



REPORT No.: SZ22040332S01

Annex E Conducted Power

Note:

Conducted power unit: dBm

The target power was recorded in the manufacture 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	32.96	33.07	33.01	34.00	23.96	24.07	24.01	25.00	0.17
GPRS 1 Tx slot	32.90	33.06	32.99	34.00	23.90	24.06	23.99	25.00	
GPRS 2 Tx slots	31.75	31.81	31.89	32.50	25.75	25.81	25.89	26.50	0.14
GPRS 3 Tx slots	29.97	30.10	30.07	31.00	25.71	25.84	25.81	26.74	0.13
GPRS 4 Tx slots	28.87	28.89	28.91	29.50	25.87	25.89	25.91	26.50	0.04
EDGE 1 Tx slot	27.69	27.73	27.55	28.50	18.69	18.73	18.55	19.50	0.18
EDGE 2 Tx slots	26.71	26.60	26.44	27.50	20.71	20.60	20.44	21.50	0.27
EDGE 3 Tx slots	24.58	24.43	24.40	25.50	20.32	20.17	20.14	21.24	0.18
EDGE 4 Tx slots	23.28	23.26	23.21	24.00	20.28	20.26	20.21	21.00	0.07
Mode		Max.	33.07			Max.	25.91		
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	28.30	28.34	28.41	29.00	19.30	19.34	19.41	20.00	0.12
GPRS 1 Tx slot	28.31	28.33	28.42	29.00	19.31	19.33	19.42	20.00	
GPRS 2 Tx slots	27.55	27.57	27.68	28.50	21.55	21.57	21.68	22.50	0.13
GPRS 3 Tx slots	25.80	25.84	25.97	26.50	21.54	21.58	21.71	22.24	0.17
GPRS 4 Tx slots	24.66	24.85	24.82	25.50	21.66	21.85	21.82	22.50	0.19
EDGE 1 Tx slot	25.66	25.78	25.74	26.50	16.66	16.78	16.74	17.50	0.12
EDGE 2 Tx slots	24.72	24.81	24.79	25.50	18.72	18.81	18.79	19.50	0.09
EDGE 3 Tx slots	22.61	22.77	22.69	23.50	18.35	18.51	18.43	19.24	0.16
EDGE 4 Tx slots	21.69	21.80	21.76	22.50	18.69	18.80	18.76	19.50	0.11
Mode		Max.	28.42			Max.	21.85		
Attenuator	Cable Loss : 0.8								
Date	4/26								

Band		WCDMA Band II			Tune-up Limit (dBm)	WCDMA Band IV			Tune-up Limit (dBm)	WCDMA Band V			Tune-up Limit (dBm)
TX Channel		9262	9400	9538		1312	1413	1513		4132	4182	4233	
RX Channel		9662	9800	9938		1537	1638	1738		4357	4407	4458	
Frequency (MHz)		1852.4	1880	1907.6		1712.4	1732.6	1752.6		826.4	836.4	846.6	
3GPP Rel 99	RMC 12.2Kbps	20.59	20.62	20.60	21.50	20.12	20.17	20.07	21.00	23.51	23.59	23.46	24.50
3GPP Rel 6	HSDPA Subtest-1	19.53	19.53	19.61	20.00	18.05	18.04	18.02	18.50	21.82	21.86	21.85	22.50
3GPP Rel 6	HSDPA Subtest-2	19.44	19.51	19.54	20.00	18.02	18.05	18.04	18.50	21.80	21.82	21.82	22.50
3GPP Rel 6	HSDPA Subtest-3	18.99	18.97	19.05	20.00	17.55	17.56	17.50	18.50	21.33	21.30	21.35	22.00
3GPP Rel 6	HSDPA Subtest-4	18.89	18.94	19.05	20.00	17.49	17.53	17.54	18.50	21.31	21.28	21.37	22.00
3GPP Rel 6	HSUPA Subtest-1	18.94	18.95	18.99	20.00	17.54	17.52	17.49	18.50	21.28	21.30	21.82	22.00
3GPP Rel 6	HSUPA Subtest-2	19.41	19.47	19.50	20.00	17.99	18.01	17.93	18.50	21.81	21.82	21.89	22.50
3GPP Rel 6	HSUPA Subtest-3	18.49	18.54	18.56	19.00	17.07	17.06	17.07	17.50	20.78	20.82	20.91	21.50
3GPP Rel 6	HSUPA Subtest-4	19.49	19.46	19.57	20.00	18.02	17.98	18.03	18.50	21.78	21.80	21.87	22.50
3GPP Rel 6	HSUPA Subtest-5	18.46	18.58	18.56	19.00	17.00	17.03	16.97	17.50	20.80	20.79	20.85	21.50
3GPP Rel 7	HSPA+ (16QAM) Subtest-1	18.42	18.45	18.54	19.00	17.00	17.06	17.03	17.50	20.76	20.79	20.80	21.50
Attenuator			Cable Loss	0.8		Cable Loss			0.8		Cable Loss	0.8	
Mode			Max.	20.62		Max.			20.17		Max.	23.59	

