

FCC ID : 2BHLUTBLB

➤ **Test Standards and Limits**

1. According to KDB 447498 D01 v06, Section 4.3.1

2. FCC Radiofrequency radiation exposure limits:

The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances ≤ 50 mm are determined by:

$[(\text{max power of channel})/(\text{min test separation distance})] \cdot [\sqrt{f(\text{GHz})}] \leq 3.0$ for 1-g SAR and ≤ 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
- The result is rounded to one decimal place for comparison
- 3.0 and 7.5 are referred to as the numeric thresholds

The test exclusions are applicable only when the minimum test separation distance is ≤ 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 according to 4.1 f) is applied to determine SAR test exclusion.

We use 5mm as separation distance to calculate.

➤ **Measurement and Calculation**

1. Maximum transmit power

BLE antenna gain: 2.02 dBi

| Transmit Frequency (GHz) | Mode | Max Conducted Power (dBm) | tune up maximum power(dBm) | Result calculation | 1-g SAR |
|--------------------------|------|---------------------------|----------------------------|--------------------|---------|
| 2.402(2M) | GFSK | -1.24 | -1 | 0.163 | 3 |
| 2.440(2M) | GFSK | -0.65 | -1 | 0.123 | 3 |
| 2.480(2M) | GFSK | -1.28 | -1 | 0.168 | 3 |

2. MPE Calculation

For the max result : $0.168 \leq 3.0$ for 1-g SAR extremity SAR, No SAR is required.

-End of the Report-