



REPORT No.: SZ23120348S01

## Annex E Conducted Power

**Note:**

Conducted power unit: dBm.

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

**Full Power for ANT 0 & ANT 2 & ANT3**

GSM850	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		
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	32.30	32.31	32.27	33.50	23.30	23.31	23.27	24.50	0.07
GPRS 1 Tx slot	32.27	32.28	32.24	33.50	23.27	23.28	23.24	24.50	
GPRS 2 Tx slots	30.19	30.25	30.20	31.50	24.19	24.25	24.20	25.50	0.06
GPRS 3 Tx slots	28.44	28.47	28.41	29.00	24.18	24.21	24.15	24.74	0.06
GPRS 4 Tx slots	26.40	26.48	26.45	27.00	23.40	23.48	23.45	24.00	0.08
EDGE 1 Tx slot	25.71	25.75	25.66	26.50	16.71	16.75	16.66	17.50	0.09
EDGE 2 Tx slots	24.22	24.23	24.18	25.00	18.22	18.23	18.18	19.00	0.05
EDGE 3 Tx slots	21.69	21.71	21.65	22.50	17.43	17.45	17.39	18.24	0.06
EDGE 4 Tx slots	19.23	19.26	19.19	20.00	16.23	16.26	16.19	17.00	0.07
Mode		Max.	32.31			Max.	24.25		
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
	512	661	810		512	661	810		
TX Channel	512	661	810		512	661	810		
Frequency (MHz)	1850.2	1880	1909.8		1850.2	1880	1909.8		
GSM 1 Tx slot	29.39	29.40	29.33	30.50	20.39	20.40	20.33	21.50	0.12
GPRS 1 Tx slot	29.36	29.38	29.28	30.50	20.36	20.38	20.28	21.50	
GPRS 2 Tx slots	27.25	27.29	27.18	28.50	21.25	21.29	21.18	22.50	0.11
GPRS 3 Tx slots	25.63	25.66	25.59	27.00	21.37	21.40	21.33	22.74	0.07
GPRS 4 Tx slots	23.67	23.71	23.64	25.00	20.67	20.71	20.64	22.00	0.07
EDGE 1 Tx slot	25.84	25.89	25.81	26.50	16.84	16.89	16.81	17.50	0.08
EDGE 2 Tx slots	24.29	24.34	24.25	25.00	18.29	18.34	18.25	19.00	0.09
EDGE 3 Tx slots	22.36	22.42	22.33	23.00	18.10	18.16	18.07	18.74	0.09
EDGE 4 Tx slots	20.40	20.44	20.36	21.00	17.40	17.44	17.36	18.00	0.08
Mode		Max.	29.40			Max.	21.40		
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)
	9262	9400	9538		1312	1413	1513		4132	4182	4233	
TX Channel	9262	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	22.48	22.52	22.51	24.00	22.45	22.49	22.43	24.00	22.70	22.74	22.71	24.50
3GPP Rel 6 HSDPA Subtest-1	22.25	22.41	22.45	24.00	22.16	22.15	22.23	24.00	22.57	22.46	22.42	24.50
3GPP Rel 6 HSDPA Subtest-2	22.27	22.27	22.29	24.00	22.16	22.21	22.22	24.00	22.65	22.54	22.51	24.50
3GPP Rel 6 HSDPA Subtest-3	21.90	21.89	21.87	23.50	21.95	21.99	22.00	23.50	22.21	22.25	22.12	24.00
3GPP Rel 6 HSDPA Subtest-4	21.93	21.92	21.70	23.50	21.98	22.01	22.02	23.50	22.25	22.29	22.17	24.00
3GPP Rel 8 DC-HSDPA Subtest-1	22.42	22.40	22.41	24.00	22.33	22.45	22.45	24.00	22.49	22.20	22.33	24.50
3GPP Rel 8 DC-HSDPA Subtest-2	22.48	22.46	22.43	24.00	22.31	22.45	22.32	24.00	22.44	22.32	22.31	24.50
3GPP Rel 8 DC-HSDPA Subtest-3	22.10	22.14	22.07	23.50	22.18	22.26	22.10	23.50	22.10	21.80	21.77	24.00
3GPP Rel 8 DC-HSDPA Subtest-4	22.09	22.06	22.04	23.50	22.23	22.19	22.13	23.50	21.98	21.95	21.69	24.00
3GPP Rel 6 HSUPA Subtest-1	22.43	22.37	22.18	24.00	22.24	22.30	22.31	24.00	22.60	22.65	22.64	24.50
3GPP Rel 6 HSUPA Subtest-2	21.15	21.12	20.99	22.00	21.08	21.01	21.06	22.00	21.74	21.61	21.57	22.50
3GPP Rel 6 HSUPA Subtest-3	21.83	21.73	21.60	23.00	22.08	22.04	22.06	23.00	22.71	22.66	22.62	23.50
3GPP Rel 6 HSUPA Subtest-4	21.19	21.13	20.95	22.00	21.06	20.98	21.06	22.00	21.69	21.65	21.52	22.50
3GPP Rel 6 HSUPA Subtest-5	22.40	22.34	22.19	24.00	22.28	22.30	22.27	24.00	22.66	22.70	22.60	24.50
3GPP Rel 7 HSPA+ (16QAM) Subtest-1	21.10	21.02	20.95	21.50	20.04	20.19	20.13	21.50	21.04	20.91	20.90	22.00
Attenuator		Cable Loss	0.8			Cable Loss	0.8			Cable Loss	0.8	
Mode		Max.	22.52			Max.	22.49			Max.	22.74	



3	QPSK	8	0	21.23	21.30	21.26	22.5
3	QPSK	8	4	21.21	21.21	21.14	
3	QPSK	8	7	21.27	21.23	21.16	
3	QPSK	15	0	21.28	21.45	21.33	22.5
3	16QAM	1	0	21.21	21.40	21.31	
3	16QAM	1	8	21.27	21.36	21.06	
3	16QAM	1	14	21.09	21.18	21.34	21.5
3	16QAM	8	0	20.43	20.35	20.41	
3	16QAM	8	4	20.18	20.10	20.23	
3	16QAM	8	7	20.27	20.41	20.14	21.5
3	16QAM	15	0	20.20	20.41	20.04	
3	64QAM	1	0	20.42	20.19	20.29	
3	64QAM	1	8	20.03	20.34	20.16	21.5
3	64QAM	1	14	20.27	20.42	20.36	
3	64QAM	8	0	19.45	19.26	19.37	
3	64QAM	8	4	19.42	19.44	19.44	20.5
3	64QAM	8	7	19.28	19.14	19.38	
3	64QAM	15	0	19.14	19.20	19.33	
Channel				18607	18900	19193	Tune-up limit (dBm)
Frequency (MHz)				1850.7	1880	1909.3	
1.4	QPSK	1	0	22.33	22.40	22.22	23.5
1.4	QPSK	1	3	22.36	22.31	22.17	
1.4	QPSK	1	5	22.40	22.28	22.23	
1.4	QPSK	3	0	21.32	21.33	21.27	
1.4	QPSK	3	1	21.28	21.11	21.38	
1.4	QPSK	3	3	21.31	21.27	21.18	
1.4	QPSK	6	0	21.35	21.39	21.39	22.5
1.4	16QAM	1	0	21.17	21.45	21.13	
1.4	16QAM	1	3	21.07	21.21	21.23	
1.4	16QAM	1	5	21.26	21.38	21.30	22.5
1.4	16QAM	3	0	20.47	20.38	20.31	
1.4	16QAM	3	1	20.15	20.12	20.34	
1.4	16QAM	3	3	20.23	20.29	20.38	21.5
1.4	16QAM	6	0	20.24	20.15	20.16	
1.4	64QAM	1	0	20.27	20.22	20.38	
1.4	64QAM	1	3	20.14	20.20	20.25	21.5
1.4	64QAM	1	5	20.27	20.41	20.46	
1.4	64QAM	3	0	20.31	20.04	20.36	
1.4	64QAM	3	1	20.42	20.28	20.31	
1.4	64QAM	3	3	20.26	20.31	20.49	
1.4	64QAM	6	0	19.30	19.24	19.20	
1.4	64QAM	6	0	19.30	19.24	19.20	20.5

3	QPSK	8	0	21.05	21.34	21.09	22.5
3	QPSK	8	4	21.11	21.12	21.02	
3	QPSK	8	7	21.09	21.26	21.15	
3	QPSK	15	0	21.24	21.16	21.41	22.5
3	16QAM	1	0	21.11	21.30	21.13	
3	16QAM	1	8	21.20	21.22	21.14	
3	16QAM	1	14	21.16	21.10	21.15	21.5
3	16QAM	8	0	20.06	20.12	20.33	
3	16QAM	8	4	20.06	20.15	20.07	
3	16QAM	8	7	20.11	20.10	20.15	21.5
3	16QAM	15	0	19.89	20.15	20.05	
3	64QAM	1	0	20.10	20.17	20.16	
3	64QAM	1	8	20.10	20.02	19.86	21.5
3	64QAM	1	14	20.17	20.33	20.33	
3	64QAM	8	0	19.11	19.10	19.25	
3	64QAM	8	4	19.16	19.09	19.09	20.5
3	64QAM	8	7	19.05	19.18	19.16	
3	64QAM	15	0	18.92	19.07	18.99	
Channel				19957	20175	20393	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1732.5	1754.3	
1.4	QPSK	1	0	22.32	22.36	22.16	23.5
1.4	QPSK	1	3	22.27	22.22	22.24	
1.4	QPSK	1	5	22.15	22.23	22.12	
1.4	QPSK	3	0	21.16	21.20	21.25	
1.4	QPSK	3	1	21.16	21.14	21.13	
1.4	QPSK	3	3	21.16	21.06	21.10	
1.4	QPSK	6	0	21.15	21.07	21.42	22.5
1.4	16QAM	1	0	21.15	21.15	21.18	
1.4	16QAM	1	3	21.09	21.10	21.05	
1.4	16QAM	1	5	21.11	21.06	21.14	22.5
1.4	16QAM	3	0	20.11	20.12	20.17	
1.4	16QAM	3	1	20.10	20.19	20.14	
1.4	16QAM	3	3	20.16	20.16	20.20	21.5
1.4	16QAM	6	0	20.11	20.16	20.15	
1.4	64QAM	1	0	20.28	20.21	20.20	
1.4	64QAM	1	3	20.11	20.08	20.14	21.5
1.4	64QAM	1	5	20.21	20.32	20.33	
1.4	64QAM	3	0	19.17	19.20	19.15	
1.4	64QAM	3	1	19.11	19.06	19.21	
1.4	64QAM	3	3	19.19	19.11	19.38	
1.4	64QAM	6	0	19.08	19.21	19.18	
1.4	64QAM	6	0	19.08	19.21	19.18	20.5





