

INTERTEK TESTING SERVICES

RF Exposure

The Equipment Under Test (EUT) is a Karaoke Machine with EDR function operating at 2402-2480MHz. The EUT is powered by DC 3.7V. For more detailed features description, please refer to the user's manual.

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

Bluetooth Version: 5.4 EDR (Single Mode)

Antenna Type: Intergral Antenna

Antenna Gain: 2.34dBi Max

The nominal conducted output power specified: -14.34dBm (Tolerance: +/- 4dB)

The nominal radiated output power specified: -12dBm (Tolerance: +/- 4dB)

According to the KDB 447498 D04 Interim General RF Exposure Guidance V01:

The maximun peak radiated emission for the EUT is 86.9dB μ V/m at 3m in the frequency 2402MHz

The EIRP = $[(FS^*D)^2 / 30]$ mW = -8.3dBm

which is within the production variation.

The minimum peak radiated emission for the EUT is 78.6dB μ V/m at 3m in the frequency 2480MHz

The EIRP = $[(FS^*D)^2 / 30]$ mW = -16.6dBm

which is within the production variation.

The maximun conducted output power specified is -10.34dBm = 0.09 mW

The source- based time-averaging conducted output power

= 0.09 mW

1-mW Test Exemption:

Since the source-based time-averaging conducted output power is well below 1-mW Test Exemption, per KDB 447498 D04 Interim General RF Exposure Guidance V01 and §1.1307 (b) (3) (i) (A), the EUT is considered to comply with SAR requirement without testing and no evaluation is required.