

LIGHTING CUTSHEETS FOR DESIGN REVIEW

APPENDIX 1

Exhibit 3 (DR 16-09)



DLR Group

Architecture

Planning

Interiors

CAMAS PBL HIGH SCHOOL CAMAS SCHOOL DISTRICT Camas, Washington

Design Review Lighting Specifications
DLR Group Project No. 73-16130-00

January 17, 2017

Contents:

1. Type SA, SA2, SC
2. Type SB
3. Type SD
4. Type SG
5. Type SH CAMAS STD
6. Type DN

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D-Series Size 1 LED Area Luminaire



d#series

Specifications

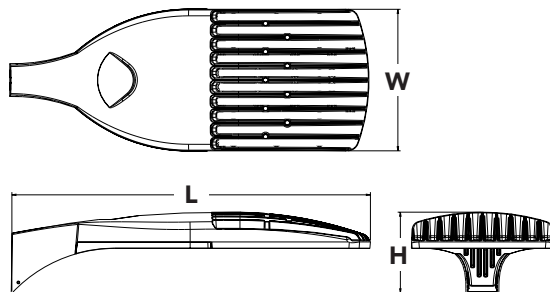
EPA: 1.01 ft²
(0.09 m²)

Length: 33"
(83.8 cm)

Width: 13"
(33.0 cm)

Height: 7-1/2"
(19.0 cm)

Weight (max): 27 lbs
(12.2 kg)



Catalog
Number

Notes

Type

Hit the Tab key or mouse over the page to see all interactive elements.

Introduction

The modern styling of the D-Series is striking yet unobtrusive - making a bold, progressive statement even as it blends seamlessly with its environment.

The D-Series distills the benefits of the latest in LED technology into a high performance, high efficacy, long-life luminaire. The outstanding photometric performance results in sites with excellent uniformity, greater pole spacing and lower power density. It is ideal for replacing up to 750W metal halide in pedestrian and area lighting applications with typical energy savings of 65% and expected service life of over 100,000 hours.

Ordering Information

EXAMPLE: DSX1 LED 60C 1000 40K T3M MVOLT SPA DDBXD

DSX1LED						
Series	LEDs	Drive current	Color temperature	Distribution	Voltage	Mounting
DSX1 LED	Forward optics 30C 30 LEDs (one engine) 40C 40 LEDs (two engines) 60C 60 LEDs (two engines) Rotated optics ¹ 60C 60 LEDs (two engines)	530 530 mA 700 700 mA 1000 1000 mA (1 A) ²	30K 3000 K 40K 4000 K 50K 5000 K AMBPC Amber phosphor converted ³	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 T5VS Type V very short T5S Type V short T5M Type V medium T5W Type V wide BLC Backlight control ^{2,4} LCCO Left corner cutoff ^{2,4} RCCO Right corner cutoff ^{2,4}	MVOLT ⁵ 120 ⁵ 208 ⁵ 240 ⁵ 277 ⁵ 347 ⁶ 480 ⁶	Shipped included SPA Square pole mounting RPA Round pole mounting WBA Wall bracket SPUMBA Square pole universal mounting adaptor ⁷ RPUMBA Round pole universal mounting adaptor ⁷ Shipped separately KMA8 DDBXD U Mast arm mounting bracket adaptor (specify finish) ⁸

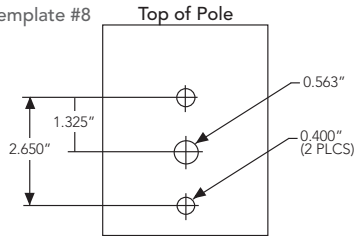
Control options	Other options	Finish (required)
Shipped installed PER NEMA twist-lock receptacle only (no controls) ⁹ PER5 Five-wire receptacle only (no controls) ^{9,10} PER7 Seven-wire receptacle only (no controls) ^{9,10} DMG 0-10V dimming driver (no controls) ¹¹ DCR Dimmable and controllable via ROAM [®] (no controls) ¹² DS Dual switching ^{13,14} PIR Bi-level, motion/ambient sensor, 8-15' mounting height, ambient sensor enabled at 5fc ¹⁵ PIRH Bi-level, motion/ambient sensor, 15-30' mounting height, ambient sensor enabled at 5fc ¹⁵ PIR1FC3V Bi-level, motion/ambient sensor, 8-15' mounting height, ambient sensor enabled at 1fc ¹⁵	PIRH1FC3V Bi-level, motion/ambient sensor, 15-30' mounting height, ambient sensor enabled at 1fc ¹⁵ BL30 Bi-level switched dimming, 30% ^{14,16} BL50 Bi-level switched dimming, 50% ^{14,16} PNMTDD3 Part night, dim till dawn ¹⁷ PNMTSD3 Part night, dim 5 hrs ¹⁷ PNMT6D3 Part night, dim 6 hrs ¹⁷ PNMT7D3 Part night, dim 7 hrs ¹⁷ FAO Field adjustable output ¹⁸	Shipped installed HS House-side shield ¹⁹ WTB Utility terminal block ²⁰ SF Single fuse (120, 277, 347V) ²¹ DF Double fuse (208, 240, 480V) ²¹ L90 Left rotated optics ²² R90 Right rotated optics ²² BS Bird spikes ²³
		DDBXD Dark bronze DBLXD Black DNAXD Natural aluminum DWHXD White DDBTXD Textured dark bronze DBLBXD Textured black DNATXD Textured natural aluminum DWHGXD Textured white

Accessories	Controls & Shields	NOTES
DLL127F 1.5 JU Photocell - SSL twist-lock (120-277V) ²⁴ DLL347F 1.5 CUL JU Photocell - SSL twist-lock (347V) ²⁴ DLL480F 1.5 CUL JU Photocell - SSL twist-lock (480V) ²⁴ DSHORT SBK U Shorting cap ²⁴ DSX1HS 30C U House-side shield for 30 LED unit ¹⁹ DSX1HS 40C U House-side shield for 40 LED unit ¹⁹ DSX1HS 60C U House-side shield for 60 LED unit ¹⁹ PUMBA DDBXD U* Square and round pole universal mounting bracket (specify finish) ²⁵ KMA8 DDBXD U Mast arm mounting bracket adaptor (specify finish) ⁸ DSX1BS U Bird spikes	Controls & Shields DLL127F 1.5 JU Photocell - SSL twist-lock (120-277V) ²⁴ DLL347F 1.5 CUL JU Photocell - SSL twist-lock (347V) ²⁴ DLL480F 1.5 CUL JU Photocell - SSL twist-lock (480V) ²⁴ DSHORT SBK U Shorting cap ²⁴ DSX1HS 30C U House-side shield for 30 LED unit ¹⁹ DSX1HS 40C U House-side shield for 40 LED unit ¹⁹ DSX1HS 60C U House-side shield for 60 LED unit ¹⁹ PUMBA DDBXD U* Square and round pole universal mounting bracket (specify finish) ²⁵ KMA8 DDBXD U Mast arm mounting bracket adaptor (specify finish) ⁸ DSX1BS U Bird spikes	NOTES 1 Rotated optics available with 60C only. 2 Not available AMBPC. 3 Only available with 530mA or 700mA. 4 Not available with HS. 5 MVOLT driver operates on any line voltage from 120-277V (50/60 Hz). Specify 120V, 208V, 240V or 277V options only when ordering with fusing (SF, DF options). 6 Not available with single board, 530mA product (30C 530 or 60C 530 DS). Not available with BL30, BL50 or PNMT options. 7 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. 8 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). 9 Photocell ordered and shipped as a separate line item from Acuity Brands Controls. See accessories. Not available with DS option. 10 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. 11 DMG option for 347V or 480V requires 1000mA. 12 Specifies a ROAM [®] enabled luminaire with 0-10V dimming capability; PER option required. Additional hardware and services required for ROAM [®] deployment; must be purchased separately. Call 1-800-442-6745 or email: sales@roamservices.net. N/A with PIR options, DS, PER5, PER7, BL30, BL50 or PNMT options. Node without integral dimming. 13 Requires 40C or 60C. Provides 50/50 luminaire operation via two independent drivers on two separate circuits. N/A with PER, DCR, WTB, PIR or PIRH. 14 Requires an additional switched circuit. 15 PIR and PIR1FC3V specify the SensorSwitch SBGR-10-ODP control; PIRH and PIRH1FC3V specify the SensorSwitch SBGR-6-ODP control; see Outdoor Control Technical Guide for details. Dimming driver standard. Not available with PER5 or PER7. Ambient sensor disabled when ordered with DCR. Separate on/off required. 16 Dimming driver standard. MVOLT only. Not available with 347V, 480V, DCR, DS, PER5, PER7 or PNMT options. Not available with PIR1FC3V or PIRH1FC3V. 17 Dimming driver standard. MVOLT only. Not available with 347V, 480V, DCR, DS, PER5, PER7, BL30 or BL50. Not available with PIR1FC3V or PIRH1FC3V. Separate on/off required. 18 Dimming driver standard. Not available with PER5, PER7, DMG, DCR, DS, BL30, BL50 or PNMT, PIR, PIRH, PIR1FC3V or PIRH1FC3V. 19 Not available with BLC, LCCO and RCCO distribution. Also available as a separate accessory; see Accessories information. 20 WTB not available with DS. 21 Single fuse (SF) requires 120V, 277V or 347V. Double fuse (DF) requires 208V, 240V or 480V. 22 Available with 60 LEDs (60C option) only. 23 Also available as a separate accessory; see accessories information. 24 Requires luminaire to be specified with PER option. Ordered and shipped as a separate line item from Acuity Brands Controls. 25 For retrofit use only.

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

Drilling

Template #8



DSX1 shares a unique drilling pattern with the AERIS™ family. Specify this drilling pattern when specifying poles, per the table below.

DM19AS	Single unit	DM29AS	2 at 90°*
DM28AS	2 at 180°	DM39AS	3 at 90°*
DM49AS	4 at 90°*	DM32AS	3 at 120°**

Example: SSA 20 4C DM19AS DDBXD

Visit Lithonia Lighting's [POLES CENTRAL](#) to see our wide selection of poles, accessories and educational tools.

*Round pole top must be 3.25" O.D. minimum.

**For round pole mounting (RPA) only.

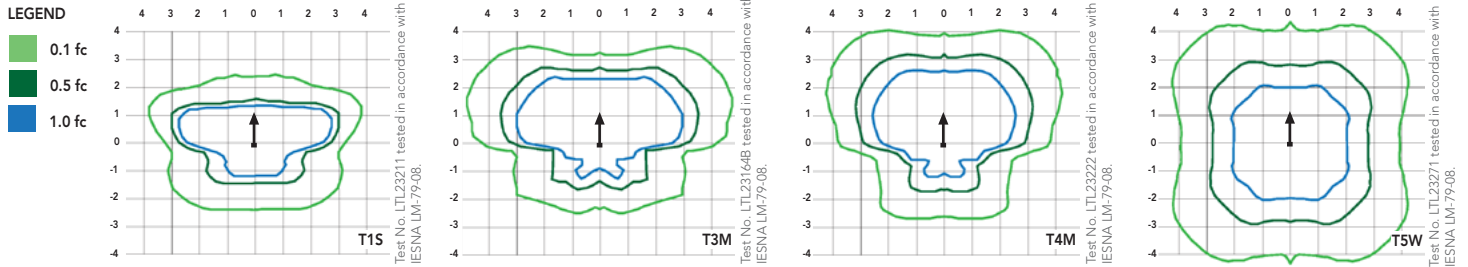
Tenon Mounting Slipfitter**

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

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 (20').



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	1.02
10°C	1.01
20°C	1.00
25°C	1.00
30°C	1.00
40°C	0.99

Electrical Load

Number of LEDs	Drive Current (mA)	System Watts	Current (A)					
			120	208	240	277	347	480
30	530	52	0.52	0.30	0.26	0.23	---	---
	700	68	0.68	0.39	0.34	0.30	0.24	0.17
	1000	105	1.03	0.59	0.51	0.45	0.36	0.26
40	530	68	0.67	0.39	0.34	0.29	0.23	0.17
	700	89	0.89	0.51	0.44	0.38	0.31	0.22
	1000	138	1.35	0.78	0.67	0.58	0.47	0.34
60	530	99	0.97	0.56	0.48	0.42	0.34	0.24
	700	131	1.29	0.74	0.65	0.56	0.45	0.32
	1000	209	1.98	1.14	0.99	0.86	0.69	0.50

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	25,000	50,000	100,000
Lumen Maintenance Factor	DSX1 LED 60C 1000			
	1.0	0.98	0.96	0.91
	DSX1 LED 60C 700			
	1.0	0.99	0.99	0.99

Performance Data

Lumen Output

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown, within the tolerances allowed by Lighting Facts. Contact factory for performance data on any configurations not shown here.

