



REPORT No.: SZ22010101S01

## Annex E Conducted Power

**Conducted Power**

GSM850 TX Channel	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)	Ch Delta > 0.5
	128	189	251		128	189	251		
Frequency (MHz)	824.2	836.4	848.8		824.2	836.4	848.8		
GSM 1 Tx slot	32.69	32.76	32.68	33.50	23.69	23.76	23.68	24.50	0.09
GPRS 1 Tx slot	32.69	32.77	32.69	33.50	23.69	23.77	23.69	24.50	
GPRS 2 Tx slots	31.52	31.68	31.55	32.50	25.52	25.68	25.55	26.50	
GPRS 3 Tx slots	29.72	29.84	29.81	30.50	25.46	25.58	25.55	26.24	
GPRS 4 Tx slots	28.65	28.66	28.61	29.50	25.65	25.66	25.61	26.50	0.05
EDGE 1 Tx slot	27.08	27.11	27.06	28.00	18.08	18.11	18.06	19.00	0.05
EDGE 2 Tx slots	25.41	25.50	25.44	26.00	19.41	19.50	19.44	20.00	0.09
EDGE 3 Tx slots	22.39	22.47	22.56	23.00	18.13	18.21	18.30	18.74	0.17
EDGE 4 Tx slots	21.36	21.34	21.22	22.00	18.36	18.34	18.22	19.00	0.14
Mode		Max.	32.77			Max.	25.68		
Attenuator	Cable Loss : 0.6								

GSM1900 TX Channel	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)	Ch Delta > 0.5
	512	661	810		512	661	810		
Frequency (MHz)	1850.2	1880	1909.8		1850.2	1880	1909.8		
GSM 1 Tx slot	30.26	30.31	30.29	31.00	21.26	21.31	21.29	22.00	0.07
GPRS 1 Tx slot	30.27	30.33	30.30	31.00	21.27	21.33	21.30	22.00	
GPRS 2 Tx slots	29.51	29.62	29.58	30.00	23.51	23.62	23.58	24.00	
GPRS 3 Tx slots	27.48	27.56	27.51	28.00	23.22	23.30	23.25	23.74	
GPRS 4 Tx slots	26.44	26.59	26.47	27.00	23.44	23.59	23.47	24.00	0.15
EDGE 1 Tx slot	26.61	26.78	26.66	27.00	17.61	17.78	17.66	18.00	0.17
EDGE 2 Tx slots	25.39	25.46	25.41	26.00	19.39	19.46	19.41	20.00	0.07
EDGE 3 Tx slots	22.49	22.66	22.57	23.00	18.23	18.40	18.31	18.74	0.17
EDGE 4 Tx slots	20.71	20.81	20.74	21.00	17.71	17.81	17.74	18.00	0.10
Mode		Max.	30.33			Max.	23.62		
Attenuator	Cable Loss : 0.8								

Band TX Channel	WCDMA Band II			Tune-up Limit (dBm)	WCDMA Band IV			Tune-up Limit (dBm)	WCDMA Band V			Tune-up Limit (dBm)
	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	23.04	23.11	23.07	24.00	22.41	22.51	22.39	24.00	22.15	22.26	22.15	23.00
3GPP Rel 6 HSDPA Subtest-1	22.67	22.48	22.92	23.50	22.20	22.25	22.20	23.00	22.22	22.18	22.16	23.00
3GPP Rel 6 HSDPA Subtest-2	22.54	22.45	22.82	23.50	22.39	22.35	22.32	23.00	22.16	22.15	22.14	23.00
3GPP Rel 6 HSDPA Subtest-3	22.07	21.92	22.30	23.00	21.98	21.92	21.81	22.50	21.88	21.84	21.82	22.50
3GPP Rel 6 HSDPA Subtest-4	22.08	21.98	22.25	23.00	21.90	21.88	21.79	22.50	21.89	21.85	21.81	22.50
3GPP Rel 6 HSUPA Subtest-1	22.00	22.37	22.18	23.00	21.83	21.75	21.70	22.50	21.88	21.84	21.95	22.50
3GPP Rel 6 HSUPA Subtest-2	22.48	22.38	22.73	23.50	22.31	22.23	22.25	23.00	22.20	22.14	22.12	23.00
3GPP Rel 6 HSUPA Subtest-3	21.50	21.38	21.71	22.00	21.31	21.31	21.19	22.00	21.27	21.15	21.24	22.00
3GPP Rel 6 HSUPA Subtest-4	22.43	22.35	22.79	23.50	22.30	22.22	22.22	23.00	22.18	22.20	22.20	23.00
3GPP Rel 6 HSUPA Subtest-5	21.47	21.41	21.65	22.00	21.32	21.28	21.16	22.00	21.41	21.34	21.43	22.00
3GPP Rel 7 HSPA+ (16QAM) Subtest-1	21.33	21.24	21.57	22.00	21.17	21.16	21.09	22.00	21.47	21.43	21.39	22.00
Attenuator		Cable Loss	0.8			Cable Loss	0.8			Cable Loss	0.6	
Mode		Max.	23.11			Max.	22.51			Max.	22.26	