3	QPSK	8	0	21.12	21.26	21.31	22.5
3	QPSK	8	4	21.17	21.05	21.33	
3	QPSK	8	7	21.08	21.28	21.25	
3	QPSK	15	0	21.27	21.34	21.22	
3	16QAM	1	0	21.24	21.13	21.10	22.5
3	16QAM	1	8	21.19	21.05	21.06	
3	16QAM	1	14	21.18	21.28	21.15	
3	16QAM	8	0	20.34	20.13	20.19	21.5
3	16QAM	8	4	20.14	20.01	20.25	
3	16QAM	8	7	20.18	20.31	20.08	
3	16QAM	15	0	20.08	20.23	20.00	
3	64QAM	1	0	20.28	20.17	20.23	21.5
3	64QAM	1	8	20.07	20.23	20.01	
3	64QAM	1	14	20.17	20.27	20.19	
3	64QAM	8	0	19.27	19.16	19.10	
3	64QAM	8	4	19.24	19.30	19.08	20.5
3	64QAM	8	7	19.08	19.08	19.32	
3	64QAM	15	0	19.03	19.20	19.32	
Channel				131979	132322	132685	
Frequency (MHz)				1710.7	1745	1779.3	
1.4	QPSK	1	0	22.23	22.35	22.15	23.5
1.4	QPSK	1	3	22.32	22.15	22.03	
1.4	QPSK	1	5	22.20	22.09	22.04	
1.4	QPSK	3	0	21.25	21.37	21.37	
1.4	QPSK	3	1	21.25	21.25	21.11	
1.4	QPSK	3	3	21.35	21.11	21.16	
1.4	QPSK	6	0	21.31	21.35	21.26	22.5
1.4	16QAM	1	0	21.18	21.23	21.28	22.5
1.4	16QAM	1	3	20.97	21.04	21.21	
1.4	16QAM	1	5	21.16	21.08	21.22	
1.4	16QAM	3	0	20.21	20.31	20.39	
1.4	16QAM	3	1	20.08	20.17	20.21	
1.4	16QAM	3	3	20.16	20.24	20.03	
1.4	16QAM	6	0	20.13	20.16	20.11	21.5
1.4	64QAM	1	0	20.22	20.28	20.33	21.5
1.4	64QAM	1	3	20.07	20.07	20.03	
1.4	64QAM	1	5	20.31	20.23	20.37	
1.4	64QAM	3	0	19.34	19.16	19.09	
1.4	64QAM	3	1	19.37	19.23	19.31	
1.4	64QAM	3	3	19.15	19.08	19.32	
1.4	64QAM	6	0	19.24	19.17	19.28	20.5





Band 40 (2.3G Band-2) (dBm)							
Part 27D-2 2350MHz ~ 2360MHz							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				39200			
Frequency (MHz)				2355			
10	QPSK	1	0	22.79			24
10	QPSK	1	25	22.58			
10	QPSK	1	49	22.71			
10	QPSK	25	0	21.84			23
10	QPSK	25	12	21.69			
10	QPSK	25	25	21.72			
10	QPSK	50	0	21.75			23
10	16QAM	1	0	21.66			
10	16QAM	1	25	21.71			
10	16QAM	1	49	21.60			22
10	16QAM	25	0	20.86			
10	16QAM	25	12	20.79			
10	16QAM	25	25	20.75			22
10	16QAM	50	0	20.78			
10	64QAM	1	0	20.63			
10	64QAM	1	25	20.59			22
10	64QAM	1	49	20.65			
10	64QAM	25	0	19.77			
10	64QAM	25	12	19.69			21
10	64QAM	25	25	19.61			
10	64QAM	50	0	19.74			
Channel				39175	39200	39225	Tune-up limit (dBm)
Frequency (MHz)				2352.5	2355	2357.5	
5	QPSK	1	0	22.67	22.75	22.64	24
5	QPSK	1	12	22.61	22.73	22.71	
5	QPSK	1	24	22.70	22.66	22.73	
5	QPSK	12	0	21.78	21.97	21.69	23
5	QPSK	12	7	21.58	21.53	21.54	
5	QPSK	12	13	21.70	21.60	21.51	
5	QPSK	25	0	21.77	21.62	21.94	23
5	16QAM	1	0	21.60	21.62	21.55	
5	16QAM	1	12	21.50	21.66	21.63	
5	16QAM	1	24	21.48	21.81	21.45	22
5	16QAM	12	0	20.65	20.62	20.65	
5	16QAM	12	7	20.40	20.55	20.59	
5	16QAM	12	13	20.66	20.73	20.58	22
5	16QAM	25	0	20.66	20.76	20.48	
5	64QAM	1	0	20.82	20.59	20.70	
5	64QAM	1	12	20.59	20.61	20.60	22
5	64QAM	1	24	20.92	20.90	20.79	
5	64QAM	12	0	19.77	19.58	19.71	
5	64QAM	12	7	19.61	19.67	19.60	21
5	64QAM	12	13	19.72	19.80	19.88	
5	64QAM	25	0	19.50	19.47	19.54	



2.4GHz WLAN ANT 0

Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Power Setting	Duty Cycle %
802.11b 1Mbps	CH 1	2412	18.83	20.50	15.00	95.53
	CH 6	2437	18.35	20.00	15.00	
	CH 11	2462	18.88	20.50	15.00	
802.11g 6Mbps	CH 1	2412	16.16	19.00	14.00	95.69
	CH 6	2437	16.25	19.00	14.00	
	CH 11	2462	13.63	15.50	12.00	
802.11n-HT20 MCS0	CH 1	2412	16.42	18.00	14.00	95.16
	CH 6	2437	16.47	18.00	14.00	
	CH 11	2462	12.76	14.50	11.00	
802.11n-HT40 MCS0	CH 3	2422	14.37	16.00	12.00	90.77
	CH 6	2437	15.59	17.50	13.00	
	CH 9	2452	11.65	13.50	10.00	

5GHz WLAN ANT 0

Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Power Setting	Duty Cycle %
802.11a 6Mbps	CH 36	5180	16.34	18.00	17.00	95.89
	CH 48	5220	16.40	18.00	17.00	
	CH 42	5240	16.46	18.00	17.00	
802.11n-HT20 MCS0	CH 36	5180	16.53	18.50	17.00	95.16
	CH 44	5220	16.73	18.50	17.00	
	CH 48	5240	16.74	18.50	17.00	
802.11n-HT40 MCS0	CH 38	5190	16.64	18.00	17.00	90.91
	CH 46	5230	16.57	18.50	17.00	
	CH 38	5180	16.51	18.50	17.00	
802.11ac-VHT20 MCS0	CH 44	5220	16.75	18.50	17.00	95.24
	CH 48	5240	16.76	18.50	17.00	
	CH 38	5190	16.25	18.00	17.00	
802.11ac-VHT40 MCS0	CH 46	5230	16.34	18.00	17.00	87.88
	CH 42	5210	16.24	18.00	17.00	
	CH 42	5210	16.24	18.00	17.00	

5GHz WLAN ANT 0

Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Power Setting	Duty Cycle %
802.11a 6Mbps	CH 52	5260	16.52	18.50	17.00	95.69
	CH 60	5300	17.06	19.00	17.00	
	CH 64	5320	16.22	18.00	17.00	
802.11n-HT20 MCS0	CH 52	5260	16.84	18.50	17.00	95.16
	CH 60	5300	16.98	18.50	17.00	
	CH 64	5320	16.89	18.50	17.00	
802.11n-HT40 MCS0	CH 54	5270	16.73	18.50	17.00	90.91
	CH 62	5310	16.45	18.00	17.00	
	CH 52	5260	16.84	18.50	17.00	
802.11ac-VHT20 MCS0	CH 60	5300	17.33	19.00	17.00	95.24
	CH 64	5320	16.84	18.50	17.00	
	CH 54	5270	16.47	18.00	17.00	
802.11ac-VHT40 MCS0	CH 62	5310	16.20	18.00	17.00	87.88
	CH 68	5390	16.50	18.50	17.00	
	CH 68	5390	16.50	18.50	17.00	

5GHz WLAN ANT 0

Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Power Setting	Duty Cycle %
802.11a 6Mbps	CH 100	5500	17.05	19.00	17.00	95.69
	CH 120	5600	17.41	19.00	17.00	
	CH 140	5700	17.06	19.00	17.00	
802.11n-HT20 MCS0	CH 100	5500	17.30	19.00	17.00	95.16
	CH 120	5600	17.87	19.50	17.00	
	CH 140	5700	17.32	19.00	17.00	
802.11n-HT40 MCS0	CH 102	5510	17.38	19.00	17.00	90.91
	CH 126	5630	17.22	19.00	17.00	
	CH 134	5670	17.04	19.00	17.00	
802.11ac-VHT20 MCS0	CH 106	5550	17.27	19.00	17.00	95.24
	CH 120	5600	17.63	19.50	17.00	
	CH 140	5700	17.31	19.00	17.00	
802.11ac-VHT40 MCS0	CH 102	5510	17.19	19.00	17.00	87.88
	CH 126	5630	16.95	18.50	17.00	
	CH 134	5670	16.78	18.50	17.00	
802.11ac-VHT80 MCS0	CH 108	5530	17.16	19.00	17.00	81.94
	CH 122	5610	17.17	19.00	17.00	
	CH 138	5690	17.00	19.00	17.00	

5GHz WLAN ANT 0

Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Power Setting	Duty Cycle %
802.11a 6Mbps	CH 149	5745	16.96	18.50	17.00	95.89
	CH 157	5785	16.80	18.50	17.00	
	CH 165	5825	16.51	18.50	17.00	
802.11n-HT20 MCS0	CH 149	5745	17.24	19.00	17.00	95.16
	CH 157	5785	17.06	19.00	17.00	
	CH 155	5765	16.79	18.50	17.00	
802.11n-HT40 MCS0	CH 151	5755	16.99	18.50	17.00	90.91
	CH 159	5795	16.69	18.50	17.00	
	CH 149	5745	17.39	19.00	17.00	
802.11ac-VHT20 MCS0	CH 157	5785	17.14	19.00	17.00	95.24
	CH 165	5825	16.82	18.50	17.00	
	CH 151	5755	16.73	18.50	17.00	
802.11ac-VHT40 MCS0	CH 159	5795	16.46	18.00	17.00	87.88
	CH 155	5775	16.84	18.50	17.00	
	CH 155	5775	16.84	18.50	17.00	

Mode	Channel	Frequency (MHz)	Average power (dBm)		
			1Mbps	2Mbps	3Mbps
BR / EDR	CH 00	2402	9.89	8.04	8.04
	CH 39	2441	9.52	8.93	8.85
	CH 78	2480	9.27	8.20	8.43
Tune-Up Limit			11.5	10.5	10.5
Duty Cycle %			77.6	77.71	77.68

Mode	Channel	Frequency (MHz)	Average power (dBm)	
			1Mbps	2Mbps
LE	CH 00	2402	-2.48	-2.55
	CH 19	2430	-3.02	-2.63
	CH 39	2460	-2.30	-2.47
Tune-Up Limit			0	0
Duty Cycle %			32	32.8

**Reduced Power Level 1 for Standalone (ANT 2)**

GSM850	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		
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	30.30	30.31	30.27	31.50	21.30	21.31	21.27	22.50	0.07
GPRS 1 Tx slot	30.27	30.28	30.24	31.50	21.27	21.28	21.24	22.50	
GPRS 2 Tx slots	28.19	28.25	28.20	29.50	22.19	22.25	22.20	23.50	0.06
GPRS 3 Tx slots	26.44	26.47	26.41	27.00	22.18	22.21	22.15	22.74	0.06
GPRS 4 Tx slots	24.40	24.48	24.45	25.00	21.40	21.48	21.45	22.00	0.08
EDGE 1 Tx slot	23.71	23.75	23.66	24.50	14.71	14.75	14.66	15.50	0.09
EDGE 2 Tx slots	22.22	22.23	22.18	23.00	16.22	16.23	16.18	17.00	0.05
EDGE 3 Tx slots	19.69	19.71	19.65	20.50	15.43	15.45	15.39	16.24	0.06
EDGE 4 Tx slots	17.23	17.26	17.19	18.00	14.23	14.26	14.19	15.00	0.07

