



## ANT 1

| GSM: ant 1 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)        | 33.66                     | <b>33.67</b> | 33.57 | 24.63                    | 24.64        | 24.54 |
| GPRS (GMSK, 1 TX slot)   | 33.60                     | 33.61        | 33.49 | 24.57                    | 24.58        | 24.46 |
| GPRS (GMSK, 2 TX slots)  | 32.65                     | 32.68        | 32.55 | 26.63                    | 26.66        | 26.53 |
| GPRS (GMSK, 3 TX slots)  | 30.70                     | 30.70        | 30.60 | 26.44                    | 26.44        | 26.34 |
| GPRS (GMSK, 4 TX slots)  | 29.65                     | <b>29.67</b> | 29.57 | 26.64                    | <b>26.66</b> | 26.56 |
| EGPRS (8PSK, 1 TX slot)  | 27.62                     | 27.56        | 27.66 | 18.59                    | 18.53        | 18.63 |
| EGPRS (8PSK, 2 TX slots) | 26.53                     | 26.57        | 26.53 | 20.51                    | 20.55        | 20.51 |
| EGPRS (8PSK, 3 TX slots) | 24.44                     | 24.39        | 24.41 | 20.18                    | 20.13        | 20.15 |
| EGPRS (8PSK, 4 TX slots) | 23.31                     | 23.32        | 23.31 | 20.3                     | 20.31        | 20.3  |

| 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)        | 30.54                     | 30.81 | 30.75  | 21.51                    | 21.78 | 21.72  |
| GPRS (GMSK, 1 TX slot)   | 30.52                     | 30.78 | 30.71  | 21.49                    | 21.75 | 21.68  |
| GPRS (GMSK, 2 TX slots)  | 29.33                     | 29.61 | 29.54  | 23.31                    | 23.59 | 23.52  |
| GPRS (GMSK, 3 TX slots)  | 27.19                     | 27.49 | 27.45  | 22.93                    | 23.23 | 23.19  |
| GPRS (GMSK, 4 TX slots)  | 26.59                     | 26.69 | 26.65  | 23.58                    | 23.68 | 23.64  |
| EGPRS (8PSK, 1 TX slot)  | 26.67                     | 26.61 | 26.37  | 17.64                    | 17.58 | 17.34  |
| EGPRS (8PSK, 2 TX slots) | 25.68                     | 25.58 | 25.41  | 19.66                    | 19.56 | 19.39  |
| EGPRS (8PSK, 3 TX slots) | 23.41                     | 23.37 | 23.22  | 19.15                    | 19.11 | 18.96  |
| EGPRS (8PSK, 4 TX slots) | 22.16                     | 22.18 | 21.94  | 19.15                    | 19.17 | 18.93  |

# ANT 1

| WCDMA: ant 1 Full Power   |               |       |              |               |        |        |
|---------------------------|---------------|-------|--------------|---------------|--------|--------|
| WCDMA Average power (dBm) |               |       |              |               |        |        |
| Band                      | WCDMA Band II |       |              | WCDMA Band IV |        |        |
| Channel                   | 9262          | 9400  | 9538         | 1312          | 1413   | 1513   |
| Frequency (MHz)           | 1852.4        | 1880  | 1907.6       | 1712.4        | 1732.6 | 1752.6 |
| AMR 12.2 kbps             | 23.63         | 23.64 | 23.69        | 23.29         | 23.49  | 23.49  |
| RMC 12.2 kbps             | 23.68         | 23.77 | <b>23.76</b> | <b>23.43</b>  | 23.53  | 23.54  |
| HSDPA Sub-test 1          | 22.69         | 22.77 | 22.73        | 22.48         | 22.57  | 22.57  |
| HSDPA Sub-test 2          | 22.17         | 22.28 | 22.27        | 22.00         | 22.07  | 22.08  |
| HSDPA Sub-test 3          | 22.22         | 22.29 | 22.28        | 22.03         | 22.09  | 22.11  |
| HSDPA Sub-test 4          | 22.16         | 22.26 | 22.26        | 22.00         | 22.07  | 22.07  |
| HSUPA Sub-test 1          | 20.62         | 20.70 | 20.69        | 20.45         | 20.53  | 20.51  |
| HSUPA Sub-test 2          | 21.11         | 21.22 | 21.19        | 20.93         | 21.04  | 21.03  |
| HSUPA Sub-test 3          | 21.66         | 21.72 | 21.69        | 21.44         | 21.52  | 21.54  |
| HSUPA Sub-test 4          | 20.65         | 20.73 | 20.71        | 20.47         | 20.55  | 20.54  |
| HSUPA Sub-test 5          | 22.67         | 22.74 | 22.71        | 22.47         | 22.55  | 22.55  |

| WCDMA Average power (dBm) |              |              |       |
|---------------------------|--------------|--------------|-------|
| Band                      | WCDMA Band V |              |       |
| Channel                   | 4132         | 4183         | 4233  |
| Frequency (MHz)           | 826.4        | 836.6        | 846.6 |
| AMR 12.2 kbps             | 23.31        | 23.46        | 23.38 |
| RMC 12.2 kbps             | 23.33        | <b>23.44</b> | 23.38 |
| HSDPA Sub-test 1          | 22.55        | 22.63        | 22.58 |
| HSDPA Sub-test 2          | 22.04        | 22.12        | 22.07 |
| HSDPA Sub-test 3          | 22.09        | 22.17        | 22.10 |
| HSDPA Sub-test 4          | 22.02        | 22.15        | 22.06 |
| HSUPA Sub-test 1          | 20.54        | 20.60        | 20.56 |