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	23
Frequency (MHz)				1860	1880	1900	
20	QPSK	1	0	22.29	22.32	22.26	23
20	QPSK	1	49	22.27	22.21	22.14	
20	QPSK	1	99	22.21	22.17	22.15	
20	QPSK	50	0	21.37	21.46	21.39	22
20	QPSK	50	24	21.38	21.43	21.43	
20	QPSK	50	50	21.43	21.39	21.45	
20	QPSK	100	0	21.36	21.45	21.41	22
20	16QAM	1	0	21.42	21.42	21.44	
20	16QAM	1	49	21.26	21.56	21.52	
20	16QAM	1	99	21.51	21.36	21.76	22
20	16QAM	50	0	21.44	21.41	21.39	
20	16QAM	50	24	21.40	21.45	21.46	
20	16QAM	50	50	21.48	21.45	21.52	22
20	16QAM	100	0	21.51	21.52	21.39	
20	64QAM	1	0	21.46	21.65	21.39	
20	64QAM	1	49	21.41	21.59	21.50	22
20	64QAM	1	99	21.36	21.69	21.69	
20	64QAM	50	0	21.46	21.38	21.43	
20	64QAM	50	24	21.49	21.43	21.48	22
20	64QAM	50	50	21.48	21.49	21.43	
20	64QAM	100	0	21.36	21.33	21.34	
Channel				18675	18900	19125	23
Frequency (MHz)				1857.5	1880	1902.5	
15	QPSK	1	0	22.10	22.13	22.04	23
15	QPSK	1	37	21.89	22.25	22.13	
15	QPSK	1	74	22.26	22.18	22.26	
15	QPSK	36	0	21.23	21.32	21.31	22
15	QPSK	36	20	21.22	21.41	21.38	
15	QPSK	36	39	21.34	21.35	21.32	
15	QPSK	75	0	21.26	21.32	21.28	22
15	16QAM	1	0	21.35	21.43	21.37	
15	16QAM	1	37	21.48	21.51	21.37	
15	16QAM	1	74	21.43	21.55	21.55	22
15	16QAM	36	0	21.22	21.27	21.30	
15	16QAM	36	20	21.31	21.24	21.37	
15	16QAM	36	39	21.36	21.45	21.42	22
15	16QAM	75	0	21.23	21.25	21.34	
15	64QAM	1	0	21.43	21.19	21.25	
15	64QAM	1	37	21.42	21.23	21.65	22
15	64QAM	1	74	21.31	21.35	21.50	
15	64QAM	36	0	21.16	21.33	21.21	
15	64QAM	36	20	21.36	21.38	21.28	22
15	64QAM	36	39	21.24	21.29	21.38	
15	64QAM	75	0	21.23	21.30	21.29	
Channel				18650	18900	19150	23
Frequency (MHz)				1855	1880	1905	
10	QPSK	1	0	22.14	22.13	22.23	23
10	QPSK	1	25	22.18	22.21	22.16	
10	QPSK	1	49	22.14	22.15	22.14	
10	QPSK	25	0	21.41	21.42	21.38	22
10	QPSK	25	12	21.37	21.49	21.42	
10	QPSK	25	25	21.28	21.41	21.37	
10	QPSK	50	0	21.34	21.43	21.41	22
10	16QAM	1	0	21.82	21.75	21.74	
10	16QAM	1	25	21.51	21.47	21.54	
10	16QAM	1	49	21.46	21.54	21.33	22
10	16QAM	25	0	21.36	21.35	21.32	
10	16QAM	25	12	21.52	21.32	21.32	
10	16QAM	25	25	21.32	21.52	21.62	22
10	16QAM	50	0	21.89	21.82	21.86	
10	64QAM	1	0	21.40	21.45	21.45	
10	64QAM	1	25	21.43	21.48	21.52	22
10	64QAM	1	49	21.10	21.23	21.20	
10	64QAM	25	0	21.40	21.44	21.45	
10	64QAM	25	12	21.43	21.41	21.42	22
10	64QAM	25	25	21.36	21.14	21.36	
10	64QAM	50	0	21.37	21.37	21.34	
Channel				18625	18900	19175	23
Frequency (MHz)				1852.5	1880	1907.5	
5	QPSK	1	0	22.14	22.19	22.13	23
5	QPSK	1	12	22.13	22.08	22.11	
5	QPSK	1	24	22.09	22.17	22.18	
5	QPSK	12	0	21.26	21.17	21.24	22
5	QPSK	12	7	21.27	21.32	21.24	
5	QPSK	12	13	21.26	21.25	21.28	
5	QPSK	25	0	21.25	21.23	21.25	22
5	16QAM	1	0	21.38	21.28	21.66	
5	16QAM	1	12	21.36	21.29	21.66	
5	16QAM	1	24	21.39	21.26	21.65	22
5	16QAM	12	0	21.48	21.62	21.48	
5	16QAM	12	7	21.38	21.38	21.18	
5	16QAM	12	13	21.18	21.51	21.28	22
5	16QAM	25	0	21.28	21.74	21.72	
5	64QAM	1	0	21.48	21.20	21.25	
5	64QAM	1	12	21.64	21.30	21.41	22
5	64QAM	1	24	21.65	21.29	21.31	
5	64QAM	12	0	21.30	21.23	21.22	
5	64QAM	12	7	21.36	21.20	21.20	22
5	64QAM	12	13	21.33	21.29	21.27	
5	64QAM	25	0	21.40	21.20	21.27	
Channel				18515	18900	19185	23
Frequency (MHz)				1851.5	1880	1908.5	
3	QPSK	1	0	22.08	22.15	22.07	23
3	QPSK	1	8	22.18	22.21	22.04	
3	QPSK	1	14	22.19	22.06	22.06	
3	QPSK	8	0	21.14	21.09	21.11	22
3	QPSK	8	4	21.20	21.14	21.15	
3	QPSK	8	7	21.20	21.14	21.10	
3	QPSK	15	0	21.12	21.20	21.13	

