



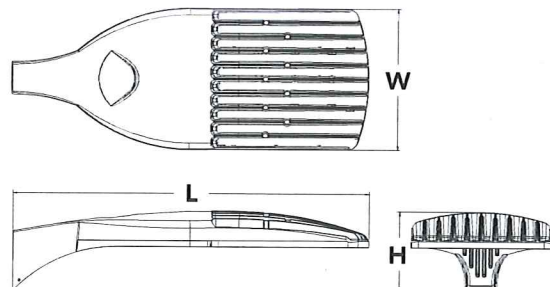
D-Series Size 1 LED Area Luminaire

d^{series}



Specifications

EPA:	1.01 ft ² (0.09 m ²)
Length:	33" (83.3 cm)
Width:	13" (33.0 cm)
Height:	7-1/2" (19.0 cm)
Weight (max):	27 lbs (12.2 kg)



A+ Capable options indicated by this color background.

Catalog
Number

Notes

Type

Photo: Full view or close-up view of the page to see all interconnect details.

Capable Luminaire

This item is an A+ capable luminaire, which has been designed and tested to provide consistent color appearance and system-level interoperability.

- All configurations of this luminaire meet the Acuity Brands' specification for chromatic consistency
- This luminaire is A+ Certified when ordered with DTL[®] controls marked by a shaded background. DTL DLL equipped luminaires meet the A+ specification for luminaire to photocontrol interoperability¹
- This luminaire is part of an A+ Certified solution for ROAM[®] or XPoint[™] Wireless control networks, providing out-of-the-box control compatibility with simple commissioning, when ordered with drivers and control options marked by a shaded background¹

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

1. See ordering tree for details.
2. A+ Certified Solutions for ROAM require the order of one ROAM node per luminaire. Sold Separately: [Link to Roam](#); [Link to DTL DLL](#)

Ordering Information

EXAMPLE: DSX1 LED P7 40K T3M MVOLT SPA DDBXD

DSX1LED							
Series	LEDs	Color temperature		Distribution		Voltage	Mounting
DSX1 LED	Forward optics P1 P4 P7 P2 P5 P8 P3 P6 P9 Rotated optics P10 ¹ P12 ¹ P11 ¹ P13 ¹	30K 40K 50K AMBPC	3000 K 4000 K 5000 K Amber phosphor converted ²	T1S Type I short T2S Type II short T2M Type II medium T3S Type III short T3M Type III medium T4M Type IV medium TFTM Forward throw medium TSVS Type V very short	T5S Type V short T5M Type V medium TSW Type V wide BLC Backlight control ^{2,2} LCCO Left corner cutoff ^{2,3} RCCO Right corner cutoff ^{2,3}	MVOLT^{4,5} 120 ⁶ 208 ^{5,6} 240 ^{5,6} 277 ⁶ 347 ^{5,6,7} 480 ^{5,6,7}	Shipped included SPA Square pole mounting RPA Round pole mounting WBA Wall bracket SPUMBA Square pole universal mounting adaptor ⁸ RPUMBA Round pole universal mounting adaptor ⁵ Shipped separately KMA8 DDBXD U Mast arm mounting bracket adaptor (specify finish) ⁹

Control options	Other options	Finish (required)
Shipped installed NLTAIR2 nLight AIR generation 2 enabled ¹¹ PER NEMA twist-lock receptacle only (controls ordered separate) ¹¹ PER5 Five-wire receptacle only (controls ordered separate) ^{11,12} PER7 Seven-wire receptacle only (controls ordered separate) ^{11,12} DMG 0-10V dimming extend out back of housing for external control (leads exit fixture) DS Dual switching ^{13,14} PIR Bi-level, motion/ambient sensor, 8-15' mounting height, ambient sensor enabled at 5fc ^{5,14,16} PIRH Bi-level, motion/ambient sensor, 15-30' mounting height, ambient sensor enabled at 5fc ^{5,14,16} PIRHN Network, Bi-Level motion/ambient sensor ¹⁷ PIR1FC3V Bi-level, motion/ambient sensor, 8-15' mounting height, ambient sensor enabled at 1fc ^{5,15,16}	PIRH1FC3V Bi-level, motion/ambient sensor, 15-30' mounting height, ambient sensor enabled at 1fc ^{5,15,16} BL30 Bi-level switched dimming, 30% ^{5,14,18} BL50 Bi-level switched dimming, 50% ^{5,14,18} PNMTDD3 Part night, dim till dawn ^{5,19} PNMTSD3 Part night, dim 5 hrs ^{5,19} PNMT6D3 Part night, dim 6 hrs ^{5,19} PNMT7D3 Part night, dim 7 hrs ^{5,19} FAO Field adjustable output ²⁰	Shipped installed HS House-side shield²¹ SF Single fuse (120, 277, 347V) ⁶ DF Double fuse (208, 240, 480V) ⁶ L90 Left rotated optics ¹ R90 Right rotated optics ¹ Shipped separately BS Bird spikes ²² EGS External glare shield ²³
		DDBXD Dark bronze DBLXD Black DNAXD Natural aluminum DWHXD White DDBTXD Textured dark bronze DBLTXD Textured black DNATXD Textured natural aluminum DWHGXD Textured white



Ordering Information

Accessories

Ordered and shipped separately.

