



# D-Series Size 1 LED Area Luminaire

DESIGNLIGHTS  
CONSORTIUM



LED lighting  
facts  
LED Product Partner

**DSX1 LED 60C 700 40K T3M  
MVOLT SPA DDBXD**

## Specifications

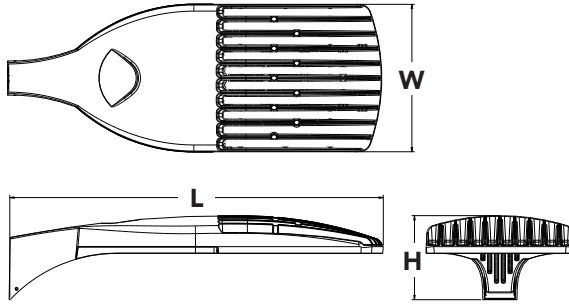
**EPA:** 1.2 ft<sup>2</sup>  
(0.11 m<sup>2</sup>)

**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.

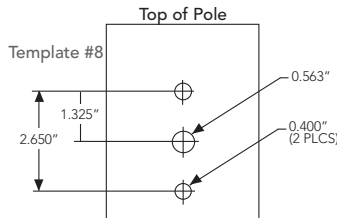
The D-Series distills the benefits of the latest in LED technology into a high performance, high efficacy, long-life luminaire. The outstanding photometric performance results in sites with excellent uniformity, greater pole spacing and lower power density. It is ideal for replacing 100 – 400W metal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

## Ordering Information

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

Series	LEDs	Drive current	Color temperature	Distribution	Voltage	Mounting	Control options	Other options	Finish (required)
<b>DSX1 LED</b>	<b>Forward optics</b>	530 530 mA 700 700 mA 1000 1000 mA (1 A)	30K 3000K (80 CRI min.) 40K 4000K (70 CRI min.) 50K 5000K (67 CRI)	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	MVOLT <sup>2</sup> 120 <sup>2</sup> 208 <sup>2</sup> 240 <sup>2</sup> 277 <sup>2</sup> 347 <sup>3</sup> 480 <sup>3</sup>	<b>Shipped included</b> SPA Square pole mounting RPA Round pole mounting WBA Wall bracket <b>Shipped separately</b> SPUMBA Square pole universal mounting adaptor <sup>4</sup> RPUMBA Round pole universal mounting adaptor <sup>4</sup>	<b>Shipped installed</b> PER NEMA twist-lock receptacle only (no controls) DMG 0-10V dimming driver (no controls) <sup>5</sup> DCR Dimmable and controllable via ROAM <sup>®</sup> (no controls) <sup>6</sup> DS Dual switching <sup>7,8</sup> PIR Motion sensor, 8-15' mounting height <sup>5,9</sup> PIRH Motion sensor, 15-30' mounting height <sup>5,9</sup> BL30 Bi-level switched dimming, 30% <sup>5,8,11</sup> BL50 Bi-level switched dimming, 50% <sup>5,8,11</sup>	<b>Shipped installed</b> HS House-side shield <sup>4</sup> WTB Utility terminal block <sup>12</sup> SF Single fuse (120, 277, 347V) <sup>13</sup> DF Double fuse (208, 240, 480V) <sup>13</sup> TLS Tool-less entry trigger latch <sup>14</sup> L90 Left rotated optics <sup>15</sup> R90 Right rotated optics <sup>15</sup>	<b>DDBXD</b> Dark bronze DBLXD Black DNAXD Natural aluminum DWHXD White DDBTXD Textured dark bronze DBLBXD Textured black DNATXD Textured natural aluminum DWHGXD Textured white
	<b>Rotated optics</b>								
	60C 60 LEDs (two engines)								
	30C 30 LEDs (one engine)								
	40C 40 LEDs (two engines)								
	60C 60 LEDs (two engines)								

## Drilling



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	N/A	N/A	N/A	N/A
2-7/8"	AST25-190	AST25-280	N/A	AST25-320	N/A	N/A
4"	AST35-190	AST35-280	AST35-290	AST35-320	AST35-390	AST35-490

