

# INTERTEK TESTING SERVICES

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## RF Exposure

The equipment under test (EUT) is a control unit for the XVR with Bluetooth function operated at 2.4GHz band. The EUT is powered by DC 4.5V (3 x 1.5V AA batteries). For more detail information pls. refer to the user manual.

Modulation Type: GFSK.

Bluetooth Version: 4.0 BLE (single mode)

Antenna Type: Integral antenna.

Antenna Gain: 0dBi.

The normal radiated output power (e.i.r.p) is: -3.0dBm (tolerance: +/- 3dB).

The normal conducted output power is: -3.0dBm (tolerance: +/- 3dB).

According to the KDB 447498:

The Maximum peak radiated emission for the EUT is 91.6dB $\mu$ V/m at 3m in the frequency 2402MHz

The EIRP = [(FS\*D) ^2 / 30] mW = -3.63dBm

which is within the production variation.

The Minimum peak radiated emission for the EUT is 91.4dB $\mu$ V/m at 3m in the frequency 2480MHz

The EIRP = [(FS\*D) ^2 / 30] mW = -3.83dBm

which is within the production variation.

The maximum conducted output power specified is 0dBm = 1.0mW

The source- based time-averaging conducted output power

= 1.0\* Duty cycle mW <1.0 mW(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.