

# FCC ID : 2BG2T-23358-061062

## ➤ 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  $\leq$ 50 mm are determined by:

$[(\text{max power of channel})/(\text{min test separation distance})] * [\sqrt{f(\text{GHz})}] \leq 3.0$  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
- 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  $\leq$  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 according to 4.1 f) is applied to determine SAR test exclusion.

For 2.4G band device, the limit of worse case is

$$P_{\text{max}} \leq 3.0 * D_{\text{min}} / f = 3.0 * 5 / [\sqrt{2.474}] = 9.537 \text{ mW}$$

## ➤ Measurement and Calculation

### 1. Maximum transmit power

2.4G SRD, Antenna Gain: 0dBi

| Operation Mode   | Channel Number | Channel Frequency (MHz) | Emission Level(dBuV/m) | EIRP (dBm) |
|--|----------------|-------------------------|------------------------|------------|
| 2.4G SRD   | 1              | 2410                    | 84.52                  | -10.71     |
|  | 4              | 2437                    | 84.85                  | -10.38     |
|  | 6              | 2473                    | 85.16                  | -10.07     |
| * EIRP[dBm] = E[dB $\mu$ V/m] + 20 log(d[meters]) - 104.77 |                |                         |                        |            |

### 2. MPE Calculation

According to the formula. calculate the EIRP test result:

$$\text{EIRP} = 0.098 \text{ mW} < 9.525 \text{ mW}$$

**So the SAR report is not required.**

-End of the Report-