



Certification Exhibit

FCC ID: 2AKCY-0550000716

FCC Rule Part: 47 CFR Part 2.1091

Project Number: 72161430

Manufacturer: COOPER LIGHTING LLC

Model: 0550-000716

RF Exposure

General Information:

Applicant: Cooper Lighting LLC
 Device Category: Sensor
 Environment: General Population/Uncontrolled Exposure

Technical Information (BLE):

Antenna Type: Isolated Magnetic Dipole (IMD)
 Antenna Gains: BLE: Isolated Magnetic Dipole / 2.6dBi
 Maximum Transmitter Conducted Power: BLE: 11.3dBm, 13.49mW
 Maximum System EIRP: BLE: 13.9dBm, 24.54mW
 Exposure Conditions: 20 centimeters

Technical Information (Zigbee):

Antenna Type: Isolated Magnetic Dipole (IMD)
 Antenna Gains: Zigbee: Isolated Magnetic Dipole / 2.6dBi
 Maximum Transmitter Conducted Power: Zigbee: 11.4dBm, 13.80mW
 Maximum System EIRP: Zigbee: 14.0dBm, 25.11mW
 Exposure Conditions: 20 centimeters

MPE Calculation

The Power Density (mW/cm²) is calculated as follows:

$$S = \frac{PG}{4\pi R^2}$$

Where:

- S = power density (in appropriate units, e.g. mW/cm²)
- P = power input to the antenna (in appropriate units, e.g., mW)
- G = power gain of the antenna in the direction of interest relative to an isotropic radiator
- R = distance to the center of radiation of the antenna (appropriate units, e.g., cm)

Table 1: MPE Calculation (BLE & Zigbee)

Radio	Transmit Frequency (MHz)	Radio Power (dBm)	Power Density Limit (mW/cm ²)	Radio Power (mW)	Antenna Gain (dBi)	Antenna Gain (mW eq.)	Distance (cm)	Power Density (mW/cm ²)
BTLE	2402	11.3	1.00	13.49	2.6	1.820	20	0.00488
Zigbee	2405	11.4	1.00	13.80	2.6	1.820	20	0.00500

Note: The device does not support simultaneous transmissions