

FEATURES & SPECIFICATIONS

INTENDED USE — The VT Series Volumetric LED Troffer (VTL) combines the aesthetics and high performance with intelligent LED engines for applications such as offices, schools, retail locations and hospitals. High-efficacy light engines deliver long life and excellent color, ensuring a superior quality lighting installation that is highly efficient and sustainable. Multiple lumen packages and driver options provide solutions for all your lighting applications. Featured nLight control system provides design flexibility and ease of installation and optimum energy savings.

CONSTRUCTION — Rugged, one-piece cold-rolled steel coated polyester, painted after fabrication with embossed facets. Impact-modified, single clear acrylic diffuser provides excellent shielding and wide distribution. End plates include integral T-bar clips. Fixture may be mounted and wired in continuous rows. Total fixture height is only 4-3/8".

OPTICS — Volumetric illumination is achieved by creating an optimal mix of light to walls, partitions, vertical and horizontal work surfaces — rendering the interior space, objects and occupants in a more balanced, complementary luminous environment. Linear faceted reflector cavity softens and distributes light into the space while minimizing luminous contrast between the fixture and ceiling. Sloped end plates provide a smooth, luminous transition between fixture and ceiling while enhancing the perception of fixture depth. High-performance diffuser provides LED concealment, even illumination across the diffuser and improved lumen-per-watt performance.

Now available with two different aesthetics including the standard Acrylic Linear Prismatic Diffuser (ADP) and the Acrylic Linear Prismatic Diffuser with Diffuser Trim Rings (ADPT).

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).

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

Optional integrated nLight® controls make each luminaire addressable - allowing it to digitally communicate with other nLight enabled controls such as dimmers, switches, occupancy sensors and photocontrols. Simply connect all the nLight enabled control devices and the VTL luminaires using standard Cat-5 cabling. Unique plug-and-play convenience as devices and luminaires automatically discover each other and self-commission.

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 the energy waste created by the traditional practice of over-lighting.

Step-level dimming option allows system to be switched to 50% power for compliance with common energy codes while maintaining fixture appearance.

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

SENSOR — **Integrated sensor (individual control):** Sensor Switch MSD7ADCX ((Passive infrared (PIR)) or MSDPDT7ADCX ((PIR/Microphonics Dual Tech (PDT)) integrated occupancy sensor/automatic dimming photocell allows the luminaire to power off when the space is unoccupied or enough ambient light is entering the space. See page 2 for more details on the integrated sensor.

Integrated Sensor (nLight Wired Networking): This 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

Catalog Number
Notes
Type



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 2 for the nLight sensor options.

INSTALLATION — Unique grid interfacing arrangement provides mounting into standard 1" and 9/16" tee bar or screw slot grids. 9/16" allows fixture trim to hang level with architectural ceiling tiles. Drywall ceiling adaptors available. Suitable for damp location.

LISTINGS — CSA Certified to meet U.S. and Canadian standards. IC rated. 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/OPL 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.

ORDERING INFORMATION

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

Example: 2VTL4 40L ADPT EZ1 LP840 N100 NES7

2VTL4		Lumens		Diffuser		Voltage		Driver		Color temperature	
Series	Air function										
2VTL4 2X4 VTL	(blank) Static H Heat removal	30L 3000 ¹ 40L 4000 ¹ 48L 4800 ¹ 60L 6000 ¹ 72L 7200 ¹		ADP Acrylic linear prismatic ADPT Acrylic linear prismatic with diffuser trim rings		(blank) MVOLT 347 347 ²		EZ1 eldoLED dims to 1% (0-10 volt dimming) EZB eldoLED dims to dark (0-10 volt dimming) EDB eldoLED DALI ³ EXB eldoLED DMX/RDM ³ SLD Step-level dimming ³ EXA1 Dims to 1%, XPoint wireless enabled ⁴ EXAB Dims to dark, XPoint wireless enabled ⁴		LP830 82CRI, 3000 K LP835 82CRI, 3500 K LP840 82CRI, 4000 K LP850 82CRI, 5000 K	
Controls		Occupancy Control⁶						Options			
(blank)	No nLight®	(blank)	No sensor control					Xpoint Wireless Networking		EL7L 700 lumen battery pack	
N80	nLight® with 80% lumen management	NES7	nLight™ nES 7 PIR integral occupancy sensor ⁷			XADS7		Xpoint™ micro 360° PIR occupancy sensor and automatic dimming photocell ^{4,8,9}		EL14L 1400 lumen battery pack	
N80EMG	nLight™ with 80% lumen management For use with generator supply EM power ⁵	NESPDT7	nLight™ nES PDT 7 dual technology integral occupancy control ⁷					Individual Control		CP Chicago plenum	
N100	nLight™ without lumen management	NES7ADCX	nLight™ nES 7 ADCX PIR integral occupancy sensor with automatic dimming photocell ⁷			MSD7ADCX		PIR integral occupancy sensor with automatic dimming control photocell ^{8,10}			
N100EMG	nLight® without lumen management For use with generator supply EM power ⁵	NESPDT7ADCX	nLight™ nES PDT 7 dual technology integral occupancy sensor with automatic dimming photocell ⁷			MSDPDT7ADCX		PDT integral occupancy sensor with automatic dimming control photocell ^{8,10}			

Notes

- 1 Approximate lumen output.
- 2 Consult factory for availability. Not available with SLD, EL7L or EL14 battery packs.
- 3 Not available with N80, N80EMG, N100 or N100EMG.
- 4 Gateway not included. Requires on-site commissioning. Visit www.lightingcontrols.com/XPointWireless for more information.
- 5 nLight EMG option requires a connection to existing nLight network. Power is provided from a separate N80 or N100 enabled fixture.
- 6 Must specify ADPT diffuser. See sensor section on page 2.
- 7 Requires N80, N80EMG, N100, or N100EMG.
- 8 Not available with N80, N80EMG, N100, or N100EMG.
- 9 Only available with EXA1 or EXAB driver options.
- 10 Only available with EZ1 driver option. 0-10v dimming wires not accessible via access plate.

