

# KAX LED Size 2 LED Area Luminaire

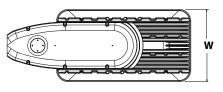


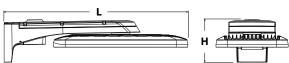


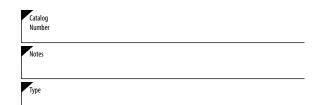


# **Specifications**

1.1 ft<sup>2</sup> EPA: (0.1 m<sup>2</sup>) 34" Lenath: (86.4 cm) 13" Width: (33 cm) 8" Height: (20.3 cm) Weight 41 lbs (max): (18.6 kg)







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

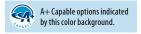
# \*\* Capable Luminaire

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 interoperability1
- This luminaire is part of an A+ Certified solution for ROAM® 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 background¹

To learn more about A+, visit <a href="www.acuitybrands.com/aplus">www.acuitybrands.com/aplus</a>.

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



### **Ordering Information**

### **EXAMPLE:** KAX2 LED P2 40K R3 MVOLT SPA DDBXD

KAX2 LED					
Series	Performance package	Color temperature	Distribution	Voltage	Mounting
KAX2 LED	P1 P2 P3	30K 3000 K 40K 4000 K 50K 5000 K	R3 Type 3 R4 Type 4 R5 Type 5 1	MVOLT <sup>2</sup> 120 <sup>3</sup> 208 <sup>4</sup> 240 <sup>4</sup> 277 <sup>3</sup> 347 <sup>3</sup> 480 <sup>4</sup>	Shipped included SPA Square pole mounting RPA Round pole mounting (includes round and square mounting)

Control opt	ions	Other o	ptions	Finish (requi	Finish (required)		
Shipped in PER PER5 PER7 PIR PIRH PIR1FC3V PIRH1FC3V FAO	NEMA twist-lock receptacle only (Controls order separate) 5.6.7  Five-wire receptacle only (Controls order separate) 5.6.7  Seven-wire receptacle only (Controls order separate) 5.6.7  Bi-level, motion/ambient sensor, 8-15' mounting height, ambient sensor enabled at 5fc 8.9  Bi-level, motion/ambient sensor, 8-15' mounting height, ambient sensor enabled at 1fc 8.9  Bi-level, motion/ambient sensor, 15-30' mounting height, ambient sensor enabled at 1fc 8.9  Bi-level, motion/ambient sensor, 15-30' mounting height, ambient sensor enabled at 1fc 8.9  Field adjustable output 10	HS SF DF TILT	House-side shield 11 Single fuse (120, 277, 347V) 3 Double fuse (208, 240, 480V) 4 Tilt arm  In separately Bird spikes 11 External glare shield 11	DDBXD DBLXD DNAXD DWHXD DDBTXD DBLBXD DNATXD DWHGXD	Dark bronze Black Natural aluminum White Textured dark bronze Textured black Textured natural aluminum Textured white		



# **Ordering Information**

### **Accessories**

DLL127F 1.5 JU Photocell - SSL twist-lock (120-277V) 12 DLL347F 1.5 CUL JU Photocell - SSL twist-lock (347V) 12 DLL480F 1.5 CUL JU Photocell - SSL twist-lock (480V) 12

DSHORT SBK U Shorting cap 12 Mast arm mounting bracket adaptor (specify finish) 13 KMA DDBXD U

KAX2HS P1 U House-side shield (P1) KAX2HS P2 U House-side shield (P2) KAX2EGS U External glare shield KAXBS U Bird spikes

RK1 KAX2WBA U Wall mount bracket (specify finish) 1

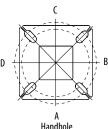
> For more control options, visit DTL and ROAM online.

