

INTERTEK TESTING SERVICES

Analysis Report

The equipment under test (EUT) is a Wireless Sensor Pad with Bluetooth 4.0 function operating in 2402-2480MHz. This EUT is powered by a DC 3V, 580mAh "CR3032" size battery. For more detail information pls. refer to the user manual.

Modulation Type: GFSK

Antenna Type: Integral antenna (Gain: 0 dBi)

The nominal radiated output power (e.i.r.p) specified: -7dBm (Tolerance: +/-3dB)

The nominal conducted output power specified: -7dBm (Tolerance: +/-3dB)

According to the KDB 447498:

The maximum radiated emission for the EUT is 88.0dB μ V/m at 3m in the frequency 2.440GHz = $[(FS \cdot D)^2 / 30]$ mW
= -7.23dBm which is within the production variation

The minimum radiated emission for the EUT is 87.0dB μ V/m for at 3m in the frequency 2.480GHz = $[(FS \cdot D)^2 / 30]$ mW
= -8.23dBm which is within the production variation

The maximum conducted output power specified is -4dBm = 0.4mW

The source-based time-averaging conducted output power

= 0.4 * Duty cycle mW = 0.4 mW

The SAR Exclusion Threshold Level:

= 3.0 * (min. test separation distance, mm) / sqrt(freq. in GHz)

= 3.0 * 5 / sqrt(2.480) mW

= 9.5 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.