

Radio Frequency Exposure

EUT INFORMATION

EUT	Mouse
Frequency band (Operating)	2.402~2.480 GHz
Antenna diversity	<input checked="" type="checkbox"/> Single antenna <input type="checkbox"/> Multiple antennas <input type="checkbox"/> Tx diversity <input type="checkbox"/> Rx diversity <input checked="" type="checkbox"/> Tx/Rx diversity
Field strength	89.68 dBuV/m @3m
Antenna gain (Max)	1.3 dBi

TEST RESULT

According to KDB 447498 D01 v06 section 4.3.1, the 1-g SAR test exclusion thresholds at test separation distance ≤ 50 mm are determined by:

The min. test separation distance (mm) is 5 mm,

$$\text{eirp} = \text{pt} \cdot \text{gt} = (\text{E} \cdot \text{d})^2 / 30$$

where:

pt = transmitter output power in watts,

gt = numeric gain of the transmitting antenna (unitless),

E = electric field strength in V/m, --- $10^{((\text{dBuV/m})/20)/10^6}$

d = measurement distance in meters (m) --- 3m

$$\text{So pt} = (\text{E} \cdot \text{d})^2 / (30 \cdot \text{gt})$$

Ant. numeric gain, Ant. = 1.3 dBi = 1.35

$$\text{So pt} = \{ [10^{(89.68/20)} / 10^{6 \cdot 3}]^2 / (30 \cdot 1.35) \} \cdot 1000 = 0.207 \text{ mW}$$

$$\text{So } (0.207 \text{ mW} / 5 \text{ mm}) \cdot \sqrt{2.402 \text{ GHz}} = \mathbf{0.064} < 3.0 \text{ for 1-g SAR}$$

Therefore, standalone SAR measurements are not required for both head and body.