## 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 (50/60 Hz). Specify 120, 208, 240 or 277 options only when ordering with fusing (SF, DF options).
- Not available with single board, 530mA product (30C 530). N/A with 1000 mA.
- Also available as a separate accessory; see Accessories information.
- Not available with 347 or 480V.
- Specifies a ROAM<sup>®</sup> enabled luminaire with 0-10V dimming capability; PER option required. Not available with 347 or 480V. Additional hardware and services required for ROAM<sup>®</sup> deployment; must be purchased separately. Call 1-800-442-6745 or email: sales@roamservices.net. N/A with PIR or PIRH.
- Requires 40C or 60C. Provides 50/50 luminaire operation via two independent drivers on two separate circuits. N/A with PER, DCR, DMG, WTB, PIR, or PIRH.
- Requires an additional switched circuit.
- Specifies the SensorSwitch SBR-10-ODP control; see Motion Sensor Guide for details. Dimming driver standard. Not available with DCR, DS, TLS or WTB.
- Specifies the SensorSwitch SBR-6-ODP control; see Motion Sensor Guide for details. Dimming driver standard. Not available with DCR, DS, TLS or WTB.
- Dimming driver standard. MVOLT only. Not available with DCR or WTB.
- WTB not available with BL30, BL50, DS, PIR or PIRH.
- Single fuse (SF) requires 120, 277 or 347 voltage option. Double fuse (DF) requires 208, 240 or 480 voltage option.
- With TLS option, the luminaire is no longer IP65 rated. Not available with PIR or PIRH.
- Available with 60 LEDs (60C option) only.
- Requires luminaire to be specified with PER option. Ordered and shipped as a separate line item.

## Accessories

Ordered and shipped separately.

DLL127F 1.5 JU	Photocell - SSL twist-lock (120-277V) <sup>16</sup>
DLL347F 1.5 CUL JU	Photocell - SSL twist-lock (347V) <sup>16</sup>
DLL480F 1.5 CUL JU	Photocell - SSL twist-lock (480V) <sup>16</sup>
SCU	Shorting cap <sup>16</sup>
DSX1HS 30C U	House-side shield for 30 LED unit
DSX1HS 40C U	House-side shield for 40 LED unit
DSX1HS 60C U	House-side shield for 60 LED unit
SPUMBA DDBXD U	Square pole universal mounting bracket adaptor (specify finish)
RPUMBA DDBXD U*	Round pole universal mounting bracket adaptor (specify finish)

For more control options, visit **DTL** and **ROAM** online.



## 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. Actual wattage may differ by +/- 8% when operating between 120-480V +/-10%. Contact factory for performance data on any configurations not shown here.