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	23
Frequency (MHz)				1720	1732.5	1745	
20	QPSK	1	0	22.31	22.39	22.38	23
20	QPSK	1	49	22.17	22.25	22.24	
20	QPSK	1	99	22.09	22.22	22.34	
20	QPSK	50	0	21.47	21.51	21.48	22
20	QPSK	50	24	21.38	21.46	21.46	
20	QPSK	50	50	21.27	21.38	21.39	
20	QPSK	100	0	21.37	21.41	21.48	22
20	16QAM	1	0	21.24	21.54	21.41	
20	16QAM	1	49	21.39	21.16	21.30	
20	16QAM	1	99	21.18	21.40	21.24	22
20	16QAM	50	0	21.37	21.30	21.44	
20	16QAM	50	24	21.63	21.74	21.63	
20	16QAM	50	50	21.59	21.60	21.60	22
20	16QAM	100	0	21.61	21.69	21.70	
20	64QAM	1	0	21.35	21.46	21.68	
20	64QAM	1	49	21.39	21.32	21.20	22
20	64QAM	1	99	21.66	21.23	21.70	
20	64QAM	50	0	21.36	21.45	21.40	
20	64QAM	50	24	21.38	21.49	21.43	22
20	64QAM	50	50	21.42	21.37	21.39	
20	64QAM	100	0	21.45	21.43	21.52	
Channel				20025	20175	20325	23
Frequency (MHz)				1717.5	1732.5	1747.5	
15	QPSK	1	0	22.18	22.22	22.32	23
15	QPSK	1	37	22.22	22.31	22.23	
15	QPSK	1	74	22.09	22.31	22.34	
15	QPSK	36	0	21.32	21.39	21.42	22
15	QPSK	36	20	21.36	21.49	21.45	
15	QPSK	36	39	21.41	21.40	21.49	
15	QPSK	75	0	21.36	21.38	21.39	22
15	16QAM	1	0	21.30	21.52	21.24	
15	16QAM	1	37	21.38	21.38	21.22	
15	16QAM	1	74	21.24	21.54	21.33	22
15	16QAM	36	0	21.25	21.27	21.46	
15	16QAM	36	20	21.20	21.27	21.33	
15	16QAM	36	39	21.16	21.25	21.31	22
15	16QAM	75	0	21.27	21.28	21.37	
15	64QAM	1	0	21.22	21.53	21.58	
15	64QAM	1	37	21.64	21.40	21.46	22
15	64QAM	1	74	21.68	21.39	21.43	
15	64QAM	36	0	21.33	21.40	21.44	
15	64QAM	36	20	21.39	21.41	21.43	22
15	64QAM	36	39	21.42	21.38	21.40	
15	64QAM	75	0	21.35	21.46	21.39	
Channel				20000	20175	20350	23
Frequency (MHz)				1715	1732.5	1750	
10	QPSK	1	0	22.30	22.29	22.12	23
10	QPSK	1	25	22.28	22.21	22.22	
10	QPSK	1	49	22.16	21.99	22.22	
10	QPSK	25	0	21.15	21.37	21.39	22
10	QPSK	25	12	21.27	21.33	21.37	
10	QPSK	25	25	21.16	21.27	21.34	
10	QPSK	50	0	21.22	21.32	21.24	22
10	16QAM	1	0	21.21	21.36	21.12	
10	16QAM	1	25	21.48	21.22	21.54	
10	16QAM	1	49	21.55	21.45	21.44	22
10	16QAM	25	0	21.21	21.20	21.19	
10	16QAM	25	12	21.13	21.23	21.20	
10	16QAM	25	25	21.47	21.38	21.47	22

3	16QAM	1	0	21.28	21.19	21.13	22
3	16QAM	1	8	21.32	21.26	21.22	
3	16QAM	1	14	21.25	21.22	21.10	
3	16QAM	8	0	21.68	21.81	21.73	22
3	16QAM	8	4	21.75	21.72	21.78	
3	16QAM	8	7	21.65	21.70	21.73	
3	16QAM	15	0	21.68	21.72	21.67	22
3	64QAM	1	0	21.21	21.14	21.17	
3	64QAM	1	8	21.63	21.62	21.22	
3	64QAM	1	14	21.24	21.60	21.24	22
3	64QAM	8	0	21.16	21.18	21.02	
3	64QAM	8	4	21.26	21.16	21.16	
3	64QAM	8	7	21.36	21.25	21.11	22
3	64QAM	15	0	21.21	21.21	21.19	
Channel				18607	18900	19193	
Frequency (MHz)				1850.7	1880	1909.3	
1.4	QPSK	1	0	22.14	22.17	22.12	23
1.4	QPSK	1	3	22.04	22.02	22.01	
1.4	QPSK	1	5	22.01	21.99	21.97	
1.4	QPSK	3	0	22.01	22.01	21.97	
1.4	QPSK	3	1	22.05	22.02	22.00	
1.4	QPSK	3	3	22.07	22.11	22.00	
1.4	QPSK	6	0	21.10	21.08	21.07	22
1.4	16QAM	1	0	21.13	21.13	21.07	22
1.4	16QAM	1	3	21.09	21.29	21.27	
1.4	16QAM	1	5	20.97	21.17	20.85	
1.4	16QAM	3	0	20.99	21.04	21.01	
1.4	16QAM	3	1	21.17	20.99	21.04	
1.4	16QAM	3	3	21.19	21.16	20.90	
1.4	16QAM	6	0	21.20	21.13	21.08	22
1.4	64QAM	1	0	21.08	21.00	21.03	22
1.4	64QAM	1	3	21.10	21.31	21.19	
1.4	64QAM	1	5	21.08	21.43	21.02	
1.4	64QAM	3	0	21.11	21.17	21.18	
1.4	64QAM	3	1	21.20	21.17	21.38	
1.4	64QAM	3	3	21.12	21.26	21.03	
1.4	64QAM	6	0	21.17	21.20	21.09	22