GSM1900	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		
TX Channel	512	661	810		512	661	810		
Frequency (MHz)	1850.2	1880	1909.8		1850.2	1880	1909.8		
GSM 1 Tx slot	23.89	23.90	23.83	25.00	14.89	14.90	14.83	16.00	0.12
GPRS 1 Tx slot	23.86	23.88	23.78	25.00	14.86	14.88	14.78	16.00	
GPRS 2 Tx slots	21.75	21.79	21.68	23.00	15.75	15.79	15.68	17.00	0.11
GPRS 3 Tx slots	20.13	20.16	20.09	21.50	15.87	15.90	15.83	17.24	0.07
GPRS 4 Tx slots	18.17	18.21	18.14	19.50	15.17	15.21	15.14	16.50	0.07
EDGE 1 Tx slot	20.34	20.39	20.31	21.00	11.34	11.39	11.31	12.00	0.08
EDGE 2 Tx slots	18.79	18.84	18.75	19.50	12.79	12.84	12.75	13.50	0.09
EDGE 3 Tx slots	16.86	16.92	16.83	17.50	12.60	12.66	12.57	13.24	0.09
EDGE 4 Tx slots	14.90	14.94	14.86	15.50	11.90	11.94	11.86	12.50	0.08
Mode		Max.	23.90			Max.	15.90		
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)
	9262	9400	9538		1312	1413	1513		4132	4182	4233	
TX Channel	9262	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	13.48	13.52	13.51	15.00	14.45	14.49	14.43	16.00	21.52	21.56	21.53	23.00
3GPP Rel 6 HSDPA Subtest-1	13.25	13.41	13.45	15.00	14.16	14.15	14.23	16.00	21.39	21.28	21.24	23.00
3GPP Rel 6 HSDPA Subtest-2	13.27	13.27	13.29	15.00	14.16	14.21	14.22	16.00	21.47	21.36	21.33	23.00
3GPP Rel 6 HSDPA Subtest-3	12.90	12.89	12.87	14.50	13.95	13.99	14.00	15.50	21.03	21.07	20.94	22.50
3GPP Rel 6 HSDPA Subtest-4	12.93	12.92	12.70	14.50	13.98	14.01	14.02	15.50	21.07	21.11	20.99	22.50
3GPP Rel 8 DC-HSDPA Subtest-1	13.42	13.40	13.41	15.00	14.33	14.45	14.45	16.00	21.31	21.02	21.15	23.00
3GPP Rel 8 DC-HSDPA Subtest-2	13.48	13.46	13.43	15.00	14.31	14.45	14.32	16.00	21.26	21.14	21.13	23.00
3GPP Rel 8 DC-HSDPA Subtest-3	13.10	13.14	13.07	14.50	14.18	14.26	14.10	15.50	20.92	20.62	20.59	22.50
3GPP Rel 8 DC-HSDPA Subtest-4	13.09	13.06	13.04	14.50	14.23	14.19	14.13	15.50	20.80	20.77	20.51	22.50
3GPP Rel 6 HSUPA Subtest-1	13.43	13.37	13.18	15.00	14.24	14.30	14.31	16.00	21.42	21.47	21.46	23.00
3GPP Rel 6 HSUPA Subtest-2	12.15	12.12	11.99	13.00	13.08	13.01	13.06	14.00	20.56	20.43	20.39	21.00
3GPP Rel 6 HSUPA Subtest-3	12.83	12.73	12.60	14.00	14.08	14.04	14.06	15.00	21.53	21.48	21.44	22.00
3GPP Rel 6 HSUPA Subtest-4	12.19	12.13	11.95	13.00	13.06	12.98	13.06	14.00	20.51	20.47	20.34	21.00
3GPP Rel 6 HSUPA Subtest-5	13.40	13.34	13.19	15.00	14.28	14.30	14.27	16.00	21.48	21.52	21.42	23.00
3GPP Rel 7 HSPA+ (16QAM) Subtest-1	12.10	12.02	11.95	12.50	12.04	12.19	12.13	13.50	19.86	19.73	19.72	20.50
Attenuator		Cable Loss	0.8			Cable Loss	0.8			Cable Loss	0.8	
Mode		Max.	13.52			Max.	14.49			Max.	21.56	



3	QPSK	8	0	14.73	14.80	14.76	16
3	QPSK	8	4	14.71	14.71	14.64	
3	QPSK	8	7	14.77	14.73	14.66	
3	QPSK	15	0	14.78	14.95	14.83	16
3	16QAM	1	0	14.71	14.90	14.81	
3	16QAM	1	8	14.77	14.86	14.56	
3	16QAM	1	14	14.59	14.68	14.84	15
3	16QAM	8	0	13.93	13.85	13.91	
3	16QAM	8	4	13.68	13.60	13.73	
3	16QAM	8	7	13.77	13.91	13.64	15
3	16QAM	15	0	13.70	13.91	13.54	
3	64QAM	1	0	13.92	13.69	13.79	
3	64QAM	1	8	13.53	13.84	13.66	15
3	64QAM	1	14	13.77	13.92	13.86	
3	64QAM	8	0	12.95	12.76	12.67	
3	64QAM	8	4	12.92	12.94	12.94	14
3	64QAM	8	7	12.78	12.64	12.88	
3	64QAM	15	0	12.64	12.70	12.83	
Channel				1860.7	1890.0	1919.3	Tune-up limit (dBm)
Frequency (MHz)				1850.7	1880	1909.3	
1.4	QPSK	1	0	15.83	15.90	15.72	17
1.4	QPSK	1	3	15.86	15.81	15.67	
1.4	QPSK	1	5	15.90	15.78	15.73	
1.4	QPSK	3	0	14.82	14.83	14.77	
1.4	QPSK	3	1	14.78	14.61	14.88	
1.4	QPSK	3	3	14.81	14.77	14.68	
1.4	QPSK	6	0	14.85	14.89	14.89	16
1.4	16QAM	1	0	14.67	14.95	14.63	
1.4	16QAM	1	3	14.57	14.71	14.73	
1.4	16QAM	1	5	14.76	14.88	14.80	16
1.4	16QAM	3	0	13.97	13.88	13.81	
1.4	16QAM	3	1	13.65	13.62	13.84	
1.4	16QAM	3	3	13.73	13.79	13.88	15
1.4	16QAM	6	0	13.74	13.65	13.66	
1.4	64QAM	1	0	13.77	13.72	13.88	
1.4	64QAM	1	3	13.64	13.70	13.75	15
1.4	64QAM	1	5	13.77	13.91	13.96	
1.4	64QAM	3	0	13.81	13.54	13.86	
1.4	64QAM	3	1	13.92	13.78	13.81	
1.4	64QAM	3	3	13.76	13.81	13.99	
1.4	64QAM	6	0	12.80	12.74	12.70	
1.4	64QAM	6	0	12.80	12.74	12.70	14

3	QPSK	8	0	13.55	13.84	13.59	15
3	QPSK	8	4	13.61	13.62	13.52	
3	QPSK	8	7	13.59	13.76	13.65	
3	QPSK	15	0	13.74	13.68	13.91	15
3	16QAM	1	0	13.61	13.80	13.63	
3	16QAM	1	8	13.70	13.72	13.64	
3	16QAM	1	14	13.66	13.60	13.65	14
3	16QAM	8	0	12.56	12.62	12.83	
3	16QAM	8	4	12.56	12.65	12.57	
3	16QAM	8	7	12.61	12.60	12.65	14
3	16QAM	15	0	12.39	12.65	12.55	
3	64QAM	1	0	12.60	12.67	12.66	
3	64QAM	1	8	12.60	12.52	12.36	14
3	64QAM	1	14	12.67	12.83	12.83	
3	64QAM	8	0	11.61	11.60	11.75	
3	64QAM	8	4	11.66	11.59	11.59	13
3	64QAM	8	7	11.55	11.68	11.66	
3	64QAM	15	0	11.42	11.57	11.49	
Channel				1995.7	2017.5	2039.3	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1732.5	1754.3	
1.4	QPSK	1	0	14.82	14.86	14.66	16
1.4	QPSK	1	3	14.77	14.72	14.74	
1.4	QPSK	1	5	14.65	14.73	14.62	
1.4	QPSK	3	0	13.66	13.70	13.75	
1.4	QPSK	3	1	13.68	13.64	13.63	
1.4	QPSK	3	3	13.66	13.56	13.60	
1.4	QPSK	6	0	13.65	13.57	13.92	15
1.4	16QAM	1	0	13.65	13.65	13.68	
1.4	16QAM	1	3	13.59	13.60	13.55	
1.4	16QAM	1	5	13.61	13.56	13.64	15
1.4	16QAM	3	0	12.61	12.62	12.67	
1.4	16QAM	3	1	12.60	12.69	12.64	
1.4	16QAM	3	3	12.66	12.66	12.70	14
1.4	16QAM	6	0	12.61	12.66	12.65	
1.4	64QAM	1	0	12.78	12.71	12.70	
1.4	64QAM	1	3	12.61	12.58	12.64	14
1.4	64QAM	1	5	12.71	12.82	12.83	
1.4	64QAM	3	0	11.67	11.70	11.65	
1.4	64QAM	3	1	11.61	11.56	11.71	
1.4	64QAM	3	3	11.69	11.61	11.88	
1.4	64QAM	6	0	11.58	11.71	11.68	
1.4	64QAM	6	0	11.58	11.71	11.68	13



