



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



# ECL G2 6 | LED Strip

#### Features:

- High performance LED technology
- 0-10V dimming drivers standard
- DALI drivers available
- 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 [LW, ML, MD, MH, HI]
- -30°C to 35°C [VH]
- -30°C to 30°C [SH]

#### **Predicted Lifetime:**

- L70: ≥ 129,000 hrs (calculated)
- L80: ≥ 81,000 hrs (calculated)
- L90: ≥ 39,000 hrs (reported) (based on LM-80, TM-21 and in-situ laboratory testing)

#### 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 condition

(Not available on all models. Certain conditions apply. Consult factory or sales representative for details.)











example: ECL G2 6 MD UV FR 940



### Ordering Guide:

Length Series Version Output Voltage Shielding CRI/CCT Hanging Controls **Options** Finish ECI-92 **ECL** LW UV 930 **Blank** G2 6 **Blank Blank** Blank **Blank** Gen 2 120-277 No Lenses 90 CRI/3000K No Controls No Options White Low None 34 FR 935 VC **ZSOL** BK ML EXT<sub>10</sub> Leviton Intellect Medium Low Frosted Acrylic 90 CRI/3500K V-Chain Hangers 10-Year Extended Matte Black Diffusers Solo PIR Sensor<sup>(1)</sup> Warranty<sup>(8)</sup> 940 QC SL MD ZLD1 Medium 90 CRI/4000K 10' Quick Hang C6 Metallic Silver Cable Kit Leviton Bluetooth-enabled 6' Single Circuit Cord MH 950 Programmable Dimming/ QC20 **C65W** Medium High Occupancy/Daylight 20' Quick Hang Harvesting Sensor with Grouping 6' Single Circuit Cord with (120-277V)<sup>(2)</sup> HI Cable Kit Low Voltage Connections High SH **ZLDU** VΗ Slide Hanger Leviton Bluetooth-enabled 10' Single Circuit Cord Programmable Dimming/ Very High C105W Occupancy/Daylight SH Harvesting Sensor with Grouping, 10' Single Circuit Cord with Scheduling (120-480V)<sup>(2)</sup> Low Voltage Connections Super High D6 Z211L 6' Dual Circuit Cord Wattstopper FSP Programmable D10 Photo/Motion Multi-Voltage **Notes** 10' Dual Circuit Cord Sensor (high/low/off)<sup>(3)</sup> P(NEMA) (1) Max mounting height 10'. See Page 4 for more details. Z311L Plug (Specify NEMA <sup>(2)</sup> Max mounting height 40'. See Page 4 for more details. Wattstopper FSP Bluetoothconfiguration) (3) "\_" = lens type. See Page 4 for lens descriptions. enabled Programmable Photo/ (4) Max mounting height 40'. See Page 4 for more details. SC Motion Multi-Voltage Sensor (5) Max mounting height 16.4'. See Page 5 for more details. (high/low/off)(3) Safety Cable (6) See Page 5 for more details. (7) Max mounting height 15'. See Page 5 for more details. F **ZOSMD** (8) Not available on all models. Certain conditions apply. Consult factory or Microwave Daylight/Motion Fuse sales representative for details. Sensor With (9) EM1 and EM2: 120-277V / 0°C-50°C ambient. Step-Dimming EM1 (High/Low/Off)(4) Emergency Pack - Up (10) "\_" for 2-circuit wiring, specify circuit A or B here. to 8W<sup>(9)</sup> **ZIFS** Accessories (order separately) Douglas IFS sensor with Emergency Pack - Up to dimming/occupancy/daylight WG(ECL6) Wire Guard 16W<sup>(9)</sup> harvesting and network capabilities<sup>(5)</sup> QWH() Controls Accessories (order separately) **ZIFC** Quick Wire Harness<sup>(10)</sup> Douglas IFC controller with SDT(480V) For Douglas Controls network capabilities<sup>(6)</sup> 480V to 277V Step Down BT-DMSW-U-A Bluetooth 17one Dimmer **ZENLO** Transformer BT-4BTSW-U-A Bluetooth 4-Button Wall Station Enlighted Micro Sensor with BT-8BTSW-U-A Bluetooth 8-Button Wall Station CC Dimming/Occupancy/Daylight Harvesting and Enlighted One Conformal Coating System<sup>(7)</sup> For Enlighted Controls LVL Enlighted Remote Control Wall WS-2-00 **ZENLC** 0-10V Dimming Leads for (for Enlighted Connected & IoT) Switch Enlighted Micro Sensor with Easy Field Access WS-2-00-IL Enlighted Remote Control Wall Dimming/Occupancy/Daylight Switch (for Enlighted One) BAA Harvesting and Enlighted



