

INTERTEK TESTING SERVICES

Analysis Report

The equipment under test (EUT) is a MICRO COMPONENT SYSTEM with Bluetooth technology operating in 2402-2480MHz. The EUT is powered by AC 100-240V, 50/60Hz. For more detail information pls. refer to the user manual.

Modulation Type: GFSK, $\pi/4$ -DQPSK and 8-DPSK

Bluetooth Version: 2.1+EDR

Antenna Type: Integral antenna

Antenna Gain: 0 dBi

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

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

According to the KDB 447498:

The maximum radiated emission for the EUT is 98.5 dB μ V/m at 3m in the frequency 2.441GHz = $[(FS \cdot D)^2 / 30]$ mW
= 3.3 dBm which is within the production variation

The minimum radiated emission for the EUT is 96.8 dB μ V/m for at 3m in the frequency 2.402GHz = $[(FS \cdot D)^2 / 30]$ mW
= 1.6 dBm which is within the production variation

The maximum radiated output power specified is 4dBm = 2.51mW

The source- based time-averaging conducted output power
= 2.51 * Duty cycle mW \leq 2.51 mW (Duty Cycle \leq 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.