Date: 2015-09-21
Report Number: 60.790.15.022.01
Model No.: VBLE

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 2402MHz = 0.0959 mW EIRP, Power at 2440MHz = 0.0895 mW EIRP
Power at 2480MHz = 0.0909 mW EIRP, Power at 2457MHz = 0.0946 mW EIRP
Power at 2410MHz = 0.0928 mW EIRP, Power at 2473MHz = 0.0941 mW EIRP

$[(0.0959 \text{ mW}) / (5 \text{ mm})] \cdot [\text{sqrt} (2.402 \text{ GHz})] = 0.0297$ which is ≤ 3.0 for 1-g SAR.
$[(0.0895 \text{ mW}) / (5 \text{ mm})] \cdot [\text{sqrt} (2.440 \text{ GHz})] = 0.0279$ which is ≤ 3.0 for 1-g SAR.
$[(0.0909 \text{ mW}) / (5 \text{ mm})] \cdot [\text{sqrt} (2.480 \text{ GHz})] = 0.0286$ which is ≤ 3.0 for 1-g SAR.
$[(0.0946 \text{ mW}) / (5 \text{ mm})] \cdot [\text{sqrt} (2.457 \text{ GHz})] = 0.0296$ which is ≤ 3.0 for 1-g SAR.
$[(0.0928 \text{ mW}) / (5 \text{ mm})] \cdot [\text{sqrt} (2.410 \text{ GHz})] = 0.0288$ which is ≤ 3.0 for 1-g SAR.
$[(0.0941 \text{ mW}) / (5 \text{ mm})] \cdot [\text{sqrt} (2.473 \text{ GHz})] = 0.0295$ 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 2457MHz, 2410MHz, 2473MHz & 2402MHz-2480MHz, the test separation distance is < 50mm. (Manufacturer specification distance is <5mm)
>> The power of EUT measured is:

   - For 2402MHz: 0.0959mW = 10 log (0.0959) dBm ~ -10.18dBm
   - For 2440MHz: 0.0895mW = 10 log (0.0895) dBm ~ -10.48dBm
   - For 2480MHz: 0.0909mW = 10 log (0.0909) dBm ~ -10.41dBm
   - For 2457MHz: 0.0946mW = 10 log (0.0946) dBm ~ -10.24dBm
   - For 2410MHz: 0.0928mW = 10 log (0.0928) dBm ~ -10.32dBm
   - For 2473MHz: 0.0941mW = 10 log (0.0941) dBm ~ -10.26dBm

TÜV SÜD Hong Kong Ltd.
3/F, West Wing, Phase 2, 10 Science Park West Avenue, Hong Kong Science Park, Shatin, Hong Kong