

RF exposure letter

RF Exposure evaluation

According to 447498 D01 General RF Exposure Guidance v05

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:

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

- $f(\text{GHz})$ is the RF channel transmit frequency in GHz
- Power and distance are rounded to the nearest mW and mm before calculation
- The result is rounded to one decimal place for comparison

Rated RF power output

1、 2.402-2.480GHz:

Mode	BT
Detector	PK
GFSK	$6 \pm 1 \text{ dBm}$
$\pi/4$ -DQPSK	$7 \pm 1 \text{ dBm}$
8DPSK	$7 \pm 1 \text{ dBm}$

2、 2.4G BT output power: $8 \text{ dBm} = 6.31 \text{ mW}$

2402MHz : $(6.31 \text{ mW} / 5 \text{ mm}) \cdot [\sqrt{2.402(\text{GHz})}] = 1.96 < 3.0$ for 1-g SAR

2440MHz : $(6.31 \text{ mW} / 5 \text{ mm}) \cdot [\sqrt{2.440(\text{GHz})}] = 1.97 < 3.0$ for 1-g SAR

2480MHz : $(6.31 \text{ mW} / 5 \text{ mm}) \cdot [\sqrt{2.480(\text{GHz})}] = 1.99 < 3.0$ for 1-g SAR

Then SAR evaluation is not required