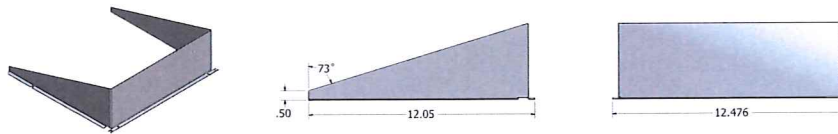
DLL127F 1.5 JU	Photocell - SSL twist-lock (120-277V) ²³
DLL347F 1.5 CUL JU	Photocell - SSL twist-lock (347V) ²³
DLL480F 1.5 CUL JU	Photocell - SSL twist-lock (480V) ²³
DSHORT SBK U	Shorting cap ²³
DSX1HS 30C U	House-side shield for 30 LED unit ²¹
DSX1HS 40C U	House-side shield for 40 LED unit ²¹
DSX1HS 60C U	House-side shield for 60 LED unit ²¹
PUMBA DDBXD U*	Square and round pole universal mounting bracket (specify finish) ²³
KMA8 DDBXD U	Mast arm mounting bracket adaptor (specify finish) ²³

For more control options, visit [DTL](#) and [ROAM](#) online.

NOTES

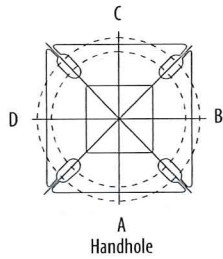
- P10, P11, P12 or P13 and rotated optics (L90, R90) only available together.
- AMBPC is not available with BLC, LCCO, RCCO or P4, P7, P8, P9 or P13.
- Not available with HS.
- MVOLT driver operates on any line voltage from 120-277V (50/60 Hz).
- Any PIRx with BL30, BL50 or PNMT, is not available with 208V, 240V, 347V, 480V or MVOLT. It is only available in 120V or 277V specified.
- Single fuse (SF) requires 120V, 277V or 347V. Double fuse (DF) requires 208V, 240V or 480V.
- Not available in P1 or P10. Not available with BL30, BL50 or PNMT options.
- Existing drilled pole only. Available as a separate combination accessory; for retrofit use only: PUMBA (finish) U; 1.5 G vibration load rating per ANCI C136.31.
- Must order fixture with SPA option. Must be ordered as a separate accessory; see Accessories information. For use with 2-3/8" mast arm (not included).
- Must be ordered with PIRHN.
- Photocell ordered and shipped as a separate line item from Acuity Brands Controls. See accessories. Not available with DS option. Shorting cap included.
- If ROAM[®] node required, it must be ordered and shipped as a separate line item from Acuity Brands Controls. Not available with DCR. Node with integral dimming. Shorting cap included.
- Provides 50/50 fixture operation via (2) independent drivers. Not available with PER, PER5, PER7, PIR or PIRH. Not available P1, P2, P3 or P4.
- Requires (2) separately switched circuits.
- Reference Motion Sensor table on page 3.
- Reference PER table on page 3 to see functionality.
- Must be ordered with NLTAIR2. For more information on nLight Air 2 [visit this link](#).
- Not available with 347V, 480V, PNMT, DS. For PER5 or PER7, see PER Table on page 3. Requires isolated neutral.
- Not available with 347V, 480V, DS, BL30, BL50. For PER5 or PER7, see PER Table on page 3. Separate Dusk to Dawn required.
- Not available with other dimming controls options
- Not available with BLC, LCCO and RCCO distribution. Also available as a separate accessory; see Accessories information.
- Must be ordered with fixture for factory pre-drilling.
- Requires luminaire to be specified with PER, PER5 or PER7 option. See PER Table on page 3.
- For retrofit use only.

External Glare Shield



Drilling

HANDHOLE ORIENTATION

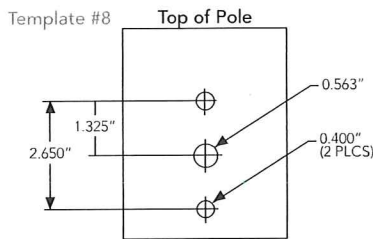


Tenon Mounting Slipfitter**

Tenon O.D.	Single Unit	2 at 180°	2 at 90°	3 at 120°	3 at 90°	4 at 90°
2-3/8"	AST20-190	AST20-280	AST20-290	AST20-320	AST20-390	AST20-490
2-7/8"	AST25-190	AST25-280	AST25-290	AST25-320	AST25-390	AST25-490
4"	AST35-190	AST35-280	AST35-290	AST35-320	AST35-390	AST35-490

Pole drilling nomenclature: # of heads at degree from handhole (default side A)					
DM19AS	DM28AS	DM29AS	DM32AS	DM39AS	DM49AS
1 @ 90°	2 @ 280°	2 @ 90°	3 @ 120°	3 @ 90°	4 @ 90°
Side B	Side B & D	Side B & C	Round pole only	Side B, C, & D	Sides A, B, C, D

Note: Review luminaire spec sheet for specific nomenclature



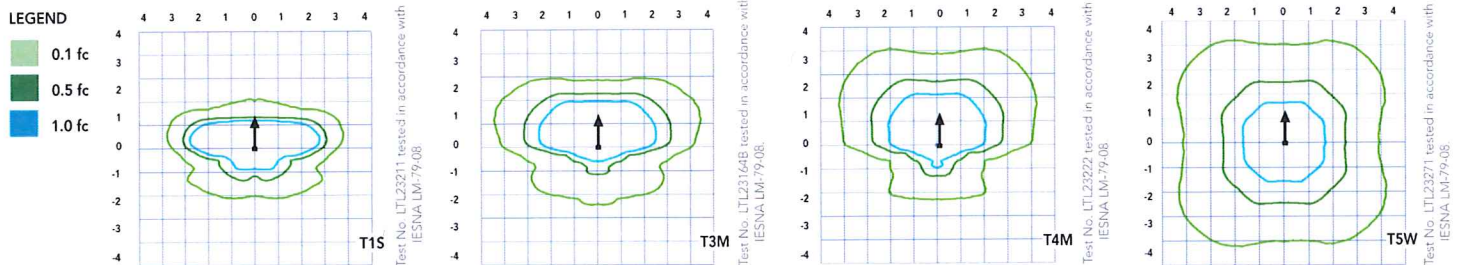
Pole top or tenon O.D.	4.5" @ 90°	4" @ 90°	3.5" @ 90°	3" @ 90°	4.5" @ 120°	4" @ 120°	3.5" @ 120°	3" @ 120°
DSX SPA	Y	Y	Y	N	-	-	-	-
DSX RPA	Y	Y	N	N	Y	Y	Y	Y
DSX SPUMBA	Y	N	N	N	-	-	-	-
DSX RPUMBA	N	N	N	N	Y	Y	Y	N

*3 fixtures @ 120 require round pole top/tenon.

