

RF exposure letter

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:

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

[2442MHz / 2.21dBm (1.66 mW) output power]

$(1.66 \text{ mW} / 5\text{mm}) \cdot [\sqrt{2.442(\text{GHz})}] = 0.519 < 3.0$ for 1 - g SAR

Then SAR evaluation is not required