

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 ≤ 50 mm are determined by:

$[(\text{max. power of channel, including tune-up tolerance, mW})/(\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}] \leq 3.0$ 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 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	-5±0.8dBm
$\pi/4$ -DQPSK	-6±0.5dBm
8-DPSK	-6±0.5dBm

2、 2.4G BT output power:

2402MHz : $(0.380\text{mW} / 5\text{mm}) \cdot [\sqrt{2.402(\text{GHz})}] = 0.118 < 3.0$ for 1-g SAR

2441MHz : $(0.380\text{mW} / 5\text{mm}) \cdot [\sqrt{2.441(\text{GHz})}] = 0.119 < 3.0$ for 1-g SAR

2480MHz : $(0.380\text{mW} / 5\text{mm}) \cdot [\sqrt{2.480(\text{GHz})}] = 0.120 < 3.0$ for 1-g SAR

Then SAR evaluation is not required