

Catalog Number
Notes
Type

FEATURES & SPECIFICATIONS

INTENDED USE — For wall or ceiling mounting, vertical or horizontal. The WL combines digital LED lighting and controls technologies with high-performance optical design to offer the most advanced wall-mount luminaire for general ambient lighting applications. High-efficacy light engine delivers long life and excellent color, ensuring a superior quality lighting installation that is highly efficient and sustainable.

CONSTRUCTION — Housing is roll formed from code-gauge steel.

Reflector is retained in die cast ends providing secure installation and easy maintenance.

Decorative die-cast end caps provide added durability.

Finish: All metal parts are post-painted in white polyester powder coat for smooth, finished edges and uniform light distribution.

OPTICS — Impact modified linear faceted refractor. Optically engineered for superior light distribution and maximum efficacy.

Crescent-shape linear faceted refractor system obscures and integrates individual LED images and uniformly washes fixture surface with light.

ELECTRICAL — Long-life LEDs, coupled with high-efficiency drivers, provide superior quantity and quality of illumination for extended service life. 90% LED lumen maintenance at 60,000 hours (L90/60,000). The LEDs have a CRI of 82.

eldoLED driver options deliver choice of dimming range and choice for control, while assuring flicker-free, low-current inrush, 89% efficiency and low EMI.

Driver disconnect provided where required to comply with US and Canadian codes.

Optional nLight® embedded controls continuously monitor system performance and allow for constant lumen management function.

Lumen Management: Unique lumen management system (option N80) provides onboard intelligence that actively manages the LED light source so that constant lumen output is maintained over the system life, preventing energy waste created by the traditional practice of over-lighting.

SENSOR — **Integrated sensor (individual control):** Sensor Switch MSD7 (Passive Infrared (PIR)) integrated occupancy sensor photocell allows the luminaire to power off when the space is unoccupied. See page 4 for more details on the integrated sensor.

Integrated Sensor (nLight Wired Networking): The sensor is nLight-enabled, meaning it has the ability to communicate over an nLight network. When wired using CAT-5 cabling with other nLight-enabled sensors, power packs, or WallPods, an nLight control zone is created. Once linked to a Gateway, directly or via a Bridge, the zone becomes capable of remote status monitoring and control via SensorView software. See page 4 for the nLight sensor options.

Integrated Smart Sensor (nLight AIR Wireless Platform): The RES7 sensor is nLight AIR enabled, meaning it has the ability to communicate over the wireless nLight control platform. It is available with an automatic dimming photocell, and either a digital PIR or a dual technology occupancy sensor. It pairs to other luminaires and wall switches through our mobile app, CLAIRITY, which allows for simple sensor adjustment. See page 4 for more details on the Integrated Smart Sensor.

XPoint Wireless Networking: XPoint™ Wireless technology creates a mesh network to ensure communication between fixtures, sensors, and wall stations facility wide. This option provides superior lighting management capabilities including granular control, configuration, and custom grouping. This option enables sensors that detect motion to wirelessly communicate to neighboring fixtures — whether on different floors in a stairwell, to a corridor or hallway — illuminating the desired path.

LISTINGS — CSA certified to meet U.S. and Canadian standards. Suitable for damp location (excluding sensor option).

Patents pending. DesignLights Consortium® (DLC) qualified product. Not all versions of this product may be DLC qualified. Please check the DLC Qualified Products List at www.designlights.org/QPL to confirm which versions are qualified.

WARRANTY — 5-year limited warranty. Complete warranty terms located at: www.acuitybrands.com/CustomerResources/Terms_and_conditions.aspx

NOTE: Actual performance may differ as a result of end-user environment and application.

All values are design or typical values, measured under laboratory conditions at 25 °C.

Specifications subject to change without notice.

W SERIES

Wall bracket & Surface Mount LED



WL4

4'
LED



eldoLED



CSA+ Capable Luminaire

This item is an A+ capable luminaire, which has been designed and tested to provide consistent color appearance and out-of-the-box control compatibility with simple commissioning.

