

RF EXPOSURE EVALUATION

1. PRODUCT INFORMATION

Product Description	Bluetooth adapter
Model Name	RGBLED-4C
FCC ID	2A2C3-RGBLED

2. EVALUATION METHOD

According to 447498 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 5 mm are determined by:

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

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

3. CALCULATION

BLE: 1M

$$P_t = 0.622 \text{ dBm} = 1.154 \text{ mW}$$

The value of the Maximum output power P_t is referred to the test report of the CFR47

§15.247.

The result for RF exposure evaluation $\text{SAR} = (1.154 \text{ mW} / 5 \text{ mm}) \cdot [\sqrt{2.48(\text{GHz})}] = 0.362 < 3.0$ for 1-g SAR and ≤ 7.5 for 10-g extremity SAR.

4. CONCLUSION

The SAR evaluation is not required.