

INTERTEK TESTING SERVICES

Analysis Report

The equipment under test (EUT) is a Remote Shutter with Bluetooth function operating in 2402-2480MHz. The EUT is powered by DC 3.0V (CR2032 button battery), 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: 2.99dBi)

The nominal conducted output power specified: -16.0dBm (Tolerance: +/-3dB)
The nominal radiated output power specified: -13.01dBm (Tolerance: +/-3dB)

According to the KDB 447498:

The Maximum peak radiated emission for the EUT is 83.1 dB μ V/m at 3m in the frequency 2402MHz

The EIRP = [(FS*D) ^2 / 30] mW = -12.13dBm
which is within the production variation.

The Minimum peak radiated emission for the EUT is 80.7 dB μ V/m at 3m in the frequency 2480MHz

The EIRP = [(FS*D) ^2 / 30] mW = -14.53dBm
which is within the production variation.

The maximum conducted output power specified is -13.0dBm = 0.05mW
The source- based time-averaging conducted output power
= 0.05 * Duty cycle mW <= 0.05 mW (Duty Cycle<=100%)

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.