

D-Series Size 1 LED Area Luminaire







Notes Туре

Introduction

Catalog

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 100 -400W metal halide in pedestrian and area lighting applications with typical energy savings of 65% and expected service life of over 100,000 hours.

Specifications

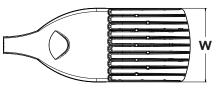
1.2 ft² EPA: (0.11 m²)

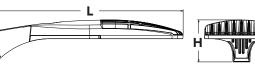
33" Length: (83.8 cm)

13" Width: (33.0 cm)

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

Weight 27 lbs (max):



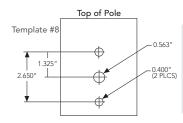


Ordering Information

EXAMPLE: DSX1 LED 2 30B700/40K SR3 MVOLT SPA DDBXD

DSX1 LED													
Series	Light Engines Performance Package 1		Distribution		Voltage	Mountir	ounting Options			Finish (required)			
DSX1 LED	2	One engine (30 LEDs) Two engines (60 LEDs)	530 mA option 30B530/30K 30B530/40K 30B530/50K 700 mA option 30B700/30K 30B700/40K 30B700/50K	3000K 4000K 5000K	SR2 SR3 SR4 SR5 FT	Type II Type III Type IV Type V Forward throw	MVOLT ² 120 ² 208 ² 240 ² 277 ² 347 ³ 480 ³	Shippe SPA RPA WBA	sd included Square pole mounting Round pole mounting Wall bracket	Shippe PER DMG DCR HS SF DF WTB TLS DS PIR PIRH	NEMA twist-lock receptacle only (no controls) 0-10V dimming driver (no controls) ⁴ Dimmable and controllable via ROAM® (no controls) ⁵ House-side shield ⁶ Single fuse (120, 277, 347V) ⁷ Double fuse (208, 240, 480V) ⁷ Utility terminal block Tool-less entry trigger latch Dual switching ^{8,9} Motion sensor, <15' mounting height ¹⁰ Motion sensor, 15-30' mounting height ¹⁰	DDBXD DBLXD DNAXD DWHXD DDBTXD DBLBXD DNATXD DWHGXD	Dark bronze Black Natural aluminum White Textured dark bronze Textured black Textured natural aluminum Textured white

Accessories



DSS124N 1.5 TJJE U DI I 347 1 5 CIII III DLL480 1.5 CUL JU SCU DSX1HS U

RPA19/MR2 DDBXD U

Photocell - SSL twist-lock (120-277V) 11 Photocell - SSI twist-lock (347V) 11 Photocell - SSL twist-lock (480V) 11 Shorting cap 11 House-side shield (one per light engine) SPA19/MR2 DDBXD U Square pole DM19 to DM19AS adapter (specify finish)

For more control options, visit DTL and ROAM online.

Round pole DM19 to DM19AS adapter (specify finish)

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.

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

^{*} For round pole mounting (RPA) only.

NOTES

- Configured with 4000K (/40K) provides the shortest lead times. Consult factory for 3000K (/30K) and 5000K (/50K) lead times
- MVOLT driver operates on any line voltage from 120-277V (50/60Hz). Specify 120, 208, 240 or 277 options only when ordering with fusing (SF, DF options).
- Not available with single board, 530 mA product (1 30B530).
- Not available with 347 or 480V.
- Specifies a ROAM® enabled luminaire with 0-10V dimming capability; PER option required. Not available with 347 or 480V. Additional hardware and services required for ROAM® deployment; must be purchased separately. Call 1-800-442-6745 or email: sales@roamservices.net.
- Also available as a separate accessory; see Accessories information at left.
- Single fuse (SF) requires 120, 277 or 347 voltage option. Double fuse (DF) requires 208, 240 or 480 voltage option.
- Provides 50% dimming capability via two independent drivers, each operating half the luminaire. N/A with PER, DCR, DMG or WTB.
- Requires an additional switched line.
- PIR specifies the <u>SensorSwitch SBR-10-ODP</u> control; PIRH specifies the <u>SensorSwitch SBR-6-ODP</u> control; see Motion Sensor Guide for details. Dimming driver standard. Not available with DCR or WTB.
- Requires luminaire to be specified with PER option. Ordered and shipped as a separate line item.



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. Actual performance may differ as a result of end-user environment and application. Contact factory for performance data on any configurations not shown here.

