

Note: This product has been discontinued and replaced with the ECLN G2.





# ECLN 4 | LED Narrow Strip

#### **Features:**

- High performance LED technology
- 0-10V dimming drivers standard
- Field replaceable LED boards and drivers
- Frosted diffuser helps minimize glare and improve aesthetics
- Advanced controls available

# Applications:

Suitable for most commercial and institutional applications

- Office
- Retail
- Coves
- Valences

# **Ambient Operating Temp.:**

- -30°C to 35°C for VH models
- -30°C to 40°C for all other models

#### Predicted L70 Lifetime:

- Up to 189,000 hrs (calculated) (L70 information for specific configurations available upon request)
- For BAA compliant configurations up to 189,000 hrs (calculated)

### 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



details.)

# Warranty:

- 5 year limited system warranty see 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











# Ordering Guide:

example: ECL N 4 MD UV FR 840 OC BK

| example, ECL IN 4 Mid OV FR 040 QC |       |                             |                                                      |                                            |                                    |                                                          |                                                                   |                                                    | N 040 QC B                                                                                                                                 |                                                                                                                                                    |                                                             |
|------------------------------------|-------|-----------------------------|------------------------------------------------------|--------------------------------------------|------------------------------------|----------------------------------------------------------|-------------------------------------------------------------------|----------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------|
| Series                             | Width | Length                      | Output                                               | Performance                                | Voltage                            | Shielding                                                | CRI/CCT                                                           | Hanging                                            | Controls                                                                                                                                   | Options                                                                                                                                            | Finish                                                      |
| ECL                                | И     | 4                           |                                                      |                                            |                                    |                                                          |                                                                   |                                                    |                                                                                                                                            |                                                                                                                                                    |                                                             |
| ECL                                | N     | <b>4</b> 46" (48" Optional) | LW Low MD Medium MH Medium High HI High VH Very High | Blank<br>Standard<br>HE<br>High Efficiency | UV<br>120-277<br><b>34</b><br>347V | Blank<br>No Lenses<br>FR<br>Frosted Acrylic<br>Diffusers | 835<br>80 CRI/3500K<br>840<br>80 CRI/4000K<br>850<br>80 CRI/5000K | Blank<br>None<br>QC<br>10' Quick Hang<br>Cable Kit | Solo PIR Sensor <sup>(1)</sup> Z211L_ Wattstopper FSP Programmable Photo/ Motion Multi-Voltage Sensor (high/low/off) <sup>(2)</sup> Z311L_ | Blank No Options EXT10 10-Year Extended Warranty <sup>(7)</sup> C6 6' Single Circuit Cord C65W 6' Single Circuit Cord with Low Voltage Connections | Blank<br>White<br>BK<br>Matte Black<br>SL<br>Metallic Silve |
| Note                               |       | ight 10' Coo D              |                                                      |                                            | _                                  |                                                          |                                                                   |                                                    | Wattstopper FSP<br>Bluetooth-enabled<br>Programmable Photo/<br>Motion Multi-Voltage<br>Sensor<br>(high/low/off) <sup>(2)</sup>             | C10 10' Single Circuit Cord C105W                                                                                                                  |                                                             |

- (1) Max mounting height 10'. See Page 6 for more details.
- (2) " " = lens type. 48" length option required. See Page 6 for lens descriptions.
- (3) Max mounting height 49'. See Page 6 for more details.
- (4) Max mounting height 16.4'. See Page 5 for more details.
- (5) See Page 5 for more details.
- (6) Max mounting height 15'. See Page 5 for more details.
- <sup>(7)</sup> Not available on all models. Certain conditions apply. Consult factory or sales representative for details.
- <sup>(8)</sup> Required for Z211 and Z311 sensor options.
- (9) EM1 and EM2: 120-277V / 0°C-50°C ambient.
- (10) "\_" for 2-circuit wiring, specify circuit A or B here.