Band 2 (1900MHz Band) Part 24E							
BW (MHz)	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				18700	18900	19100	24
Frequency (MHz)				1860	1880	1900	
20	QPSK	1	0	23.22	23.26	23.16	24
20	QPSK	1	49	23.14	23.16	23.21	
20	QPSK	1	99	22.94	22.95	22.95	
20	QPSK	50	0	22.38	22.46	22.42	
20	QPSK	50	24	22.35	22.36	22.35	23
20	QPSK	50	50	22.34	22.28	22.37	
20	QPSK	100	0	22.35	22.41	22.37	
20	16QAM	1	0	22.52	22.23	22.19	
20	16QAM	1	49	22.49	22.64	22.59	23
20	16QAM	1	99	22.16	22.23	22.28	
20	16QAM	50	0	21.30	21.25	21.29	
20	16QAM	50	24	21.30	21.24	21.31	
20	16QAM	50	50	21.34	21.16	21.32	22
20	16QAM	100	0	21.29	21.30	21.33	
20	64QAM	1	0	21.39	21.30	21.40	
20	64QAM	1	49	21.63	21.30	21.42	
20	64QAM	1	99	21.35	21.41	21.41	22
20	64QAM	50	0	21.17	21.21	21.21	
20	64QAM	50	24	21.19	21.17	21.20	
20	64QAM	50	50	21.26	21.06	21.19	
20	64QAM	100	0	21.17	21.13	21.18	22
Channel				18675	18900	19125	
Frequency (MHz)				1857.5	1880	1902.5	Tune-up limit (dBm)
15	QPSK	1	0	22.85	23.12	22.93	24
15	QPSK	1	37	23.01	23.07	23.16	
15	QPSK	1	74	22.87	22.82	22.81	
15	QPSK	36	0	22.23	22.20	22.39	
15	QPSK	36	20	22.25	22.27	22.33	23
15	QPSK	36	39	22.30	22.25	22.32	
15	QPSK	75	0	22.24	22.16	22.30	
15	16QAM	1	0	22.44	22.20	22.16	
15	16QAM	1	37	22.40	22.48	22.45	23
15	16QAM	1	74	22.06	22.20	22.17	
15	16QAM	36	0	21.27	21.11	21.26	
15	16QAM	36	20	21.15	21.12	21.19	
15	16QAM	36	39	21.22	21.06	21.24	22
15	16QAM	75	0	21.27	21.24	21.32	
15	64QAM	1	0	21.30	21.20	21.34	
15	64QAM	1	37	21.56	21.54	21.36	
15	64QAM	1	74	21.30	21.28	21.30	22
15	64QAM	36	0	21.13	21.13	21.08	
15	64QAM	36	20	21.05	21.11	21.15	
15	64QAM	36	39	21.16	20.97	21.13	
15	64QAM	75	0	21.09	21.02	21.07	22
Channel				18650	18900	19150	
Frequency (MHz)				1855	1880	1905	Tune-up limit (dBm)
10	QPSK	1	0	22.90	23.15	23.04	24
10	QPSK	1	25	23.01	23.02	23.07	
10	QPSK	1	49	22.86	22.89	22.82	
10	QPSK	25	0	22.33	22.19	22.41	
10	QPSK	25	12	22.31	22.35	22.32	23
10	QPSK	25	25	22.28	22.20	22.23	
10	QPSK	50	0	22.31	22.19	22.24	
10	16QAM	1	0	22.40	22.16	22.10	
10	16QAM	1	25	22.40	22.54	22.50	23
10	16QAM	1	49	22.06	22.20	22.27	
10	16QAM	25	0	21.17	21.22	21.23	
10	16QAM	25	12	21.19	21.16	21.22	
10	16QAM	25	25	21.23	21.09	21.28	22
10	16QAM	50	0	21.19	21.24	21.18	
10	64QAM	1	0	21.25	21.18	21.38	
10	64QAM	1	25	21.49	21.60	21.27	
10	64QAM	1	49	21.22	21.34	21.38	22
10	64QAM	25	0	21.02	21.06	21.10	
10	64QAM	25	12	21.18	21.06	21.13	
10	64QAM	25	25	21.14	21.02	21.12	
10	64QAM	50	0	21.15	21.02	21.09	22
Channel				18625	18900	19175	
Frequency (MHz)				1852.5	1880	1907.5	Tune-up limit (dBm)
5	QPSK	1	0	22.89	23.11	23.05	24
5	QPSK	1	12	23.08	23.15	23.10	
5	QPSK	1	24	22.81	22.94	22.90	
5	QPSK	12	0	22.24	22.21	22.32	
5	QPSK	12	7	22.28	22.24	22.32	23
5	QPSK	12	13	22.23	22.20	22.36	
5	QPSK	25	0	22.26	22.24	22.22	
5	16QAM	1	0	22.46	22.18	22.15	
5	16QAM	1	12	22.35	22.47	22.48	23
5	16QAM	1	24	22.09	22.18	22.19	
5	16QAM	12	0	21.27	21.24	21.27	
5	16QAM	12	7	21.22	21.18	21.24	
5	16QAM	12	13	21.24	21.09	21.22	22
5	16QAM	25	0	21.15	21.16	21.20	
5	64QAM	1	0	21.25	21.27	21.37	
5	64QAM	1	12	21.62	21.61	21.38	
5	64QAM	1	24	21.34	21.37	21.39	22
5	64QAM	12	0	21.09	21.12	21.08	
5	64QAM	12	7	21.13	21.09	21.18	
5	64QAM	12	13	21.12	21.04	21.05	
5	64QAM	25	0	21.11	21.03	21.16	22
Channel				18615	18900	19185	
Frequency (MHz)				1851.5	1880	1908.5	Tune-up limit (dBm)
3	QPSK	1	0	22.88	23.13	23.04	24
3	QPSK	1	8	23.01	23.14	23.12	
3	QPSK	1	14	22.92	22.90	22.85	
3	QPSK	8	0	22.34	22.25	22.31	
3	QPSK	8	4	22.24	22.34	22.30	23
3	QPSK	8	7	22.27	22.27	22.33	
3	QPSK	15	0	22.28	22.23	22.31	

