



## **Certification Exhibit**

**FCC ID: 2AKCY-TMS0550000295**

**FCC Rule Part: 47 CFR Part 2.1093**

**Project Number: 72146524**

Manufacturer: Eaton Cooper Lighting LLC  
Model: TMS0550000295

## **RF Exposure**

**General Information:**

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

**Technical Information:**

Antenna Type: PCB  
 Antenna Gain: -0.2dBi (Mighty Gecko Chipset) / -1.12dBi (Blue Gecko Chipset)  
 Maximum Transmitter Conducted Power: 13.9dBm, 24.55mW (Zigbee); 13.5dBm, 22.39mW (MG BLE); 1.8dBm, 1.51mW (BG BLE)  
 Maximum System EIRP: 13.7dBm, 23.44mW (Zigbee); 13.3dBm, 21.38mW (MG BLE); 0.68dBm, 1.17mW (BG BLE)  
 Exposure Conditions: Greater than 20 centimeters

**MPE Calculation**

The Power Density (mW/cm<sup>2</sup>) is calculated as follows:

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

Where:

S = power density (in appropriate units, e.g. mW/cm<sup>2</sup>)

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**

| Transmit Frequency (MHz) | Radio Power (dBm) | Power Density Limit (mW/cm <sup>2</sup> ) | Radio Power (mW) | Antenna Gain (dBi) | Antenna Gain (mW eq.) | Distance (cm) | Power Density (mW/cm <sup>2</sup> ) |
|--------------------------|-------------------|---|------------------|--------------------|-----------------------|---------------|-------------------------------------|
| 2475                     | 13.9              | 1.00                                      | 24.55            | -0.2               | 0.955                 | 20            | 0.005                               |
| 2440                     | 13.5              | 1.00                                      | 22.39            | -0.2               | 0.955                 | 20            | 0.004                               |
| 2402                     | 1.8               | 1.00                                      | 1.51             | -1.12              | 0.773                 | 20            | 0.0002                              |

Note: The device does not support simultaneous transmissions