Photometric Diagrams

To see complete photometric reports or download .ies files for this product, visit Lithonia Lighting's [D-Series Area Size 1 homepage](#).

Isofootcandle plots for the DSX1 LED 60C 1000 40K. Distances are in units of mounting height (25').



Performance Data

Lumen Ambient Temperature (LAT) Multipliers

Use these factors to determine relative lumen output for average ambient temperatures from 0-40°C (32-104°F).

Ambient		Lumen Multiplier
0°C	32°F	1.04
5°C	41°F	1.04
10°C	50°F	1.03
15°C	59°F	1.02
20°C	68°F	1.01
25°C	77°F	1.00
30°C	86°F	0.99
35°C	95°F	0.98
40°C	104°F	0.97

Electrical Load

	Performance Package	LED Count	Drive Current	Wattage	Current (A)					
					120	208	240	277	347	480
Forward Optics (Non-Rotated)	P1	30	530	54	0.45	0.26	0.23	0.19	0.10	0.12
	P2	30	700	70	0.59	0.34	0.30	0.25	0.20	0.16
	P3	30	1050	102	0.86	0.50	0.44	0.38	0.30	0.22
	P4	30	1250	125	1.06	0.60	0.52	0.46	0.37	0.27
	P5	30	1400	138	1.16	0.67	0.58	0.51	0.40	0.29
	P6	40	1250	163	1.36	0.78	0.68	0.59	0.47	0.34
	P7	40	1400	183	1.53	0.88	0.76	0.66	0.53	0.38
	P8	60	1050	207	1.74	0.98	0.87	0.76	0.64	0.49
	P9	60	1250	241	2.01	1.16	1.01	0.89	0.70	0.51
Rotated Optics (Requires L90 or R90)	P10	60	530	106	0.90	0.52	0.47	0.43	0.33	0.27
	P11	60	700	137	1.15	0.67	0.60	0.53	0.42	0.32
	P12	60	1050	207	1.74	0.99	0.87	0.76	0.60	0.46
	P13	60	1250	231	1.93	1.12	0.97	0.86	0.67	0.49

Projected LED Lumen Maintenance

Data references the extrapolated performance projections for the platforms noted in a 25°C ambient, based on 10,000 hours of LED testing (tested per IESNA LM-80-08 and projected per IESNA TM-21-11).

To calculate LLF, use the lumen maintenance factor that corresponds to the desired number of operating hours below. For other lumen maintenance values, contact factory.

Operating Hours	0	25000	50000	100000
Lumen Maintenance Factor	1.00	0.96	0.92	0.85

Motion Sensor Default Settings

Option	Dimmed State	High Level (when triggered)	Photocell Operation	Dwell Time	Ramp-up Time	Ramp-down Time
PIR or PIRH	3V (37%) Output	10V (100%) Output	Enabled @ 5FC	5 min	3 sec	5 min
*PIR1FC3V or PIRH1FC3V	3V (37%) Output	10V (100%) Output	Enabled @ 1FC	5 min	3 sec	5 min

*for use with Inline Dusk to Dawn or timer.

PER Table

Control	PER (3 wire)	PER5 (5 wire)		PER7 (7 wire)	
		Wire 4/Wire5	Wire 4/Wire5	Wire 4/Wire5	Wire 6/Wire7
Photocontrol Only (On/Off)	✓	⚠	Wired to dimming leads on driver	⚠	Wired to dimming leads on driver Wires Capped inside fixture
ROAM	⊗	✓	Wired to dimming leads on driver	⚠	Wired to dimming leads on driver Wires Capped inside fixture
ROAM with Motion (ROAM on/off only)	⊗	⚠	Wires Capped inside fixture	⚠	Wires Capped inside fixture Wires Capped inside fixture
Future-proof*	⊗	⚠	Wired to dimming leads on driver	✓	Wired to dimming leads on driver Wires Capped inside fixture
Future-proof* with Motion	⊗	⚠	Wires Capped inside fixture	✓	Wires Capped inside fixture Wires Capped inside fixture

✓ Recommended

⊗ Will not work

⚠ Alternate

*Future-proof means: Ability to change controls in the future.

FEATURES & SPECIFICATIONS

INTENDED USE

The sleek design of the D-Series Size 1 reflects the embedded high performance LED technology. It is ideal for many commercial and municipal applications, such as parking lots, plazas, campuses, and streetscapes.

CONSTRUCTION

Single-piece die-cast aluminum housing has integral heat sink fins to optimize thermal management through conductive and convective cooling. Modular design allows for ease of maintenance and future light engine upgrades. The LED drivers are mounted in direct contact with the casting to promote low operating temperature and long life. Housing is completely sealed against moisture and environmental contaminants (IP65). Low EPA (1.01 ft) for optimized pole wind loading.