Forward Optics

LEDs	Drive Current (mA)	System Watts	Dist. Type	30K (3000 K, 70 CRI)					40K (4000 K, 70 CRI)					50K (5000 K, 70 CRI)					AMBPC (Amber Phosphor Converted)				
				Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW
30C (30 LEDs)	530 mA	52 W	T1S	5,948	1	0	1	114	6,387	1	0	1	123	6,427	1	0	1	124	3,640	1	0	1	70
			T2S	6,132	1	0	1	118	6,585	2	0	2	127	6,626	2	0	2	127	3,813	1	0	1	73
			T2M	5,992	1	0	2	115	6,434	1	0	2	124	6,475	1	0	2	125	3,689	1	0	1	71
			T3S	5,985	1	0	1	115	6,427	1	0	2	124	6,467	1	0	2	124	3,770	1	0	1	73
			T3M	6,039	1	0	2	116	6,485	1	0	2	125	6,525	1	0	2	125	3,752	1	0	1	72
			T4M	6,121	1	0	2	118	6,573	1	0	2	126	6,614	1	0	2	127	3,758	1	0	1	72
			TFTM	6,030	1	0	2	116	6,475	1	0	2	125	6,515	1	0	2	125	3,701	1	0	1	71
			TSVS	6,370	2	0	0	123	6,840	2	0	0	132	6,883	2	0	0	132	3,928	2	0	0	76
			T5S	6,417	2	0	0	123	6,890	2	0	0	133	6,933	2	0	0	133	3,881	2	0	0	75
			T5M	6,428	3	0	1	124	6,902	3	0	1	133	6,945	3	0	1	134	3,930	2	0	1	76
			TSW	6,334	3	0	1	122	6,801	3	0	1	131	6,844	3	0	1	132	3,820	3	0	1	73
			BLC	4,735	1	0	1	91	5,085	1	0	2	98	5,116	1	0	1	98					
			LCCO	4,600	1	0	2	88	4,940	1	0	2	95	4,971	1	0	2	96					
			RCCO	4,600	1	0	2	88	4,940	1	0	2	95	4,971	1	0	2	96					
	700 mA	68 W	T1S	7,554	1	0	1	111	8,112	2	0	2	119	8,163	2	0	2	120	4,561	1	0	1	67
			T2S	7,789	2	0	2	115	8,364	2	0	2	123	8,416	2	0	2	124	4,777	1	0	1	70
			T2M	7,610	1	0	2	112	8,172	2	0	2	120	8,223	2	0	2	121	4,622	1	0	2	68
			T3S	7,601	1	0	2	112	8,162	2	0	2	120	8,213	2	0	2	121	4,724	1	0	1	69
			T3M	7,670	1	0	2	113	8,236	2	0	2	121	8,288	2	0	2	122	4,701	1	0	2	69
			T4M	7,774	1	0	2	114	8,348	2	0	2	123	8,400	2	0	2	124	4,709	1	0	2	69
			TFTM	7,658	1	0	2	113	8,223	1	0	2	121	8,275	1	0	2	122	4,638	1	0	2	68
			TSVS	8,090	2	0	0	119	8,687	3	0	1	128	8,742	3	0	1	129	4,922	2	0	0	72
			T5S	8,150	2	0	0	120	8,751	3	0	0	129	8,806	3	0	0	130	4,863	2	0	0	72
			T5M	8,164	3	0	1	120	8,767	3	0	2	129	8,821	3	0	2	130	4,924	3	0	1	72
			TSW	8,044	3	0	1	118	8,638	3	0	2	127	8,692	3	0	2	128	4,787	3	0	1	70
			BLC	6,028	1	0	2	89	6,473	1	0	2	95	6,514	1	0	2	96					
			LCCO	5,856	1	0	2	86	6,289	1	0	2	92	6,328	1	0	2	93					
			RCCO	5,856	1	0	2	86	6,289	1	0	2	92	6,328	1	0	2	93					
	1000 mA	105 W	T1S	10,331	2	0	2	98	11,094	2	0	2	106	11,163	2	0	2	106					
			T2S	10,652	2	0	2	101	11,438	2	0	2	109	11,510	2	0	2	110					
			T2M	10,408	2	0	2	99	11,176	2	0	3	106	11,246	2	0	3	107					
			T3S	10,395	2	0	2	99	11,163	2	0	2	106	11,233	2	0	2	107					
			T3M	10,490	2	0	2	100	11,264	2	0	2	107	11,335	2	0	2	108					
			T4M	10,632	2	0	2	101	11,417	2	0	2	109	11,488	2	0	2	109					
			TFTM	10,473	2	0	2	100	11,247	2	0	3	107	11,317	2	0	3	108					
			TSVS	11,064	3	0	1	105	11,881	3	0	1	113	11,955	3	0	1	114					
			T5S	11,145	3	0	1	106	11,968	3	0	1	114	12,043	3	0	1	115					
			T5M	11,165	3	0	2	106	11,989	4	0	2	114	12,064	4	0	2	115					
			TSW	11,001	3	0	2	105	11,813	4	0	2	113	11,887	4	0	2	113					
			BLC	7,960	1	0	2	76	8,548	1	0	2	81	8,601	1	0	2	82					
			LCCO	7,734	1	0	2	74	8,305	1	0	2	79	8,357	1	0	2	80					
			RCCO	7,734	1	0	2	74	8,305	1	0	2	79	8,357	1	0	2	80					

Performance Data

Lumen Output

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown, within the tolerances allowed by Lighting Facts. Contact factory for performance data on any configurations not shown here.

Forward Optics

LEDs	Drive Current (mA)	System Watts	Dist. Type	30K (3000 K, 70 CRI)					40K (4000 K, 70 CRI)					50K (5000 K, 70 CRI)					AMBPC (Amber Phosphor Converted)				
				Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW
40C (40 LEDs)	530 mA	68 W	T1S	7,861	1	0	1	116	8,441	2	0	2	124	8,494	2	0	2	125	4,794	1	0	1	71
			T2S	8,105	2	0	2	119	8,704	2	0	2	128	8,758	2	0	2	129	5,021	1	0	1	74
			T2M	7,920	2	0	2	116	8,504	2	0	2	125	8,557	2	0	2	126	4,858	1	0	2	71
			T3S	7,910	1	0	2	116	8,494	2	0	2	125	8,547	2	0	2	126	4,966	1	0	1	73
			T3M	7,982	2	0	2	117	8,571	2	0	2	126	8,625	2	0	2	127	4,941	1	0	2	73
			T4M	8,090	1	0	2	119	8,687	2	0	2	128	8,741	2	0	2	129	4,950	1	0	2	73
			TFTM	7,969	1	0	2	117	8,558	2	0	2	126	8,611	2	0	2	127	4,875	1	0	2	72
			TSVS	8,419	2	0	0	124	9,040	3	0	1	133	9,097	3	0	1	134	5,174	2	0	0	76
			T5S	8,481	2	0	0	125	9,107	3	0	1	134	9,164	3	0	1	135	5,111	2	0	0	75
			T5M	8,496	3	0	1	125	9,123	3	0	2	134	9,180	3	0	2	135	5,175	3	0	1	76
			TSW	8,371	3	0	2	123	8,989	3	0	2	132	9,045	3	0	2	133	5,031	3	0	1	74
			BLC	6,255	1	0	2	92	6,717	1	0	2	99	6,759	1	0	2	99					
			LCCO	6,077	1	0	2	89	6,526	1	0	2	96	6,566	1	0	2	97					
			RCCO	6,077	1	0	2	89	6,526	1	0	2	96	6,566	1	0	2	97					
	700 mA	91 W	T1S	9,984	2	0	2	112	10,721	2	0	2	120	10,788	2	0	2	121	6,014	1	0	1	68
			T2S	10,294	2	0	2	116	11,054	2	0	2	124	11,123	2	0	2	125	6,299	2	0	2	71
			T2M	10,059	2	0	2	113	10,801	2	0	3	121	10,869	2	0	3	122	6,094	2	0	2	68
			T3S	10,046	2	0	2	113	10,788	2	0	2	121	10,855	2	0	2	122	6,229	1	0	2	70
			T3M	10,137	2	0	2	114	10,886	2	0	2	122	10,954	2	0	2	123	6,198	2	0	2	70
			T4M	10,275	2	0	2	115	11,033	2	0	2	124	11,102	2	0	2	125	6,209	1	0	2	70
			TFTM	10,122	2	0	2	114	10,869	2	0	2	122	10,937	2	0	2	123	6,115	1	0	2	69
			TSVS	10,693	3	0	1	120	11,482	3	0	1	129	11,554	3	0	1	130	6,490	2	0	0	73
			T5S	10,771	3	0	1	121	11,566	3	0	1	130	11,639	3	0	1	131	6,411	2	0	0	72
			T5M	10,790	3	0	2	121	11,587	4	0	2	130	11,659	4	0	2	131	6,492	3	0	1	73
			TSW	10,632	3	0	2	119	11,417	4	0	2	128	11,488	4	0	2	129	6,311	3	0	2	71
			BLC	7,963	1	0	2	89	8,551	1	0	2	96	8,605	1	0	2	97					
			LCCO	7,736	1	0	2	87	8,308	1	0	2	93	8,359	1	0	2	94					
			RCCO	7,736	1	0	2	87	8,308	1	0	2	93	8,359	1	0	2	94					
	1000 mA	138 W	T1S	13,655	2	0	2	99	14,663	3	0	3	106	14,754	3	0	3	107					
			T2S	14,079	2	0	2	102	15,118	3	0	3	110	15,212	3	0	3	110					
			T2M	13,756	2	0	3	100	14,772	3	0	3	107	14,864	3	0	3	108					
			T3S	13,739	2	0	2	100	14,754	2	0	2	107	14,846	3	0	3	108					
			T3M	13,864	2	0	2	100	14,888	3	0	3	108	14,981	3	0	3	109					
			T4M	14,052	2	0	2	102	15,090	3	0	3	109	15,184	3	0	3	110					
			TFTM	13,842	2	0	3	100	14,864	2	0	3	108	14,957	2	0	3	108					
			TSVS	14,623	3	0	1	106	15,703	4	0	1	114	15,801	4	0	1	115					
			T5S	14,731	3	0	1	107	15,818	3	0	1	115	15,917	3	0	1	115					
			T5M	14,757	4	0	2	107	15,846	4	0	2	115	15,945	4	0	2	116					
			TSW	14,540	4	0	2	105	15,614	4	0	2	113	15,711	4	0	2	114					
			BLC	10,516	1	0	2	76	11,292	1	0	2	82	11,363	1	0	2	82					
			LCCO	10,216	2	0	3	74	10,971	2	0	3	80	11,039	2	0	3	80					
			RCCO	10,216	2	0	3	74	10,971	2	0	3	80	11,039	2	0	3	80					

Performance Data

Lumen Output

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown, within the tolerances allowed by Lighting Facts. Contact factory for performance data on any configurations not shown here.

