Date: 2015-09-15
Report Number: 60.790.15.008.01
Model No.: BKM4AB

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 2457GHz = 0.8531 mW EIRP
Power at 2402GHz = 1.1912 mW EIRP
Power at 2440GHz = 1.1721 mW EIRP
Power at 2480GHz = 1.3335 mW EIRP

$[(0.8531 \text{ mW}) / (50 \text{ mm})] \cdot [\text{sqrt} (2457 \text{ GHz})] = 0.8457$ which is ≤ 3.0 for 1-g SAR.
$[(1.1912 \text{ mW}) / (50 \text{ mm})] \cdot [\text{sqrt} (2402 \text{ GHz})] = 1.1676$ which is ≤ 3.0 for 1-g SAR.
$[(1.1721 \text{ mW}) / (50 \text{ mm})] \cdot [\text{sqrt} (2440 \text{ GHz})] = 1.1579$ which is ≤ 3.0 for 1-g SAR.
$[(1.1335 \text{ mW}) / (50 \text{ mm})] \cdot [\text{sqrt} (2480 \text{ GHz})] = 1.1289$ 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, the test separation distance is < 50mm.

>> The power of EUT measured is:

  - For 2457MHz: 0.8531mW = 10 log (0.8531) dBm ~ -0.69dBm
  - For 2402MHz: 1.1912mW = 10 log (1.1912) dBm ~ +0.76dBm
  - For 2440MHz: 1.1721mW = 10 log (1.1721) dBm ~ -+0.69dBm
  - For 2480MHz: 1.3335mW = 10 log (1.3335) dBm ~ +1.25dBm