# Controls Accessories (order separately)



#### For Leviton Programmable Sensor (OS)

ZLSOR-RA1 IR Programming Remote



#### For Douglas Controls

BT-DMSW-U-A Bluetooth 1 Zone Dimmer Bluetooth 4-Button Wall Station BT-4BTSW-U-A BT-8BTSW-U-A Bluetooth 8-Button Wall Station



#### For Enlighted Controls

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

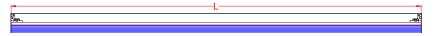
10' Single Circuit Cord ZOSMD with Low Voltage Microwave Daylight/ Connections Motion Sensor With D6 Step-Dimming (High/Low/Off)<sup>(3)</sup> 6' Dual Circuit Cord D10 ZIFS 10' Dual Circuit Cord Douglas IFS sensor with dimming/occupancy/ P(NEMA) daylight harvesting and Plug (Specify NEMA network capabilities<sup>(4)</sup> configuration) ZIFC CC Douglas IFC controller with network Conformal Coating capabilities<sup>(5)</sup> LVL **ZENLO** 0-10V Dimming Leads for Easy Field Enlighted Micro Sensor with Dimming/ Occupancy/Daylight 48" Harvesting and Enlighted One System<sup>(6)</sup> 48" Length (Standard Length is 46")(8 **ZENLC** Enlighted Micro Emergency Pack - Up to 8W<sup>(9)</sup> Sensor with Dimming/ Occupancy/Daylight Harvesting and Enlighted EM2 Connected System<sup>(6)</sup> Emergency Pack - Up to 16W<sup>(9)</sup> ZENLI Enlighted Micro QWH() Sensor with Dimming/ Quick Wire Harness<sup>(10)</sup> Occupancy/Daylight Harvesting and Enlighted AC IoT System<sup>(6)</sup> Aligner Clips for Continuous Row Mountina



BAA Buy American Act Compliant



# **Schematic:**





Length (L) = 46.00" (48.00" optional) Width (W) = 2.50" Height (H) = 2.165"

#### **Performance Chart:**

| Catalog #               | Lumens | Watts | LPW   |
|-------------------------|--------|-------|-------|
| ECL N 4 LW UV FR 835    | 2015   | 15    | 133.7 |
| ECL N 4 MD UV FR 835    | 3811   | 31    | 124.8 |
| ECL N 4 MH UV FR 835    | 4509   | 33    | 137.7 |
| ECL N 4 HI UV FR 835    | 5975   | 44    | 136.2 |
| ECL N 4 VH UV FR 835    | 7964   | 62    | 128.4 |
| ECL N 4 LW HE UV FR 835 | 2002   | 14    | 147.3 |
| ECL N 4 MD HE UV FR 835 | 3763   | 25    | 149.4 |
| ECL N 4 MH HE UV FR 835 | 4484   | 30    | 148.7 |
| ECL N 4 HI HE UV FR 835 | 5950   | 41    | 143.9 |
| ECL N 4 VH HE UV FR 835 | 7938   | 58    | 137.5 |

| Catalog #               | Lumens | Watts | LPW   |
|-------------------------|--------|-------|-------|
| ECL N 4 LW UV FR 840    | 2082   | 15    | 138.1 |
| ECL N 4 MD UV FR 840    | 3937   | 31    | 129.0 |
| ECL N 4 MH UV FR 840    | 4658   | 33    | 142.3 |
| ECL N 4 HI UV FR 840    | 6172   | 44    | 140.7 |
| ECL N 4 VH UV FR 840    | 8227   | 62    | 132.6 |
| ECL N 4 LW HE UV FR 840 | 2068   | 14    | 152.2 |
| ECL N 4 MD HE UV FR 840 | 3888   | 25    | 154.3 |
| ECL N 4 MH HE UV FR 840 | 4633   | 30    | 153.7 |
| ECL N 4 HI HE UV FR 840 | 6147   | 41    | 148.6 |
| ECL N 4 VH HE UV FR 840 | 8201   | 58    | 142.1 |