- All configurations of this luminaire meet the Acuity Brands' specification for chromatic consistency
- This luminaire is part of an A+ Certified solution for nLight® or XPoint™ Wireless control networks when ordered with drivers marked by a shaded background*

To learn more about A+, visit www.acuitybrands.com/aplus.

*See ordering tree for details

WL4 Wall Bracket & Surface Mount LED



A+ Capable options indicated by this color background.

ORDERING INFORMATION

Lead times will vary depending on options selected. Consult with your sales representative.

Example: WL4 30L EZ1 LP840

WL4		Lumens ¹		Voltage		Driver		Color temperature		nLight Interface	
Series	WL4 4' wall-mount LED	20L	2000 lumens	(blank)	MVOLT	EZ1	eldoLED dims to 1%, 0-10V	LP830	3000 K	nLight Wired	
		30L	3000 lumens	347	347V	EZB	eldoLED dims to dark, 0-10V	LP835	3500 K	(blank)	No nLight® interface
		40L	4000 lumens					LP840	4000 K	N80	nLight® with 80% lumen management
								LP850	5000 K	N80EMG	nLight® with 80% lumen management. For use with generator supply EM power ²
										N100	nLight® without lumen management
										N100EMG	nLight® without lumen management. For use with generator supply EM power ²
										nLight Wireless	
										(blank)	No nLight® interface
										NLTAIR2	nLight® Air Generation 2 enabled ³

Control ⁴	Standby mode ⁸	Options	Finish ¹¹
nLight Wired	(blank) Fixture turns off when unoccupied	EL7L 700 nominal lumen battery pack (non-CEC compliant) ¹⁰	(blank) White
(blank) No nLight control	DIM10 Fixture dims to approximately 10% light output when unoccupied	EL14L 1400 nominal lumen battery pack (non-CEC compliant) ¹⁰	
NES7 nLight® nES 7 PIR integral occupancy sensor ⁵	DIM50 Fixture dims to approximately 50% light output when unoccupied	E10WLCP EM Self-Diagnostic battery pack, 10W Constant Power, CEC compliant ¹⁰	
NESPDT7 nLight® nES PDT 7 dual technology integral occupancy control ⁵	NOC Occupancy sensor disabled ⁹	SC Surface conduit end cap provisions	
NES7ADCX nLight® nES 7 ADCX PIR integral occupancy sensor with automatic dimming photocell ⁵			
Xpoint Wireless			
XADS7 XPoint™ wireless controller and micro 360° PIR occupancy and photocell sensor ⁷			
XADNS7 XPoint™ wireless controller and micro 360° PIR occupancy and photocell sensor (egress lighting) ⁷			
nLight Wireless			
RES7 nLight® AIR PIR integral occupancy sensor with automatic dimming photocell			
RES7PDT nLight® AIR microphonics dual technology integral occupancy sensor with automatic dimming photocell			
Individual Control			
MSD7 Sensor Switch® MSD 7 PIR Integral Occupancy Control ⁶			

Notes

- 1 Approximate lumen output.
- 2 nLight EMG option requires a connection to existing nLight network. Power is provided from a separate N80 or N100 enabled fixture
- 3 Must order with RES7, RES7PDT, or module. Only available with EZ1 driver.
- 4 See sensor options on page 4.
- 5 Requires N80, N100, N80EMG, or N100EMG. Cannot be ordered with EZB and EL7L or EL14L together.
- 6 Not available with nLight options or EZB.
- 7 Not available with nLight options or Standby Mode. Gateway not included. Requires on-site commissioning. Visit www.lightingcontrols.com/XPointWireless for more information.
- 8 Requires Occupancy Control.
- 9 Only available with RES7 or RES7PDT. Occupancy sensor disabled at factory but can be re-enabled upon commissioning.
- 10 Not available with 347V. Cannot be ordered with 40L, EZB, and sensor combination.
- 11 For additional paint finishes, refer to [Architectural Colors](#).