Forward Optics

LEDs	Drive Current (mA)	System Watts	Dist. Type	30K (3000 K, 70 CRI)					40K (4000 K, 70 CRI)					50K (5000 K, 70 CRI)					AMBPC (Amber Phosphor Converted)				
				Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW
60C (60 LEDs)	530 mA	99 W	T1S	11,569	2	0	2	117	12,423	2	0	2	125	12,501	2	0	2	126	7,167	2	0	2	72
			T2S	11,928	2	0	2	120	12,809	3	0	3	129	12,889	3	0	3	130	7,507	2	0	2	76
			T2M	11,655	2	0	2	118	12,516	2	0	3	126	12,594	2	0	3	127	7,263	2	0	2	73
			T3S	11,641	2	0	2	118	12,500	2	0	2	126	12,579	2	0	2	127	7,424	2	0	2	75
			T3M	11,747	2	0	2	119	12,614	2	0	2	127	12,693	2	0	2	128	7,387	2	0	2	75
			T4M	11,906	2	0	2	120	12,785	2	0	2	129	12,865	2	0	2	130	7,400	2	0	2	75
			TFTM	11,728	2	0	2	118	12,594	2	0	3	127	12,673	2	0	3	128	7,288	1	0	2	74
			TSVS	12,390	3	0	1	125	13,305	3	0	1	134	13,388	3	0	1	135	7,734	3	0	1	78
			T5S	12,481	3	0	1	126	13,402	3	0	1	135	13,486	3	0	1	136	7,641	3	0	0	77
			T5M	12,503	3	0	2	126	13,426	4	0	2	136	13,510	4	0	2	136	7,737	3	0	2	78
			TSW	12,320	4	0	2	124	13,229	4	0	2	134	13,312	4	0	2	134	7,522	3	0	2	76
			BLC	9,212	1	0	2	93	9,892	1	0	2	100	9,954	1	0	2	101					
			LCCO	8,950	1	0	2	90	9,611	2	0	2	97	9,671	2	0	2	98					
			RCCO	8,950	1	0	2	90	9,611	2	0	2	97	9,671	2	0	2	98					
	700 mA	131 W	T1S	14,694	2	0	2	112	15,779	3	0	3	120	15,877	3	0	3	121	8,952	2	0	2	68
			T2S	15,150	3	0	3	116	16,269	3	0	3	124	16,370	3	0	3	125	9,377	2	0	2	72
			T2M	14,803	2	0	3	113	15,896	3	0	3	121	15,995	3	0	3	122	9,072	2	0	2	69
			T3S	14,785	2	0	2	113	15,877	3	0	3	121	15,976	3	0	3	122	9,273	2	0	2	71
			T3M	14,919	2	0	2	114	16,021	3	0	3	122	16,121	3	0	3	123	9,227	2	0	2	70
			T4M	15,122	2	0	2	115	16,238	3	0	3	124	16,340	3	0	3	125	9,243	2	0	2	71
			TFTM	14,896	2	0	3	114	15,996	2	0	3	122	16,096	2	0	3	123	9,103	2	0	2	69
			TSVS	15,736	3	0	1	120	16,898	4	0	1	129	17,004	4	0	1	130	9,661	3	0	1	74
			T5S	15,852	3	0	1	121	17,022	4	0	1	130	17,129	4	0	1	131	9,544	3	0	1	73
			T5M	15,880	4	0	2	121	17,052	4	0	2	130	17,159	4	0	2	131	9,665	3	0	2	74
			TSW	15,647	4	0	2	119	16,802	4	0	2	128	16,907	4	0	2	129	9,395	4	0	2	72
			BLC	11,728	1	0	2	90	12,594	1	0	2	96	12,672	3	0	3	97					
			LCCO	11,394	2	0	3	87	12,235	2	0	3	93	12,311	2	0	3	94					
			RCCO	11,394	2	0	3	87	12,235	2	0	3	93	12,311	2	0	3	94					
	1000 mA	209 W	T1S	20,095	3	0	3	96	21,579	3	0	3	103	21,714	3	0	3	104					
			T2S	20,720	3	0	3	99	22,249	3	0	3	106	22,388	3	0	3	107					
			T2M	20,245	3	0	3	97	21,740	3	0	3	104	21,876	3	0	3	105					
			T3S	20,220	3	0	3	97	21,713	3	0	3	104	21,849	3	0	3	105					
			T3M	20,404	3	0	3	98	21,910	3	0	4	105	22,047	3	0	4	105					
			T4M	20,681	3	0	3	99	22,207	3	0	4	106	22,346	3	0	4	107					
			TFTM	20,372	3	0	3	97	21,876	3	0	4	105	22,013	3	0	4	105					
			TSVS	21,521	4	0	1	103	23,110	4	0	1	111	23,254	4	0	1	111					
			T5S	21,679	4	0	1	104	23,280	4	0	1	111	23,425	4	0	1	112					
			T5M	21,717	4	0	2	104	23,321	5	0	3	112	23,466	5	0	3	112					
			TSW	21,399	4	0	3	102	22,979	5	0	3	110	23,122	5	0	3	111					
			BLC	15,487	2	0	2	74	16,630	2	0	2	80	16,734	2	0	3	80					
			LCCO	15,046	2	0	3	72	16,157	2	0	3	77	16,258	2	0	3	78					
			RCCO	15,046	2	0	3	72	16,157	2	0	3	77	16,258	2	0	3	78					

Performance Data

Lumen Output

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown, within the tolerances allowed by Lighting Facts. Contact factory for performance data on any configurations not shown here.

L90 and R90 Rotated Optics

LEDs	Drive Current (mA)	System Watts	Dist. Type	30K (3000 K, 70 CRI)					40K (4000 K, 70 CRI)					50K (5000 K, 70 CRI)					AMBPC (Amber Phosphor Converted)				
				Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW
60C (60 LEDs)	530 mA	99 W	T1S	11,569	2	0	2	117	12,423	2	0	2	125	12,501	2	0	2	126	7,167	2	0	2	72
			T2S	11,928	2	0	2	120	12,809	3	0	3	129	12,889	3	0	3	130	7,507	2	0	2	76
			T2M	11,655	2	0	2	118	12,516	2	0	3	126	12,594	2	0	3	127	7,263	2	0	2	73
			T3S	11,641	2	0	2	118	12,500	2	0	2	126	12,579	2	0	2	127	7,424	2	0	2	75
			T3M	11,747	2	0	2	119	12,614	2	0	2	127	12,693	2	0	2	128	7,387	2	0	2	75
			T4M	11,906	2	0	2	120	12,785	2	0	2	129	12,865	2	0	2	130	7,400	2	0	2	75
			TFTM	11,728	2	0	2	118	12,594	2	0	3	127	12,673	2	0	3	128	7,288	1	0	2	74
			TSVS	12,390	3	0	1	125	13,305	3	0	1	134	13,388	3	0	1	135	7,734	3	0	1	78
			T5S	12,481	3	0	1	126	13,402	3	0	1	135	13,486	3	0	1	136	7,641	3	0	0	77
			T5M	12,503	3	0	2	126	13,426	4	0	2	136	13,510	4	0	2	136	7,737	3	0	2	78
			TSW	12,320	4	0	2	124	13,229	4	0	2	134	13,312	4	0	2	134	7,522	3	0	2	76
			BLC	9,212	1	0	2	93	9,892	1	0	2	100	9,954	1	0	2	101					
			LCCO	8,950	1	0	2	90	9,611	2	0	2	97	9,671	2	0	2	98					
			RCCO	8,950	1	0	2	90	9,611	2	0	2	97	9,671	2	0	2	98					
	700 mA	131 W	T1S	14,694	2	0	2	112	15,779	3	0	3	120	15,877	3	0	3	121	8,952	2	0	2	68
			T2S	15,150	3	0	3	116	16,269	3	0	3	124	16,370	3	0	3	125	9,377	2	0	2	72
			T2M	14,803	2	0	3	113	15,896	3	0	3	121	15,995	3	0	3	122	9,072	2	0	2	69
			T3S	14,785	2	0	2	113	15,877	3	0	3	121	15,976	3	0	3	122	9,273	2	0	2	71
			T3M	14,919	2	0	2	114	16,021	3	0	3	122	16,121	3	0	3	123	9,227	2	0	2	70
			T4M	15,122	2	0	2	115	16,238	3	0	3	124	16,340	3	0	3	125	9,243	2	0	2	71
			TFTM	14,896	2	0	3	114	15,996	2	0	3	122	16,096	2	0	3	123	9,103	2	0	2	69
			TSVS	15,736	3	0	1	120	16,898	4	0	1	129	17,004	4	0	1	130	9,661	3	0	1	74
			T5S	15,852	3	0	1	121	17,022	4	0	1	130	17,129	4	0	1	131	9,544	3	0	1	73
			T5M	15,880	4	0	2	121	17,052	4	0	2	130	17,159	4	0	2	131	9,665	3	0	2	74
			TSW	15,647	4	0	2	119	16,802	4	0	2	128	16,907	4	0	2	129	9,395	4	0	2	72
			BLC	11,728	1	0	2	90	12,594	1	0	2	96	12,672	3	0	3	97					
			LCCO	11,394	2	0	3	87	12,235	2	0	3	93	12,311	2	0	3	94					
			RCCO	11,394	2	0	3	87	12,235	2	0	3	93	12,311	2	0	3	94					
	1000 mA	209 W	T1S	20,095	3	0	3	96	21,579	3	0	3	103	21,714	3	0	3	104					
			T2S	20,720	3	0	3	99	22,249	3	0	3	106	22,388	3	0	3	107					
			T2M	20,245	3	0	3	97	21,740	3	0	3	104	21,876	3	0	3	105					
			T3S	20,220	3	0	3	97	21,713	3	0	3	104	21,849	3	0	3	105					
			T3M	20,404	3	0	3	98	21,910	3	0	4	105	22,047	3	0	4	105					
			T4M	20,681	3	0	3	99	22,207	3	0	4	106	22,346	3	0	4	107					
			TFTM	20,372	3	0	3	97	21,876	3	0	4	105	22,013	3	0	4	105					
			TSVS	21,521	4	0	1	103	23,110	4	0	1	111	23,254	4	0	1	111					
			T5S	21,679	4	0	1	104	23,280	4	0	1	111	23,425	4	0	1	112					
			T5M	21,717	4	0	2	104	23,321	5	0	3	112	23,466	5	0	3	112					
			TSW	21,399	4	0	3	102	22,979	5	0	3	110	23,122	5	0	3	111					
			BLC	15,487	2	0	2	74	16,630	2	0	2	80	16,734	2	0	3	80					
			LCCO	15,046	2	0	3	72	16,157	2	0	3	77	16,258	2	0	3	78					
			RCCO	15,046	2	0	3	72	16,157	2	0	3	77	16,258	2	0	3	78					

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 ft²) 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) or optional 3000 K (70 minimum CRI) or 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 30, 40 or 60 high-efficacy LEDs mounted to metal-core circuit boards to maximize heat dissipation and promote long life (up to L99/100,000 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 or 6kV 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, tool-less entry, 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) qualified product. Not all versions of this product may be DLC qualified. Please check the DLC Qualified Products List at www.designlights.org 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.





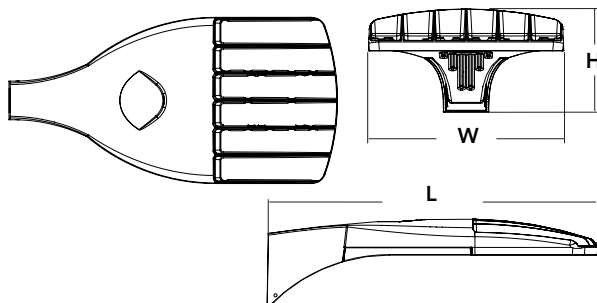
D-Series Size 0 LED Area Luminaire



d#series

Specifications

EPA:	0.95 ft ² (.09 m ²)
Length:	26" (66.0 cm)
Width:	13" (33.0 cm)
Height:	7" (17.8 cm)
Weight (max):	16 lbs (7.25 kg)



Catalog
Number

Notes

Type

Hit the Tab key or mouse over the page to see all interactive elements.

Introduction

The modern styling of the D-Series is striking yet unobtrusive - making a bold, progressive statement even as it blends seamlessly with its environment.

The D-Series distills the benefits of the latest in LED technology into a high performance, high efficacy, long-life luminaire. The outstanding photometric performance results in sites with excellent uniformity, greater pole spacing and lower power density. It is ideal for replacing up to 400W metal halide with typical energy savings of 65% and expected service life of over 100,000 hours.