#### NOTES

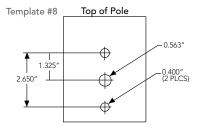
- Any Type 5 distribution, is not available with WBA.
- MVOLT driver operates on any line voltage from 120-277V (50/60 Hz). Specify 120V, 208V, 240V or 277V options only when ordering with fusing (SF, DF options).
- Must specify 120, 277, or 347V when ordering SF option.
- Must specify 208, 240, or 480V when ordering DF option.
- See PER Table on page 3.
- - If ROAM node required, it must be ordered and shipped as a separate line from Acuity Brands Controls. Shorting Cap included.
- Reference Motion Sensor Table on page 3.
- Reference PER Table on page 3 to see functionality.
- Not available with other controls option.
- Also available as a separate accessory; see Accessories information.
  Requires luminaire to be specified with PER option. See PER Table on page 3.
- 13 For use with 2-3/8" mast arm (not included).

### **Drilling**

### HANDHOLE ORIENTATION



Handhole



### Pole drilling nomenclature: # of heads at degree from handhole (default side A)

DM19AS	DM28AS	DM29AS	DM32AS	DM39AS	DM49AS
1 @ 90°	2 @ 280°	2 @ 90°	3 @ 120°	3 @ 90°	4 @ 90°
Side B	Side B & D	Side B & C	Round pole only	Side B, C, & D	Sides A, B, C, D

Note: Review luminaire spec sheet for specific nomenclature

Pole top or tenon O.D.	4.5" @ 90°	4" @ 90°	3.5" @ 90°	3"@90°	4.5" @ 120°	4" @ 120°	3.5" @ 120°	3" @ 120°
KAX SPA	N	N	N	N	-	-	-	-
KAX RPA	N	N	N	N	Υ	Υ	Υ	N

<sup>\*3</sup> fixtures @120 require round pole top/tenon.

#### **Tenon Mounting Slipfitter**

Te	enon O.D.	Single Unit	2 at 180°	2 at 90°	*3 at 120°	3 at 90°	4 at 90°
	4"	AST35-190	AST35-280	AST35-290	AST35-320	AST35-390	AST35-490

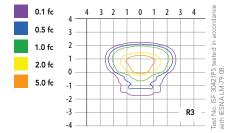
<sup>\* 3@120°</sup> is Round Pole only.

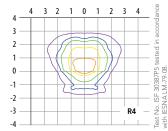
### **Photometric Diagrams**

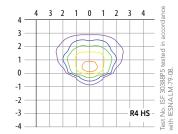
To see complete photometric reports or download .ies files for this product, visit Lithonia Lighting's KAX2 Area Light homepage.

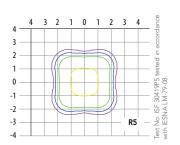
Isofootcandle plots for the KAX2 LED P2 40K. Distances are in units of mounting height (30').

#### LEGEND









# **Performance Data**

# **Lumen Ambient Temperature** (LAT) Multipliers

Use these factors to determine relative lumen output for average ambient temperatures from 0-50°C (32-122°F).  $\star$  Shaded cells include active dynamic temperature sensing.

	Lumen Multiplier						
Ambient	P1	P2					
0°C	1.05	1.05					
10°C	1.03	1.03					
20°C	1.01	1.01					
25°C	1	1					
30°C	0.99	0.99					
40°C	0.82	0.9					
45°C	0.74	0.8					
50°C	0.66	0.59					

### **Electrical Load**

Package		120V				347V	480V
P1	Current (A)	1.68A	0.94A	0.82A	0.71A	0.59A	0.43A
	System Watts	200W	195W	194W	194W	196W	195W
P2	Current (A)	2.07A	1.19A	1.04A	0.91A	0.76A	0.58A
PZ	System Watts	248W	244W	243W	243W	246W	247W
Da	Current (A)	3.15A	1.80A	1.57A	1.36A	1.09A	0.81A
P3	System Watts	383W	373W	371W	369W	370W	367W

# **Projected LED Lumen Maintenance**

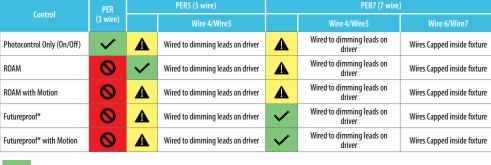
Operating Hours	25,000	50,000	100,000
Lumen Maintenance Factor	>0.94	>0.89	>0.80

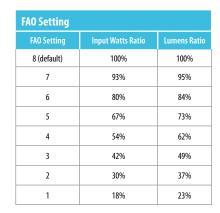
Values calculated according to IESNA TM-21-11 methodology and valid up to  $40^{\circ}$ C.

