



# KAX LED Size 1 LED Area Luminaire



## Specifications

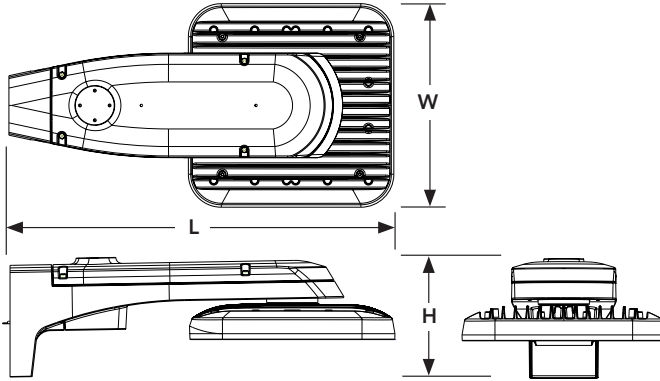
**EPA:** 0.7 ft<sup>2</sup>  
(0.07 m<sup>2</sup>)

**Length:** 25"  
(64 cm)

**Width:** 13-1/4"  
(34 cm)

**Height:** 7-3/4"  
(20 cm)

**Weight (max):** 26 lbs  
(11.8 kg)



Catalog  
Number

Notes

Type

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

## A+ Capable Luminaire

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

- All configurations of this luminaire meet the Acuity Brands' specification for chromatic consistency
- This luminaire is A+ Certified when ordered with DTL® controls marked by a shaded background. DTL DLL equipped luminaires meet the A+ specification for luminaire to photocontrol interoperability<sup>1</sup>
- This luminaire is part of an A+ Certified solution for ROAM®2 or XPoint™ Wireless control networks, providing out-of-the-box control compatibility with simple commissioning, when ordered with drivers and control options marked by a shaded background<sup>1</sup>

To learn more about A+, visit [www.acuitybrands.com/aplus](http://www.acuitybrands.com/aplus).

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

A+ Capable options indicated by this color background.

## Ordering Information

**EXAMPLE:** KAX1 LED P4 40K R3 MVOLT SPA DDBXD

KAX1 LED							
Series	Performance package	Color temperature		Distribution	Voltage	Mounting	
KAX1 LED	P1	30K	3000 K	R3	Type 3	MVOLT <sup>1</sup>	
	P2	40K	4000 K	R4	Type 4	120 <sup>1</sup>	
	P3	50K	5000 K	R5	Type 5	208 <sup>1</sup>	
	P4					240 <sup>1</sup>	<b>Shipped included</b>
						277 <sup>1</sup>	SPA Square pole mounting
					347	RPA Round pole mounting	
					480	<b>Shipped separately</b>	
						KMA Mast arm adaptor <sup>2,3</sup>	

Control options	Other options	Finish (required)	
<b>Shipped installed</b>	<b>Shipped installed</b>	DDBXD	Dark bronze
PER NEMA twist-lock receptacle only (no controls) <sup>4,5</sup>	HS House-side shield <sup>9</sup>	DBLXD	Black
PER5 Five-wire receptacle only (no controls) <sup>5,6</sup>	SF Single fuse (120, 277, 347V) <sup>10</sup>	DNAXD	Natural aluminum
PER7 Seven-wire receptacle only (no controls) <sup>5,6</sup>	DF Double fuse (208, 240, 480V) <sup>11</sup>	DWHXD	White
PIR Bi-level, motion/ambient sensor, 8-15' mounting height, ambient sensor enabled at 5fc <sup>7</sup>	TILT Tilt arm	DDBTXD	Textured dark bronze
PIRH Bi-level, motion/ambient sensor, 15-30' mounting height, ambient sensor enabled at 5fc <sup>7</sup>	<b>Shipped separately</b>	DBLTXD	Textured black
PIR1FC3V Bi-level, motion/ambient sensor, 8-15' mounting height, ambient sensor enabled at 1fc <sup>7</sup>	BS Bird spikes <sup>9</sup>	DNATXD	Textured natural aluminum
PIRH1FC3V Bi-level, motion/ambient sensor, 15-30' mounting height, ambient sensor enabled at 1fc <sup>7</sup>	EGS External glare shield <sup>9</sup>	DWHGXD	Textured white
FAO Field adjustable output <sup>8</sup>			



# Ordering Information

## Accessories

Ordered and shipped separately.

