

Project: \_\_\_\_\_  
 Location: \_\_\_\_\_  
 Cat. #: \_\_\_\_\_  
 Type: \_\_\_\_\_  
 Quantity: \_\_\_\_\_

LED

## ECL N G2 12 | LED Narrow Strip

### Features:

- High performance LED technology
- 0-10V dimming drivers standard
- DALI drivers available
- Field replaceable LED boards and drivers
- Frosted diffuser helps minimize glare and improve aesthetics
- A wide variety of lumen packages and lengths allows for flexibility in design and helps maximize energy savings
- Advanced controls available

### Applications:

Suitable for most commercial and institutional applications

- Office
- Retail
- Coves
- Valences

### Ambient Operating Temp.:

- -30°C to 40°C

### Predicted Lifetime:

- L70: ≥ 129,000 hrs (calculated)
- L80: ≥ 81,000 hrs (calculated)
- L90: ≥ 39,000 hrs (reported)
- 85% lumen maintenance @ 60,000 hrs  
(based on LM80 and insitu laboratory testing)

### Construction:

- Precision brake formed from cold rolled steel
- Highly durable matte white finish. Optional matte black or metallic silver finish

### Certifications:

- UL 1598 listed for US and Canada, suitable for damp locations



### Warranty:

- 5 year limited system warranty - see [www.LumenFocus.com](http://www.LumenFocus.com) for complete warranty terms and conditions
- 10 year warranty option available on specific models  
(Not available on all models. Certain conditions apply. Consult factory or sales representative for details.)



## Ordering Guide:

example: ECL N G2 12 MD UV FR 840 QC BK

Series	Version	Length	Output	Voltage	Shielding	CRI/CCT	Hanging	Controls	Options	Finish
ECL N	G2	12								
ECL N Narrow Strip	G2 Gen 2	12 138" (144" Optional)	LW Low	UV 120-277	Blank No Lenses	930 90 CRI/3000K	Blank None	Blank No Controls	Blank No Options	Blank White
			ML Medium Low	34 347V	FR Frosted Acrylic Diffusers	935 90 CRI/3500K	QC 10' Quick Hang Cable Kit	ZSOL Leviton Intellect Solo Programmable PIR/Daylight Harvesting Sensor <sup>(1)</sup>	EXT10 10-Year Extended Warranty <sup>(4)</sup>	BK Matte Black
			MD Medium			940 90 CRI/4000K		ZLD1 Leviton Bluetooth-enabled Programmable Dimming/Occupancy/ Daylight Harvesting Sensor with Grouping (120-277V) <sup>(1)</sup>	C6 6' Single Circuit Cord	SL Metallic Silver
			MH Medium High			950 90 CRI/5000K		ZLDU Leviton Bluetooth-enabled Programmable Dimming/Occupancy/ Daylight Harvesting Sensor with Grouping, Scheduling (120-480V) <sup>(1)</sup>	C65W 6' Single Circuit Cord with Low Voltage Connections	

## Notes

<sup>(1)</sup> See Page 4 for more details.

<sup>(2)</sup> " " = lens type. See Page 4 for more details.

<sup>(3)</sup> See Page 5 for more details.

<sup>(4)</sup> Not available on all models. Certain conditions apply. Consult factory or sales representative for details.

<sup>(5)</sup> 120-277V / 0°C-50°C ambient.

<sup>(6)</sup> " " for 2-circuit wiring, specify circuit A or B here.

## Controls Accessories (order separately)



**For Leviton Intellect Solo Sensor**  
ZLSOR-RA1 IR Programming Remote



**For WattStopper Controls**  
FSIR-100 Wireless IR Programming Tool  
(For Z211Lx)



**For Leviton Intellect Networked Controls**  
DRKDN-U1W 1-Button Wireless Wall Controller  
DRKDN-U2W 2-Button Wireless Wall Controller  
DRKDN-U2W 4-Button Wireless Wall Controller  
DRKDN-U8W 8-Button Wireless Wall Controller



**For Enlighted Controls**  
WS-2-00 Enlighted Remote Control Wall Switch  
(for Enlighted Connected & IoT)  
WS-2-00-IL Enlighted Remote Control Wall Switch  
(for Enlighted One)

