

RF Exposure Evaluation

LIMIT

According to FCC §2. 1093 and §1.1307(b)(1), 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 guide line.

According to KDB 447498 DO1 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: $(\text{max power of channel, including tune-up tolerance, mW} / (\text{min test separation distance, mm}) \times \text{fGHz}) \leq 3.0$ for 1-g SAR and ≤ 7.5 for 10-g extremity SAR,

Where $f(\text{GHz})$ is the RF channel transmit frequency in GHz.

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.

EVALUATION METHOD

Transmission formula: $P_d = (P_{out} \times G) / (4 \times \pi \times r^2)$

Where

P_d = power density in mW/cm^2 , P_{out} = output power to antenna in mW, G = gain of antenna in linear scale;

$\pi = 3.1416$, R = distance between observation point and center of the radiator in cm

TEST RESULT

☒ Passed

☐ Not Applicable

Type	Maximum conducted output power(dBm)	Power Density (mW/cm2)	Limit (mW/cm2)	Result
BT-EDR	-0.31	0.29	7.5	Pass

- Note:
- 1) The maximum antenna gain is 2dBi
 - 2) The exposure safety distance is less than 20cm.