

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:

$$\left[\begin{array}{l} \text{(max. power of channel,} \\ \text{including tune-up tolerance,} \\ \text{mW)} / (\text{min. test separation} \\ \text{distance, mm)} \end{array} \right] \cdot [\sqrt{f(\text{GHz})}] \leq 3.0$$

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

Worse case is as below: [2402 MHz
-0.965dBm (0.8mW) output power]

$$(0.8\text{mW} / 5\text{mm}) \cdot [\sqrt{2.402(\text{GHz})}] = \\ 0.25 < 3.0 \text{ for 1-g SAR}$$

Then SAR evaluation is not
required