

INTERTEK TESTING SERVICES

RF Exposure

The equipment under test (EUT) is a NSW Wireless Controller with Bluetooth function operating in 2402-2480MHz. The EUT is powered by DC 3.7V by rechargeable battery or DC 5V by USB port. For more detail information pls. refer to the user manual.

Antenna Type: Integral antenna

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

Antenna Gain: 0dBi Max

The normal radiated output power (e.i.r.p) is: -14.0dBm (tolerance: +/- 3dB).

The normal conducted output power is -14.0dBm (tolerance: +/- 3dB).

According to the KDB 447498:

The Maximum peak radiated emission for the EUT is 81.3 dB μ V/m at 3m in the frequency 2480MHz

The EIRP = $[(FS \cdot D)^2 / 30]$ mW = -13.93dBm

which is within the production variation.

The Minimum peak radiated emission for the EUT is 80.0dB μ V/m at 3m in the frequency 2402MHz

The EIRP = $[(FS \cdot D)^2 / 30]$ mW = -15.23dBm

which is within the production variation.

The maximum conducted output power specified is -11.0dBm=0.079mW

The source- based time-averaging conducted output power

=0.079* Duty cycle mW <0.079 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.