Ordering Information

EXAMPLE: DSX0 LED 40C 1000 40K T3M MVOLT SPA DDBXD

DSX0 LED						
Series	LEDs	Drive current	Color temperature	Distribution	Voltage	Mounting
DSX0 LED	Forward optics 20C 20 LEDs (one engine) 40C 40 LEDs (two engines) Rotated optics¹ 30C 30 LEDs (one engine)	530 530 mA 700 700 mA 1000 1000 mA (1 A) ²	30K 3000 K 40K 4000 K 50K 5000 K AMBPC Amber phosphor converted ³	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 T5VS Type V very short T5S Type V short T5M Type V medium T5W Type V wide BLC Backlight control ^{2,4} LCCO Left corner cutoff ^{2,4} RCCO Right corner cutoff ^{2,4}	MVOLT ⁵ 120 ⁵ 208 ⁵ 240 ⁵ 277 ⁵ 347 ⁶ 480 ⁶	Shipped included SPA Square pole mounting RPA Round pole mounting WBA Wall bracket SPUMBA Square pole universal mounting adaptor ⁷ RPUMBA Round pole universal mounting adaptor ⁷ Shipped separately KMA8 DDBXD U Mast arm mounting bracket adaptor (specify finish) ⁸

Control options	Other options	Finish (required)
Shipped installed PER NEMA twist-lock receptacle only (no controls) ⁹ PER5 Five-wire receptacle only (no controls) ^{9,10} PER7 Seven-wire receptacle only (no controls) ^{9,10} DMG 0-10V dimming driver (no controls) ¹¹ DCR Dimmable and controllable via ROAM [®] (no controls) ¹² PIR Bi-level, motion/ambient sensor, 8-15' mounting height, ambient sensor enabled at 5fc ¹³ PIRH Bi-level, motion/ambient sensor, 15-30' mounting height, ambient sensor enabled at 5fc ¹³ PIR1FC3V Bi-level, motion/ambient sensor, 8-15' mounting height, ambient sensor enabled at 1fc ¹³	Shipped installed HS House-side shield ¹⁸ SF Single fuse (120, 277, 347V) ¹⁹ DF Double fuse (208, 240, 480V) ¹⁹ L90 Left rotated optics ¹ R90 Right rotated optics ¹ DDL Diffused drop lens ¹⁸ BS Bird spikes ²⁰	DDBXD Dark bronze DBLXD Black DNAXD Natural aluminum DWHXD White DDBTXD Textured dark bronze DBLBXD Textured black DNATXD Textured natural aluminum DWHGXD Textured white

Controls & Shields

DL127F 1.5 JU	Photocell - SSL twist-lock (120-277V) ²¹
DL1347F 1.5 CUL JU	Photocell - SSL twist-lock (347V) ²¹
DL1480F 1.5 CUL JU	Photocell - SSL twist-lock (480V) ²¹
DSHORT SBK U	Shorting cap ²¹
DSX0HS 20C U	House-side shield for 20 LED unit ¹⁸
DSX0HS 30C U	House-side shield for 30 LED unit ¹⁸
DSX0HS 40C U	House-side shield for 40 LED unit ¹⁸
DSX0DDL U	Diffused drop lens (polycarbonate) ¹⁷
PUMBA DDBXD U*	Square and round pole universal mounting bracket adaptor (specify finish) ¹²
KMA8 DDBXD U	Mast arm mounting bracket adaptor (specify finish) ⁸
DSX0BS U	Bird spikes

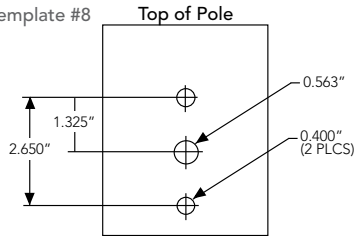
NOTES

- 30 LEDs (30C option) and rotated options (L90 or R90) only available together.
- Not available with AMBPC.
- Only available with 530mA or 700mA.
- Not available with HS or DDL.
- MVOLT driver operates on any line voltage from 120-277V (50/60 Hz). Specify 120V, 208V, 240V or 277V options only when ordering with fusing (SF, DF options).
- Not available with single board, 530mA product (20C 530 or 30C 530). 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 ANSI C136.31.
- Must order fixture with SPA mounting. Must be ordered as a separate accessory; see Accessories information. For use with 2-3/8" mast arm (not included).
- Photocell ordered and shipped as a separate line item from Acuity Brands Controls. See accessories.
- 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.
- DMG option for 347V or 480V requires 1000mA.
- Specifies a ROAM[®] enabled luminaire with 0-10V dimming capability; PER option required. Additional hardware and services required for ROAM[®] deployment; must be purchased separately. Call 1-800-442-6745 or email: sales@roamservices.net. N/A with PIR options, PER5, PER7, BL30, BL50 or PNMT options. Node without integral dimming.

- PIR and PIR1FC3V specify the [SensorSwitch SBGR-10-ODP](#) control; PIRH and PIRH1FC3V specify the [SensorSwitch SBGR-6-ODP](#) control; see [Outdoor Control Technical Guide](#) for details. Dimming driver standard. Not available with PER5 or PER7. Ambient sensor disabled when ordered with DCR. Separate on/off required. Not available with PNMT options.
- Requires an additional switched circuit.
- Dimming driver standard. MVOLT only. Not available with 347V, 480V, DCR, PER5, PER7 or PNMT options. Not available with PIR1FC3V and PIRH1FC3V.
- Dimming driver standard. MVOLT only. Not available with 347V, 480V, DCR, PER5, PER7, BL30 or BL50. Not available with PIR1FC3V and PIRH1FC3V. Separate on/off required.
- Dimming driver standard. Not available with PER5, PER7, DMG, DCR, BL30, BL50, PNMT, PIR, PIRH, PIR1FC3V and PIRH1FC3V.
- Not available with BLC, LCCO and RCCO distribution. Also available as a separate accessory; see Accessories information.
- Single fuse (SF) requires 120V, 277V or 347V. Double fuse (DF) requires 208V, 240V or 480V.
- Also available as a separate accessory; see accessories information.
- Requires luminaire to be specified with PER option. Ordered and shipped as a separate line item from Acuity Brands Controls.
- For retrofit use only.

Drilling

Template #8



DSX0 shares a unique drilling pattern with the AERIS™ family. Specify this drilling pattern when specifying poles, per the table below.

DM19AS	Single unit	DM29AS	2 at 90° *
DM28AS	2 at 180°	DM39AS	3 at 90° *
DM49AS	4 at 90° *	DM32AS	3 at 120° **

Example: SSA 20 4C DM19AS DDBXD

Visit Lithonia Lighting's [POLES CENTRAL](#) to see our wide selection of poles, accessories and educational tools.

*Round pole top must be 3.25" O.D. minimum.

**For round pole mounting (RPA) only.

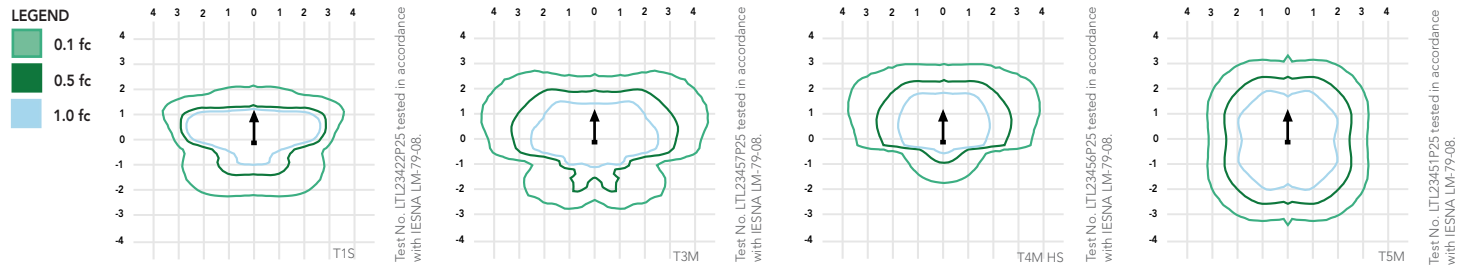
Tenon Mounting Slipfitter **

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

Photometric Diagrams

To see complete photometric reports or download .ies files for this product, visit [Lithonia Lighting's D-Series Area Size 0 homepage](#).

Isofootcandle plots for the DSX0 LED 40C 1000 40K. Distances are in units of mounting height (20').



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	1.02
10°C	50°F	1.01
20°C	68°F	1.00
25°C	77°F	1.00
30°C	86°F	1.00
40°C	104°F	0.99

Electrical Load

Number of LEDs	Drive Current (mA)	System Watts	Current (A)					
			120	208	240	277	347	480
20C	530	35	0.34	0.22	0.21	0.20	--	--
	700	45	0.47	0.28	0.24	0.22	0.18	0.14
	1000	72	0.76	0.45	0.39	0.36	0.36	0.26
30C	530	52	0.51	0.31	0.28	0.25	--	--
	700	70	0.72	0.43	0.37	0.34	0.25	0.19
	1000	104	1.11	0.64	0.56	0.49	0.47	0.34
40C	530	68	0.71	0.41	0.36	0.33	0.25	0.19
	700	91	0.94	0.55	0.48	0.42	0.33	0.24
	1000	138	1.45	0.84	0.73	0.64	0.69	0.50

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	25,000	50,000	100,000
Lumen Maintenance Factor		DSX0 LED 20C 1000		
	1	0.98	0.96	0.93
		DSX0 LED 40C 1000		
	1	0.98	0.95	0.90
		DSX0 LED 40C 700		
	1	0.99	0.99	0.99

Performance Data

Lumen Output

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown, within the tolerances allowed by Lighting Facts. Contact factory for performance data on any configurations not shown here.

Forward Optics

LEDs	Drive Current (mA)	System Watts	Dist. Type	30K (3000 K, 70 CRI)					40K (4000 K, 70 CRI)					50K (5000 K, 70 CRI)					AMBPC (Amber Phosphor Converted)				
				Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW
20C (20 LEDs)	530 mA	35 W	T1S	4,079	1	0	1	117	4,380	1	0	1	125	4,408	1	0	1	126	2,541	1	0	1	73
			T2S	4,206	1	0	1	120	4,516	1	0	1	129	4,544	1	0	1	130	2,589	1	0	1	74
			T2M	4,109	1	0	1	117	4,413	1	0	1	126	4,440	1	0	1	127	2,539	1	0	1	73
			T3S	4,104	1	0	1	117	4,407	1	0	1	126	4,435	1	0	1	127	2,558	1	0	1	73
			T3M	4,142	1	0	1	118	4,447	1	0	1	127	4,475	1	0	1	128	2,583	1	0	1	74
			T4M	4,198	1	0	1	120	4,508	1	0	1	129	4,536	1	0	1	130	2,570	1	0	1	73
			TFTM	4,135	1	0	1	118	4,440	1	0	2	127	4,468	1	0	2	128	2,540	1	0	1	73
			TSVS	4,368	2	0	0	125	4,691	2	0	0	134	4,720	2	0	0	135	2,650	1	0	0	76
			TSS	4,401	2	0	2	126	4,725	2	0	0	135	4,755	2	0	0	136	2,690	1	0	0	77
			TSM	4,408	2	0	1	126	4,734	3	0	1	135	4,763	3	0	1	136	2,658	2	0	0	76
			TSW	4,344	3	0	1	124	4,664	3	0	1	133	4,693	3	0	1	134	2,663	2	0	1	76
			BLC	3,071	1	0	1	88	3,297	1	0	1	94	3,318	1	0	1	95					
			LCCO	2,983	1	0	1	85	3,204	1	0	1	92	3,224	1	0	1	92					
			RCCO	2,983	1	0	1	85	3,204	1	0	1	92	3,224	1	0	1	92					
	700 mA	45 W	T1S	5,181	1	0	1	115	5,563	1	0	1	124	5,598	1	0	1	124	3,144	1	0	1	70
			T2S	5,342	1	0	1	119	5,736	1	0	1	127	5,772	1	0	1	128	3,203	1	0	1	71
			T2M	5,219	1	0	1	116	5,605	1	0	1	125	5,640	1	0	1	125	3,141	1	0	1	70
			T3S	5,213	1	0	1	116	5,598	1	0	1	124	5,633	1	0	1	125	3,165	1	0	1	70
			T3M	5,260	1	0	1	117	5,649	1	0	2	126	5,684	1	0	2	126	3,196	1	0	1	71
			T4M	5,332	1	0	1	118	5,725	1	0	2	127	5,761	1	0	2	128	3,179	1	0	1	71
			TFTM	5,252	1	0	2	117	5,640	1	0	2	125	5,675	1	0	2	126	3,143	1	0	1	70
			TSVS	5,548	2	0	0	123	5,958	2	0	0	132	5,995	2	0	0	133	3,278	2	0	0	73
			TSS	5,589	2	0	0	124	6,002	2	0	0	133	6,039	2	0	0	134	3,328	2	0	0	74
			TSM	5,599	3	0	1	124	6,012	3	0	1	134	6,050	3	0	1	134	3,288	2	0	1	73
			TSW	5,517	3	0	1	123	5,924	3	0	1	132	5,961	3	0	1	132	3,295	2	0	1	73
			BLC	3,909	1	0	1	87	4,198	1	0	1	93	4,224	1	0	1	94					
			LCCO	3,798	1	0	1	84	4,078	1	0	1	91	4,104	1	0	1	91					
			RCCO	3,798	1	0	1	84	4,078	1	0	1	91	4,104	1	0	1	91					
	1000 mA	72 W	T1S	7,085	1	0	1	98	7,608	2	0	2	106	7,656	2	0	2	106					
			T2S	7,305	1	0	1	101	7,845	2	0	2	109	7,894	2	0	2	110					
			T2M	7,138	1	0	2	99	7,665	2	0	2	106	7,713	2	0	2	107					
			T3S	7,129	1	0	1	99	7,656	2	0	2	106	7,704	2	0	2	107					
			T3M	7,194	1	0	2	100	7,725	2	0	2	107	7,773	2	0	2	108					
			T4M	7,292	1	0	2	101	7,830	2	0	2	109	7,879	2	0	2	109					
			TFTM	7,183	1	0	2	100	7,713	1	0	2	107	7,761	1	0	2	108					
			TSVS	7,588	2	0	0	105	8,148	3	0	0	113	8,199	3	0	0	114					
			TSS	7,644	2	0	0	106	8,208	2	0	0	114	8,259	2	0	0	115					
			TSM	7,657	3	0	1	106	8,222	3	0	1	114	8,274	3	0	1	115					
			TSW	7,545	3	0	1	105	8,102	3	0	2	113	8,153	3	0	2	113					
			BLC	5,162	1	0	1	72	5,543	1	0	2	77	5,578	1	0	1	77					
			LCCO	5,015	1	0	2	70	5,386	1	0	2	75	5,419	1	0	2	75					
			RCCO	5,015	1	0	2	70	5,386	1	0	2	75	5,419	1	0	2	75					

