

SAR Evaluation

The EUT is a portable device, and used to near the head of human, so according to FCC part 1.1037, 2.1093 and KDB 447498 D01 v05r01 section 4.3.1, the SAR Test Exclusion Threshold as below:

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

The device was used to near to the head, and the distance between antennas and human is 5mm.

The maximum output power of EUT is -1.41 dBm = 0.72 mW, and the maximum turn-up tolerance is 0 dBm = 1 mW, so the calculated result is:

$$[1 \text{ mW} / 5 \text{ mm}] \cdot [\sqrt{2.402 \text{ GHz}}] = 0.31 < 3.0$$

So, the SAR test is exclusion.

Remark: The turn-up tolerance of output power please refers to Operational description.