Radio Frequency Exposure

EUT INFORMATION

EUT	Mouse
FCC ID	2A9L8-E1WL
Frequency band (Operating)	2.402~2.480 GHz
Antenna diversity	☒ Single antenna ☐ Multiple antennas ☐ Tx diversity ☐ Rx diversity ☐ Tx/Rx diversity
Field strength	85.75 dBuV/m @3m
Antenna gain (Max)	2.71 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,

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

Ant. numeric gain, Ant. = 2.71 dBi = 1.87
So pt = $\{[10^{(85.75/20)}/10^6*3]^2/(30*1.87)\}*1000$ = 0.060 mW
So (0.060 mW/5 mm)* $\sqrt{}$2.440 GHz = **0.019** <3.0 for 1-g SAR

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