Accessories: Order as separate catalog number.	
2VT4 F916	Trim to adjust fixture mounting flush with 9/16" T-bar; for 2x4 fixture
DGA24 FS/VT	Drywall ceiling adapter with trim kit

2VTL Volumetric Recessed Lighting 2'x4'

Performance Data			
Lumen Package	Lumens	Input Watts ³	LPW
30L LP830	3168.4	30.76	103.0
30L LP835	3326.1	30.76	108.1
30L LP840	3677.2	30.76	119.5
30L LP850	3665.8	30.76	119.2
40L LP830	3992.1	38.98	102.4
40L LP835	4210.7	38.98	108.0
40L LP840	4315.3	38.98	110.7
40L LP850	4622.6	38.98	118.6
48L LP830	4619.5	46.43	99.5
48L LP835	4879.3	46.43	105.1
48L LP840	4993.3	46.43	107.5
48L LP850	5354.5	46.43	115.3
60L LP830	5069.4	52.15	97.2
60L LP835	5351.3	52.15	102.6
60L LP840	5500.3	52.15	105.5
60L LP850	5867.8	52.15	112.5
72L LP830	6751.8	69.25	97.5
72L LP835	6884.8	69.25	99.4
72L LP840	7394.9	69.25	106.8
72L LP850	7803.7	69.25	112.7

Note: Based on ADP diffuser

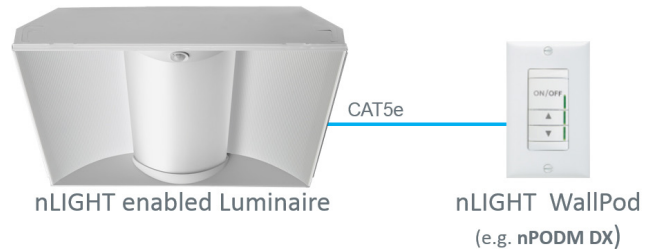
Integrated Sensor with Individual Control

The MSD7ADCX PIR occupancy sensor/automatic dimming photocell 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.

The MSDPDT7ADCX PIR/Microphonics Dual Tech occupancy sensor/automatic dimming photocell is ideal for areas with obstructions and where daylight harvesting is desired. Suggested applications include, but not limited to, open offices, private offices, classrooms, public restrooms, and conference rooms.

Sensor Options					
Option	Automatic Dimming Photocell	Occupancy Sensing		nLight Wired Networking	Xpoint Wireless Networking
		PIR	PDT		
MSD7ADCX	X	X			
MSDPDT7ADCX	X		X		
NES7		X		X	
NES7ADCX	X	X		X	
NESPDT7			X	X	
NESPDT7ADCX	X		X	X	
XADS7	X	X			X

Basic nLight Zone

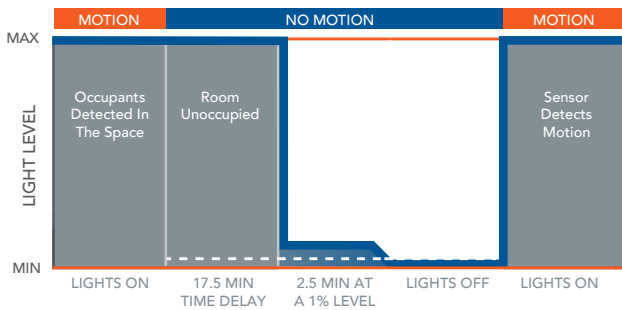


nLight Wired Networking

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.

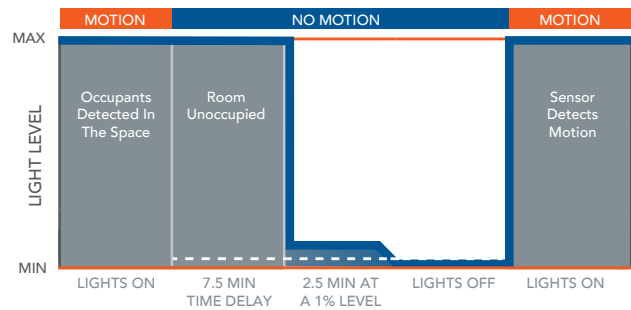
For areas like restrooms, private offices, open offices, conference rooms or any space with obstructions, the nES PDT 7 dual technology sensor is recommended. The nES PDT 7 utilizes both PIR (passive infrared) and Microphonics technologies to detect occupancy. Additionally, the NESPDT7ADCX includes an integrated photocell, which enables daylight harvesting controls which is ideal for areas where windows are present.

Sequence of Operation



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

Sequence of Operation

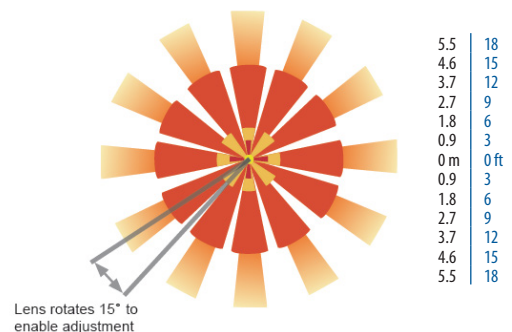


*The presetting on the automatic dimming photocell is 5fc.

