

INTERTEK TESTING SERVICES

Analysis Report

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: 4.2 Single Mode (BLE)

Modulation Type: GFSK

Antenna Type: Integral antenna (Gain: 0 dBi)

The nominal conducted output power specified: -5.0dBm (Tolerance: +/-3dB)

According to the KDB 447498:

The Maximum peak radiated emission for the EUT is 91.9 dBμV/m at 3m in the frequency 2402MHz

The EIRP = $[(FS \cdot D)^2 / 30]$ mW = -3.33dBm

which is within the production variation.

The Minimum peak radiated emission for the EUT is 87.5dBμV/m at 3m in the frequency 2480MHz

The EIRP = $[(FS \cdot D)^2 / 30]$ mW = -7.73dBm

which is within the production variation.

The maximum conducted output power specified is -2.0dBm = 0.63mW

The source- based time-averaging conducted output power

= $0.63 \cdot \text{Duty cycle}$ mW ≤ 0.63 mW (Duty Cycle $\leq 100\%$)

The SAR Exclusion Threshold Level:

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

= $3.0 \cdot 5 / \sqrt{2.480}$ 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.