FINISH

Exterior parts are protected by a zinc-infused Super Durable TGIC thermoset powder coat finish that provides superior resistance to corrosion and weathering. A tightly controlled multi-stage process ensures a minimum 3 mils thickness for a finish that can withstand extreme climate changes without cracking or peeling. Available in both textured and non-textured finishes.

OPTICS

Precision-molded proprietary acrylic lenses are engineered for superior area lighting distribution, uniformity, and pole spacing. Light engines are available in standard 3000 K, 4000 K and 5000 K (70 CRI) configurations. The D-Series Size 1 has zero uplight and qualifies as a Nighttime Friendly™ product, meaning it is consistent with the LEED® and Green Globes™ criteria for eliminating wasteful uplight.

ELECTRICAL

Light engine configurations consist of high-efficacy LEDs mounted to metal-core circuit boards to maximize heat dissipation and promote long life (up to L85/100,000 hours at 25°C). Class 1

electronic drivers are designed to have a power factor >90%, THD <20%, and an expected life of 100,000 hours with <1% failure rate. Easily serviceable 10kV surge protection device meets a minimum Category C Low operation (per ANSI/IEEE C62.41.2).

INSTALLATION

Included mounting block and integral arm facilitate quick and easy installation. Stainless steel bolts fasten the mounting block securely to poles and walls, enabling the D-Series Size 1 to withstand up to a 3.0 G vibration load rating per ANSI C136.31. The D-Series Size 1 utilizes the AERIS™ series pole drilling pattern (template #8). Optional terminal block and NEMA photocontrol receptacle are also available.

LISTINGS

UL Listed for wet locations. Light engines are IP66 rated; luminaire is IP65 rated. Rated for -40°C minimum ambient. U.S. Patent No. D672,492 S. International patent pending.

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

International Dark-Sky Association (IDA) Fixture Seal of Approval (FSA) is available for all products on this page utilizing 3000K color temperature only.

WARRANTY

5-year limited warranty. Complete warranty terms located at:

www.lithonia.com/warranty

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.



SLIM18

RAB

12, 18 and 26 Watt SLIM wallpacks are ultra efficient and deliver impressive light distribution with a compact low-profile design that's super easy to install as a downlight or uplight.

Color: Bronze

Weight: 4.5 lbs

Project:

Type: **SITE LIGHTING**
TYPE S3

Prepared By:

Date:

Driver Info

Type:	Constant Current
120V:	0.18A
208V:	0.11A
240V:	0.09A
277V:	0.08A
Input Watts:	21W
Efficiency:	85%

LED Info

Watts:	18W
Color Temp:	5100K
Color Accuracy:	71 CRI
L70 Lifespan:	100000
Lumens:	2560
Efficacy:	121 LPW

Technical Specifications

Listings

UL Listing:

Suitable for wet locations. Suitable for mounting within 1.2m (4ft) of the ground.

DLC Listed:

This product is listed by Design Lights Consortium (DLC) as an ultra-efficient premium product that qualifies for the highest tier of rebates from DLC Member Utilities.
DLC Product Code: PSPVC3C7

ADA Compliant:

SLIM™ is ADA Compliant

Dark Sky Approved:

The International Dark Sky Association has approved this product as a full cutoff, fully shielded luminaire

IESNA LM-79 & LM-80 Testing:

RAB LED luminaires have been tested by an independent laboratory in accordance with IESNA LM-79 and LM-80, and have received the Department of Energy "Lighting Facts" label

Construction

IP Rating:

Ingress Protection rating of IP66 for dust and water

Cold Weather Starting:

Minimum starting temperature is -40°C (-40°F)

Maximum Ambient Temperature:

Suitable for use in 40°C (104°F) ambient temperatures

Housing:

Precision die-cast aluminum housing

Mounting:

Heavy-duty mounting bracket with hinged housing for easy installation

Recommended Mounting Height:

Up to 14 ft

Lens:

Tempered glass lens

Reflector:

Specular thermoplastic

Gaskets:

High-temperature silicone

Finish:

Formulated for high-durability and long lasting color

Green Technology:

Mercury and UV-free. RoHS compliant components. Polyester powder coat finish formulated without the use of VOCs or toxic heavy metals.

LED Characteristics

LED:

Multi-chip, long-life LED

Lifespan:

100,000-hour LED lifespan based on IES LM-80 results and TM-21 calculations

Color Consistency:

7-step MacAdam Ellipse binning to achieve consistent fixture-to-fixture color

Color Stability:

LED color temperature is warranted to shift no more than 200K in CCT over a 5 year period

Color Uniformity:

RAB's range of CCT (Correlated Color Temperature) follows the guidelines for the American National Standard for Specifications for the Chromaticity of Solid State Lighting (SSL) Products, ANSI C78.377-2017.

Electrical

Driver:

Constant Current, Class 2, 100-277V, 50/60 Hz., 4KV surge protection, 120V: 0.19A, 208V: 0.11A, 240V: 0.10A, 277V: 0.08A

Other**Patents:**

The design of the SLIM™ is protected by patents in U.S. Pat D681,864, and pending patents in Canada, China, Taiwan and Mexico.

HID Replacement Range:

Replaces 100W Metal Halide

Buy American Act Compliance:

RAB values USA manufacturing! Upon request, RAB may be able to manufacture this product to be compliant with the Buy American Act (BAA). Please contact customer service to request a quote for the product to be made BAA compliant.

