

# **FCC ID: 2A3T4-Z20000**

## **Portable device**

According to §15.247(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 and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances  $\leq 50$  mm are determined by:

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

$f(\text{GHz})$  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;

The test exclusions are applicable only when the minimum test separation distance is  $\leq 50$  mm and for transmission frequencies between 100 MHz and 6 GHz. When the minimum test separation distance is  $< 5$  mm, a distance of 5 mm is applied to determine SAR test exclusion.

We use 5mm as separation distance to calculate.

Maximum measured transmitter power:

BLE 1M

| Transmit Frequency (GHz) | Mode | Max Conducted Power (dBm) | tune up maximum power(dBm) | Result calculation | 1-g SAR |
|--------------------------|------|---------------------------|----------------------------|--------------------|---------|
| 2.402                    | GFSK | -2.542                    | -2                         | 0.20               | 3       |
| 2.440                    | GFSK | -3.446                    | -3                         | 0.16               | 3       |
| 2.480                    | GFSK | -4.976                    | -4                         | 0.13               | 3       |

Conclusion:

For the max result :  $0.78 \leq 3.0$  for 1-g SAR extremity SAR, No SAR is required.