



REPORT No.: SZ22110259S01

Annex E Conducted Power

Note:

Conducted power unit: dBm

The target power was recorded in the manufacture document.



Conducted 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		33.08	33.10	33.06	34.00	24.08	24.10	24.06	25.00	0.05
GPRS 1 Tx slot		33.05	33.07	33.05	34.00	24.05	24.07	24.05	25.00	
GPRS 2 Tx slots		32.23	32.26	32.19	33.00	26.23	26.26	26.19	27.00	0.07
GPRS 3 Tx slots		30.42	30.45	30.40	31.00	26.16	26.19	26.14	26.74	0.05
GPRS 4 Tx slots		29.21	29.27	29.24	30.00	26.21	26.27	26.24	27.00	0.06
EDGE 1 Tx slot		25.40	25.44	25.38	26.00	16.40	16.44	16.38	17.00	0.06
EDGE 2 Tx slots		24.37	24.39	24.36	25.00	18.37	18.39	18.36	19.00	0.03
EDGE 3 Tx slots		22.38	22.42	22.37	23.00	18.12	18.16	18.11	18.74	0.05
EDGE 4 Tx slots		21.33	21.41	21.35	22.00	18.33	18.41	18.35	19.00	0.08
Mode			Max.	33.10			Max.	26.27		
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	1860	1909.8		1850.2	1860	1909.8		
GSM 1 Tx slot		29.63	29.65	29.62	30.50	20.63	20.65	20.62	21.50	0.06
GPRS 1 Tx slot		29.60	29.61	29.59	30.50	20.60	20.61	20.59	21.50	
GPRS 2 Tx slots		28.73	28.76	28.71	29.50	22.73	22.76	22.71	23.50	0.05
GPRS 3 Tx slots		26.90	26.95	26.93	27.50	22.64	22.69	22.67	23.24	0.05
GPRS 4 Tx slots		25.85	25.87	25.84	26.50	22.85	22.87	22.84	23.50	0.03
EDGE 1 Tx slot		27.40	27.42	27.41	28.00	18.40	18.42	18.41	19.00	0.02
EDGE 2 Tx slots		26.49	26.54	26.50	27.50	20.49	20.54	20.50	21.50	0.05
EDGE 3 Tx slots		24.55	24.61	24.58	25.50	20.29	20.35	20.32	21.24	0.06
EDGE 4 Tx slots		23.64	23.70	23.66	24.50	20.64	20.70	20.66	21.50	0.06
Mode			Max.	29.65			Max.	22.87		
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		9282	9400	9538		1312	1413	1513		4132	4182	4233	
Frequency (MHz)		1852.4	1880	1907.6		1712.4	1732.6	1752.6		826.4	836.4	846.6	
3GPP Rel 99	RMC 12.2Kbps	22.29	22.31	22.11	23.00	22.40	22.43	22.39	23.00	22.15	22.17	22.11	23.00
3GPP Rel 6	HSOPA Subtest-1	21.49	21.75	21.57	22.50	22.07	21.92	22.09	23.00	21.82	21.90	21.59	22.50
3GPP Rel 6	HSOPA Subtest-2	21.48	21.74	21.55	22.50	22.07	21.91	22.05	23.00	21.83	21.90	21.60	22.50
3GPP Rel 6	HSOPA Subtest-3	21.48	21.69	21.68	22.00	22.07	21.91	22.05	22.50	21.84	21.90	21.62	22.50
3GPP Rel 6	HSOPA Subtest-4	21.47	21.63	21.68	22.00	22.08	21.93	22.08	22.50	21.82	21.92	21.61	22.50
3GPP Rel 6	HSUPA Subtest-1	18.47	18.75	18.70	19.50	19.15	18.95	19.08	20.00	18.91	18.93	18.68	19.50
3GPP Rel 6	HSUPA Subtest-2	18.50	18.74	18.70	19.50	19.09	18.94	19.09	20.00	18.90	18.93	18.67	19.50
3GPP Rel 6	HSUPA Subtest-3	19.57	19.76	19.66	20.50	20.08	19.93	20.08	21.00	19.88	19.96	19.67	20.50
3GPP Rel 6	HSUPA Subtest-4	18.08	18.28	18.19	19.00	18.64	18.46	18.60	19.50	18.40	18.50	18.16	19.50
3GPP Rel 6	HSUPA Subtest-5	19.57	19.74	19.73	20.50	20.11	19.94	20.08	21.00	19.87	19.89	19.66	20.50
3GPP Rel 7	HSPA+ (16QAM) Subtest-1	20.40	20.42	20.04	21.00	20.66	20.74	20.73	21.50	20.35	20.35	20.34	21.00
Attenuator		Cable Loss			0.8	Cable Loss			0.8	Cable Loss			0.6
Mode		Max.			22.31	Max.			22.43	Max.			22.17



Band 2 (1900MHz Band) (dBm)							
Part 24E							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				18700	18900	19100	
Frequency (MHz)				1860	1880	1900	
20	QPSK	1	0	23.13	23.18	23.12	
20	QPSK	1	49	22.95	23.05	22.98	24
20	QPSK	1	99	23.13	22.94	23.03	
20	QPSK	50	0	22.18	22.20	22.13	
20	QPSK	50	24	22.03	22.16	22.03	23
20	QPSK	50	50	22.12	22.11	22.15	
20	QPSK	100	0	22.07	22.08	22.09	
20	16QAM	1	0	22.09	22.25	21.98	23
20	16QAM	1	49	22.09	22.24	22.09	
20	16QAM	1	99	22.02	22.07	22.06	
20	16QAM	50	0	21.13	21.25	21.18	22
20	16QAM	50	24	21.11	21.06	21.05	
20	16QAM	50	50	21.06	21.05	21.08	
20	16QAM	100	0	21.06	21.08	21.10	22
20	64QAM	1	0	21.09	21.30	21.17	
20	64QAM	1	49	21.12	21.19	20.99	
20	64QAM	1	99	21.02	21.03	21.06	21
20	64QAM	50	0	20.22	20.27	20.18	
20	64QAM	50	24	20.09	20.16	20.06	
20	64QAM	50	50	20.13	20.08	20.10	20
20	64QAM	100	0	20.12	20.15	20.11	
Channel				18675	18900	19125	Tune-up limit (dBm)
Frequency (MHz)				1857.5	1880	1902.5	
15	QPSK	1	0	22.99	23.15	23.11	
15	QPSK	1	37	22.98	23.11	23.05	24
15	QPSK	1	74	23.07	23.08	23.09	
15	QPSK	36	0	22.08	22.35	22.32	
15	QPSK	36	20	22.18	22.10	22.07	23
15	QPSK	36	39	22.25	22.33	22.03	
15	QPSK	75	0	22.08	22.06	22.11	
15	16QAM	1	0	22.21	22.25	22.06	23
15	16QAM	1	37	22.08	22.06	22.07	
15	16QAM	1	74	22.05	21.98	21.92	
15	16QAM	36	0	21.30	21.32	21.28	22
15	16QAM	36	20	21.18	21.17	21.18	
15	16QAM	36	39	21.28	21.30	21.31	
15	16QAM	75	0	21.03	21.27	21.03	22
15	64QAM	1	0	21.09	21.21	21.05	
15	64QAM	1	37	21.12	21.05	21.04	
15	64QAM	1	74	21.01	21.07	21.15	21
15	64QAM	36	0	20.29	20.30	20.28	
15	64QAM	36	20	20.17	20.34	20.26	
15	64QAM	36	39	20.24	20.28	20.11	20
15	64QAM	75	0	20.31	20.12	20.29	
Channel				18650	18900	19150	Tune-up limit (dBm)
Frequency (MHz)				1855	1880	1905	
10	QPSK	1	0	22.98	23.16	22.98	
10	QPSK	1	25	23.10	23.00	23.03	24
10	QPSK	1	49	23.05	23.12	23.01	
10	QPSK	25	0	22.31	22.24	22.13	
10	QPSK	25	12	22.14	22.11	22.21	23
10	QPSK	25	25	22.01	22.19	22.19	
10	QPSK	50	0	22.23	22.27	22.31	
10	16QAM	1	0	21.97	22.18	21.98	23
10	16QAM	1	25	21.98	21.99	22.01	
10	16QAM	1	49	22.06	22.15	22.03	
10	16QAM	25	0	21.35	21.28	21.36	22
10	16QAM	25	12	21.31	21.14	21.15	
10	16QAM	25	25	21.15	21.21	21.16	
10	16QAM	50	0	21.22	20.96	21.00	22
10	64QAM	1	0	21.22	21.24	21.21	
10	64QAM	1	25	21.04	21.15	20.97	
10	64QAM	1	49	21.01	21.20	21.26	21
10	64QAM	25	0	20.28	20.36	20.37	
10	64QAM	25	12	20.31	20.31	20.14	
10	64QAM	25	25	20.14	20.29	20.16	20
10	64QAM	50	0	20.28	20.14	20.23	
Channel				18625	18900	19175	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1880	1907.5	
5	QPSK	1	0	23.04	23.13	23.08	
5	QPSK	1	12	23.06	23.07	23.01	24
5	QPSK	1	24	23.04	23.10	23.09	
5	QPSK	12	0	22.32	22.29	22.35	
5	QPSK	12	7	22.19	22.35	22.03	23
5	QPSK	12	13	22.13	22.32	22.34	
5	QPSK	25	0	22.05	21.95	22.29	
5	16QAM	1	0	22.26	22.29	22.12	23
5	16QAM	1	12	22.23	22.20	22.33	
5	16QAM	1	24	21.94	21.94	21.99	
5	16QAM	12	0	21.24	21.27	21.14	22
5	16QAM	12	7	21.05	21.31	21.11	
5	16QAM	12	13	21.26	21.30	21.28	
5	16QAM	25	0	21.31	21.11	21.20	22
5	64QAM	1	0	21.24	21.29	21.09	
5	64QAM	1	12	21.27	21.12	20.95	
5	64QAM	1	24	21.07	21.19	21.23	21
5	64QAM	12	0	20.17	20.33	20.33	
5	64QAM	12	7	20.01	20.02	20.08	
5	64QAM	12	13	20.14	20.30	20.20	20
5	64QAM	25	0	20.26	20.28	20.17	
Channel				18615	18900	19185	Tune-up limit (dBm)
Frequency (MHz)				1851.5	1880	1908.5	
3	QPSK	1	0	23.12	23.15	23.04	
3	QPSK	1	8	23.05	23.09	23.14	24
3	QPSK	1	14	23.14	22.91	23.00	
3	QPSK	8	0	22.31	22.08	22.29	
3	QPSK	8	4	22.26	22.07	22.10	23
3	QPSK	8	7	22.04	22.35	22.22	

