

INTERTEK TESTING SERVICES

RF Exposure

The Equipment under Test (EUT) is a Control unit for GAMEPAD CLASSIC (2 BUTTON WIRELESS CONTROLLER FOR NES CLASSIC)(INCLUDES RECEIVER)-GRAY model: DGUN-2927 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: -4.0dBm (tolerance: +/- 3dB).

The normal conducted output power is: -4.0dBm (tolerance: +/- 3dB).

Modulation Type: GFSK.

According to the KDB 447498:

The Maximum peak radiated emission for the EUT is 91.1dB μ V/m at 3m in the frequency 2475MHz

The EIRP = [(FS*D) ^2 / 30] mW = -4.13dBm

which is within the production variation.

The Minimum peak radiated emission for the EUT is 89.0dB μ V/m at 3m in the frequency 2405MHz

The EIRP = [(FS*D) ^2 / 30] mW = -6.23dBm

which is within the production variation.

The maximum conducted output power specified is -1dBm = 0.8mW

The source- based time-averaging conducted output power

= 0.8* Duty Cycle mW < 0.8mW (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 = 7.9855ms

Effective period of the cycle = 188.4 μ s = 0.1884ms

DC = 0.1884ms/7.9855ms = 0.0236 or 2.36%