3	16QAM	1	0	21.31	21.40	21.44	22
3	16QAM	1	8	21.53	21.53	21.27	
3	16QAM	1	14	21.44	21.22	21.30	
3	16QAM	8	0	21.23	21.24	21.33	22
3	16QAM	8	4	21.33	21.33	21.34	
3	16QAM	8	7	21.55	21.63	21.67	
3	16QAM	15	0	21.55	21.53	21.60	22
3	64QAM	1	0	21.22	21.31	21.29	
3	64QAM	1	8	21.41	21.29	21.45	
3	64QAM	1	14	21.22	21.29	21.12	22
3	64QAM	8	0	21.20	21.24	21.18	
3	64QAM	8	4	21.32	21.30	21.34	
3	64QAM	8	7	21.26	21.33	21.45	22
3	64QAM	15	0	21.22	21.30	21.21	
Channel				19957	20175	20393	
Frequency (MHz)				1710.7	1732.5	1754.3	
1.4	QPSK	1	0	22.27	22.32	22.30	23
1.4	QPSK	1	3	22.21	22.21	22.25	
1.4	QPSK	1	5	22.07	22.16	22.18	
1.4	QPSK	3	0	22.15	22.12	22.11	
1.4	QPSK	3	1	22.11	22.21	22.26	
1.4	QPSK	3	3	22.10	22.17	22.16	
1.4	QPSK	6	0	21.26	21.28	21.24	22
1.4	16QAM	1	0	21.20	21.67	21.33	22
1.4	16QAM	1	3	21.33	21.41	21.45	
1.4	16QAM	1	5	21.39	21.55	21.35	
1.4	16QAM	3	0	21.42	21.46	21.37	
1.4	16QAM	3	1	21.43	21.46	21.48	
1.4	16QAM	3	3	21.42	21.54	21.43	
1.4	16QAM	6	0	21.33	21.34	21.25	22
1.4	64QAM	1	0	21.11	21.05	21.19	22
1.4	64QAM	1	3	21.37	21.35	21.47	
1.4	64QAM	1	5	21.28	21.24	21.08	
1.4	64QAM	3	0	21.19	21.17	21.36	
1.4	64QAM	3	1	21.10	21.25	21.22	
1.4	64QAM	3	3	21.16	21.33	21.21	
1.4	64QAM	6	0	21.15	21.16	21.23	22

Band 5 (Cellular 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	23
Frequency (MHz)				829	836.5	844	
10	QPSK	1	0	22.25	22.26	22.18	23
10	QPSK	1	25	22.11	22.14	21.94	
10	QPSK	1	49	22.03	22.15	21.83	
10	QPSK	25	0	21.34	21.36	21.17	22
10	QPSK	25	12	21.10	21.12	21.17	
10	QPSK	25	25	21.10	21.21	21.26	
10	QPSK	50	0	21.16	21.04	21.18	22
10	16QAM	1	0	21.20	21.39	21.10	
10	16QAM	1	25	21.43	21.46	21.14	
10	16QAM	1	49	21.26	21.32	21.39	22
10	16QAM	25	0	21.35	21.36	21.18	
10	16QAM	25	12	21.29	21.37	21.15	
10	16QAM	25	25	21.32	21.25	21.28	22
10	16QAM	50	0	21.33	21.24	21.14	
10	64QAM	1	0	21.29	21.39	21.27	
10	64QAM	1	25	21.26	21.46	21.26	22
10	64QAM	1	49	21.15	21.37	21.28	
10	64QAM	25	0	21.26	21.37	21.04	
10	64QAM	25	12	21.25	21.42	21.13	22
10	64QAM	25	25	21.37	21.26	20.96	
10	64QAM	50	0	21.33	21.29	21.15	
Channel				20425	20525	20625	23
Frequency (MHz)				826.5	836.5	846.5	
5	QPSK	1	0	22.20	22.16	22.14	23
5	QPSK	1	12	22.10	22.21	22.05	
5	QPSK	1	24	22.10	22.05	22.05	
5	QPSK	12	0	21.25	21.30	21.16	22
5	QPSK	12	7	21.32	21.33	21.25	
5	QPSK	12	13	21.37	21.21	21.16	
5	QPSK	25	0	21.28	21.24	21.16	22
5	16QAM	1	0	21.57	21.50	21.26	
5	16QAM	1	12	21.27	21.49	21.25	
5	16QAM	1	24	21.14	21.49	21.32	22
5	16QAM	12	0	21.23	21.32	21.31	
5	16QAM	12	7	21.30	21.33	21.15	
5	16QAM	12	13	21.30	21.21	21.26	22
5	16QAM	25	0	21.31	21.36	21.31	
5	64QAM	1	0	21.38	21.26	21.37	
5	64QAM	1	12	21.26	21.20	21.34	22
5	64QAM	1	24	21.40	21.24	21.18	
5	64QAM	12	0	21.12	21.26	21.06	
5	64QAM	12	7	21.16	21.32	21.10	22
5	64QAM	12	13	21.34	21.29	20.86	
5	64QAM	25	0	21.22	21.29	20.90	
Channel				20415	20525	20635	23
Frequency (MHz)				825.5	836.5	847.5	
3	QPSK	1	0	22.19	22.20	22.05	23
3	QPSK	1	8	22.15	22.16	22.07	
3	QPSK	1	14	22.16	22.14	21.88	
3	QPSK	8	0	21.18	21.31	21.29	22
3	QPSK	8	4	21.32	21.38	21.35	
3	QPSK	8	7	21.27	21.29	21.16	
3	QPSK	15	0	21.25	21.31	21.30	22
3	16QAM	1	0	21.27	21.38	21.45	
3	16QAM	1	8	21.20	21.46	21.30	
3	16QAM	1	14	21.25	21.51	21.26	22
3	16QAM	8	0	21.21	21.30	21.04	
3	16QAM	8	4	21.37	21.48	21.05	
3	16QAM	8	7	21.29	21.35	21.09	22
3	16QAM	15	0	21.23	21.25	20.80	
3	64QAM	1	0	21.18	21.06	21.27	
3	64QAM	1	8	21.06	21.30	21.06	22
3	64QAM	1	14	21.08	21.26	21.07	
3	64QAM	8	0	21.18	21.28	21.26	
3	64QAM	8	4	21.40	21.24	21.18	22
3	64QAM	8	7	21.35	21.27	21.24	
3	64QAM	15	0	21.24	21.34	21.14	
Channel				20407	20525	20643	23
Frequency (MHz)				824.7	836.5	848.3	
1.4	QPSK	1	0	22.20	22.17	22.21	23
1.4	QPSK	1	3	22.23	22.16	22.23	
1.4	QPSK	1	5	22.12	22.06	22.07	
1.4	QPSK	3	0	22.13	22.19	22.15	22
1.4	QPSK	3	1	22.19	22.06	22.16	
1.4	QPSK	3	3	22.20	22.12	22.12	
1.4	QPSK	6	0	21.23	21.22	21.21	22
1.4	16QAM	1	0	21.36	21.17	21.34	
1.4	16QAM	1	3	21.16	21.40	21.29	
1.4	16QAM	1	5	21.55	21.23	21.29	22
1.4	16QAM	3	0	21.08	21.06	21.20	
1.4	16QAM	3	1	21.11	21.38	21.24	
1.4	16QAM	3	3	21.19	21.30	21.18	22
1.4	16QAM	6	0	21.38	21.25	21.29	
1.4	64QAM	1	0	20.91	21.08	21.10	
1.4	64QAM	1	3	21.22	21.23	21.18	22
1.4	64QAM	1	5	21.17	21.16	21.04	
1.4	64QAM	3	0	20.83	21.10	21.11	
1.4	64QAM	3	1	21.11	21.05	21.06	22
1.4	64QAM	3	3	21.01	21.18	21.22	
1.4	64QAM	6	0	21.22	21.34	21.23	