WL4 Wall Bracket & Surface Mount LED

nLight® Wired Control Accessories:

Order as separate catalog number. Visit www.acuitybrands.com/products/controls/nlight.

WallPod stations	Model number	Occupancy sensors	Model number
On/Off	nPODM [color]	Small motion 360°, ceiling (PIR / dual tech)	nCM 9 RJB / nCM PDT 9 RJB
On/Off & raise/lower	nPODM DX [color]	Large motion 360°, ceiling (PIR / dual tech)	nCM10 RJB / nCM PDT 10 RJB
Graphic touchscreen	nPOD GFX [color]	Wall switch with raise/lower	nWSX PDT LV DX [color]
Photocell controls	Model number	Cat-5 cable (plenum rated)	Model number
Full range dimming	nCM ADCX RJB	10' cable	CAT5 10FT J1
		30' cable	CAT5 30FT J1

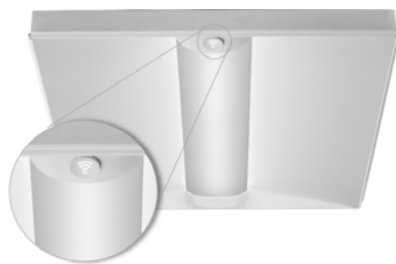
nLight® AIR Control Accessories:

Order as separate catalog number. Visit www.acuitybrands.com/products/controls/nlightair.

Wall switches	Model number
On/Off single pole	rPODB [color] G2
On/Off two pole	rPODB 2P [color] G2
On/Off & raise/lower single pole	rPODB DX [color] G2
On/Off & raise/lower two pole	rPODB 2P DX [color] G2
On/Off & raise/lower single pole	rPODBZ DX WH G2

ORDERING INFORMATION

rCMS		Example: RCMS PDT 10 AR G2				
Series/Detection	Occupancy Detection	Lens (Required)		Operating Mode		Generation
RCMS nLight AIR occupancy and daylight sensor	(blank) PIR Detection PDT Dual Tech PIR/ Microphonics	10	Large Motion/Extended Range 360°	(blank)	None	G2
		9	Small Motion/Extended Range 360°	AIR	Auxiliary Relay	Generation 2 compatibility
		6	High Bay 360° Lens			



RCMS

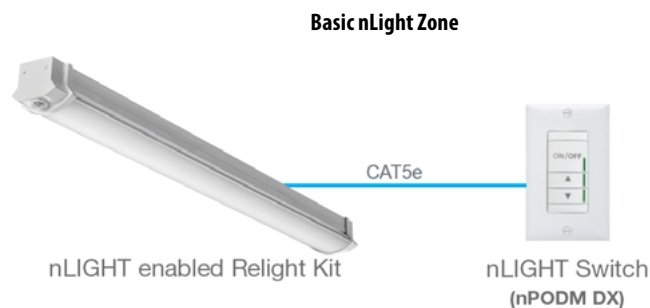


WL4 Wall Bracket & Surface Mount LED

Sensor Options					
Option	Automatic Dimming Photocell	Occupancy Sensing		nLight Wired Networking	nLight AIR Networking
		PIR	PDT		
MSD7		X			
NES7		X		X	
NES7ADCX	X	X		X	
NESPDT7			X	X	
RES7	X	X			X
RES7PDT	X	X	X		X

Integrated Sensor with Individual Control

The MSD7 PIR occupancy sensor is ideal for areas without obstructions and where daylight harvesting may be desired. Suggested applications include, but not limited to, hallways, corridors, storage rooms, and breakrooms or other areas where people are typically moving.