Performance Data

Lumen Output

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown, within the tolerances allowed by Lighting Facts. Contact factory for performance data on any configurations not shown here.

Forward Optics

LEDs	Drive Current (mA)	System Watts	Dist. Type	30K (3000 K, 70 CRI)					40K (4000 K, 70 CRI)					50K (5000 K, 70 CRI)					AMBPC (Amber Phosphor Converted)					
				Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	
40C (40 LEDs)	530 mA	68 W	T1S	7,926	2	0	2	117	8,511	2	0	2	125	8,564	2	0	2	126	4,878	1	0	1	72	
			T2S	8,172	2	0	2	120	8,775	2	0	2	129	8,830	2	0	2	130	4,969	1	0	1	73	
			T2M	7,985	2	0	2	117	8,574	2	0	2	126	8,628	2	0	2	127	4,874	1	0	1	72	
			T3S	7,975	1	0	2	117	8,564	2	0	2	126	8,617	2	0	2	127	4,910	1	0	1	72	
			T3M	8,047	2	0	2	118	8,642	2	0	2	127	8,696	2	0	2	128	4,958	1	0	2	73	
			T4M	8,157	1	0	2	120	8,759	2	0	2	129	8,813	2	0	2	130	4,932	1	0	2	73	
			TFTM	8,035	1	0	2	118	8,628	2	0	2	127	8,682	2	0	2	128	4,876	1	0	2	72	
			TSVS	8,488	2	0	0	125	9,115	3	0	0	134	9,172	3	0	0	135	5,086	2	0	0	75	
			TSS	8,550	2	0	0	126	9,182	3	0	1	135	9,239	3	0	1	136	5,163	2	0	0	76	
			TSM	8,565	3	0	1	126	9,198	3	0	2	135	9,255	3	0	2	136	5,102	3	0	1	75	
			TSW	8,440	3	0	2	124	9,063	3	0	2	133	9,120	3	0	2	134	5,112	3	0	1	75	
			BLC	6,142	1	0	2	90	6,595	1	0	2	97	6,636	1	0	2	98						
			LCCO	5,967	1	0	2	88	6,407	1	0	2	94	6,447	1	0	2	95						
			RCCO	5,967	1	0	2	88	6,407	1	0	2	94	6,447	1	0	2	95						
		700 mA	91 W	T1S	10,066	2	0	2	111	10,810	2	0	2	119	10,877	2	0	2	120	6,206	2	0	2	68
	T2S			10,379	2	0	2	114	11,145	2	0	2	122	11,215	2	0	2	123	6,322	2	0	2	69	
	T2M			10,141	2	0	2	111	10,890	2	0	2	120	10,958	2	0	2	120	6,201	2	0	2	68	
	T3S			10,129	2	0	2	111	10,877	2	0	2	120	10,945	2	0	2	120	6,247	1	0	2	69	
	T3M			10,221	2	0	2	112	10,975	2	0	2	121	11,044	2	0	2	121	6,308	2	0	2	69	
	T4M			10,359	2	0	2	114	11,124	2	0	2	122	11,194	2	0	2	123	6,275	1	0	2	69	
	TFTM			10,205	2	0	2	112	10,958	2	0	3	120	11,027	2	0	3	121	6,203	1	0	2	68	
	TSVS			10,781	3	0	0	118	11,576	3	0	1	127	11,649	3	0	1	128	6,569	2	0	0	72	
	TSS			10,860	3	0	1	119	11,662	3	0	1	128	11,734	3	0	1	129	6,569	2	0	0	72	
	TSM			10,879	3	0	2	120	11,682	3	0	2	128	11,755	3	0	2	129	6,491	3	0	1	71	
	TSW			10,719	3	0	2	118	11,511	4	0	2	126	11,583	4	0	2	127	6,504	3	0	2	71	
	BLC			7,819	1	0	2	86	8,396	1	0	2	92	8,448	1	0	2	93						
	LCCO			7,596	1	0	2	83	8,157	1	0	2	90	8,208	1	0	2	90						
	RCCO			7,596	1	0	2	83	8,157	1	0	2	90	8,208	1	0	2	90						
		1000 mA	138 W	T1S	13,767	2	0	2	100	14,783	3	0	3	107	14,876	3	0	3	108					
	T2S			14,194	2	0	2	103	15,242	3	0	3	110	15,338	3	0	3	111						
	T2M			13,869	2	0	2	101	14,893	3	0	3	108	14,986	3	0	3	109						
	T3S			13,852	2	0	2	100	14,875	2	0	2	108	14,968	2	0	2	108						
	T3M			13,978	2	0	2	101	15,010	3	0	3	109	15,104	3	0	3	109						
	T4M			14,168	2	0	2	103	15,214	3	0	3	110	15,309	3	0	3	111						
	TFTM			13,956	2	0	3	101	14,987	2	0	3	109	15,080	2	0	3	109						
	TSVS			14,744	3	0	1	107	15,832	3	0	1	115	15,931	4	0	1	115						
	TSS			14,852	3	0	1	108	15,948	3	0	1	116	16,048	3	0	1	116						
	TSM			14,878	4	0	2	108	15,976	4	0	2	116	16,076	4	0	2	116						
	TSW			14,660	4	0	2	106	15,742	4	0	2	114	15,840	4	0	2	115						
	BLC			10,325	1	0	2	75	11,087	1	0	2	80	11,156	1	0	2	81						
	LCCO			10,031	2	0	2	73	10,771	2	0	3	78	10,839	2	0	3	79						
	RCCO			10,031	2	0	2	73	10,771	2	0	3	78	10,839	2	0	3	79						

Performance Data

L90 and R90 Rotated Optics

LEDs	Drive Current (mA)	System Watts	Dist. Type	30K (3000 K, 70 CRI)					40K (4000 K, 70 CRI)					50K (5000 K, 70 CRI)					AMBPC (Amber Phosphor Converted)				
				Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW
30C (30 LEDs)	530 mA	52 W	T1S	6,130	2	0	2	118	6,583	2	0	2	127	6,624	2	0	2	127	3,841	2	0	2	74
			T2S	6,321	2	0	2	122	6,787	2	0	2	131	6,830	3	0	3	131	3,912	2	0	2	75
			T2M	6,176	2	0	2	119	6,632	3	0	3	128	6,673	3	0	3	128	3,837	2	0	2	74
			T3S	6,168	2	0	2	119	6,624	3	0	3	127	6,665	3	0	3	128	3,866	2	0	2	74
			T3M	6,224	3	0	3	120	6,684	3	0	3	129	6,726	3	0	3	129	3,904	2	0	2	75
			T4M	6,309	3	0	3	121	6,775	3	0	3	130	6,817	3	0	3	131	3,884	2	0	2	75
			TFTM	6,215	3	0	3	120	6,673	3	0	3	128	6,715	3	0	3	129	3,839	2	0	2	74
			T5VS	6,565	2	0	0	126	7,050	2	0	0	136	7,094	2	0	0	136	4,005	2	0	0	77
			T5S	6,613	2	0	0	127	7,102	2	0	0	137	7,146	2	0	0	137	4,065	2	0	0	78
			T5M	6,625	3	0	1	127	7,114	3	0	1	137	7,159	3	0	1	138	4,017	2	0	1	77
			T5W	6,528	3	0	1	126	7,010	3	0	2	135	7,054	3	0	2	136	4,025	3	0	1	77
			BLC	4,747	2	0	2	91	5,098	2	0	2	98	5,130	2	0	2	99					
			LCCO	4,612	1	0	2	89	4,953	1	0	2	95	4,984	1	0	2	96					
			RCCO	4,612	1	0	2	89	4,953	1	0	2	95	4,984	1	0	2	96					
	700 mA	70 W	T1S	7,786	2	0	2	111	8,361	3	0	3	119	8,413	3	0	3	120	4,783	2	0	2	68
			T2S	8,028	2	0	2	115	8,620	3	0	3	123	8,674	3	0	3	124	4,873	2	0	2	70
			T2M	7,844	3	0	3	112	8,423	3	0	3	120	8,476	3	0	3	121	4,779	2	0	2	68
			T3S	7,834	3	0	3	112	8,413	3	0	3	120	8,465	3	0	3	121	4,815	2	0	2	69
			T3M	7,905	3	0	3	113	8,489	3	0	3	121	8,542	3	0	3	122	4,862	3	0	3	69
			T4M	8,013	3	0	3	114	8,604	3	0	3	123	8,658	3	0	3	124	4,837	3	0	3	69
			TFTM	7,893	3	0	3	113	8,476	3	0	3	121	8,529	3	0	3	122	4,781	3	0	3	68
			T5VS	8,338	2	0	0	119	8,954	3	0	0	128	9,010	3	0	0	129	4,988	2	0	0	71
			T5S	8,400	2	0	0	120	9,020	3	0	1	129	9,076	3	0	1	130	5,063	2	0	0	72
			T5M	8,414	3	0	1	120	9,036	3	0	2	129	9,092	3	0	2	130	5,003	3	0	1	71
			T5W	8,291	3	0	2	118	8,903	3	0	2	127	8,959	3	0	2	128	5,013	3	0	1	72
			BLC	6,044	2	0	2	86	6,490	3	0	3	93	6,530	3	0	3	93					
			LCCO	5,872	1	0	2	84	6,305	1	0	2	90	6,345	1	0	2	91					
			RCCO	5,872	1	0	2	84	6,305	1	0	2	90	6,345	1	0	2	91					
	1000 mA	104 W	T1S	10,648	3	0	3	102	11,434	3	0	3	110	11,506	3	0	3	111					
			T2S	10,979	3	0	3	106	11,789	3	0	3	113	11,863	3	0	3	114					
			T2M	10,727	3	0	3	103	11,519	3	0	3	111	11,591	3	0	3	111					
			T3S	10,714	3	0	3	103	11,505	3	0	3	111	11,577	3	0	3	111					
			T3M	10,812	3	0	3	104	11,610	4	0	4	112	11,682	4	0	4	112					
			T4M	10,958	3	0	3	105	11,767	3	0	3	113	11,841	3	0	3	114					
			TFTM	10,795	3	0	3	104	11,592	3	0	3	111	11,664	4	0	4	112					
			T5VS	11,404	3	0	0	110	12,245	3	0	1	118	12,322	3	0	1	118					
			T5S	11,487	3	0	1	110	12,336	3	0	1	119	12,413	3	0	1	119					
			T5M	11,508	3	0	2	111	12,357	4	0	2	119	12,434	4	0	2	120					
			T5W	11,339	4	0	2	109	12,176	4	0	2	117	12,252	4	0	2	118					
			BLC	7,981	3	0	3	77	8,570	3	0	3	82	8,624	3	0	3	83					
			LCCO	7754	1	0	2	75	8326	2	0	2	80	8378	2	0	2	81					
			RCCO	7754	1	0	2	75	8326	2	0	2	80	8378	2	0	2	81					

FEATURES & SPECIFICATIONS

INTENDED USE

The sleek design of the D-Series Size 0 reflects the embedded high performance LED technology. It is ideal for many commercial and municipal applications, such as parking lots, plazas, campuses, and pedestrian areas.