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	23
Frequency (MHz)				2510	2535	2560	
20	QPSK	1	0	22.30	22.31	22.23	23
20	QPSK	1	49	22.25	22.29	22.18	
20	QPSK	1	99	22.20	22.15	22.20	
20	QPSK	50	0	21.36	21.43	21.40	22
20	QPSK	50	24	21.12	21.09	20.99	
20	QPSK	50	50	21.22	21.25	21.22	
20	QPSK	100	0	21.17	21.19	21.16	22
20	16QAM	1	0	21.26	21.36	21.54	
20	16QAM	1	49	21.41	21.27	21.55	
20	16QAM	1	99	21.35	21.66	21.31	22
20	16QAM	50	0	21.20	21.30	21.23	
20	16QAM	50	24	21.25	21.17	21.28	
20	16QAM	50	50	21.33	21.38	21.21	22
20	16QAM	100	0	21.21	21.33	21.31	
20	64QAM	1	0	21.09	21.25	21.27	
20	64QAM	1	49	21.37	21.34	21.39	22
20	64QAM	1	99	21.35	21.40	21.31	
20	64QAM	50	0	21.29	21.30	21.35	
20	64QAM	50	24	21.34	21.35	21.35	22
20	64QAM	50	50	21.38	21.45	21.30	
20	64QAM	100	0	21.31	21.28	21.40	
Channel				20825	21100	21375	23
Frequency (MHz)				2507.5	2535	2562.5	
15	QPSK	1	0	22.13	22.22	22.22	23
15	QPSK	1	37	22.23	22.20	22.24	
15	QPSK	1	74	22.17	22.24	22.24	
15	QPSK	36	0	20.95	21.04	21.06	22
15	QPSK	36	20	21.03	21.10	21.05	
15	QPSK	36	39	21.06	21.09	21.13	
15	QPSK	75	0	21.12	21.05	21.07	22
15	16QAM	1	0	21.48	21.59	21.66	
15	16QAM	1	37	21.30	21.41	21.39	
15	16QAM	1	74	21.34	21.34	21.56	22
15	16QAM	36	0	20.93	21.04	21.06	
15	16QAM	36	20	21.00	21.03	21.02	
15	16QAM	36	39	21.06	21.04	20.93	22
15	16QAM	75	0	21.01	21.09	21.01	
15	64QAM	1	0	21.19	21.16	21.04	
15	64QAM	1	37	21.09	21.24	21.33	22
15	64QAM	1	74	21.08	21.20	21.26	
15	64QAM	36	0	21.27	21.35	21.34	
15	64QAM	36	20	21.38	21.37	21.44	22
15	64QAM	36	39	21.42	21.33	21.35	
15	64QAM	75	0	21.27	21.37	21.32	
Channel				20800	21100	21400	23
Frequency (MHz)				2505	2535	2565	
10	QPSK	1	0	22.12	21.99	22.02	23
10	QPSK	1	25	22.15	22.05	22.07	
10	QPSK	1	49	22.08	22.05	22.07	
10	QPSK	25	0	21.15	21.15	21.14	22
10	QPSK	25	12	21.11	21.23	21.28	
10	QPSK	25	25	21.04	21.22	21.22	
10	QPSK	50	0	21.13	21.25	21.24	22
10	16QAM	1	0	21.10	21.28	21.13	
10	16QAM	1	25	21.09	21.11	21.16	
10	16QAM	1	49	21.56	21.46	21.37	22
10	16QAM	25	0	21.27	21.15	21.23	
10	16QAM	25	12	21.09	21.26	21.19	
10	16QAM	25	25	21.14	21.17	21.09	22
10	16QAM	50	0	21.17	21.26	21.11	
10	64QAM	1	0	21.19	21.15	21.13	
10	64QAM	1	25	21.22	21.47	21.30	22
10	64QAM	1	49	21.33	21.57	21.38	
10	64QAM	25	0	21.19	21.17	21.21	
10	64QAM	25	12	21.21	21.32	21.25	22
10	64QAM	25	25	21.14	21.04	21.03	
10	64QAM	50	0	21.08	21.14	21.06	
Channel				20775	21100	21425	23
Frequency (MHz)				2502.5	2535	256	

