## LumenFécus



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



# ECL 6 | LED Strip

#### Features:

- High performance LED technology
- 0-10V dimming drivers standard
- Field replaceable LED boards and drivers
- Frosted diffuser available to help 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, industrial and institutional applications

- Office
- Retail
- Warehouse
- Coves
- Valences

#### Ambient Operating Temp.:

• -30°C to 40°C

#### 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 heavy gauge cold rolled steel
- Highly durable, highly reflective white finish

#### **Certifications:**

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



#### 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.)







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#### LumenF@cus

### ECL 6 | LED STRIP

#### Ordering Guide

Series	Length	Output	Voltage	Shielding	CRI/CCT	Hanging	Controls	Options	Finish	
ECL	6									
ECL	<b>6</b> 6′	<b>LW</b> Low	UV 120-277	Blank No Lenses	<b>835</b> 80 CRI/3500K	Blank None	<b>Blank</b> No Controls	Blank No Options	Blank White	
		MD Medium	<b>34</b> 347V	<b>FR</b> Frosted Acrylic Diffusers	<b>840</b> 80 CRI/4000K	VC V-Chain Hangers	<b>ZOS</b> Occupancy Sensor (On/Off) <sup>(1)</sup>	<b>EXT10</b> 10-Year Extended Warranty <sup>(8)</sup>	<b>BK</b> Matte Blac	
		HI High			850 80 CRI/5000K	<b>QC</b> 10' Quick Hang Cable Kit	<b>ZOSD</b> Occupancy Sensor	C6 6' Single Circuit Cord	SL Metallic Silv	
		<b>VH</b> Very High				QC20 20' Quick Hang Cable Kit	w/ Daylight Harvesting (On/Off/Dim) <sup>(1)</sup> <b>ZSOL</b>	<b>C65W</b> 6' Single Circuit Cord with Low Voltage Connections		
						Slide Hanger	Leviton Intellect Solo PIR Sensor <sup>(2)</sup>	<b>C10</b> 10' Single Circuit Cord		
lotes	atina haial	nt 40'. End r	nounted				<b>Z211L_</b> Wattstopper FSP Programmable Photo/Motion Multi-Voltage	<b>C105W</b> 10' Single Circuit Cord with Low Voltage Connections		
Max mou Max mou	nting heig nting heig	ht 10'. See P. ht 49'. See P	age 5 for m Page 5 for m	nore details.			Sensor (high/low/off) <sup>(4)</sup> <b>Z311L_</b> Wattstopper FSP Bluetooth-	D6 6' Dual Circuit Cord		
<ul> <li>"_" = lens type. See Page 5 for lens descriptions.</li> <li>Max mounting height 16.4'. See Page 4 for more details.</li> <li>See Page 4 for more details.</li> <li>Max mounting height 15'. See page 4 for more details.</li> <li>Not available on all models. Certain conditions apply. Consult factory or sales representative for details.</li> <li>EM1 and EM2: 120-277V / 0°C-50°C ambient.</li> </ul>							enabled Programmable Photo/ Motion Multi-Voltage Sensor (high/low/off) <sup>(4)</sup>	D10 10' Dual Circuit Cord		
							<b>ZOSMD</b> Microwave Daylight/Motion Sensor With Step-Dimming	P(NEMA) Plug (Specify NEMA configuration) WG		
		ng, specify c Cessor			ely)		(High/Low/Off) <sup>(3)</sup> <b>ZPC</b> Photocell	Wire Guard SC Safety Cable		
For Douglas Controls         Bluetooth 1 Zone Dimmer           BT-DMSW-U-A         Bluetooth 4-Button Wall Station           BT-8BTSW-U-A         Bluetooth 8-Button Wall Station							<b>ZIFS</b> Douglas IFS sensor with	<b>F</b> Fuse		
							dimming/occupancy/daylight harvesting and network capabilities <sup>(5)</sup>	<b>EM1</b> Emergency Pack - Up to 8W <sup>(9)</sup>		
	r <b>Enlighte</b> 5-2-00		Remote Co Ited Connec	ntrol Wall Swit	ch		<b>ZIFC</b> Douglas IFC controller with network capabilities <sup>(6)</sup>	EM2 Emergency Pack - Up to 16W <sup>(9)</sup>		
	-2-00-IL		Remote Co	ntrol Wall Swit	ch		ZENLO Enlighted Micro Sensor with	QWH(_) Quick Wire Harness <sup>(10)</sup>		
							Dimming/Occupancy/Daylight Harvesting and Enlighted One System <sup>(7)</sup>	<b>SDT(480V)</b> 480V to 277V Step Down Transformer		
		1					ZENLC Enlighted Micro Sensor with Dimming/Occupancy/Daylight Harvesting and Enlighted	CC Conformal Coating LVL		
		۲					Connected System <sup>(7)</sup>	0-10V Dimming Leads for Easy Field Access		
							Enlighted Micro Sensor with Dimming/Occupancy/Daylight Harvesting and Enlighted IoT System <sup>(7)</sup>	BAA Buy American Act Compliant		
				10						
_			Matte Bla finish opti							