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	23.07	23.30	23.14	24
20	QPSK	1	49	23.10	23.09	23.19	
20	QPSK	1	99	23.16	23.10	23.20	
20	QPSK	50	0	22.26	22.33	22.16	
20	QPSK	50	24	22.27	22.31	22.24	23
20	QPSK	50	50	22.10	22.19	22.13	
20	QPSK	100	0	22.20	22.24	22.14	
20	16QAM	1	0	22.39	22.41	22.31	
20	16QAM	1	49	22.32	22.35	22.21	23
20	16QAM	1	99	22.05	22.23	22.26	
20	16QAM	50	0	21.09	21.31	21.32	
20	16QAM	50	24	21.35	21.23	21.32	
20	16QAM	50	50	21.06	21.05	21.27	22
20	16QAM	100	0	21.27	21.16	21.10	
20	64QAM	1	0	21.29	21.29	21.32	
20	64QAM	1	49	21.37	21.25	21.23	
20	64QAM	1	99	21.07	21.20	21.30	22
20	64QAM	50	0	20.16	20.18	20.22	
20	64QAM	50	24	20.22	20.29	20.18	
20	64QAM	50	50	20.22	20.15	20.37	
20	64QAM	100	0	20.09	20.19	20.26	21
Channel			20025	20175	20325		
Frequency (MHz)			1717.5	1732.5	1747.5		
15	QPSK	1	0	23.04	23.26	23.06	
15	QPSK	1	37	23.11	23.17	23.16	
15	QPSK	1	74	23.23	23.24	23.18	
15	QPSK	36	0	22.31	22.27	22.29	
15	QPSK	36	20	22.02	22.08	22.29	23
15	QPSK	36	39	22.10	22.13	22.18	
15	QPSK	75	0	22.07	22.37	22.29	
15	16QAM	1	0	22.34	22.34	22.17	
15	16QAM	1	37	22.33	22.27	22.25	23
15	16QAM	1	74	22.18	22.08	22.19	
15	16QAM	36	0	21.19	21.39	21.31	
15	16QAM	36	20	21.31	21.41	21.25	
15	16QAM	36	39	21.16	21.10	21.33	22
15	16QAM	75	0	21.18	21.11	21.15	
15	64QAM	1	0	21.05	21.31	21.21	
15	64QAM	1	37	21.24	21.19	21.31	
15	64QAM	1	74	21.10	21.23	21.06	22
15	64QAM	36	0	20.37	20.41	20.23	
15	64QAM	36	20	20.39	20.43	20.36	
15	64QAM	36	39	20.23	20.21	20.14	
15	64QAM	75	0	20.37	20.27	20.36	21
Channel			20000	20175	20350		
Frequency (MHz)			1715	1732.5	1750		
10	QPSK	1	0	23.07	23.28	23.24	
10	QPSK	1	25	23.05	23.08	23.21	
10	QPSK	1	49	23.20	23.08	23.21	
10	QPSK	25	0	22.41	22.35	22.08	
10	QPSK	25	12	22.06	22.17	22.32	23
10	QPSK	25	25	22.27	22.39	22.56	
10	QPSK	50	0	22.14	22.22	22.06	
10	16QAM	1	0	22.30	22.26	22.46	
10	16QAM	1	25	22.31	22.30	22.42	23
10	16QAM	1	49	22.16	22.33	22.28	
10	16QAM	25	0	21.25	21.34	21.27	
10	16QAM	25	12	21.26	21.39	21.25	
10	16QAM	25	25	21.05	21.24	21.36	22
10	16QAM	50	0	21.11	21.06	21.31	
10	64QAM	1	0	21.26	21.31	21.16	
10	64QAM	1	25	21.33	21.31	21.25	
10	64QAM	1	49	21.23	21.25	21.19	22
10	64QAM	25	0	20.26	20.21	20.21	
10	64QAM	25	12	20.19	20.22	20.02	
10	64QAM	25	25	20.24	20.39	20.34	
10	64QAM	50	0	20.22	20.20	20.24	21
Channel			19975	20175	20375		
Frequency (MHz)			1712.5	1732.5	1752.5		
5	QPSK	1	0	23.18	23.27	23.21	
5	QPSK	1	12	23.15	23.19	23.15	
5	QPSK	1	24	23.10	23.07	23.14	
5	QPSK	12	0	22.36	22.28	22.29	
5	QPSK	12	7	22.29	22.41	22.25	23
5	QPSK	12	13	22.12	22.29	22.18	
5	QPSK	25	0	22.04	22.32	22.16	
5	16QAM	1	0	22.20	22.39	22.38	
5	16QAM	1	12	22.42	22.31	22.17	23
5	16QAM	1	24	22.30	22.25	22.48	
5	16QAM	12	0	21.06	21.34	21.41	
5	16QAM	12	7	21.08	21.22	21.10	
5	16QAM	12	13	21.08	21.32	21.27	22
5	16QAM	25	0	21.19	21.06	21.32	
5	64QAM	1	0	21.33	21.34	21.44	
5	64QAM	1	12	21.17	21.29	21.18	
5	64QAM	1	24	21.10	21.14	21.04	22
5	64QAM	12	0	20.12	20.16	20.40	
5	64QAM	12	7	20.15	20.19	20.27	
5	64QAM	12	13	20.13	20.22	20.10	
5	64QAM	25	0	20.16	20.16	20.30	21
Channel			19965	20175	20385		
Frequency (MHz)			1711.5	1732.5	1753.5		
3	QPSK	1	0	23.21	23.25	23.18	
3	QPSK	1	8	23.05	23.09	23.17	
3	QPSK	1	14	23.18	23.06	23.19	
3	QPSK	8	0	22.22	22.34	22.18	
3	QPSK	8	4	22.19	22.20	22.44	23
3	QPSK	8	7	22.37	22.13	22.41	