Band 12 (700MHz Low Band)							
Part 27F(only on channel required)							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				23060	23095	23130	
Frequency (MHz)				704	707.5	711	
10	QPSK	1	0	22.13	22.29	22.18	23
10	QPSK	1	25	21.99	22.12	22.15	
10	QPSK	1	49	22.09	22.10	22.09	
10	QPSK	25	0	21.38	21.48	21.39	22
10	QPSK	25	12	21.35	21.29	21.08	
10	QPSK	25	25	21.40	21.46	21.39	
10	QPSK	50	0	21.41	21.43	21.34	22
10	16QAM	1	0	21.34	20.89	21.02	
10	16QAM	1	25	21.09	21.04	21.18	
10	16QAM	1	49	21.18	21.23	21.12	22
10	16QAM	25	0	21.07	21.09	21.03	
10	16QAM	25	12	21.11	21.15	21.04	
10	16QAM	25	25	21.16	21.17	21.11	22
10	16QAM	50	0	21.06	21.14	21.19	
10	64QAM	1	0	21.01	21.13	21.47	
10	64QAM	1	25	21.45	21.51	21.10	22
10	64QAM	1	49	21.47	21.15	21.08	
10	64QAM	25	0	21.53	21.47	21.44	
10	64QAM	25	12	21.58	21.61	21.53	22
10	64QAM	25	25	21.63	21.60	21.60	
10	64QAM	50	0	21.55	21.48	21.59	
Channel				23035	23095	23155	Tune-up limit (dBm)
Frequency (MHz)				701.5	707.5	713.5	
5	QPSK	1	0	21.88	22.21	21.99	23
5	QPSK	1	12	22.04	22.20	22.04	
5	QPSK	1	24	22.00	22.19	22.05	
5	QPSK	12	0	21.11	21.18	21.17	22
5	QPSK	12	7	21.22	21.24	21.21	
5	QPSK	12	13	21.17	21.20	21.17	
5	QPSK	25	0	21.13	21.25	21.21	22
5	16QAM	1	0	21.14	21.16	21.18	
5	16QAM	1	12	21.31	21.26	21.27	
5	16QAM	1	24	21.27	21.25	21.21	22
5	16QAM	12	0	21.01	20.98	21.01	
5	16QAM	12	7	21.15	21.20	21.04	
5	16QAM	12	13	21.10	21.07	21.12	22
5	16QAM	25	0	21.11	21.07	21.09	
5	64QAM	1	0	21.37	21.38	21.43	
5	64QAM	1	12	21.82	21.52	21.45	22
5	64QAM	1	24	21.80	21.49	21.54	
5	64QAM	12	0	21.34	21.36	21.31	
5	64QAM	12	7	21.44	21.32	21.38	22
5	64QAM	12	13	21.31	21.41	21.46	
5	64QAM	25	0	21.46	21.42	21.39	
Channel				23025	23095	23165	Tune-up limit (dBm)
Frequency (MHz)				700.5	707.5	714.5	
3	QPSK	1	0	21.96	22.23	21.90	23
3	QPSK	1	8	22.14	22.13	22.03	
3	QPSK	1	14	22.08	22.19	22.14	
3	QPSK	8	0	21.19	21.17	21.17	22
3	QPSK	8	4	21.22	21.25	21.26	
3	QPSK	8	7	21.17	21.25	21.19	
3	QPSK	15	0	21.16	21.24	21.10	22
3	16QAM	1	0	21.17	21.53	21.12	
3	16QAM	1	8	21.37	21.35	21.30	
3	16QAM	1	14	21.20	21.25	21.11	22
3	16QAM	8	0	21.17	21.06	21.09	
3	16QAM	8	4	21.22	21.19	21.30	
3	16QAM	8	7	21.06	21.09	21.15	22
3	16QAM	15	0	21.04	20.97	20.96	
3	64QAM	1	0	21.38	21.72	21.71	
3	64QAM	1	8	21.67	21.57	21.58	22
3	64QAM	1	14	21.60	21.45	21.56	
3	64QAM	8	0	21.27	21.35	21.26	
3	64QAM	8	4	21.36	21.40	21.39	22
3	64QAM	8	7	21.35	21.27	21.42	
3	64QAM	15	0	21.34	21.36	21.28	
Channel				23017	23095	23173	Tune-up limit (dBm)
Frequency (MHz)				699.7	707.5	715.3	
1.4	QPSK	1	0	21.99	22.16	21.96	23
1.4	QPSK	1	3	22.10	22.09	22.11	
1.4	QPSK	1	5	21.99	22.04	22.00	
1.4	QPSK	3	0	21.94	22.07	22.05	
1.4	QPSK	3	1	22.15	22.15	21.82	22
1.4	QPSK	3	3	22.10	22.12	22.08	
1.4	QPSK	6	0	21.38	21.35	21.33	
1.4	16QAM	1	0	21.42	21.36	21.21	
1.4	16QAM	1	3	21.23	21.66	21.33	22
1.4	16QAM	1	5	21.35	21.36	21.35	
1.4	16QAM	3	0	21.19	21.22	21.23	
1.4	16QAM	3	1	21.35	21.43	21.27	
1.4	16QAM	3	3	21.55	21.44	21.48	22
1.4	16QAM	6	0	21.35	21.33	21.35	
1.4	64QAM	1	0	21.22	21.37	21.21	
1.4	64QAM	1	3	21.34	21.27	21.32	
1.4	64QAM	1	5	21.50	21.53	21.49	22
1.4	64QAM	3	0	21.40	21.41	21.24	
1.4	64QAM	3	1	21.38	21.62	21.47	
1.4	64QAM	3	3	21.40	21.24	21.40	
1.4	64QAM	6	0	21.36	21.37	21.24	22

