

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

LED

## EWL N G2 4 | LED Wrap

### Features:

- High performance LED technology
- 0-10V dimming drivers standard
- DALI drivers available
- Field replaceable LED boards and drivers
- Can be surface, stem, or cable mounted as individual units or in continuous rows

### Applications:

Suitable for industrial, retail, and institutional applications

- Warehouse
- Manufacturing Facility
- Stock Room
- Classroom

### Ambient Operating Temp:

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

### Predicted Lifetime:

- L70 ≥ 131,000 hrs (calculated)
- L80 ≥ 83,000 hrs (calculated)
- L90 ≥ 40,000 hrs (reported)
- 85% lumen maintenance @ 60,000 hrs (based on LM-80, TM-21 and in-situ laboratory testing)

### Construction:

- Die-formed heavy-gauge cold rolled steel
- Pre-painted with a highly durable, highly reflective white finish
- Clear Prismatic Acrylic Lens

### 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: EWL N G2 4 MD UV CPA 940 QC

Series	Version	Length	Output	Voltage	Shielding	CRI/CCT	Hanging	Controls	Options
EWL N	G2	4			CPA				
EWL N	G2 Gen 2	4 4'	<b>SL</b> Super Low	<b>UV</b> 120-277	<b>CPA</b> Clear Prismatic Acrylic	<b>930</b> 90 CRI/3000K	<b>Blank</b> None	<b>Blank</b> No Controls	<b>Blank</b> No Options
			<b>VL</b> Very Low				<b>VC</b> V-Chain Hangers		
			<b>LW</b> Low				<b>QC</b> 10' Quick Hang Cable Kit		
			<b>MD</b> Medium				<b>QC15</b> 15' Quick Hang Cable Kit		
			<b>HI</b> High				<b>QC20</b> 20' Quick Hang Cable Kit		
			<b>VH</b> Very High						
								<b>ZSOL</b> Leviton Intellect Solo PIR Sensor <sup>(1)</sup>	<b>EXT10</b> 10-Year Extended Warranty <sup>(8)</sup>
								<b>ZOFD1</b> Leviton Bluetooth-enabled Programmable Dimming/ Occupancy/Daylight Harvesting Sensor with Grouping (120-277V) <sup>(2)</sup>	<b>F</b> Fuse
								<b>ZOFDU</b> Leviton Bluetooth-enabled Programmable Dimming/ Occupancy/Daylight Harvesting Sensor with Grouping, Scheduling (120-480V) <sup>(2)</sup>	<b>EM1</b> Emergency Pack - Up to 8W <sup>(9)</sup>
								<b>Z221BL</b> Wattstopper Programmable Photo/ Motion Multi-Voltage Sensor (high/low/off) <sup>(3)</sup>	<b>EM2</b> Emergency Pack - Up to 16W <sup>(9)</sup>
								<b>Z321BL</b> Wattstopper Bluetooth-enabled Programmable Photo/Motion Multi- Voltage Sensor (high/low/off) <sup>(3)</sup>	<b>CC</b> Conformal Coating
								<b>ZOSMD</b> Microwave Daylight/Motion Sensor With Step-Dimming (High/Low/Off) <sup>(4)</sup>	<b>LVL</b> 0-10V Dimming Leads for Easy Field Access
								<b>ZIFS</b> Douglas IFS sensor with dimming/occupancy/daylight harvesting and network capabilities <sup>(5)</sup>	<b>BAA</b> Buy American Act Compliant
								<b>ZIFC</b> Douglas IFC controller with network capabilities <sup>(6)</sup>	
								<b>ZENLO</b> Enlighted Micro Sensor with Dimming/Occupancy/Daylight Harvesting and Enlighted One System <sup>(7)</sup>	
								<b>ZENLC</b> Enlighted Micro Sensor with Dimming/Occupancy/Daylight Harvesting and Enlighted Connected System <sup>(7)</sup>	
								<b>ZENLI</b> Enlighted Micro Sensor with Dimming/Occupancy/Daylight Harvesting and Enlighted IoT System <sup>(7)</sup>	

## Notes

- <sup>(1)</sup> Max mounting height 10'. See Page 4 for more details.  
<sup>(2)</sup> Max mounting height 40'. See Page 4 for more details.  
<sup>(3)</sup> " " = lens type. See Page 4 for lens descriptions.  
<sup>(4)</sup> Max mounting height 40'. See Page 4 for more details.  
<sup>(5)</sup> Max mounting height 16.4'. See Page 5 for more details.  
<sup>(6)</sup> See Page 5 for more details.  
<sup>(7)</sup> Max mounting height 15'. See Page 5 for more details.  
<sup>(8)</sup> Not available on all models. Certain conditions apply.

