

INTERTEK TESTING SERVICES

RF Exposure

The Equipment Under Test (EUT) is a HUAWEI Wireless Earphone with Bluetooth function operating at 2402-2480MHz. The EUT can be powered by DC 3.7V(1 x 3.7V rechargeable battery) and the Bluetooth function can't operation during charging. For more detailed features description, please refer to the user's manual.

BT 5.0 function:

Antenna Type: Integral antenna.

Antenna Gain: 0dBi.

The normal conducted output power is 8.77dBm (tolerance: +/- 1dB).

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

According to the KDB 447498:

The Maximum Conducted Output Power for the EUT is 9.77 dBm = 9.48mW the frequency 2441MHz which is within the production variation.

The Minimum Conducted Output Power for the EUT is 9.52dBm = 8.95mW the frequency 2480MHz which is within the production variation.

The maximum conducted output power specified is 9.77dBm=9.48 mW

The source- based time-averaging conducted output power
=9.48* Duty cycle mW \leq 9.48mW(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.

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BLE function:

Antenna Type: Integral antenna.

Antenna Gain: 0dBi.

The normal conducted output power is 7.0dBm (tolerance: +/- 1dB).

Modulation Type: GFSK.

According to the KDB 447498:

The Maximum Conducted Output Power for the EUT is 7.36 dBm = 5.45mW
the frequency 2440MHz which is within the production variation.

The Minimum Conducted Output Power for the EUT is 6.84dBm = 4.83mW
the frequency 2402MHz which is within the production variation.

The maximum conducted output power specified is 8.0dBm = 6.31mW
The source- based time-averaging conducted output power
=6.31* Duty cycle mW = 6.31mW (Duty cycle =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.