Optical

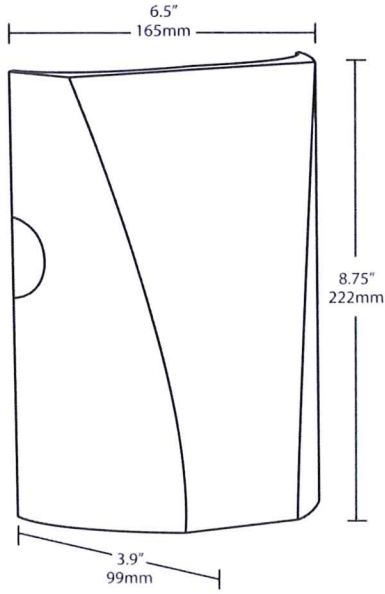
BUG Rating:

B1 U0 G0

SLIM18



Dimensions

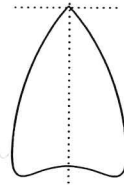
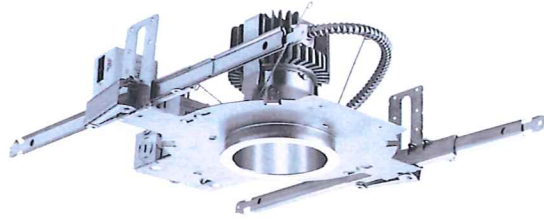


Features

- Full cutoff, fully shielded LED wallpack
- Can be used as a downlight or uplight
- Contractor friendly features for easy installation
- 100,000-hour LED Life
- 5-Year, No-Compromise Warranty

Ordering Matrix

Family	Wattage	Color Temp	Finish	Driver	Options
SLIM	18	Blank = 5000K (Cool) N = 4000K (Neutral) Y = 3000K (Warm)	Blank = Bronze W = White	Blank = Standard (120-277V) /D10 = Dimmable	Blank = No Option /PC = 120V Button /PC2 = 277V Button /LC = Lightcloud Controller



Gotham Architectural Downlighting
LED Downlights

**4" Evo®
Downlight**

Solid-State Lighting



FEATURES

OPTICAL SYSTEM

- Self-flanged or flangeless semi-specular, matte-diffuse or specular finishing trim
- Patented Bounding Ray™ optical design (U.S. Patent No. 5,800,050)
- 45° cutoff to source and source image
- Top-down flash characteristic
- Polycarbonate lens integral to light engine

MECHANICAL SYSTEM

- 16-gauge galvanized steel construction; maximum 1-1/2" ceiling thickness
- Telescopic mounting bars maximum of 32" and minimum of 15", preinstalled, 4" vertical adjustment
- Toolless adjustments post installation
- Junction box capacity: 8 (4 in, 4 out) 12AWG rated for 90°C
- Light engine and driver accessible through aperture
- Injection molded mud ring included with flangeless trims. Ships separately. Installs independently of the mounting frame to reduce cracks in plaster due to vibration.

ELECTRICAL SYSTEM

- Fully serviceable and upgradeable lensed LED light engine
- 70% lumen maintenance at 60,000 hours
- Tested according to LM-79 and LM-80 standards
- Overload and short circuit protected
- 2.5 SDCM; 85 CRI typical, 90+ CRI optional

LISTINGS

- Fixtures are CSA certified to meet US and Canadian standards; wet location, covered ceiling ENERGY STAR® certified product.

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.

WATTAGE CONSUMPTION MATRIX			
LUMENS	LM ACTUAL	WATTAGE	LUMENS per WATT
750	849	10.3	82.4
1000	1,189	12.8	92.9
1500	1,509	17.3	87.2
2000	2,109	23.5	89.6
2500	2,576	28.9	89.1
3000	3,112	36.9	84.3

A+ 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® control networks when ordered with drivers marked by a **shaded background***
- This luminaire is part of an A+ Certified solution for nLight® control networks, providing advanced control functionality at the luminaire level, when selection includes driver and control options marked by a **shaded background***

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

*See ordering tree for details



A+ Capable options indicated by this color background.

EXAMPLE: EVO 35/10 4AR MWD LSS MVOLT EZ1

Series	Color temperature	Nominal lumen values	Aperture/Trim color	Trim Style	Distribution	Finish	Voltage
EVO	27/ 2700 K	07 750 lumens	4AR Clear	(blank) Self-flanged	MD Medium (0.9 s/mh)	LSS Semi-specular	MVOLT 120
	30/ 3000 K	10 1000 lumens	4PR Pewter	FL Flangeless	MWD Medium wide (1.0 s/mh)	LD Matte-diffuse	277
	35/ 3500 K	15 1500 lumens	4WTR Wheat		WD Wide (1.2 s/mh)	LS Specular	347 ²
	40/ 4000 K	20 2000 lumens	4GR Gold				
	50/ 5000 K	25 2500 lumens	4WR ¹ White				
			30 3000 lumens	4BR ¹ Black 4WRAMF ¹ White anti-microbial			