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 driver is 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 (0.95 ft²) 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 3000 K, 4000 K or 5000 K (70 CRI) or optional 3000 K (70 minimum CRI) or 5000 K (70 CRI) configurations. The D-Series Size 0 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(s) configurations consist of 20, 30 or 40 high-efficacy LEDs mounted to metal-core circuit boards to maximize heat dissipation and promote long life (up to L99/100,000 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 or 6kV 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 0 to withstand up to a 3.0 G vibration load rating per ANSI C136.31. The D-Series Size 0 utilizes the AERIS™ series pole drilling pattern (template #8). Optional terminal block, tool-less entry, 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) qualified product. Not all versions of this product may be DLC qualified. Please check the DLC Qualified Products List at www.designlights.org 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.



Wall luminaires with cutoff optics

Housing: Constructed of copper free die-cast aluminum alloy. The housing uses stainless steel inserts for enclosure attachment. Mounts over a standard 3 1/2" or 4" octagonal wiring box. Die castings are marine grade, copper free ($\leq 0.3\%$ copper content) A360.0 aluminum alloy.

Enclosure: Tempered, matte glass lens. One piece die-cast, copper free, louvered, aluminum face plate secured to the housing with four captive socket head, stainless steel screws. Semi specular, anodized aluminum internal reflector. Fully gasketed for water tight operation using a silicone rubber gasket.

Electrical: 26W LED luminaire, 32 total system watts, -30°C start temperature. Integral 120V through 277V electronic LED driver, 0-10V dimming. LED module(s) are available from factory for easy replacement. Standard LED color temperature is 3000K with an 85 CRI. Available in 4000K (85 CRI); add suffix K4 to order.

Note: LEDs supplied with luminaire. Due to the dynamic nature of LED technology, LED luminaire data on this sheet is subject to change at the discretion of BEGA-US. For the most current technical data, please refer to www.bega-us.com.

Finish: All BEGA standard finishes are polyester powder coat with minimum 3 mil thickness. Available in four standard BEGA colors: Black (BLK); White (WHT); Bronze (BRZ); Silver (SLV). To specify, add appropriate suffix to catalog number. Custom colors supplied on special order

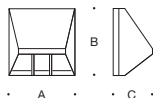
CSA certified to U.S. and Canadian standards, suitable for wet locations. Protection class IP65

Weight: 4.0 lbs.

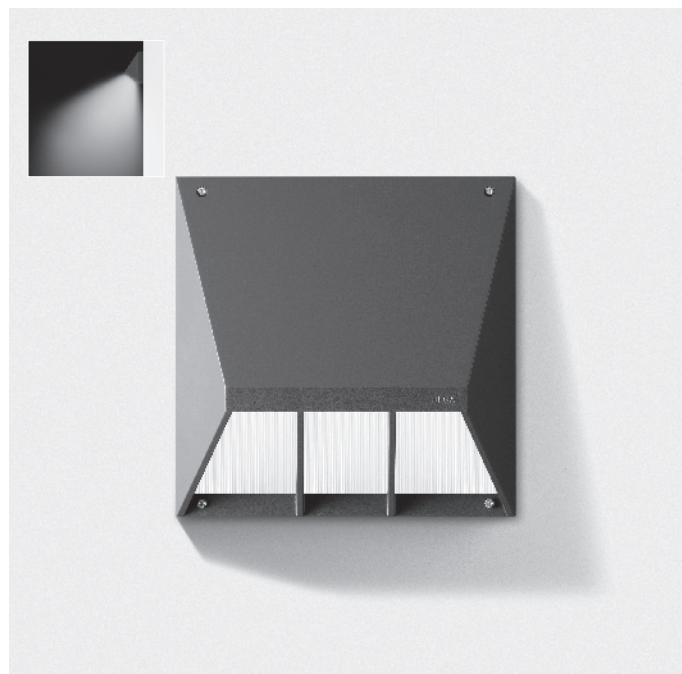
Luminaire Lumens: 1124

Tested in accordance with LM-79-08

Type:
BEGA Product:
Project:
Voltage:
Color:
Options:
Modified:



	Lamp	A	B	C
22256	26W LED	7 7/8	7 7/8	4 1/2





M9410/M9430

Modular In-Grade Luminaire Single Lens LED

LED IP68

**SUITABLE FOR
WET LOCATIONS**

CATALOG
NUMBER

NOTES

TYPE SG

TYPE

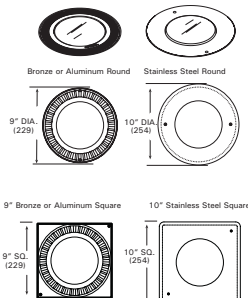
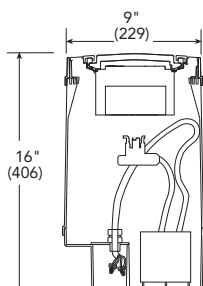
DESCRIPTION

Hydrel's M9410/M9430 Series modular in-grade lights are multi-purpose units designed for uplighting architectural and landscape features. These units can be flush mounted into a variety of substrates or landscape materials including concrete.

The M9410/M9430 consists of a factory-sealed lamp module and encapsulated power module. The components are secured inside a heavy-duty polymer rough-in housing designed with channeled convective cooling, an integral junction box, and finish door trim assembly.

Specifications

L:	9"
	229 mm
W:	9"
	229 mm
H:	16"
	407 mm



ORDERING INFORMATION

EXAMPLE: M9410 SS 12LED WHT41K MVOLT NSP FLC10 34B IHL

Model	Door Material	Lamp Type	LED Color	Voltage	Distribution	Lens
M9410 Round	A Aluminum	12LED	WHT30K White	MVOLT	NSP Narrow Spot	FLC Flat Lens Clear
M9430 Square	B Bronze		WHT41K White	(120-277)	MFL Medium Flood	FLC10 Flat Lens Clear, 10° tilt
	SS Stainless Steel		WHT53K White		FL Flood	FLC20 Flat Lens Clear, 20° tilt
			AMB Amber		WFL Wide Flood	FLF Flat Lens Frosted
			BLU Blue		VWFL ¹ Very Wide Flood (no optics)	FLCAS Flat Lens Clear, Anti-Slip
			GRN Green		HSP Horizontal Spot	FLCSR ² Flat Lens, Slip Resistant
			RED Red		HFL Horizontal Flood	CLC Convex Lens, Clear
						CLF Convex Lens, Frosted

Conduit Entries	Accessories	Options	Finish ⁸	Listing
12B 1/2" NPT Bottom	Internal ⁵	LDIM 0-10V Dimming (dims to 40%)	BL Black	IEC ⁴ International Electrotechnical Commission
12S 1/2" NPT Side	IHL Internal Honeycomb Louver		BZ Bronze	
34B ³ 3/4" NPT Bottom	LSF ⁶ Linear Spread Filter		DDB Dark Bronze	
34S 3/4" NPT Side	FRF Frosted Filter		DNA Natural Aluminum	
25S ⁴ Two 25mm Side	External ^{5,7}		GN Green	
	GS Glare Shield		GR Gray	
	LC Lexan Cover		SND Sand	
	RG ⁶ Rock Guard		STG Steel Gray	
	Trim Ring ^{5,7}		TVG Terra Verde Green	
	BTR Brass Round		WH White	
	BTS Brass Square		_Z ⁹ Zinc Undercoat (i.e. BLZ)	
	STR Stainless Round			
	STS Stainless Square			

M9400 Series Assembly consists of the following individual components parts

- MRIS94 Rough-In Housing
- MFS94 Finishing Section
- MACS Lamp Module
- MHSL94 Power Module

Notes:

- 1 FRF filter needed with VWFL.
- 2 Meets ADA requirements for coefficient of friction.
- 3 Default conduit entry.
- 4 Only for use in 50HZ applications.
- 5 Accessories are mutually exclusive, choose one only.
- 6 Not available with CLC or CLF convex lens.
- 7 Accessory not available with SS door material.
- 8 Paint only available with "A" material.
- 9 Add Zinc undercoat for harsh environments.

HYDREL

9144 Deering Avenue, Second Floor • Chatsworth, CA 91311
Phone: 866.533.9901 • www.hydrel.com

©2014-2016 Acuity Brands Lighting, Inc.
06/01/16
M9410_M9430_LED_MONO

LUMEN OUTPUT

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown, within the tolerances allowed by Lighting Facts. Actual performance may differ as a result of end-user environment and application. Contact factory for performance data on any configurations not shown here.

	Distribution	Nema Type	Beam Angle (50%) H x V	Field Angle (10%) H x V	Watts	LPW	Delivered Lumens
3000K 80CRI	NSP	2 x 2	14.7 x 14.7	28 x 28	14	50	700
	MFL	3 x 3	24.4 x 24.4	44 x 44	14	50	700
	FL	6 x 6	74.5 x 70.8	104.2 x 102.1	14	36	500
	WFL	6 x 6	102.5 x 100.4	129.6 x 129.1	14	43	600
	HSP	3 x 3	21.6 x 21.6	39.9 x 39.9	14	50	700
	HFL	4 x 3	39.3 x 15.7	59.6 x 29.9	14	43	600
	VWFL	6 x 6	89.3 x 85.1	129.4 x 128.2	13	31	400
4000K 70CRI	NSP	2 x 2	14.7 x 14.7	28 x 28	14	86	1,200
	MFL	3 x 3	24.4 x 24.4	44 x 44	14	86	1,200
	FL	6 x 6	74.5 x 70.8	104.2 x 102.1	14	64	900
	WFL	6 x 6	102.5 x 100.4	129.6 x 129.1	14	79	1,100
	HSP	3 x 3	21.6 x 21.6	39.9 x 39.9	14	86	1,200
	HFL	4 x 3	39.3 x 15.7	59.6 x 29.9	14	79	1,100
	VWFL	6 x 6	89.3 x 85.1	129.4 x 128.2	13	54	700
5000K 70CRI	NSP	2 x 2	14.7 x 14.7	28 x 28	14	86	1,200
	MFL	3 x 3	24.4 x 24.4	44 x 44	14	86	1,200
	FL	6 x 6	74.5 x 70.8	104.2 x 102.1	14	64	900
	WFL	6 x 6	102.5 x 100.4	129.6 x 129.1	14	79	1,100
	HSP	3 x 3	21.6 x 21.6	39.9 x 39.9	14	86	1,200
	HFL	4 x 3	39.3 x 15.7	59.6 x 29.9	14	79	1,100
	VWFL	6 x 6	89.3 x 85.1	129.4 x 128.2	13	54	700

LED LIFE: L70/60,000 hours

OPERATING TEMPERATURE: -30°C Through 40°C

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	1.02
10°C	50°F	1.01
20°C	68°F	1.00
25°C	77°F	1.00
30°C	86°F	0.99
40°C	104°F	0.98

Projected LED Lumen Maintenance

Data references the extrapolated performance projections for the Fixture platform in a 25°C ambient, based on 8400 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.