LEDs	Drive Current (mA)	Performance Package	System Watts	Dist. Type	30K (3000K, 80 minimum CRI)					40K (4000K, 70 minimum CRI)					50K (5000K, 67 CRI)				
					Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW
					30C Section														
30C  (30 LEDs)	700 mA	30C 700 --K	68 W	T1S	5,290	1	0	1	78	6,524	2	0	2	96	7,053	2	0	2	104
				T2S	5,540	1	0	1	81	6,833	2	0	2	100	7,387	2	0	2	109
				T2M	5,360	1	0	2	79	6,611	2	0	2	97	7,147	2	0	2	105
				T3S	5,479	1	0	1	81	6,757	1	0	2	99	7,305	2	0	2	107
				T3M	5,452	1	0	2	80	6,724	2	0	2	99	7,269	2	0	2	107
				T4M	5,461	1	0	2	80	6,736	2	0	2	99	7,282	2	0	2	107
				TFTM	5,378	1	0	2	79	6,633	1	0	2	98	7,171	1	0	2	105
				TSVS	5,708	2	0	0	84	7,040	3	0	0	104	7,611	3	0	1	112
				T5S	5,639	2	0	0	83	6,955	2	0	0	102	7,519	3	0	0	111
	T5M	5,710	3	0	1	84	7,042	3	0	1	104	7,613	3	0	2	112			
	T5W	5,551	3	0	1	82	6,847	3	0	2	101	7,401	3	0	2	109			
	T1S	7,229	2	0	2	69	9,168	2	0	2	87	9,874	2	0	2	94			
	T2S	7,572	2	0	2	72	9,603	2	0	2	91	10,342	2	0	2	98			
	T2M	7,325	2	0	2	70	9,291	2	0	2	88	10,005	2	0	3	95			
	T3S	7,488	2	0	2	71	9,496	2	0	2	90	10,227	2	0	2	97			
	T3M	7,451	2	0	2	71	9,450	2	0	2	90	10,177	2	0	2	97			
	T4M	7,464	2	0	2	71	9,467	2	0	2	90	10,195	2	0	2	97			
	TFTM	7,351	1	0	2	70	9,323	2	0	2	89	10,040	2	0	3	96			
TSVS	7,801	3	0	1	74	9,894	3	0	1	94	10,655	3	0	1	101				
T5S	7,803	3	0	2	74	9,774	3	0	1	93	10,526	3	0	1	100				
T5M	7,707	3	0	0	73	9,897	3	0	2	94	10,658	4	0	2	102				
T5W	7,586	3	0	2	72	9,621	4	0	2	92	10,363	4	0	2	99				
40C Section																			
40C  (40 LEDs)	700 mA	40C 700 --K	89 W	T1S	6,876	2	0	2	77	8,639	2	0	2	97	9,345	2	0	2	105
				T2S	7,202	2	0	2	81	9,049	2	0	2	102	9,788	2	0	2	110
				T2M	6,968	2	0	2	78	8,755	2	0	2	98	9,469	2	0	3	106
				T3S	7,122	2	0	2	80	8,948	2	0	2	101	9,679	2	0	2	109
				T3M	7,088	2	0	2	80	8,905	2	0	2	100	9,632	2	0	2	108
				T4M	7,100	2	0	2	80	8,920	2	0	2	100	9,649	2	0	2	108
				TFTM	6,992	1	0	2	79	8,785	2	0	2	99	9,502	2	0	2	107
				TSVS	7,421	3	0	0	83	9,323	3	0	1	105	10,085	3	0	1	113
				T5S	7,331	2	0	0	82	9,210	3	0	1	103	9,962	3	0	1	112
	T5M	7,423	3	0	2	83	9,326	3	0	2	105	10,087	4	0	2	113			
	T5W	7,216	3	0	2	81	9,066	4	0	2	102	9,807	4	0	2	110			
	T1S	9,521	2	0	2	69	11,970	2	0	2	87	12,871	3	3	0	93			
	T2S	9,972	2	0	2	72	12,558	3	0	3	91	13,481	3	0	3	98			
	T2M	9,648	2	0	3	70	12,149	3	0	3	88	13,043	3	0	3	95			
	T3S	9,862	2	0	2	71	12,418	2	0	2	90	13,331	2	0	2	97			
	T3M	9,814	2	0	2	71	12,358	3	0	3	90	13,267	3	0	3	96			
	T4M	9,831	2	0	2	71	12,379	2	0	3	90	13,290	2	0	3	96			
	TFTM	9,681	2	0	2	70	12,191	2	0	3	88	13,087	2	0	3	95			
TSVS	10,275	3	0	1	74	12,937	3	0	1	94	13,890	4	0	1	101				
T5S	10,150	3	0	1	74	12,782	3	0	1	93	13,721	3	0	1	99				
T5M	10,278	4	0	2	74	12,942	4	0	2	94	13,894	4	0	2	101				
T5W	9,991	4	0	2	72	12,582	4	0	2	91	13,507	4	0	2	98				
60C Section																			
60C  (60 LEDs)	700 mA	60C 700 --K	131 W	T1S	10,226	2	0	2	78	12,871	3	0	3	98	13,929	3	0	3	106
				T2S	10,711	2	0	2	82	13,481	3	0	3	103	14,589	3	0	3	111
				T2M	10,363	2	0	3	79	13,043	3	0	3	100	14,115	3	0	3	108
				T3S	10,592	2	0	2	81	13,331	2	0	2	102	14,427	3	0	3	110
				T3M	10,541	2	0	2	80	13,267	3	0	3	101	14,357	3	0	3	110
				T4M	10,559	2	0	2	81	13,290	2	0	3	101	14,382	3	0	3	110
				TFTM	10,398	2	0	3	79	13,087	2	0	3	100	14,163	2	0	3	108
				TSVS	11,036	3	0	1	84	13,890	4	0	4	106	15,032	4	0	1	115
				T5S	10,902	3	0	1	83	13,721	3	0	1	105	14,849	4	0	1	113
	T5M	11,039	4	0	2	84	13,894	4	0	2	106	15,036	4	0	2	115			
	T5W	10,732	4	0	2	82	13,507	4	0	2	103	14,617	4	0	2	112			
	T1S	14,017	3	0	3	67	17,632	3	0	3	84	19,007	3	0	3	91			
	T2S	14,681	3	0	3	70	18,467	3	0	3	88	19,908	3	0	3	95			
	T2M	14,204	3	0	3	68	17,867	3	0	3	85	19,260	3	0	3	92			
	T3S	14,518	3	0	3	69	18,262	3	0	3	87	19,687	3	0	3	94			
	T3M	14,448	3	0	3	69	18,173	3	0	4	87	19,591	3	0	4	94			
	T4M	14,473	3	0	3	69	18,205	3	0	3	87	19,625	3	0	4	94			
	TFTM	14,253	2	0	3	68	17,928	3	0	4	86	19,326	3	0	4	92			
TSVS	15,127	4	0	1	72	19,028	4	0	1	91	20,512	4	0	1	98				
T5S	14,943	4	0	1	71	18,797	4	0	1	90	20,263	4	0	1	97				
T5M	15,131	4	0	2	72	19,033	4	0	2	91	20,517	5	0	3	98				
T5W	14,710	4	0	2	70	18,503	5	0	3	89	19,946	5	0	3	95				

