



ANT 3

GSM: ant 3 Full Power						
Band: GSM 850	Burst Average Power (dBm)			Frame-Average Power(dBm)		
Channel	128	190	251	128	190	251
Frequency (MHz)	824.2	836.6	848.8	824.2	836.6	848.8
GSM (GMSK, Voice)	32.59	32.51	32.41	23.56	23.48	23.38
GPRS (GMSK, 1 TX slot)	32.51	32.40	32.31	23.48	23.37	23.28
GPRS (GMSK, 2 TX slots)	31.79	31.69	31.60	25.77	25.67	25.58
GPRS (GMSK, 3 TX slots)	30.08	29.96	29.86	25.82	25.70	25.60
GPRS (GMSK, 4 TX slots)	29.43	28.93	28.81	26.42	25.92	25.80
EGPRS (8PSK, 1 TX slot)	27.17	27.07	27.08	18.14	18.04	18.05
EGPRS (8PSK, 2 TX slots)	26.12	26.02	26.03	20.10	20.00	20.01
EGPRS (8PSK, 3 TX slots)	23.94	23.87	23.87	19.68	19.61	19.61
EGPRS (8PSK, 4 TX slots)	22.79	22.76	22.82	19.78	19.75	19.81

WCDMA: ant 3 Full Power			
WCDMA Average power (dBm)			
Band	WCDMA Band V		
Channel	4132	4183	4233
Frequency (MHz)	826.4	836.6	846.6
AMR 12.2 kbps	23.07	22.97	22.98
RMC 12.2 kbps	23.04	23.03	22.91
HSDPA Sub-test 1	23.08	22.96	22.95
HSDPA Sub-test 2	22.57	22.48	22.46
HSDPA Sub-test 3	22.61	22.51	22.51
HSDPA Sub-test 4	22.58	22.45	22.45
HSUPA Sub-test 1	21.06	20.96	20.93
HSUPA Sub-test 2	21.56	21.45	21.43
HSUPA Sub-test 3	22.10	21.98	21.94
HSUPA Sub-test 4	21.10	21.00	20.96
HSUPA Sub-test 5	23.08	22.98	22.97

ANT5

GSM: ant 5 Full Power						
Band: PCS 1900	Burst Average Power (dBm)			Frame-Average Power(dBm)		
Channel	512	661	810	512	661	810
Frequency (MHz)	1850.2	1880	1909.8	1850.2	1880	1909.8
GSM (GMSK, Voice)	29.45	29.41	29.21	20.42	20.38	20.18
GPRS (GMSK, 1 TX slot)	29.42	29.38	29.17	20.39	20.35	20.14
GPRS (GMSK, 2 TX slots)	28.68	28.67	28.47	22.66	22.65	22.45
GPRS (GMSK, 3 TX slots)	26.83	26.85	26.69	22.57	22.59	22.43
GPRS (GMSK, 4 TX slots)	25.79	25.81	25.67	22.78	22.80	22.66
EGPRS (8PSK, 1 TX slot)	25.86	25.53	25.94	16.83	16.50	16.91
EGPRS (8PSK, 2 TX slots)	24.74	24.47	24.91	18.72	18.45	18.89
EGPRS (8PSK, 3 TX slots)	22.48	22.26	22.69	18.22	18.00	18.43
EGPRS (8PSK, 4 TX slots)	21.26	21.07	21.52	18.25	18.06	18.51

WCDMA: ant 5 Full Power						
WCDMA Average power (dBm)						
Band	WCDMA Band IV			WCDMA Band II		
Channel	1312	1413	1513	9262	9400	9538
Frequency (MHz)	1712.4	1732.6	1752.6	1852.4	1880	1907.6
AMR 12.2 kbps	22.47	22.69	22.51	22.16	22.37	22.17
RMC 12.2 kbps	22.57	22.65	22.45	22.19	22.33	22.16
HSDPA Sub-test 1	22.61	22.68	22.51	22.25	22.35	22.19
HSDPA Sub-test 2	22.05	22.15	21.98	21.69	21.80	21.62
HSDPA Sub-test 3	22.11	22.20	22.03	21.75	21.83	21.67
HSDPA Sub-test 4	22.07	22.15	21.97	21.70	21.80	21.68
HSUPA Sub-test 1	20.73	20.83	20.63	20.16	20.28	20.13
HSUPA Sub-test 2	21.26	21.33	21.16	20.65	20.80	20.61
HSUPA Sub-test 3	21.57	21.64	21.46	21.20	21.33	21.14
HSUPA Sub-test 4	20.78	20.86	20.69	20.18	20.35	20.16
HSUPA Sub-test 5	22.62	22.66	22.51	22.20	22.34	22.16