Band 4 (AWS Band) Part 27L (only on channel required)							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				20050	20175	20300	
Frequency (MHz)				1720	1732.5	1745	
20	QPSK	1	0	23.04	23.15	23.00	24
20	QPSK	1	49	23.08	23.05	23.06	
20	QPSK	1	99	22.68	22.65	22.72	
20	QPSK	50	0	22.13	22.35	22.17	
20	QPSK	50	24	22.23	22.13	22.30	23
20	QPSK	50	50	22.20	22.21	22.05	
20	QPSK	100	0	22.09	22.28	22.08	
20	16QAM	1	0	22.10	21.96	22.31	
20	16QAM	1	49	22.08	22.38	22.12	23
20	16QAM	1	99	22.34	21.99	21.95	
20	16QAM	50	0	21.18	21.25	21.21	
20	16QAM	50	24	21.18	21.11	21.16	
20	16QAM	50	50	21.10	21.14	21.00	22
20	16QAM	100	0	21.21	21.08	21.03	
20	64QAM	1	0	21.75	21.54	21.43	
20	64QAM	1	49	21.48	21.73	21.72	
20	64QAM	1	99	21.36	21.70	21.34	22
20	64QAM	50	0	21.11	21.21	21.15	
20	64QAM	50	24	21.06	21.24	21.06	
20	64QAM	50	50	21.08	21.16	21.05	
20	64QAM	100	0	21.25	21.18	21.14	
Channel				20025	20175	20325	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1732.5	1747.5	
15	QPSK	1	0	23.07	23.11	22.93	24
15	QPSK	1	37	23.05	23.09	23.00	
15	QPSK	1	74	22.74	22.88	22.85	
15	QPSK	36	0	22.05	22.06	22.08	
15	QPSK	36	20	22.04	21.93	22.12	23
15	QPSK	36	39	22.01	22.04	21.88	
15	QPSK	75	0	21.98	22.10	21.88	
15	16QAM	1	0	21.92	21.96	22.31	
15	16QAM	1	37	22.02	22.33	22.04	23
15	16QAM	1	74	22.16	21.94	21.98	
15	16QAM	36	0	21.02	21.05	21.10	
15	16QAM	36	20	21.10	21.02	20.98	
15	16QAM	36	39	20.95	21.06	20.88	22
15	16QAM	75	0	21.15	20.88	20.89	
15	64QAM	1	0	21.67	21.58	21.54	
15	64QAM	1	37	21.31	21.61	21.50	
15	64QAM	1	74	21.37	21.55	21.40	22
15	64QAM	36	0	20.94	21.13	21.01	
15	64QAM	36	20	20.94	21.10	20.97	
15	64QAM	36	39	21.00	20.97	20.87	
15	64QAM	75	0	21.10	21.02	21.05	
Channel				20000	20175	20350	Tune-up limit (dBm)
Frequency (MHz)				1715	1732.5	1750	
10	QPSK	1	0	22.89	23.09	22.91	24
10	QPSK	1	25	23.08	22.90	23.01	
10	QPSK	1	49	22.77	22.73	22.72	
10	QPSK	25	0	21.99	22.06	22.13	
10	QPSK	25	12	22.20	22.02	22.17	23
10	QPSK	25	25	22.19	22.13	22.00	
10	QPSK	50	0	22.00	22.08	22.07	
10	16QAM	1	0	22.06	22.08	22.23	
10	16QAM	1	25	22.03	22.35	22.05	23
10	16QAM	1	49	22.20	21.92	21.97	
10	16QAM	25	0	21.16	21.23	21.15	
10	16QAM	25	12	21.12	21.01	21.07	
10	16QAM	25	25	21.06	20.99	20.93	22
10	16QAM	50	0	21.10	21.06	20.97	
10	64QAM	1	0	21.68	21.55	21.41	
10	64QAM	1	25	21.42	21.71	21.62	
10	64QAM	1	49	21.29	21.57	21.39	22
10	64QAM	25	0	20.96	21.13	21.12	
10	64QAM	25	12	20.91	21.17	20.95	
10	64QAM	25	25	20.97	21.10	21.01	
10	64QAM	50	0	21.19	21.12	21.10	
Channel				19975	20175	20375	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1732.5	1752.5	
5	QPSK	1	0	23.03	23.04	22.91	24
5	QPSK	1	12	23.00	22.91	22.85	
5	QPSK	1	24	22.76	22.84	22.69	
5	QPSK	12	0	22.00	21.92	22.05	
5	QPSK	12	7	22.13	21.93	22.11	23
5	QPSK	12	13	22.00	22.09	21.93	
5	QPSK	25	0	21.98	22.08	21.92	
5	16QAM	1	0	21.96	22.08	22.18	
5	16QAM	1	12	21.93	22.28	21.93	23
5	16QAM	1	24	22.13	21.95	21.83	
5	16QAM	12	0	21.08	21.16	21.00	
5	16QAM	12	7	20.97	20.95	20.95	
5	16QAM	12	13	20.93	20.98	20.82	22
5	16QAM	25	0	21.12	20.98	20.87	
5	64QAM	1	0	21.59	21.50	21.33	
5	64QAM	1	12	21.35	21.51	21.59	
5	64QAM	1	24	21.25	21.48	21.30	22
5	64QAM	12	0	20.89	21.04	21.05	
5	64QAM	12	7	20.87	21.08	20.93	
5	64QAM	12	13	20.91	20.99	20.87	
5	64QAM	25	0	21.06	20.97	21.03	
Channel				19965	20175	20385	Tune-up limit (dBm)
Frequency (MHz)				1711.5	1732.5	1753.5	
3	QPSK	1	0	22.91	22.95	22.86	24
3	QPSK	1	8	23.09	23.06	22.94	
3	QPSK	8	0	21.96	22.01	21.99	
3	QPSK	8	4	22.13	21.92	22.10	
3	QPSK	8	7	22.02	22.00	21.81	23
3	QPSK	15	0	21.89	21.99	21.84	