Band 66 (dBm)							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				132072	132322	132572	
Frequency (MHz)				1720	1745	1770	
20	QPSK	1	0	14.67	14.94	14.61	16
20	QPSK	1	49	14.61	14.88	14.65	
20	QPSK	1	99	14.56	14.59	14.66	
20	QPSK	50	0	13.58	13.88	13.86	15
20	QPSK	50	24	13.63	13.66	13.82	
20	QPSK	50	50	13.61	13.63	13.66	
20	QPSK	100	0	13.65	13.80	13.84	15
20	16QAM	1	0	13.65	13.76	13.57	
20	16QAM	1	49	13.63	13.80	13.64	
20	16QAM	1	99	13.70	13.61	13.57	14
20	16QAM	50	0	12.79	12.55	12.76	
20	16QAM	50	24	12.54	12.58	12.57	
20	16QAM	50	50	12.53	12.84	12.53	14
20	16QAM	100	0	12.52	12.56	12.55	
20	64QAM	1	0	12.89	12.81	12.70	
20	64QAM	1	49	12.70	12.76	12.70	14
20	64QAM	1	99	12.86	12.91	12.93	
20	64QAM	50	0	11.86	11.50	11.64	
20	64QAM	50	24	11.81	11.59	11.80	13
20	64QAM	50	50	11.69	11.80	11.77	
20	64QAM	100	0	11.61	11.60	11.73	
Channel				132047	132322	132597	
Frequency (MHz)				1717.5	1745	1772.5	
15	QPSK	1	0	14.88	14.92	14.79	16
15	QPSK	1	37	14.72	14.72	14.68	
15	QPSK	1	74	14.62	14.82	14.76	
15	QPSK	36	0	13.78	13.93	13.69	15
15	QPSK	36	20	13.73	13.71	13.58	
15	QPSK	36	39	13.69	13.80	13.73	
15	QPSK	75	0	13.75	13.62	13.73	15
15	16QAM	1	0	13.70	13.77	13.58	
15	16QAM	1	37	13.66	13.63	13.71	
15	16QAM	1	74	13.59	13.80	13.68	14
15	16QAM	36	0	12.84	12.68	12.83	
15	16QAM	36	20	12.72	12.78	12.67	
15	16QAM	36	39	12.77	12.78	12.59	14
15	16QAM	75	0	12.55	12.54	12.56	
15	64QAM	1	0	12.64	12.75	12.93	
15	64QAM	1	37	12.66	12.67	12.71	14
15	64QAM	1	74	12.77	12.76	12.78	
15	64QAM	36	0	11.67	11.66	11.77	
15	64QAM	36	20	11.76	11.84	11.61	13
15	64QAM	36	39	11.78	11.77	11.78	
15	64QAM	75	0	11.57	11.68	11.69	
Channel				132022	132322	132622	
Frequency (MHz)				1715	1745	1775	
10	QPSK	1	0	14.80	14.89	14.64	16
10	QPSK	1	25	14.78	14.84	14.71	
10	QPSK	1	49	14.80	14.67	14.55	
10	QPSK	25	0	13.82	13.94	13.85	15
10	QPSK	25	12	13.59	13.53	13.82	
10	QPSK	25	25	13.56	13.63	13.58	
10	QPSK	50	0	13.84	13.67	13.76	15
10	16QAM	1	0	13.68	13.87	13.60	
10	16QAM	1	25	13.62	13.54	13.70	
10	16QAM	1	49	13.71	13.52	13.59	14
10	16QAM	25	0	12.70	12.76	12.66	
10	16QAM	25	12	12.60	12.70	12.67	
10	16QAM	25	25	12.71	12.65	12.60	14
10	16QAM	50	0	12.68	12.62	12.50	
10	64QAM	1	0	12.80	12.82	12.71	
10	64QAM	1	25	12.64	12.56	12.64	14
10	64QAM	1	49	12.84	12.86	12.70	
10	64QAM	25	0	11.87	11.65	11.82	
10	64QAM	25	12	11.82	11.69	11.59	13
10	64QAM	25	25	11.54	11.72	11.82	
10	64QAM	50	0	11.55	11.56	11.58	
Channel				131997	132322	132647	
Frequency (MHz)				1712.5	1745	1777.5	
5	QPSK	1	0	14.80	14.88	14.75	16
5	QPSK	1	12	14.61	14.65	14.79	
5	QPSK	1	24	14.82	14.61	14.60	
5	QPSK	12	0	13.71	13.89	13.63	15
5	QPSK	12	7	13.68	13.76	13.84	
5	QPSK	12	13	13.86	13.69	13.56	
5	QPSK	25	0	13.57	13.85	13.75	15
5	16QAM	1	0	13.46	13.73	13.72	
5	16QAM	1	12	13.68	13.59	13.58	
5	16QAM	1	24	13.65	13.54	13.49	14
5	16QAM	12	0	12.86	12.82	12.88	
5	16QAM	12	7	12.67	12.65	12.54	
5	16QAM	12	13	12.76	12.75	12.68	14
5	16QAM	25	0	12.63	12.71	12.63	
5	64QAM	1	0	12.65	12.56	12.93	
5	64QAM	1	12	12.67	12.74	12.89	14
5	64QAM	1	24	12.84	12.84	12.78	
5	64QAM	12	0	11.88	11.62	11.57	
5	64QAM	12	7	11.87	11.68	11.70	13
5	64QAM	12	13	11.67	11.72	11.72	
5	64QAM	25	0	11.56	11.52	11.71	
Channel				131987	132322	132657	
Frequency (MHz)				1711.5	1745	1778.5	
3	QPSK	1	0	14.66	14.87	14.73	16
3	QPSK	1	8	14.75	14.70	14.64	
3	QPSK	1	14	14.56	14.78	14.59	



3	QPSK	8	0	13.62	13.76	13.81	15
3	QPSK	8	4	13.67	13.55	13.83	
3	QPSK	8	7	13.58	13.78	13.75	
3	QPSK	15	0	13.77	13.84	13.72	15
3	16QAM	1	0	13.74	13.63	13.60	
3	16QAM	1	8	13.69	13.55	13.56	
3	16QAM	1	14	13.68	13.78	13.65	14
3	16QAM	8	0	12.84	12.63	12.69	
3	16QAM	8	4	12.64	12.51	12.75	
3	16QAM	8	7	12.68	12.81	12.58	14
3	16QAM	15	0	12.58	12.73	12.50	
3	64QAM	1	0	12.78	12.67	12.73	
3	64QAM	1	8	12.57	12.73	12.51	14
3	64QAM	1	14	12.67	12.77	12.69	
3	64QAM	8	0	11.77	11.66	11.60	
3	64QAM	8	4	11.74	11.80	11.58	13
3	64QAM	8	7	11.58	11.58	11.82	
3	64QAM	15	0	11.53	11.70	11.82	
Channel				131979	132322	132685	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1745	1779.3	
1.4	QPSK	1	0	14.73	14.85	14.65	16
1.4	QPSK	1	3	14.82	14.65	14.53	
1.4	QPSK	1	5	14.70	14.59	14.54	
1.4	QPSK	3	0	13.75	13.87	13.87	
1.4	QPSK	3	1	13.75	13.75	13.61	
1.4	QPSK	3	3	13.85	13.61	13.66	
1.4	QPSK	6	0	13.81	13.85	13.76	15
1.4	16QAM	1	0	13.68	13.73	13.78	
1.4	16QAM	1	3	13.47	13.54	13.71	
1.4	16QAM	1	5	13.66	13.58	13.72	15
1.4	16QAM	3	0	12.71	12.81	12.89	
1.4	16QAM	3	1	12.58	12.67	12.71	
1.4	16QAM	3	3	12.66	12.74	12.53	14
1.4	16QAM	6	0	12.63	12.66	12.61	
1.4	64QAM	1	0	12.72	12.78	12.83	
1.4	64QAM	1	3	12.57	12.57	12.53	14
1.4	64QAM	1	5	12.81	12.73	12.87	
1.4	64QAM	3	0	11.84	11.66	11.59	
1.4	64QAM	3	1	11.87	11.73	11.81	
1.4	64QAM	3	3	11.65	11.58	11.82	
1.4	64QAM	6	0	11.74	11.67	11.78	13



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	19.29			20.5
10	QPSK	1	25	19.08			
10	QPSK	1	49	19.21			
10	QPSK	25	0	18.34			19.5
10	QPSK	25	12	18.19			
10	QPSK	25	25	18.22			
10	QPSK	50	0	18.25			19.5
10	16QAM	1	0	18.16			
10	16QAM	1	25	18.21			
10	16QAM	1	49	18.10			18.5
10	16QAM	25	0	17.36			
10	16QAM	25	12	17.29			
10	16QAM	25	25	17.25			18.5
10	16QAM	50	0	17.28			
10	64QAM	1	0	17.13			
10	64QAM	1	25	17.09			18.5
10	64QAM	1	49	17.15			
10	64QAM	25	0	16.27			
10	64QAM	25	12	16.19			17.5
10	64QAM	25	25	16.11			
10	64QAM	50	0	16.24			
Channel				39175	39200	39225	Tune-up limit (dBm)
Frequency (MHz)				2352.5	2355	2357.5	
5	QPSK	1	0	19.17	19.25	19.14	20.5
5	QPSK	1	12	19.11	19.23	19.21	
5	QPSK	1	24	19.20	19.16	19.23	
5	QPSK	12	0	18.28	18.47	18.19	19.5
5	QPSK	12	7	18.08	18.03	18.04	
5	QPSK	12	13	18.20	18.10	18.01	
5	QPSK	25	0	18.27	18.12	18.44	19.5
5	16QAM	1	0	18.10	18.12	18.05	
5	16QAM	1	12	18.00	18.16	18.13	
5	16QAM	1	24	17.98	18.31	17.95	18.5
5	16QAM	12	0	17.15	17.12	17.15	
5	16QAM	12	7	16.90	17.05	17.09	
5	16QAM	12	13	17.16	17.23	17.08	18.5
5	16QAM	25	0	17.16	17.26	16.98	
5	64QAM	1	0	17.32	17.09	17.20	
5	64QAM	1	12	17.09	17.11	17.10	18.5
5	64QAM	1	24	17.42	17.40	17.29	
5	64QAM	12	0	16.27	16.08	16.21	
5	64QAM	12	7	16.11	16.17	16.30	17.5
5	64QAM	12	13	16.22	16.30	16.38	
5	64QAM	25	0	16.00	15.97	16.04	

Band 41 (2535~2655MHz) (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				40140	40390	40640	40890	41140	
Frequency (MHz)				2545	2570	2595	2620	2645	
20	QPSK	1	0	20.64	20.83	20.86	20.77	20.76	22
20	QPSK	1	49	20.69	20.61	20.73	20.77	20.57	
20	QPSK	1	99	20.61	20.67	20.67	20.56	20.58	
20	QPSK	50	0	19.81	19.83	19.90	19.87	19.74	21
20	QPSK	50	24	19.63	19.72	19.72	19.50	19.74	
20	QPSK	50	50	19.57	19.84	19.74	19.68	19.75	
20	QPSK	100	0	19.67	19.92	19.86	19.80	20.01	21
20	16QAM	1	0	19.62	19.71	19.75	19.78	19.50	
20	16QAM	1	49	19.76	19.79	19.65	19.58	19.71	
20	16QAM	1	99	19.75	19.71	19.64	19.60	19.59	20
20	16QAM	50	0	18.88	18.66	18.65	18.67	18.66	
20	16QAM	50	24	18.52	18.55	18.71	18.68	18.57	
20	16QAM	50	50	18.73	18.61	18.62	18.67	18.69	20
20	16QAM	100	0	18.50	18.59	18.45	18.54	18.71	
20	64QAM	1	0	18.68	18.84	18.86	18.62	18.84	
20	64QAM	1	49	18.54	18.55	18.56	18.56	18.75	20
20	64QAM	1	99	18.71	18.77	18.67	18.79	18.63	
20	64QAM	50	0	17.85	17.64	17.69	17.44	17.61	
20	64QAM	50	24	17.63	17.83	17.85	17.83	17.59	19
20	64QAM	50	50	17.71	17.69	17.80	17.73	17.74	
20	64QAM	100	0	17.71	17.61	17.82	17.59	17.62	
Channel				40115	40378	40640	40903	41165	
Frequency (MHz)				2542.5	2568.8	2595	2621.3	2647.5	
15	QPSK	1	0	20.63	20.73	20.85	20.72	20.64	22
15	QPSK	1	37	20.64	20.71	20.65	20.60	20.70	
15	QPSK	1	74	20.67	20.78	20.58	20.62	20.60	
15	QPSK	36	0	19.78	19.71	19.85	19.80	19.86	21
15	QPSK	36	20	19.64	19.71	19.61	19.49	19.63	
15	QPSK	36	39	19.74	19.61	19.68	19.77	19.75	
15	QPSK	75	0	19.73	19.74	19.77	19.73	19.83	21
15	16QAM	1	0	19.74	19.65	19.70	19.88	19.69	
15	16QAM	1	37	19.56	19.69	19.62	19.63	19.73	
15	16QAM	1	74	19.76	19.67	19.61	19.69	19.63	20
15	16QAM	36	0	18.81	18.68	18.73	18.66	18.65	
15	16QAM	36	20	18.59	18.60	18.62	18.74	18.47	
15	16QAM	36	39	18.75	18.66	18.55	18.60	18.64	20
15	16QAM	75	0	18.58	18.56	18.69	18.57	18.57	
15	64QAM	1	0	18.68	18.68	18.81	18.62	18.70	
15	64QAM	1	37	18.56	18.68	18.58	18.59	18.66	20
15	64QAM	1	74	18.86	18.90	18.63	18.91	18.71	
15	64QAM	36	0	17.67	17.54	17.61	17.55	17.82	
15	64QAM	36	20	17.58	17.67	17.61	17.65	17.61	19
15	64QAM	36	39	17.57	17.67	17.78	17.63	17.83	
15	64QAM	75	0	17.73	17.72	17.80	17.48	17.81	
Channel				40090	40365	40640	40915	41190	
Frequency (MHz)				2540	2567.5	2595	2622.5	2650	
10	QPSK	1	0	20.61	20.76	20.83	20.80	20.61	22
10	QPSK	1	25	20.61	20.66	20.77	20.79	20.59	
10	QPSK	1	49	20.62	20.60	20.67	20.76	20.51	
10	QPSK	25	0	19.62	19.77	19.90	19.92	19.86	21
10	QPSK	25	12	19.52	19.67	19.72	19.64	19.73	
10	QPSK	25	25	19.69	19.69	19.52	19.87	19.68	
10	QPSK	50	0	19.56	19.68	19.88	19.70	19.66	21
10	16QAM	1	0	19.65	19.82	19.68	19.86	19.53	
10	16QAM	1	25	19.57	19.65	19.70	19.66	19.73	
10	16QAM	1	49	19.49	19.80	19.67	19.52	19.50	20
10	16QAM	25	0	18.63	18.57	18.65	18.60	18.83	
10	16QAM	25	12	18.64	18.78	18.70	18.56	18.76	
10	16QAM	25	25	18.60	18.63	18.73	18.67	18.67	20
10	16QAM	50	0	18.50	18.65	18.49	18.55	18.69	
10	64QAM	1	0	18.82	18.69	18.78	18.57	18.93	
10	64QAM	1	25	18.60	18.59	18.67	18.53	18.74	20
10	64QAM	1	49	18.71	18.98	18.92	18.73	18.72	
10	64QAM	25	0	17.86	17.70	17.67	17.64	17.59	
10	64QAM	25	12	17.80	17.59	17.74	17.70	17.80	19
10	64QAM	25	25	17.59	17.73	17.91	17.52	17.80	
10	64QAM	50	0	17.73	17.74	17.61	17.59	17.52	
Channel				40065	40353	40640	40928	41216	
Frequency (MHz)				2537.5	2566.3	2595	2623.80	2652.5	
5	QPSK	1	0	20.78	20.77	20.80	20.77	20.71	22
5	QPSK	1	12	20.64	20.80	20.62	20.70	20.75	
5	QPSK	1	24	20.57	20.59	20.58	20.66	20.64	
5	QPSK	12	0	19.85	19.73	19.76	19.72	19.86	21
5	QPSK	12	7	19.56	19.59	19.63	19.67	19.79	
5	QPSK	12	13	19.58	19.67	19.74	19.76	19.80	
5	QPSK	25	0	19.56	19.89	19.97	19.76	19.63	21
5	16QAM	1	0	19.66	19.67	19.72	19.66	19.65	
5	16QAM	1	12	19.59	19.71	19.57	19.72	19.52	
5	16QAM	1	24	19.53	19.62	19.47	19.73	19.71	20
5	16QAM	12	0	18.75	18.60	18.64	18.53	18.75	
5	16QAM	12	7	18.66	18.65	18.74	18.53	18.55	
5	16QAM	12	13	18.73	18.71	18.56	18.71	18.81	20
5	16QAM	25	0	18.52	18.76	18.71	18.77	18.68	
5	64QAM	1	0	18.89	18.72	18.84	18.61	18.70	
5	64QAM	1	12	18.70	18.77	18.74	18.61	18.76	20
5	64QAM	1	24	18.80	18.87	18.93	18.94	18.75	
5	64QAM	12	0	17.63	17.60	17.63	17.62	17.78	
5	64QAM	12	7	17.59	17.84	17.55	17.70	17.76	19
5	64QAM	12	13	17.64	17.79	17.60	17.53	17.89	
5	64QAM	25	0	17.59	17.60	17.82	17.71	17.58	

