



# AST1 LED

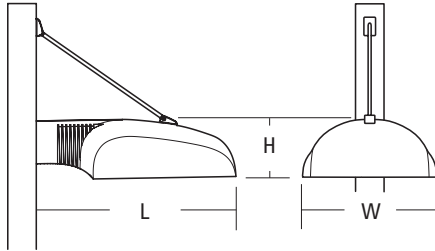
## LED Area Luminaire



AERIS™

### Specifications

<b>EPA:</b>	0.7 ft <sup>2</sup> (0.07 m <sup>2</sup> )
<b>Length:</b>	22-1/4" (56.4 cm)
<b>Width:</b>	13" (33.0 cm)
<b>Height:</b>	6-3/8" (15.9 cm)
<b>Weight (max):</b>	33 lbs (14.8 kg)



Catalog  
Number

Notes

Type

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

### Introduction

The Aeris™ family combines sleek, fluid forms and crisp edges into a striking architectural aesthetic that can be echoed throughout entire sites.

The AST1 LED integrates the latest LED technology with the designer aesthetic of the Aeris™ family for stylish, high-performance illumination that lasts. The AST1 LED is ideal for replacing 100-400W metal halide in area lighting applications with typical energy savings of 65% and expected service life of over 100,000 hours.

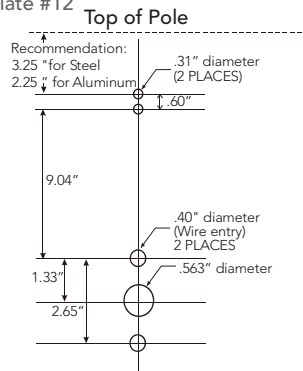
### Ordering Information

**EXAMPLE: AST1 LED 42C 700 40K SR5 MVOLT SPA DDBXD**

AST1 LED									
Series	LEDs	Drive current	Color temperature	Distribution	Voltage	Mounting	Control options	Other options	Finish (required)
<b>AST1 LED</b>	<b>42C</b> 42 LEDs (one engine)	<b>350</b> 350mA <b>530</b> 530mA <b>700</b> 700mA	<b>30K</b> 3000 K <b>40K</b> 4000 K <b>50K</b> 5000 K	SR2 Type II SR3 Type III <b>SR4 Type IV</b> SR5 Type V	<b>MVOLT</b> <sup>1</sup> 120 <sup>1</sup> 208 <sup>1</sup> 240 <sup>1</sup> 277 <sup>1</sup> 347 480	<b>Shipped included</b>  SPA Square pole mounting  RPA Round pole mounting  WBA Wall bracket	DMG 0-10V dimming driver (no controls) <sup>2</sup> BL30 Bi-level switched dimming, 30% <sup>3,4</sup> BL50 Bi-level switched dimming, 50% <sup>3,4</sup> PNMTDD3 Part night, dim till dawn <sup>4</sup> PNMTSD3 Part night, dim 5 hrs <sup>4</sup> PNMT6D3 Part night, dim 6 hrs <sup>4</sup> PNMT7D3 Part night, dim 7 hrs <sup>4</sup>	<b>Shipped installed</b> SF Single fuse (120, 277, 347V) <sup>1</sup> DF Double fuse (208, 240, 480V) <sup>1</sup> DFL Diffusing lens  <b>Shipped separately</b> VG Vandal guard <sup>5</sup>	DDBXD Dark bronze DBLXD Black DNAXD Natural aluminum DWHXD White DDBTXD Textured dark bronze DBLBXD Textured black DNATXD Textured natural aluminum DWHGXD Textured white

### Drilling

Template #12



### Accessories

Ordered and shipped separately.

AST1VG U

Vandal guard accessory

The AST1 has a unique drilling pattern. Specify this drilling pattern when specifying poles, per the table below.

DM19AST1	1 at 90°	DM28AST1	2 at 180°
DM29AST1	2 at 90°	DM39AST1	3 at 90°
DM49AST1	4 at 90°	DM32AST1	3 at 120° *

**Example:** SSA 20 4C DM19AST1 DDBXD

\* For round pole mounting (RPA) only.

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

### NOTES

- 1 MVOLT driver operates on any line voltage from 120-277V (50/60 Hz). Single fuse (SF) requires 120 or 277 voltage option. Double fuse (DF) requires 208 or 240 voltage option.
- 2 Not available with 347 or 480V.
- 3 Requires an additional switched line.
- 4 Dimming driver standard. Not available with 347V, 480V, PER5 or PER7.
- 5 Also available as a separate accessory; see Accessories information at left.



