

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

WIFI:

Worse case is as below: [2462 MHz 9.4dBm (8.7 mW) output power]

$(8.7\text{mW} / 5\text{mm}) \cdot [\sqrt{2.462(\text{GHz})}] = 2.73 < 3.0$ for 1-g SAR

Then SAR evaluation is not required

Bluetooth:

Worse case is as below: [2480 MHz 3.745dBm (2.37 mW) output power]

$(2.37\text{mW} / 5\text{mm}) \cdot [\sqrt{2.480(\text{GHz})}] = 0.746 < 3.0$ for 1-g SAR

Then SAR evaluation is not required

Remark: WIFI and BT can not transmit simultaneously