

## SAR 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  $\leq 50$  mm are determined by:

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

- $f(\text{GHz})$  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:

The maximum output power of EUT (lowest channel) is -6.88dBm = 0.21 mW,

So the calculated result is:

$$\left[ \frac{0.21 \text{ mW}}{5 \text{ mm}} \right] \cdot \sqrt{2.402(\text{GHz})} = 0.07 < 3.0 \text{ for 1-g SAR}$$

Then SAR evaluation is not required