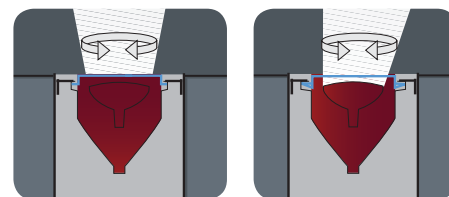
Operating Hours	0	25,000	50,000	100,000
Lumen Maintenance Factor	1	0.99	0.98	0.96

Electrical Load

Light Engines	Drive Current (mA)	System Watts	Current (A)					
			120	208	240	277	347	480
12 LED	350mA	14	0.117	0.067	0.058	0.051	0.040	0.029

Slip Resistance and Load Rating

M9400
MAXIMUM LOAD RATING
Peak compression force of 7,700 lbs. (single lens) or 2,550 lbs. (double lens).
LENS STATIC COEFFICIENT OF FRICTION
M9400 Anti-Slip Lens (FLCAS): Dry = 0.76; Wet = 0.10
M9400 Slip Resistant Lens (FLSR): Dry = 0.84; Wet = 0.65



Single lensed fixture can be aimed using 10° and 20° tilt lenses only.

FEATURES & SPECIFICATIONS

DOOR MATERIAL: Cast Aluminum, cast bronze, cast aluminum or bronze with stainless perforated trim insert or Stainless Steel. Available in round or square door trim.

ROUGH-IN SECTION: Injection molded polymer with integral junction box for thru-branch wiring. The housing is U.V. stabilized, impact and corrosion resistant for use in all types of environments. The rough-in has a cylinder configuration and houses the lamp components and top door finishing section.

LAMP MODULE: Stainless steel housing, factory-sealed and purged of all moisture for longer component life. Lens is sealed with silicone gasket and stainless steel clamp band assembly with single fastener. Electrical connection to lamp module is done through a submersible quick pull plug connector with gold-plated contacts. (Lamp Included)

LAMP TYPE: LED: Monochromatic LEDs, (Lamp Included).

VOLTAGE: See ordering guide.

LIGHT DISTRIBUTION: See ordering guide.

FINISHING SECTION: Single lens design includes door assembly with 360° Aim-Lock™ lamp module support ring. Module indexing provides easy maintenance and relamping without re-aiming. Active optical lenses are also available. Door trim locks into position with two stainless steel captive, tamper-resistant fasteners.

POWER MODULE: LED driver is encapsulated in a custom designed heat-dissipating epoxy resin that also eliminates all moisture intrusion. Module is provided with submersible rated cord leads for connection to integral junction box and lamp module.

CONDUIT ENTRIES: Two (2) bottom or side entries available. Box suitable for through-branch wiring. Splicing volume is 25 in³ (410 ccm)

NOTE: Potting compound (PC21) recommended for junction box splices. PC21 sold separately.

ACCESSORIES: See Ordering Guide.

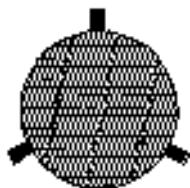
FINISH: Finish is natural aluminum or bronze. Stainless steel door is brushed finish. Aluminum doors may be painted. See ordering guide.

LISTING: U.L., C.U.L., C.E.

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.

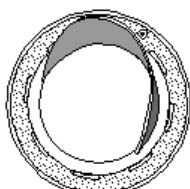
INTERNAL



INTERNAL HONEYCOMB LOUVERS
Hexagonal cell louver with 45° cut-off.

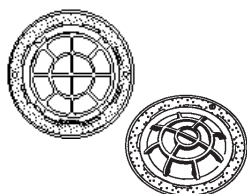
IHL

EXTERNAL



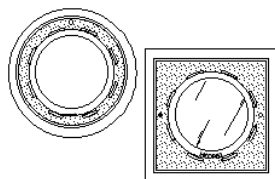
QUARTER GLARE SHIELDS
Rolled sheet aluminum or brass. 360° of adjustment on fixture door, with lock down. May be field installed to door as shown.
(Not recommended for foot traffic areas.)

GS



ROCKGUARD (EXTERNAL)
Cast aluminum or cast bronze material.
(Not recommended for foot traffic areas.)

RG



STAINLESS STEEL or BRONZE TRIM RINGS
A decorative escutcheon used when a high finish look is wanted. For finishing marble, tile or other installations. Available in round or square. Door is flush with escutcheon. Not available on SS doors.

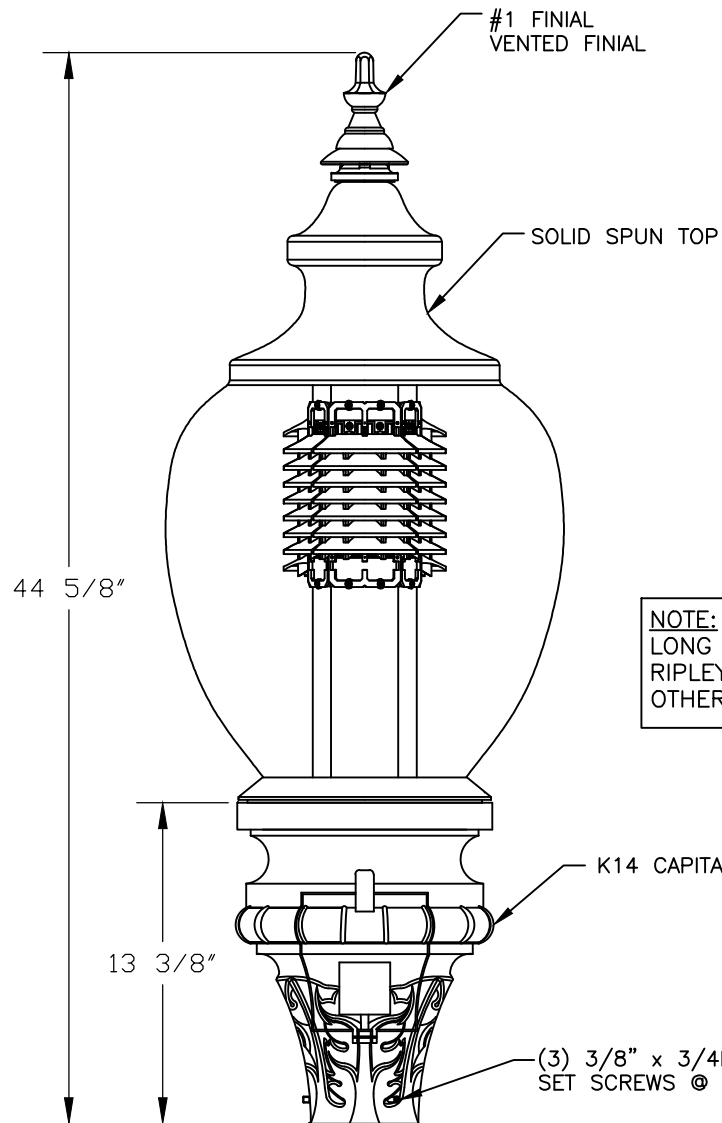
BTR
BTS
STR
STS



LEXAN DOME
A Lexan protective cover for use in areas where loose debris such as leaves and pine needles accumulate.
(Not recommended for foot traffic areas.)

LC

TYPE SH CAMAS STD



NOTE:
LONG LIFE PHOTOCELL
RIPLEY 6390LL-BK BY
OTHERS

TO ACCEPT 3 1/2" O.D.
3 1/2" LONG TENON

REV.	ALTERATION	DATE	BY
A	NOT ADDED	04/19/16	T.B
B	LONG LIFE PHOTOCELL SPECIFIED AS 6390LL-BK BY RIPLEY LIGHTING CONTROLS.	5/3/16	M.Y
C	OPTICS WAS R1AR WITH TYPE III DISTRIBUTION	06/06/16	T.B

LUMINAIRE SPECIFICATIONS

CATALOGUE NO.: K118R-B3AR-IV-60(SSL)
-1036-120:277V-K14-PR7-SST

QUANTITY:

POLE ADAPTOR: K14

OPTICAL SYSTEM: BAFFLED ARRAY ACRYLIC RIPPLED

IES LTG. CLASS.: TYPE IV

INPUT WATTS: 60W

SOLID STATE LIGHTING

SERIES: 1036

CCT / DIODE: 4000K / HE5

LINE VOLTAGE: 120:277V

PAINT: TEXTURED BLACK

OPTIONS: C/W SOLID SPUN TOP &
7-PRONG TWISTLOCK PHOTOCELL
RECEPTACLE ANSI STANDARD
C136.41 (PHOTO-EYE BY OTHERS)

OPTIONS

QUICK DISCONNECT ☒

NOTE:

NOTE THAT THIS FIXTURE IS BY DEFAULT SHIPPED IN 'NON-ADAPTIVE MODE'. THE FIXTURE IS FIELD SWITCHABLE TO 'ADAPTIVE-MODE' IF ADAPTIVE TECHNOLOGY IS TO BE UTILIZED. NOTE THAT SWITCHING TO 'ADAPTIVE MODE' MAY INCREASE THE NOMINAL INPUT POWER OF THE FIXTURE. PLEASE CONTACT THE FACTORY FOR FURTHER DETAILS"

CUSTOMER APPROVAL & DATE: _____



King Luminaire • StressCrete • Est. 1953

**STRESSCRETE
GROUP**

Manufacturing Locations:

Burlington, Ontario 1-800-268-7809
Northport, Alabama 1-800-435-6563
Atchison, Kansas 1-800-837-1024
Jefferson, Ohio 1-800-268-7809

CUSTOMER ORDER No:

STRESSCRETE ORDER No:

KMFG. ORDER No:

KING U.S. ORDER No:

PROJECT/CUSTOMER:

CITY OF CAMAS, WA

DRAWN BY:	AT:	CHECKED BY:	DATE:	REVISION:
TASHI B.	SC1		02/29/16	C

DRAWING TYPE:

APPROVAL/MFG. DWG.

DRAWING NUMBER:

CAMAS-1



Decorative Pole Specifications

PLP Model# Dom-DB-FL-14.5-BL-CI

TYPE SH
CAMAS
STD

Decorative Pole Specifications

PLP Model# Dom-DB-FL-14.5-BL-CI

Fiberglass reinforced composite fluted shaft with decorative 2-piece (clam shell) base of casting urethane.

Direct burial (embedded) style with a 14.5' mounting height and an overall length of 18.5' allowing 4 feet to be buried below grade.

Round tapered fluted shaft.

Tip diameter is 4.5" and ground level diameter is 6.5".

Shaft hand hole is 2.5"x8" above the decorative base.

Hand hole is equipped with a non-conductive cover with vandal resistant 1/4-20 stainless steel screws.

Wire entrance hole of 2"x5" with nylon grommet 2' below grade.

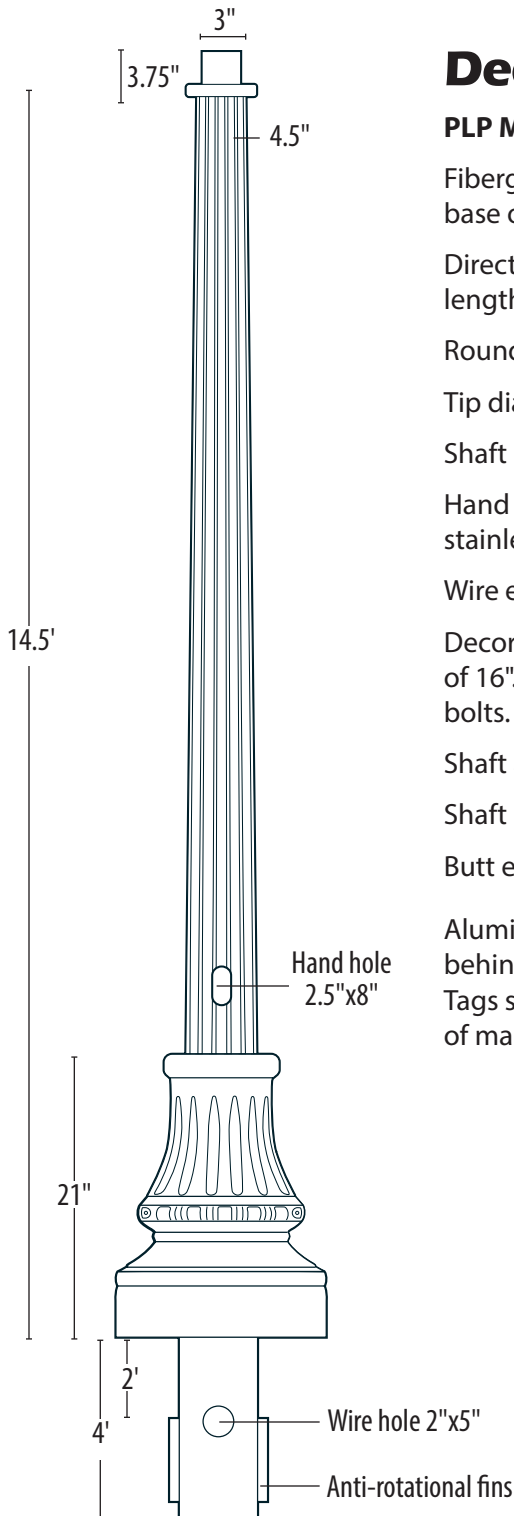
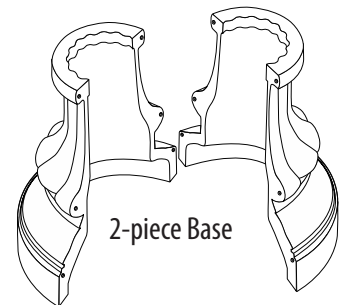
Decorative base for the PLP "Dominion" design is 21" high with a base diameter of 16". The 2-piece "clam shell" design is secured together with stainless steel bolts.

