

INTERTEK TESTING SERVICES

RF Exposure

The Equipment Under Test (EUT) is a Vyper Go with Bluetooth functions. The EUT is powered by DC 12V by rechargeable battery or 100-240V~ 50/60Hz 0.7A for adapter. Bluetooth function will stop transmission during charging. For more detailed features description, please refer to the user's manual.

Bluetooth Version: 5.0 BLE

Antenna Type: PCB Layout Antenna.

Antenna Gain: 3.44dBi.

Modulation Type: GFSK

The nominal conducted output power specified: -7.54dBm (+/-1dB)

The nominal radiated output power (e.i.r.p) specified-4.1dBm (+/- 1dB)

According to the KDB 447498:

The maximum peak radiated emission for the EUT is 92.0dB μ V/m at 3m in the frequency 2402MHz (BLE mode)

The EIRP = [(FS*D) ^2 / 30] mW = -3.23dBm

The minimum peak radiated emission for the EUT is 90.2dB μ V/m at 3m in the frequency 2440MHz (BLE mode)

The EIRP = [(FS*D) ^2 / 30] mW = -5.03dBm

which is within the production variation.

The maximum radiated output power specified is -3.1dBm = 0.5 mW

The source- based time-averaging conducted output power

= 0.5 * Duty factor mW (where Duty Factor \leq 1)

= 0.5mW

The SAR Exclusion Threshold Level:

= 3.0 * (min. test separation distance, mm) / sqrt(freq. in GHz)

= 3.0 * 5 / sqrt (2.480) mW

= 9.53 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