

INTERTEK TESTING SERVICES

RF Exposure

The equipment under test (EUT) is a TRUE WIRELESS STEREO EARBUDS with Bluetooth function. The EUT is powered by DC 3.7V lithium battery which can be charged by DC 5V from the portable rechargeable box . For more detail information pls. refer to the user manual.

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

Bluetooth Version: BT 4.1(without BLE mode)

Antenna Type: Integral antenna.

Antenna Gain: 0dBi.

The nominal conducted output power specified: 2.7dBm (+/-3dB).

The nominal radiated output power (e.i.r.p) specified: 2.7dBm (+/- 3dB)

According to the KDB 447498:

The minimum peak radiated emission for the EUT is 96.6dB μ V/m at 3m in the frequency 2402MHz.

The EIRP = $[(FS^*D)^2 / 30]$ mW = 1.37dBm
which is within the production variation.

The maximum peak radiated emission for the EUT is 100.9dB μ V/m at 3m in the frequency 2480MHz.

The EIRP = $[(FS^*D)^2 / 30]$ mW = 5.67dBm
which is within the production variation.

The maximum conducted output power specified is 5.7dBm = 3.72mW

The source- based time-averaging conducted output power
= $3.72 * \text{Duty factor mW}$ (where Duty Factor ≤ 1)
= 3.72 mW

The SAR Exclusion Threshold Level:

= $3.0 * (\text{min. test separation distance, mm}) / \text{sqrt(freq. in GHz)}$
= $3.0 * 5 / \text{sqrt}(2.480)$ 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.