Motion Sensor Default Settings											
Option	Dimmed State	High Level (when triggered)	Photocell Operation	Dwell Time	Ramp-up Time	Ramp-down Time					
PIR or PIRH	3V (37%) Output	10V (100%) Output	Enabled @ 5FC	5 min	3 sec	5 min					
*PIR1FC3V or PIRH1FC3V	3V (37%) Output	10V (100%) Output	Enabled @ 1FC	5 min	3 sec	5 min					

<sup>\*</sup>For use when motion sensor is used as dusk to dawn control

PER Table											
Control	PER		PER5 (5 wire)	PER7 (7 wire)							
Control	(3 wire)		Wire 4/Wire5		Wire 4/Wire5	Wire 6/Wire7					
Photocontrol Only (On/Off)	<b>~</b>	A	Wired to dimming leads on driver	A	Wired to dimming leads on driver	Wires Capped inside fixture					
ROAM	0	<b>~</b>	Wired to dimming leads on driver	A	Wired to dimming leads on driver	Wires Capped inside fixture					
ROAM with Motion	0	A	Wired to dimming leads on driver	A	Wired to dimming leads on driver	Wires Capped inside fixture					
Futureproof*	proof* Wired to dimming leads on driver		<b>~</b>	Wired to dimming leads on driver	Wires Capped inside fixture						
Futureproof* with Motion	0	A	Wired to dimming leads on driver	<b>~</b>	Wired to dimming leads on driver	Wires Capped inside fixture					





### **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	System Watts		30K (3000 K, 70 CRI)				40K (4000 K, 70 CRI)				50K (5000 K, 70 CRI)						
Раскаде		Туре	Lumens	В	U	G	LPW	Lumens	В	U	G	LPW	Lumens	В	U	G	LPW
		R3	24,474	3	0	3	122	26,112	3	0	3	131	26,572	3	0	3	133
P1	200W	R4	25,377	3	0	3	127	27,076	3	0	3	135	27,552	3	0	3	138
		R5	26,882	4	0	2	134	28,681	4	0	2	143	29,186	4	0	2	146
		R3	30,753	3	0	3	124	32,812	3	0	3	132	33,389	3	0	3	135
P2	248W	R4	31,888	3	0	3	129	34,022	3	0	4	137	34,621	3	0	4	140
		R5	33,779	5	0	2	136	36,040	5	0	3	145	36,674	5	0	3	148
		R3	45,049	4	0	4	118	48,065	4	0	4	126	48,911	4	0	4	128
P3 381W	381W	R4	46,712	4	0	4	123	49,838	4	0	4	131	50,715	4	0	4	133
	R5	49,481	5	0	3	130	52,793	5	0	4	139	53,723	5	0	4	141	



Recommended Will not work

<sup>\*</sup>Futureproof means: Ability to change controls in the future.

#### **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, strip malls and automotive dealerships. Suitable replacement for luminaires up to 1000W metal halide.

#### 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 (1.1 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

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 uplight and qualifies as a Nighttime Friendly  $^{\rm TM}$  product, meaning it is consistent with the LEED® and Green Globes  $^{\rm TM}$  criteria for eliminating wasteful uplight. With the TILT option, the optical assembly can be tilted up to 80 degrees for additional forward throw or to provide vertical illumination.

#### ELECTRICAL

Light engine(s) configurations consist of high-efficacy 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 AERISTM 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 minimum ambient temperatures as low as  $-40^{\circ}$ C.

DesignLights Consortium® (DLC) qualified product. Not all versions of this product may be DLC qualified. Please check the DLC Qualified Products List at <a href="https://www.designlights.org">www.designlights.org</a> to confirm which versions are qualified.

#### WARRANTY

5-year limited warranty. Complete warranty terms located at: www.acuitybrands.com/support/customer-support/terms-and-conditions

**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.

