

# INTERTEK TESTING SERVICES

---

## RF Exposure

The equipment under test (EUT) is a Bluetooth Speaker with BT 4.2+EDR function operating in 2402-2480MHz. The EUT is powered by rechargeable battery (DC3.7V) which can be charged by USB port (DC 5V). Insert the AUX cable to the AUX input port when the power is on or insert the AUX cable to the AUX input port then power on, the speaker will switch to AUX IN mode automatically. The NFC tag is passive. For more detail information pls. refer to the user manual.

Modulation Type: GFSK, p/4-DQPSK and 8-DPSK

Bluetooth Version: BT 4.2 (without BLE)

Antenna Type: Integral antenna.

Antenna Gain: 0dBi Max

The nominal conducted output power specified: 0dBm (+/-5dB).

The nominal radiated output power (e.i.r.p) specified: 0dBm (+/- 5dB)

According to the KDB 447498:

The maximum peak radiated emission for the EUT is 96.7dB $\mu$ V/m at 3m in the frequency 2480MHz.

The EIRP = [(FS\*D) ^2 / 30] mW = 1.47dBm  
which is within the production variation.

The minimum peak radiated emission for the EUT is 91.5dB $\mu$ V/m at 3m in the frequency 2402MHz.

The EIRP = [(FS\*D) ^2 / 30] mW = -3.73dBm  
which is within the production variation.

The maximum conducted output power specified is 5.0dBm = 3.16mW

The source- based time-averaging conducted output power

= 3.16 \* Duty factor mW (where Duty Factor  $\leq$  1)  
= 3.16 mW

The SAR Exclusion Threshold Level:

= 3.0 \* (min. test separation distance, mm) / sqrt(freq. in GHz)  
= 3.0 \* 5 / sqrt (2.480) mW  
= 9.53 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.