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

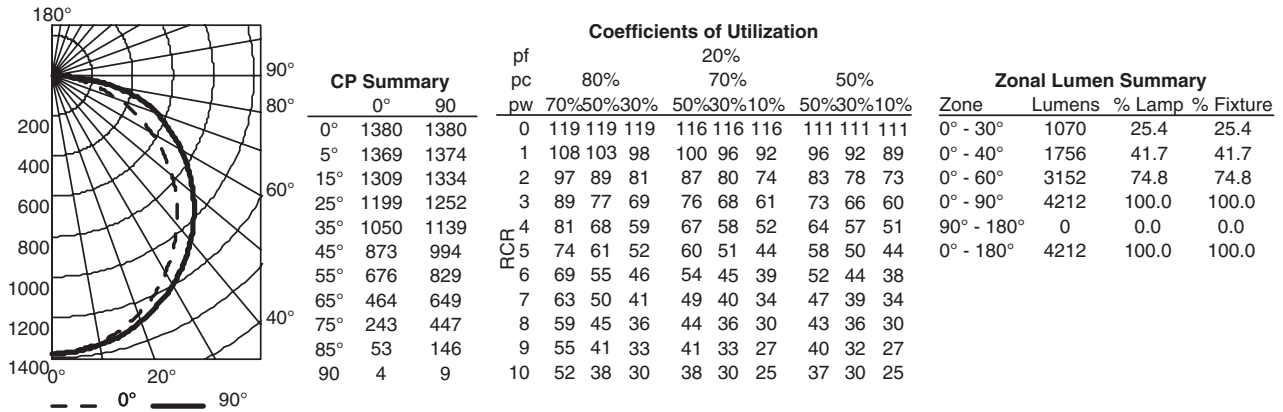
9 FT Mounting



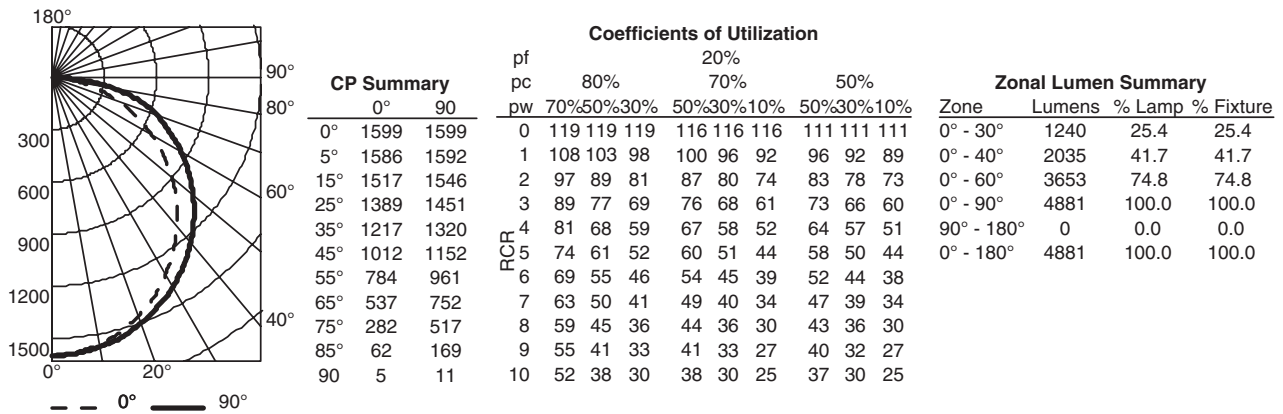
2VTL Volumetric Recessed Lighting 2'x4'

PHOTOMETRICS

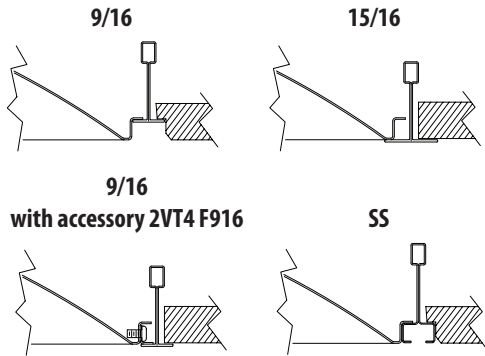
2VTL4 40L ADP LP835, 4211 delivered lumens, test no. LTL24782P4, tested in accordance to IESNA LM-79



2VTL4 48L ADP LP835, 4879 delivered lumens, test no. LTL24782P8, tested in accordance to IESNA LM-79



Mounting data



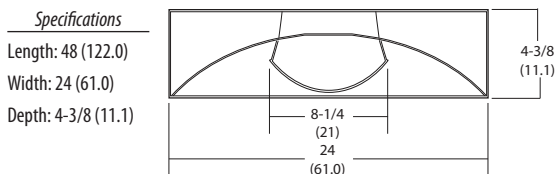
nLight® Control Accessories:

Order as separate catalog number. Visit www.sensorswitch.com/nLight for complete listing of nLight controls.

WallPod stations	Model number	Occupancy sensors	Model number
On/Off	nPODM [color]	Small motion 360°, ceiling (PIR / dual tech)	nCM 9 / nCM PDT 9
On/Off & Raise/Lower	nPODM DX [color]	Large motion 360°, ceiling (PIR / dual tech)	nCM 10 / nCM PDT 10
Graphic Touchscreen	nPOD GFX	Wall switch with raise/lower	nWSXPDTLVDX
Photocell controls	Model number	Cat-5 cable bundles (plenum rated)	Model number
On/Off & Dimming	nCM ADXC	10', 15 pieces per bundle	CAT5 10FT
		30', 15 pieces per bundle	CAT5 30FT

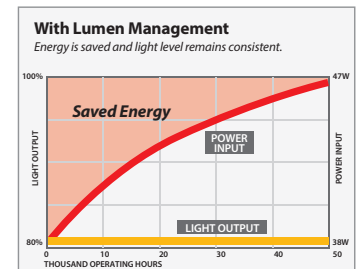
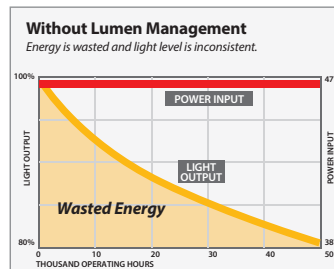
Dimensions

All dimensions are inches (centimeters) unless otherwise specified.



Constant Lumen Management

Enabled by the embedded nLight control, the VTL actively tracks its run-time and manages its light source such that constant lumen output is maintained over the system life. Referred to as lumen management, this feature eliminates the energy waste created by the traditional practice of over-lighting.



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CONSTRUCTION — Rugged, one-piece cold-rolled steel coated polyester, painted after fabrication with embossed facets. Impact-modified, single clear acrylic diffuser provides excellent shielding and wide distribution. End plates include integral T-bar clips. Fixture may be mounted and wired in continuous rows. Total fixture height is only 4-3/8".

OPTICS — Volumetric illumination is achieved by creating an optimal mix of light to walls, partitions, vertical and horizontal work surfaces — rendering the interior space, objects and occupants in a more balanced, complementary luminous environment. Linear faceted reflector cavity softens and distributes light into the space while minimizing luminous contrast between the fixture and ceiling. Sloped end plates provide a smooth, luminous transition between fixture and ceiling while enhancing the perception of fixture depth. High-performance diffuser provides LED concealment, even illumination across the diffuser and improved lumen-per-watt performance.

