

RF Exposure Evaluation

FCC ID: 2ADH9-GSW

IC ID: 12453A-GSW

MPE Evaluation

The EUT is a wireless switch for lighting system. It is intended for household / commercial, indoor dry locations mounted on wall or ceiling. Configured to be mounted, at least 20 cm from any body part of the user or nearby persons.

The maximum Peak EIRP calculated is 12.24 dBm (RF Conducted Power) + (-3.6 dBi)(Antenna Gain) = 8.64 dBm or 7.3mW; therefore, to comply with RF Exposure Requirement, the MPE is calculated.

The Power Density can be calculated using the formula

$$S = \text{EIRP} / 4\pi D^2$$

Where: S is Power Density in mW/cm²

D is the distance from the antenna.

It is considered that 20 cm is the minimum distance that user can go closest to the EUT.

At 20 cm, S = 0.00145mW/cm², or 0.0145W/m² which is below the MPE Limit of 10 W/m²