3	16QAM	1	0	22.46	22.20	22.06	23
3	16QAM	1	8	22.38	22.49	22.47	
3	16QAM	1	14	22.05	22.12	22.20	
3	16QAM	8	0	21.20	21.22	21.24	22
3	16QAM	8	4	21.15	21.17	21.24	
3	16QAM	8	7	21.20	21.01	21.31	
3	16QAM	15	0	21.20	21.22	21.26	22
3	64QAM	1	0	21.28	21.26	21.38	
3	64QAM	1	8	21.50	21.64	21.29	
3	64QAM	1	14	21.24	21.29	21.37	22
3	64QAM	8	0	21.10	21.16	21.14	
3	64QAM	8	4	21.16	21.05	21.06	
3	64QAM	8	7	21.23	21.02	21.13	22
3	64QAM	15	0	21.03	21.09	21.09	
Channel				18607	18900	19193	Tune-up limit (dBm)
Frequency (MHz)				1850.7	1880	1909.3	
1.4	QPSK	1	0	22.84	23.18	22.92	24
1.4	QPSK	1	3	23.13	23.08	23.10	
1.4	QPSK	1	5	22.88	22.94	22.88	
1.4	QPSK	3	0	22.83	23.03	22.87	23
1.4	QPSK	3	1	23.08	22.95	23.03	
1.4	QPSK	3	3	22.85	22.91	22.80	
1.4	QPSK	6	0	22.23	22.15	22.30	23
1.4	16QAM	1	0	22.40	22.09	22.07	
1.4	16QAM	1	3	22.38	22.48	22.44	
1.4	16QAM	1	5	22.15	22.11	22.23	22
1.4	16QAM	3	0	22.28	22.20	22.19	
1.4	16QAM	3	1	22.24	22.16	22.18	
1.4	16QAM	3	3	22.22	22.09	22.21	22
1.4	16QAM	6	0	21.26	21.19	21.27	
1.4	64QAM	1	0	21.30	21.19	21.34	
1.4	64QAM	1	3	21.55	21.57	21.32	22
1.4	64QAM	1	5	21.22	21.38	21.37	
1.4	64QAM	3	0	21.11	21.08	21.07	
1.4	64QAM	3	1	21.15	21.13	21.06	22
1.4	64QAM	3	3	21.12	21.04	21.17	
1.4	64QAM	6	0	21.08	21.08	21.13	

3	16QAM	1	0	21.96	22.04	22.24	23
3	16QAM	1	8	21.86	22.26	21.94	
3	16QAM	1	14	22.18	21.79	21.85	
3	16QAM	8	0	20.99	21.15	21.02	22
3	16QAM	8	4	20.95	20.91	21.01	
3	16QAM	8	7	20.96	21.02	20.86	
3	16QAM	15	0	21.05	20.97	20.79	22
3	64QAM	1	0	21.57	21.44	21.38	
3	64QAM	1	8	21.32	21.54	21.59	
3	64QAM	1	14	21.30	21.47	21.38	22
3	64QAM	8	0	20.89	21.04	20.95	
3	64QAM	8	4	20.87	21.01	20.82	
3	64QAM	8	7	20.96	20.95	20.81	22
3	64QAM	15	0	21.13	20.98	20.96	
Channel				19957	20175	20393	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1732.5	1754.3	
1.4	QPSK	1	0	22.73	23.08	22.71	24
1.4	QPSK	1	3	22.99	23.03	22.86	
1.4	QPSK	1	5	22.87	22.83	22.62	
1.4	QPSK	3	0	22.63	22.65	22.60	23
1.4	QPSK	3	1	22.79	22.89	22.90	
1.4	QPSK	3	3	22.51	22.46	22.53	
1.4	QPSK	6	0	21.89	22.00	22.00	23
1.4	16QAM	1	0	21.98	21.87	22.17	
1.4	16QAM	1	3	21.99	22.29	22.01	
1.4	16QAM	1	5	22.16	21.89	21.85	22
1.4	16QAM	3	0	21.96	22.04	22.02	
1.4	16QAM	3	1	22.01	21.95	22.00	
1.4	16QAM	3	3	22.00	21.96	21.79	22
1.4	16QAM	6	0	21.11	20.87	20.81	
1.4	64QAM	1	0	21.57	21.51	21.25	
1.4	64QAM	1	3	21.31	21.52	21.57	22
1.4	64QAM	1	5	21.34	21.44	21.33	
1.4	64QAM	3	0	21.03	21.03	21.05	
1.4	64QAM	3	1	20.99	21.15	20.87	22
1.4	64QAM	3	3	20.86	21.07	20.96	
1.4	64QAM	6	0	21.07	21.00	21.05	