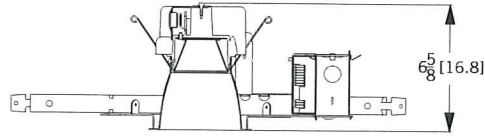
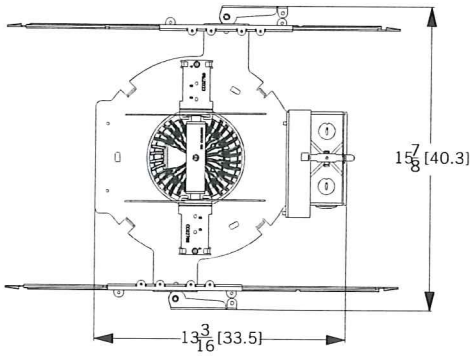
Driver ³	Options
GZ10 0-10V driver dims to 10%	SF Single fuse. Specify 120V or 277V.
GZ1 0-10V driver dims to 1%	TRW ⁵ White painted flange
EZ10 eldoLED 0-10V ECOdrive. Linear dimming to 10% min.	TRBL ⁷ Black painted flange
EZ1 eldoLED 0-10V ECOdrive. Linear dimming to 1% min.	EL ⁸ Emergency battery pack with integral test switch, CEC compliant
EZB eldoLED 0-10V SOLOdrive. Logarithmic dimming to <1%.	ELR ⁸ Emergency battery pack with remote test switch, CEC compliant
EDAB ⁴ eldoLED SOLOdrive DALI. Logarithmic dimming to <1%.	NPP16D ⁹ nLight [®] network power/relay pack with 0-10V dimming for non-eldoLED drivers (GZ10, GZ1).
EDXB ⁴ eldoLED POWERdrive DMX with RDM (remote device management). Square Law dimming to <1%. Includes termination resistor. Refer to DMXR Manual .	NPP16DER ⁹ nLight [®] network power/relay pack with 0-10V dimming for non-eldoLED drivers (GZ10, GZ1). ER controls fixtures on emergency circuit.
EXA1 XPoint Wireless, eldoLED 0-10V ECOdrive. Linear dimming to 1%. Refer to XPoint tech sheet.	NPS80EZ ⁹ nLight [®] dimming pack controls 0-10V eldoLED drivers (EZ_).
EXAB XPoint Wireless, eldoLED 0-10V SOLOdrive. Logarithmic dimming to <1%. Refer to XPoint tech sheet.	NPS80EZER ⁹ nLight [®] dimming pack controls 0-10V eldoLED drivers (EZ_). ER controls fixtures on emergency circuit.
ECOS2 ^{4,5} Lutron [®] Hi-Lume [®] 2-wire forward-phase driver. Minimum dimming level 1%. Minimum lumen 1000/Maximum lumen 3000. 120V only.	N80 ¹⁰ nLight [®] Lumen Compensation
ECOS3 ^{4,5} Lutron [®] Hi-Lume [®] 3-wire or EcoSystem [®] dimming driver. Minimum dimming level 1%. Minimum lumen 1000/Maximum lumen 4500.	
	BGTD Bodine generator transfer device. Specify 120V or 277V.
	CR190 High CRI (90+). Specify 120V or 277V.
	CP ¹¹ Chicago plenum
	RRL ^{___} RELOC [®] -ready luminaire connectors enable a simple and consistent factory installed option across all ABL luminaire brands. Refer to RRL for complete nomenclature.

ACCESSORIES order as separate catalog numbers (shipped separately)	
SCA4	Sloped ceiling adapter. Degree of slope must be specified (5D, 10D, 15D, 20D, 25D, 30D). Ex: SCA4 10D. Refer to TECH-190 .
CTA4-8 YK	Ceiling thickness adapter (extends mounting frame to accommodate ceiling thickness up to 5"). Adds ~4" to fixture height.
ISD BC	0-10V wallbox dimmer. Refer to ISD-BC .

ORDERING NOTES	
1. Not available with finishes.	8. For dimensional changes, refer to TECH-140 . Access above ceiling required. Not available with 347V.
2. Not available with EL or ELR options.	9. Specify voltage. For use with generator supply EM power. Will require an emergency hot feed and normal hot feed.
3. Refer to TECH-240 for compatible dimmers.	10. Fixture begins at 80% light level. Must be specified with NPS80EZ or NPS80EZER.
4. Not available with nLight [®] and XPoint options.	11. ELR not available. CP, ECOS2/ECOS3 with EL-2000 lumen max.
5. Specify voltage 120V or 277V.	
6. Not available with white reflector. Not applicable with FL option.	
7. Not available with black reflector. Not applicable with FL option.	

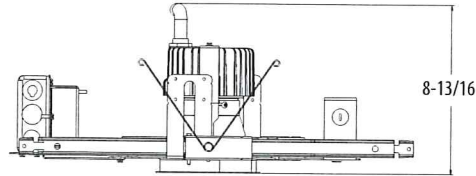
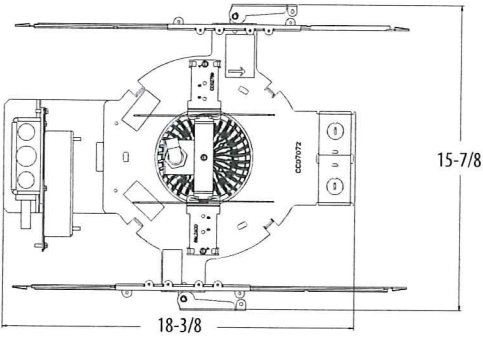
DIMENSIONAL DATA

All dimensions are inches (centimeters) unless otherwise noted.



Aperture: 4-5/16" (11)
 Ceiling Opening: 5-1/8" (13) self-flanged
 5-1/4" (13.3) flangeless
 Overlap trim: 5-7/16" (13.8)

DIMENSIONS FOR CHICAGO PLENUM



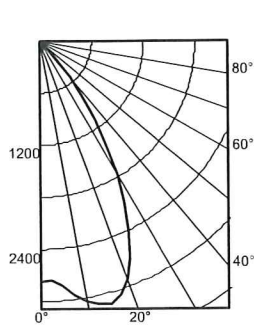
ELECTRICAL

EMERGENCY LUMEN OUTPUT		
LUMENS	WATTAGE	INITIAL OUTPUT
750	9.6	1000
1000	9.6	1000
1500	9.6	1000
2000	9.6	1000
2500	9.6	1000
3000	9.6	1000

PHOTOMETRY

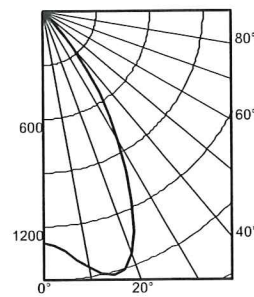
Distribution Curve Distribution Data Output Data Coefficient of Utilization Illuminance: Single Luminaire 30" Above Floor

