



# EWL N 4 | 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 35°C for VH models
- -30°C to 40°C for all other models

#### 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 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.)









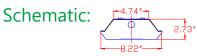


# Ordering Guide:

example: FWL N 4 MD LIV CPA 840 OC

Dimming/Occupancy/Daylight Harvesting<sup>(3)</sup>

Oraci	mg Ge	nac.					example: EWL N	4 MD UV CPA 840 QC
Series	Length	Output	Voltage	Shielding	CRI/CCT	Hanging	Controls	Options
EWLN	4			CPA				
EWL N	<b>4</b> 4'	VL Very Low LW Low MD Medium HI High VH Very High	UV 120-277 <b>34</b> 347V	<b>CPA</b> Clear Prismatic Acrylic	830 80 CRI/3000K 835 80 CRI/3500K 840 80 CRI/4000K 850 80 CRI/5000K	Blank None  VC V-Chain Hangers  QC 10' Quick Hang Cable Kit  QC15 15' Quick Hang Cable Kit  QC20 20' Quick Hang Cable Kit	Blank No Controls  ZOS Occupancy Sensor (On/Off)  Z221BL_ Wattstopper Programmable Photo/ Motion Multi-Voltage Sensor (high/ low/off) <sup>(1)</sup> Z321BL_ Wattstopper Bluetooth-enabled Programmable Photo/Motion Multi-	Blank No Options  EXT10 10-Year Extended Warranty <sup>(4)</sup> F Fuse  EM1 Emegency Pack - Up to 8W <sup>(5)</sup> EM2
(2) Max ceilin See Page 4 (3) Max ceilin for more d (4) Not avail Consult fac	s type. See I ng height fo I for more o ng height fo etails on ac lable on all ctory or sale	Page 3 for lens or Douglas sen details on adva or Enlighted se vanced contro models. Certai es representativ 77V / 0°C-50°C	isors: 16.4 fe nced contro insors: 15 fea ols. n conditions we for details	et. ols. et. See Page 4 s apply.			Voltage Sensor (high/low/off) <sup>(1)</sup> ZOSM  Microwave Occupancy Sensor  ZPC Photocell  ZIFS  Douglas IFS Sensor with Dimming/ Occupancy/Daylight Harvesting with Newtork Capabilities <sup>(2)</sup> ZIFC  Douglas IFC Controller with Newtork Capabilities <sup>(3)</sup>	Emegency Pack - Up to 16W(5)  CC Conformal Coating  LVL 0-10V Dimming Leads for Easy Field Access  BAA  Buy American Act Compliant
FC BT BT BT W	or Douglas T-DMSW-U- T-4BTSW-U- T-8BTSW-U- or Enlighter S-2-00	Controls -A Blueto -A Blueto	ooth 1 Zone both 4-Butto both 8-Butto mote Contro d Connected mote Contro	on Wall Station on Wall Station of Wall Switch of & IoT)			ZENLO Enlighted One Micro Sensor with Dimming/Occupancy/Daylight Harvesting <sup>(5)</sup> ZENLC Enlighted Connected Micro Sensor with Dimming/Occupancy/Daylight Harvesting <sup>(6)</sup> ZENLI Enlighted IoT Micro Sensor with Dimming/Occupancy/Daylight	



(for Enlighted One)



#### Performance Chart:

Catalog #	Watts	Lumens (830)	LPW (830)	Lumens (835)	LPW (835)	Lumens (840)	LPW (840)	Lumens (850)	LPW (850)
EWL N 4 VL UV CPA xxx	16	2105	128.2	2140	130.3	2211	134.6	2277	138.7
EWL N 4 LW UV CPA xxx	31	4094	132.6	4163	134.8	4300	139.3	4429	143.5
EWL N 4 MD UV CPA xxx	48	6000	125.8	6101	127.9	6302	132.1	6491	136.1
EWL N 4 HI UV CPA xxx	60	7862	131.3	7994	133.5	8258	137.9	8506	142.1
EWL N 4 VH UV CPA xxx	78	9814	126.0	9979	128.2	10309	132.4	10619	136.4

# Photometric Data:

# **EWL N 4 MD UV CPA 830**

Test No.: LLIA001226-005 Luminaire Lumens: 6,000 lm Luminaire Watts: 47.7 W Efficacy: 125.8 LPW

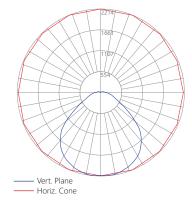
Spacing Criterion (0-180): 1.30 Spacing Criterion (90-270): 1.32

Luminance	e Data (cd/s	q.m)	
Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	8117	7381	7114
55	6970	5802	5032
65	4484	3834	3477
75	3344	2572	3070
85	2696	2341	3402

#### 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	104	104	104
1	109	104	100	96	106	102	98	94	97	94	91	93	90	88
2	99	92	85	80	97	89	84	79	86	81	76	82	78	74
3	91	81	73	67	88	79	72	66	76	70	65	73	68	63
4	84	72	64	57	81	71	63	57	68	61	56	65	59	55
5	77	65	56	50	75	64	55	49	61	54	49	59	53	48
6	71	58	50	44	69	57	49	43	55	48	43	53	47	42
7	66	53	45	39	64	52	44	38	50	43	38	49	42	38
8	62	48	40	35	60	48	40	34	46	39	34	45	38	34
9	58	45	36	31	56	44	36	31	42	36	31	41	35	30
10	54	41	33	28	53	40	33	28	39	33	28	38	32	28

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



Zonal Lumen S	Summary	
Zone	Lumens	%Fixt
0-20	813.16	13.6
0-30	1740.44	29.0
0-40	2873.59	47.9
0-60	4906.50	81.8
0-80	5696.00	94.9
0-90	5841.66	97.4
90-120	126.28	2.1
90-130	142.30	2.4
90-150	154.09	2.6
90-180	158.16	2.6
0-180	5999.83	100.0

#### 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





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.



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 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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