Band 5 (Celluar Band) Part 22H(only on channel required)							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				20450	20525	20600	24.5
Frequency (MHz)				829	836.5	844	
10	QPSK	1	0	23.46	23.65	23.45	
10	QPSK	1	25	23.59	23.62	23.57	
10	QPSK	1	49	23.51	23.56	23.50	23.5
10	QPSK	25	0	22.62	22.72	22.63	
10	QPSK	25	12	22.64	22.63	22.59	
10	QPSK	25	25	22.59	22.60	22.54	
10	QPSK	50	0	22.51	22.69	22.63	23.5
10	16QAM	1	0	22.58	22.38	22.23	
10	16QAM	1	25	22.35	22.66	22.23	
10	16QAM	1	49	22.61	22.57	22.42	
10	16QAM	25	0	21.65	21.65	21.51	22.5
10	16QAM	25	12	21.73	21.65	21.51	
10	16QAM	25	25	21.72	21.62	21.42	
10	16QAM	50	0	21.52	21.63	21.59	
10	64QAM	1	0	21.56	21.42	21.15	22.5
10	64QAM	1	25	21.35	21.59	21.31	
10	64QAM	1	49	21.60	21.30	21.60	
10	64QAM	25	0	21.62	21.57	21.62	
10	64QAM	25	12	21.64	21.60	21.70	22.5
10	64QAM	25	25	21.61	21.63	21.57	
10	64QAM	50	0	21.61	21.63	21.60	
Channel				20425	20525	20625	Tune-up limit (dBm)
Frequency (MHz)				826.5	836.5	846.5	24.5
5	QPSK	1	0	23.32	23.60	23.43	
5	QPSK	1	12	23.54	23.60	23.56	
5	QPSK	1	24	23.49	23.48	23.47	
5	QPSK	12	0	22.55	22.66	22.50	23.5
5	QPSK	12	7	22.56	22.51	22.46	
5	QPSK	12	13	22.51	22.56	22.45	
5	QPSK	25	0	22.69	22.65	22.51	
5	16QAM	1	0	22.53	22.32	22.16	23.5
5	16QAM	1	12	22.29	22.56	22.19	
5	16QAM	1	24	22.54	22.49	22.36	
5	16QAM	12	0	21.58	21.62	21.50	
5	16QAM	12	7	21.65	21.51	21.42	22.5
5	16QAM	12	13	21.70	21.60	21.29	
5	16QAM	25	0	21.44	21.59	21.50	
5	64QAM	1	0	21.51	21.48	21.45	
5	64QAM	1	12	21.21	21.48	21.24	22.5
5	64QAM	1	24	21.58	21.16	21.49	
5	64QAM	12	0	21.52	21.51	21.61	
5	64QAM	12	7	21.54	21.49	21.62	
5	64QAM	12	13	21.49	21.50	21.43	22.5
5	64QAM	25	0	21.52	21.62	21.56	
Channel				20415	20525	20635	Tune-up limit (dBm)
Frequency (MHz)				825.5	836.5	847.5	24.5
3	QPSK	1	0	23.35	23.53	23.39	
3	QPSK	1	8	23.56	23.63	23.44	
3	QPSK	1	14	23.41	23.48	23.38	
3	QPSK	8	0	22.47	22.63	22.55	23.5
3	QPSK	8	4	22.62	22.52	22.48	
3	QPSK	8	7	22.52	22.49	22.50	
3	QPSK	15	0	22.68	22.55	22.48	
3	16QAM	1	0	22.45	22.34	22.39	23.5
3	16QAM	1	8	22.32	22.60	22.20	
3	16QAM	1	14	22.52	22.52	22.38	
3	16QAM	8	0	21.60	21.50	21.36	
3	16QAM	8	4	21.60	21.56	21.40	22.5
3	16QAM	8	7	21.71	21.54	21.37	
3	16QAM	15	0	21.50	21.60	21.50	
3	64QAM	1	0	21.42	21.31	21.33	
3	64QAM	1	8	21.34	21.54	21.22	22.5
3	64QAM	1	14	21.57	21.21	21.55	
3	64QAM	8	0	21.59	21.56	21.58	
3	64QAM	8	4	21.49	21.48	21.60	
3	64QAM	8	7	21.47	21.49	21.47	22.5
3	64QAM	15	0	21.58	21.57	21.53	
Channel				20407	20525	20643	Tune-up limit (dBm)
Frequency (MHz)				824.7	836.5	848.3	24.5
1.4	QPSK	1	0	23.32	23.55	23.37	
1.4	QPSK	1	3	23.47	23.57	23.42	
1.4	QPSK	1	5	23.44	23.51	23.36	
1.4	QPSK	3	0	23.41	23.60	23.37	23.5
1.4	QPSK	3	1	23.52	23.63	23.46	
1.4	QPSK	3	3	23.48	23.52	23.47	
1.4	QPSK	6	0	22.69	22.62	22.56	
1.4	16QAM	1	0	22.46	22.34	22.22	23.5
1.4	16QAM	1	3	22.32	22.54	22.08	
1.4	16QAM	1	5	22.52	22.51	22.30	
1.4	16QAM	3	0	22.24	22.17	22.12	
1.4	16QAM	3	1	22.22	22.14	22.15	22.5
1.4	16QAM	3	3	22.25	22.24	22.14	
1.4	16QAM	6	0	21.38	21.60	21.55	
1.4	64QAM	1	0	21.42	21.41	21.27	
1.4	64QAM	1	3	21.25	21.55	21.20	22.5
1.4	64QAM	1	5	21.54	21.28	21.57	
1.4	64QAM	3	0	21.54	21.68	21.58	
1.4	64QAM	3	1	21.61	21.50	21.69	
1.4	64QAM	3	3	21.55	21.58	21.55	22.5
1.4	64QAM	6	0	21.48	21.54	21.51	

