

**FCC ID:2BM2R-N15**

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  $\leq 50$  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:

- $f(\text{GHz})$  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.

BLE1M:

| Modulation | Channel Freq. (GHz) | Conduct ed power (dBm) | Conducte d power (mW) | Tune-up power (dBm) | Max tune-up power (dBm) | Max tune-up power (mW) | Distance (mm) | Result calculatio n | SAR Exclusion threshold | SAR test exclusion |
|------------|---------------------|------------------------|-----------------------|---------------------|-------------------------|------------------------|---------------|---------------------|-------------------------|--------------------|
| GFSK       | 2.402               | -0.186                 | 0.96                  | 0±1                 | 1.00                    | 1.26                   | <5            | 0.39023             | 3.00                    | YES                |
|            | 2.441               | -0.375                 | 0.92                  | 0±1                 | 1.00                    | 1.26                   | <5            | 0.39338             | 3.00                    | YES                |
|            | 2.480               | -0.218                 | 0.95                  | 0±1                 | 1.00                    | 1.26                   | <5            | 0.39651             | 3.00                    | YES                |

BLE2M:

| Modulation | Channel Freq. (GHz) | Conduct ed power (dBm) | Conducte d power (mW) | Tune-up power (dBm) | Max tune-up power (dBm) | Max tune-up power (mW) | Distance (mm) | Result calculatio n | SAR Exclusion threshold | SAR test exclusion |
|------------|---------------------|------------------------|-----------------------|---------------------|-------------------------|------------------------|---------------|---------------------|-------------------------|--------------------|
| GFSK       | 2.402               | -0.079                 | 0.98                  | 0±1                 | 1.00                    | 1.26                   | <5            | 0.39023             | 3.00                    | YES                |
|            | 2.441               | -0.275                 | 0.94                  | 0±1                 | 1.00                    | 1.26                   | <5            | 0.39338             | 3.00                    | YES                |
|            | 2.480               | -0.122                 | 0.97                  | 0±1                 | 1.00                    | 1.26                   | <5            | 0.39651             | 3.00                    | YES                |

EDR:

| Modulation    | Channel Freq. (GHz) | Conduct ed power (dBm) | Conducte d power (mW) | Tune-up power (dBm) | Max tune-up power (dBm) | Max tune-up power (mW) | Distance (mm) | Result calculatio n | SAR Exclusion threshold | SAR test exclusion |
|---------------|---------------------|------------------------|-----------------------|---------------------|-------------------------|------------------------|---------------|---------------------|-------------------------|--------------------|
| GFSK          | 2.402               | -0.177                 | 0.96                  | 0±1                 | 1.00                    | 1.26                   | <5            | 0.39023             | 3.00                    | YES                |
|               | 2.441               | -0.339                 | 0.92                  | 0±1                 | 1.00                    | 1.26                   | <5            | 0.39338             | 3.00                    | YES                |
|               | 2.480               | -0.162                 | 0.96                  | 0±1                 | 1.00                    | 1.26                   | <5            | 0.39651             | 3.00                    | YES                |
| $\pi$ /4DQPSK | 2.402               | 0.693                  | 1.17                  | 0±1                 | 1.00                    | 1.26                   | <5            | 0.39023             | 3.00                    | YES                |
|               | 2.441               | 0.516                  | 1.13                  | 0±1                 | 1.00                    | 1.26                   | <5            | 0.39338             | 3.00                    | YES                |
|               | 2.480               | 0.622                  | 1.15                  | 0±1                 | 1.00                    | 1.26                   | <5            | 0.39651             | 3.00                    | YES                |
| 8DQPSK        | 2.402               | 1.063                  | 1.28                  | 1±1                 | 2.00                    | 1.58                   | <5            | 0.49127             | 3.00                    | YES                |
|               | 2.441               | 0.907                  | 1.23                  | 0±1                 | 1.00                    | 1.26                   | <5            | 0.39338             | 3.00                    | YES                |
|               | 2.480               | 1.049                  | 1.27                  | 1±1                 | 2.00                    | 1.58                   | <5            | 0.49918             | 3.00                    | YES                |

**Conclusion:**

For the max result :  $0.49918 \leq \text{FCC Limit } 3.0 \text{ for } 1\text{g SAR}.$