

FCC ID: R8NMG5424LR

Radiation exposure evaluation

The MeshNode is a Wireless Gateway. It is desktop or wall-mounted device used with AC power adapter in mobile application, at least 20 cm from any body part of the user or nearby persons.

The maximum conducted average power is 14.55 dBm. The antenna is fix-mounted, with +2 dBi gain (maximum). Therefore, to comply with RF Exposure Requirement, the Power Density is calculated.

The maximum Average EIRP calculated is 0.0452 W. The Power Density can be calculated using the formula

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

Where: S is Power Density in W/m²
D is the distance from the antenna.

At a distance of 0.2 m, S = 0.09 W/m² which is below the MPE Limit of 10 W/m²

Therefore the MeshNode complies with FCC and IC RF Exposure Requirements.