Band 7 (2600MHz Band) Part 27							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				20850	21100	21350	24
Frequency (MHz)				2510	2535	2560	
20	QPSK	1	0	22.93	23.20	22.96	
20	QPSK	1	49	23.19	23.12	23.15	
20	QPSK	1	99	22.88	22.85	22.91	23
20	QPSK	50	0	22.39	22.45	22.37	
20	QPSK	50	24	22.24	22.32	22.22	
20	QPSK	50	50	22.28	22.21	22.14	
20	QPSK	100	0	22.27	22.43	22.26	23
20	16QAM	1	0	22.27	22.30	22.25	
20	16QAM	1	49	22.46	22.45	22.44	
20	16QAM	1	99	22.09	22.44	22.36	
20	16QAM	50	0	21.14	21.28	21.21	22
20	16QAM	50	24	21.29	21.21	21.26	
20	16QAM	50	50	21.27	21.33	21.08	
20	16QAM	100	0	21.14	21.24	21.22	
20	64QAM	1	0	21.75	21.72	21.56	22
20	64QAM	1	49	21.79	21.82	21.73	
20	64QAM	1	99	21.49	21.48	21.48	
20	64QAM	50	0	21.12	21.16	21.26	
20	64QAM	50	24	21.24	21.28	21.29	22
20	64QAM	50	50	21.24	21.38	21.09	
20	64QAM	100	0	21.15	21.32	21.28	
Channel				20825	21100	21375	Tune-up limit (dBm)
Frequency (MHz)				2507.5	2535	2562.5	24
15	QPSK	1	0	22.91	23.11	23.05	
15	QPSK	1	37	23.05	23.02	23.11	
15	QPSK	1	74	22.77	22.80	22.78	23
15	QPSK	36	0	22.02	22.14	22.28	
15	QPSK	36	20	22.09	22.19	22.14	
15	QPSK	36	39	22.21	22.10	22.13	
15	QPSK	75	0	22.12	22.20	22.20	23
15	16QAM	1	0	22.17	22.22	22.19	
15	16QAM	1	37	22.38	22.45	22.40	
15	16QAM	1	74	22.07	22.35	22.33	
15	16QAM	36	0	21.11	21.17	21.18	22
15	16QAM	36	20	21.28	21.15	21.25	
15	16QAM	36	39	21.21	21.28	20.95	
15	16QAM	75	0	21.13	21.09	21.09	
15	64QAM	1	0	21.49	21.44	21.36	22
15	64QAM	1	37	21.53	21.59	21.49	
15	64QAM	1	74	21.24	21.22	21.26	
15	64QAM	36	0	21.09	21.06	21.23	
15	64QAM	36	20	21.12	21.23	21.22	22
15	64QAM	36	39	21.16	21.33	21.07	
15	64QAM	75	0	21.14	21.28	21.22	
Channel				20800	21100	21400	Tune-up limit (dBm)
Frequency (MHz)				2505	2535	2565	24
10	QPSK	1	0	22.92	23.15	22.99	
10	QPSK	1	25	23.04	23.07	23.07	
10	QPSK	1	49	22.76	22.81	22.73	23
10	QPSK	25	0	21.96	22.11	22.24	
10	QPSK	25	12	22.17	22.21	22.18	
10	QPSK	25	25	22.20	22.11	22.04	23
10	QPSK	50	0	22.02	22.16	22.11	
10	16QAM	1	0	22.24	22.21	22.19	
10	16QAM	1	25	22.34	22.37	22.44	22
10	16QAM	1	49	22.04	22.29	22.23	
10	16QAM	25	0	21.00	21.26	21.12	
10	16QAM	25	12	21.24	21.09	21.14	
10	16QAM	25	25	21.14	21.27	20.93	22
10	16QAM	50	0	21.04	21.13	21.07	
10	64QAM	1	0	21.43	21.50	21.31	
10	64QAM	1	25	21.59	21.59	21.45	
10	64QAM	1	49	21.18	21.28	21.19	22
10	64QAM	25	0	21.04	21.03	21.25	
10	64QAM	25	12	21.23	21.26	21.16	
10	64QAM	25	25	21.22	21.31	20.97	
10	64QAM	50	0	21.07	21.18	21.21	
Channel				20775	21100	21425	Tune-up limit (dBm)
Frequency (MHz)				2502.5	2535	2567.5	24
5	QPSK	1	0	22.96	23.10	22.90	
5	QPSK	1	12	23.08	23.03	23.13	
5	QPSK	1	24	22.88	22.97	22.84	23
5	QPSK	12	0	22.04	22.11	22.36	
5	QPSK	12	7	22.19	22.22	22.11	
5	QPSK	12	13	22.24	22.20	22.06	23
5	QPSK	25	0	22.03	22.11	22.17	
5	16QAM	1	0	22.22	22.23	22.14	
5	16QAM	1	12	22.40	22.41	22.42	23
5	16QAM	1	24	22.07	22.40	22.33	
5	16QAM	12	0	21.06	21.22	21.08	
5	16QAM	12	7	21.24	21.18	21.16	22
5	16QAM	12	13	21.17	21.28	20.98	
5	16QAM	25	0	21.06	21.10	21.17	
5	64QAM	1	0	21.49	21.48	21.29	22
5	64QAM	1	12	21.57	21.53	21.53	
5	64QAM	1	24	21.15	21.17	21.18	
5	64QAM	12	0	20.97	21.14	21.24	22
5	64QAM	12	7	21.14	21.13	21.16	
5	64QAM	12	13	21.23	21.33	20.94	
5	64QAM	25	0	21.02	21.30	21.16	

