LumenFécus



Project:	
Location:	
Cat. #:	
Туре:	
Quantity:	

LED

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
- DesignLights Consortium qualified on specific configurations (refer to DLC qualified products list for exact model numbers) http://designlights.org/



Warranty:

- 5 year limited system warranty see <u>www.LumenFocus.com</u> 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.)







© 2022 LumenFocus, LLC. LumenFocus reserves the right to change specifications without notice. Consult factory for most up to date specifications. www.lumenfocus.com 880 Facet Rd. | Henderson, NC 27537 252-430-6970 ECLN_4_LED_v3.6 Page 1 of 6

LumenF@cus

ECLN 4 | LED STRIP

Ordering Guide:

ECL N 4 Image: Control is a control in the control is a control is a control in the control in the control is a control in the control in the control is a control in the control in the control is a control in the control in the control is a control in the control in the control is a control in the control in the control in the control in the control is a control in the control								examp	ole: ECL N 4 MD UV F	r 840 QC BK
ECL N 4 LW Blank UV Blank 835 Blank Nore Blank Blank Nore Blank Nore Blank Nore Blank Nore Blank Blank More Blank More Blank More Blank More Blank More Blank More Blank Blan	Series Width Lengtł	Output	Performance	Voltage	Shielding	CRI/CCT	Hanging	Controls	Options	Finish
46° (48° Optional) Low Standard 120-277 No Lenses 80 CRV3500C Nore No Centrols No Options Whee MD MD HE 34 FR 840 00 CRV3500C Options QC ZSOL Low (Duck Hang) Low	ECL N 4									
MD HE 34 Frosted Acry in Cashe Single Control Heller Sin	46"	Low		-			-			Blank White
BT-DMSW-U-A Bluetooth 1 Zone Dimmer BT-DMSW-U-A Bluetooth 4-Button Wall Station BT-BTSW-U-A Bluetooth 4-Button Wall Station BT-BTSW-U-A Bluetooth 4-Button Wall Station BT-BTSW-U-A Bluetooth 8-Button Wall Station BT-BTSW-U-A Bluetooth 8-Button Wall Station Enlighted Controls Sensor with Dimming/ Occupancy/Daylight WS-2-00 Enlighted Remote Control Wall Switch (for Enlighted Connected & IoT) WS-2-00-IL Enlighted Remote Control Wall Switch (for Enlighted One) VS-2-00-IL Enlighted One)	ECL N 4 46" 46" (48" Option Notes ************************************	Low MD Medium MH Medium High HI High VH Very High Medium High HI High VH Very High Medium High HI High VH Very High Medium High HI High VH Very High Medium High HI High VH Very High NC See Page 6 for m See Page 5 for m Certain conditi Rensor options. C-50°C ambien fy circuit A or E DrieS (ord nmable Senso rogramming R Bluetooth 1 Zo Bluetooth 4-Bu Bluetooth 8-Bu Ols ed Remote Co lighted Connece ed Remote Co	Standard HE High Efficiency Argentials. See Page 6 for I hore details. more details. more details. ons apply. Consu t. B here. er separated r (OS) emote ne Dimmer utton Wall Station utton Wall Station itton Wall Station itton Wall Station itton Wall Station	120-277 34 347V ens descri ult factory	No Lenses FR Frosted Acrylic Diffusers	80 CRI/3500K 840 80 CRI/4000K 850	None QC 10' Quick Hang	No Controls ZSOL Leviton Intellect Solo PIR Sensor ⁽¹⁾ Z2111_ Wattstopper FSP Programmable Photo/ Motion Multi-Voltage Sensor (high/low/off) ⁽²⁾ Z3111_ Wattstopper FSP Bluetooth-enabled Programmable Photo/ Motion Multi-Voltage Sensor (high/low/off) ⁽²⁾ ZOSMD Microwave Daylight/ Motion Sensor With Step-Dimming (High/Low/Off) ⁽³⁾ ZIFS Douglas IFS ensor with dimming/occupancy/ daylight harvesting and network capabilities ⁽⁴⁾ ZIFC Douglas IFC controller with network capabilities ⁽⁵⁾ ZENLO Enlighted Micro Sensor with Dimming/ Occupancy/Daylight Harvesting and Enlighted Connected System ⁽⁶⁾ ZENLI Enlighted Micro Sensor with Dimming/ Occupancy/Daylight Harvesting and Enlighted Connected System ⁽⁶⁾	No Options EXT10 10-Year Extended Warranty ⁽⁷⁾ C6 6' Single Circuit Cord C65W 6' Single Circuit Cord with Low Voltage Connections C105W 10' Single Circuit Cord With Low Voltage Connections D6 6' Dual Circuit Cord D10 10' Dual Circuit Cord D10 10' 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 48" 48" Length (Standard Length is 46") ⁽⁸⁾ EM1 Emergency Pack - Up to 16W ⁽⁹⁾ QWH(_) Quick Wire Harness ⁽¹⁰⁾	White BK Matte Black

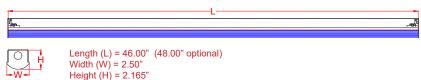
 $\ensuremath{\mathbb{O}}$ 2022 LumenFocus, LLC. LumenFocus reserves the right to change specifications without notice. Consult factory for most up to date specifications.