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#### Lumen Fécus

#### Schematic:

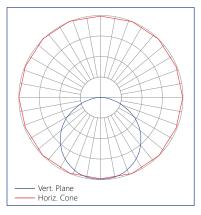


#### Performance Chart:

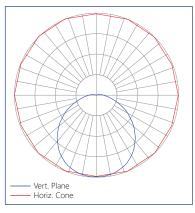
Lumens	Watts	LPW	Catalog #	Lumens	Watts	LPW	Catalog #	Lumens	Watts	LPW
3119	22	141.8	ECL 6 LW UV 840	3216	22	146.2	ECL 6 LW UV 850	3312	22	150.5
6482	54	120.0	ECL 6 MD UV 840	6682	54	123.7	ECL 6 MD UV 850	6883	54	127.5
9854	70	140.8	ECL 6 HI UV 840	10159	70	145.1	ECL 6 HI UV 850	10463	70	149.5
12423	95	130.8	ECL 6 VH UV 840	12807	95	134.8	ECL 6 VH UV 850	13192	95	138.9
2994	22	136.1	ECL 6 LW UV FR 840	3086	22	140.3	ECL 6 LW UV FR 850	3179	22	144.5
6221	54	115.2	ECL 6 MD UV FR 840	6413	54	118.8	ECL 6 MD UV FR 850	6606	54	122.3
9457	70	135.1	ECL 6 HI UV FR 840	9750	70	139.3	ECL 6 HI UV FR 850	10042	70	143.5
11923	95	125.5	ECL 6 VH UV FR 840	12292	95	129.4	ECL 6 VH UV FR 850	12660	95	133.3
	3119 6482 9854 12423 2994 6221 9457	3119         22           6482         54           9854         70           12423         95           2994         22           6221         54           9457         70	311922141.8648254120.0985470140.81242395130.8299422136.1622154115.2945770135.1	3119         22         141.8         ECL 6 LW UV 840           6482         54         120.0         ECL 6 MD UV 840           9854         70         140.8         ECL 6 H UV 840           12423         95         130.8         ECL 6 VH UV 840           2994         22         136.1         ECL 6 LW UV FR 840           6221         54         115.2         ECL 6 MD UV FR 840           9457         70         135.1         ECL 6 HI UV FR 840	3119         22         141.8         ECL 6 LW UV 840         3216           6482         54         120.0         ECL 6 MD UV 840         6682           9854         70         140.8         ECL 6 HI UV 840         10159           12423         95         130.8         ECL 6 VH UV 840         12807           2994         22         136.1         ECL 6 LW UV FR 840         3086           6221         54         115.2         ECL 6 HI UV FR 840         6413           9457         70         135.1         ECL 6 HI UV FR 840         9750	3119         22         141.8         ECL 6 LW UV 840         3216         22           6482         54         120.0         ECL 6 MD UV 840         6682         54           9854         70         140.8         ECL 6 HI UV 840         10159         70           12423         95         130.8         ECL 6 VH UV 840         12807         95           2994         22         136.1         ECL 6 MD UV FR 840         3086         22           6221         54         115.2         ECL 6 HI UV FR 840         6413         54           9457         70         135.1         ECL 6 HI UV FR 840         9750         70	3119         22         141.8         ECL 6 LW UV 840         3216         22         146.2           6482         54         120.0         ECL 6 MD UV 840         6682         54         123.7           9854         70         140.8         ECL 6 HI UV 840         10159         70         145.1           12423         95         130.8         ECL 6 VH UV 840         12807         95         134.8           2994         22         136.1         ECL 6 LW UV FR 840         3086         22         140.3           6221         54         115.2         ECL 6 HI UV R40         6413         54         118.8           9457         70         135.1         ECL 6 HI UV R40         9750         70         139.3	3119         22         141.8         ECL 6 LW UV 840         3216         22         146.2         ECL 6 LW UV 850           6482         54         120.0         ECL 6 MD UV 840         6682         54         123.7         ECL 6 MD UV 850           9854         70         140.8         ECL 6 HI UV 840         10159         70         145.1         ECL 6 HI UV 850           12423         95         130.8         ECL 6 VH UV 840         12807         95         134.8         ECL 6 VH UV 850           2994         22         136.1         ECL 6 LW UV FR 840         3086         22         140.3         ECL 6 LW UV FR 850           6221         54         115.2         ECL 6 HI UV FR 840         6413         54         118.8         ECL 6 MD UV FR 850           9457         70         135.1         ECL 6 HI UV FR 840         9750         70         139.3         ECL 6 HI UV FR 850	3119         22         141.8         ECL 6 LW UV 840         3216         22         146.2         ECL 6 LW UV 850         3312           6482         54         120.0         ECL 6 MD UV 840         6682         54         123.7         ECL 6 MD UV 850         6883           9854         70         140.8         ECL 6 HI UV 840         10159         70         145.1         ECL 6 HI UV 850         10463           12423         95         130.8         ECL 6 VH UV 840         12807         95         134.8         ECL 6 VH UV 850         13192           2994         22         136.1         ECL 6 LW UV FR 840         3086         22         140.3         ECL 6 LW UV FR 850         3179           6221         54         115.2         ECL 6 HI UV FR 840         6413         54         118.8         ECL 6 MD UV FR 850         6606           9457         70         135.1         ECL 6 HI UV FR 840         9750         70         139.3         ECL 6 HI UV FR 850         10042	3119         22         141.8         ECL 6 LW UV 840         3216         22         146.2         ECL 6 LW UV 850         3312         22           6482         54         120.0         ECL 6 MD UV 840         6682         54         123.7         ECL 6 MD UV 850         6883         54           9854         70         140.8         ECL 6 HI UV 840         10159         70         145.1         ECL 6 HI UV 850         10463         70           12423         95         130.8         ECL 6 VH UV 840         12807         95         134.8         ECL 6 VH UV 850         13192         95           2994         22         136.1         ECL 6 LW UV FR 840         3086         22         140.3         ECL 6 LW UV FR 850         3179         22           6221         54         115.2         ECL 6 MD UV FR 840         6413         54         118.8         ECL 6 MD UV FR 850         6606         54           9457         70         135.1         ECL 6 HI UV FR 840         9750         70         139.3         ECL 6 HI UV FR 850         10042         70