Band 12 (700MHz Low Band) Part 27F(only on channel required)									
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)		
Channel				23090	23095	23130			
Frequency (MHz)				704	707.5	711			
10	QPSK	1	0	23.44	23.61	23.40	24.5		
10	QPSK	1	25	23.56	23.55	23.52			
10	QPSK	1	49	23.54	23.50	23.51			
10	QPSK	25	0	22.41	22.58	22.57	23.5		
10	QPSK	25	12	22.53	22.50	22.50			
10	QPSK	25	25	22.50	22.47	22.47			
10	QPSK	50	0	22.56	22.69	22.47	23.5		
10	16QAM	1	0	22.56	22.57	22.64			
10	16QAM	1	25	22.41	22.75	22.74			
10	16QAM	1	49	22.74	22.36	22.39	22.5		
10	16QAM	25	0	21.73	21.54	21.58			
10	16QAM	25	12	21.66	21.62	21.49			
10	16QAM	25	25	21.68	21.59	21.70	22.5		
10	16QAM	50	0	21.63	21.51	21.53			
10	64QAM	1	0	21.41	21.46	21.68			
10	64QAM	1	25	21.64	21.70	21.66	22.5		
10	64QAM	1	49	21.61	21.59	21.41			
10	64QAM	25	0	21.60	21.49	21.61			
10	64QAM	25	12	21.76	21.63	21.62	22.5		
10	64QAM	25	25	21.64	21.68	21.58			
10	64QAM	50	0	21.66	21.58	21.54			
Channel				23035	23095	23155	Tune-up limit (dBm)		
Frequency (MHz)				701.5	707.5	713.5			
5	QPSK	1	0	23.41	23.46	23.33	24.5		
5	QPSK	1	12	23.43	23.56	23.38			
5	QPSK	1	24	23.42	23.39	23.40			
5	QPSK	12	0	22.60	22.35	22.55	23.5		
5	QPSK	12	7	22.61	22.59	22.54			
5	QPSK	12	13	22.54	22.49	22.52			
5	QPSK	25	0	22.63	22.46	22.56	23.5		
5	16QAM	1	0	22.45	22.49	22.54			
5	16QAM	1	12	22.34	22.54	22.56			
5	16QAM	1	24	22.67	22.33	22.35	22.5		
5	16QAM	12	0	21.59	21.44	21.43			
5	16QAM	12	7	21.57	21.56	21.36			
5	16QAM	12	13	21.66	21.51	21.56	22.5		
5	16QAM	25	0	21.58	21.48	21.52			
5	64QAM	1	0	21.29	21.36	21.67			
5	64QAM	1	12	21.56	21.63	21.52	22.5		
5	64QAM	1	24	21.60	21.56	21.39			
5	64QAM	12	0	21.57	21.40	21.54			
5	64QAM	12	7	21.74	21.57	21.47	22.5		
5	64QAM	12	13	21.52	21.64	21.43			
5	64QAM	25	0	21.64	21.47	21.48			
Channel				23025	23095	23165	Tune-up limit (dBm)		
Frequency (MHz)				700.5	707.5	714.5			
3	QPSK	1	0	23.34	23.37	23.31	24.5		
3	QPSK	1	8	23.42	23.56	23.42			
3	QPSK	1	14	23.43	23.41	23.45			
3	QPSK	8	0	22.65	22.46	22.43	23.5		
3	QPSK	8	4	22.56	22.58	22.51			
3	QPSK	8	7	22.63	22.46	22.51			
3	QPSK	15	0	22.57	22.52	22.59	23.5		
3	16QAM	1	0	22.16	22.34	22.55			
3	16QAM	1	8	22.28	22.48	22.54			
3	16QAM	1	14	22.60	22.22	22.29	22.5		
3	16QAM	8	0	21.66	21.47	21.52			
3	16QAM	8	4	21.58	21.54	21.39			
3	16QAM	8	7	21.56	21.57	21.66	22.5		
3	16QAM	15	0	21.60	21.41	21.50			
3	64QAM	1	0	21.30	21.42	21.56			
3	64QAM	1	8	21.60	21.69	21.55	22.5		
3	64QAM	1	14	21.60	21.45	21.37			
3	64QAM	8	0	21.50	21.38	21.48			
3	64QAM	8	4	21.70	21.58	21.56	22.5		
3	64QAM	8	7	21.57	21.65	21.56			
3	64QAM	15	0	21.65	21.52	21.47			
Channel				23017	23095	23173	Tune-up limit (dBm)		
Frequency (MHz)				699.7	707.5	715.3			
1.4	QPSK	1	0	23.35	23.40	23.28	24.5		
1.4	QPSK	1	3	23.52	23.54	23.37			
1.4	QPSK	1	5	23.49	23.49	23.39			
1.4	QPSK	3	0	23.37	23.34	23.38	23.5		
1.4	QPSK	3	1	23.44	23.55	23.49			
1.4	QPSK	3	3	23.43	23.38	23.50			
1.4	QPSK	6	0	22.66	22.41	22.49	23.5		
1.4	16QAM	1	0	22.38	22.51	22.55			
1.4	16QAM	1	3	22.37	22.54	22.52			
1.4	16QAM	1	5	22.68	22.36	22.34	23.5		
1.4	16QAM	3	0	22.28	22.39	22.49			
1.4	16QAM	3	1	22.40	22.66	22.59			
1.4	16QAM	3	3	22.59	22.34	22.34	22.5		
1.4	16QAM	6	0	21.50	21.44	21.40			
1.4	64QAM	1	0	21.02	21.14	21.29			
1.4	64QAM	1	3	21.32	21.43	21.40	22.5		
1.4	64QAM	1	5	21.35	21.27	21.03			
1.4	64QAM	3	0	21.52	21.40	21.56			
1.4	64QAM	3	1	21.75	21.51	21.60	22.5		
1.4	64QAM	3	3	21.50	21.54	21.54			
1.4	64QAM	6	0	21.60	21.65	21.48			

Band 13(700MHz Band)							
Part 27F							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				23230			
Frequency (MHz)				782			
10	QPSK	1	0		23.66		24.5
10	QPSK	1	25		23.59		
10	QPSK	1	49		23.50		
10	QPSK	25	0		22.56		23.5
10	QPSK	25	12		22.51		
10	QPSK	25	25		22.34		
10	QPSK	50	0		22.32		23.5
10	16QAM	1	0		22.58		
10	16QAM	1	25		22.38		
10	16QAM	1	49		22.58		23.5
10	16QAM	25	0		21.51		
10	16QAM	25	12		21.59		
10	16QAM	25	25		21.60		22.5
10	16QAM	50	0		21.65		
10	64QAM	1	0		21.64		
10	64QAM	1	25		21.79		22.5
10	64QAM	1	49		21.74		
10	64QAM	25	0		21.73		
10	64QAM	25	12		21.59		22.5
10	64QAM	25	25		21.56		
10	64QAM	50	0		21.61		
Channel				23205	23230	23255	Tune-up limit (dBm)
Frequency (MHz)				779.5	782	784.5	
5	QPSK	1	0	23.54	23.53	23.60	24.5
5	QPSK	1	12	23.52	23.51	23.46	
5	QPSK	1	24	23.39	23.43	23.41	
5	QPSK	12	0	22.49	22.50	22.45	23.5
5	QPSK	12	7	22.57	22.48	22.51	
5	QPSK	12	13	22.60	22.60	22.62	
5	QPSK	25	0	22.52	22.63	22.65	23.5
5	16QAM	1	0	22.89	22.94	22.90	
5	16QAM	1	12	22.63	22.69	22.67	
5	16QAM	1	24	22.57	22.56	22.73	23.5
5	16QAM	12	0	21.46	21.36	21.36	
5	16QAM	12	7	21.58	21.58	21.50	
5	16QAM	12	13	21.52	21.58	21.51	22.5
5	16QAM	25	0	21.50	21.54	21.64	
5	64QAM	1	0	21.63	21.63	21.59	
5	64QAM	1	12	21.77	21.66	21.65	22.5
5	64QAM	1	24	21.61	21.61	21.72	
5	64QAM	12	0	21.64	21.62	21.61	
5	64QAM	12	7	21.54	21.49	21.48	22.5
5	64QAM	12	13	21.41	21.49	21.46	
5	64QAM	25	0	21.58	21.55	21.47	