Shaft and decorative base are black with a textured satin "cast iron" finish.

Shaft has a post top steel tenon of 3"x3.75"

Butt end of the shaft has anti-rotational/anti-lift fins.

Aluminum identification tags are fixed to the shaft behind the base and on the inside of the base itself. Tags show manufacturer, model number and date of manufacture.



Project/Customer: _____

Date: _____

Revision: _____

Drawing Number: _____

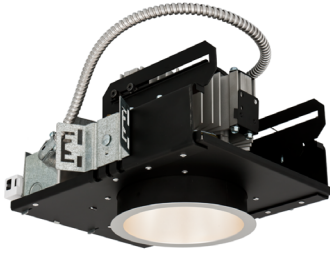
PLP Composite Technologies, Inc.

57 Creamery Road • PO Box 429 • Fitzwilliam, NH 03447 • Tel: 603-585-9100 • Fax: 603-585-3470 • www.plpcomp.com

TYPE DN



Luminaire Type:
Catalog Number
(autopopulated):



Gotham Architectural Downlighting
LED Downlights

6" Incito®
Downlight

Solid-State Lighting
(US and International Patents Pending)



FEATURES

INTENDED USE

- Achieve the lowest installed power density and operating costs while achieving every layer of light via the optimized general illumination distributions from the EVO family, and the high centerbeam accent layers from the highly flexible Incito family. The EVO and Incito families maintain consistent luminous apertures, dimming characteristics, and color quality to ensure the blending of families in common spaces renders an unparalleled, tailored visual experience.

OPTICAL SYSTEM

- Ten optimized distribution patterns allow designers to achieve tailored effects.
- Self-flanged semi-specular or matte-diffuse lower reflector utilized in combination with a highly transmissive lens.
- Patented Bounding Ray™ Optical Principle design (U.S. Patent No. 5,800,050) provides smooth and continuous transition from lensed source to the top of the reflector down to the bottom of the reflector.

MECHANICAL SYSTEM

- Light engine and driver are accessible from above or below ceiling.
- 16-gauge black painted steel mounting frame with C-channel mounting bars included. Post-installation adjustment possible from above or below ceiling.
- Galvanized steel junction box with hinged access covers and spring latch. Three combination 1/2"-3/4" and one 1/2" knockout for straight-through conduit runs. Capacity: 8 (4in, 4out) No. 12 AWG conductors rated for 90°C.
- Accommodates up to 1 1/2"-thick ceilings.

ELECTRICAL SYSTEM

- Solid-state LED light engine available in 2700 K, 3000 K, 3500 K or 4000 K color temperatures. CRI: 85 typical.
- eldoLED ecoDrive 0-10V driver available with 10% dimming level.
- eldoLED ecoDrive 0-10V driver available with 1% dimming level.
- eldoLED SOLOdrive 0-10V driver available with <1% dimming level.
- eldoLED SOLOdrive DALI driver available with <1% dimming level.
- eldoLED POWERdrive DMX with RDM (remote device management) available with <1% dimming level.
- Rated system life of 60,000 hours at >70% output.
- Emergency battery pack with remote test switch available.
- Tested in accordance with LM-79 and LM-80 standards.

LISTINGS

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

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.



A+ Capable options indicated
by this color background.

EXAMPLE: IC0 30/50 6ARFL LD 20D 120 EZB

Series	Color temperature	Nominal delivered lumen values ¹			Aperture/Trim color		Trim style		Finish		Beam		Volt-age	
IC0	27/ 2700 K	20	2000 lumens	55	5500 lumens	6AR	Clear	(blank)	Self-flanged	LSS	Semi-specular	20D	20° beam angle	120
	30/ 3000 K	25	2500 lumens	60	6000 lumens	6PR	Pewter	FL	Flangeless	LD	Matte diffuse	25D	25° beam angle	277
	35/ 3500 K	30	3000 lumens	65	6500 lumens	6WTR	Wheat					30D	30° beam angle	347 ³
	40/ 4000 K	35	3500 lumens	70	7000 lumens	6GR	Gold					35D	35° beam angle	
		40	4000 lumens	75	7500 lumens	6WR ²	White					40D	40° beam angle	
		45	4500 lumens	80	8000 lumens	6BR ²	Black					45D	45° beam angle	
		50	5000 lumens	85	8500 lumens							55D	55° beam angle	
												60D	60° beam angle	
												65D	65° beam angle	
												70D	70° beam angle	

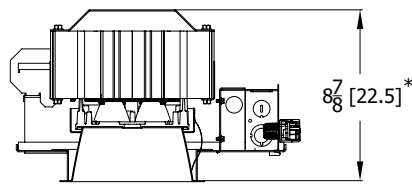
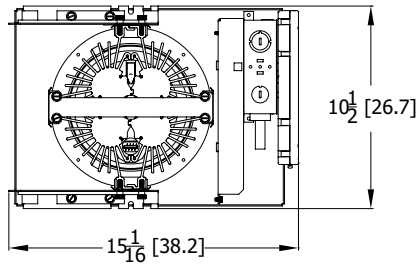
Driver	Options
EZ10 eldoLED 0-10V ECOdrive. Linear dimming to 10% min. EZ1 eldoLED 0-10V ECOdrive. Linear dimming to 1% min. EZB eldoLED 0-10V SOLOdrive. Logarithmic dimming to <1%. EDAB eldoLED SOLOdrive DALI. Logarithmic dimming to <1%. EDXB eldoLED POWERdrive DMX with RDM (remote device management). Square Law dimming to <1%. Includes termination resistor. Refer to DMXR Manual .	SF Single fuse TRW⁴ White painted flange TRBL⁵ Black painted flange ELR⁶ Emergency battery pack with remote test switch CP⁷ Chicago plenum BGTD Bodine generator transfer device CRI90 High CRI (90+)
	HAO High ambient capability up to 40°C. Fixture height is 10-3/8" NPS80EZ nLight® dimming pack controls 0-10V eldoLED drivers. NPS80EZ ER⁸ nLight® dimming pack controls 0-10V eldoLED drivers. ER controls fixtures on emergency circuit. LTVI⁹ Lutron ECOSystem interface for compatibility with 0-10V EZ10, EZ1 or EZB. RRL RELOC®-ready luminaire connectors enable a simple and consistent factory installed option across all ABL luminaire brands. Refer to RRL for complete nomenclature. Available only in RRLA, RRLB, RRLAE, and RRLC12S.

ACCESSORIES order as separate catalog numbers (shipped separately)

SCA Sloped ceiling adapter. Degree of slope must be specified (10D, 15D, 20D, 25D, 30D). Ex: SCA6 10D. Refer to [TECH-190](#).

ORDERING INFORMATION

All dimensions are inches (centimeters) unless otherwise noted.



Incito Round Downlight - Flanged



Incito Round Downlight - Flangeless (FL)

Aperture: 6-1/4 [15.8]
Ceiling opening: 6-15/16 [17.6]
Overlap trim: 7-1/2 [19.1] self-flanged
6-5/8 [16.8] flangeless

* HIGH AMBIENT FIXTURE HEIGHT - 10-5/8"

WATTAGE CONSUMPTION MATRIX

LUMENS	BEAM ANGLES									
	20	25	30	35	40	45	55	60	65	70
8500	93 W	93 W	93 W	93 W	93 W	106 W	106 W	106 W	106 W	106 W
8000	88 W	88 W	88 W	88 W	88 W	97 W	97 W	97 W	97 W	97 W
7500	80 W	80 W	80 W	80 W	80 W	93 W	93 W	93 W	93 W	93 W
7000	73 W	73 W	73 W	73 W	73 W	84 W	84 W	84 W	84 W	84 W
6500	69 W	69 W	69 W	69 W	69 W	80 W	80 W	80 W	80 W	80 W
6000	62 W	62 W	62 W	62 W	62 W	72 W	72 W	72 W	72 W	72 W
5500	57 W	57 W	57 W	57 W	57 W	65 W	65 W	65 W	65 W	65 W
5000	49 W	49 W	49 W	49 W	49 W	62 W	62 W	62 W	62 W	62 W
4500	45 W	45 W	45 W	45 W	45 W	54 W	54 W	54 W	54 W	54 W
4000	40 W	40 W	40 W	40 W	40 W	43 W	43 W	43 W	43 W	43 W
3500	34 W	34 W	34 W	34 W	34 W	37 W	37 W	37 W	37 W	37 W
3000	29 W	29 W	29 W	29 W	29 W	31 W	31 W	31 W	31 W	31 W
2500	26 W	26 W	26 W	26 W	26 W	29 W	29 W	29 W	29 W	29 W
2000	26 W	26 W	26 W	26 W	26 W	26 W	26 W	26 W	26 W	26 W

EL/ELR AVAILABILITY / COMPATIBILITY – Initial Lumens

LED			Initial Lumens	
Product	Lumens	Watts	EL/ELR	ELRHL
ICO 6"	2000-8500	24-101	580	N/A

nLight® Control Accessories:

Order as separate catalog number. Visit www.acuitybrands.com/products/controls/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
On/Off & Dimming	nCM ADCX	Cat-5 cables (plenum rated)	Model number
		10', CAT5 10FT	CAT5 10FT J1
		15', CAT5 15FT	CAT5 15FT J1

ORDERING NOTES

- Nominal downlight lumens.
- Not available with finishes. Not available with flangeless (FL) trim style.
- Add 2" to overall height.
- Not available with white reflector. Not applicable with FL option.
- Not available with black reflector. Not applicable with FL option.
- For dimensional changes, refer to [TECH-140](#). Not available with CP option. Must specify 120V or 277V. Not available with 347V.
- Chicago plenum available 5500 lumens and below.
- For use with generator supply EM power. Will require an emergency hot feed and normal hot feed.
- Shipped installed from the factory. Not available with CP.

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Choose Wall Controls.

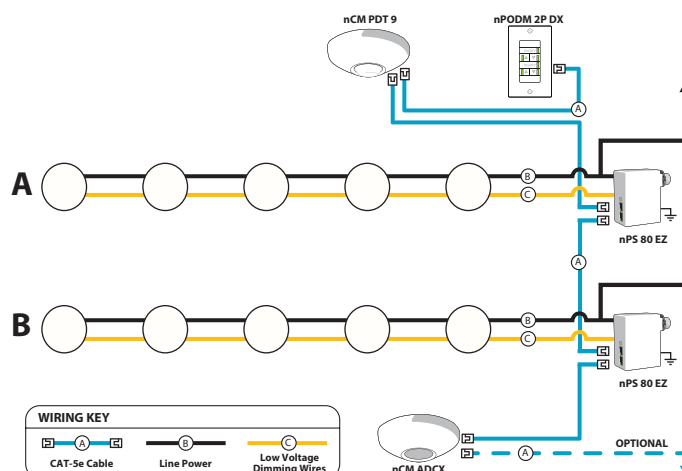
nLIGHT offers multiple styles of wall controls – each with varying features and user experience.



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.

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