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Model No.: SP1601

Radiofrequency radiation exposure evaluation

According to KDB 447498 D01v05r02 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 2.402GHz = 1.406 mW EIRP

Power at 2.441GHz = 1.291 mW EIRP

Power at 2.480GHz = 1.172 mW EIRP

$[(1.406 \text{ mW}) / (20 \text{ mm})] \cdot [\text{sqrt}(2.402 \text{ GHz})] = 0.1005$ which is ≤ 3.0 for 1-g SAR.

$[(1.291 \text{ mW}) / (20 \text{ mm})] \cdot [\text{sqrt}(2.441 \text{ GHz})] = 0.1009$ which is ≤ 3.0 for 1-g SAR.

$[(1.172 \text{ mW}) / (20 \text{ mm})] \cdot [\text{sqrt}(2.480 \text{ GHz})] = 0.0923$ 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 mm. (Manufacturer specified the separation distance is < 20 mm)

>> The power of EUT measured is:

- For 2402MHz: $1.406\text{mW} = 10 \log(1.406) \text{ dBm} \sim 1.48\text{dBm}$

- For 2440MHz: $1.291\text{mW} = 10 \log(1.291) \text{ dBm} \sim 1.11\text{dBm}$

- For 2480MHz: $1.172\text{mW} = 10 \log(1.172) \text{ dBm} \sim 0.69\text{dBm}$