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Model No.: mcMod120

Radiofrequency radiation exposure evaluation

According to KDB 447498 D01v06 section 4.3.1,

>> The 1-g SAR test exclusion thresholds, for 100MHz to 6GHz, at test separation distances ≤ 50 mm are determined by:

Power at 2402MHz = 0.7381 mW EIRP

Power at 2440MHz = 0.5359 mW EIRP

Power at 2480MHz = 0.3829 mW EIRP

$[(0.7381 \text{ mW}) / (5 \text{ mm})] \cdot [\text{sqrt}(2.402 \text{ GHz})] = 0.057197$ which is ≤ 3.0 for 1-g SAR.

$[(0.5359 \text{ mW}) / (5 \text{ mm})] \cdot [\text{sqrt}(2.440 \text{ GHz})] = 0.041855$ which is ≤ 3.0 for 1-g SAR.

$[(0.3829 \text{ mW}) / (5 \text{ mm})] \cdot [\text{sqrt}(2.480 \text{ GHz})] = 0.030149$ which is ≤ 3.0 for 1-g SAR.

Therefore the device is exempt from stand-alone SAR test requirements.

>> The fundamental frequency of the EUT is 2402MHz-2480MHz, the test separation distance is $< 50\text{mm}$. (Manufacturer specified the separation distance is: less than 5mm)

>> The power of EUT measured is:

- For 2402MHz: $0.7381\text{mW} = 10 \log(0.7381) \text{ dBm} \sim -1.32\text{dBm}$

- For 2440MHz: $0.5359\text{mW} = 10 \log(0.5359) \text{ dBm} \sim -2.71\text{dBm}$

- For 2480MHz: $0.3829\text{mW} = 10 \log(0.3829) \text{ dBm} \sim -4.17\text{dBm}$