16QAM	1	37	20.51	20.56	20.46	
15	16QAM	1	74	20.38	20.37	20.27	
15	16QAM	36	0	19.84	19.88	19.66	21
15	16QAM	36	20	19.59	19.68	19.53	
15	16QAM	36	39	19.44	19.56	19.41	
15	16QAM	75	0	19.29	19.37	19.27	
15	64QAM	1	0	19.70	19.79	19.63	21
15	64QAM	1	37	19.74	19.76	19.60	
15	64QAM	1	74	19.69	19.72	19.51	
15	64QAM	36	0	19.39	19.39	19.19	
15	64QAM	36	20	19.29	19.38	19.14	20.5
15	64QAM	36	39	19.27	19.26	19.19	
15	64QAM	75	0	19.31	19.24	19.15	
Channel				132022	132322	132622	
Frequency (MHz)				1715	1745	1775	
10	QPSK	1	0	21.48	21.61	21.57	23
10	QPSK	1	25	21.41	21.42	21.33	
10	QPSK	1	49	21.23	21.33	21.17	
10	QPSK	25	0	20.50	20.50	20.44	
10	QPSK	25	12	20.32	20.38	20.25	22
10	QPSK	25	25	20.20	20.19	20.06	
10	QPSK	50	0	20.00	20.00	20.03	
10	16QAM	1	0	20.63	20.66	20.56	
10	16QAM	1	25	20.41	20.45	20.37	22
10	16QAM	1	49	20.34	20.34	20.19	
10	16QAM	25	0	19.80	19.81	19.61	
10	16QAM	25	12	19.58	19.64	19.48	
10	16QAM	25	25	19.43	19.47	19.37	21
10	16QAM	50	0	19.20	19.34	19.24	
10	64QAM	1	0	19.63	19.69	19.63	
10	64QAM	1	25	19.64	19.69	19.56	
10	64QAM	1	49	19.61	19.64	19.48	20.5
10	64QAM	25	0	19.29	19.34	19.17	
10	64QAM	25	12	19.24	19.28	19.12	
10	64QAM	25	25	19.28	19.24	19.13	
10	64QAM	50	0	19.25	19.22	19.08	Tune-up limit (dBm)
Channel				131997	132322	132647	
Frequency (MHz)				1712.5	1745	1777.5	
5	QPSK	1	0	21.59	21.62	21.59	
5	QPSK	1	12	21.36	21.44	21.33	
5	QPSK	1	24	21.23	21.28	21.18	
5	QPSK	12	0	20.50	20.49	20.40	
5	QPSK	12	7	20.35	20.39	20.23	22
5	QPSK	12	13	20.15	20.22	20.05	
5	QPSK	25	0	20.06	20.09	20.08	
5	16QAM	1	0	20.63	20.66	20.60	
5	16QAM	1	12	20.42	20.48	20.33	22
5	16QAM	1	24	20.34	20.31	20.21	
5	16QAM	12	0	19.77	19.80	19.61	
5	16QAM	12	7	19.56	19.62	19.44	
5	16QAM	12	13	19.46	19.44	19.33	21
5	16QAM	25	0	19.22	19.32	19.22	
5	64QAM	1	0	19.65	19.69	19.59	
5	64QAM	1	12	19.64	19.66	19.54	
5	64QAM	1	24	19.64	19.60	19.46	20.5
5	64QAM	12	0	19.33	19.36	19.14	
5	64QAM	12	7	19.26	19.33	19.12	
5	64QAM	12	13	19.24	19.24	19.13	
5	64QAM	25	0	19.23	19.21	19.10	Tune-up limit (dBm)
Channel				131987	132322	132857	
Frequency (MHz)				1711.5	1745	1778.5	
3	QPSK	1	0	21.61	21.63	21.55	
3	QPSK	1	8	21.37	21.43	21.30	
3	QPSK	1	14	21.27	21.31	21.19	
3	QPSK	8	0	20.51	20.50	20.42	
3	QPSK	8	4	20.33	20.37	20.26	

3	QPSK	8	7	20.18	20.20	20.03	22
3	QPSK	15	0	20.00	20.05	20.03	
3	16QAM	1	0	20.61	20.66	20.58	