## 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.

LEDs	Drive Current (mA)	System Watts	Dist. Type	40 K (4000 K, 70 CRI)				
				Lumens	B	U	G	LPW
42C (42 LEDs)	350	49W	SR2	5,060	1	0	1	103
			SR3	5,060	1	0	1	103
			SR4	5,026	1	0	1	103
			SR5	5,351	3	0	1	109
	530	75W	SR2	7,021	2	0	2	94
			SR3	7,021	1	0	2	94
			SR4	6,974	1	0	2	93
			SR5	7,424	3	0	2	99
	700	97W	SR2	8,533	2	0	2	88
			SR3	8,533	2	0	2	88
			SR4	8,476	2	0	2	87
			SR5	9,023	3	0	2	93

### 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	1.06
10°C	50°F	1.04
20°C	68°F	1.01
<b>25°C</b>	<b>77°F</b>	<b>1.00</b>
30°C	86°F	0.99
40°C	104°F	0.96

### Projected LED Lumen Maintenance

Data references the extrapolated performance projections for the **AST1 LED 42C 700** platform 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).

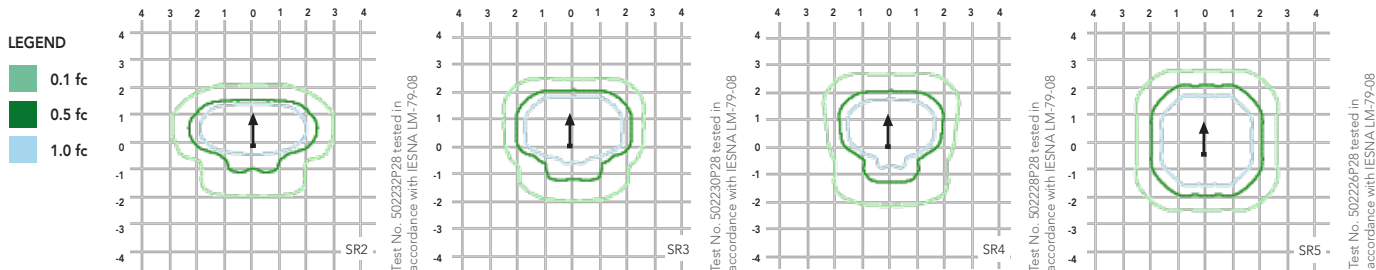
To calculate LLF, use the lumen maintenance factor that corresponds to the desired number of operating hours below. For other lumen maintenance values, contact factory.

Operating Hours	0	25,000	50,000	100,000
Lumen Maintenance Factor	1.0	0.96	0.92	0.85

## Photometric Diagrams

To see complete photometric reports or download .ies files for this product, visit Lithonia Lighting's [AST1 LED homepage](#).

Isofootcandle plots are considered to be representative of available optical distributions.



## FEATURES & SPECIFICATIONS

### INTENDED USE

The energy savings and long life of the AST1 LED area luminaire make it a reliable choice for illuminating streets, walkways, parking lots, and surrounding areas.

### CONSTRUCTION

Single-piece die-cast aluminum housing with nominal wall thickness of .012". Die-cast doorframe has impact-resistant, tempered glass lens (3/16" thick). Doorframe is fully gasketed with one-piece tubular silicone. Decorative strut is comprised of an aluminum tension rod and is provided as an architectural element; not designed to bear weight.

### 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.

### OPTICS

Precision-molded refractive acrylic optics housed behind the door frame lens are available in four distributions. Light engines are available in standard 4000 K or optional 3000 K or 5000 K (70 CRI) configurations. The AST1 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 consists of 42 high-efficacy LEDs mounted to a metal-core circuit board and aluminum heat sink, ensuring optimal thermal management and long life. 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 (per ANSI/IEEE C62.41.2).

### INSTALLATION

Integral arm provides easy installation to a pole and assists in alignment and leveling. Decorative strut requires luminaire to mount 9.64" lower than specified pole height; additional backing plate and receiver provided to mount tension rod.

### LISTINGS

CSA certified to U.S. and Canadian standards. Luminaire is IP65 rated. **U.S. Patent No. D447,590. Canada Patent No. 94324.**

### WARRANTY

5-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:** 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.

