

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: -5.0dBm (tolerance: +/- 3dB).

The normal conducted output power is: -5.0dBm (tolerance: +/- 3dB).

Modulation Type: GFSK.

According to the KDB 447498:

The Maximum peak radiated emission for the EUT is 91.0dBμV/m at 3m in the frequency 2405MHz

The EIRP = $[(FS \cdot D)^2 / 30]$ mW = -4.23dBm

which is within the production variation.

The Minimum peak radiated emission for the EUT is 89.1dBμV/m at 3m in the frequency 2475MHz

The EIRP = $[(FS \cdot D)^2 / 30]$ mW = -6.13dBm

which is within the production variation.

The maximum conducted output power specified is -2.0dBm = 0.6mW

The source- based time-averaging conducted output power

= $0.6 \cdot \text{Duty Cycle}$ mW < 0.6mW (Duty Cycle<100%)

The SAR Exclusion Threshold Level:

= $3.0 \cdot (\text{min. test separation distance, mm}) / \sqrt{\text{freq. in GHz}}$

= $3.0 \cdot 5 / \sqrt{2.475}$ 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 = 7.9832ms

Effective period of the cycle = 187.6μs = 0.1876ms

DC = 0.1876ms/7.9832ms = 0.0235 or 2.35%