## ANT 5

### 5.2GWi-Fi ant 5 Full Power

| Average Power (dBm) |                 |          |             |            |
|---------------------|-----------------|----------|-------------|------------|
| Channel             | Frequency (MHz) | 802.11 a | 802.11 ac20 | 802.11 n20 |
| CH 36               | 5180            | 12.11    | 12.18       | 12.50      |
| CH 40               | 5200            | 11.23    | 11.92       | 12.79      |
| CH 48               | 5240            | 11.94    | 12.20       | 13.45      |

| Average Power (dBm) |                 |             |              |
|---------------------|-----------------|-------------|--------------|
| Channel             | Frequency (MHz) | 802.11 ac40 | 802.11 n40   |
| CH 38               | 5190            | 11.96       | 12.68        |
| CH 46               | 5230            | 12.29       | <b>13.54</b> |

| Average Power (dBm) |                 |             |
|---------------------|-----------------|-------------|
| Channel             | Frequency (MHz) | 802.11 ac80 |
| CH 42               | 5210            | 11.43       |

### 5.8GWi-Fi ant 5 Full Power

| Average Power (dBm) |                 |          |             |            |
|---------------------|-----------------|----------|-------------|------------|
| Channel             | Frequency (MHz) | 802.11 a | 802.11 ac20 | 802.11 n20 |
| CH 149              | 5745            | 12.46    | 12.31       | 12.88      |
| CH 157              | 5785            | 13.91    | 13.65       | 13.72      |
| CH 165              | 5825            | 13.35    | 13.33       | 13.29      |

| Average Power (dBm) |                 |             |              |
|---------------------|-----------------|-------------|--------------|
| Channel             | Frequency (MHz) | 802.11 ac40 | 802.11 n40   |
| CH 151              | 5755            | 11.92       | 13.81        |
| CH 159              | 5795            | 12.44       | <b>14.16</b> |

| Average Power (dBm) |                 |             |
|---------------------|-----------------|-------------|
| Channel             | Frequency (MHz) | 802.11 ac80 |
| CH 155              | 5775            | 11.58       |

## NFC ANT

| Mode | Power (dBm) |
|------|-------------|
| NFC  | -40.34      |

**ANT 5**

2.4GWi-Fi ant 5 Full Power

| Average Power (dBm) |                 |              |          |                |                |
|---------------------|-----------------|--------------|----------|----------------|----------------|
| Channel             | Frequency (MHz) | 802.11 b     | 802.11 g | 802.11n (HT20) | 802.11n (HT40) |
| CH 01               | 2412            | 16.56        | 13.26    | 13.28          | 13.57          |
| CH 06               | 2437            | 16.85        | 13.65    | 13.56          | 13.80          |
| CH 11               | 2462            | <b>17.11</b> | 14.01    | 14.12          | 13.92          |

Bluetooth ant 5 Full Power

| Average Power (dBm) |                 |       |                |       |
|---------------------|-----------------|-------|----------------|-------|
| Channel             | Frequency (MHz) | GFSK  | $\pi/4$ -DQPSK | 8DPSK |
| CH 00               | 2402            | 6.69  | 9.38           | 9.36  |
| CH 39               | 2441            | 10.37 | 9.70           | 9.70  |
| CH 78               | 2480            | 10.22 | <b>10.47</b>   | 10.46 |

| Average Power (dBm) |                 |           |           |                  |                  |
|---------------------|-----------------|-----------|-----------|------------------|------------------|
| Channel             | Frequency (MHz) | BLE PHY1M | BLE PHY2M | BLE CodedPHY S=2 | BLE CodedPHY S=8 |
| CH 00               | 2402            | -4.31     | -4.36     | -4.30            | -4.34            |
| CH 20               | 2442            | -2.73     | -2.77     | -2.72            | -2.76            |
| CH 39               | 2480            | -3.69     | -3.69     | -3.68            | -3.70            |

**ANT 7**

2.4GWi-Fi ant 7 Full Power

| Average Power (dBm) |                 |              |          |                |                |
|---------------------|-----------------|--------------|----------|----------------|----------------|
| Channel             | Frequency (MHz) | 802.11 b     | 802.11 g | 802.11n (HT20) | 802.11n (HT40) |
| CH 01               | 2412            | 16.38        | 11.97    | 11.43          | 11.59          |
| CH 06               | 2437            | 16.36        | 13.20    | 13.13          | 13.34          |
| CH 11               | 2462            | <b>16.70</b> | 13.53    | 13.54          | 13.53          |

Bluetooth ant 7 Full Power

| Average Power (dBm) |                 |             |                |       |
|---------------------|-----------------|-------------|----------------|-------|
| Channel             | Frequency (MHz) | GFSK        | $\pi/4$ -DQPSK | 8DPSK |
| CH 00               | 2402            | 7.95        | 7.39           | 7.37  |
| CH 39               | 2441            | 7.18        | 6.36           | 6.33  |
| CH 78               | 2480            | <b>8.58</b> | 7.83           | 7.86  |

| Average Power (dBm) |                 |           |           |                  |                  |
|---------------------|-----------------|-----------|-----------|------------------|------------------|
| Channel             | Frequency (MHz) | BLE PHY1M | BLE PHY2M | BLE CodedPHY S=2 | BLE CodedPHY S=8 |
| CH 00               | 2402            | -7.64     | -7.68     | -7.67            | -7.68            |
| CH 20               | 2442            | -6.84     | -6.90     | -6.83            | -6.87            |
| CH 39               | 2480            | -6.96     | -7.04     | -6.97            | -7.04            |