

INTERTEK TESTING SERVICES

RF Exposure

The equipment under test (EUT) is a Bluetooth Low Energy Device with BT 4.0 BLE function operating in 2402-2480MHz. The EUT is powered by DC 4.5V by AAA battery. For more detail information pls. refer to the user manual.

Modulation Type: GFSK

Bluetooth Version: 4.0 (Single Mode BLE)

Antenna Type: Integral antenna.

Antenna Gain: 0dBi.

The nominal conducted output power specified: 0dBm (+/- 3dB).

The nominal radiated output power (e.i.r.p) specified: 0dBm (+/- 3dB).

According to the KDB 447498:

The maximum peak radiated emission for the EUT is 96.3dBμV/m at 3m in the frequency 2440MHz

The EIRP = $[(FS \cdot D)^2 / 30]$ mW = 1.07dBm
which is within the production variation.

The minimum peak radiated emission for the EUT is 93.5dBμV/m at 3m in the frequency 2480MHz

The EIRP = $[(FS \cdot D)^2 / 30]$ mW = -1.73dBm
which is within the production variation.

The maximum conducted output power specified is 3dBm = 2.0mW

The source-based time-averaging conducted output power
= 2.0 * Duty factor mW (where Duty Factor ≤ 1)
= 2.0 mW

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.