

INTERTEK TESTING SERVICES

RF Exposure

The equipment under test (EUT) is a Bluetooth keyboard case with Bluetooth functions operating in 2402-2480MHz. It is powered by DC 3.7V by rechargeable battery and charged by DC 5V through adaptor. For more detail information pls refer to the user manual.

Bluetooth Version: 5.1(without BLE)

Antenna Type: Integral antenna.

Antenna Gain: 1.87dBi.

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

The nominal conducted output power specified: -4dBm (+/-4dB).

The nominal radiated output power (e.i.r.p) specified: -2.13dBm (+/- 4dB).

According to the KDB 447498:

The maximum conducted output power for the EUT is -6.22dBm in the frequency 2402MHz which is within the production variation.

The minimum conducted output power for the EUT is -7.16dBm in the frequency 2480MHz which is within the production variation.

The maximum conducted output power specified is 0dBm = 1.0mW

The source- based time-averaging conducted output power

= $1.0 * \text{Duty factor mW (where Duty Factor} \leq 1)$

= 1.0 mW

The SAR Exclusion Threshold Level:

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

= $3.0 * 5 / \text{sqrt} (2.480)$ 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.