MPE Calculation / RF Exposure

Product: EVOA

Applicant: Nmotion Co.,Ltd.

Model: EV1000

Address: 402, 204, Convensia-daero, Yeonsu-gu, Incheon, Republic of Korea

FCC ID: 2BK7I-EV1000

Per KDB 447498 D01 General RF Exposure Guidance v06 (10/23/2015) section 4.3.1 (a)

Standalone SAR test exclusion threshold is applied;

a) For 100 MHz to 6 GHz and test separation distances ≤ 50 mm, the 1-g and 10-g SAR test exclusion thresholds are determined by the following:

[(max. power of channel, including tune-up tolerance, mW) / (min. test separation distance, mm)] $\cdot [\sqrt{f(GHz)}] \le 3.0$ for 1-g SAR, and ≤ 7.5 for 10-g extremity SAR,

- where f(GHz) is the RF channel transmit frequency in GHz
- Power and distance are rounded to the nearest mW and mm before calculation
- The result is rounded to one decimal place for comparison
- The values 3.0 and 7.5 are referred to as numeric thresholds in step b) below

Freq: BLE / 2 440 MHz

Tune-up max. power : -10.32 dBm (0.093 mW)

Min. Test separation distance: 5 mm

SAR exclusion threshold: $[0.093/5] \times [\sqrt{2.440}] = 0.029$ (=0.1, is rouned to one decimal place)

* Tune-up tolerance : -11 dBm +/- 1.0 dB

Therefore, the EUT was not evaluated as the value of SAR exclusion threshold was less than 3 per KDB 447498 D01 v06 section 4.3.1(a)