## Controls Accessories (order separately)



### For Douglas Controls

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



### For Enlighted Controls

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



### For WattStopper Controls

FSIR-100 Wireless IR Programming Tool  
(For Z211Lx)



### For Leviton Intellect Solo Controls

ZLSOR-RA1 Wireless IR Programming Tool  
(For ZSOL)

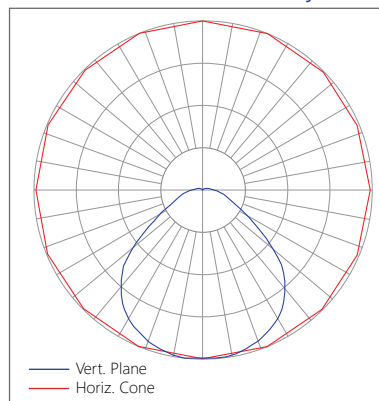


## Performance Chart:

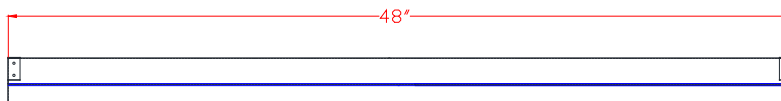
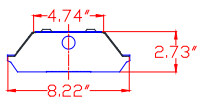
Catalog #	Watts	Lumens (930)	LPW (930)	Lumens (935)	LPW (935)	Lumens (940)	LPW (940)	Lumens (950)	LPW (950)
EWL N G2 4 SL UV CPA 9xx	15.7	2085.4	133.2	2094.2	133.7	2144.0	136.9	2144.0	136.9
EWL N G2 4 VL UV CPA 9xx	28.9	4035.4	139.8	4052.4	140.3	4148.6	143.7	4148.6	143.7
EWL N G2 4 LW UV CPA 9xx	36.1	5012.8	138.7	5033.9	139.3	5153.5	142.6	5153.5	142.6
EWL N G2 4 MD UV CPA 9xx	43.5	5947.2	136.8	5972.3	137.4	6114.1	140.6	6114.1	140.6
EWL N G2 4 HI UV CPA 9xx	57.4	7930.0	138.2	7963.4	138.8	8152.6	142.1	8152.6	142.1
EWL N G2 4 VH UV CPA 9xx	70.2	9833.7	140.1	9875.1	140.7	10109.7	144.1	10109.7	144.1

## Photometric Data:

### Relative Luminous Intensity



## Schematic:



The EWL N 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:

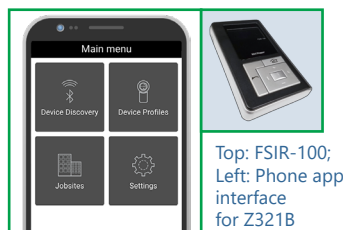
Control Code	Type	Capabilities	Communication
ZSOL	Motion (PIR), Daylight Harvesting	High/Low/Off	Wired 0-10V, Programmable via IR remote (sold separately)
ZOFD1	Motion (PIR), Daylight Harvesting	High/Low/Off, High-End Trim, Grouping	Wired 0-10V, Programmable via Bluetooth App (iOS, Android)
ZOFDU	Motion (PIR), Daylight Harvesting	High/Low/Off, High-End Trim, Grouping, Scheduling	Wired 0-10V, Programmable via Bluetooth App (iOS, Android)
Z221BLx	Motion (PIR), Photosensor	High/Low/Off, High-End Trim	Wired 0-10V, Programmable via IR remote (sold separately)
Z321BLx	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, LLC (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, LLC (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), LLC (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*, LLC (Enlighted IoT)*, Space - Building Utilization*, Where - Real Time Location Services*	Wireless Bluetooth Low Energy Mesh, Programmable via Enlighted IoT Software

LLC = Luminaire Level Lighting Control

\* Additional equipment required. Contact LumenFocus representative for details

## Dimming Sensors (Z221B/Z321B)

- The Wattstopper FSP sensor provides multi-level control based on motion and/or daylight contribution
- Comes pre-installed on the end cap
- Rated for cold locations
- Parameters for Bluetooth-enabled Z321B adjustable via phone app - iOS or Android
- Parameters adjustable via wireless configuration tool (FSIR-100 - sold separately)
- 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



Top: FSIR-100;  
Left: Phone app interface for Z321B

## 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 EWL's prismatic 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 EWL N 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 (ZOFD1/ZOFDU)

The ZOFDx 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 ZOFDU only), single-level switching
- Comes pre-installed on the end cap
- Rated for cold locations
- Configurable through the Leviton Smart Sensor App using a smartphone or other Bluetooth-enabled iOS or Android device



## Universal Douglas: Cloud-based controls

The EWL N can be equipped with the Douglas Bluetooth Intelligent Fixture Sensor (IFS) as well as the Intelligent Fixture Controller. Max mounting height is 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 dim-to-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.

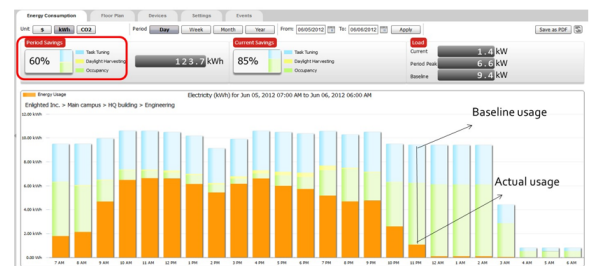
Enlighted sensors come standard with the Enlighted One system (the "ZENLO" option). Enlighted Connected ("ZENLC") offers even more options. The Enlighted IoT ("ZENLI") option allows the full implementation of Enlighted's services. Each system can be fully upgraded to the next tier in the future. So if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



## 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



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 ZENLC and ZENLI

Learn more about our available advanced controls options here:

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

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