

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:

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

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

NII Band I, worse case is as below: [5240 MHz 5.22dBm (3.33 mW) output power]

$$(3.33 \text{ mW} / 5\text{mm}) \cdot [\sqrt{5.24(\text{GHz})}] = 1.53 < 3.0 \text{ for 1-g SAR}$$

NII Band III, worse case is as below: [5825 MHz 6.83dBm (4.82 mW) output power]

$$(4.82 \text{ mW} / 5\text{mm}) \cdot [\sqrt{5.825(\text{GHz})}] = 2.33 < 3.0 \text{ for 1-g SAR}$$

Then SAR evaluation is not required