

Project: _____
 Location: _____
 Cat. #: _____
 Type: _____
 Quantity: _____

LED

EWL N 2 | LED Wrap

Features:

- High performance LED technology
- 0-10V dimming drivers standard
- 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 40°C

Predicted L70 Lifetime:

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

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



Ordering Guide:

example: EWL N 2 MD UV CPA 840 QC

Series	Length	Output	Voltage	Shielding	CRI/CCT	Hanging	Controls	Options
EWL N	2			CPA				
EWL N	2 2'	VL Very Low	UV 120-277	CPA Clear Prismatic Acrylic	830 80 CRI/3000K	Blank None	Blank No Controls	Blank No Options
		LW Low	34 347V		835 80 CRI/3500K	VC V-Chain Hangers	ZOS Occupancy Sensor (On/Off)	EXT10 10-Year Extended Warranty ⁽⁴⁾
		MD Medium			840 80 CRI/4000K	QC 10' Quick Hang Cable Kit	Z221BL_ Wattstopper Programmable Photo/ Motion Multi-Voltage Sensor (high/ low/off) ⁽¹⁾	F Fuse
		HI High			850 80 CRI/5000K	QC15 15' Quick Hang Cable Kit	Z321BL_ Wattstopper Bluetooth-enabled Programmable Photo/Motion Multi- Voltage Sensor (high/low/off) ⁽¹⁾	EM1 Emergency Pack - Up to 8W ⁽⁵⁾
		VH Very High				QC20 20' Quick Hang Cable Kit	ZOSM Microwave Occupancy Sensor	EM2 Emergency Pack - Up to 16W ⁽⁵⁾

Notes

⁽¹⁾ " " = lens type. See Page 3 for lens descriptions.

⁽²⁾ Max ceiling height for Douglas sensors: 16.4 feet.
See Page 4 for more details on advanced controls.

⁽³⁾ Max ceiling height for Enlighted sensors: 15 feet. See Page 4
for more details on advanced controls.

⁽⁴⁾ Not available on all models. Certain conditions apply.
Consult factory or sales representative for details.

⁽⁵⁾ EM1 and EM2: 120-277V / 0°C-50°C ambient.

Controls Accessories (order separately)



For Douglas Controls

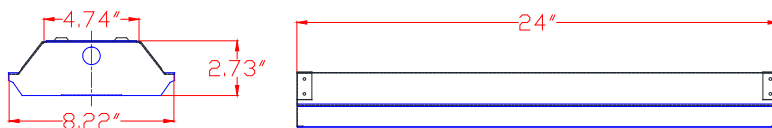
BT-DMSW-U-A Bluetooth 1 Zone Dimmer
BT-4BTSW-U-A Bluetooth 4-Button Wall Station
BT-8BTSW-U-A Bluetooth 8-Button Wall Station



For Enlighted Controls

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

Schematic:



Performance Chart:

Catalog #	Watts	Lumens (830)	LPW (830)	Lumens (835)	LPW (835)	Lumens (840)	LPW (840)	Lumens (850)	LPW (850)
EWL N 2 VL UV CPA xxx	12	1448	125.5	1472	127.6	1521	131.8	1566	135.8
EWL N 2 LW UV CPA xxx	16	2047	126.3	2081	128.4	2150	132.6	2215	136.6
EWL N 2 MD UV CPA xxx	24	3038	125.8	3089	127.9	3191	132.2	3287	136.1
EWL N 2 HI UV CPA xxx	32	3935	122.9	4002	124.9	4134	129.1	4258	132.9
EWL N 2 VH UV CPA xxx	40	4954	123.6	5037	125.7	5203	129.9	5359	133.7

Photometric Data:

EWL N 2 HI UV CPA 830

Test No.: LLIA001226-003

Luminaire Lumens: 3,935 lm

Luminaire Watts: 32.0 W

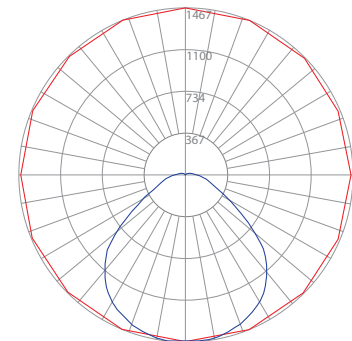
Efficacy: 122.9 LPW

Spacing Criterion (0-180): 1.28

Spacing Criterion (90-270): 1.32

Luminance Data (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	10201	9577	9400
55	8460	7405	6746
65	5341	4821	4678
75	3844	3184	4073
85	2756	2647	4372



— Vert. Plane
— Horiz. Cone

Coefficients Of Utilization - Zonal Cavity Method Effective Floor Cavity Reflectance 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		110	110	110		105	105	105
1	109	104	100	96		106	102	98	95		97	94	91		93	90	88
2	100	92	85	80		97	90	84	79		86	81	77		82	78	74
3	91	81	73	67		89	79	72	67		76	70	65		73	68	64
4	84	72	64	58		81	71	63	57		68	61	56		66	60	55
5	77	65	56	50		75	64	56	50		61	54	49		59	53	48
6	71	59	50	44		69	58	49	44		56	48	43		54	47	42
7	66	53	45	39		65	52	44	39		51	43	38		49	43	38
8	62	49	40	35		60	48	40	35		46	39	34		45	39	34
9	58	45	37	31		56	44	36	31		43	36	31		41	35	31
10	54	41	34	28		53	41	33	28		39	33	28		38	32	28

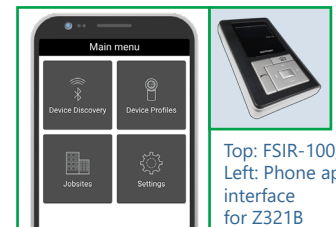
Zonal Lumen Summary

Zone	Lumens	%Fixt
0-20	539.13	13.7
0-30	1152.93	29.3
0-40	1900.26	48.3
0-60	3229.18	82.1
0-80	3742.65	95.1
0-90	3835.71	97.5
90-120	79.45	2.0
90-130	89.25	2.3
90-150	96.68	2.5
90-180	99.67	2.5
0-180	3935.38	100.0

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

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



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.](#)



Douglas Lighting Controls, Inc.: 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.

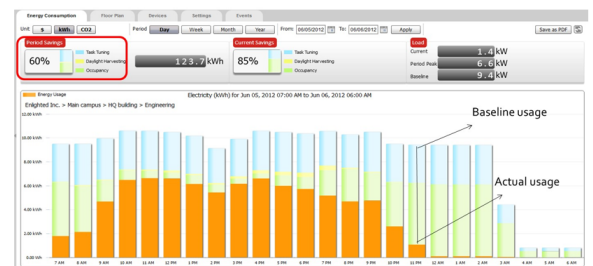
Enlighted sensors come standard with the Enlighted One system (the "ZENLO" option). Enlighted Connected ("ZENLC") offers even more options. The Enlighted IoT ("ZENLI") option allows the full implementation of Enlighted's services. Each system can be fully upgraded to the next tier in the future. So if 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			✓

Learn more about our available advanced controls options here:

www.lumenfocus.com/controls-overview

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Note: Additional equipment required ZENLC and ZENLI

