



# Radio Frequency Exposure

## EUT INFORMATION

<b>EUT</b>	Evluent VerticalMouse C Replacement Receiver
<b>Frequency band (Operating)</b>	2.405~2.475 GHz
<b>Antenna diversity</b>	<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
<b>Field strength</b>	77.15 dBuV/m @3m
<b>Antenna gain (Max)</b>	3.45 dBi

## TEST RESULT

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

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

$$eirp = pt * gt = (E * d)^2 / 30$$

where:

pt = transmitter output power in watts,

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

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

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

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

Ant. numeric gain, Ant. = 3.45 dBi = 2.21

$$\text{So } pt = \{ [10^{(77.15/20)} / 10^6 * 3]^2 / (30 * 2.21) \} * 1000 = 0.007 \text{ mW}$$

$$\text{So } (0.007 \text{ mW} / 5 \text{ mm}) * \sqrt{2.475 \text{ GHz}} = \mathbf{0.002} < 3.0 \text{ for 1-g SAR}$$

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