

## FCC ID: 2BB3B-HDQ4TWS

### 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:

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

$f(\text{GHz})$  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:

**BT**

|            | Channel Freq. (MHz) | Max Transmit Power (dBm) | Max tune-up power (dBm) | Result calculation | 1-g SAR |
|------------|---------------------|--------------------------|-------------------------|--------------------|---------|
| GFSK       | 2402                | 1.97                     | 2                       | 0.491              | 3.0     |
|            | 2441                | 2.1                      | 3                       | 0.623              | 3.0     |
|            | 2480                | 2.17                     | 3                       | 0.628              | 3.0     |
| pi/4-DQPSK | 2402                | 2.8                      | 3                       | 0.612              | 3.0     |
|            | 2441                | 2.94                     | 3                       | 0.623              | 3.0     |
|            | 2480                | 3.05                     | 4                       | 0.791              | 3.0     |
| 8DPSK      | 2402                | 3.39                     | 4                       | 0.779              | 3.0     |
|            | 2441                | 3.54                     | 4                       | 0.785              | 3.0     |
|            | 2480                | 3.62                     | 4                       | 0.791              | 3.0     |

**Conclusion:**

For the max result :  $0.791 \leq 3.0$  for 1-g SAR extremity SAR, No SAR is required.