## 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
<b>25°C</b>	<b>77°F</b>	<b>1.00</b>
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
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	--	--
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	--	--
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	--	--

### 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).

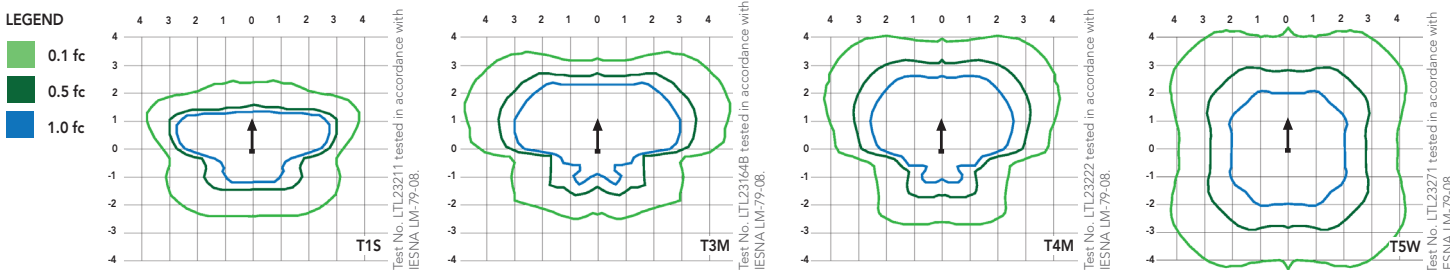
To calculate LLF, use the lumen maintenance factor that corresponds to the desired number of operating hours below. For other lumen maintenance values, contact factory.

Operating Hours	0	25,000	50,000	100,000
Lumen Maintenance Factor	DSX1 LED 60C 1000			
	1.0	0.95	0.93	0.88
	DSX1 LED 60C 700			
	1.0	0.99	0.98	0.96

## 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').



## 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 ft<sup>2</sup>) 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 (70 minimum CRI) or optional 3000K (80 minimum CRI) or 5000K (67 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 L96/100,000 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. 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](http://www.acuitybrands.com/CustomerResources/Terms_and_conditions.aspx)

**Note:** Specifications subject to change without notice.