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	22.21	22.24	22.21	23
10	QPSK	1	25	22.09	22.05	22.11	
10	QPSK	1	49	22.02	22.05	22.00	
10	QPSK	25	0	21.32	21.38	21.30	22
10	QPSK	25	12	21.17	21.11	21.25	
10	QPSK	25	25	21.15	21.15	21.24	
10	QPSK	50	0	21.28	21.15	21.16	22
10	16QAM	1	0	21.01	21.20	21.34	
10	16QAM	1	25	21.22	21.51	21.35	
10	16QAM	1	49	21.18	21.43	21.48	22
10	16QAM	25	0	21.12	21.36	21.35	
10	16QAM	25	12	21.36	21.51	21.49	
10	16QAM	25	25	21.19	21.45	21.50	22
10	16QAM	50	0	21.23	21.52	21.49	
10	64QAM	1	0	21.20	21.53	21.21	
10	64QAM	1	25	21.43	21.33	21.23	22
10	64QAM	1	49	21.17	21.20	21.20	
10	64QAM	25	0	21.17	21.34	21.32	
10	64QAM	25	12	21.09	21.17	21.34	22
10	64QAM	25	25	21.03	21.24	21.40	
10	64QAM	50	0	21.10	21.33	21.34	
Channel				23755	23790	23825	Tune-up limit (dBm)
Frequency (MHz)				706.5	710	713.5	
5	QPSK	1	0	22.15	22.11	22.07	23
5	QPSK	1	12	22.14	22.10	22.09	
5	QPSK	1	24	22.06	22.12	22.11	
5	QPSK	12	0	21.22	21.40	21.56	22
5	QPSK	12	7	21.34	21.43	21.51	
5	QPSK	12	13	21.17	21.45	21.51	
5	QPSK	25	0	21.20	21.37	21.50	22
5	16QAM	1	0	21.68	21.73	21.45	
5	16QAM	1	12	21.85	21.41	21.78	
5	16QAM	1	24	21.69	21.74	21.90	22
5	16QAM	12	0	21.13	21.16	21.37	
5	16QAM	12	7	21.13	21.20	21.32	
5	16QAM	12	13	21.04	21.29	21.32	22
5	16QAM	25	0	21.14	21.26	21.30	
5	64QAM	1	0	21.12	21.13	21.13	
5	64QAM	1	12	21.16	21.13	21.21	22
5	64QAM	1	24	21.03	21.03	20.95	
5	64QAM	12	0	21.09	21.14	21.38	
5	64QAM	12	7	21.22	21.30	21.24	22
5	64QAM	12	13	21.07	21.25	21.27	
5	64QAM	25	0	21.04	21.23	21.39	

## Band 66

BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				132072	132322	132572	
Frequency (MHz)				1720	1745	1770	
20	QPSK	1	0	22.38	22.44	22.42	23
20	QPSK	1	49	22.23	22.22	22.18	
20	QPSK	1	99	22.16	22.15	22.16	
20	QPSK	50	0	21.61	21.68	21.64	22
20	QPSK	50	24	21.42	21.44	21.57	
20	QPSK	50	50	21.46	21.54	21.42	
20	QPSK	100	0	21.44	21.44	21.36	22
20	16QAM	1	0	21.49	21.25	21.53	
20	16QAM	1	49	21.54	21.28	21.34	
20	16QAM	1	99	21.54	21.72	21.51	22
20	16QAM	50	0	21.66	21.63	21.60	
20	16QAM	50	24	21.55	21.55	21.56	
20	16QAM	50	50	21.30	21.22	21.18	22
20	16QAM	100	0	21.26	21.29	21.35	
20	64QAM	1	0	21.59	21.36	21.69	
20	64QAM	1	49	21.36	21.69	21.68	22
20	64QAM	1	99	21.59	21.71	21.79	
20	64QAM	50	0	21.55	21.45	21.58	
20	64QAM	50	24	21.49	21.43	21.55	22
20	64QAM	50	50	21.51	21.39	21.45	
20	64QAM	100	0	21.50	21.50	21.48	
Channel				132047	132322	132597	
Frequency (MHz)				1717.5	1745	1772.5	
15	QPSK	1	0	22.36	22.40	22.38	23
15	QPSK	1	37	22.40	22.36	22.34	
15	QPSK	1	74	22.34	22.30	22.28	
15	QPSK	36	0	21.33	21.30	21.34	22
15	QPSK	36	20	21.33	21.25	21.35	
15	QPSK	36	39	21.19	21.24	21.21	
15	QPSK	75	0	21.28	21.32	21.25	22
15	16QAM	1	0	21.27	21.14	21.44	
15	16QAM	1	37	21.14	21.44	21.37	
15	16QAM	1	74	21.24	21.14	21.14	22
15	16QAM	36	0	21.45	21.45	21.36	
15	16QAM	36	20	21.48	21.47	21.53	
15	16QAM	36	39	21.40	21.55	21.49	22
15	16QAM	75	0	21.28	21.26	21.22	
15	64QAM	1	0	21.59	21.49	21.59	
15	64QAM	1	37	21.61	21.39	21.49	22
15	64QAM	1	74	21.26	21.52	21.59	
15	64QAM	36	0	21.38	21.37	21.50	
15	64QAM	36	20	21.48	21.44	21.45	22
15	64QAM	36	39	21.37	21.31	21.35	
15	64QAM	75	0	21.39	21.41	21.38	
Channel				132022	132322	132622	
Frequency (MHz)				1715	1745	1775	
10	QPSK	1	0	22.39	22.39	22.40	23
10	QPSK	1	25	22.29	22.27	22.35	
10	QPSK	1	49	22.43	22.31	22.21	
10	QPSK	25	0	21.64	21.57	21.64	22
10	QPSK	25	12	21.61	21.80	21.58	
10	QPSK	25	25	21.57	21.53	21.45	
10	QPSK	50	0	21.65	21.50	21.69	22
10	16QAM	1	0	21.57	21.57	21.77	
10	16QAM	1	25	21.57	21.66	21.78	
10	16QAM	1	49	21.40	21.60	21.48	22
10	16QAM	25	0	21.41	21.58	21.46	
10	16QAM	25	12	21.40	21.60	21.51	
10	16QAM	25	25	21.31	21.36	21.36	22
10	16QAM	50	0	21.47	21.51	21.52	
10	64QAM	1	0	21.64	21.64	21.31	
10	64QAM	1	25	21.31	21.44	21.34	22
10	64QAM	1	49	21.31	21.31	21.31	
10	64QAM	25	0	21.64	21.62	21.64	
10	64QAM	25	12	21.63	21.67	21.71	22
10	64QAM	25	25	21.63	21.56	21.58	
10	64QAM	50	0	21.53	21.63	21.64	
Channel				131997	132322	132647	
Frequency (MHz)				1712.5	1745	1777.5	
5	QPSK	1	0	22.28	22.31	22.36	23
5	QPSK	1	12	22.31	22.31	22.30	
5	QPSK	1	24	22.39	22.29	22.35	
5	QPSK	12	0	21.33	21.35	21.31	22
5	QPSK	12	7	21.35	21.43	21.36	
5	QPSK	12	13	21.21	21.27	21.28	
5	QPSK	25	0	21.31	21.32	21.31	22
5	16QAM	1	0	21.80	21.49	21.50	
5	16QAM	1	12	21.43	21.72	21.67	
5	16QAM	1	24	21.55	21.44	21.79	22
5	16QAM	12	0	21.44	21.55	21.51	
5	16QAM	12	7	21.61	21.53	21.65	
5	16QAM	12	13	21.52	21.46	21.53	22
5	16QAM	25	0	21.53	21.55	21.47	
5	64QAM	1	0	21.31	21.71	21.51	
5	64QAM	1	12	21.61	21.61	21.61	22
5	64QAM	1	24	21.44	21.48	21.44	
5	64QAM	12	0	21.68	21.43	21.64	
5	64QAM	12	7	21.76	21.35	21.66	22
5	64QAM	12	13	21.59	21.71	21.66	
5	64QAM	25	0	21.66	21.74	21.61	
Channel				131987	132322	132657	
Frequency (MHz)				1711.5	1745	1778.5	
3	QPSK	1	0	22.35	22.26	22.25	23
3	QPSK	1	8	22.22	22.23	22.31	
3	QPSK	1	14	22.13	21.94	22.24	
3	QPSK	8	0	21.59	21.56	21.60	22
3	QPSK	8	4	21.54	21.46	21.56	
3	QPSK	8	7	21.40	21.45	21.42	
3	QPSK	15	0	21.49	21.53	21.46	