Now available with two different aesthetics including the standard Acrylic Linear Prismatic Diffuser (ADP) and the Acrylic Linear Prismatic Diffuser with Diffuser Trim Rings (ADPT).

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).

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

Optional integrated nLight® controls make each luminaire addressable - allowing it to digitally communicate with other nLight enabled controls such as dimmers, switches, occupancy sensors and photocontrols. Simply connect all the nLight enabled control devices and the VTLED luminaires using standard Cat-5 cabling. Unique plug-and-play convenience as devices and luminaires automatically discover each other and self-commission.

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

Step-level dimming option allows system to be switched to 50% power for compliance with common energy codes while maintaining fixture appearance.

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

SENSOR — **Integrated sensor (individual control):** Sensor Switch MSD7ADCX ((Passive infrared (PIR)) or MSDPDT7ADCX ((PIR/Microphonics Dual Tech (PDT)) integrated occupancy sensor/automatic dimming photocell allows the luminaire to power off when the space is unoccupied or enough ambient light is entering the space. See page 2 for more details on the integrated sensor.

Catalog Number
Notes
Type



Integrated Sensor (nLight Wired Networking): This 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 2 for the nLight sensor options.

INSTALLATION — Unique grid interfacing arrangement provides mounting into standard 1" and 9/16" tee bar or screw slot grids. 9/16" allows fixture trim to hang level with architectural ceiling tiles. Drywall ceiling adaptors available. Suitable for damp location.

LISTINGS — CSA Certified to meet U.S. and Canadian standards. IC rated. 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.

ORDERING INFORMATION

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

Example: 2VTL2 40L ADPT EZ1 LP840 MSD7ADCX

Series	Air function	Lumens	Diffuser	Voltage	Driver	Color temperature
2VTL2 2X2 VTL	(blank) Static H Heat removal	20L 2000 ¹ 33L 3300 ¹ 40L 4000 ¹	ADP Acrylic linear prismatic ADPT Acrylic linear prismatic with diffuser trim rings	(blank) MVOLT 347 347 ²	EZ1 eldoLED dims to 1% (0-10 volt dimming) EZB eldoLED dims to dark (0-10 volt dimming) EDB eldoLED DALI ³ EXB eldoLED DMX/RDM ³ SLD Step-level dimming ³ EXA1 Dims to 1%, XPoint wireless enabled ⁴ EXAB Dims to dark, XPoint wireless enabled ⁴	LP830 82CRI, 3000 K LP835 82CRI, 3500 K LP840 82CRI, 4000 K LP850 82CRI, 5000 K

Controls	Occupancy Control ⁶	Options
(blank) No nLight® N80 nLight® with 80% lumen management N80EMG nLight® with 80% lumen management For use with generator supply EM power ⁵ N100 nLight® without lumen management N100EMG nLight® without lumen management For use with generator supply EM power ⁵	(blank) No sensor control nLight Wired Networking NES7 nLight™ nES 7 PIR integral occupancy sensor ⁷ NESPDT7 nLight™ nES PDT 7 dual technology integral occupancy control ⁷ NES7ADCX nLight™ nES 7 ADCX PIR integral occupancy sensor with automatic dimming photocell ⁷ NESPDT7ADCX nLight™ nES PDT 7 dual technology integral occupancy sensor with automatic dimming photocell ⁷	Xpoint Wireless Networking XADS7 Xpoint™ micro 360° PIR occupancy sensor and automatic dimming photocell ^{4,8,9} Individual Control MSD7ADCX PIR integral occupancy sensor with automatic dimming control photocell ^{8,10} MSDPDT7ADCX PDT integral occupancy sensor with automatic dimming control photocell ^{8,10}
		EL7L 700 lumen battery pack EL14L 1400 lumen battery pack CP Chicago plenum

Accessories: Order as separate catalog number.
2VT2 F916 Trim to adjust fixture mounting flush with 9/16" T-bar; for 2x2 fixture
DGA22 FS/VT Drywall ceiling adapter with trim kit

Notes

- 1 Approximate lumen output.
- 2 Consult factory for availability. Not available with SLD,EL7L or EL14 battery packs.
- 3 Not available with N80, N80EMG, N100 or N100EMG.
- 4 Gateway not included. Requires on-site commissioning. Visit www.lightingcontrols.com/XPointWireless for more information.
- 5 nLight EMG option requires a connection to existing nLight network. Power is provided from a separate N80 or N100 enabled fixture.
- 6 Must specify ADPT diffuser. See sensor section on page 2.
- 7 Requires N80, N80EMG, N100, or N100EMG.
- 8 Not available with N80, N80EMG, N100, or N100EMG.
- 9 Only available with EXA1 or EXAB driver options.
- 10 Only available with EZ1 driver option. 0-10v dimming wires not accessible via access plate.

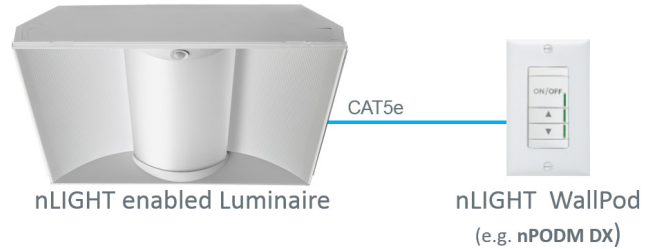
2VTL Volumetric Recessed Lighting 2'x2'

Performance Data			
Lumen Package	Lumens	Input Watts ³	LPW
20L LP830	2044.0	20.39	100.2
20L LP835	2196.0	20.39	107.7
20L LP840	2241.0	20.51	109.3
20L LP850	2401.0	20.51	117.1
33L LP830	3357.0	34.31	97.8
33L LP835	3564.0	34.5	103.3
33L LP840	3670.0	34.59	106.1
33L LP850	3911.0	34.71	112.7
40L LP830	3919.0	41.27	95.0
40L LP835	4179.0	41.42	100.9
40L LP840	4271.0	41.66	102.5
40L LP850	4543.0	41.81	108.7

Note: Based on ADP diffuser

Sensor Options					
Option	Automatic Dimming Photocell	Occupancy Sensing		nLight Wired Networking	Xpoint Wireless Networking
		PIR	PDT		
MSD7ADCX	X	X			
MSDPDT7ADCX	X		X		
NES7		X		X	
NES7ADCX	X	X		X	
NESPDT7			X	X	
NESPDT7ADCX	X		X	X	
XADS7	X	X			X

Basic nLight Zone



Integrated Sensor with Individual Control

The MSD7ADCX PIR occupancy sensor/automatic dimming photocell 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.