EVO 35/30 4AR LS INPUT WATTS: 36.9, DELIVERED LUMENS: 3112, LM/W=84.3 , 1.07 S/MH, TEST NO. LTL27791



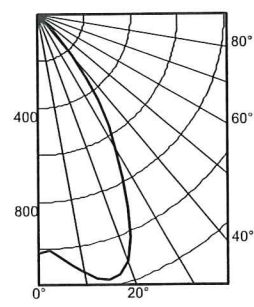
Ave	Lumens	Zone	Lumens	% Lamp	pf	Coefficient of Utilization								
						pc	80%			20%				
						pw	50%	30%	10%	50%	30%	10%		
0	2763	0° - 30°	2236.6	71.9	0	119	119	119	116	116	116	111	111	111
5	2824	0° - 40°	2930.3	94.2	1	111	108	106	109	106	104	105	103	101
15	3133	0° - 60°	3106.1	99.8	2	103	99	96	101	98	95	98	95	93
25	2417	0° - 90°	3111.9	100.0	3	96	91	87	95	90	87	92	88	85
35	1117	90° - 120°	0.0	0.0	4	90	84	80	89	84	80	87	82	79
45	186	90° - 130°	0.0	0.0	5	84	78	74	83	78	74	81	77	73
55	6	90° - 150°	0.0	0.0	6	79	73	69	78	72	68	77	72	68
65	2	90° - 180°	0.0	0.0	7	74	68	64	73	68	64	72	67	63
75	3	0° - 180°	3111.9	*100.0	8	70	64	60	69	63	59	68	63	59
85	2				9	66	60	56	65	60	56	64	59	55
90	0				10	62	56	52	62	56	52	61	56	52

EVO 35/15 4AR LS INPUT WATTS: 17.3, DELIVERED LUMENS: 1509, LM/W=87.2, 1.08 S/MH, TEST NO. LTL27786



Ave	Lumens	Zone	Lumens	% Lamp	pf	Coefficient of Utilization								
						pc	80%			20%				
						pw	50%	30%	10%	50%	30%	10%		
0	1290	0° - 30°	1081.0	71.6	0	119	119	119	116	116	116	111	111	111
5	1338	0° - 40°	1419.3	94.0	1	111	108	106	109	106	104	105	103	101
15	1521	0° - 60°	1507.8	99.9	2	103	99	96	101	98	95	98	95	92
25	1167	0° - 90°	1509.3	100.0	3	96	91	87	95	90	87	92	88	85
35	546	90° - 180°	0.0	0.0	4	90	84	80	89	84	80	87	82	79
45	92	0° - 180°	1509.3	*100.0	5	84	78	74	83	78	74	81	77	73
55	2				6	79	73	69	78	72	68	76	72	68
65	1				7	74	68	64	73	68	64	72	67	63
75	0				8	70	64	59	69	63	59	68	63	59
85	0				9	66	60	56	65	59	56	64	59	55
90	0				10	62	56	52	61	56	52	61	56	52

EVO 35/10 4AR LS INPUT WATTS: 12.8, DELIVERED LUMENS: 1189, LM/W=92.9, 1.08 S/MH, TEST NO. LTL27785



Ave	Lumens	Zone	Lumens	% Lamp	pf	Coefficient of Utilization								
						pc	80%			20%				
						pw	50%	30%	10%	50%	30%	10%		
0	1012	0° - 30°	838.3	70.5	0	119	119	119	116	116	116	111	111	111
5	1035	0° - 40°	1114.0	93.7	1	111	108	106	109	106	104	105	103	101
15	1169	0° - 60°	1188.4	99.9	2	103	99	96	101	98	95	98	95	92
25	910	0° - 90°	1189.3	100.0	3	96	91	87	95	90	86	92	88	85
35	449	90° - 180°	0.0	0.0	4	90	84	80	88	83	79	86	82	78
45	80	0° - 180°	1189.3	*100.0	5	84	78	74	83	77	73	81	76	73
55	2				6	78	72	68	78	72	68	76	71	67
65	2				7	74	68	63	73	67	63	72	67	63
75	0				8	69	63	59	69	63	59	68	62	59
85	0				9	65	59	55	65	59	55	64	59	55
90	0				10	61	56	52	61	55	52	60	55	51

LUMEN OUTPUT MULTIPLIER - CRI	
CRI	FACTOR
80 CRI	1
90 CRI	0.79

LUMEN OUTPUT MULTIPLIER - CCT	
CRI	FACTOR
5000 K	1.101
4000 K	1.035
3500 K	1
3000 K	0.973
2700 K	0.938

LUMEN OUTPUT MULTIPLIER - TRIM FINISH						
FINISH	CLEAR (AR)	PEWTER (PR)	WHEAT (WTR)	GOLD (GR)	WHITE (WR/WRAMF)	BLACK (BR)
Specular (LS)	1.00	0.88	0.83	0.95	N/A	N/A
Semi-specular (LSS)	0.95	0.84	0.79	0.90	N/A	N/A
Matte-diffuse (LD)	0.85	0.73	0.69	0.80	N/A	N/A
Paint	N/A	N/A	N/A	N/A	0.87	0.73

PHOTOMETRY NOTES

- Tested in accordance with IESNA LM-79-08.
- Tested to current IES and NEMA standards under stabilized laboratory conditions.
- CRI: 85 typical.

Choose Wall Controls.