ZLDU  
Leviton Bluetooth-enabled  
Programmable Dimming/Occupancy/  
Daylight Harvesting Sensor with  
Grouping, Scheduling (120-480V)<sup>(1)</sup>

Z211L  
Wattstopper FSP Programmable  
Photo/Motion Multi-Voltage Sensor  
(high/low/off)<sup>(2)</sup>

Z311L  
Wattstopper FSP Bluetooth-enabled  
Programmable Photo/Motion Multi-  
Voltage Sensor (high/low/off)<sup>(2)</sup>

ZOSMD  
Microwave Daylight/Motion Sensor  
With Step-Dimming (High/Low/Off)<sup>(1)</sup>

ZLDS  
Leviton Intellect DALI Sensor  
with Dimming/Occupancy/  
Daylight Harvesting with Newtork  
Capabilities<sup>(3)</sup>

ZL7S  
Leviton Intellect 0-10V Sensor  
with Dimming/Occupancy/  
Daylight Harvesting with Newtork  
Capabilities<sup>(3)</sup>

ZLDC  
Leviton Intellect DALI Fixture  
Controller with Newtork Capabilities<sup>(3)</sup>

ZL7C  
Leviton Intellect 0-10V Fixture  
Controller with Newtork Capabilities<sup>(3)</sup>

ZENLO  
Enlighted Micro Sensor with  
Dimming/Occupancy/Daylight  
Harvesting and Enlighted One  
System<sup>(3)</sup>

ZENLC  
Enlighted Micro Sensor with  
Dimming/Occupancy/Daylight  
Harvesting and Enlighted Connected  
System<sup>(3)</sup>

ZENLI  
Enlighted Micro Sensor with  
Dimming/Occupancy/Daylight  
Harvesting and Enlighted IoT

C10  
10' Single Circuit Cord

C105W  
10' Single Circuit Cord with  
Low Voltage Connections

D6  
6' Dual Circuit Cord

D10  
10' Dual Circuit Cord

P(NEMA)  
Plug (Specify NEMA  
configuration)

CC  
Conformal Coating

LVL  
0-10V Dimming Leads for  
Easy Field Access

144"  
144" Length (Standard  
Length is 138")

EM1  
Emergency Pack - Up to  
8W<sup>(5)</sup>

EM2  
Emergency Pack - Up to  
16W<sup>(5)</sup>

QWH()  
Quick Wire Harness<sup>(6)</sup>

AC  
Aligner Clips for Continuous  
Row Mounting

BAA  
Buy American Act  
Compliant



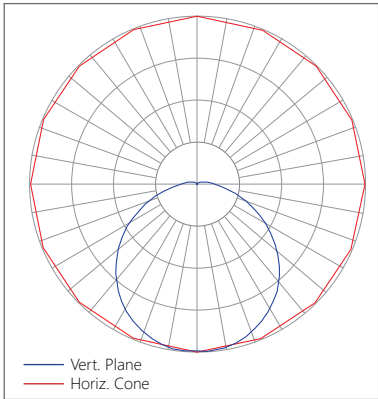
Performance Chart:

Catalog #	Watts	Lumens (930)	LPW (930)	Lumens (935)	LPW (935)	Lumens (940)	LPW (940)	Lumens (950)	LPW (950)
ECL N G2 12 LW UV FR 9xx	42.3	6276.0	148.4	6302.4	149.0	6452.1	152.6	6452.1	152.6
ECL N G2 12 ML UV FR 9xx	62.6	9142.8	146.0	9181.4	146.6	9399.5	150.1	9399.5	150.1
ECL N G2 12 MD UV FR 9xx	86.6	12140.5	140.2	12191.7	140.8	12481.2	144.2	12481.2	144.2
ECL N G2 12 MH UV FR 9xx	101.0	15141.9	150.0	15205.7	150.6	15566.9	154.2	15566.9	154.2

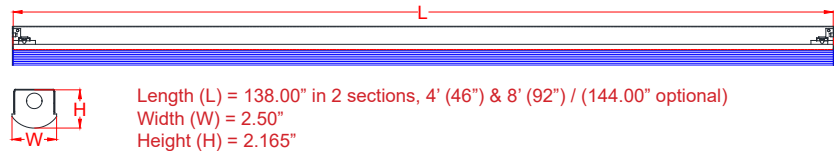
Scaling Factor:  
No lens: 1.05

Photometric Data:

Relative Luminous Intensity



Schematic:



The ECLN features field replaceable boards and drivers. This allows you to upgrade to more efficient technology in the future. Or, in the rare event of a failure, you can rapidly replace defective components. Re-boardABILITY helps to ensure you won't get stuck with an obsolete light fixture. [Learn more about Re-boardABILITY here.](#)



## Controls Summary:

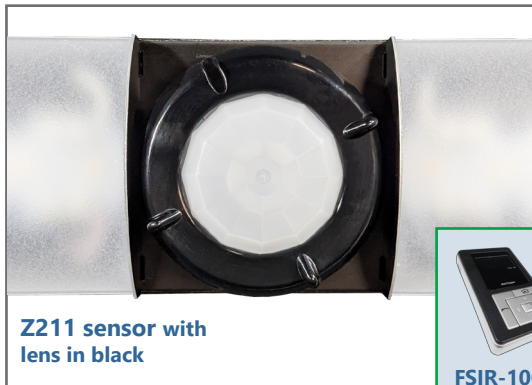
Control Code	Type	Capabilities	Communication
ZSOL	Motion (PIR), Daylight Harvesting	High/Low/Off	Wired 0-10V, Programmable via IR remote (sold separately)
ZLD1	Motion (PIR), Daylight Harvesting	High/Low/Off, High-End Trim, Grouping	Wired 0-10V, Programmable via Bluetooth App (iOS, Android)
ZLDU	Motion (PIR), Daylight Harvesting	High/Low/Off, High-End Trim, Grouping, Scheduling	Wired 0-10V, Programmable via Bluetooth App (iOS, Android)
Z211Lx	Motion (PIR), Photosensor	High/Low/Off, High-End Trim	Wired 0-10V, Programmable via IR remote (sold separately)
Z311Lx	Motion (PIR), Daylight Harvesting	High/Low/Off, High-End Trim	Wired 0-10V, Programmable via Bluetooth App (iOS, Android)
ZOSMD	Motion (Microwave), Photosensor	On/Low/Off	Wired 1-10V
ZLxS	Motion (PIR), Daylight Harvesting	High/Low/Off, High-End Trim, Grouping, Scheduling, Demand Response*, BMS Integration*, LLLC (GreenMAX DRC)	Wireless Zigbee 2.4 GHz Mesh, Programmable via GreenMAX DRC app. for iOS or Android along with DRKDN-UxW Wall Controller (sold separately)
ZLxC	Controller, No Sensors	High/Low/Off, High-End Trim, Grouping, Scheduling, Demand Response*, BMS Integration*, LLLC (GreenMAX DRC)	Wireless Zigbee 2.4 GHz Mesh, Programmable via GreenMAX DRC app. for iOS or Android along with DRKDN-UxW Wall Controller (sold separately)
ZENLO	Motion (PIR), Daylight Harvesting	High/Low/Off, High-End Trim, Grouping, Upgradable to Connected (ZENLC) or IoT (ZENLI)	Wireless Bluetooth Low Energy Mesh, Programmable via Enlighted Room Controller WS-2-00-IL (sold separately)
ZENLC	Motion (PIR), Daylight Harvesting	High/Low/Off, High-End Trim, Grouping, Scheduling*, Energy Monitoring*, BMS Integration*, Upgradable to IoT (ZENLI), LLLC (Enlighted IoT)*	Wireless Bluetooth Low Energy Mesh, Programmable via Enlighted IoT Software
ZENLI	Motion (PIR), Daylight Harvesting	High/Low/Off, High-End Trim, Grouping, Scheduling*, Energy Monitoring*, BMS Integration*, LLLC (Enlighted IoT)*, Space - Building Utilization*, Where - Real Time Location Services*	Wireless Bluetooth Low Energy Mesh, Programmable via Enlighted IoT Software