Ó

www.lumenfocus.com 880 Facet Rd. | Henderson, NC 27537 252-430-6970

Lumen Fécus

Schematic:



Performance Chart:

Catalog #	Lumens	Watts	I D\A/	Catalog #	Lumens	Watts	LPW	٠	Catalog #
	Lumens	walls			Lumens	watts			Catalog #
ECL N 4 LW UV FR 835	2015	15	133.7	ECL N 4 LW UV FR 840	2082	15	138.1		ECL N 4 LW
ECL N 4 MD UV FR 835	3811	31	124.8	ECL N 4 MD UV FR 840	3937	31	129.0		ECL N 4 MD
ECL N 4 MH UV FR 835	4509	33	137.7	ECL N 4 MH UV FR 840	4658	33	142.3		ECL N 4 MH
ECL N 4 HI UV FR 835	5975	44	136.2	ECL N 4 HI UV FR 840	6172	44	140.7		ECL N 4 HI U
ECL N 4 VH UV FR 835	7964	62	128.4	ECL N 4 VH UV FR 840	8227	62	132.6		ECL N 4 VH
ECL N 4 LW HE UV FR 835	2002	14	147.3	ECL N 4 LW HE UV FR 840	2068	14	152.2		ECL N 4 LW
ECL N 4 MD HE UV FR 835	3763	25	149.4	ECL N 4 MD HE UV FR 840	3888	25	154.3		ECL N 4 MD
ECL N 4 MH HE UV FR 835	4484	30	148.7	ECL N 4 MH HE UV FR 840	4633	30	153.7		ECL N 4 MH
ECL N 4 HI HE UV FR 835	5950	41	143.9	ECL N 4 HI HE UV FR 840	6147	41	148.6		ECL N 4 HI H
ECL N 4 VH HE UV FR 835	7938	58	137.5	ECL N 4 VH HE UV FR 840	8201	58	142.1		ECL N 4 VH I

Catalog #	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 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.



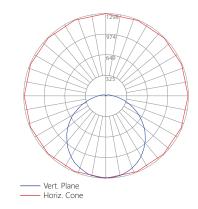
Photometric Data:

FCL N 4 MD UV FR 835

ECL N 4 MD UV FR 835			ata (cd/sq.m)			
Test No.: LLIA001200-004	Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg		
Luminaire Lumens: 3,811 lm	5	5	5	5		
Luminaire Watts: 30.5W	45	14939	13259	12913		
Efficacy: 124.8 LPW	55	12867	11683	11458		
Spacing Criterion (0-180): 1.24	65 75	10143 7218	9806 7749	9578 7339		
Spacing Criterion (90-270): 1.28	85	4039	6094	5341		

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

Lilect	 		.,		 0.20				 			 		
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



Zonal Lumen Summary Zone %Fixt Lumens 0-20 472.29 12.40 1003.16 0-30 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

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





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.



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

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 & Beaconing			✓
Future App & API Ready			✓

Note: Additional equipment required for ZENLC and ZENLI

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

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

© 2021 Enlighted for all Enlighted content and images.

© 2021 Douglas Lighting Controls, Inc. for all Douglas content and images. The Bluetooth® word, mark and logos are registered trademarks owned by the Bluetooth SIG, Inc. and any use of such marks by Douglas Lighting Controls is under license. Other trademarks and trade names are those of their respective owners.



programming sensor from

• Can be used to comply with

IECC, ASHRAE 90.1 and 2019

the floor (sold separately)

Title 24, Part 6 dimming, occupancy/vacancy sensing

and daylight harvesting

requirements.

Other controls available:



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: 360º 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:

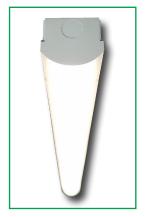
- Partial-on
- Partial-off
- 8' to 10' mounting height
- IP20 rated
- Detection angle: 120
- dearees
- IR remote available for

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.



© 2022 LumenFocus, LLC. LumenFocus reserves the right to change specifications without notice. Consult factory for most up to date specifications. www.lumenfocus.com 880 Facet Rd. | Henderson, NC 27537 252-430-6970