



KAX LED Size 2 LED Area Luminaire



Catalog
Number

Notes

Type

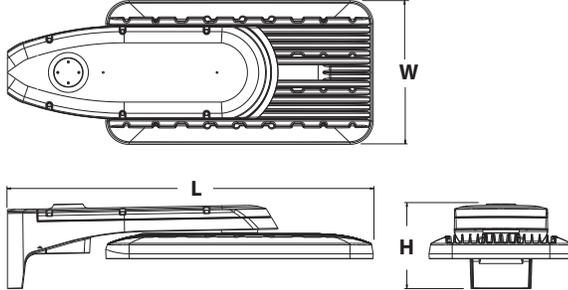
Hit the Tab key or mouse over the page to see all interactive elements.

Introduction

This feature-rich luminaire embodies the highest level of functionality, and with field-rotatable optics and optional tilt, light can be placed exactly where it's needed. The optics are specifically designed to maximize the light in the desired area and are particularly useful in small to medium sized parking lots requiring higher illuminance levels such as restaurants, banks, service stations, strip malls and even automotive dealerships. By providing the maximum amount of light at minimal cost, the KAX2 is the perfect choice for new installations or retrofit installations replacing up to 1000W MH.

Specifications

| | |
|----------------------|--|
| EPA: | 1.1 ft ² (0.1 m ²) |
| Length: | 34" (86.4 cm) |
| Width: | 13" (33 cm) |
| Height: | 8" (20.3 cm) |
| Weight (max): | 41 lbs (18.6 kg) |



Ordering Information

EXAMPLE: KAX2 LED P2 40K R3 MVOLT SPA DDBXD

| KAX2 LED | | | | | |
|----------|---------------------|-------------------|------------------|--------------------|--|
| Series | Performance package | Color temperature | Distribution | Voltage | Mounting |
| KAX2 LED | P1 | 30K 3000 K | R3 Type 3 | MVOLT ¹ | Shipped included SPA Square pole mounting RPA Round pole mounting Shipped separately KMA Mast arm adaptor ² |
| | | 40K 4000 K | R4 Type 4 | 120 ¹ | |
| | | 50K 5000 K | R5 Type 5 | 208 ¹ | |
| | | | 240 ¹ | | |
| | | | 277 ¹ | | |
| | | | | 347 | |
| | | | | 480 | |

| Control options | Other options | Finish <i>(required)</i> |
|---|---|--|
| Shipped installed PER NEMA twist-lock receptacle only (no controls) ^{3,4} PER5 Five-wire receptacle only (no controls) ^{4,5} PER7 Seven-wire receptacle only (no controls) ^{4,5} PIR Bi-level, motion/ambient sensor, 8-15' mounting height, ambient sensor enabled at 5fc ⁶ PIRH Bi-level, motion/ambient sensor, 15-30' mounting height, ambient sensor enabled at 5fc ⁶ PIR1FC3V Bi-level, motion/ambient sensor, 8-15' mounting height, ambient sensor enabled at 1fc ⁶ PIRH1FC3V Bi-level, motion/ambient sensor, 15-30' mounting height, ambient sensor enabled at 1fc ⁶ FAO Field adjustable output ⁷ | Shipped installed HS House-side shield ⁸ SF Single fuse (120, 277, 347V) ⁹ DF Double fuse (208, 240, 480V) ¹⁰ TILT Tilt arm Shipped separately BS Bird spikes ⁸ EGS External glare shield ⁸ | DDBXD Dark bronze DBLXD Black DNAXD Natural aluminum DWHXD White DDBTXD Textured dark bronze DBLBXD Textured black DNATXD Textured natural aluminum DWHGXD Textured white |

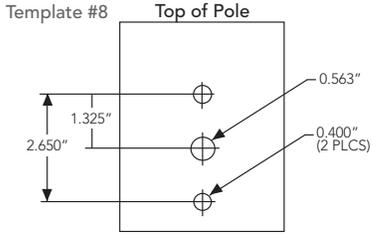
| Accessories | | Controls & Shields |
|---------------------------------|-------------------|---|
| Ordered and shipped separately. | DLL127F 1.5 JU | Photocell - SSL twist-lock (120-277V) ¹¹ |
| | DLL347F 1.5 CULJU | Photocell - SSL twist-lock (347V) ¹¹ |
| | DLL480F 1.5 CULJU | Photocell - SSL twist-lock (480V) ¹¹ |
| | DSHORT SBK U | Shorting cap ¹¹ |
| | KMA DDBXD U | Mast arm mounting bracket adaptor (specify finish) ² |
| | KAX2HS P1 U | House-side shield (P1) |
| | KAX2HS P2 U | House-side shield (P2) |
| | KAX2EGS U | External glare shield |
| | KAXBS U | Bird spikes |

- 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).
 - 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.

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



Drilling



KAX2 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.

**Far round pole mounting (RPA) only.

Tenon Mounting Slipfitter**

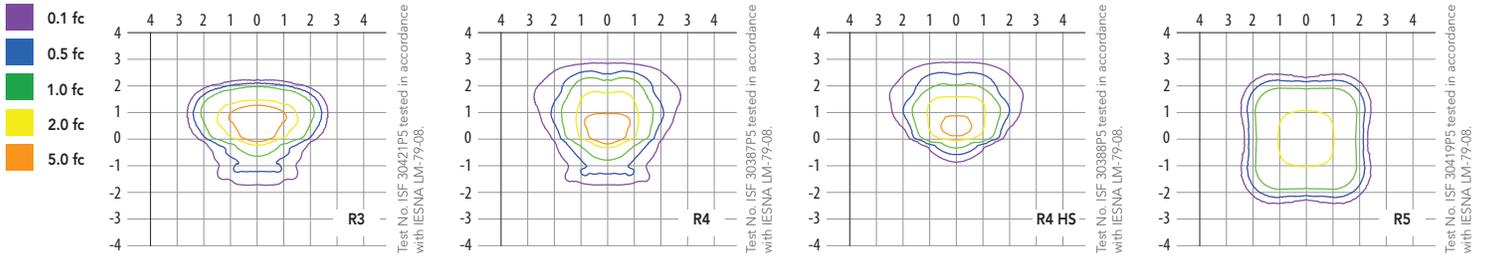
| Tenon O.D. | Single Unit | 2 at 180° | 2 at 90° | 3 at 120° | 3 at 90° | 4 at 90° |
|------------|-------------|-----------|-----------|-----------|-----------|-----------|
| 2-3/8" | AST20-190 | AST20-280 | AST20-290 | AST20-320 | AST20-390 | AST20-490 |
| 2-7/8" | AST25-190 | AST25-280 | AST25-290 | 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 [KAX2 Area Light homepage](#).

Isofootcandle plots for the KAX2 LED P2 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 | 200 | R3 | 24,474 | 3 | 0 | 3 | 122 | 26,112 | 3 | 0 | 3 | 131 | 26,572 | 3 | 0 | 3 | 133 |
| | | 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 |
| P2 | 248 | R3 | 30,753 | 3 | 0 | 3 | 124 | 32,812 | 3 | 0 | 3 | 132 | 33,389 | 3 | 0 | 3 | 135 |
| | | 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 |

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 |
| 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 | 208V | 240V | 277V | 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 |
| | System Watts | 248W | 244W | 243W | 243W | 246W | 247W |

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, 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™ product, meaning it is consistent with the LEED® and Green Globes™ 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 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 minimum ambient temperatures as low as -40°C.

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 to confirm which versions are qualified.

WARRANTY

5-year limited warranty. Complete warranty terms located at: 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.