3	QPSK	15	0	22.05	22.14	22.24	23
3	16QAM	1	0	22.15	22.25	22.11	
3	16QAM	1	8	22.20	22.15	22.24	
3	16QAM	1	14	22.11	22.18	21.98	22
3	16QAM	8	0	21.25	21.22	21.37	
3	16QAM	8	4	21.07	21.02	21.21	
3	16QAM	8	7	21.09	21.27	21.30	22
3	16QAM	15	0	21.30	21.24	21.10	
3	64QAM	1	0	21.06	21.19	21.16	
3	64QAM	1	8	21.06	21.08	21.09	22
3	64QAM	1	14	21.24	20.98	21.21	
3	64QAM	8	0	20.11	20.26	20.15	
3	64QAM	8	4	20.02	20.03	20.07	21
3	64QAM	8	7	20.30	20.33	20.17	
3	64QAM	15	0	20.14	20.23	20.15	
Channel				18607	18900	19193	Tune-up limit (dBm)
Frequency (MHz)				1850.7	1880	1909.3	
1.4	QPSK	1	0	23.08	23.14	23.12	24
1.4	QPSK	1	3	23.00	23.06	23.08	
1.4	QPSK	1	5	23.09	23.07	23.02	
1.4	QPSK	3	0	22.71	22.49	22.42	
1.4	QPSK	3	1	22.45	22.78	22.45	
1.4	QPSK	3	3	22.48	22.59	22.47	
1.4	QPSK	6	0	22.02	22.05	22.07	23
1.4	16QAM	1	0	22.24	22.20	22.15	23
1.4	16QAM	1	3	22.01	22.16	21.94	
1.4	16QAM	1	5	22.12	21.96	22.25	
1.4	16QAM	3	0	21.78	21.63	21.56	
1.4	16QAM	3	1	21.63	21.53	21.58	
1.4	16QAM	3	3	21.66	21.52	21.58	
1.4	16QAM	6	0	21.20	21.23	21.00	22
1.4	64QAM	1	0	20.99	21.23	21.12	22
1.4	64QAM	1	3	21.28	21.35	21.13	
1.4	64QAM	1	5	21.22	21.09	21.26	
1.4	64QAM	3	0	20.82	20.79	20.58	
1.4	64QAM	3	1	20.51	20.61	20.54	
1.4	64QAM	3	3	20.62	20.61	20.72	
1.4	64QAM	6	0	20.27	20.39	20.33	21

3	QPSK	15	0	22.25	22.24	22.09	23
3	16QAM	1	0	22.16	22.32	22.21	
3	16QAM	1	8	22.33	22.20	22.07	
3	16QAM	1	14	22.14	22.31	22.18	22
3	16QAM	8	0	21.24	21.26	21.28	
3	16QAM	8	4	21.23	21.26	21.25	
3	16QAM	8	7	21.31	21.18	21.22	22
3	16QAM	15	0	21.23	21.05	21.29	
3	64QAM	1	0	21.29	21.25	21.24	
3	64QAM	1	8	21.27	21.28	21.18	21
3	64QAM	1	14	21.06	21.29	21.14	
3	64QAM	8	0	20.43	20.45	20.37	
3	64QAM	8	4	20.28	20.31	20.05	21
3	64QAM	8	7	20.29	20.25	20.16	
3	64QAM	15	0	20.34	20.36	20.30	
Channel				19957	20175	20393	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1732.5	1754.3	
1.4	QPSK	1	0	23.04	23.26	23.03	24
1.4	QPSK	1	3	23.06	23.08	23.14	
1.4	QPSK	1	5	23.04	23.06	23.10	
1.4	QPSK	3	0	22.23	22.16	22.08	
1.4	QPSK	3	1	22.19	22.06	22.46	
1.4	QPSK	3	3	22.17	22.16	22.18	
1.4	QPSK	6	0	22.07	22.15	22.04	23
1.4	16QAM	1	0	22.33	22.39	22.20	23
1.4	16QAM	1	3	22.28	22.32	22.07	
1.4	16QAM	1	5	22.17	22.10	22.35	
1.4	16QAM	3	0	21.42	21.35	21.33	
1.4	16QAM	3	1	21.41	21.39	21.29	
1.4	16QAM	3	3	21.23	21.33	21.20	
1.4	16QAM	6	0	21.14	21.22	21.20	22
1.4	64QAM	1	0	21.37	21.43	21.27	22
1.4	64QAM	1	3	21.33	21.35	21.37	
1.4	64QAM	1	5	21.09	21.23	21.07	
1.4	64QAM	3	0	20.34	20.34	20.22	
1.4	64QAM	3	1	20.43	20.29	20.37	
1.4	64QAM	3	3	20.26	20.33	20.38	
1.4	64QAM	6	0	20.25	20.44	20.29	21