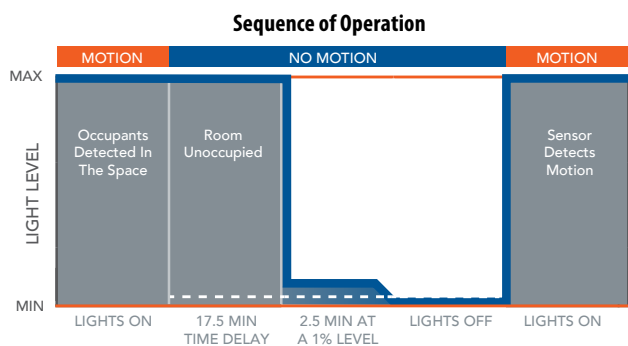
nLight Wired Networking

The nES 7 is ideal for small rooms without obstructions or areas with primarily walking motion. Ideal areas include hallways, corridors, storage rooms, and breakrooms. Additionally, the NES7ADCX includes an integrated photocell, which enables daylight harvesting controls.

For areas like restrooms, private offices, open offices, conference rooms or any space with obstructions, the nES PDT 7 dual technology sensor is recommended. The nES PDT 7 utilizes both PIR (passive infrared) and Microphonics technologies to detect occupancy.

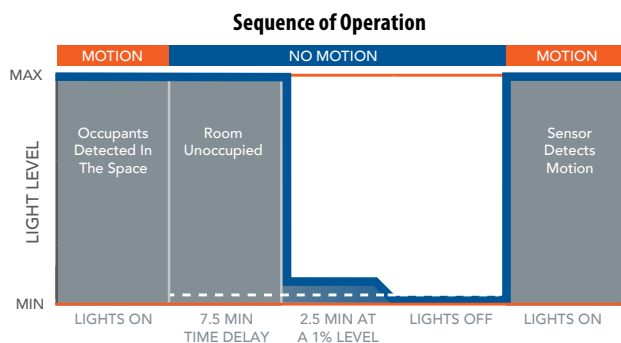
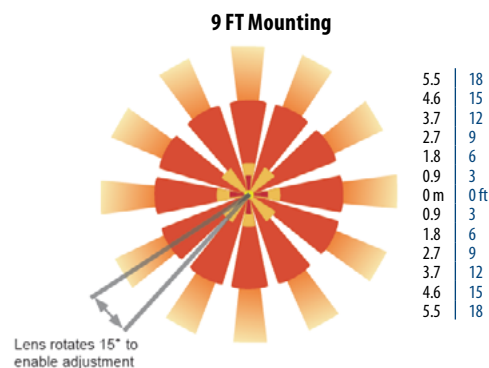
nLight AIR Wireless

nLight AIR is the ideal solution for retrofit or new construction spaces where adding additional wiring can be labor intensive and costly. nLight AIR is available with or without an integral sensor. The integrated RES7 or RES7PDT smart sensors are part of each luminaire in the nLight AIR network, which can be grouped to control multiple luminaires. The granularity of control with the digital PIR occupancy detection and daylight sensing makes a great solution for any application.

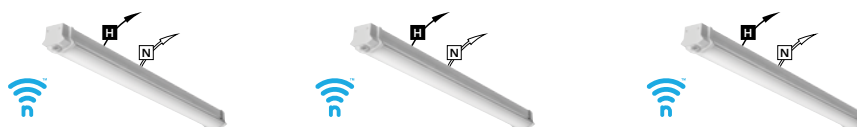


Sensor Coverage Pattern Mini 360° Lens

- Recommended for walking motion detection from mounting heights between 8 ft (2.44 m) and 20 ft (6.10 m)
- Initial detection of walking motion along sensor axes at distances of 2x the mounting height up to 15 ft (4.57 m) and 1.75x up to 20 ft (6.10 m).
- Provides 12 ft (3.66 m) radial detection of small motion when mounted at 9 ft (2.74 m)
- Initial detection will occur earlier when walking across sensor's field of view than when walking directly at sensor



*The presetting on the automatic dimming photocell is 5fc.



