

INTERTEK TESTING SERVICES

RF Exposure

The Equipment Under Test (EUT) is a Folding Bluetooth Keyboard/Folding Wireless Keyboard which has Bluetooth function. The EUT was powered by DC3.7V rechargeable battery or DC 5V through USB port. For more detailed features description, please refer to the user's manual.

Bluetooth Version: 4.2(Dual-mode)

Antenna Type: Integral antenna.

Antenna Gain: 0.55dBi.

Modulation Type: GFSK, $\pi/4$ -DQPSK and 8-DPSK

The nominal conducted output power specified: 5.45dBm (+/-3dB)

The nominal radiated output power (e.i.r.p) specified: 6.0dBm (+/- 3dB)

According to the KDB 447498:

The maximum peak radiated emission for the EUT is 103.2dB μ V/m at 3m in the frequency 2440MHz(BLE mode)

The EIRP = $[(FS \cdot D)^2 / 30]$ mW = 7.97dBm
which is within the production variation.

The minimum peak radiated emission for the EUT is 98.8dB μ V/m at 3m in the frequency 2480MHz(EDR mode)

The EIRP = $[(FS \cdot D)^2 / 30]$ mW = 3.57dBm
which is within the production variation.

The maximum conducted output power specified is 8.45dBm = 7.0mW

The source- based time-averaging conducted output power
= 7.0 * Duty factor mW (where Duty Factor \leq 1)
= 7.0mW

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.