3	16QAM	1	0	21.18	21.59	21.35	22
3	16QAM	1	8	21.51	21.45	21.44	
3	16QAM	1	14	21.55	21.44	21.14	
3	16QAM	8	0	21.36	21.36	21.27	22
3	16QAM	8	4	21.39	21.38	21.44	
3	16QAM	8	7	21.31	21.46	21.40	
3	16QAM	15	0	21.41	21.39	21.35	
3	64QAM	1	0	21.72	21.62	21.72	22
3	64QAM	1	8	21.74	21.52	21.62	
3	64QAM	1	14	21.39	21.65	21.72	
3	64QAM	8	0	21.51	21.50	21.63	22
3	64QAM	8	4	21.61	21.57	21.58	
3	64QAM	8	7	21.50	21.44	21.48	
3	64QAM	15	0	21.52	21.54	21.51	
Channel				131979	132322	132665	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1745	1779.3	
1.4	QPSK	1	0	22.29	22.20	22.21	23
1.4	QPSK	1	3	22.35	22.37	22.37	
1.4	QPSK	1	5	22.27	22.15	22.31	
1.4	QPSK	3	0	22.26	22.19	22.26	
1.4	QPSK	3	1	22.23	22.29	22.20	
1.4	QPSK	3	3	22.24	22.20	22.12	
1.4	QPSK	6	0	21.62	21.47	21.66	22
1.4	16QAM	1	0	21.49	21.49	21.69	22
1.4	16QAM	1	3	21.49	21.58	21.70	
1.4	16QAM	1	5	21.32	21.52	21.40	
1.4	16QAM	3	0	21.27	21.24	21.50	
1.4	16QAM	3	1	21.36	21.26	21.38	
1.4	16QAM	3	3	21.37	21.38	21.32	
1.4	16QAM	6	0	21.26	21.17	21.18	22
1.4	64QAM	1	0	21.77	21.62	21.78	22
1.4	64QAM	1	3	21.50	21.59	21.59	
1.4	64QAM	1	5	21.47	21.47	21.58	
1.4	64QAM	3	0	21.56	21.54	21.56	
1.4	64QAM	3	1	21.55	21.59	21.63	
1.4	64QAM	3	3	21.55	21.48	21.50	
1.4	64QAM	6	0	21.45	21.55	21.56	22



## 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	8.60	9.00	10	100.00
		CH 7	2442	9.20	10.00	10	
		CH 13	2472	8.74	9.00	10	
	802.11g 6Mbps	CH 1	2412	8.55	9.00	10	100.00
		CH 7	2442	9.15	9.50	10	
		CH 13	2472	8.65	9.00	10	
	802.11n-HT20 MCS0	CH 1	2412	8.42	9.00	10	100.00
		CH 7	2442	8.93	9.50	10	
		CH 13	2472	8.48	9.00	10	
802.11n-HT40 MCS0	CH 1	2412	8.86	9.00	10	100.00	
	CH 7	2442	9.08	9.50	10		
	CH 13	2472	8.75	9.00	10		

Mode	Channel	Frequency (MHz)	Average power (dBm)		
			1Mbps	2Mbps	3Mbps
BR / EDR	CH 00	2402	2.12	-1.61	-1.62
	CH 39	2441	2.26	-1.25	-1.28
	CH 78	2480	1.73	-1.91	-1.84
Tune-up Limit			3	0.5	0.5
Duty Cycle %			76.53	76.8	76.8

Mode	Channel	Frequency (MHz)	Average power (dBm)		
			1Mbps	2Mbps	3Mbps
LE	CH 00	2402	-5.98	-9.16	N/A
	CH 19	2440	-5.25	-8.30	N/A
	CH 39	2480	-5.94	-9.03	N/A
Tune-up Limit			0.5	0.5	N/A
Duty Cycle %			60.9	31.31	N/A