

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:

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

☐ $f(\text{GHz})$ 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

Worse case is as below: [2480 MHz 3.72 dBm (2.355 mW) output power]

$$(2.355 \text{ mW} / 5 \text{ mm}) \cdot \sqrt{2.480 (\text{GHz})} = 0.74 < 3.0 \text{ for 1-g SAR}$$

Then SAR evaluation is not required