



Date: 2016-08-08
Report Number: 60.790.16.080.01
Model No.: HSTNW-D04W

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 = 0.0791 mW EIRP

Power at 2440MHz = 0.0845 mW EIRP

Power at 2480MHz = 0.1005 mW EIRP

$[(0.0791 \text{ mW}) / (5 \text{ mm})] \cdot [\text{sqrt}(2.402 \text{ GHz})] = 0.0245$ which is ≤ 3.0 for 1-g SAR.

$[(0.0845 \text{ mW}) / (5 \text{ mm})] \cdot [\text{sqrt}(2.440 \text{ GHz})] = 0.0264$ which is ≤ 3.0 for 1-g SAR.

$[(0.1005 \text{ mW}) / (5 \text{ mm})] \cdot [\text{sqrt}(2.480 \text{ GHz})] = 0.0317$ 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: less than 5mm)

>> The power of EUT measured is:

- For 2402MHz: $0.0791\text{mW} = 10 \log(0.0791) \text{ dBm} \sim -11.02\text{dBm}$

- For 2440MHz: $0.0845\text{mW} = 10 \log(0.0845) \text{ dBm} \sim -10.73\text{dBm}$

- For 2480MHz: $0.1055\text{mW} = 10 \log(0.1005) \text{ dBm} \sim -9.98\text{dBm}$