

## FCC ID : EMJDDGRFN5

### ➤ 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

$$P_{\text{max}} \leq 3.0 * D_{\text{min}} / f = 3.0 * 5 / 2.480 = 9.525 \text{ mW}$$

### ➤ Measurement and Calculation

#### 1. Maximum transmit power

Antenna Gain: 0.79 dBi

Operation Mode	Modulation	Measurement Level (dBm)
SRD 2.4G	GFSK	-27.20*
* EIRP[dBm] = E[dB $\mu$ V/m] + 20 log(d[meters]) - 104.77		

#### 2. MPE Calculation

Max EIRP = 0.002mW  $<$  9.525mW

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

-End of the Report-