

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:

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

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

Worse case is as below: [2480 MHz 3.58dBm (2.28mW)
output power]

$$(2.28\text{mW} / 5\text{mm}) \cdot [\sqrt{2.480(\text{GHz})}] = 0.72 < 3.0 \text{ for 1-g SAR}$$

Then SAR evaluation is not required