

INTERTEK TESTING SERVICES

Analysis Report

The equipment under test (EUT) is an Electronic Board Game with Bluetooth (4.0 single mode) function. The EUT was powered by 3Vdc (2 x AA batteries). For more detail information pls. refer to the user manual.

Modulation Type: GFSK

Bluetooth Version: 4.0 (Single Mode)

Antenna Type: Integral antenna

Antenna Gain: 0dBi

The nominal radiated output power (e.i.r.p) specified: 6.0dBm (tolerance: +/- 3 dB)

The nominal conducted output power specified: 6.0dBm (tolerance: +/- 3dB)

According to the KDB 447498:

The Maximum peak radiated emission for the EUT is 5.96dBm at 3m in the frequency 2440MHz which is within the production variation.

The Minimum peak radiated emission for the EUT is 5.27dBm at 3m in the frequency 2480MHz which is within the production variation.

The maximum conducted output power specified is 9.0 dBm = 7.94mW

The source- based time-averaging conducted output power
= 7.94 * Duty cycle mW= 7.94 mW

The SAR Exclusion Threshold Level:

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

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

Transmitter Duty Cycle Calculation

The test signal of the EUT is Continuous emission, so the Duty Cycle is 100%.