3	16QAM	1	8	20.45	20.47	20.34	21
3	16QAM	1	14	20.37	20.35	20.17	
3	16QAM	8	0	19.80	19.81	19.57	
3	16QAM	8	4	19.56	19.59	19.49	21
3	16QAM	8	7	19.45	19.43	19.33	
3	16QAM	15	0	19.20	19.30	19.19	
3	64QAM	1	0	19.63	19.73	19.64	21
3	64QAM	1	8	19.67	19.69	19.51	
3	64QAM	1	14	19.62	19.62	19.48	
3	64QAM	8	0	19.33	19.35	19.17	20.5
3	64QAM	8	4	19.26	19.30	19.11	
3	64QAM	8	7	19.28	19.22	19.13	
3	64QAM	15	0	19.26	19.19	19.09	Tone-up limit (dBm)
Channel				131979	132322	132665	
Frequency (MHz)				1710.7	1745	1779.3	
1.4	QPSK	1	0	21.60	21.59	21.54	23
1.4	QPSK	1	3	21.37	21.42	21.33	
1.4	QPSK	1	5	21.25	21.28	21.20	
1.4	QPSK	3	0	20.51	20.50	20.45	22
1.4	QPSK	3	1	20.35	20.39	20.21	
1.4	QPSK	3	3	20.18	20.22	20.07	
1.4	QPSK	6	0	19.98	20.00	19.94	21
1.4	16QAM	1	0	20.67	20.66	20.56	
1.4	16QAM	1	3	20.44	20.48	20.35	
1.4	16QAM	1	5	20.34	20.37	20.23	21
1.4	16QAM	3	0	19.79	19.84	19.60	
1.4	16QAM	3	1	19.56	19.62	19.45	
1.4	16QAM	3	3	19.47	19.44	19.35	21
1.4	16QAM	6	0	19.20	19.31	19.23	
1.4	64QAM	1	0	19.65	19.72	19.64	
1.4	64QAM	1	3	19.64	19.68	19.53	20.5
1.4	64QAM	1	5	19.60	19.65	19.47	
1.4	64QAM	3	0	19.31	19.32	19.17	
1.4	64QAM	3	1	19.25	19.30	19.12	20.5
1.4	64QAM	3	3	19.28	19.26	19.14	
1.4	64QAM	6	0	19.25	19.24	19.06	

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	20.65	20.78	20.74	21.8
20	QPSK	1	49	20.85	20.68	20.64	
20	QPSK	1	99	20.52	20.47	20.51	
20	QPSK	50	0	19.72	19.72	19.79	20.8
20	QPSK	50	24	19.61	19.57	19.66	
20	QPSK	50	50	19.40	19.43	19.50	
20	QPSK	100	0	19.24	19.32	19.30	20.8
20	16QAM	1	0	19.93	19.91	19.91	
20	16QAM	1	49	19.73	19.75	19.74	
20	16QAM	1	99	19.59	19.61	19.56	19.8
20	16QAM	50	0	19.01	19.06	19.03	
20	16QAM	50	24	18.90	18.95	18.90	
20	16QAM	50	50	18.75	18.76	18.75	19.8
20	16QAM	100	0	18.59	18.65	18.58	
20	64QAM	1	0	18.98	19.01	19.00	
20	64QAM	1	49	18.90	19.00	18.96	19.8
20	64QAM	1	99	18.84	18.97	18.95	
20	64QAM	50	0	18.53	18.60	18.58	
20	64QAM	50	24	18.47	18.59	18.55	18.8
20	64QAM	50	50	18.42	18.51	18.50	
20	64QAM	100	0	18.37	18.45	18.50	
Channel				37825	38000	38175	
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	20.61	20.66	20.61	21.8
15	QPSK	1	37	20.42	20.51	20.45	
15	QPSK	1	74	20.31	20.30	20.29	
15	QPSK	36	0	19.49	19.50	19.50	20.8
15	QPSK	36	20	19.33	19.31	19.33	
15	QPSK	36	39	19.21	19.10	19.19	
15	QPSK	75	0	19.10	18.95	19.07	20.8
15	16QAM	1	0	19.75	19.64	19.68	