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	24
Frequency (MHz)				829	836.5	844	
10	QPSK	1	0	23.15	23.20	23.12	24
10	QPSK	1	25	23.09	23.17	23.10	
10	QPSK	1	49	23.05	23.12	23.09	
10	QPSK	25	0	22.32	22.33	22.25	
10	QPSK	25	12	22.06	22.06	22.33	23
10	QPSK	25	25	22.33	22.11	22.36	
10	QPSK	50	0	22.35	22.35	22.30	
10	16QAM	1	0	22.34	22.36	22.25	
10	16QAM	1	25	22.26	22.34	22.10	23
10	16QAM	1	49	22.24	22.09	22.19	
10	16QAM	25	0	21.18	21.38	21.41	
10	16QAM	25	12	21.31	21.32	21.15	
10	16QAM	25	25	21.25	21.20	21.28	22
10	16QAM	50	0	21.15	21.03	21.12	
10	64QAM	1	0	21.20	21.31	21.22	
10	64QAM	1	25	21.15	21.32	21.19	
10	64QAM	1	49	21.24	21.10	21.11	22
10	64QAM	25	0	20.25	20.23	20.27	
10	64QAM	25	12	20.31	20.37	20.29	
10	64QAM	25	25	20.18	20.47	20.26	
10	64QAM	50	0	20.29	20.28	20.33	21
Channel				20425	20525	20625	
Frequency (MHz)				826.5	836.5	846.5	Tune-up limit (dBm)
5	QPSK	1	0	23.13	23.18	23.11	24
5	QPSK	1	12	23.09	23.09	23.13	
5	QPSK	1	24	23.07	23.06	23.10	
5	QPSK	12	0	22.39	22.32	22.11	
5	QPSK	12	7	22.10	22.07	22.24	23
5	QPSK	12	13	22.20	22.16	22.35	
5	QPSK	25	0	22.35	22.16	22.17	
5	16QAM	1	0	22.22	22.34	22.27	
5	16QAM	1	12	22.23	22.30	22.19	23
5	16QAM	1	24	22.16	22.11	22.16	
5	16QAM	12	0	21.24	21.35	21.25	
5	16QAM	12	7	21.20	21.27	21.23	
5	16QAM	12	13	21.13	21.24	21.34	22
5	16QAM	25	0	21.12	21.23	21.23	
5	64QAM	1	0	21.30	21.39	21.12	
5	64QAM	1	12	21.38	21.21	21.20	
5	64QAM	1	24	21.07	21.18	21.11	22
5	64QAM	12	0	20.12	20.27	20.14	
5	64QAM	12	7	20.13	20.19	20.14	
5	64QAM	12	13	20.23	20.20	20.29	
5	64QAM	25	0	20.10	20.22	20.17	21
Channel				20415	20525	20635	
Frequency (MHz)				825.5	836.5	847.5	Tune-up limit (dBm)
3	QPSK	1	0	23.13	23.16	23.07	24
3	QPSK	1	8	23.14	23.06	23.10	
3	QPSK	1	14	23.11	23.05	23.08	
3	QPSK	8	0	22.20	22.33	22.23	
3	QPSK	8	4	22.28	22.25	22.10	23
3	QPSK	8	7	22.28	22.22	22.18	
3	QPSK	15	0	22.25	22.05	22.36	
3	16QAM	1	0	22.27	22.31	22.22	
3	16QAM	1	8	22.30	22.28	22.17	23
3	16QAM	1	14	22.07	22.02	22.21	
3	16QAM	8	0	21.33	21.40	21.29	
3	16QAM	8	4	21.25	21.21	21.19	
3	16QAM	8	7	21.08	21.18	21.13	22
3	16QAM	15	0	21.03	21.09	21.08	
3	64QAM	1	0	21.26	21.35	21.34	
3	64QAM	1	8	21.24	21.27	21.26	
3	64QAM	1	14	21.05	21.25	21.14	22
3	64QAM	8	0	20.12	20.23	20.13	
3	64QAM	8	4	20.17	20.19	20.32	
3	64QAM	8	7	20.22	20.40	20.23	
3	64QAM	15	0	20.33	20.38	20.37	21
Channel				20407	20525	20643	
Frequency (MHz)				824.7	836.5	848.3	Tune-up limit (dBm)
1.4	QPSK	1	0	23.09	23.17	23.11	24
1.4	QPSK	1	3	23.13	23.15	23.13	
1.4	QPSK	1	5	23.10	23.05	23.09	
1.4	QPSK	3	0	22.28	22.17	22.37	
1.4	QPSK	3	1	22.07	22.17	22.30	23
1.4	QPSK	3	3	22.28	22.12	22.14	
1.4	QPSK	6	0	22.08	22.15	22.17	
1.4	16QAM	1	0	22.23	22.19	22.30	
1.4	16QAM	1	3	22.13	22.25	22.33	23
1.4	16QAM	1	5	22.23	22.09	22.13	
1.4	16QAM	3	0	21.18	21.38	21.42	
1.4	16QAM	3	1	21.33	21.40	21.10	
1.4	16QAM	3	3	21.09	21.18	21.11	22
1.4	16QAM	6	0	21.07	21.21	21.12	
1.4	64QAM	1	0	21.39	21.42	21.16	
1.4	64QAM	1	3	21.22	21.28	21.20	
1.4	64QAM	1	5	21.11	21.36	21.09	22
1.4	64QAM	3	0	20.36	20.40	20.38	
1.4	64QAM	3	1	20.18	20.11	20.28	
1.4	64QAM	3	3	20.33	20.33	20.14	
1.4	64QAM	6	0	20.10	20.32	20.26	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	23.5	
20	QPSK	1	0	22.59	22.75	22.65		
20	QPSK	1	49	22.57	22.59	22.57		
20	QPSK	1	99	22.63	22.54	22.65		
20	QPSK	50	0	21.71	21.84	21.65		
20	QPSK	50	24	21.60	21.66	21.74	22.5	
20	QPSK	50	50	21.75	21.74	21.83		
20	QPSK	100	0	21.64	21.64	21.63		
20	16QAM	1	0	21.81	21.88	21.81		
20	16QAM	1	49	21.88	21.83	21.71		
20	16QAM	1	99	21.58	21.60	21.83	22.5	
20	16QAM	50	0	20.59	20.91	20.86		
20	16QAM	50	24	20.69	20.84	20.58		
20	16QAM	50	50	20.60	20.61	20.74		
20	16QAM	100	0	20.64	20.56	20.58		
20	64QAM	1	0	20.65	20.89	20.77	21.5	
20	64QAM	1	49	20.84	20.76	20.81		
20	64QAM	1	99	20.50	20.86	20.55		
20	64QAM	50	0	19.92	19.76	19.86		
20	64QAM	50	24	19.72	19.76	19.63		
20	64QAM	50	50	19.90	19.80	19.79	20.5	
20	64QAM	50	0	19.64	19.97	19.86		
Channel				20825	21100	21375		
Frequency (MHz)				2507.5	2535	2562.5		Tune-up limit (dBm)
15	QPSK	1	0	22.57	22.69	22.52		23.5
15	QPSK	1	37	22.56	22.61	22.65		
15	QPSK	1	74	22.62	22.59	22.61		
15	QPSK	36	0	21.60	21.88	21.78		
15	QPSK	36	20	21.57	21.71	21.81		
15	QPSK	36	39	21.65	21.66	21.64	22.5	
15	QPSK	75	0	21.68	21.60	21.68		
15	16QAM	1	0	21.82	21.78	21.80		
15	16QAM	1	37	21.85	21.88	21.58		
15	16QAM	1	74	21.58	21.85	21.70		
15	16QAM	36	0	20.77	20.85	20.69	21.5	
15	16QAM	36	20	20.73	20.69	20.75		
15	16QAM	36	39	20.72	20.68	20.64		
15	16QAM	75	0	20.69	20.65	20.59		
15	64QAM	1	0	20.74	20.93	20.65		
15	64QAM	1	37	20.75	20.87	20.87	21.5	
15	64QAM	1	74	20.63	20.86	20.79		
15	64QAM	36	0	19.90	19.75	19.96		
15	64QAM	36	20	19.77	19.83	19.71		
15	64QAM	36	39	19.83	19.92	19.64		
15	64QAM	75	0	19.83	19.82	19.89	20.5	
Channel				20800	21100	21400		
Frequency (MHz)				2505	2535	2565	Tune-up limit (dBm)	
10	QPSK	1	0	22.63	22.70	22.62	23.5	
10	QPSK	1	25	22.64	22.68	22.53		
10	QPSK	1	49	22.60	22.56	22.65		
10	QPSK	25	0	21.69	21.81	21.71		
10	QPSK	25	12	21.51	21.75	21.71		
10	QPSK	25	25	21.83	21.85	21.60	22.5	
10	QPSK	50	0	21.61	21.66	21.79		
10	16QAM	1	0	21.75	21.74	21.77		
10	16QAM	1	25	21.65	21.75	21.61		
10	16QAM	1	49	21.65	21.70	21.74		
10	16QAM	25	0	20.83	20.79	20.84	21.5	
10	16QAM	25	12	20.70	20.66	20.80		
10	16QAM	25	25	20.82	20.73	20.90		
10	16QAM	50	0	20.71	20.42	20.72		
10	64QAM	1	0	20.80	20.94	20.84		
10	64QAM	1	25	20.75	20.61	20.99	21.5	
10	64QAM	1	49	20.61	20.90	20.78		
10	64QAM	25	0	19.74	19.85	19.98		
10	64QAM	25	12	19.97	19.86	19.66		
10	64QAM	25	25	19.98	19.85	19.73		
10	64QAM	50	0	19.67	19.76	19.77	20.5	
Channel				20775	21100	21425		
Frequency (MHz)				2502.5	2535	2567.5	Tune-up limit (dBm)	
5	QPSK	1	0	22.66	22.71	22.58	23.5	
5	QPSK	1	12	22.61	22.65	22.70		
5	QPSK	1	24	22.64	22.52	22.67		
5	QPSK	12	0	21.74	21.87	21.67		
5	QPSK	12	7	21.57	21.57	21.72		
5	QPSK	12	13	21.86	21.86	21.73	22.5	
5	QPSK	25	0	21.77	21.51	21.53		
5	16QAM	1	0	21.84	21.88	21.85		
5	16QAM	1	12	21.84	21.84	21.60		
5	16QAM	1	24	21.55	21.63	21.75		
5	16QAM	12	0	20.53	20.90	20.78	21.5	
5	16QAM	12	7	20.77	20.69	20.67		
5	16QAM	12	13	20.66	20.67	20.61		
5	16QAM	25	0	20.70	20.81	20.61		
5	64QAM	1	0	20.73	20.78	20.89		
5	64QAM	1	12	20.92	20.72	20.67	21.5	
5	64QAM	1	24	20.62	20.73	20.63		
5	64QAM	12	0	19.84	19.73	19.76		
5	64QAM	12	7	19.80	19.72	19.61		
5	64QAM	12	13	19.79	19.88	19.86		
5	64QAM	25	0	19.65	19.78	19.88	20.5	
Channel				20750	21100	21400		



