

RF EXPOSURE

Applicable Standard

According to FCC §2.1093, systems operating under the provisions of this section shall be operated in a manner that ensure that the public is not exposed to radio frequency energy level in excess of the Commission’s guideline.

According to KDB 447498 D01 General RF Exposure Guidance

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:

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

- 1. f(GHz) is the RF channel transmit frequency in GHz.
- 2. Power and distance are rounded to the nearest mW and mm before calculation.
- 3. The result is rounded to one decimal place for comparison.
- 4. When the minimum test separation distance is < 5 mm, a distance of 5 mm is applied to determine SAR test Exclusion.

Test result

For worst case:

| Frequency (MHz) | Tune-Up Conducted Output Power# (dBm) | Tune-Up Conducted Output Power# (mW) | Distance (mm) | Calculated Value | Threshold (1-g SAR) | SAR Test Exclusion |
|-----------------|---------------------------------------|--------------------------------------|---------------|------------------|---------------------|--------------------|
| 2480            | 2.5                                   | 1.78                                 | 5.0           | 0.6              | 3.0                 | Yes                |

Note: The tune-up conducted power is declared by the applicant.

Result: No SAR test is required.