**Reduced Power Level 2 for Standalone (ANT 0)**
**2.4GHz WLAN ANT 0**

Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Power Setting	Duty Cycle %
802.11b 1Mbps	CH 1	2412	16.63	18.50	13.00	99.53
	CH 6	2437	16.35	17.50	13.00	
	CH 11	2462	16.68	18.50	13.00	
802.11g 6Mbps	CH 1	2412	14.16	16.00	12.00	95.89
	CH 6	2437	14.25	16.00	12.00	
	CH 11	2462	11.63	13.50	10.00	
802.11n-HT20 MCSO	CH 1	2412	14.42	16.00	12.00	95.16
	CH 6	2437	14.47	16.00	12.00	
	CH 11	2462	10.76	12.50	9.00	
802.11n-HT40 MCSO	CH 3	2422	12.37	14.00	10.00	90.77
	CH 6	2437	13.59	15.50	11.00	
	CH 9	2452	9.65	11.50	8.00	

**5GHz WLAN ANT 0**

Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Power Setting	Duty Cycle %
802.11a 6Mbps	CH 36	5180	14.34	16.00	15.00	95.89
	CH 44	5220	14.40	16.00	15.00	
	CH 48	5240	14.46	16.00	15.00	
802.11n-HT20 MCSO	CH 36	5180	14.53	16.50	15.00	95.16
	CH 44	5220	14.73	16.50	15.00	
	CH 48	5240	14.74	16.50	15.00	
802.11n-HT40 MCSO	CH 38	5190	14.64	16.50	15.00	90.91
	CH 46	5230	14.57	16.50	15.00	
802.11ac-VHT20 MCSO	CH 36	5180	14.51	16.50	15.00	95.24
	CH 44	5220	14.75	16.50	15.00	
	CH 48	5240	14.76	16.50	15.00	
802.11ac-VHT40 MCSO	CH 38	5190	14.25	16.00	15.00	87.88
	CH 46	5230	14.34	16.00	15.00	
802.11ac-VHT80 MCSO	CH 42	5210	14.24	16.00	15.00	81.94

**5GHz WLAN ANT 0**

Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Power Setting	Duty Cycle %
802.11a 6Mbps	CH 52	5260	15.52	17.50	16.00	95.89
	CH 60	5300	16.06	18.00	16.00	
	CH 64	5320	15.22	17.00	16.00	
802.11n-HT20 MCSO	CH 52	5260	15.84	17.50	16.00	95.16
	CH 60	5300	15.98	17.50	16.00	
	CH 64	5320	15.89	17.50	16.00	
802.11n-HT40 MCSO	CH 54	5270	15.73	17.50	16.00	90.91
	CH 62	5310	15.45	17.00	16.00	
802.11ac-VHT20 MCSO	CH 52	5260	15.84	17.50	16.00	95.24
	CH 60	5300	16.33	18.00	16.00	
	CH 64	5320	15.84	17.50	16.00	
802.11ac-VHT40 MCSO	CH 54	5270	15.47	17.00	16.00	87.88
	CH 62	5310	15.20	17.00	16.00	
802.11ac-VHT80 MCSO	CH 58	5290	15.50	17.50	16.00	81.94

**5GHz WLAN ANT 0**

Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Power Setting	Duty Cycle %
802.11a 6Mbps	CH 100	5500	14.05	16.00	14.00	95.89
	CH 120	5600	14.41	16.00	14.00	
	CH 140	5700	14.06	16.00	14.00	
802.11n-HT20 MCSO	CH 100	5500	14.30	16.00	14.00	95.16
	CH 120	5600	14.67	16.50	14.00	
	CH 140	5700	14.32	16.00	14.00	
802.11n-HT40 MCSO	CH 102	5510	14.38	16.00	14.00	90.91
	CH 126	5630	14.22	16.00	14.00	
	CH 134	5670	14.04	16.00	14.00	
802.11ac-VHT20 MCSO	CH 100	5500	14.27	16.00	14.00	95.24
	CH 120	5600	14.63	16.50	14.00	
	CH 140	5700	14.31	16.00	14.00	
802.11ac-VHT40 MCSO	CH 102	5510	14.19	16.00	14.00	87.88
	CH 126	5630	13.95	15.50	14.00	
	CH 134	5670	13.78	15.50	14.00	
802.11ac-VHT80 MCSO	CH 106	5530	14.16	16.00	14.00	81.94
	CH 122	5610	14.17	16.00	14.00	
	CH 138	5690	14.00	16.00	14.00	

**5GHz WLAN ANT 0**

Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Power Setting	Duty Cycle %
802.11a 6Mbps	CH 149	5745	13.96	15.50	14.00	95.89
	CH 157	5785	13.80	15.50	14.00	
	CH 165	5825	13.51	15.50	14.00	
802.11n-HT20 MCSO	CH 149	5745	14.24	16.00	14.00	95.16
	CH 157	5785	14.06	16.00	14.00	
	CH 165	5825	13.79	15.50	14.00	
802.11n-HT40 MCSO	CH 151	5755	13.99	15.50	14.00	90.91
	CH 159	5795	13.69	15.50	14.00	
802.11ac-VHT20 MCSO	CH 149	5745	14.39	16.00	14.00	95.24
	CH 157	5785	14.14	16.00	14.00	
	CH 165	5825	13.82	15.50	14.00	
802.11ac-VHT40 MCSO	CH 151	5755	13.73	15.50	14.00	87.88
	CH 159	5795	13.46	15.00	14.00	
802.11ac-VHT80 MCSO	CH 155	5775	13.84	15.50	14.00	91.94

**Reduced Power Level 3 for Standalone (ANT 2)**

GSM1900 TX Channel	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
	512	681	810		512	681	810	
Frequency (MHz)	1850.2	1880	1909.8		1850.2	1880	1909.8	
GSM 1 Tx slot	27.89	27.90	27.83	29.00	18.89	18.90	18.83	20.00
GPRS 1 Tx slot	27.86	27.88	27.78	29.00	18.86	18.88	18.78	20.00
GPRS 2 Tx slots	25.75	25.79	25.68	27.00	19.75	19.79	19.68	21.00
GPRS 3 Tx slots	24.13	24.16	24.09	25.50	19.87	19.90	19.83	21.24
GPRS 4 Tx slots	22.17	22.21	22.14	23.50	19.17	19.21	19.14	20.50
EDGE 1 Tx slot	24.34	24.39	24.31	25.00	15.34	15.39	15.31	16.00
EDGE 2 Tx slots	22.79	22.84	22.75	23.50	16.79	16.84	16.75	17.50
EDGE 3 Tx slots	20.86	20.92	20.83	21.50	16.60	16.66	16.57	17.24
EDGE 4 Tx slots	18.90	18.94	18.86	19.50	15.90	15.94	15.86	16.50
Mode		Max.	27.90			Max.	19.90	
Attenuator	Cable Loss : 0.8							

