

# INTERTEK TESTING SERVICES

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## RF Exposure

The equipment under test (EUT) is a Wireless Speaker with Bluetooth function. The EUT was powered by the fully-charged DC 3.7V, 300mAh new rechargeable battery which was charged by USB port (DC 5V). For more detail information pls. refer to the user manual.

Modulation Type: GFSK,  $\pi/4$ DQPSK, 8DPSK.  
Bluetooth Version: 2.1 with EDR.

Antenna Type: Integral antenna.

Antenna Gain: 0dBi.

The nominal conducted output power specified: 1dBm +/-3dB.

The nominal radiated output power (e.i.r.p) specified: 1dBm (+/- 3dB)

According to the KDB 447498:

The maximum peak radiated emission for the EUT is 98.2dB $\mu$ V/m at 3m in the frequency 2480MHz

The EIRP =  $[(FS \cdot D)^2 / 30]$  mW = 3.0dBm  
which is within the production variation.

The minimum peak radiated emission for the EUT is 97.1dB $\mu$ V/m at 3m in the frequency 2402MHz

The EIRP =  $[(FS \cdot D)^2 / 30]$  mW = 1.9dBm  
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  $\leq$  1)  
 $\leq$  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.