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				23090	23095	23130	
Frequency (MHz)				704	707.5	711	
10	QPSK	1	0	23.57	23.68	23.63	24.5
10	QPSK	1	25	23.56	23.55	23.62	
10	QPSK	1	49	23.52	23.55	23.60	
10	QPSK	25	0	22.73	22.84	22.57	23.5
10	QPSK	25	12	22.71	22.75	22.65	
10	QPSK	25	25	22.61	22.80	22.83	
10	QPSK	50	0	22.61	22.73	22.58	23.5
10	16QAM	1	0	22.79	22.75	22.71	
10	16QAM	1	25	22.88	22.63	22.62	
10	16QAM	1	49	22.54	22.67	22.66	22.5
10	16QAM	25	0	21.82	21.90	21.86	
10	16QAM	25	12	21.72	21.74	21.69	
10	16QAM	25	25	21.78	21.63	21.82	22.5
10	16QAM	50	0	21.62	21.66	21.49	
10	64QAM	1	0	21.50	21.91	21.90	
10	64QAM	1	25	21.76	21.72	21.89	22.5
10	64QAM	1	49	21.67	21.71	21.62	
10	64QAM	25	0	20.67	20.77	20.62	
10	64QAM	25	12	20.64	20.58	20.59	21.5
10	64QAM	25	25	20.91	20.64	20.70	
10	64QAM	50	0	20.61	20.62	20.76	
Channel				23035	23095	23155	Tune-up limit (dBm)
Frequency (MHz)				701.5	707.5	713.5	
5	QPSK	1	0	23.61	23.66	23.62	24.5
5	QPSK	1	12	23.53	23.53	23.57	
5	QPSK	1	24	23.57	23.58	23.60	
5	QPSK	12	0	22.57	22.75	22.79	23.5
5	QPSK	12	7	22.85	22.80	22.77	
5	QPSK	12	13	22.62	22.88	22.84	
5	QPSK	25	0	22.55	22.81	22.59	23.5
5	16QAM	1	0	22.67	22.81	22.67	
5	16QAM	1	12	22.73	22.71	22.73	
5	16QAM	1	24	22.74	22.55	22.68	22.5
5	16QAM	12	0	21.81	21.72	21.83	
5	16QAM	12	7	21.78	21.62	21.64	
5	16QAM	12	13	21.58	21.62	21.79	22.5
5	16QAM	25	0	21.59	21.69	21.58	
5	64QAM	1	0	21.62	21.79	21.78	
5	64QAM	1	12	21.74	21.84	21.66	22.5
5	64QAM	1	24	21.63	21.77	21.55	
5	64QAM	12	0	20.82	20.78	20.77	
5	64QAM	12	7	20.82	20.72	20.82	21.5
5	64QAM	12	13	20.75	20.73	20.59	
5	64QAM	25	0	20.64	20.69	20.85	
Channel				23025	23095	23165	Tune-up limit (dBm)
Frequency (MHz)				700.5	707.5	714.5	
3	QPSK	1	0	23.57	23.64	23.63	24.5
3	QPSK	1	8	23.55	23.56	23.52	
3	QPSK	1	14	23.53	23.59	23.59	
3	QPSK	8	0	22.82	22.80	22.65	23.5
3	QPSK	8	4	22.58	22.62	22.76	
3	QPSK	8	7	22.65	22.63	22.57	
3	QPSK	15	0	22.70	22.59	22.68	23.5
3	16QAM	1	0	22.74	22.79	22.69	
3	16QAM	1	8	22.79	22.79	22.60	
3	16QAM	1	14	22.56	22.69	22.72	22.5
3	16QAM	8	0	21.66	21.78	21.73	
3	16QAM	8	4	21.71	21.68	21.67	
3	16QAM	8	7	21.83	21.70	21.78	22.5
3	16QAM	15	0	21.80	21.53	21.74	
3	64QAM	1	0	21.86	21.73	21.86	
3	64QAM	1	8	21.73	21.84	21.87	22.5
3	64QAM	1	14	21.60	21.72	21.70	
3	64QAM	8	0	20.69	20.77	20.72	
3	64QAM	8	4	20.86	20.84	20.78	21.5
3	64QAM	8	7	20.77	20.97	20.96	
3	64QAM	15	0	20.79	20.78	20.79	
Channel				23017	23095	23173	Tune-up limit (dBm)
Frequency (MHz)				699.7	707.5	715.3	
1.4	QPSK	1	0	23.59	23.65	23.56	24.5
1.4	QPSK	1	3	23.45	23.55	23.61	
1.4	QPSK	1	5	23.48	23.49	23.56	
1.4	QPSK	3	0	22.75	22.77	22.60	23.5
1.4	QPSK	3	1	22.55	22.56	22.64	
1.4	QPSK	3	3	22.69	22.62	22.61	
1.4	QPSK	6	0	22.66	22.70	22.66	23.5
1.4	16QAM	1	0	22.75	22.84	22.66	
1.4	16QAM	1	3	22.77	22.74	22.74	
1.4	16QAM	1	5	22.65	22.60	22.76	23.5
1.4	16QAM	3	0	21.73	21.83	21.56	
1.4	16QAM	3	1	21.56	21.75	21.65	
1.4	16QAM	3	3	21.55	21.79	21.62	22.5
1.4	16QAM	6	0	21.71	21.68	21.53	
1.4	64QAM	1	0	21.77	21.88	21.74	
1.4	64QAM	1	3	21.81	21.82	21.81	22.5
1.4	64QAM	1	5	21.59	21.76	21.67	
1.4	64QAM	3	0	20.77	20.84	20.74	
1.4	64QAM	3	1	20.94	20.83	20.53	21.5
1.4	64QAM	3	3	20.81	20.94	20.72	
1.4	64QAM	6	0	20.89	20.78	20.77	

Band 17 (700MHz Band) (dBm) Part 27H(only on channel required)							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				23780	23790	23800	
Frequency (MHz)				709	710	711	
10	QPSK	1	0	23.56	23.72	23.65	24.5
10	QPSK	1	25	23.51	23.70	23.60	
10	QPSK	1	49	23.71	23.63	23.67	
10	QPSK	25	0	22.63	22.87	22.75	23.5
10	QPSK	25	12	22.67	22.79	22.78	
10	QPSK	25	25	22.86	22.63	22.70	
10	QPSK	50	0	22.74	22.74	22.77	23.5
10	16QAM	1	0	22.81	22.88	22.80	
10	16QAM	1	25	22.75	22.71	22.58	
10	16QAM	1	49	22.83	22.56	22.79	22.5
10	16QAM	25	0	21.67	21.68	21.73	
10	16QAM	25	12	21.64	21.75	21.59	
10	16QAM	25	25	21.84	21.66	21.80	22.5
10	16QAM	50	0	21.52	21.77	21.76	
10	64QAM	1	0	21.55	21.82	21.89	
10	64QAM	1	25	21.71	21.69	21.84	22.5
10	64QAM	1	49	21.70	21.85	21.67	
10	64QAM	25	0	20.75	20.92	20.90	
10	64QAM	25	12	20.82	20.80	20.74	21.5
10	64QAM	25	25	20.73	20.65	20.71	
10	64QAM	50	0	20.80	20.78	20.76	
Channel				23756	23790	23825	Tune-up limit (dBm)
Frequency (MHz)				706.5	710	713.5	
5	QPSK	1	0	23.62	23.67	23.56	24.5
5	QPSK	1	12	23.53	23.59	23.62	
5	QPSK	1	24	23.56	23.58	23.60	
5	QPSK	12	0	22.86	22.85	22.87	23.5
5	QPSK	12	7	22.73	22.82	22.62	
5	QPSK	12	13	22.69	22.81	22.71	
5	QPSK	25	0	22.66	22.87	22.78	23.5
5	16QAM	1	0	22.85	22.80	22.75	
5	16QAM	1	12	22.79	22.82	22.64	
5	16QAM	1	24	22.70	22.65	22.63	22.5
5	16QAM	12	0	21.65	21.95	21.94	
5	16QAM	12	7	21.75	21.97	21.56	
5	16QAM	12	13	21.78	21.76	21.81	22.5
5	16QAM	25	0	21.66	21.54	21.77	
5	64QAM	1	0	21.78	21.95	21.92	
5	64QAM	1	12	21.76	21.71	21.74	22.5
5	64QAM	1	24	21.68	21.83	21.61	
5	64QAM	12	0	20.67	20.79	20.75	
5	64QAM	12	7	20.85	20.75	20.60	21.5
5	64QAM	12	13	20.81	20.81	20.83	
5	64QAM	25	0	20.73	20.80	20.72	