Band TX Channel	WCDMA Band II (dBm)			Tune-up Limit (dBm)	WCDMA Band IV (dBm)			Tune-up Limit (dBm)
	9262	9400	9538		1312	1413	1513	
Frequency (MHz)	1852.4	1880	1907.6		1712.4	1732.6	1752.6	
3GPP Rel 99 RMC 12.2Kbps	18.98	19.02	19.01	20.50	18.95	18.99	18.93	20.50
3GPP Rel 6 HSDPA Subtest-1	18.75	18.91	18.95	20.50	18.66	18.65	18.73	20.50
3GPP Rel 6 HSDPA Subtest-2	18.77	18.77	18.79	20.50	18.66	18.71	18.72	20.50
3GPP Rel 6 HSDPA Subtest-3	18.40	18.39	18.37	20.00	18.45	18.49	18.50	20.00
3GPP Rel 6 HSDPA Subtest-4	18.43	18.42	18.20	20.00	18.48	18.51	18.52	20.00
3GPP Rel 8 DC-HSDPA Subtest-1	18.92	18.90	18.91	20.50	18.83	18.95	18.95	20.50
3GPP Rel 8 DC-HSDPA Subtest-2	18.98	18.96	18.93	20.50	18.81	18.95	18.82	20.50
3GPP Rel 8 DC-HSDPA Subtest-3	18.60	18.64	18.57	20.00	18.68	18.76	18.60	20.00
3GPP Rel 8 DC-HSDPA Subtest-4	18.59	18.56	18.54	20.00	18.73	18.69	18.63	20.00
3GPP Rel 6 HSUPA Subtest-1	18.93	18.87	18.68	20.50	18.74	18.80	18.81	20.50
3GPP Rel 6 HSUPA Subtest-2	17.65	17.62	17.49	18.50	17.58	17.51	17.56	18.50
3GPP Rel 6 HSUPA Subtest-3	18.33	18.23	18.10	19.50	18.58	18.54	18.56	19.50
3GPP Rel 6 HSUPA Subtest-4	17.69	17.63	17.45	18.50	17.56	17.48	17.56	18.50
3GPP Rel 6 HSUPA Subtest-5	18.90	18.84	18.69	20.50	18.78	18.80	18.77	20.50
3GPP Rel 7 HSPA+ (16QAM) Subtest-1	17.60	17.52	17.45	18.00	16.54	16.69	16.63	18.00
Attenuator	Cable Loss			0.8	Cable Loss			0.8
Mode		Max.	19.02			Max.	18.99	



3	QPSK	8	0	18.23	18.30	18.26	19.5
3	QPSK	8	4	18.21	18.21	18.14	
3	QPSK	8	7	18.27	18.23	18.16	
3	QPSK	15	0	18.28	18.45	18.33	19.5
3	16QAM	1	0	18.21	18.40	18.31	
3	16QAM	1	8	18.27	18.36	18.06	
3	16QAM	1	14	18.09	18.18	18.34	18.5
3	16QAM	8	0	17.43	17.35	17.41	
3	16QAM	8	4	17.18	17.10	17.23	
3	16QAM	8	7	17.27	17.41	17.14	18.5
3	16QAM	15	0	17.20	17.41	17.04	
3	64QAM	1	0	17.42	17.19	17.29	
3	64QAM	1	8	17.03	17.34	17.16	18.5
3	64QAM	1	14	17.27	17.42	17.36	
3	64QAM	8	0	16.45	16.26	16.37	
3	64QAM	8	4	16.42	16.44	16.44	17.5
3	64QAM	8	7	16.28	16.14	16.38	
3	64QAM	15	0	16.14	16.20	16.33	
Channel				18607	18900	19193	Tune-up limit (dBm)
Frequency (MHz)				1850.7	1880	1909.3	
1.4	QPSK	1	0	19.33	19.40	19.22	20.5
1.4	QPSK	1	3	19.36	19.31	19.17	
1.4	QPSK	1	5	19.40	19.28	19.23	
1.4	QPSK	3	0	18.32	18.33	18.27	
1.4	QPSK	3	1	18.28	18.11	18.38	
1.4	QPSK	3	3	18.31	18.27	18.18	
1.4	QPSK	6	0	18.35	18.39	18.39	19.5
1.4	16QAM	1	0	18.17	18.45	18.13	
1.4	16QAM	1	3	18.07	18.21	18.23	
1.4	16QAM	1	5	18.26	18.38	18.30	19.5
1.4	16QAM	3	0	17.47	17.38	17.31	
1.4	16QAM	3	1	17.15	17.12	17.34	
1.4	16QAM	3	3	17.23	17.29	17.38	18.5
1.4	16QAM	6	0	17.24	17.15	17.16	
1.4	64QAM	1	0	17.27	17.22	17.38	
1.4	64QAM	1	3	17.14	17.20	17.25	18.5
1.4	64QAM	1	5	17.27	17.41	17.46	
1.4	64QAM	3	0	17.31	17.04	17.36	
1.4	64QAM	3	1	17.42	17.28	17.31	
1.4	64QAM	3	3	17.26	17.31	17.49	
1.4	64QAM	6	0	16.30	16.24	16.20	
Channel				18607	18900	19193	Tune-up limit (dBm)
Frequency (MHz)				1850.7	1880	1909.3	

3	QPSK	8	0	18.05	18.34	18.09	19.5
3	QPSK	8	4	18.11	18.12	18.02	
3	QPSK	8	7	18.09	18.26	18.15	
3	QPSK	15	0	18.24	18.18	18.41	19.5
3	16QAM	1	0	18.11	18.30	18.13	
3	16QAM	1	8	18.20	18.22	18.14	
3	16QAM	1	14	18.16	18.10	18.15	18.5
3	16QAM	8	0	17.06	17.12	17.33	
3	16QAM	8	4	17.06	17.15	17.07	
3	16QAM	8	7	17.11	17.10	17.15	18.5
3	16QAM	15	0	16.89	17.15	17.05	
3	64QAM	1	0	17.10	17.17	17.16	
3	64QAM	1	8	17.10	17.02	16.86	18.5
3	64QAM	1	14	17.17	17.33	17.33	
3	64QAM	8	0	16.11	16.10	16.25	
3	64QAM	8	4	16.16	16.09	16.09	17.5
3	64QAM	8	7	16.05	16.18	16.16	
3	64QAM	15	0	15.92	16.07	15.99	
Channel				19957	20175	20393	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1732.5	1754.3	
1.4	QPSK	1	0	19.32	19.36	19.16	20.5
1.4	QPSK	1	3	19.27	19.22	19.24	
1.4	QPSK	1	5	19.15	19.23	19.12	
1.4	QPSK	3	0	18.16	18.20	18.25	
1.4	QPSK	3	1	18.18	18.14	18.13	
1.4	QPSK	3	3	18.16	18.06	18.10	
1.4	QPSK	6	0	18.15	18.07	18.42	19.5
1.4	16QAM	1	0	18.15	18.15	18.18	
1.4	16QAM	1	3	18.09	18.10	18.05	
1.4	16QAM	1	5	18.11	18.06	18.14	19.5
1.4	16QAM	3	0	17.11	17.12	17.17	
1.4	16QAM	3	1	17.10	17.19	17.14	
1.4	16QAM	3	3	17.16	17.16	17.20	18.5
1.4	16QAM	6	0	17.11	17.16	17.15	
1.4	64QAM	1	0	17.28	17.21	17.20	
1.4	64QAM	1	3	17.11	17.08	17.14	18.5
1.4	64QAM	1	5	17.21	17.32	17.33	
1.4	64QAM	3	0	16.17	16.20	16.15	
1.4	64QAM	3	1	16.11	16.06	16.21	
1.4	64QAM	3	3	16.19	16.11	16.38	
1.4	64QAM	6	0	16.08	16.21	16.18	
Channel				19957	20175	20393	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1732.5	1754.3	





3	QPSK	8	0	19.12	19.26	19.31	20.5
3	QPSK	8	4	19.17	19.05	19.33	
3	QPSK	8	7	19.08	19.28	19.25	
3	QPSK	15	0	19.27	19.34	19.22	20.5
3	16QAM	1	0	19.24	19.13	19.10	
3	16QAM	1	8	19.19	19.05	19.06	
3	16QAM	1	14	19.18	19.28	19.15	19.5
3	16QAM	8	0	18.34	18.13	18.19	
3	16QAM	8	4	18.14	18.01	18.25	
3	16QAM	8	7	18.18	18.31	18.08	19.5
3	16QAM	15	0	18.08	18.23	18.00	
3	64QAM	1	0	18.28	18.17	18.23	
3	64QAM	1	8	18.07	18.23	18.01	18.5
3	64QAM	1	14	18.17	18.27	18.19	
3	64QAM	8	0	17.27	17.16	17.10	
3	64QAM	8	4	17.24	17.30	17.08	18.5
3	64QAM	8	7	17.08	17.08	17.32	
3	64QAM	15	0	17.03	17.20	17.32	
Channel				131979	132322	132685	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1745	1779.3	
1.4	QPSK	1	0	20.23	20.35	20.15	21.5
1.4	QPSK	1	3	20.32	20.15	20.03	
1.4	QPSK	1	5	20.20	20.09	20.04	
1.4	QPSK	3	0	19.25	19.37	19.37	
1.4	QPSK	3	1	19.25	19.25	19.11	
1.4	QPSK	3	3	19.35	19.11	19.16	
1.4	QPSK	6	0	19.31	19.35	19.26	20.5
1.4	16QAM	1	0	19.18	19.23	19.28	
1.4	16QAM	1	3	18.97	19.04	19.21	
1.4	16QAM	1	5	19.16	19.08	19.22	20.5
1.4	16QAM	3	0	18.21	18.31	18.39	
1.4	16QAM	3	1	18.08	18.17	18.21	
1.4	16QAM	3	3	18.16	18.24	18.03	19.5
1.4	16QAM	6	0	18.13	18.16	18.11	
1.4	64QAM	1	0	18.22	18.28	18.33	
1.4	64QAM	1	3	18.07	18.07	18.03	19.5
1.4	64QAM	1	5	18.31	18.23	18.37	
1.4	64QAM	3	0	17.34	17.16	17.09	
1.4	64QAM	3	1	17.37	17.23	17.31	
1.4	64QAM	3	3	17.15	17.08	17.32	
1.4	64QAM	6	0	17.24	17.17	17.28	



Band 40 (2.3G Band-2) (dBm)							
Part 27D-2 2350MHz ~ 2360MHz							
BW (MHz)	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				39200			
Frequency (MHz)				2355			
10	QPSK	1	0	20.29			21.5
10	QPSK	1	25	20.08			
10	QPSK	1	49	20.21			
10	QPSK	25	0	19.34			20.5
10	QPSK	25	12	19.19			
10	QPSK	25	25	19.22			
10	QPSK	50	0	19.25			20.5
10	16QAM	1	0	19.16			
10	16QAM	1	25	19.21			
10	16QAM	1	49	19.10			19.5
10	16QAM	25	0	18.36			
10	16QAM	25	12	18.29			
10	16QAM	25	25	18.25			19.5
10	16QAM	50	0	18.28			
10	84QAM	1	0	18.13			
10	84QAM	1	25	18.09			19.5
10	84QAM	1	49	18.15			
10	84QAM	25	0	17.27			
10	84QAM	25	12	17.19			18.5
10	84QAM	25	25	17.11			
10	84QAM	50	0	17.24			
Channel				39175	39200	39225	Tune-up limit (dBm)
Frequency (MHz)				2352.5	2355	2357.5	
5	QPSK	1	0	20.17	20.25	20.14	21.5
5	QPSK	1	12	20.11	20.23	20.21	
5	QPSK	1	24	20.20	20.16	20.23	
5	QPSK	12	0	19.28	19.47	19.19	20.5
5	QPSK	12	7	19.08	19.03	19.04	
5	QPSK	12	13	19.20	19.10	19.01	
5	QPSK	25	0	19.27	19.12	19.44	20.5
5	16QAM	1	0	19.10	19.12	19.05	
5	16QAM	1	12	19.00	19.16	19.13	
5	16QAM	1	24	18.98	19.31	18.95	19.5
5	16QAM	12	0	18.15	18.12	18.15	
5	16QAM	12	7	17.90	18.05	18.09	
5	16QAM	12	13	18.16	18.23	18.08	19.5
5	16QAM	25	0	18.16	18.26	17.98	
5	84QAM	1	0	18.32	18.09	18.20	
5	84QAM	1	12	18.09	18.11	18.10	19.5
5	84QAM	1	24	18.42	18.40	18.29	
5	84QAM	12	0	17.27	17.08	17.21	
5	84QAM	12	7	17.11	17.17	17.30	18.5
5	84QAM	12	13	17.22	17.30	17.38	
5	84QAM	25	0	17.00	16.97	17.04	



