

INTERTEK TESTING SERVICES

RF Exposure

The equipment under test (EUT) is a LIGHTING CONTROL SWITCH with wireless control function. The EUT was powered by AC 120V-277V, 50/60Hz. For more detail information pls. refer to the user manual.

Modulation Type: N/A

Antenna Type: Integral antenna.

Antenna Gain: 0dBi max.

The nominal conducted output power specified: -3dBm (+/- 2dB)

The nominal radiated output power (e.i.r.p) specified: -3dBm (+/- 2dB)

According to the KDB 447498:

The maximum peak radiated emission for the EUT is 92.1dB μ V/m at 3m in the frequency 5800MHz

The EIRP = $[(FS \cdot D)^2 / 30]$ mW = -3.1dBm

which is within the production variation.

The maximum conducted output power specified is -1dBm = 0.79mW

The source-based time-averaging conducted output power
= 0.79 * Duty Cycle mW (where Duty Cycle < 100%) < 0.79mW

The SAR Exclusion Threshold Level:

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

= 3.0 * 5 / sqrt(5.8) mW

= 6.23 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.