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	22.74	22.81	22.68	23.5
20	QPSK	1	49	22.63	22.69	22.54	
20	QPSK	1	99	22.63	22.60	22.60	
20	QPSK	50	0	21.77	21.81	21.65	22.5
20	QPSK	50	24	21.77	21.52	21.68	
20	QPSK	50	50	21.63	21.59	21.71	
20	QPSK	100	0	21.65	21.63	21.66	22.5
20	16QAM	1	0	21.63	21.82	21.79	
20	16QAM	1	49	21.71	21.76	21.71	
20	16QAM	1	99	21.69	21.62	21.88	21.5
20	16QAM	50	0	20.70	20.80	20.75	
20	16QAM	50	24	20.73	20.73	20.67	
20	16QAM	50	50	20.72	20.64	20.85	21.5
20	16QAM	100	0	20.70	20.67	20.77	
20	64QAM	1	0	20.76	20.90	20.93	
20	64QAM	1	49	20.75	20.85	20.59	21.5
20	64QAM	1	99	20.63	20.83	20.55	
20	64QAM	50	0	19.85	19.85	19.80	
20	64QAM	50	24	19.71	19.61	19.84	20.5
20	64QAM	50	50	19.75	19.86	19.73	
20	64QAM	100	0	19.72	19.68	19.75	
Channel				37825	38000	38175	Tune-up limit (dBm)
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	22.59	22.77	22.69	23.5
15	QPSK	1	37	22.70	22.65	22.75	
15	QPSK	1	74	22.69	22.73	22.60	
15	QPSK	36	0	21.81	21.83	21.57	22.5
15	QPSK	36	20	21.69	21.54	21.79	
15	QPSK	36	39	21.65	21.81	21.73	
15	QPSK	75	0	21.80	21.52	21.61	22.5
15	16QAM	1	0	21.76	21.83	21.72	
15	16QAM	1	37	21.75	21.72	21.62	
15	16QAM	1	74	21.53	21.67	21.87	21.5
15	16QAM	36	0	20.52	20.83	20.83	
15	16QAM	36	20	20.94	20.84	20.66	
15	16QAM	36	39	20.58	20.66	20.83	21.5
15	16QAM	75	0	20.50	20.67	20.59	
15	64QAM	1	0	20.73	20.87	20.76	
15	64QAM	1	37	20.77	20.91	20.66	21.5
15	64QAM	1	74	20.51	20.73	20.68	
15	64QAM	36	0	19.84	19.82	19.85	
15	64QAM	36	20	19.78	19.71	19.88	20.5
15	64QAM	36	39	19.82	19.75	19.71	
15	64QAM	75	0	19.77	19.82	19.80	
Channel				37800	38000	38200	Tune-up limit (dBm)
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	22.59	22.78	22.74	23.5
10	QPSK	1	25	22.69	22.53	22.65	
10	QPSK	1	49	22.55	22.68	22.76	
10	QPSK	25	0	21.71	21.82	21.73	22.5
10	QPSK	25	12	21.81	21.71	21.63	
10	QPSK	25	25	21.74	21.65	21.66	
10	QPSK	50	0	21.54	21.67	21.64	22.5
10	16QAM	1	0	21.85	21.85	21.66	
10	16QAM	1	25	21.79	21.88	21.73	
10	16QAM	1	49	21.82	21.76	21.69	21.5
10	16QAM	25	0	20.62	20.85	20.82	
10	16QAM	25	12	20.92	20.73	20.58	
10	16QAM	25	25	20.73	20.70	20.81	21.5
10	16QAM	50	0	20.55	20.70	20.44	
10	64QAM	1	0	20.55	20.74	20.69	
10	64QAM	1	25	20.79	20.65	20.98	20.5
10	64QAM	1	49	20.67	20.59	20.61	
10	64QAM	25	0	19.82	19.92	19.84	
10	64QAM	25	12	19.70	19.66	19.67	20.5
10	64QAM	25	25	19.76	19.87	19.97	
10	64QAM	50	0	19.59	19.71	19.91	
Channel				37775	38000	38225	Tune-up limit (dBm)
Frequency (MHz)				2572.5	2595	2617.5	
5	QPSK	1	0	22.74	22.79	22.64	23.5
5	QPSK	1	12	22.60	22.57	22.56	
5	QPSK	1	24	22.63	22.67	22.63	
5	QPSK	12	0	21.70	21.81	21.56	22.5
5	QPSK	12	7	21.65	21.77	21.65	
5	QPSK	12	13	21.62	21.76	21.69	
5	QPSK	25	0	21.55	21.65	21.52	22.5
5	16QAM	1	0	21.69	21.86	21.71	
5	16QAM	1	12	21.73	21.69	21.73	
5	16QAM	1	24	21.60	21.67	21.75	21.5
5	16QAM	12	0	20.64	20.86	20.91	
5	16QAM	12	7	20.70	20.59	20.62	
5	16QAM	12	13	20.67	20.66	20.99	21.5
5	16QAM	25	0	20.96	20.74	20.66	
5	64QAM	1	0	20.58	20.85	20.92	
5	64QAM	1	12	20.78	20.63	20.80	20.5
5	64QAM	1	24	20.68	20.75	20.51	
5	64QAM	12	0	19.75	19.84	19.81	
5	64QAM	12	7	19.84	19.68	19.52	20.5
5	64QAM	12	13	19.90	19.89	19.85	
5	64QAM	25	0	19.53	19.89	19.75	

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	23.10			24
10	QPSK	1	25	23.05			
10	QPSK	1	49	23.08			
10	QPSK	25	0	22.17			23
10	QPSK	25	12	22.15			
10	QPSK	25	25	22.06			
10	QPSK	50	0	22.10			23
10	16QAM	1	0	22.19			
10	16QAM	1	25	22.03			
10	16QAM	1	49	22.16			23
10	16QAM	25	0	21.28			
10	16QAM	25	12	21.08			
10	16QAM	25	25	21.16			22
10	16QAM	50	0	21.17			
10	64QAM	1	0	21.23			
10	64QAM	1	25	21.19			22
10	64QAM	1	49	21.23			
10	64QAM	25	0	20.22			
10	64QAM	25	12	20.13			21
10	64QAM	25	25	20.09			
10	64QAM	50	0	20.15			
Channel				38725	38750	38775	Tune-up limit (dBm)
Frequency (MHz)				2307.5	2310	2312.5	
5	QPSK	1	0	23.06	23.08	23.06	24
5	QPSK	1	12	23.02	22.95	23.04	
5	QPSK	1	24	23.05	23.01	22.95	
5	QPSK	12	0	22.07	22.20	22.11	23
5	QPSK	12	7	22.21	22.10	22.18	
5	QPSK	12	13	22.12	22.09	22.19	
5	QPSK	25	0	22.17	22.13	22.16	23
5	16QAM	1	0	22.39	22.38	22.42	
5	16QAM	1	12	22.24	22.42	22.13	
5	16QAM	1	24	22.16	22.31	22.34	22
5	16QAM	12	0	21.23	21.30	21.37	
5	16QAM	12	7	21.16	21.19	21.19	
5	16QAM	12	13	21.05	21.17	21.21	22
5	16QAM	25	0	21.28	21.16	21.27	
5	64QAM	1	0	21.03	21.29	21.24	
5	64QAM	1	12	21.22	21.39	21.18	22
5	64QAM	1	24	21.07	21.23	21.11	
5	64QAM	12	0	20.39	20.20	20.31	
5	64QAM	12	7	20.29	20.26	20.30	21
5	64QAM	12	13	20.28	20.41	20.16	
5	64QAM	25	0	20.19	20.29	20.25	