Simple as 1,2,3

1. Install the nLight® AIR fixtures with embedded smart sensor
2. Install the wireless battery-powered wall switch
3. With CLAIRITY app, pair the fixtures with the wall switch and if desired, customize the sensor settings for the desired outcome



WL4 Wall Bracket & Surface Mount LED

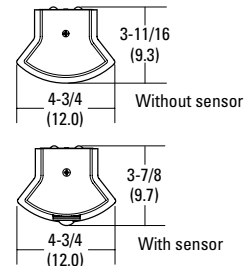
Performance Data			
Lumen package	Input watts	Lumens	LPW
20L LP830	18.7	2050	110
20L LP835	18.7	2152	115
20L LP840	18.7	2255	121
20L LP850	18.7	2410	129
30L LP830	28.2	2952	105
30L LP835	28.2	3095	110
30L LP840	28.2	3251	115
30L LP850	28.2	3239	115
40L LP830	39.5	3927	99
40L LP835	39.5	4124	104
40L LP840	39.5	4325	110
40L LP850	39.5	4571	116

DIMENSIONS

All dimensions are inches (centimeters) unless otherwise noted.

Specifications

Length: with sensor - 50-15/16 (129.40)
 without sensor - 46-13/16 (118.90)
 Height: with sensor - 3-7/8 (9.7)
 without sensor - 3-11/16 (9.3)
 Width: 4-3/4 (12.1)



How to Calculate Estimated Lumens in Emergency Mode

Use the formula below to estimate the delivered lumens in emergency mode

$$\text{Delivered Lumens} = 1.25 \times P \times \text{LPW}$$

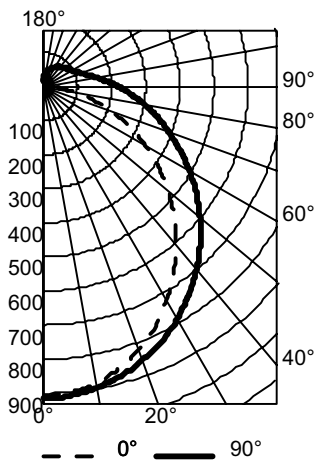
P = Output power of emergency driver. P = 10W for E10WLCP option.

LPW = Lumen per watt rating of the luminaire. This information is available on the ABL luminaire spec sheet.

LPW = Lumen per watt rating of the luminaire. LPW information available in Performance Data section.

PHOTOMETRICS

WL4 30L EZ1 LP840, 3250.8 delivered lumens, test no. LTL25482P5, tested in accordance to IESNA LM-79



CP Summary

	0°	90°
0°	912	912
5°	901	910
15°	856	879
25°	777	823
35°	666	745
45°	542	650
55°	412	549
65°	279	444
75°	151	346
85°	44	257
90°	5	219

Coefficients of Utilization

pc	20%								
	80%			70%			50%		
pw	70%	50%	30%	50%	30%	10%	50%	30%	10%
0	116	116	116	112	112	112	104	104	104
1	104	99	94	95	91	87	88	85	81
2	94	85	78	82	75	70	76	71	66
3	85	74	66	72	64	57	67	60	55
4	78	66	56	63	55	48	59	52	46
5	72	58	49	57	48	42	53	46	40
6	66	52	43	51	42	36	48	40	35
7	61	47	39	46	38	32	43	36	31
8	57	43	35	42	34	28	40	32	27
9	53	40	31	39	31	25	36	29	25
10	50	37	29	36	28	23	34	27	22

Zonal Lumen Summary

Zone	Lumens	% Lamp	% Fixture
0° - 30°	701	21.6	21.6
0° - 40°	1143	35.2	35.2
0° - 60°	2032	62.5	62.5
0° - 90°	2829	87.0	87.0
90° - 120°	256	7.9	7.9
90° - 130°	310	9.5	9.5
90° - 150°	386	11.9	11.9
90° - 180°	421	13.0	13.0
0° - 180°	3251	100.0	100.0

MOUNTING DATA

For unit installation; surface ceiling or wall mounting.