LLLC = Luminaire Level Lighting Control

\* Additional equipment required. Contact LumenFocus representative for details

## Dimming Sensors (Z211/Z311)

- The Wattstopper FSP sensor provides multi-level control based on motion and/or daylight contribution
- Comes pre-installed on the fixture
- Rated for cold locations
- Parameters for Bluetooth-enabled Z311 adjustable via phone app - iOS or Android
- Parameters for Z211 adjustable via wireless configuration tool (FSIR-100 - sold separately)
- Available with black lens for black finishes (pictured below)
- Two lenses available, tailored for the ideal detection area and mounting height:
  - **L2: 360° lens, maximum coverage 48', diameter from 8' height**
  - **L3: 360° lens, maximum coverage 40', diameter from 20' height**



Z211 sensor with lens in black



FSIR-100



Phone app interface for Z311 sensor

## Microwave Occupancy Sensor (ZOSMD)

The Leviton OSM3D-DDW (or equivalent) detects motion through low density materials using high frequency electromagnetic waves. This means it can sit discretely behind the ECLN's frosted lens. The ZOSMD features automatic switching based on motion and ambient light level. ZOSMD option adds step-dimming functionality - standby dimming level 10% / 20% / 30% / 50%.

**Max mounting height for ZOSMD is 40 feet.**



## Leviton Intellect Solo Dimming Sensor (ZSOL)

The ECLN can be equipped with an integrated Leviton Intellect Solo Sensor ("ZSOL" option). This is a 0-10V dimming Passive Infrared (PIR) occupancy and daylight harvesting sensor.

Other features:

- Partial-on
- Partial-off
- **8' to 10' mounting height**
- IP20 rated
- Detection angle: 120 degrees
- IR remote available for programming sensor from the floor (sold separately)
- Can be used to comply with IECC, ASHRAE 90.1 and 2019 Title 24, Part 6 dimming, occupancy/vacancy sensing and daylight harvesting requirements.



## Smart Sensors (ZLD1/ZLDU)



The ZLDx option includes high bay and low bay lenses along with aisleway masks that can easily be installed

or swapped out in the field. **The high bay lens is good for 20'-40' mounting heights, while the low bay lens is good for 8'-20' mounting heights.**

- Leviton Smart IP66 passive infrared (PIR) sensors
- Features mesh grouping (16 devices per group), occupancy sensing, daylight harvesting, scheduling (for ZLDU only), single-level switching
- Comes pre-installed on the center face of the fixture
- Rated for cold locations
- Configurable through the Leviton Smart Sensor App using a smartphone or other Bluetooth-enabled iOS or Android device



## GreenMAX DRC Wireless Networked Control System with Leviton Intellect Sensors & Controllers

The GreenMAX DRC Wireless Keypad Room Controllers are used as the brain of the system, managing the fixture integrated Leviton Intellect sensors & controllers. Wirelessly commission, configure, control, monitor and provision the GreenMAX DRC system using the GreenMAX DRC App and an Android or iOS smart device.

- Occupancy/Vacancy Sensing
- Multi-Level Lighting, Partial-On, Partial-Off
- Daylight Harvesting
- Task Tuning
- Scheduling
- Grouping
- Demand Response
- BMS Integration
- ZigBee 2.4 GHz Wireless Mesh Network
- Up to 75' between devices

\* DRKDN-UxW room controller required for full functionality and programming of Intellect sensors & controllers



### ZLxS



- PIR Occupancy Sensor
- Daylight Sensor
- 0-10V or DALI
- Up to 20' mounting height

### ZLxC



- Wireless fixture controller, no sensor
- 0-10V or DALI

### DRKDN-UxW Room Controllers



- 1-, 2-, 4-, and 8-button configurations
- Line voltage powered: 120-277V
- Max capacity: 60 devices
- Programmable: On/Off/Raise/Lower/ Toggle/Scene
- Use any Android or iOS device for configuration using the GreenMAX DRC App

## Enlighted: All-in-one sensors, upgradeable systems

Enlighted's SMART Micro Sensor is an all-in-one unit: task tuning, high-end trimming, daylight harvesting, and occupancy/vacancy detection. **Max installation height is 15 feet.**

Enlighted sensors come standard with the Enlighted One system (the "ZENLO" option). Enlighted Connected ("ZENLC") offers even more options. The Enlighted IoT ("ZENLI") option allows the full implementation of Enlighted's services. Each system can be fully upgraded to the next tier in the future. So if you start with Enlighted One but want to add energy reporting or building management systems integration in the future, you can.