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	23.15			24
10	QPSK	1	25	23.08			
10	QPSK	1	49	23.10			
10	QPSK	25	0	22.09			
10	QPSK	25	12	22.06			23
10	QPSK	25	25	22.01			
10	QPSK	50	0	22.04			
10	16QAM	1	0	22.22			
10	16QAM	1	25	22.09			23
10	16QAM	1	49	22.15			
10	16QAM	25	0	21.16			
10	16QAM	25	12	21.06			
10	16QAM	25	25	21.11			22
10	16QAM	50	0	21.10			
10	64QAM	1	0	21.09			
10	64QAM	1	25	21.13			
10	64QAM	1	49	21.05			22
10	64QAM	25	0	20.24			
10	64QAM	25	12	20.23			
10	64QAM	25	25	20.09			
10	64QAM	50	0	20.16			21
Channel				39175	39200	39225	
Frequency (MHz)				2352.5	2355	2357.5	
5	QPSK	1	0	23.04	23.13	23.09	
5	QPSK	1	12	23.07	23.11	23.07	
5	QPSK	1	24	23.04	23.08	23.04	
5	QPSK	12	0	22.27	22.19	22.05	
5	QPSK	12	7	22.22	22.05	22.15	23
5	QPSK	12	13	22.37	22.35	22.15	
5	QPSK	25	0	22.09	22.09	22.05	
5	16QAM	1	0	22.18	22.34	22.22	
5	16QAM	1	12	22.05	22.07	22.14	23
5	16QAM	1	24	22.09	22.18	22.06	
5	16QAM	12	0	21.04	21.31	21.25	
5	16QAM	12	7	21.08	21.06	21.06	
5	16QAM	12	13	21.25	21.06	21.24	22
5	16QAM	25	0	21.03	21.06	21.28	
5	64QAM	1	0	21.20	21.32	21.25	
5	64QAM	1	12	21.20	21.14	21.20	
5	64QAM	1	24	21.08	21.21	21.13	22
5	64QAM	12	0	20.34	20.35	20.38	
5	64QAM	12	7	20.14	20.22	20.07	
5	64QAM	12	13	20.20	20.15	20.13	
5	64QAM	25	0	20.17	20.24	20.24	



Band 41 (2496~2690MHz) (dBm)									
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Low Channel	Middle Channel	Middle High Channel	High Channel	Tune-up limit (dBm)
Channel				39750	40185	40620	41055	41490	
Frequency (MHz)				2506	2549.5	2593	2636.5	2680	
20	QPSK	1	0	23.09	23.04	23.22	23.08	23.04	24
20	QPSK	1	49	23.09	23.05	23.20	23.14	23.03	
20	QPSK	1	99	23.13	23.07	23.13	23.00	23.08	
20	QPSK	50	0	22.20	22.39	22.44	22.12	22.23	
20	QPSK	50	24	22.07	22.04	22.35	22.15	22.05	23
20	QPSK	50	50	22.19	22.34	22.38	22.34	22.37	
20	QPSK	100	0	22.03	22.01	22.38	22.16	22.03	
20	16QAM	1	0	22.30	22.41	22.43	22.35	22.33	
20	16QAM	1	49	22.21	22.29	22.44	22.46	22.26	23
20	16QAM	1	99	22.19	22.06	22.34	22.20	22.28	
20	16QAM	50	0	21.17	21.27	21.34	21.26	21.34	
20	16QAM	50	24	21.38	21.21	21.29	21.17	21.43	
20	16QAM	50	50	21.13	21.08	21.09	21.09	21.07	22
20	16QAM	100	0	21.27	21.05	21.26	21.17	21.18	
20	64QAM	1	0	21.10	21.27	21.36	21.25	21.29	
20	64QAM	1	49	21.22	21.44	21.43	21.38	21.19	
20	64QAM	1	99	21.10	21.16	21.44	21.04	21.00	22
20	64QAM	50	0	20.39	20.46	20.46	20.36	20.35	
20	64QAM	50	24	20.12	20.41	20.47	20.14	20.07	
20	64QAM	50	50	20.28	20.46	20.22	20.37	20.31	
20	64QAM	100	0	20.21	20.10	20.15	20.26	20.01	21
Channel				39725	40173	40620	41068	41515	
Frequency (MHz)				2503.5	2548.3	2593	2637.8	2682.5	Tune-up limit (dBm)
15	QPSK	1	0	23.10	23.15	23.20	23.15	23.05	24
15	QPSK	1	37	23.07	23.17	23.13	23.14	23.10	
15	QPSK	1	74	23.03	23.16	23.02	23.12	23.06	
15	QPSK	36	0	22.10	22.37	22.42	22.14	22.31	
15	QPSK	36	20	22.13	21.97	22.24	22.20	21.98	23
15	QPSK	36	39	22.36	22.36	22.31	22.36	22.17	
15	QPSK	75	0	22.07	22.22	22.27	22.22	22.35	
15	16QAM	1	0	22.23	22.30	22.33	22.31	22.16	
15	16QAM	1	37	22.24	22.29	22.31	22.35	22.33	23
15	16QAM	1	74	22.17	22.25	22.21	22.27	22.22	
15	16QAM	36	0	21.03	21.06	21.35	21.31	21.18	
15	16QAM	36	20	21.20	21.10	21.23	21.20	21.21	
15	16QAM	36	39	21.06	21.22	21.32	21.34	21.17	22
15	16QAM	75	0	21.03	21.08	21.03	21.09	21.11	
15	64QAM	1	0	21.16	21.12	21.39	21.33	21.02	
15	64QAM	1	37	21.25	21.22	21.29	21.29	21.23	
15	64QAM	1	74	21.25	21.16	21.25	21.10	21.01	22
15	64QAM	36	0	20.25	20.33	20.44	20.15	20.18	
15	64QAM	36	20	20.11	20.46	20.31	20.33	20.22	
15	64QAM	36	39	20.31	20.46	20.43	20.34	20.46	
15	64QAM	75	0	20.00	20.29	20.32	20.26	20.21	21
Channel				39700	40160	40620	41080	41540	
Frequency (MHz)				2501	2547	2593	2639	2685	Tune-up limit (dBm)
10	QPSK	1	0	23.18	23.12	23.19	23.13	23.12	24
10	QPSK	1	25	23.11	23.18	23.07	23.13	23.17	
10	QPSK	1	49	23.04	23.09	23.18	23.17	23.15	
10	QPSK	25	0	22.34	22.35	22.40	22.09	22.13	
10	QPSK	25	12	22.31	22.26	22.35	22.32	22.25	23
10	QPSK	25	25	22.06	22.20	22.26	22.15	22.27	
10	QPSK	50	0	22.09	22.19	22.16	22.27	22.06	
10	16QAM	1	0	22.28	22.37	22.30	22.30	22.16	
10	16QAM	1	25	22.28	22.23	22.35	22.37	22.29	23
10	16QAM	1	49	22.33	22.20	22.10	22.08	21.96	
10	16QAM	25	0	21.33	21.05	21.34	21.22	21.22	
10	16QAM	25	12	21.11	21.28	21.21	20.98	21.23	
10	16QAM	25	25	21.12	21.31	21.09	21.28	20.98	22
10	16QAM	50	0	21.02	21.32	21.11	21.03	21.33	
10	64QAM	1	0	21.15	21.17	21.28	21.27	21.17	
10	64QAM	1	25	21.28	21.26	21.25	21.29	21.21	
10	64QAM	1	49	21.12	21.06	21.37	20.94	21.15	21
10	64QAM	25	0	20.14	20.23	20.39	20.28	20.23	
10	64QAM	25	12	20.42	20.23	20.30	19.99	20.28	
10	64QAM	25	25	20.34	20.34	20.31	20.31	20.43	
10	64QAM	50	0	20.27	20.03	20.37	20.42	20.14	21
Channel				39675	40148	40620	41093	41565	
Frequency (MHz)				2498.5	2545.8	2593	2640.30	2687.5	Tune-up limit (dBm)
5	QPSK	1	0	23.05	23.06	23.16	23.15	23.14	24
5	QPSK	1	12	23.05	23.10	23.05	23.06	23.12	
5	QPSK	1	24	23.05	23.09	22.99	23.06	23.05	
5	QPSK	12	0	22.10	22.09	22.38	22.05	22.33	
5	QPSK	12	7	22.27	22.30	22.34	22.10	22.22	23
5	QPSK	12	13	22.10	22.10	22.22	22.20	22.36	
5	QPSK	25	0	22.26	22.20	22.28	22.25	22.22	
5	16QAM	1	0	22.34	22.42	22.38	22.23	22.33	
5	16QAM	1	12	22.39	22.46	22.35	22.09	22.35	23
5	16QAM	1	24	22.05	22.26	22.08	22.30	22.05	
5	16QAM	12	0	21.20	21.26	21.37	21.37	20.95	
5	16QAM	12	7	21.31	21.07	21.38	21.05	21.34	
5	16QAM	12	13	21.09	21.00	21.03	21.30	20.95	22
5	16QAM	25	0	21.00	21.01	21.28	21.25	21.06	
5	64QAM	1	0	21.36	21.03	21.41	21.28	21.22	
5	64QAM	1	12	21.26	21.23	21.25	21.24	21.27	
5	64QAM	1	24	20.99	21.19	21.40	21.02	20.93	21
5	64QAM	12	0	20.48	20.37	20.11	20.26	20.12	
5	64QAM	12	7	20.07	20.43	20.45	20.31	20.36	
5	64QAM	12	13	20.43	20.47	20.36	20.37	20.13	
5	64QAM	25	0	20.27	20.13	20.64	20.55	20.01	