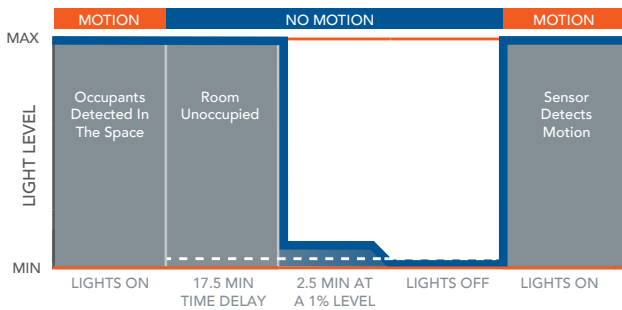
The MSDPDT7ADCX PIR/Microphonics Dual Tech occupancy sensor/automatic dimming photocell is ideal for areas with obstructions and where daylight harvesting is desired. Suggested applications include, but not limited to, open offices, private offices, classrooms, public restrooms, and conference rooms.

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.

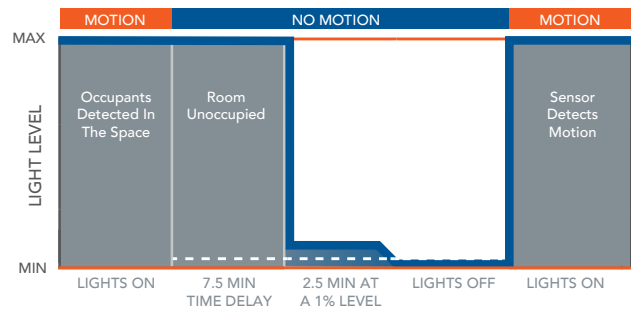
For areas like restrooms, private offices, open offices, conference rooms or any space with obstructions, the nES PDT 7 dual technology sensor is recommended. The nES PDT 7 utilizes both PIR (passive infrared) and Microphonics technologies to detect occupancy. Additionally, the NESPDT7ADCX includes an integrated photocell, which enables daylight harvesting controls which is ideal for areas where windows are present.

Sequence of Operation



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

Sequence of Operation

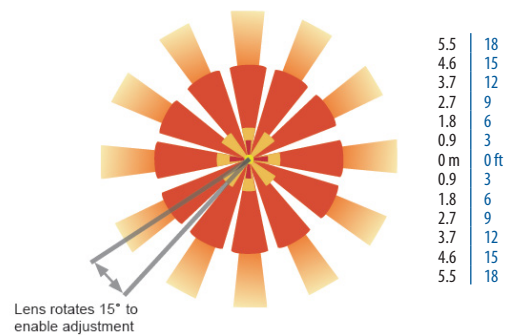


*The presetting on the automatic dimming photocell is 5fc.

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

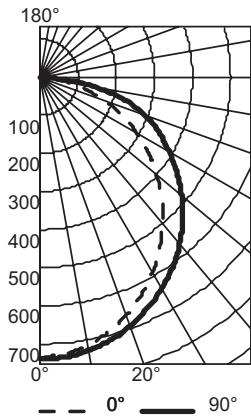
9 FT Mounting



2VTL Volumetric Recessed Lighting 2'x2'

PHOTOMETRICS

2VTL2 20L ADP LP835, 2196 delivered lumens, test no. LTL24790P, tested in accordance to IESNA LM-79



CP Summary

	0°	90
0°	737	737
5°	729	737
15°	692	714
25°	630	669
35°	547	607
45°	451	529
55°	347	440
65°	236	344
75°	123	229
85°	28	62
90	2	2

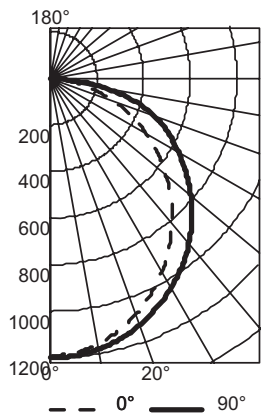
Coefficients of Utilization

RCR	pf	pc	20%									
			80%			70%			50%			
			pw	70%	50%	30%	50%	30%	10%	50%	30%	10%
0	0	0	119	119	119	116	116	116	111	111	111	111
1	1	1	108	103	98	101	96	93	96	93	90	90
2	2	2	98	89	82	87	81	75	84	78	73	73
3	3	3	89	78	69	76	68	62	73	66	61	61
4	4	4	81	69	60	67	59	52	65	57	52	52
5	5	5	75	61	52	60	51	45	58	50	44	44
6	6	6	69	55	46	54	46	39	52	45	39	39
7	7	7	64	50	41	49	41	35	48	40	34	34
8	8	8	59	46	37	45	37	31	43	36	31	31
9	9	9	55	42	33	41	33	28	40	33	28	28
10	10	10	52	39	31	38	30	25	37	30	25	25

Zonal Lumen Summary

Zone	Lumens	% Lamp	% Fixture
0° - 30°	569	25.9	25.9
0° - 40°	931	42.4	42.4
0° - 60°	1663	75.7	75.7
0° - 90°	2197	100.0	100.0
90° - 180°	0	0.0	0.0
0° - 180°	2197	100.0	100.0

2VTL2 33L ADP L835, 3564 delivered lumens, test no. LTL24790P4, tested in accordance to IESNA LM-79



CP Summary

	0°	90
0°	1196	1196
5°	1182	1196
15°	1123	1158
25°	1022	1085
35°	888	985
45°	732	858
55°	563	713
65°	384	558
75°	199	371
85°	45	101
90	3	3

