

INTERTEK TESTING SERVICES

Analysis Report

The equipment under test (EUT) is a CD+G/MP3+G KARAOKE PLAYER WITH BLUETOOTH with Bluetooth technology operating in 2402-2480MHz. The EUT is powered by DC9V through adapter with 120V/60Hz input. 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: -0.58 dBi

The nominal conducted output power specified: -3.0dBm (Tolerance: +/-5dB)

The nominal radiated output power specified: -3.58dBm (Tolerance: +/-5dB)

According to the KDB 447498:

The maximum radiated emission for the EUT is 92.6 dB μ V/m at 3m in the frequency 2.480GHz = $[(FS \cdot D)^2 / 30]$ mW
= -2.6 dBm which is within the production variation

The minimum radiated emission for the EUT is 92.1 dB μ V/m for at 3m in the frequency 2.441GHz = $[(FS \cdot D)^2 / 30]$ mW
= -3.1 dBm which is within the production variation

The maximum radiated output power specified is 2dBm = 1.58mW

The source- based time-averaging conducted output power
= 1.58 * Duty cycle mW \leq 0.26 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
= 9.53 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.