### Controls & Shields

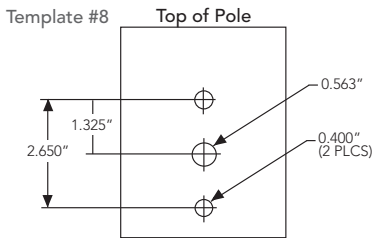
DLL127F 1.5 JU	Photocell - SSL twist-lock (120-277V) <sup>12</sup>
DLL347F 1.5 CULJU	Photocell - SSL twist-lock (347V) <sup>12</sup>
DLL480F 1.5 CULJU	Photocell - SSL twist-lock (480V) <sup>12</sup>
DSHORT SBK U	Shorting cap <sup>12</sup>
KMA DDBXD U	Mast arm mounting bracket adaptor (specify finish) <sup>2</sup>
KAX1HS P1/P2 U	House-side shield (P1, P2)
KAX1HS P3/P4 U	House-side shield (P3, P4)
KAXBS U	Bird spikes
KAX1EGS U	External glare shield

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

### NOTES

- 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).
- For use with 2-3/8" mast arm (not included).
- Needs to be order as a separate item.
- Not available with ROAM®. See PER5 or PER7 option.
- Photocell ordered and shipped as a separate line item from Acuity Brands Controls. See Accessories information.
- If ROAM® node required, it must be ordered and shipped as a separate line item from Acuity Brands Controls.
- 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.
- Dimming driver standard. Not available with PER5 or PER7.
- Also available as a separate accessory; see Accessories information.
- Must specify 120, 277, or 347V option.
- Must specify 208, 240, or 480V option.
- Requires luminaire to be specified with PER, PER5, or PER7 option. Ordered and shipped as a separate line item from Acuity Brands Controls.

## Drilling



KAX1 shares a unique drilling pattern with the AERIS™ family. Specify this drilling pattern when specifying poles, per the table below.

<b>DM19AS</b>	Single unit	<b>DM29AS</b>	2 at 90°**
<b>DM28AS</b>	2 at 180°	<b>DM39AS</b>	3 at 90°**
<b>DM49AS</b>	4 at 90°**	<b>DM32AS</b>	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.

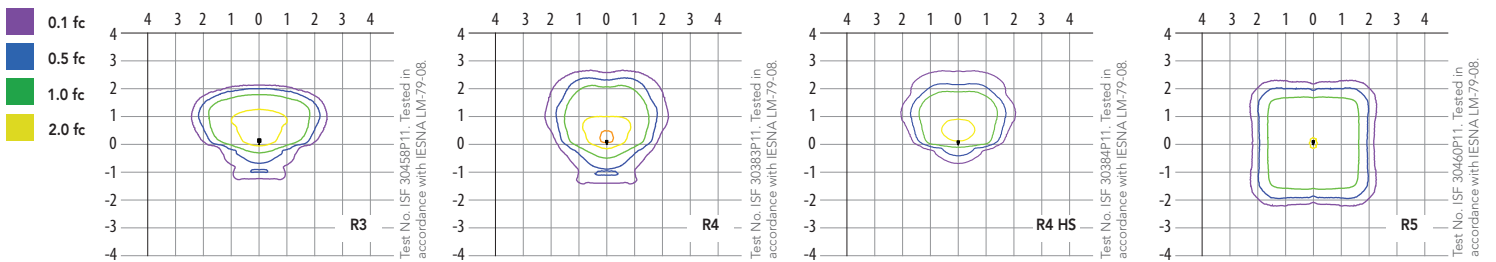
## Tenon Mounting Slipfitter\*\*

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 KAX1 Area Light homepage. Isofootcandle plots for the KAX1 LED P4 40K. Distances are in units of mounting height (30').

### LEGEND



## 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.

Performance Package	System Watts	Dist. Type	30K (3000 K, 70 CRI)					40K (4000 K, 70 CRI)					50K (5000 K, 70 CRI)				
			Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW
P1	50	R3	6,212	1	0	1	124	6,628	1	0	1	133	6,745	1	0	2	135
		R4	6,444	1	0	1	129	6,876	1	0	1	138	6,997	1	0	1	140
		R5	6,826	3	0	1	137	7,283	3	0	1	146	7,411	3	0	1	148
P2	96	R3	10,687	2	0	2	111	11,403	2	0	2	119	11,603	2	0	2	121
		R4	11,087	2	0	2	115	11,829	2	0	2	123	12,037	2	0	2	125
		R5	11,743	3	0	1	122	12,529	3	0	2	131	12,750	3	0	2	133
P3	130	R3	15,567	2	0	3	120	16,609	2	0	3	128	16,902	2	0	3	130
		R4	16,149	2	0	2	124	17,230	2	0	3	133	17,533	2	0	3	135
		R5	17,106	4	0	2	132	18,251	4	0	2	140	18,572	4	0	2	143
P4	160	R3	18,623	3	0	3	116	19,869	3	0	3	124	20,219	3	0	3	126
		R4	19,319	3	0	3	121	20,612	3	0	3	129	20,975	3	0	3	131
		R5	20,463	4	0	2	128	21,833	4	0	2	136	22,217	4	0	2	139

