

INTERTEK TESTING SERVICES

RF Exposure

The equipment under test (EUT) is an Electric Scooter with Bluetooth function operating in 2402-2480MHz. The EUT is powered by DC 42.0V by rechargeable battery. Once charging, the wireless function will be disabled. For more detail information pls. refer to the user manual.

Antenna Type: Integral antenna

Modulation Type: GFSK

Antenna Gain: 1.0dBi Max

Bluetooth Version: 5.2 BLE (Single Mode)

The normal radiated output power (e.i.r.p) is: -4.0dBm (tolerance: +/- 3dB).

The normal conducted output power is -5.0dBm (tolerance: +/- 3dB).

According to the KDB 447498 V06:

The Maximum peak radiated emission for the EUT is 93.3dBμV/m at 3m in the frequency 2440MHz

The EIRP = $[(FS \cdot D)^2 / 30]$ mW = -1.93dBm

which is within the production variation.

The Minimum peak radiated emission for the EUT is 89.0dBμV/m at 3m in the frequency 2480MHz

The EIRP = $[(FS \cdot D)^2 / 30]$ mW = -6.23dBm

which is within the production variation.

The maximum conducted output power specified is -2dBm= 0.631mW

The source- based time-averaging conducted output power
=0.631mW

The SAR Exclusion Threshold Level:

= $3.0 \cdot (\text{min. test separation distance, mm}) / \text{sqrt}(\text{freq. in GHz})$

= $3.0 \cdot 5 / \text{sqrt} (2.480)$ mW

= 9.54 mW

Since the source-based time-averaging conducted output power is well below the SAR low threshold level, so the EUT is considered to comply with SAR requirement without testing.