**Reduced Power Level 4 for Standalone(ANT 3)**

Band		WCDMA Band II (dBm)			Tune-up Limit (dBm)	WCDMA Band IV (dBm)			Tune-up Limit (dBm)
TX Channel	Frequency (MHz)	9262	9400	9538		1312	1413	1513	
		1852.4	1880	1907.6	1712.4	1732.6	1752.6		
3GPP Rel 99	RMC 12.2Kbps	20.48	20.52	20.51	22.00	20.43	20.47	20.41	21.50
3GPP Rel 6	HSDPA Subtest-1	20.25	20.41	20.45	22.00	20.14	20.13	20.21	21.50
3GPP Rel 6	HSDPA Subtest-2	20.27	20.27	20.29	22.00	20.14	20.19	20.20	21.50
3GPP Rel 6	HSDPA Subtest-3	19.90	19.89	19.87	21.50	19.93	19.97	19.98	21.00
3GPP Rel 6	HSDPA Subtest-4	19.93	19.92	19.70	21.50	19.96	19.99	20.00	21.00
3GPP Rel 8	DC-HSDPA Subtest-1	20.42	20.40	20.41	22.00	20.31	20.43	20.43	21.50
3GPP Rel 8	DC-HSDPA Subtest-2	20.48	20.46	20.43	22.00	20.29	20.43	20.30	21.50
3GPP Rel 8	DC-HSDPA Subtest-3	20.10	20.14	20.07	21.50	20.16	20.24	20.08	21.00
3GPP Rel 8	DC-HSDPA Subtest-4	20.09	20.06	20.04	21.50	20.21	20.17	20.11	21.00
3GPP Rel 6	HSUPA Subtest-1	20.43	20.37	20.18	22.00	20.22	20.28	20.29	21.50
3GPP Rel 6	HSUPA Subtest-2	19.15	19.12	18.99	20.00	19.06	18.99	19.04	19.50
3GPP Rel 6	HSUPA Subtest-3	19.83	19.73	19.60	21.00	20.06	20.02	20.04	20.50
3GPP Rel 6	HSUPA Subtest-4	19.19	19.13	18.95	20.00	19.04	18.96	19.04	19.50
3GPP Rel 6	HSUPA Subtest-5	20.40	20.34	20.19	22.00	20.26	20.28	20.25	21.50
3GPP Rel 7	HSPA+ (16QAM) Subtest-1	19.10	19.02	18.95	19.50	18.02	18.17	18.11	19.00
Attenuator			Cable Loss	0.8			Cable Loss	0.8	
Mode			Max.	20.52			Max.	20.47	



3	QPSK	15	0	19.78	19.95	19.83	21
3	16QAM	1	0	19.71	19.90	19.81	
3	16QAM	1	8	19.77	19.86	19.56	
3	16QAM	1	14	19.59	19.68	19.84	
3	16QAM	8	0	18.93	18.85	18.91	
3	16QAM	8	4	18.68	18.60	18.73	
3	16QAM	8	7	18.77	18.91	18.64	
3	16QAM	15	0	18.70	18.91	18.54	
3	64QAM	1	0	18.92	18.69	18.79	
3	64QAM	1	8	18.53	18.84	18.66	
3	64QAM	1	14	18.77	18.92	18.86	
3	64QAM	8	0	17.95	17.76	17.87	
3	64QAM	8	4	17.92	17.94	17.94	
3	64QAM	8	7	17.78	17.64	17.88	
3	64QAM	15	0	17.64	17.70	17.83	
Channel				18607	18900	19193	Tune-up limit (dBm)
Frequency (MHz)				1850.7	1880	1909.3	
1.4	QPSK	1	0	20.83	20.90	20.72	22
1.4	QPSK	1	3	20.86	20.81	20.67	
1.4	QPSK	1	5	20.90	20.78	20.73	
1.4	QPSK	3	0	19.82	19.83	19.77	
1.4	QPSK	3	1	19.78	19.61	19.88	
1.4	QPSK	3	3	19.81	19.77	19.68	
1.4	QPSK	6	0	19.85	19.89	19.89	
1.4	16QAM	1	0	19.67	19.95	19.63	21
1.4	16QAM	1	3	19.57	19.71	19.73	
1.4	16QAM	1	5	19.76	19.88	19.80	
1.4	16QAM	3	0	18.97	18.88	18.81	
1.4	16QAM	3	1	18.65	18.62	18.84	
1.4	16QAM	3	3	18.73	18.79	18.88	
1.4	16QAM	6	0	18.74	18.65	18.66	20
1.4	64QAM	1	0	18.77	18.72	18.88	20
1.4	64QAM	1	3	18.64	18.70	18.75	
1.4	64QAM	1	5	18.77	18.91	18.96	
1.4	64QAM	3	0	18.81	18.54	18.86	
1.4	64QAM	3	1	18.92	18.78	18.81	
1.4	64QAM	3	3	18.76	18.81	18.99	
1.4	64QAM	6	0	17.80	17.74	17.70	19

3	QPSK	15	0	18.74	18.68	18.91	20
3	16QAM	1	0	18.61	18.80	18.63	
3	16QAM	1	8	18.70	18.72	18.64	
3	16QAM	1	14	18.66	18.60	18.65	
3	16QAM	8	0	17.56	17.62	17.83	
3	16QAM	8	4	17.56	17.65	17.57	
3	16QAM	8	7	17.61	17.60	17.65	
3	16QAM	15	0	17.39	17.65	17.55	
3	64QAM	1	0	17.60	17.67	17.66	
3	64QAM	1	8	17.60	17.52	17.36	
3	64QAM	1	14	17.67	17.83	17.83	
3	64QAM	8	0	16.61	16.60	16.75	
3	64QAM	8	4	16.66	16.59	16.59	
3	64QAM	8	7	16.55	16.68	16.66	
3	64QAM	15	0	16.42	16.57	16.49	
Channel				19957	20175	20393	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1732.5	1754.3	
1.4	QPSK	1	0	19.82	19.86	19.66	21
1.4	QPSK	1	3	19.77	19.72	19.74	
1.4	QPSK	1	5	19.65	19.73	19.62	
1.4	QPSK	3	0	18.66	18.70	18.75	
1.4	QPSK	3	1	18.68	18.64	18.63	
1.4	QPSK	3	3	18.66	18.56	18.60	
1.4	QPSK	6	0	18.65	18.57	18.92	20
1.4	16QAM	1	0	18.65	18.65	18.68	20
1.4	16QAM	1	3	18.59	18.60	18.55	
1.4	16QAM	1	5	18.61	18.56	18.64	
1.4	16QAM	3	0	17.61	17.62	17.67	
1.4	16QAM	3	1	17.60	17.69	17.64	
1.4	16QAM	3	3	17.66	17.66	17.70	
1.4	16QAM	6	0	17.61	17.66	17.65	19
1.4	64QAM	1	0	17.78	17.71	17.70	19
1.4	64QAM	1	3	17.61	17.58	17.64	
1.4	64QAM	1	5	17.71	17.82	17.83	
1.4	64QAM	3	0	16.67	16.70	16.65	
1.4	64QAM	3	1	16.61	16.56	16.71	
1.4	64QAM	3	3	16.69	16.61	16.88	
1.4	64QAM	6	0	16.58	16.71	16.68	18



Band 66 (dBm)							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				132072	132322	132572	
Frequency (MHz)				1720	1745	1770	
20	QPSK	1	0	17.67	17.94	17.61	19
20	QPSK	1	49	17.61	17.88	17.65	
20	QPSK	1	99	17.56	17.59	17.66	
20	QPSK	50	0	16.58	16.88	16.86	18
20	QPSK	50	24	16.63	16.66	16.82	
20	QPSK	50	50	16.61	16.63	16.66	
20	QPSK	100	0	16.65	16.80	16.84	18
20	16QAM	1	0	16.65	16.76	16.57	
20	16QAM	1	49	16.63	16.80	16.64	
20	16QAM	1	99	16.70	16.61	16.57	17
20	16QAM	50	0	15.79	15.55	15.76	
20	16QAM	50	24	15.54	15.58	15.57	
20	16QAM	50	50	15.53	15.84	15.53	17
20	16QAM	100	0	15.52	15.56	15.55	
20	64QAM	1	0	15.89	15.81	15.70	
20	64QAM	1	49	15.70	15.76	15.70	17
20	64QAM	1	99	15.86	15.91	15.93	
20	64QAM	50	0	14.86	14.50	14.64	
20	64QAM	50	24	14.81	14.59	14.80	16
20	64QAM	50	50	14.69	14.80	14.77	
20	64QAM	100	0	14.61	14.60	14.73	
Channel				132047	132322	132597	
Frequency (MHz)				1717.5	1745	1772.5	
15	QPSK	1	0	17.88	17.92	17.79	19
15	QPSK	1	37	17.72	17.72	17.68	
15	QPSK	1	74	17.62	17.82	17.76	
15	QPSK	36	0	16.78	16.93	16.69	18
15	QPSK	36	20	16.73	16.71	16.58	
15	QPSK	36	39	16.69	16.80	16.73	
15	QPSK	75	0	16.75	16.62	16.73	18
15	16QAM	1	0	16.70	16.77	16.58	
15	16QAM	1	37	16.66	16.63	16.71	
15	16QAM	1	74	16.59	16.80	16.68	17
15	16QAM	36	0	15.84	15.68	15.83	
15	16QAM	36	20	15.72	15.78	15.67	
15	16QAM	36	39	15.77	15.78	15.59	17
15	16QAM	75	0	15.55	15.54	15.56	
15	64QAM	1	0	15.64	15.75	15.93	
15	64QAM	1	37	15.66	15.67	15.71	17
15	64QAM	1	74	15.77	15.76	15.78	
15	64QAM	36	0	14.67	14.66	14.77	
15	64QAM	36	20	14.76	14.84	14.61	16
15	64QAM	36	39	14.78	14.77	14.78	
15	64QAM	75	0	14.57	14.68	14.69	
Channel				132022	132322	132622	
Frequency (MHz)				1715	1745	1775	
10	QPSK	1	0	17.80	17.89	17.64	19
10	QPSK	1	25	17.78	17.64	17.71	
10	QPSK	1	49	17.80	17.67	17.55	
10	QPSK	25	0	16.82	16.94	16.85	18
10	QPSK	25	12	16.59	16.53	16.82	
10	QPSK	25	25	16.56	16.63	16.58	
10	QPSK	50	0	16.84	16.67	16.76	18
10	16QAM	1	0	16.68	16.87	16.60	
10	16QAM	1	25	16.62	16.54	16.70	
10	16QAM	1	49	16.71	16.52	16.59	17
10	16QAM	25	0	15.70	15.76	15.66	
10	16QAM	25	12	15.60	15.70	15.67	
10	16QAM	25	25	15.71	15.65	15.60	17
10	16QAM	50	0	15.68	15.62	15.50	
10	64QAM	1	0	15.80	15.82	15.71	
10	64QAM	1	25	15.64	15.56	15.64	17
10	64QAM	1	49	15.84	15.86	15.70	
10	64QAM	25	0	14.87	14.65	14.82	
10	64QAM	25	12	14.82	14.69	14.59	16
10	64QAM	25	25	14.54	14.72	14.82	
10	64QAM	50	0	14.55	14.56	14.58	
Channel				131997	132322	132647	
Frequency (MHz)				1712.5	1745	1777.5	
5	QPSK	1	0	17.80	17.88	17.75	19
5	QPSK	1	12	17.61	17.65	17.79	
5	QPSK	1	24	17.82	17.61	17.60	
5	QPSK	12	0	16.71	16.89	16.63	18
5	QPSK	12	7	16.68	16.76	16.84	
5	QPSK	12	13	16.86	16.69	16.56	
5	QPSK	25	0	16.57	16.85	16.75	18
5	16QAM	1	0	16.46	16.73	16.72	
5	16QAM	1	12	16.68	16.59	16.58	
5	16QAM	1	24	16.65	16.54	16.49	17
5	16QAM	12	0	15.86	15.82	15.88	
5	16QAM	12	7	15.67	15.65	15.54	
5	16QAM	12	13	15.76	15.75	15.68	17
5	16QAM	25	0	15.63	15.71	15.63	
5	64QAM	1	0	15.65	15.56	15.93	
5	64QAM	1	12	15.67	15.74	15.69	17
5	64QAM	1	24	15.84	15.84	15.78	
5	64QAM	12	0	14.88	14.62	14.57	
5	64QAM	12	7	14.87	14.68	14.70	16
5	64QAM	12	13	14.67	14.72	14.72	
5	64QAM	25	0	14.56	14.52	14.71	
Channel				131987	132322	132657	
Frequency (MHz)				1711.5	1745	1778.5	
3	QPSK	1	0	17.66	17.87	17.73	19
3	QPSK	1	8	17.75	17.70	17.64	
3	QPSK	1	14	17.56	17.78	17.59	
3	QPSK	8	0	16.62	16.76	16.81	18
3	QPSK	8	4	16.67	16.55	16.83	
3	QPSK	8	7	16.58	16.78	16.75	