#### For WattStopper Controls

FSIR-100 Wireless IR Programming Tool

(For Z211Lx)



#### For Leviton Intellect Solo Controls

ZLSOR-RA1 Wireless IR Programming Tool

(For ZSOL)



Buy American Act

Compliant

Connected System<sup>(7)</sup>



#### Schematic:

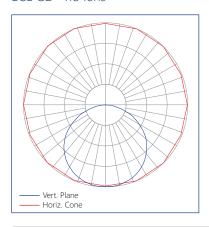


#### Performance Chart:

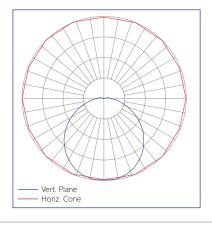
Catalog #	Watts	Lumens (930)	LPW (930)	Lumens (935)	LPW (935)	Lumens (940)	LPW (940)	Lumens (950)	LPW (950)
ECL G2 6 LW UV FR 9xx	21.9	3187.4	145.7	3200.8	146.3	3276.9	149.7	3276.9	149.7
ECL G2 6 ML UV FR 9xx	32.4	4737.4	146.4	4757.4	147.0	4870.4	150.5	4870.4	150.5
ECL G2 6 MD UV FR 9xx	43.9	6165.8	140.5	6191.8	141.1	6338.9	144.4	6338.9	144.4
ECL G2 6 MH UV FR 9xx	51.6	7690.2	149.1	7722.6	149.8	7906.0	153.3	7906.0	153.3
ECL G2 6 HI UV FR 9xx	62.2	9106.4	146.4	9144.8	147.0	9362.0	150.5	9362.0	150.5
ECL G2 6 VH UV FR 9xx	83.6	12303.0	147.1	12354.9	147.7	12648.3	151.2	12648.3	151.2
ECL G2 6 SH UV FR 9xx	106.0	15095.3	142.4	15158.9	143.0	15518.9	146.4	15518.9	146.4
ECL G2 6 LW UV 9xx	21.9	3350.3	153.1	3364.4	153.7	3444.3	157.4	3444.3	157.4
ECL G2 6 ML UV 9xx	32.4	4979.6	153.9	5000.6	154.6	5119.3	158.2	5119.3	158.2
ECL G2 6 MD UV 9xx	43.9	6481.0	147.7	6508.3	148.3	6662.9	151.8	6662.9	151.8
ECL G2 6 MH UV 9xx	51.6	8083.2	156.8	8117.3	157.4	8310.1	161.2	8310.1	161.2
ECL G2 6 HI UV 9xx	62.2	9571.8	153.9	9612.1	154.5	9840.4	158.2	9840.4	158.2
ECL G2 6 VH UV 9xx	83.6	12931.8	154.6	12986.3	155.3	13294.8	158.9	13294.8	158.9
ECL G2 6 SH UV 9xx	106.0	15866.8	149.7	15933.6	150.3	16312.1	153.9	16312.1	153.9

#### Photometric Data:

Relative Luminous Intensity ECL G2 - no lens



Relative Luminous Intensity ECL G2 - with Frosted Diffuser





The ECL G2 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	Туре	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
ZIFS	Motion (PIR), Daylight Harvesting	High/Low/Off, High-End Trim, Grouping, LLLC (Douglas Lighting Controls-Dialog)*	Wireless Bluetooth Mesh, Programmable via iOS App or Douglas Dialog Software
ZIFC	Controller, No Sensors	High/Low/Off, High-End Trim, Grouping, LLLC (Douglas Lighting Controls-Dialog)*	Wireless Bluetooth Mesh, Programmable via iOS App or Douglas Dialog Software
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

### 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





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 ECL G2's frosted

lens. The ZOSMD features automatic switching based on motion and ambient light level. ZOSMD option adds step-dimming functionality - standby dimmina level 10% / 20% / 30% / 50%. Max mounting height for ZOSMD 40



### Leviton Intellect Solo Dimming Sensor (ZSOL)

The ECL G2 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 Bluetoothenabled iOS or Android device



LLLC = Luminaire Level Lighting Control

\* Additional equipment required. Contact LumenFocus representative for details



### Universal Douglas: Cloud-based controls

The ECL G2 can be equipped with the Douglas Bluetooth Intelligent Fixture Sensor (IFS) as well as the Intelligent Fixture Controller.

#### **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; max mounting height for sensor: 16.4 ft

### 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 (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

### 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 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).





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. V-hangers and slide hangers are also optional.

Finish in addition to the standard white finish, the ECL G2 is also available in matte black (pictured) and metallic silver.