15	16QAM	1	37	19.64	19.53	19.54	
15	16QAM	1	74	19.49	19.34	19.38	19.8
15	16QAM	36	0	18.96	18.81	18.76	
15	16QAM	36	20	18.76	18.68	18.63	
15	16QAM	36	39	18.59	18.46	18.47	19.8
15	16QAM	75	0	18.40	18.30	18.34	
15	64QAM	1	0	18.77	18.64	18.74	
15	64QAM	1	37	18.75	18.58	18.73	19.8
15	64QAM	1	74	18.71	18.52	18.66	
15	64QAM	36	0	18.38	18.22	18.33	
15	64QAM	36	20	18.35	18.22	18.26	18.8
15	64QAM	36	39	18.31	18.17	18.22	
15	64QAM	75	0	18.24	18.12	18.18	
Channel				37800	38000	38200	
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	20.62	20.63	20.61	21.8
10	QPSK	1	25	20.46	20.47	20.43	
10	QPSK	1	49	20.23	20.27	20.27	
10	QPSK	25	0	19.41	19.46	19.43	20.8
10	QPSK	25	12	19.24	19.26	19.30	
10	QPSK	25	25	19.09	19.15	19.23	
10	QPSK	50	0	18.98	18.91	19.12	20.8
10	16QAM	1	0	19.62	19.55	19.67	
10	16QAM	1	25	19.42	19.45	19.55	
10	16QAM	1	49	19.31	19.24	19.42	19.8
10	16QAM	25	0	18.78	18.72	18.87	
10	16QAM	25	12	18.59	18.56	18.74	
10	16QAM	25	25	18.51	18.34	18.53	19.8
10	16QAM	50	0	18.38	18.14	18.45	
10	64QAM	1	0	18.78	18.54	18.88	
10	64QAM	1	25	18.75	18.48	18.81	18.8
10	64QAM	1	49	18.72	18.45	18.75	
10	64QAM	25	0	18.33	18.09	18.42	
10	64QAM	25	12	18.25	18.12	18.40	19.8
10	64QAM	25	25	18.23	18.07	18.36	
10	64QAM	50	0	18.22	17.99	18.29	
Channel				37775	38000	38225	
Frequency (MHz)				2572.5	2595	2617.5	
5	QPSK	1	0	20.58	20.62	20.61	21.8
5	QPSK	1	12	20.42	20.45	20.42	
5	QPSK	1	24	20.21	20.28	20.24	
5	QPSK	12	0	19.42	19.42	19.45	20.8
5	QPSK	12	7	19.21	19.29	19.35	
5	QPSK	12	13	19.12	19.15	19.24	
5	QPSK	25	0	19.00	18.95	19.10	20.8
5	16QAM	1	0	19.65	19.58	19.70	
5	16QAM	1	12	19.42	19.47	19.51	
5	16QAM	1	24	19.35	19.24	19.43	19.8
5	16QAM	12	0	18.76	18.69	18.89	
5	16QAM	12	7	18.63	18.53	18.76	
5	16QAM	12	13	18.50	18.37	18.53	19.8
5	16QAM	25	0	18.38	18.15	18.43	
5	64QAM	1	0	18.77	18.53	18.87	
5	64QAM	1	12	18.76	18.52	18.77	18.8
5	64QAM	1	24	18.69	18.45	18.73	
5	64QAM	12	0	18.34	18.09	18.43	
5	64QAM	12	7	18.25	18.06	18.41	18.8
5	64QAM	12	13	18.23	18.07	18.38	
5	64QAM	25	0	18.24	18.03	18.32	

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	20.72			22
10	QPSK	1	25	20.53			
10	QPSK	1	49	20.33			
10	QPSK	25	0	19.70			20.5
10	QPSK	25	12	19.62			
10	QPSK	25	25	19.53			
10	QPSK	50	0	19.15			21
10	16QAM	1	0	19.85			
10	16QAM	1	25	19.71			
10	16QAM	1	49	19.52			20
10	16QAM	25	0	18.93			
