

## FCC ID: XHWPBSKD7001

## Portable device

According to §15.247(e)(i) and §1.1307(b)(1), systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess of the Commission's guidelines.

According to KDB447498 D01 General RF Exposure Guidance V06

The 1-g SAR and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances ≤ 50 mm are determined by:

[(max. power of channel, including tune-up tolerance, mW)/(min. test separation distance, mm)]· $[\sqrt{f(GHZ)}] \le 3.0$  for 1-g SAR and  $\le 7.5$  for 10-g extremity SAR, where:

- f(GHZ) is the RF channel transmit frequency in GHz
- Power and distance are rounded to the nearest mW and mm before calculation
- The result is rounded to one decimal place for comparison

When the minimum test separation distance is < 5 mm, a distance of 5 mm is applied to determine SAR test exclusion.

### BT-EDR

| Modulation    | Channel<br>Freq.<br>(GHz) | Conduct<br>ed<br>power<br>(dBm) | Conducte<br>d power<br>(mW) | Tune-up<br>power<br>(dBm) | Max<br>tune-up<br>power<br>(dBm) | Max<br>tune-up<br>power<br>(mW) | Distance<br>(mm) | Result<br>calculatio<br>n | SAR<br>Exclusion<br>threshold | SAR test exclusion |
|---------------|---------------------------|---------------------------------|-----------------------------|---------------------------|----------------------------------|---------------------------------|------------------|---------------------------|-------------------------------|--------------------|
| GFSK          | 2.402                     | 1.650                           | 1.46                        | 2±1                       | 3.00                             | 2.00                            | <5               | 0.61847                   | 3.00                          | YES                |
|               | 2.441                     | 2.260                           | 1.68                        | 2±1                       | 3.00                             | 2.00                            | <5               | 0.62347                   | 3.00                          | YES                |
|               | 2.480                     | 1.920                           | 1.56                        | 2±1                       | 3.00                             | 2.00                            | <5               | 0.62843                   | 3.00                          | YES                |
| Pi/4<br>DQPSK | 2.402                     | 2.990                           | 1.99                        | 3±1                       | 4.00                             | 2.51                            | <5               | 0.77860                   | 3.00                          | YES                |
|               | 2.441                     | 3.620                           | 2.30                        | 3±1                       | 4.00                             | 2.51                            | <5               | 0.78490                   | 3.00                          | YES                |
|               | 2.480                     | 3.200                           | 2.09                        | 3±1                       | 4.00                             | 2.51                            | <5               | 0.79114                   | 3.00                          | YES                |
| 8DPSK         | 2.402                     | 3.210                           | 2.09                        | 3±1                       | 4.00                             | 2.51                            | <5               | 0.77860                   | 3.00                          | YES                |
|               | 2.441                     | 3.870                           | 2.44                        | 3±1                       | 4.00                             | 2.51                            | <5               | 0.78490                   | 3.00                          | YES                |
|               | 2.480                     | 3.460                           | 2.22                        | 3±1                       | 4.00                             | 2.51                            | <5               | 0.79114                   | 3.00                          | YES                |



# WIFI:2.4G

| Modulation | Channel<br>Freq.<br>(GHz) | Conduct<br>ed<br>power<br>(dBm) |      | Tune-up<br>power<br>(dBm) | Max<br>tune-up<br>power<br>(dBm) | Max<br>tune-up<br>power<br>(mW) | Distance<br>(mm) | Result<br>calculatio<br>n | SAR<br>Exclusion<br>threshold | SAR test exclusion |
|------------|---------------------------|---------------------------------|------|---------------------------|----------------------------------|---------------------------------|------------------|---------------------------|-------------------------------|--------------------|
| 802.11b    | 2.412                     | 8.53                            | 7.13 | 8±1                       | 9.00                             | 7.94                            | <5               | 2.46728                   | 3.00                          | YES                |
|            | 2.437                     | 8.04                            | 6.37 | 8±1                       | 9.00                             | 7.94                            | <5               | 2.48003                   | 3.00                          | YES                |
|            | 2.462                     | 8.07                            | 6.41 | 8±1                       | 9.00                             | 7.94                            | <5               | 2.49272                   | 3.00                          | YES                |
| 802.11g    | 2.412                     | 7.60                            | 5.75 | 7±1                       | 8.00                             | 6.31                            | <5               | 1.95983                   | 3.00                          | YES                |
|            | 2.437                     | 7.53                            | 5.66 | 7±1                       | 8.00                             | 6.31                            | <5               | 1.96996                   | 3.00                          | YES                |
|            | 2.462                     | 7.66                            | 5.83 | 7±1                       | 8.00                             | 6.31                            | <5               | 1.98004                   | 3.00                          | YES                |
| 802.11n20  | 2.412                     | 6.26                            | 4.23 | 6±1                       | 7.00                             | 5.01                            | <5               | 1.55675                   | 3.00                          | YES                |
|            | 2.437                     | 6.58                            | 4.55 | 6±1                       | 7.00                             | 5.01                            | <5               | 1.56480                   | 3.00                          | YES                |
|            | 2.462                     | 6.50                            | 4.47 | 6±1                       | 7.00                             | 5.01                            | <5               | 1.57280                   | 3.00                          | YES                |
| 802.11n40  | 2.422                     | 5.46                            | 3.52 | 5±1                       | 6.00                             | 3.98                            | <5               | 1.23913                   | 3.00                          | YES                |
|            | 2.437                     | 5.36                            | 3.44 | 5±1                       | 6.00                             | 3.98                            | <5               | 1.24296                   | 3.00                          | YES                |
|            | 2.452                     | 5.62                            | 3.65 | 5±1                       | 6.00                             | 3.98                            | <5               | 1.24678                   | 3.00                          | YES                |

Conclusion: For the max result :  $2.49272 \le FCC \text{ Limit } 3.0 \text{ for } 1g \text{ SAR}.$