3	QPSK	15	0	16.77	16.84	16.72	18
3	16QAM	1	0	16.74	16.63	16.60	
3	16QAM	1	8	16.69	16.55	16.56	
3	16QAM	1	14	16.68	16.78	16.65	17
3	16QAM	8	0	15.84	15.63	15.69	
3	16QAM	8	4	15.64	15.51	15.75	
3	16QAM	8	7	15.68	15.81	15.58	17
3	16QAM	15	0	15.58	15.73	15.50	
3	64QAM	1	0	15.78	15.67	15.73	
3	64QAM	1	8	15.57	15.73	15.51	16
3	64QAM	1	14	15.67	15.77	15.69	
3	64QAM	8	0	14.77	14.66	14.80	
3	64QAM	8	4	14.74	14.80	14.58	16
3	64QAM	8	7	14.58	14.58	14.82	
3	64QAM	15	0	14.53	14.70	14.82	
Channel				131979	132322	132665	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1745	1779.3	
1.4	QPSK	1	0	17.73	17.85	17.65	19
1.4	QPSK	1	3	17.82	17.65	17.53	
1.4	QPSK	1	5	17.70	17.59	17.54	
1.4	QPSK	3	0	16.75	16.87	16.87	
1.4	QPSK	3	1	16.75	16.75	16.61	
1.4	QPSK	3	3	16.85	16.61	16.66	18
1.4	QPSK	6	0	16.81	16.85	16.76	
1.4	16QAM	1	0	16.68	16.73	16.78	18
1.4	16QAM	1	3	16.47	16.54	16.71	
1.4	16QAM	1	5	16.66	16.58	16.72	
1.4	16QAM	3	0	15.71	15.81	15.89	
1.4	16QAM	3	1	15.58	15.67	15.71	
1.4	16QAM	3	3	15.66	15.74	15.53	17
1.4	16QAM	6	0	15.63	15.66	15.61	
1.4	64QAM	1	0	15.72	15.78	15.63	
1.4	64QAM	1	3	15.57	15.57	15.53	17
1.4	64QAM	1	5	15.81	15.73	15.87	
1.4	64QAM	3	0	14.84	14.66	14.59	
1.4	64QAM	3	1	14.87	14.73	14.81	
1.4	64QAM	3	3	14.65	14.58	14.82	16
1.4	64QAM	6	0	14.74	14.67	14.78	

## Reduced Power Level 5 for Simultaneous (ANT 0)

## 2.4GHz WLAN ANT 0

Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Power Setting	Duty Cycle %
802.11b 1Mbps	CH 1	2412	15.63	17.50	12.00	99.53
	CH 6	2437	15.35	17.00	12.00	
	CH 11	2462	15.68	17.50	12.00	
802.11g 6Mbps	CH 1	2412	13.16	15.00	11.00	95.89
	CH 6	2437	13.25	15.00	11.00	
	CH 11	2462	10.63	12.50	9.00	
802.11n-HT20 MCS0	CH 1	2412	13.42	15.00	11.00	95.16
	CH 6	2437	13.47	15.00	11.00	
	CH 11	2462	9.76	11.50	8.00	
802.11n-HT40 MCS0	CH 3	2422	11.37	13.00	9.00	90.77
	CH 6	2437	12.59	14.50	10.00	
	CH 9	2452	8.65	10.50	7.00	

## 5GHz WLAN ANT 0

Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Power Setting	Duty Cycle %
802.11a 6Mbps	CH 36	5180	13.34	15.00	14.00	95.89
	CH 44	5220	13.40	15.00	14.00	
	CH 48	5240	13.46	15.00	14.00	
802.11n-HT20 MCS0	CH 36	5180	13.53	15.50	14.00	95.16
	CH 44	5220	13.73	15.50	14.00	
	CH 48	5240	13.74	15.50	14.00	
802.11n-HT40 MCS0	CH 38	5190	13.64	15.50	14.00	90.91
	CH 46	5230	13.57	15.50	14.00	
802.11ac-VHT20 MCS0	CH 36	5180	13.51	15.50	14.00	95.24
	CH 44	5220	13.75	15.50	14.00	
	CH 48	5240	13.76	15.50	14.00	
802.11ac-VHT40 MCS0	CH 38	5190	13.25	15.00	14.00	87.88
	CH 46	5230	13.34	15.00	14.00	
802.11ac-VHT80 MCS0	CH 42	5210	13.24	15.00	14.00	81.94

## 5GHz WLAN ANT 0

Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Power Setting	Duty Cycle %
802.11a 6Mbps	CH 52	5280	14.52	16.50	15.00	95.89
	CH 60	5300	15.06	17.00	15.00	
	CH 64	5320	14.22	16.00	15.00	
802.11n-HT20 MCS0	CH 52	5280	14.84	16.50	15.00	95.16
	CH 60	5300	14.98	16.50	15.00	
	CH 64	5320	14.89	16.50	15.00	
802.11n-HT40 MCS0	CH 54	5270	14.73	16.50	15.00	90.91
	CH 62	5310	14.45	16.00	15.00	
802.11ac-VHT20 MCS0	CH 52	5280	14.84	16.50	15.00	95.24
	CH 60	5300	15.33	17.00	15.00	
	CH 64	5320	14.84	16.50	15.00	
802.11ac-VHT40 MCS0	CH 54	5270	14.47	16.00	15.00	87.88
	CH 62	5310	14.20	16.00	15.00	
802.11ac-VHT80 MCS0	CH 58	5290	14.50	16.50	15.00	81.94

## 5GHz WLAN ANT 0

Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Power Setting	Duty Cycle %
802.11a 6Mbps	CH 100	5500	12.05	14.00	12.00	95.89
	CH 120	5600	12.41	14.00	12.00	
	CH 140	5700	12.06	14.00	12.00	
802.11n-HT20 MCS0	CH 100	5500	12.30	14.00	12.00	95.16
	CH 120	5600	12.67	14.50	12.00	
	CH 140	5700	12.32	14.00	12.00	
802.11n-HT40 MCS0	CH 102	5510	12.38	14.00	12.00	90.91
	CH 126	5630	12.22	14.00	12.00	
	CH 134	5670	12.04	14.00	12.00	
802.11ac-VHT20 MCS0	CH 100	5500	12.27	14.00	12.00	95.24
	CH 120	5600	12.63	14.50	12.00	
	CH 140	5700	12.31	14.00	12.00	
802.11ac-VHT40 MCS0	CH 102	5510	12.19	14.00	12.00	87.88
	CH 126	5630	11.95	13.50	12.00	
	CH 134	5670	11.78	13.50	12.00	
802.11ac-VHT80 MCS0	CH 106	5530	12.16	14.00	12.00	81.94
	CH 122	5610	12.17	14.00	12.00	
	CH 138	5690	12.00	14.00	12.00	

## 5GHz WLAN ANT 0

Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Power Setting	Duty Cycle %
802.11a 6Mbps	CH 149	5745	11.96	13.50	12.00	95.89
	CH 157	5785	11.80	13.50	12.00	
	CH 165	5825	11.51	13.50	12.00	
802.11n-HT20 MCS0	CH 149	5745	12.24	14.00	12.00	95.16
	CH 157	5785	12.06	14.00	12.00	
	CH 165	5825	11.79	13.50	12.00	
802.11n-HT40 MCS0	CH 151	5785	11.99	13.50	12.00	90.91
	CH 159	5795	11.69	13.50	12.00	
802.11ac-VHT20 MCS0	CH 149	5745	12.39	14.00	12.00	95.24
	CH 157	5785	12.14	14.00	12.00	
	CH 165	5825	11.82	13.50	12.00	
802.11ac-VHT40 MCS0	CH 151	5785	11.73	13.50	12.00	87.88
	CH 159	5795	11.46	13.00	12.00	
802.11ac-VHT80 MCS0	CH 155	5775	11.84	13.50	12.00	81.94

**Reduced Power Level 6 for Simultaneous (ANT 0)**
**5GHz WLAN ANT 0**

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Power Setting	Duty Cycle %
5.2GHz WLAN ANT 0	802.11a 6Mbps	CH 36	5180	12.34	14.00	13.00	95.89
		CH 44	5220	12.40	14.00	13.00	
		CH 48	5240	12.46	14.00	13.00	
	802.11n-HT20 MCS0	CH 36	5180	12.53	14.50	13.00	95.16
		CH 44	5220	12.73	14.50	13.00	
		CH 48	5240	12.74	14.50	13.00	
	802.11n-HT40 MCS0	CH 38	5190	12.64	14.50	13.00	90.91
		CH 46	5230	12.57	14.50	13.00	
	802.11ac-VHT20 MCS0	CH 36	5180	12.51	14.50	13.00	95.24
		CH 44	5220	12.75	14.50	13.00	
		CH 48	5240	12.76	14.50	13.00	
	802.11ac-VHT40 MCS0	CH 38	5190	12.25	14.00	13.00	87.88
CH 46		5230	12.34	14.00	13.00		
802.11ac-VHT80 MCS0	CH 42	5210	11.24	13.00	13.00	81.94	

**5GHz WLAN ANT 0**

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Power Setting	Duty Cycle %
5.8GHz WLAN ANT 0	802.11a 6Mbps	CH 149	5745	12.96	14.50	13.00	95.89
		CH 157	5785	12.80	14.50	13.00	
		CH 165	5825	12.51	14.50	13.00	
	802.11n-HT20 MCS0	CH 149	5745	13.24	15.00	13.00	95.16
		CH 157	5785	13.06	15.00	13.00	
		CH 165	5825	12.79	14.50	13.00	
	802.11n-HT40 MCS0	CH 151	5755	12.99	14.50	13.00	90.91
		CH 159	5795	12.69	14.50	13.00	
	802.11ac-VHT20 MCS0	CH 149	5745	13.39	15.00	13.00	95.24
		CH 157	5785	13.14	15.00	13.00	
		CH 165	5825	12.82	14.50	13.00	
	802.11ac-VHT40 MCS0	CH 151	5755	12.73	14.50	13.00	87.88
CH 159		5795	12.46	14.00	13.00		
802.11ac-VHT80 MCS0	CH 155	5775	12.84	14.50	13.00	91.94	