

INTERTEK TESTING SERVICES

Analysis Report

The equipment under test (EUT) is a PORTABLE BLUETOOTH BOOMBOX with Bluetooth function operating in 2402-2480MHz. The EUT is powered by AC 110-240V, 50/60Hz or AC/DC adaptor (DC Output 12.0V) or DC 15.0V (10 x 1.5V size "D" batteries). For more detail information pls. refer to the user manual.

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

Bluetooth Version: 2.1 with EDR function

Antenna Type: Integral antenna (Gain: 0 dBi)

The nominal radiated output power (e.i.r.p) specified: 0dBm (Tolerance: +/-3dB)

The nominal conducted output power specified: 0dBm (Tolerance: +/-3dB)

According to the KDB 447498:

The maximum radiated emission for the EUT is 93.8dB μ V/m at 3m in the frequency 2.402GHz = $[(FS \cdot D)^2 / 30]$ mW
= -1.4dBm which is within the production variation

The minimum radiated emission for the EUT is 92.8dB μ V/m for at 3m in the frequency 2.480GHz = $[(FS \cdot D)^2 / 30]$ mW
= -2.4dBm which is within the production variation.

The maximum conducted output power specified is 3dBm = 2.0mW

The source- based time-averaging conducted output power
= 2.0 * Duty cycle mW $\leq$ 2.0 mW (Duty Cycle $\leq$ 100%)

The SAR Exclusion Threshold Level:

= 3.0 * (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.