Band 17 (700MHz Band)							
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	23.50	23.78	23.56	24.5
10	QPSK	1	25	23.73	23.63	23.70	
10	QPSK	1	49	23.52	23.53	23.59	
10	QPSK	25	0	22.58	22.69	22.58	23.5
10	QPSK	25	12	22.64	22.61	22.62	
10	QPSK	25	25	22.55	22.61	22.60	
10	QPSK	50	0	22.58	22.68	22.64	23.5
10	16QAM	1	0	22.91	22.94	22.92	
10	16QAM	1	25	22.82	22.97	22.74	
10	16QAM	1	49	22.66	22.77	22.72	22.5
10	16QAM	25	0	21.56	21.68	21.51	
10	16QAM	25	12	21.63	21.59	21.59	
10	16QAM	25	25	21.67	21.68	21.67	22.5
10	16QAM	50	0	21.60	21.58	21.71	
10	64QAM	1	0	21.60	21.65	21.61	
10	64QAM	1	25	21.59	21.63	21.60	22.5
10	64QAM	1	49	21.66	21.64	21.55	
10	64QAM	25	0	21.48	21.55	21.58	
10	64QAM	25	12	21.67	21.61	21.71	22.5
10	64QAM	25	25	21.61	21.60	21.65	
10	64QAM	50	0	21.64	21.59	21.56	
Channel				23755	23790	23825	Tune-up limit (dBm)
Frequency (MHz)				706.5	710	713.5	
5	QPSK	1	0	23.42	23.64	23.50	24.5
5	QPSK	1	12	23.62	23.36	23.67	
5	QPSK	1	24	23.45	23.50	23.55	
5	QPSK	12	0	22.50	22.62	22.52	23.5
5	QPSK	12	7	22.53	22.56	22.55	
5	QPSK	12	13	22.44	22.50	22.68	
5	QPSK	25	0	22.54	22.57	22.55	23.5
5	16QAM	1	0	22.90	22.80	22.91	
5	16QAM	1	12	22.85	22.95	22.65	
5	16QAM	1	24	22.54	22.68	22.69	22.5
5	16QAM	12	0	21.52	21.55	21.49	
5	16QAM	12	7	21.59	21.54	21.51	
5	16QAM	12	13	21.66	21.58	21.62	22.5
5	16QAM	25	0	21.46	21.44	21.56	
5	64QAM	1	0	21.47	21.52	21.60	
5	64QAM	1	12	21.50	21.57	21.52	22.5
5	64QAM	1	24	21.65	21.60	21.46	
5	64QAM	12	0	21.45	21.49	21.53	
5	64QAM	12	7	21.63	21.50	21.69	22.5
5	64QAM	12	13	21.54	21.45	21.50	
5	64QAM	25	0	21.51	21.57	21.47	

2.4GHz WLAN

2.4GHz WLAN	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Power Setting	Duty Cycle %
	802.11b 1Mbps	CH 1	2412	18.32	19.00	20.5	99.52
		CH 7	2442	18.53	19.00	20.5	
		CH 13	2472	17.92	18.50	20.5	
	802.11g 6Mbps	CH 1	2412	16.26	17.00	18.5	96.88
		CH 7	2442	16.49	17.00	18.5	
		CH 13	2472	15.68	16.00	18.5	
	802.11n-HT20 MCS0	CH 1	2412	15.67	16.00	18.0	97.03
		CH 7	2442	15.82	16.00	18.0	
		CH 13	2472	15.14	16.00	18.0	
	802.11n-HT40 MCS0	CH 1	2412	11.12	12.00	13.0	93.64
		CH 7	2442	11.00	12.00	13.0	
		CH 13	2472	10.89	11.50	13.0	

5.2GHz 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	15.76	16.00	17.0	96.86
		CH 44	5220	16.00	16.50	17.0	
		CH 48	5240	16.10	16.50	17.0	
	802.11n-HT20 MCS0	CH 36	5180	14.61	15.00	16.0	96.65
		CH 44	5220	14.75	15.00	16.0	
		CH 48	5240	14.81	15.00	16.0	
	802.11n-HT40 MCS0	CH 38	5190	14.50	15.00	16.0	93.37
		CH 46	5230	14.73	15.00	16.0	
		CH 36	5180	10.88	11.00	12.5	96.68
	802.11ac-VHT20 MCS0	CH 44	5220	11.03	12.00	12.5	
		CH 48	5240	11.15	12.00	12.5	
	802.11ac-VHT40 MCS0	CH 38	5190	10.80	11.00	12.5	93.68
		CH 46	5230	11.04	12.00	12.5	
		CH 42	5210	10.79	11.00	12.5	88.04

5.8GHz WLAN ANT 1

5.8GHz WLAN ANT 1	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Power Setting	Duty Cycle %
	802.11a MCS0	CH 149	5745	16.61	17.00	17.0	96.86
		CH 157	5785	16.51	17.00	17.0	
		CH 165	5825	15.69	16.50	17.0	
	802.11n-HT20 MCS0	CH 149	5745	15.43	16.00	16.0	96.65
		CH 157	5785	15.30	16.00	16.0	
		CH 165	5825	14.68	15.00	16.0	
	802.11n-HT40 MCS0	CH 151	5755	15.21	16.00	16.0	93.37
		CH 159	5795	15.00	16.00	16.0	
	802.11ac-VHT20 MCS0	CH 149	5745	11.64	12.00	16.0	96.68
		CH 157	5785	11.58	12.00	12.5	
		CH 165	5825	10.83	11.00	12.5	
	802.11ac-VHT40 MCS0	CH 151	5755	11.62	12.00	12.5	93.68
		CH 159	5795	11.28	12.00	12.5	
	802.11ac-VHT80 MCS0	CH 155	5775	11.40	12.00	12.5	88.04

Mode	Channel	Frequency (MHz)	Average power (dBm)		
			1Mbps	2Mbps	3Mbps
BR / EDR	CH 00	2402	7.29	3.99	4.10
	CH 39	2441	8.63	5.92	6.12
	CH 78	2480	9.03	6.13	6.25
Tune-up Limit			9.5	7	7
Duty Cycle %			76.8	76.8	76.8

Mode	Channel	Frequency (MHz)	Average power (dBm)		
			1Mbps	2Mbps	3Mbps
LE	CH 00	2402	-6.27	-9.26	NA
	CH 19	2440	-6.08	-9.11	NA
	CH 39	2480	-6.30	-9.24	NA
Tune-up Limit			0.5	0.5	NA
Duty Cycle %			61.34	31.85	NA