

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 92.1dBμV/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
= $0.79 \cdot \text{Duty Cycle}$ mW (where Duty Cycle < 100%) < 0.79mW

The SAR Exclusion Threshold Level:

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

= $3.0 \cdot 5 / \sqrt{5.8}$ 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.