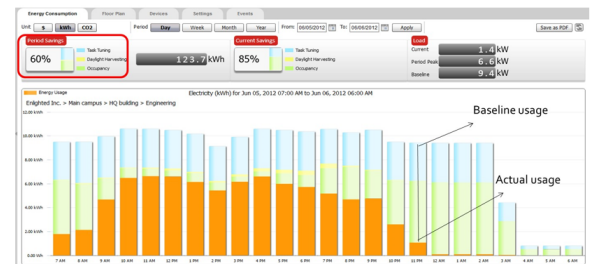
Enlighted Capabilities*	Enlighted One (ZENLO)	Enlighted Connected (ZENLC)	Enlighted IoT (ZENLI)
Motion and Switch Groups	✓	✓	✓
Daylight Harvesting	✓	✓	✓
Schedule Lighting		✓	✓
Energy Reporting & Optimization		✓	✓
Environment Data & Lighting Controls API		✓	✓
Building Management System Integration		✓	✓
Where & Space Applications			✓
Location & Occupancy APIs & Beacons			✓
Future App & API Ready			✓

**Note:** Additional equipment required for ZENLC and ZENLI

## Real-time data analytics

Enlighted's control units compile data in real-time, which can be viewed via the Energy Manager. The Energy Manager is part of the Enlighted Connected and Enlighted IoT configurations.

- Real-time measurements and verification of energy savings
- Space analytics - data can be compiled into motion trails and heat maps
- Analyze traffic density and congestion in a space



Learn more about our available advanced controls options here:

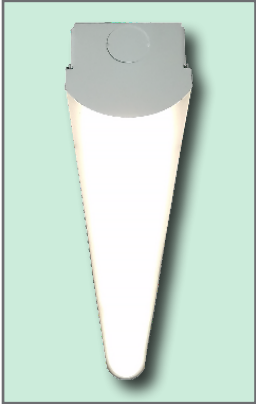
[www.lumenfocus.com/controls-overview](http://www.lumenfocus.com/controls-overview)

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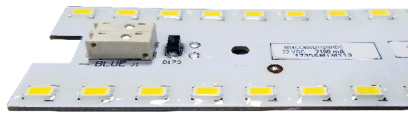
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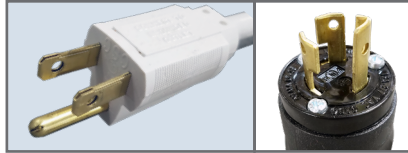
## Other Options:



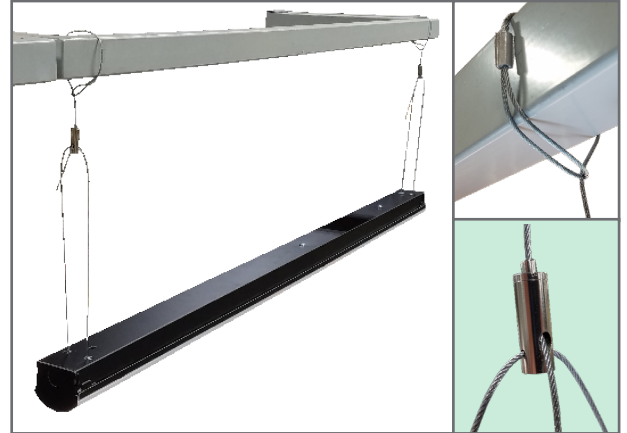
**Shielding** Frosted acrylic diffuser lenses minimize glare and improve aesthetics.



**Conformal coating** Grants LED boards added protection from moisture and corrosion in more hazardous environments.



**Cords** are available in single circuit or dual circuit, 6' or 10'. Standard plug is optional, as are other NEMA configurations if specified.



**Hanging** The QC hanging kit from ALP comes in 10' or 20'. Cables are pre-looped for easy installation and designed for easy fixture height adjustment. When ordered, QCs come boxed with each fixture.