ANT6

LTE Band 42(3450-3550) part ant 6 Full Power										NR 47(3450-3550MHz) part ant 6 Full Power										NR 47(3450-3550MHz) part ant 6 Full Power										NR 47(3450-3550MHz) part ant 6 Full Power									
Band	Channel	Frequency	Power	Modulation	Bandwidth	Subcarrier Spacing	Cyclic Prefix	Antenna	Beam	Frequency	Power	Modulation	Bandwidth	Subcarrier Spacing	Cyclic Prefix	Antenna	Beam	Frequency	Power	Modulation	Bandwidth	Subcarrier Spacing	Cyclic Prefix	Antenna	Beam	Frequency	Power	Modulation	Bandwidth	Subcarrier Spacing	Cyclic Prefix	Antenna	Beam						
Band 42	1	3450	100	QPSK	100	15	Normal	1	1	3450	100	QPSK	100	15	Normal	1	1	3450	100	QPSK	100	15	Normal	1	1	3450	100	QPSK	100	15	Normal	1	1						
	10	3460	100	QPSK	100	15	Normal	1	10	3460	100	QPSK	100	15	Normal	1	10	3460	100	QPSK	100	15	Normal	1	10	3460	100	QPSK	100	15	Normal	1	10						
	19	3470	100	QPSK	100	15	Normal	1	19	3470	100	QPSK	100	15	Normal	1	19	3470	100	QPSK	100	15	Normal	1	19	3470	100	QPSK	100	15	Normal	1	19						
Band 42	28	3480	100	QPSK	100	15	Normal	1	28	3480	100	QPSK	100	15	Normal	1	28	3480	100	QPSK	100	15	Normal	1	28	3480	100	QPSK	100	15	Normal	1	28						
	37	3490	100	QPSK	100	15	Normal	1	37	3490	100	QPSK	100	15	Normal	1	37	3490	100	QPSK	100	15	Normal	1	37	3490	100	QPSK	100	15	Normal	1	37						
	46	3500	100	QPSK	100	15	Normal	1	46	3500	100	QPSK	100	15	Normal	1	46	3500	100	QPSK	100	15	Normal	1	46	3500	100	QPSK	100	15	Normal	1	46						
Band 42	55	3510	100	QPSK	100	15	Normal	1	55	3510	100	QPSK	100	15	Normal	1	55	3510	100	QPSK	100	15	Normal	1	55	3510	100	QPSK	100	15	Normal	1	55						
	64	3520	100	QPSK	100	15	Normal	1	64	3520	100	QPSK	100	15	Normal	1	64	3520	100	QPSK	100	15	Normal	1	64	3520	100	QPSK	100	15	Normal	1	64						
	73	3530	100	QPSK	100	15	Normal	1	73	3530	100	QPSK	100	15	Normal	1	73	3530	100	QPSK	100	15	Normal	1	73	3530	100	QPSK	100	15	Normal	1	73						
Band 42	82	3540	100	QPSK	100	15	Normal	1	82	3540	100	QPSK	100	15	Normal	1	82	3540	100	QPSK	100	15	Normal	1	82	3540	100	QPSK	100	15	Normal	1	82						
	91	3550	100	QPSK	100	15	Normal	1	91	3550	100	QPSK	100	15	Normal	1	91	3550	100	QPSK	100	15	Normal	1	91	3550	100	QPSK	100	15	Normal	1	91						
	100	3560	100	QPSK	100	15	Normal	1	100	3560	100	QPSK	100	15	Normal	1	100	3560	100	QPSK	100	15	Normal	1	100	3560	100	QPSK	100	15	Normal	1	100						



