



RF Exposure evaluation

According to 447498 D01 General RF Exposure Guidance v06

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:

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

Power and distance are rounded to the nearest mW and mm before calculation
The result is rounded to one decimal place for comparison

FM:

Worse case output power is as below: [553.2MHz: 4.69dBm]

Antenna Gain is -2.71dBi

Maximum output power is 4.69dBm (2.94mW).

$(2.94\text{mW} / 5\text{mm}) \cdot \sqrt{0.5532 \text{ (GHz)}} = 0.44 < 3.0$ for 1-g SAR

Then SAR evaluation is not required