

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:

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

☐ $f(\text{GHz})$ 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: [2402 MHz 5.21dBm (3.32 mW) output power]

$$(3.32 \text{ mW} / 5\text{mm}) \cdot \left[\sqrt{2.402 \text{ (GHz)}} \right] = 1.029 < 3.0 \text{ for 1-g SAR}$$

Then SAR evaluation is not required