ANT 4

2.4GWi-Fi ant 4 Full Power

Average Power (dBm)					
Channel	Frequency (MHz)	802.11 b	802.11 g	802.11n (HT20)	802.11ax20
CH 01	2412	16.19	13.18	12.33	9.15
CH 06	2437	16.64	13.5	12.75	9.35
CH 11	2462	16.56	13.59	12.63	9.42

Average Power (dBm)		
Channel	Frequency (MHz)	802.11ax40
CH 03	2422	9.31
CH 06	2437	9.15
CH 09	2452	8.87

ANT 12

2.4GWi-Fi ant 12 Full Power

Average Power (dBm)					
Channel	Frequency (MHz)	802.11 b	802.11 g	802.11n (HT20)	802.11ax20
CH 01	2412	16.25	13.37	13.82	10.81
CH 06	2437	16.09	13.30	13.81	10.74
CH 11	2462	16.64	13.88	14.22	11.18

Average Power (dBm)		
Channel	Frequency (MHz)	802.11ax40
CH 03	2422	10.78
CH 06	2437	10.85
CH 09	2452	11.05

Bluetooth ant 12 Full Power

Average Power (dBm)				
Channel	Frequency (MHz)	GFSK	$\pi/4$ -DQPSK	8DPSK
CH 00	2402	7.69	7.03	7.29
CH 39	2441	8.25	7.80	8.18
CH 78	2480	7.10	6.62	6.98

Average Power (dBm)				
Channel	Frequency (MHz)	BLE PHY1M	BLE CodedPHY S=2	BLE CodedPHY S=8
CH 00	2402	2.55	2.69	2.64
CH 20	2442	3.34	3.40	3.34
CH 39	2480	1.86	1.86	1.87

Average Power (dBm)		
Channel	Frequency (MHz)	BLE PHY2M
CH 01	2404	2.57
CH 20	2442	3.31
CH 38	2478	2.35



ANT 4

5.2GWi-Fi ant 4 Full Power

Average Power (dBm)					
Channel	Frequency (MHz)	802.11 a	802.11 ac20	802.11 n20	802.11 ax20
CH 36	5180	12.09	11.47	11.97	9.57
CH 40	5200	12.4	11.93	12.41	9.9
CH 48	5240	11.74	11.5	11.71	9.56

Average Power (dBm)				
Channel	Frequency (MHz)	802.11 ac40	802.11 n40	802.11 ax40
CH 38	5190	9.62	12.5	9.72
CH 46	5230	9.51	12.34	9.6

Average Power (dBm)			
Channel	Frequency (MHz)	802.11 ac80	802.11 ax80
CH 58	5290	9.06	9.39

5.6GWi-Fi ant 4 Full Power

Average Power (dBm)					
Channel	Frequency (MHz)	802.11 a	802.11 ac20	802.11 n20	802.11 ax20
CH 100	5500	12.57	12.62	13.57	10.5
CH 120	5600	12.7	12.51	13.61	10.69
CH 140	5700	13.21	13.05	14.03	11.01

Average Power (dBm)				
Channel	Frequency (MHz)	802.11 ac40	802.11 n40	802.11 ax40
CH 102	5510	10.51	13.62	10.56
CH 112	5590	10.59	13.59	10.74
CH 102	5670	9.98	12.95	10.16

Average Power (dBm)			
Channel	Frequency (MHz)	802.11 ac80	802.11 ax80
CH 106	5530	9.98	11.58
CH 122	5610	11.39	11.69

5.3GWi-Fi ant 4 Full Power

Average Power (dBm)					
Channel	Frequency (MHz)	802.11 a	802.11 ac20	802.11 n20	802.11 ax20
CH 52	5260	12.3	11.93	13.23	10.31
CH 60	5300	12.05	11.43	12.65	9.81
CH 64	5320	12.17	11.81	12.67	9.86

Average Power (dBm)				
Channel	Frequency (MHz)	802.11 ac40	802.11 n40	802.11 ax40
CH 54	5270	9.84	12.74	9.94
CH 62	5310	9.46	12.48	9.55

