



Certification Exhibit

FCC ID: 2AKCY-0028000021

FCC Rule Part: 47 CFR Part 2.1091

Project Number: 72177304

Manufacturer: COOPER LIGHTING SOLUTIONS
Model Name / Number: WaveLinx Wireless Adapter / 0028-000021

RF Exposure

General Information:

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

Technical Information (BLE) – “Device 1”:

Frequency Range (MHz): 2402 - 2480
Antenna Type: Dipole
Antenna Gains: 2.6 dBi
Maximum Transmitter Conducted Power: 12.3 dBm, 16.98 mW
Maximum System EIRP: 14.9 dBm, 30.90 mW
Exposure Conditions: 20 centimeters

Technical Information (Zigbee) – “Device 2”:

Frequency Range (MHz): 2405 - 2480
Antenna Type: Dipole
Antenna Gains: 2.6 dBi
Maximum Transmitter Conducted Power: 12.2 dBm, 16.60 mW
Maximum System EIRP: 14.8dBm, 30.20mW
Exposure Conditions: 20 centimeters

Note: The device does not support simultaneous transmissions

RF Exposure Calculation

Table 1: Device Characteristics (BLE & Zigbee)

Technical Parameters	Device 1	Device 2
Frequency (GHz)	2.402	2.405
Frequency (MHz)	2402	2405
Separation Distance (cm)	20.00	20.0
Separation Distance (m)	0.2000	0.200
Antenna Gain (dBi)	2.60	2.60
ERP Easily Determined	YES	YES
1-g body or 10-g extremity	Body	Body
Conducted Power (dBm)	12.30	12.20
Conducted Power (mW)	16.98	16.60
Duty Factor (Source-Based) %	100.0	100.0
Maximum (Source-Based) Time-Averaged Conducted Power (mW)	16.98	16.60
Maximum (Source-Based) Time-Averaged ERP (mW)	18.84	18.41
Maximum (Source-Based) Time-Averaged EIRP (mW)	30.90	30.20
Maximum Output (mW)	18.84	18.41

Table 2: 47 CFR 1.1307(b)(3)(i)(c) MPE-Based Exemption ERP (W) – (BLE & Zigbee)

Technical Parameters	Device 1	Device 2
$\lambda / 2\pi$ (m)	0.020	0.020
$R \geq \lambda / 2\pi$	YES	YES
Maximum (Source-Based) Time-Averaged ERP (W)	0.0188	0.0184
ERP Threshold (W)	0.7680	0.7680
Exemption	YES	YES
Contribution Ratio (ERP / ERP _{th})	0.025	0.024
Distance to Limit (cm)	3.13	3.10