## INTERTEK TESTING SERVICES

## **RF Exposure**

The Equipment under Test (EUT) is a Control unit for GAMEPAD PRO (4 BUTTON WIRELESS CONTROLLER FOR NES CLASSIC) (INCLUDES RECEIVER)-GRAY model: DGUN-2926 operating at 2.4GHz band. It is powered by DC 3.0V (2 x 1.5V AAA batteries). For more detail information pls. refer to the user manual.

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). Modulation Type: GFSK.

According to the KDB 447498:

The Maximum peak radiated emission for the EUT is  $91.3dB\mu V/m$  at 3m in the frequency 2475MHz The EIRP = [(FS\*D) ^2 / 30] mW = -3.93dBm which is within the production variation.

The Minimum peak radiated emission for the EUT is  $89.3dB\mu V/m$  at 3m in the frequency 2405MHz The EIRP = [(FS\*D) ^2 / 30] mW = -5.93dBm 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 < 1.0mW (Duty Cycle<100%)

The SAR Exclusion Threshold Level: = 3.0 \* (min. test separation distance, mm) / sqrt(freq. in GHz) = 3.0 \* 5 / sqrt (2.475) mW = 9.53mW 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.

The duration of one cycle = 8.0ms Effective period of the cycle =  $202.9\mu$ s = 0.2029ms DC = 0.2029ms/8.0ms = 0.0254 or 2.54%