10	16QAM	25	12	18.79			
10	16QAM	25	25	18.68			20
10	16QAM	50	0	18.53			
10	64QAM	1	0	18.99			
10	64QAM	1	25	18.94			20
10	64QAM	1	49	18.93			
10	64QAM	25	0	18.57			
10	64QAM	25	12	18.54			19
10	64QAM	25	25	18.46			
10	64QAM	50	0	18.41			
Channel				38725	38750	38775	Tune-up limit (dBm)
Frequency (MHz)				2307.5	2310	2312.5	
5	QPSK	1	0	20.70	20.71	20.66	22
5	QPSK	1	12	20.56	20.51	20.50	
5	QPSK	1	24	20.40	20.28	20.34	
5	QPSK	12	0	19.68	19.62	19.53	21
5	QPSK	12	7	19.51	19.41	19.34	
5	QPSK	12	13	19.37	19.25	19.19	
5	QPSK	25	0	19.15	19.13	18.99	21
5	16QAM	1	0	19.84	19.79	19.60	
5	16QAM	1	12	19.67	19.63	19.44	
5	16QAM	1	24	19.51	19.47	19.21	20
5	16QAM	12	0	18.87	18.87	18.63	
5	16QAM	12	7	18.70	18.73	18.40	
5	16QAM	12	13	18.53	18.64	18.30	20
5	16QAM	25	0	18.36	18.48	18.14	
5	64QAM	1	0	18.69	18.93	18.44	
5	64QAM	1	12	18.68	18.87	18.40	20
5	64QAM	1	24	18.61	18.66	18.38	
5	64QAM	12	0	18.32	18.52	18.07	
5	64QAM	12	7	18.31	18.48	18.07	19
5	64QAM	12	13	18.29	18.43	18.05	
5	64QAM	25	0	18.18	18.33	18.03	

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			
10	QPSK	1	0	20.75			
10	QPSK	1	25	20.57			22
10	QPSK	1	49	20.37			
10	QPSK	25	0	19.66			
10	QPSK	25	12	19.55			21
10	QPSK	25	25	19.36			
10	QPSK	50	0	19.26			
10	16QAM	1	0	19.85			21
10	16QAM	1	25	19.65			
10	16QAM	1	49	19.44			
10	16QAM	25	0	18.85			20
10	16QAM	25	12	18.73			
10	16QAM	25	25	18.59			
10	16QAM	50	0	18.39			20
10	64QAM	1	0	18.72			
10	64QAM	1	25	18.71			
10	64QAM	1	49	18.69			19
10	64QAM	25	0	18.33			
10	64QAM	25	12	18.33			
10	64QAM	25	25	18.30			
10	64QAM	50	0	18.26			
Channel				39175	39200	39225	Tune-up limit (dBm)
Frequency (MHz)				2352.5	2355	2357.5	
5	QPSK	1	0	20.67	20.72	20.67	22
5	QPSK	1	12	20.48	20.57	20.51	
5	QPSK	1	24	20.37	20.36	20.35	
5	QPSK	12	0	19.55	19.56	19.56	21
5	QPSK	12	7	19.39	19.37	19.39	
5	QPSK	12	13	19.27	19.16	19.25	
5	QPSK	25	0	19.16	19.01	19.13	21
5	16QAM	1	0	19.81	19.70	19.74	
5	16QAM	1	12	19.70	19.59	19.60	
5	16QAM	1	24	19.55	19.40	19.44	20
5	16QAM	12	0	19.02	18.87	18.82	
5	16QAM	12	7	18.82	18.74	18.69	
5	16QAM	12	13	18.65	18.52	18.53	20
5	16QAM	25	0	18.46	18.36	18.40	
5	64QAM	1	0	18.83	18.70	18.80	
5	64QAM	1	12	18.81	18.64	18.79	20
5	64QAM	1	24	18.77	18.58	18.72	
5	64QAM	12	0	18.44	18.28	18.39	
5	64QAM	12	7	18.41	18.28	18.32	19
5	64QAM	12	13	18.37	18.23	18.28	
5	64QAM	25	0	18.30	18.18	18.24	