



RF Exposure Analysis – SAR Test Exemption

Applicant: EMM TECHNOLOGY LTD
FCC ID: 2BQACEMM01
Model number/name: EMM01

The above device operates in the 2402-2483.5 MHz frequency band (BLE).

The following FCC Rule Parts are applicable:

- Part 1.1307(b)(3)(i)(A) – 1 mW Blanket Exemption (i)
- Part 1.1307(b)(3)(i)(C) – MPE-based Exemption (ii)
- Part 1.1307(b)(3)(i)(B) – SAR-based Exemption (iii)

For the above device:

Transmitter frequency range = 2402 MHz to 2483.5 MHz

Maximum Conducted Power = -3.5 dBm (including tune-up tolerance)

Antenna gain: +1.8 dBi

Duty Cycle: 100 %

EIRP = -3.5 dBm + 1.8 dBi = -1.7 dBm = 0.68 mW

As the calculated EIRP is higher than the conducted transmitter output power this figure is compared to the specified exemption limits of Part 1.1307

Evaluation:

From Part 1.1307, RF exposure exemption applies if the maximum transmitted power is less than the maximum of the following three criteria:

- Less than 1 mw Blanket exemption. $P_{TH} = 0.001 \text{ W}$ – §1.1307(b)(3)(i)(A)
- determination of exemption under the MPE-based §1.1307(b)(3)(i)(C), if i) not met - met
- determination of exemption under the SAR-based §1.1307(b)(3)(i)(B) if both i) and ii) are not met;

Conclusion

The EMM01 maximum EIRP is less than 1 mW and, therefore, complies with the RF exposure blanket exemption in accordance with §1.1307(b)(3)(i)(A).

Certification Body

UL International (UK) Ltd