

INTERTEK TESTING SERVICES

RF Exposure

The Equipment Under Test (EUT) is a Television remote control which has Bluetooth function. The EUT was powered DC 3V from battery. For more detailed features description, please refer to the user's manual.

Bluetooth Version: 5.0 BLE

Antenna Type: Integral antenna.

Antenna Gain: 2.0dBi.

Modulation Type: GFSK.

The nominal conducted output power specified: -2dBm (+/-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 97.8dB μ V/m at 3m in the frequency 2480MHz

The EIRP = $[(FS \cdot D)^2 / 30]$ mW = 2.57 dBm

which is within the production variation.

The minimum peak radiated emission for the EUT is 92.7dB μ V/m at 3m in the frequency 2402MHz

The EIRP = $[(FS \cdot D)^2 / 30]$ mW = -2.53dBm

which is within the production variation.

The maximum conducted output power specified is 1dBm = 1.259 mW

The source-based time-averaging conducted output power

= 1.259 * Duty factor mW (where Duty Factor ≤ 1)

= 1.259 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.