

INTERTEK TESTING SERVICES

RF Exposure

The equipment under test (EUT) is a Wireless Keypad with Bluetooth BLE 5.3(Single Mode) function operating in 2402-2480MHz and 2.4GHz function operating in 2405-2470MHz. The EUT is powered by DC 5V/500mA. Bluetooth and SRD 2.4G cannot transmit data simultaneously. For more detail information pls. refer to the user manual.

BLE

Bluetooth Version: 5.3 BLE (Single Mode)

Modulation Type: GFSK

Antenna Type: Integral antenna

Antenna Gain: 1.15dBi (This information is provided by applicant, and the applicant is responsible for the authenticity of the provided information.)

The nominal radiated output power (e.i.r.p) specified: -2dBm (Tolerance: +/- 2dB)

The nominal conducted output power specified: -3.15dBm (Tolerance: +/- 2dB)

According to the KDB 447498 D04 V01:

The maximum peak radiated emission for the EUT is 93.3dB μ V/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 91.8dB μ V/m at 3m in the frequency 2480MHz

The EIRP = $[(FS \cdot D)^2 / 30]$ mW = -3.43dBm

which is within the production variation.

The maximum conducted output power specified is -1.15dBm = 0.77 mW

The source- based time-averaging conducted output power
= 0.77 mW

1-mW Test Exemption:

Since the source-based time-averaging conducted output power is well below 1-mW Test Exemption, per KDB 447498 D04 V01 and §1.1307 (b) (3) (i) (A), the EUT is considered to comply with SAR requirement without testing and no evaluation is required.

2.4G

Modulation Type: GFSK

Antenna Type: Integral antenna

Antenna Gain: 1.15dBi (This information is provided by applicant, and the applicant is responsible for the authenticity of the provided information.)

The nominal radiated output power (e.i.r.p) specified: -15dBm (Tolerance: +/- 2dB)

The nominal conducted output power specified: -16.15dBm (Tolerance: +/- 2dB)

According to the KDB 447498 D04 V01:

The maximum peak radiated emission for the EUT is 79.5dB μ V/m at 3m in the frequency 2405MHz

The EIRP = $[(FS \cdot D)^2 / 30]$ mW = -15.73dBm
which is within the production variation.

The minimum peak radiated emission for the EUT is 78.6dB μ V/m at 3m in the frequency 2470MHz

The EIRP = $[(FS \cdot D)^2 / 30]$ mW = -16.63dBm
which is within the production variation.

The maximum conducted output power specified is -14.15dBm = 0.04 mW

The source- based time-averaging conducted output power
= 0.04 mW

1-mW Test Exemption:

Since the source-based time-averaging conducted output power is well below 1-mW Test Exemption, per KDB 447498 D04 V01 and §1.1307 (b) (3) (i) (A), the EUT is considered to comply with SAR requirement without testing and no evaluation is required.