2.4GHz WLAN ANT 1

2.4GHz WLAN ANT 1	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Power Setting	Duty Cycle %
	802.11b 1Mbps	CH 1	2412	18.04	19.00	18.50	99.52
		CH 6	2437	18.03	19.00	18.50	
		CH 11	2462	19.41	20.00	18.50	
	802.11g 6Mbps	CH 1	2412	15.16	16.00	16.00	97.22
		CH 6	2437	16.21	17.00	16.00	
		CH 11	2462	18.00	19.00	16.00	
	802.11n-HT20 MCS0	CH 1	2412	15.96	16.50	16.00	97.04
		CH 6	2437	16.05	17.00	16.00	
		CH 11	2462	17.94	18.50	16.00	
	802.11n-HT40 MCS0	CH 3	2422	16.18	17.00	16.00	94.20
		CH 6	2437	16.56	17.50	16.00	
		CH 9	2452	17.61	18.50	16.00	

5GHz WLAN ANT 1

5.2GHz WLAN ANT 1	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Power Setting	Duty Cycle %
	802.11a 6Mbps	CH 36	5180	16.25	17.00	16.50	97.22
		CH 44	5220	17.13	18.00	16.50	
		CH 48	5240	17.86	18.50	16.50	
	802.11n-HT20 MCS0	CH 36	5180	16.20	17.00	16.00	97.01
		CH 44	5220	16.63	17.50	16.00	
		CH 48	5240	16.78	17.50	16.00	
	802.11n-HT40 MCS0	CH 38	5190	16.46	17.00	16.00	94.20
		CH 46	5230	16.74	17.50	16.00	
		CH 36	5180	16.18	17.00	16.00	
	802.11ac-VHT20 MCS0	CH 44	5220	16.61	17.50	16.00	97.06
		CH 48	5240	16.78	17.50	16.00	
		CH 38	5190	15.96	16.50	16.00	
	802.11ac-VHT40 MCS0	CH 46	5230	16.22	17.00	16.00	94.20
		CH 46	5230	16.22	17.00	16.00	

5GHz WLAN ANT 1

5.3GHz WLAN ANT 1	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Power Setting	Duty Cycle %
	802.11a 6Mbps	CH 52	5260	16.76	17.50	16.50	96.53
		CH 60	5300	17.49	18.00	16.50	
		CH 64	5320	17.81	18.50	16.50	
	802.11n-HT20 MCS0	CH 52	5260	16.10	17.00	16.00	97.01
		CH 60	5300	16.89	17.50	16.00	
		CH 64	5320	17.01	18.00	16.00	
	802.11n-HT40 MCS0	CH 54	5270	16.16	17.00	16.00	94.20
		CH 62	5310	16.78	17.50	16.00	
		CH 52	5260	16.09	17.00	16.00	
	802.11ac-VHT20 MCS0	CH 60	5300	16.82	17.50	16.00	97.04
		CH 64	5320	16.99	17.50	16.00	
		CH 54	5270	16.71	17.50	16.00	
	802.11ac-VHT40 MCS0	CH 62	5310	16.55	17.50	16.00	94.20
		CH 62	5310	16.55	17.50	16.00	

5GHz WLAN 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	17.33	18.00	16.50	96.53
		CH 120	5600	15.64	16.50	16.50	
		CH 144	5720	16.46	17.00	16.50	
	802.11n-HT20 MCS0	CH 100	5500	16.68	17.50	16.00	97.01
		CH 120	5600	15.10	16.00	16.00	
		CH 144	5720	16.10	17.00	16.00	
	802.11n-HT40 MCS0	CH 102	5510	16.55	17.50	16.00	94.20
		CH 126	5630	15.10	16.00	16.00	
		CH 142	5710	16.86	17.50	16.00	
	802.11ac-VHT20 MCS0	CH 100	5500	16.69	17.50	16.00	96.32
		CH 120	5600	16.36	17.00	16.00	
		CH 144	5720	16.73	17.50	16.00	
	802.11ac-VHT40 MCS0	CH 102	5510	16.52	17.50	16.00	94.20
		CH 126	5630	17.98	18.50	16.00	
		CH 142	5710	16.20	17.00	16.00	

5GHz WLAN ANT 1

5.9GHz WLAN ANT 1	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Power Setting	Duty Cycle %
	802.11a 6Mbps	CH 149	5745	14.72	16.00	13.00	97.20
		CH 157	5785	14.61	16.50	13.00	
		CH 165	5825	14.73	16.50	13.00	
	802.11n-HT20 MCS0	CH 149	5745	14.65	15.50	13.00	97.01
		CH 157	5785	14.51	15.50	13.00	
		CH 165	5825	14.70	15.50	13.00	
	802.11n-HT40 MCS0	CH 151	5755	14.43	15.00	13.00	94.20
		CH 159	5795	14.73	15.50	13.00	
		CH 149	5745	14.05	15.00	13.00	
	802.11ac-VHT20 MCS0	CH 157	5785	14.75	15.50	13.00	97.04
		CH 165	5825	13.80	14.50	13.00	
		CH 151	5755	14.43	15.00	13.00	
	802.11ac-VHT40 MCS0	CH 159	5795	14.34	15.00	13.00	94.29
		CH 159	5795	14.34	15.00	13.00	

Mode	Channel	Frequency (MHz)	Average power (dBm)		
			1Mbps	2Mbps	3Mbps
BR / EDR	CH 00	2402	5.72	2.55	2.69
	CH 39	2441	4.10	0.70	0.53
	CH 76	2480	6.98	3.93	4.11
	Tune-up Limit		7.5	4.5	5
Duty Cycle %			77.07	77.07	77.07

Mode	Channel	Frequency (MHz)	Average power (dBm)		
			GFSK		
LE	CH 00	2402	-4.77		
	CH 19	2440	-5.57		
	CH 39	2480	-4.64		
	Tune-up Limit		1		
Duty Cycle %			85.2		