### Lumen Ambient Temperature (LAT) Multipliers

Use these factors to determine relative lumen output for average ambient temperatures from 0-50°C (32-122°F).

\* Shaded cells include active dynamic temperature sensing.

Ambient	Lumen Multiplier			
	P1	P2	P3	P4
0°C	1.05	1.05	1.05	1.05
10°C	1.03	1.03	1.03	1.03
20°C	1.01	1.01	1.01	1.01
25°C	1	1	1	1
30°C	0.99	0.99	0.99	0.99
40°C	0.97	0.97	0.97	0.95
45°C	0.96	0.96	0.93	0.81
50°C	0.95	0.95	0.78	0.67

### Electrical Load

Package		120V	208V	240V	277V	347V	480V
P1	Current (A)	0.42A	0.24A	0.21A	0.18A	0.15A	0.12A
	System Watts	50W	49W	49W	49W	49W	49W
P2	Current (A)	0.80A	0.46A	0.40A	0.35A	0.28A	0.21A
	System Watts	96W	94W	94W	93W	94W	93W
P3	Current (A)	1.08A	0.62A	0.54A	0.47A	0.39A	0.30A
	System Watts	130W	127W	127W	126W	128W	128W
P4	Current (A)	1.33A	0.76A	0.66A	0.58A	0.48A	0.36A
	System Watts	160W	156W	156W	155W	159W	159W

### Projected LED Lumen Maintenance

Operating Hours	25,000	50,000	100,000
Lumen Maintenance Factor	>0.94	>0.89	>0.80

Values calculated according to IESNA TM-21-11 methodology and valid up to 40°C.

## FEATURES & SPECIFICATIONS

### INTENDED USE

This feature-rich luminaire embodies the highest level of functionality with extraordinary efficacy which maximizes your application efficiency providing high levels of light for minimal cost specifically on small to medium sized parking lots like banks, restaurants, service stations, corporate offices and strip malls.

### CONSTRUCTION

Separated die-cast aluminum heat sink and mounting arm allow maximum air flow and separated electrical compartments to promote cool operating environments extending component life. This modular design allows for ease of maintenance and future light engine upgrades. The KAX features a field rotatable optical assembly enabling on-the-fly adjustments when plans change, and can even be tilted upwards if necessary for additional forward throw. The housing is completely sealed against moisture and environmental contaminants (IP66). Low EPA (0.7 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

Individually formed acrylic lenses are engineered for superior application efficiency which maximizes the light in the areas where it is most needed. Light engines are available in 3000 K, 4000 K or 5000 K (minimum 70 CRI) configurations. In its standard configuration the KAX has zero upright and qualifies as a Nighttime Friendly™ product, meaning it is consistent with the LEED® and Green Globes™ criteria for eliminating wasteful upright. With the TILT option, the optical assembly can be raised up to 80 degrees for additional forward throw or to provide vertical illumination.

### ELECTRICAL

Light engine(s) configurations consist of high-efcacy LEDs mounted to metal-core circuit boards to maximize heat dissipation and promote long life (>L80/100,000 hours). Class 1 electronic drivers are designed to have a power factor >90%, THD <20%, and an expected life of 100,000 hours. Easily serviceable 10kV surge protection device meets a minimum Category C Low operation (per ANSI/IEEE C62.41.2).

### INSTALLATION

The base of the mounting arm features a universal mounting template to facilitate quick and easy installation. Mounting bolts featuring a 1000-hour salt fog finish are utilized to secure the luminaire providing up to a 1.5 G vibration load rating per ANSI C136.31. The KAX utilizes the AERIS™ series pole drilling pattern. Optional bi-level motion sensor and NEMA 3, 5 or 7 pin twist lock photocontrol receptacle are also available.

### LISTINGS

CSA Listed for wet locations. Light engines and electrical compartment are IP66 rated. Rated for temperatures as low as -40°C minimum ambient.

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](http://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](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.

