

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:

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

| Test Mode | Channel Frequency (GHz) | Conducted power (dBm) | Conducted power (mW) | Tune-up power (dBm) | Max tune-up power (dBm) | Max tune-up power (mW) | Distance (mm) | Result calculation | SAR Exclusion threshold | SAR test exclusion |
|-----------|-------------------------|-----------------------|----------------------|---------------------|-------------------------|------------------------|---------------|--------------------|-------------------------|--------------------|
| GFSK      | 2.402                   | -2.35                 | 0.58                 | 0+1                 | 1.00                    | 1.26                   | <5            | 0.200              | 3.00                    | YES                |
|           | 2.441                   | -3.51                 | 0.45                 | 0+1                 | 1.00                    | 1.26                   | <5            | 0.156              | 3.00                    | YES                |
|           | 2.480                   | -5.15                 | 0.31                 | 0+1                 | 1.00                    | 1.26                   | <5            | 0.108              | 3.00                    | YES                |
| π/4-DQPSK | 2.402                   | -1.55                 | 0.70                 | 0+1                 | 1.00                    | 1.26                   | <5            | 0.241              | 3.00                    | YES                |
|           | 2.441                   | -2.81                 | 0.52                 | 0+1                 | 1.00                    | 1.26                   | <5            | 0.181              | 3.00                    | YES                |
|           | 2.480                   | -4.22                 | 0.38                 | 0+1                 | 1.00                    | 1.26                   | <5            | 0.133              | 3.00                    | YES                |
| 8-DPSK    | 2.402                   | -1.22                 | 0.76                 | 0+1                 | 1.00                    | 1.26                   | <5            | 0.262              | 3.00                    | YES                |
|           | 2.441                   | -2.39                 | 0.58                 | 0+1                 | 1.00                    | 1.26                   | <5            | 0.201              | 3.00                    | YES                |
|           | 2.480                   | -3.98                 | 0.40                 | 0+1                 | 1.00                    | 1.26                   | <5            | 0.140              | 3.00                    | YES                |

BLE:

| Test Mode | Channel Frequency (GHz) | Conducted power (dBm) | Conducted power (mW) | Tune-up power (dBm) | Max tune-up power (dBm) | Max tune-up power (mW) | Distance (mm) | Result calculation | SAR Exclusion threshold | SAR test exclusion |
|-----------|-------------------------|-----------------------|----------------------|---------------------|-------------------------|------------------------|---------------|--------------------|-------------------------|--------------------|
| BLE(1M)   | 2.402                   | -2.24                 | 0.60                 | 0+1                 | 1.00                    | 1.26                   | <5            | 0.206              | 3.00                    | YES                |
|           | 2.441                   | -3.22                 | 0.48                 | 0+1                 | 1.00                    | 1.26                   | <5            | 0.165              | 3.00                    | YES                |
|           | 2.480                   | -4.83                 | 0.33                 | 0+1                 | 1.00                    | 1.26                   | <5            | 0.115              | 3.00                    | YES                |
| BLE(2M)   | 2.402                   | -2.16                 | 0.61                 | 0+1                 | 1.00                    | 1.26                   | <5            | 0.209              | 3.00                    | YES                |
|           | 2.441                   | -3.21                 | 0.48                 | 0+1                 | 1.00                    | 1.26                   | <5            | 0.166              | 3.00                    | YES                |
|           | 2.480                   | -4.84                 | 0.33                 | 0+1                 | 1.00                    | 1.26                   | <5            | 0.115              | 3.00                    | YES                |

**Conclusion:**

For the max result :  $0.281 \leq$  FCC Limit 3.0 for 1g SAR.