#### Photometric Data:

Relative Luminous Intensity ECL - no lens



#### Relative Luminous Intensity ECL - with Frosted Diffuser



# Re-board ABILITY

The ECL 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.





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

The ECL can be equipped with the Douglas Bluetooth Intelligent Fixture Sensor (IFS) as well as the Intelligent Fixture Controller.



- 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; max mounting height for sensor: 16.4 ft

#### 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<sup>®</sup> Energy Management System

Douglas controls can be integrated with the CheckLight<sup>®</sup> 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<sup>®</sup> 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

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**Microwave Occupancy** 

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 ECL's frosted lens. The ZOSMD features automatic switching based on

motion and ambient light level. ZOSMD option

Leviton Intellect Solo PIR

Sensor (ZSOL)

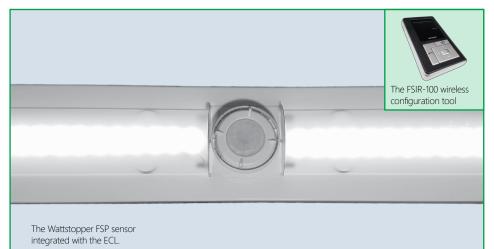
The ECL can be

Passive Infrared

also features step-dimming functionality - standby dimming level 10% / 20% / 30% / 50%. Max mounting height for ZOSMD 49 feet.

Sensor (ZOSMD)

#### 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

# **Other Options:**



Shielding Frosted acrylic diffuser lenses minimize glare and improve aesthetics.

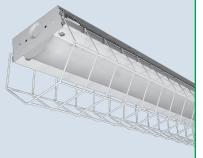


#### Conformal coating Grants LED boards added protection from moisture and corrosion in more hazardous

environments.



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



#### Wireguards are available for added protection (shipped separately).

#### Left: The phone app interface for

the Z311 sensor

equipped with an integrated Leviton Intellect Solo Sensor ("ZSOL" option). This is a 0-10V dimming



(PIR) occupancy and daylight harvesting sensor. It includes partialon and partial-off capabilities. Mounting height is 8' to 10'. It is IP20 rated with a detection angle of 120 degrees. An IR remote is available for programming sensor from the floor (sold separately). The sensor can be used to comply with IECC, ASHRAE 90.1 and 2019 Title 24, Part 6 dimming, occupancy/vacancy sensing and daylight harvesting requirements.

Hanging The QC hanging kit (1) comes in 10' or 20'. Cables are pre-looped for easy installation and designed for easy fixture height adjustment. QCs come boxed with each fixture. V-hangers and slide hangers are also optional.



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