

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:

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

$[\sqrt{f(\text{GHz})}] \leq 3.0$ for 1-g SAR and ≤ 7.5 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 power [#] (dBm)	Tune-Up conducted power [#] (mW)	Distance (mm)	Calculated Value	Threshold (1-g SAR)	SAR Test Exclusion
467.6125	12	15.85	5	2.17	3	Yes

Note 1: The tune-up conducted power is declared by the applicant.

Note 2: Max conducted power = ERP+2.15dBi-Antenna Gain=5.31+2.15-(-4.01) =11.47dBm

Note 3: Antenna Gain= -4.01dBi

Result: No SAR test is required.