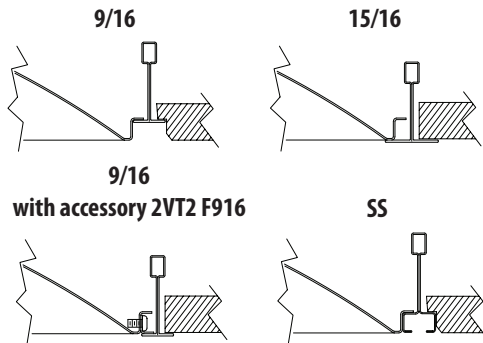
Coefficients of Utilization

RCR	pf	pc	20%									
			80%			70%			50%			
			pw	70%	50%	30%	50%	30%	10%	50%	30%	10%
0	0	0	119	119	119	116	116	116	111	111	111	111
1	1	1	108	103	98	101	96	93	96	93	90	90
2	2	2	98	89	82	87	81	75	84	78	73	73
3	3	3	89	78	69	76	68	62	73	66	61	61
4	4	4	81	69	60	67	59	52	65	57	52	52
5	5	5	75	61	52	60	51	45	58	50	44	44
6	6	6	69	55	46	54	46	39	52	45	39	39
7	7	7	64	50	41	49	41	35	48	40	34	34
8	8	8	59	46	37	45	37	31	43	36	31	31
9	9	9	55	42	33	41	33	28	40	33	28	28
10	10	10	52	39	31	38	30	25	37	30	25	25

Zonal Lumen Summary

Zone	Lumens	% Lamp	% Fixture
0° - 30°	923	25.9	25.9
0° - 40°	1511	42.4	42.4
0° - 60°	2698	75.7	75.7
0° - 90°	3565	100.0	100.0
90° - 180°	0	0.0	0.0
0° - 180°	3565	100.0	100.0

Mounting Data



nLight® Control Accessories:

Order as separate catalog number. Visit www.sensorswitch.com/nLight for complete listing of nLight controls.

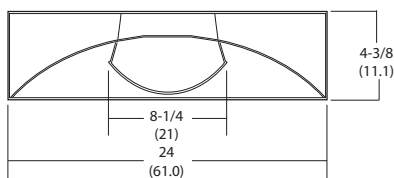
WallPod stations	Model number	Occupancy sensors	Model number
On/Off	nPODM [color]	Small motion 360°, ceiling (PIR / dual tech)	nCM 9 / nCM PDT 9
On/Off & Raise/Lower	nPODM DX [color]	Large motion 360°, ceiling (PIR / dual tech)	nCM 10 / nCM PDT 10
Graphic Touchscreen	nPOD GFX	Wall switch with raise/lower	nWSXPDTLVDX
Photocell controls	Model number	Cat-5 cable bundles (plenium rated)	Model number
On/Off & Dimming	nCM ADCX	10', 15 pieces per bundle	CAT5 10FT
		30', 15 pieces per bundle	CAT5 30FT

Dimensions

All dimensions are inches (centimeters) unless otherwise specified.

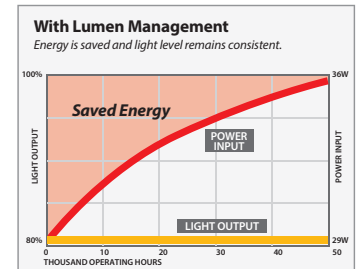
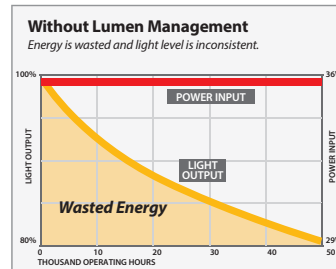
Specifications

Length: 24 (61.0)
Width: 24 (61.0)
Depth: 4-3/8 (11.1)



Constant Lumen Management

Enabled by the embedded nLight control, the VTL actively tracks its run-time and manages its light source such that constant lumen output is maintained over the system life. Referred to as lumen management, this feature eliminates the energy waste created by the traditional practice of over-lighting.



FEATURES & SPECIFICATIONS

INTENDED USE

Provides task or accent lighting in commercial, retail, hospitality and residential applications. Ideal for use under and over cabinets, display cases, task lighting, office lighting, coves and utility/work areas.

ATTRIBUTES

Durable aluminum construction in a low-profile design. Can be plugged in or direct-wired (splice box and 24" connector cord required for direct-wiring).

Link up to 10' of modular system to one transformer (required, sold separately). Fixtures can be linked end-to-end with the end row connector (sold separately). All fixtures include a 18" linking cord. 3", 24" and 121" connector cords may also be purchased separately.

LEDs have a 50,000 hour L70 rated life. Provides warm color temperature, 3,000K with CRI 85, and even illumination.

Dimmable when used with the optional step dimmer.

All mounting hardware included. Mounting clips allow for quick & easy installation flush or at 30°. All configurations tested to IES LM79 standards.

LISTING

CUL listed to US and Canadian safety standards.

WARRANTY

3-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.

Catalog Number
Notes
Type

Indoor General Purpose

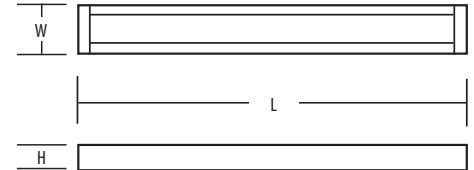
Rayzer™ Modular LED Lighting System



RAYZER™
LED MODULAR LIGHTING SYSTEM

Specifications

Length: RAZ9	-	9-1/4 (23.5)
RAZ12	-	12-1/4 (31.1)
RAZ18	-	18-1/4 (46.4)
RAZ24	-	24-1/4 (61.6)



Width:	1-1/4 (3.18)
Height:	1/2" (1.27)

All dimensions are in inches (centimeters)

ORDERING INFORMATION

For shortest lead times, configure products using **bolded options**.

