

INTERTEK TESTING SERVICES

RF Exposure

The Equipment under Test (EUT) is a Control unit for PS3 OPP Pro Wireless controller model: 106235-FR operating at 2.4GHz band. It is powered by 3 x 1.5V AAA size 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: -4.5dBm (tolerance: +/- 3dB).

The normal conducted output power is -4.5dBm (tolerance: +/- 3dB).

Modulation Type: GFSK.

According to the KDB 447498:

The Maximum peak radiated emission for the EUT is 91.4dB μ V/m at 3m in the frequency 2409MHz

The EIRP = $[(FS * D)^2 / 30]$ mW = -3.8dBm

which is within the production variation.

The Minimum peak radiated emission for the EUT is 88.0dB μ V/m at 3m in the frequency 2440MHz

The EIRP = $[(FS * D)^2 / 30]$ mW = -7.2dBm

which is within the production variation.

The maximum conducted output power specified is -1.5dBm = 0.71mW

The source- based time-averaging conducted output power

= 0.71 * Duty factor mW = 0.14 mW

The SAR Exclusion Threshold Level:

= 3.0 * (min. test separation distance, mm) / sqrt(freq. in GHz)

= 3.0 * 5 / sqrt (2.476) 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.

Transmitter Duty Cycle Calculation

The duration of one cycle = 16.68ms

Effective period of the cycle = 3.36ms

DC = $3.36\text{ms} / 16.68\text{ms} = 0.2014$ or 20.14%

This requirement is according to KDB 865664 D02