

RADIO FREQUENCY EXPOSURE EVALUATION

Evaluation Method:

KDB 447498 D01 v6

Applicable Standard:

KDB 447498 D01 V06 clause 4.3.1.a):

For 100 MHz to 6 GHz and *test separation distances* ≤ 50 mm, the 1-g and 10-g SAR test exclusion thresholds are determined by the following:

$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] \cdot [\sqrt{f_{(\text{GHz})}}] \leq 3.0$ 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 values 3.0 and 7.5 are referred to as *numeric thresholds* in step b) below

The test exclusions are applicable only when the minimum *test separation distance* is ≤ 50 mm, and for transmission frequencies between 100 MHz and 6 GHz. When the minimum *test separation distance* is < 5 mm, a distance of 5 mm according to 4.1 f) is applied to determine SAR test exclusion.

Calculation Result:

For this EUT:

max. power of channel, including tune-up tolerance = 2.11mW

min. test separation distance = 5mm

$\sqrt{f_{(\text{GHz})}}$ = 1.55

Calculation result = 0.6547,

that is less than 3.0 for 1-g SAR, hence the EUT is excluded from SAR evaluation according to FCC KDB Publication 447498 D01: General RF Exposure Guidance V06.