| Cata  | alog #            | Lumens | Watts | LPW   |
|-------|-------------------|--------|-------|-------|
| ECL N | 4 LW UV FR 850    | 2144   | 15    | 142.3 |
| ECL N | 4 MD UV FR 850    | 4055   | 31    | 132.8 |
| ECL N | N 4 MH UV FR 850  | 4798   | 33    | 146.5 |
| ECL N | 4 HI UV FR 850    | 6357   | 44    | 144.9 |
| ECL N | 4 VH UV FR 850    | 8474   | 62    | 136.6 |
| ECL N | 4 LW HE UV FR 850 | 2130   | 14    | 156.7 |
| ECL N | 4 MD HE UV FR 850 | 4004   | 25    | 158.9 |
| ECL N | 4 MH HE UV FR 850 | 4772   | 30    | 158.3 |
| ECL N | 4 HI HE UV FR 850 | 6331   | 41    | 153.1 |
| ECL N | 4 VH HE UV FR 850 | 8447   | 58    | 146.3 |

Scaling Factor: No lens: 1.05



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.



## Photometric Data:

#### **ECL N 4 MD UV FR 835**

**Test No.:** LLIA001200-004 Luminaire Lumens: 3,811 lm Luminaire Watts: 30.5W Efficacy: 124.8 LPW Spacing Criterion (0-180): 1.24

Spacing Criterion (90-270): 1.28

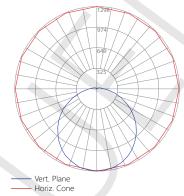
#### Luminance Data (cd/sq.m)

| Angle In | Average | Average | Average |
|----------|---------|---------|---------|
| Degrees  | 0-Deg   | 45-Deg  | 90-Deg  |
| 45       | 14939   | 13259   | 12913   |
| 55       | 12867   | 11683   | 11458   |
| 65       | 10143   | 9806    | 9578    |
| 75       | 7218    | 7749    | 7339    |
| 85       | 4039    | 6094    | 5341    |

#### Coefficients Of Utilization - Zonal Cavity Method **Effective Floor Cavity Reflectance 0.20**

| Eneci | _ |     |     |     |     | <br> |     |     |     | _ | _   |     |     | _ |     |     |     |
|-------|---|-----|-----|-----|-----|------|-----|-----|-----|---|-----|-----|-----|---|-----|-----|-----|
| RC    |   |     | 80  |     |     |      | 70  |     |     |   |     | 50  |     |   |     | 30  |     |
| RW    |   | 70  | 50  | 30  | 10  | 70   | 50  | 30  | 10  |   | 50  | 30  | 10  |   | 50  | 30  | 10  |
|       |   |     |     |     |     |      |     |     |     |   |     |     |     |   |     |     |     |
| 0     |   | 118 | 118 | 118 | 118 | 115  | 115 | 115 | 115 |   | 109 | 109 | 109 |   | 104 | 104 | 104 |
| 1     |   | 107 | 102 | 98  | 94  | 104  | 100 | 96  | 92  |   | 95  | 92  | 89  |   | 91  | 88  | 85  |
| 2     |   | 98  | 89  | 82  | 76  | 95   | 87  | 81  | 75  |   | 83  | 78  | 73  |   | 79  | 75  | 71  |
| 3     |   | 89  | 78  | 70  | 63  | 86   | 76  | 69  | 63  |   | 73  | 66  | 61  |   | 70  | 64  | 60  |
| 4     |   | 81  | 69  | 60  | 54  | 79   | 68  | 60  | 53  |   | 65  | 58  | 52  |   | 62  | 56  | 51  |
| 5     |   | 75  | 62  | 53  | 46  | 73   | 61  | 52  | 46  |   | 58  | 51  | 45  |   | 56  | 49  | 44  |
| 6     |   | 69  | 56  | 47  | 40  | 67   | 55  | 46  | 40  |   | 53  | 45  | 39  |   | 51  | 44  | 39  |
| 7     |   | 64  | 51  | 42  | 36  | 62   | 50  | 41  | 35  |   | 48  | 40  | 35  |   | 46  | 39  | 34  |
| 8     |   | 60  | 46  | 38  | 32  | 58   | 45  | 37  | 32  |   | 44  | 36  | 31  |   | 42  | 36  | 31  |
| 9     |   | 56  | 42  | 34  | 29  | 54   | 42  | 34  | 28  |   | 40  | 33  | 28  |   | 39  | 32  | 28  |
| 10    |   | 52  | 39  | 31  | 26  | 51   | 38  | 31  | 26  |   | 37  | 30  | 25  |   | 36  | 30  | 25  |

