

# INTERTEK TESTING SERVICES

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## RF Exposure

The equipment under test (EUT) is a Headphone with Bluetooth function. The EUT was powered by Built-in rechargeable 3.7V, 680mAh DC Lithium ion Battery or USB Charging. For more detail information pls. refer to the user manual.

Modulation Type: GFSK for BT 4.0 and GFSK,  $\pi/4$ DQPSK, 8DPSK for BT2.1+EDR  
Bluetooth Version: 4.0 and 2.1+EDR, 3.0.

Antenna Type: Integral antenna.

Antenna Gain:-1.0 dBi.

The nominal conducted output power specified: -14.0dBm +/-3dB.

The nominal radiated output power (e.i.r.p) specified: -15.0dBm (+/- 3dB)

According to the KDB 447498:

The maximum peak radiated emission for the EUT is 80.6dB $\mu$ V/m at 3m in the frequency 2442MHz of BT 4.0

The EIRP =  $[(FS \cdot D)^2 / 30]$  mW = -14.63dBm  
which is within the production variation.

The minimum peak radiated emission for the EUT is 78.5dB $\mu$ V/m at 3m in the frequency 2441MHz of BT 3.0+EDR

The EIRP =  $[(FS \cdot D)^2 / 30]$  mW = -16.73dBm  
which is within the production variation.

The maximum conducted output power specified is -11.0dBm = 0.08mW

The source-based time-averaging conducted output power  
= 0.08 \* Duty cycle mW (where Duty cycle  $\leq$  100%)  
<0.1 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.