Average Power (dBm)			
Channel	Frequency (MHz)	802.11 ac80	802.11 ax80
CH 58	5290	10.37	10.45

5.8GWi-Fi ant 4 Full Power

Average Power (dBm)					
Channel	Frequency (MHz)	802.11 a	802.11 ac20	802.11 n20	802.11 ax20
CH 149	5745	12.57	12.57	13.45	10.5
CH 157	5785	12.94	12.96	13.92	11.02
CH 165	5825	12.86	13.15	14.4	11.41

Average Power (dBm)				
Channel	Frequency (MHz)	802.11 ac40	802.11 n40	802.11 ax40
CH 151	5755	11.32	13.86	11.6
CH 159	5795	11.07	13.66	11.1

Average Power (dBm)			
Channel	Frequency (MHz)	802.11 ac80	802.11 ax80
CH 155	5775	11.14	11.22

ANT 12

5.2GWi-Fi ant 12 Full Power

Average Power (dBm)					
Channel	Frequency (MHz)	802.11 a	802.11 ac20	802.11 n20	802.11 ax20
CH 36	5180	12.55	13.11	13.61	11.11
CH 40	5200	12.36	13.21	13.56	11.2
CH 48	5240	12.46	12.89	13.14	10.94

Average Power (dBm)				
Channel	Frequency (MHz)	802.11 ac40	802.11 n40	802.11 ax40
CH 38	5190	10.98	14.11	11.05
CH 46	5230	10.64	13.77	10.82

Average Power (dBm)			
Channel	Frequency (MHz)	802.11 ac80	802.11 ax80
CH 42	5210	10.56	10.75

5.6GWi-Fi ant 4 Full Power

Average Power (dBm)					
Channel	Frequency (MHz)	802.11 a	802.11 ac20	802.11 n20	802.11 ax20
CH 100	5500	12.38	11.71	12.75	9.51
CH 120	5600	12.4	11.51	12.57	9.38
CH 140	5700	12.15	11.61	12.54	9.34

Average Power (dBm)				
Channel	Frequency (MHz)	802.11 ac40	802.11 n40	802.11 ax40
CH 102	5510	9.82	13.07	9.9
CH 112	5590	9.55	12.71	9.57
CH 102	5670	9.87	13.04	10.01

Average Power (dBm)			
Channel	Frequency (MHz)	802.11 ac80	802.11 ax80
CH 106	5530	9.45	10.82
CH 122	5610	9.64	10.12

5.3GWi-Fi ant 12 Full Power

Average Power (dBm)					
Channel	Frequency (MHz)	802.11 a	802.11 ac20	802.11 n20	802.11 ax20
CH 52	5260	12.42	12.31	13.67	10.73
CH 60	5300	12.22	12.11	13.23	10.27
CH 64	5320	13.13	12.86	13.74	10.68

Average Power (dBm)				
Channel	Frequency (MHz)	802.11 ac40	802.11 n40	802.11 ax40
CH 54	5270	10.42	13.2	10.3
CH 62	5310	10.34	13.48	10.58

Average Power (dBm)			
Channel	Frequency (MHz)	802.11 ac80	802.11 ax80
CH 58	5290	11.06	11.02

5.8GWi-Fi ant 12 Full Power

Average Power (dBm)					
Channel	Frequency (MHz)	802.11 a	802.11 ac20	802.11 n20	802.11 ax20
CH 149	5745	12.61	11.39	12.39	9.32
CH 157	5785	12.14	11.23	12.21	9.19
CH 165	5825	12.39	10.42	11.41	8.4

Average Power (dBm)				
Channel	Frequency (MHz)	802.11 ac40	802.11 n40	802.11 ax40
CH 151	5755	9.48	12.16	9.67
CH 159	5795	9.64	12.22	9.64

Average Power (dBm)			
Channel	Frequency (MHz)	802.11 ac80	802.11 ax80
CH 155	5775	9.18	9.37

NFC ANT

Mode	Power (dBm)
NFC	-57.67