Example: RAZ18

Series ^{1,2}	Options
RAZ9 9" length - 3 LEDs	(Consult factory)
RAZ12 12" length - 4 LEDs	
RAZ18 18" length - 6 LEDs	
RAZ24 24" length - 8 LEDs	

Accessories / Replacement Parts ^{1,2}			
RAZTRANS24 120	24v transformer - 120v power source	RAZ ERC	End row connector
RAZTRANS24 MVOLT	24v transformer - Multi-Volt power source	RAZ PHD	Power hub distributor
RAZDIM	Step dimmer with remote touch pad	RAZ INLS26	In-line power switch
RAZ CC121	121" linking cord (fixture to fixture)	UCD JB	Splice box - white (required for direct wire)
RAZ CC24	24" linking cord (fixture to fixture)	UCD JB BL	Splice box - black (required for direct wire)
RAZ CC3	3" linking cord (fixture to fixture)	UC ERC24 R12	24" connector cord - white (required for direct wire)
RAZLVCC	Low voltage linking cord (cord to cord)	UC ERC24 BL	24" connector cord - black (required for direct wire)

Notes:

- Link up to 10' of modular system to one transformer.
- Transformer is required for operation.

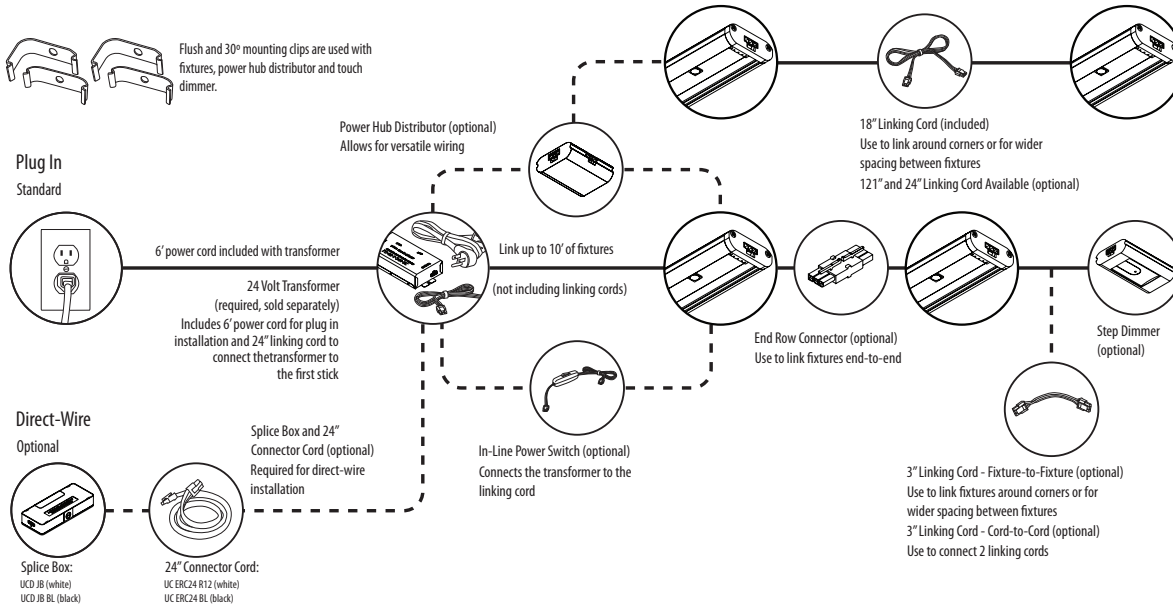
Rayzer™ LED Modular Lighting System

Full photometric data report available within 2 weeks from request. Consult factory.

9"	12"	18"	24"
<p>Acuity Brands Lighting</p> <p>lighting facts^{CM}</p> <p>A Program of the U.S. DOE</p> <p>Light Output (Lumens) 175</p> <p>Watts 5.4</p> <p>Lumens per Watt (Efficacy) 32</p> <p>Color Accuracy 85</p> <p>Color Rendering Index (CRI)</p> <p>Light Color 3000 (Bright White)</p> <p>Correlated Color Temperature (CCT)</p> <p>Warm White 3000K Bright White 4500K Daylight 6500K</p> <p>All results are according to IESNA LM-79-2008: Approved Method for the Electrical and Photometric Testing of Solid-State Lighting. The U.S. Department of Energy (DOE) verifies product test data and results.</p> <p>Visit www.lightingfacts.com for the Label Reference Guide.</p> <p>Registration Number: NISM-1F11Y2 Model Number: RAZ9 (with RAZTRANS24 120 power supply) Type: Under-cabinet kitchen lights</p>	<p>Acuity Brands Lighting</p> <p>lighting facts^{CM}</p> <p>A Program of the U.S. DOE</p> <p>Light Output (Lumens) 239</p> <p>Watts 7.12</p> <p>Lumens per Watt (Efficacy) 33</p> <p>Color Accuracy 85</p> <p>Color Rendering Index (CRI)</p> <p>Light Color 3000 (Bright White)</p> <p>Correlated Color Temperature (CCT)</p> <p>Warm White 3000K Bright White 4500K Daylight 6500K</p> <p>All results are according to IESNA LM-79-2008: Approved Method for the Electrical and Photometric Testing of Solid-State Lighting. The U.S. Department of Energy (DOE) verifies product test data and results.</p> <p>Visit www.lightingfacts.com for the Label Reference Guide.</p> <p>Registration Number: NISM-1S7U7X Model Number: RAZ12 (with RAZTRANS24 120 power supply) Type: Under-cabinet kitchen lights</p>	<p>Acuity Brands Lighting</p> <p>lighting facts^{CM}</p> <p>A Program of the U.S. DOE</p> <p>Light Output (Lumens) 353</p> <p>Watts 9.7</p> <p>Lumens per Watt (Efficacy) 36</p> <p>Color Accuracy 85</p> <p>Color Rendering Index (CRI)</p> <p>Light Color 3000 (Bright White)</p> <p>Correlated Color Temperature (CCT)</p> <p>Warm White 3000K Bright White 4500K Daylight 6500K</p> <p>All results are according to IESNA LM-79-2008: Approved Method for the Electrical and Photometric Testing of Solid-State Lighting. The U.S. Department of Energy (DOE) verifies product test data and results.</p> <p>Visit www.lightingfacts.com for the Label Reference Guide.</p> <p>Registration Number: NISM-RY2L37 Model Number: RAZ18 (with RAZTRANS24 120 power supply) Type: Under-cabinet kitchen lights</p>	<p>Lithonia Lighting</p> <p>lighting facts^{CM}</p> <p>A Program of the U.S. DOE</p> <p>Light Output (Lumens) 441</p> <p>Watts 13.14</p> <p>Lumens per Watt (Efficacy) 33</p> <p>Color Accuracy 85</p> <p>Color Rendering Index (CRI)</p> <p>Light Color 3000 (Bright White)</p> <p>Correlated Color Temperature (CCT)</p> <p>Warm White 3000K Bright White 4500K Daylight 6500K</p> <p>All results are according to IESNA LM-79-2008: Approved Method for the Electrical and Photometric Testing of Solid-State Lighting. The U.S. Department of Energy (DOE) verifies product test data and results.</p> <p>Visit www.lightingfacts.com for the Label Reference Guide.</p> <p>Registration Number: NISM-24BQHB Model Number: RAZ24 (w/ RAZTRANS24 120 power supply) Type: Under-cabinet kitchen lights</p>