	Drive	Performance Package	System Watts		40K					50K				
Light	Current			Dist.	(4000K, 67 CRI)					(5000K, 67 CRI)				
Engines	(mA)			Туре	Lumens	В	U	G	LPW	Lumens	В	U	G	LPW
				SR2	4634	1	0	1	84	5056	1	0	1	92
				SR3	4695	1	0	2	85	5123	1	0	2	93
				SR3 HS	3425	0	0	1	61	3737	0	0	1	68
	530	30B530/K	55 W	SR4	4694	1	0	2	85	5122	1	0	2	93
				SR4 HS	3459	0	0	1	62	3774	0	0	2	69
1				SR5	4696	3	0	1	85	5124	3	0	1	93
'				FT	4694	1	0	1	85	5122	1	0	2	93
(20150.)			73 W	SR2	5679	1	0	1	77	6223	2	0	2	85
(30 LEDs)	700	30B700/K		SR3	5835	1	0	2	79	6394	2	0	2	88
				SR3 HS	4239	0	0	2	58	4645	0	0	2	64
				SR4	5798	1	0	2	79	6354	1	0	2	87
				SR4 HS	4294	0	0	2	58	4706	0	0	2	64
				SR5	5769	3	0	1	79	6322	3	0	2	87
				FT	5820	1	0	2	79	6378	1	0	2	87
		30B530/K	106W	SR2	9109	2	0	2	86	9929	2	0	2	93
				SR3	9257	2	0	2	87	10,010	2	0	3	94
				SR3 HS	6717	0	0	2	64	7302	0	0	2	69
	530			SR4	9204	2	0	2	87	10,010	2	0	2	94
				SR4 HS	6800	0	0	2	64	7446	0	0	2	70
2				SR5	9223	4	0	2	87	10,198	4	0	2	96
۲				FT	9183	2	0	2	87	10,020	2	0	2	95
				SR2	11,170	2	0	2	78	12,312	3	0	3	86
(60 LEDs)				SR3	11,391	2	0	3	80	12,462	2	0	3	87
				SR3 HS	8285	0	0	2	58	9047	0	0	2	63
	700	30B700/K	143 W	SR4	11,332	2	0	2	79	12,368	2	0	3	86
				SR4 HS	8318	0	0	2	58	9149	0	0	2	64
İ				SR5	11,723	4	0	2	82	12,455	4	0	2	87
				FT	11,662	2	0	3	82	12,531	2	0	3	87

Lumen Ambient Temperature (LAT) Multipliers

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

Amb	Lumen Multiplier				
0°C	32°F	1.02			
10°C	50°F	1.01 1.00			
20°C	68°F				
25°C	77°F	1.00			
30°C	86°F	1.00			
40°C	104°F	0.99			

Projected LED Lumen Maintenance

Data references the extrapolated performance projections for the **DSX1 LED 2 30B700** platform in a **40°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	1.0	0.95	0.92	0.87

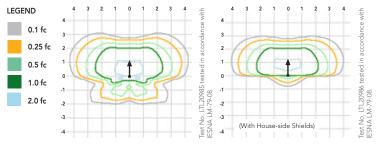
Electrical Load

					Curre	nt (A)		
Light Engines	Drive Current (mA)	System Watts	120	208	240	277	347	480
1	530 700	55 W 73 W	0.46 0.61	0.26 0.35	0.23 0.30	0.20 0.26	0.16 0.21	0.11 0.15
2	530 700	106 W 143 W	0.89 1.19	0.51 0.69	0.44 0.60	0.38 0.52	0.31 0.41	0.22

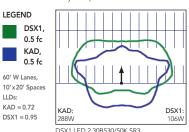
Photometric Diagrams

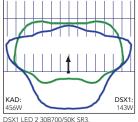
To see complete photometric reports or download .ies files for this product, visit Lithonia Lighting's D-Series Area Size 1 homepage.

Isofootcandle plots for the DSX1 LED 2 30B700/50K SR3. Distances are in units of mounting height (20').



Distribution overlay comparisons to 250W and 400W metal halide.





DSX1 LED 2 30B700/50K SR3, KAD 400M R3 Pulse, 30' Mounting Ht

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 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 (1.2 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 4000K (67 CRI) or optional 3000K (80 CRI) or 5000K (67 CRI) configurations. The D-Series Size 1 has zero uplight and qualifies as a Nighttime FriendlyTM product, meaning it is consistent with the LEED® and Green GlobesTM criteria for eliminating wasteful uplight.

ELECTRICAL

Light engine(s) consist of 30 high-efficacy LEDs mounted to a metal-core circuit board to maximize heat dissipation and promote long life (100,000 hrs at 40°C, L87). Class 1 electronic driver has a power factor >90%, THD <20%, and has an expected life of 100,000 hours with <1% failure rate. Easily-serviceable 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 AERISTM series pole drilling pattern. Optional terminal block, tool-less entry, and NEMA photocontrol receptacle are also available.

LISTINGS

CSA certified to U.S. and Canadian standards. 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.

WARRANTY

Five year limited warranty. Full warranty terms located at www.acuitybrands.com/CustomerResources/Terms_and_conditions.aspx.

Note: Specifications subject to change without notice.

