

INTERTEK TESTING SERVICES

RF Exposure

The equipment under test (EUT) is a MP3/CD Bass Reflex Boombox & PA System with Bluetooth with Bluetooth function. The EUT was powered by 10 x 1.5V "D" size batteries or AC adapter(Input: AC100-240V, 50/60Hz, 1.2A, Output: DC15V, 3A) . For more detail information pls. refer to the user manual.

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

Bluetooth Version: 3.0 + EDR

Antenna Type: Integral antenna.

Antenna Gain: 0dBi.

The nominal conducted output power specified: 1.0dBm (+/-3dB)

The nominal radiated output power (e.i.r.p) specified: 1.0dBm (+/- 3dB)

According to the KDB 447498:

The maximum peak radiated emission for the EUT is 98.6dB μ V/m at 3m in the frequency 2480MHz

The EIRP = $[(FS^*D)^2 / 30]$ mW = 3.4dBm
which is within the production variation.

The minimum peak radiated emission for the EUT is 97.8dB μ V/m at 3m in the frequency 2402MHz

The EIRP = $[(FS^*D)^2 / 30]$ mW = 2.6dBm
which is within the production variation.

The maximum conducted output power specified is 4.0dBm = 2.5mW

The source- based time-averaging conducted output power

= 2.5 * Duty cycle mW (where Duty cycle \leq 100%)
= 2.5 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.