INSTALLATION DIAGRAM

Note: Fixture includes 18" linking cord, mounting clips for flush or 30° mounting, and screws.



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 reflector. Optically engineered for superior light distribution and maximum efficacy.

Crescent-shape linear faceted reflector 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 choices 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.

CONTROLS — 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.

Integral occupancy control: Integrated occupancy sensors allow luminaire to power off or dim to 10% or 50% output when space is unoccupied. Fixture designed to fail on.

The nES 7 is ideal for small rooms without obstructions or areas with primarily walking motion (e.g. corridors, stairwells). Additionally, the NES7ADCX includes an integrated photocell, which enables daylight harvesting.

For rooms like restrooms and private offices 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.

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

Catalog Number
Notes
Type

W SERIES

Wall bracket & Surface Mount LED



WL4

4'
LED



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.

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.

ORDERING INFORMATION

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

Example: WL4 30L EZ1 LP840

Series	Lumens ¹	Voltage	Driver	Color temperature	Lumen management
WL4 4' wall-mount LED	20L 2000 lumens 30L 3000 lumens 40L 4000 lumens	(blank) MVOLT (120 - 277V) 347 347V	EZ1 eldoLED dims to 1%, 0-10V EZB eldoLED dims to dark, 0-10V SLD Step-level dimming ²	LP830 3000 K LP835 3500 K LP840 4000 K LP850 5000 K	(blank) No nLight N80 nLight with 80% lumen management N100 nLight without lumen management N80EMG nLight with 80% lumen management for use with generator supply emergency power ³ N100EMG nLight without lumen management for use with generator supply emergency power ³

Occupancy control ⁴	Standby mode ¹⁰	Options	Finish ¹²
NES7 Sensor Switch® nES 7 PIR integral occupancy sensor ⁵	(blank) Fixture turns off when unoccupied	EL7L LED Emergency battery pack (nominal 700 lumens); see Life Safety section ¹¹	(blank) White
NESPD7 Sensor Switch® nES PDT 7 dual technology integral occupancy control ⁵	DIM10 Fixture dims to approximately 10% light output when unoccupied	EL14L LED Emergency battery pack (nominal 1400 lumens); see Life Safety section ¹¹	
NES7ADCX Sensor Switch® nES 7 ADCX PIR integral occupancy sensor with automatic dimming control photocell ⁵	DIM50 Fixture dims to approximately 50% light output when unoccupied ⁸	SC Surface conduit end cap provisions	
XADS7 XPoint™ Wireless controller and micro 360° PIR occupancy and photocell sensor ^{6,7}			
XADNS7 XPoint™ Wireless controller and micro 360° PIR occupancy and photocell sensor (egress lighting) ^{6,7}			
MSD7 Sensor Switch® MSD 7 PIR integral occupancy sensor ^{8,9}			

Notes

- 1 Approximate lumen output.
- 2 Not available with XPoint™ Wireless or nLight options.
- 3 nLight EMG option requires a connection to existing nLight network. Power is provided from a separate N80 or N100 enabled fixture.
- 4 See integral occupancy control section in header.
- 5 Requires N80 or N100.
- 6 Select (blank) under "Lumen management" for this option.
- 7 Gateway not included. Requires on-site commissioning. Visit www.lightingcontrols.com/XPointWireless for more information.
- 8 Not available with EZB or SLD.
- 9 Requires DIM10 or DIM50.
- 10 Requires occupancy control. For XPoint™ Wireless select (blank). Standby mode is programmed at time of commissioning.
- 11 Not available with 347V.
- 12 For additional paint finishes refer to Architectural Colors.

WL4 Wall Bracket & Surface Mount LED

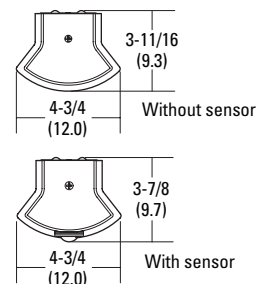
Performance Data			
Lumen package	Input watts	Lumens	LPW
20L LP830	18.7	2050	110
20L LP835	18.7	2152	115
20L LP840	18.7	2255	121
20L LP850	18.7	2410	129
30L LP830	28.2	2952	105
30L LP835	28.2	3095	110
30L LP840	28.2	3251	115
30L LP850	28.2	3239	115
40L LP830	39.5	3927	99
40L LP835	39.5	4124	104
40L LP840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

DIMENSIONS

All dimensions are inches (centimeters) unless otherwise noted.

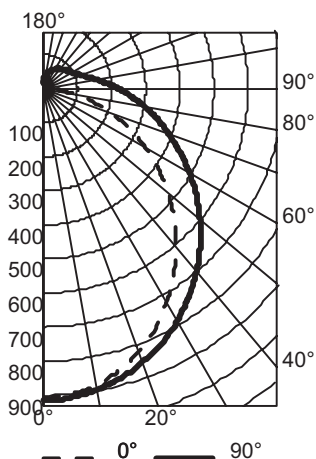
Specifications

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



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	80%	20%			50%				
		70%	50%	30%	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.

