

INTERTEK TESTING SERVICES

RF Exposure

The equipment under test (EUT) is a Modern Wireless Controller for Atari VCS with Bluetooth function operating in 2402-2480MHz. The EUT is powered by DC 3.7V (1 x 3.7V rechargeable battery). Once a USB cable is inserted into the micro USB port, the Bluetooth function will be closed. 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: 2dBi Max

Bluetooth Version: 2.1 + EDR

The normal radiated output power (e.i.r.p) is: 0.0dBm (tolerance: +/- 3dB).

The normal conducted output power is -2.0dBm (tolerance: +/- 3dB).

According to the KDB 447498:

The Maximum peak radiated emission for the EUT is 95.6 dB μ V/m at 3m in the frequency 2402MHz

The EIRP = $[(FS \cdot D)^2 / 30]$ mW = 0.37dBm

which is within the production variation.

The Minimum peak radiated emission for the EUT is 92.6dB μ V/m at 3m in the frequency 2480MHz

The EIRP = $[(FS \cdot D)^2 / 30]$ mW = -2.63dBm

which is within the production variation.

The maximum conducted output power specified is 1.0dBm= 1.26mW

The source- based time-averaging conducted output power

=1.26* Duty cycle mW =1.26 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.