

INTERTEK TESTING SERVICES

Analysis Report

The equipment under test (EUT) is a Mono Earbuds model 25488 with Bluetooth technology operating in 2402-2480MHz. The EUT is powered by rechargeable battery(DC 3.7V, 40mAh) which can be charged by DC 5V/ 0.5A. For more detail information pls. refer to the user manual.

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

Bluetooth Version: 3.0

Antenna Type: PCB Antenna

Antenna Gain: -2.1dBi

The nominal radiated output power specified: 1dBm (Tolerance: +/-1dB)

According to the KDB 447498:

The maximum radiated emission for the EUT is 96.4 dB μ V/m at 3m in the frequency 2.402GHz = $[(FS \cdot D)^2 / 30]$ mW
= 1.2 dBm which is within the production variation

The minimum radiated emission for the EUT is 95.8 dB μ V/m for at 3m in the frequency 2.441GHz = $[(FS \cdot D)^2 / 30]$ mW
= 0.6 dBm which is within the production variation

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

The source- based time-averaging conducted output power

= 1.58 * Duty cycle mW \leq 1.58 mW (Duty Cycle \leq 100%)

The SAR Exclusion Threshold Level:

= 3.0 * (min. test separation distance, mm) / sqrt(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.