

**FCC ID: 2BTNV-KY-R720**

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.

BLE:

| 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               | 2.378                  | 1.73                  | 2±1                 | 3.00                    | 2.00                   | <5            | 0.61847             | 3.00                    | YES                |
|            | 2.441               | 1.885                  | 1.54                  | 1±1                 | 2.00                    | 1.58                   | <5            | 0.49524             | 3.00                    | YES                |
|            | 2.480               | 2.574                  | 1.81                  | 2±1                 | 3.00                    | 2.00                   | <5            | 0.62843             | 3.00                    | YES                |

2.4G:

| 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               | 2.21                   | 1.66                  | 2±1                 | 3.00                    | 2.00                   | <5            | 0.61847             | 3.00                    | YES                |
|            | 2.441               | 1.887                  | 1.54                  | 1±1                 | 2.00                    | 1.58                   | <5            | 0.49524             | 3.00                    | YES                |
|            | 2.480               | 2.803                  | 1.91                  | 2±1                 | 3.00                    | 2.00                   | <5            | 0.62843             | 3.00                    | YES                |

**Conclusion:**

For the max result :  $0.62843 \leq \text{FCC Limit } 3.0$  for 1g SAR.