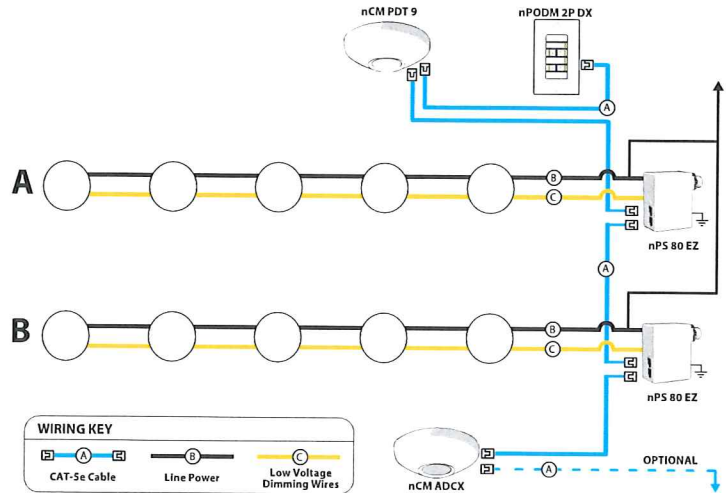
nLIGHT offers multiple styles of wall controls – each with varying features and user experience.



Push-Button WallPod
Traditional tactile buttons and LED user feedback



Graphic WallPod
Full color touch screen provides a sophisticated look and feel



EXAMPLE

Group Fixture Control*

*Application diagram applies for fixtures with eldoLED drivers only.

- nPS 80 EZ Dimming/Control Pack (qty 2 required)
- nPODM 2P DX Dual On/Off/Dim Push-Button WallPod
- nCM ADCX Daylight Sensor with Automatic Dimming Control
- nCM PDT 9 Dual Technology Occupancy Sensor

Description: This design provides a dual on/off/dim wall station that enables manual control of the fixtures in Row A and Row B separately. Additionally, a daylight harvesting sensor is provided so the lights in row B can be configured to dim automatically when daylight is available. An occupancy sensor turns off all lights when the space is vacant.

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 [color]	Wide view (PIR / dual tech)	nWV 16 / nWV PDT 16
Photocell controls	Model number	Wall Switch w/ Raise/Lower (PIR / dual tech)	nWSX LV DX / nWSX PDT LV DX
Dimming	nCM ADCX	Cat-5 cables (plenum rated)	Model number
		10', CAT5 10FT	CAT5 10FT J1
		15', CAT5 15FT	CAT5 15FT J1



City of Madison Fire Department

314 W Dayton Street, Madison, WI 53703-2506
Phone: 608-266-4420 • Fax: 608-267-1100 • E-mail: fire@cityofmadison.com

Project Address: 241 - 245 Junction Road

Contact Name & Phone #: James Worker 608.664.3552

FIRE APPARATUS ACCESS AND FIRE HYDRANT WORKSHEET

1. Is the building completely protected by an NFPA 13 or 13R automatic fire sprinkler system? If non-sprinklered , fire lanes extend to within 150-feet of all portions of the exterior wall? If sprinklered , fire lanes are within 250-feet of all portions of the exterior wall?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
2. Is the fire lane constructed of concrete or asphalt, designed to support a minimum load of 85,000 lbs? a) Is the fire lane a minimum unobstructed width of at least 20-feet? b) Is the fire lane unobstructed with a vertical clearance of at least 13½-feet? c) Is the minimum inside turning radius of the fire lane at least 28-feet? d) Is the grade of the fire lane not more than a slope of 8%? e) Is the fire lane posted as fire lane? (Provide detail of signage.) f) Is a roll-able curb used as part of the fire lane? (Provide detail of curb.) g) Is part of a sidewalk used as part of the required fire lane? (Must support +85,000 lbs.)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
3. Is the fire lane obstructed by security gates or barricades? If yes: a) Is the gate a minimum of 20-feet clear opening? b) Is an approved means of emergency operations installed, key vault, padlock or key switch?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
4. Is the Fire lane dead-ended with a length greater than 150-feet? If yes, does the area for turning around fire apparatus comply with IFC D103?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
5. Is any portion of the building to be used for high-piled storage in accordance with IFC Chapter 3206.6 If yes, see IFC 3206.6 for further requirements.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A
6. Is any part of the building <u>greater than 30-feet</u> above the grade plane? If yes, answer the following questions: a) Is the aerial apparatus fire lane parallel to one entire side of the building and covering at least 25% of the perimeter? b) Is the near edge of the aerial apparatus fire lane between 15' and 30' from the building? c) Are there any overhead power or utility lines located across the aerial apparatus fire lane? d) Are there any tree canopies expected to grow across the aerial fire lane? (Based on mature canopy width of tree species) e) Does the aerial apparatus fire lane have a minimum unobstructed width of 26-feet? f) Is the space between the aerial lane and the building free of trees exceeding 20' in heights?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
7. Are all portions of the required fire lanes within 500-feet of at least (2) hydrants? <i>Note: Distances shall be measured along the path of the hose lay as it comes off the fire apparatus.</i> a) Is the fire lane at least 26' wide for at least 20-feet on each side of the hydrants? b) Is there at least 40' between a hydrant and the building? c) Are the hydrant(s) setback no less than 5-feet nor more than 10-feet from the curb or edge of the street or fire lane? d) Are hydrants located in parking lot islands a minimum of 3½-feet from the hydrant to the curb? e) Are there no obstructions, including but not limited to: power poles, trees, bushes, fences, posts located, or grade changes exceeding 1½-feet, within 5-feet of a fire hydrant?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A

Note: Hydrants shall be installed and in-service prior to combustible construction on the project site.

Attach an additional sheet if further explanation is required for any answers.

This worksheet is based on **MGO 34.503** and **IFC 2015 Edition Chapter 5 and Appendix D**; please see the codes for further information.