Tested in accordance with IES standards utilizing absolute photometry per LM-79-08



| Zonal Lum | en Summary |        |
|-----------|------------|--------|
| Zone      | Lumens     | %Fixt  |
| 0-20      | 472.29     | 12.40  |
| 0-30      | 1003.16    | 26.30  |
| 0-40      | 1640.20    | 43.00  |
| 0-60      | 2867.78    | 75.20  |
| 0-80      | 3564.12    | 93.50  |
| 0-90      | 3695.32    | 97.00  |
| 90-120    | 99.96      | 2.60   |
| 90-130    | 108.09     | 2.80   |
| 90-150    | 114.59     | 3.00   |
| 90-180    | 115.73     | 3.00   |
| 0-180     | 3811.06    | 100.00 |





# Douglas Lighting Controls, Inc.: Cloud-based controls

The ECLN can be equipped with the Douglas Bluetooth Intelligent Fixture Sensor (IFS) as well as the Intelligent Fixture Controller. Max mounting height for sensor: 16.4 feet.

#### **IFS**



- Occupancy, vacancy, partial-on and partial-off
- Occupancy timeout adjustable from 5 to 90 minutes
- Primary and secondary daylight harvesting

#### IFC



- Listed for emergency control when used on dedicated emergency power bus
- Same occupancy and daylight controls as the IFS when networked with one or more IFS sensors

#### Available with both IFS and IFC:

- 0-10V dimming with dim-to-off
- Bluetooth beacon for digital ceiling, IoT and location service strategies
  - 150-foot clear line of sight, 50 feet through standard walls
- May be used with dual-channel, tunable white LED drivers providing auxiliary power and dimto-off capability
  - Commissioning through Douglas Lighting Controls, Inc. app from Apple app store

    Note: Additional equipment required for IoT capabilities.

# CheckLight® Energy Management System

Douglas controls can be integrated with the CheckLight® Energy Management system. This system can help you uncover energy conversion opportunities, create conservation strategies, analyze lighting load inefficiencies, and make configuration changes from anywhere with Douglas' user-friendly interface. You can get measurements, reports, and control your system from a web-based application.

CheckLight® has the capability to look at different facilities within a portfolio and use data benchmarks to compare building performances.

- Find energy conservation opportunities
- Create energy saving strategies
- Analyze load inefficiencies
- Optimize energy management

# **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<br>(ZENLO) | Enlighted<br>Connected<br>(ZENLC) | Enlighted<br>IoT (ZENLI) |
|------------------------------------------|--------------------------|-----------------------------------|--------------------------|
| Motion and Switch Groups                 | ✓                        | ✓                                 | ✓                        |
| Daylight Harvesting                      | ✓                        | <b>*</b>                          | ✓                        |
| Schedule Lighting                        |                          | ✓                                 | ✓                        |
| Energy Reporting & Optimization          |                          | ✓                                 | ✓                        |
| Environment Data & Lighting Controls API |                          | <b>✓</b>                          | ✓                        |
| Building Management System Integration   |                          | <b>✓</b>                          | ✓                        |
| Where & Space Applications               |                          |                                   | ✓                        |
| Location & Occupancy APIs & Beaconing    |                          |                                   | ✓                        |
| 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

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## Other controls available:



# Phone app interface for Z311 sensor



## 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 right)
- Three 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
  - L7: 360° lens, maximum coverage 100', diameter from 40' height

### Leviton Intellect Solo PIR 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





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)

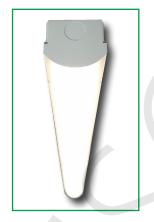
• Can be used to comply with IECC, ASHRAE 90.1 and 2019 Title 24, Part 6 dimming, occupancy/vacancy sensing and daylight harvesting requirements.

# Microwave Occupancy Sensor (ZOSMD)

The Leviton OSM3D-V1W (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 49 feet.



# 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.