

INTERTEK TESTING SERVICES

RF Exposure

The equipment under test (EUT) is a Remote Control with Bluetooth function operating in 2402-2480MHz. The EUT is powered by DC 3.0V(2*1.5V AAA batteries), For more detail information pls. refer to the user manual.

Bluetooth Version: 5.0 BLE (Single Mode)

Antenna Type: Integral antenna

Modulation Type: GFSK

Antenna Gain: 0dBi Max

The nominal conducted output power specified: 4.0dBm (+/-2dB)

The nominal radiated output power(e.i.r.p) specified: 4.0dBm (+/-2dB)

According to the KDB 447498:

The Maximum peak radiated emission for the EUT is 100.8 dB μ V/m at 3m in the frequency 2402MHz

The EIRP = [(FS*D) ^2 / 30] mW = 5.57dBm
which is within the production variation.

The Minimum peak radiated emission for the EUT is 98.1 dB μ V/m at 3m in the frequency 2480MHz

The EIRP = [(FS*D) ^2 / 30] mW = 2.87dBm
which is within the production variation.

The maximum conducted output power specified is 6.0dBm = 3.98mW

The source- based time-averaging conducted output power

= 3.98 * Duty factor mW (where Duty Factor \leq 1)

= 3.98 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.