



KAD LED LED Area Luminaire

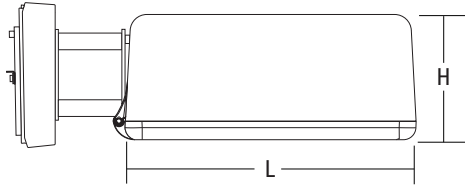


Catalog Number
Notes
Type

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

Specifications

EPA:	1.2 ft ² (0.11 m ²)
Length:	17-1/2" (44.5 cm)
Width:	17-1/2" (44.5 cm)
Height:	7-1/8" (18.1 cm)
Weight (max):	36 lbs. (16.4 kg)



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 interoperability¹
- 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**¹

To learn more about A+, visit 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: KAD LED 40C 1000 40K R5 MVOLT SPD04 DDBXD

KAD LED	Series	LEDs	Drive current	CCT	Distribution	Voltage	Mounting ³
KAD LED	20C ¹	20 LEDs	530 530 mA ¹	30K 3000 K	R2 Type II	MVOLT ² 277 ³	Shipped included SPUMBAK__ Square pole universal mounting adaptor ⁵ RPUMBAK__ Round pole universal mounting adaptor ⁵ SPD__ Square pole RPD__ Round pole WBD__ Wall bracket WWD__ Wood pole or wall Shipped separately DAD12P Degree arm (pole) DAD12WB Degree arm (wall) KMA Mast arm external fitter
	30C ¹	30 LEDs	700 700 mA	40K 4000 K	R3 Type III	120 ³ 347 ^{1,2}	
	40C	40 LEDs	1000 1000 mA	50K 5000 K	R4 Type IV	208 ^{2,3} 480 ^{1,2}	
	60C	60 LEDs			R5 Type V	240 ^{2,3}	

Options	Finish (required)
Shipped installed PER5 NEMA twist-lock five-wire receptacle only (no controls) ^{6,7,8} PER7 Seven-wire receptacle only (no controls) ^{6,7,8} SF Single fuse (120, 277, 347V) ³ DF Double fuse (208, 240, 480V) ³ PIR Bi-level, motion/ambient sensor, 8-15' mounting height, ambient sensor enabled at 5fc ^{2,9,10,11,12} PIRH Bi-level, motion/ambient sensor, 15-30' mounting height, ambient sensor enabled at 5fc ^{2,9,10,11,12}	Shipped separately ¹⁶ WG Wire guard DDBXD Dark bronze DBLXD Black DNAXD Natural aluminum DWHXD White DDBTXD Textured dark bronze DBLTXD Textured black DNATXD Textured natural aluminum DWHGXD Textured white
PIR1FC3V Bi-level, motion/ambient sensor, 8-15' mounting height, ambient sensor enabled at 1fc ^{2,9,10,11,12} PIRH1FC3V Bi-level, motion/ambient sensor, 15-30' mounting height, ambient sensor enabled at 1fc ^{2,9,10,11,12} BL30 Bi-level switched dimming, 30% ^{2,8,9,10} BL50 Bi-level switched dimming, 50% ^{2,8,9,10} PNMTDD3 Part night, dim till dawn ^{2,10,15} PNMT5D3 Part night, dim 5 hrs ^{2,10,15} PNMT6D3 Part night, dim 6 hrs ^{2,10,15} PNMT7D3 Part night, dim 7 hrs ^{2,10,15} HS Houseside shield ¹⁶	



Ordering Information

Stock configurations are offered for shorter lead times:

Standard Part Number	Stock Part Number
KAD LED 30C 1000 40K R3 MVOLT PUMBAK09 DDBXD*	KADL 30C 40K R3
KAD LED 30C 1000 40K R5 MVOLT PUMBAK09 DDBXD*	KADL 30C 40K R5
KAD LED 40C 1000 40K R3 MVOLT PUMBAK09 DDBXD*	KADL 40C 40K R3
KAD LED 40C 1000 40K R5 MVOLT PUMBAK09 DDBXD*	KADL 40C 40K R5
KAD LED 30C 1000 40K R3 MVOLT PUMBAK09 PIRH DDBXD*	KADL 30C 40K R3 PIRH
KAD LED 30C 1000 40K R5 MVOLT PUMBAK09 PIRH DDBXD*	KADL 30C 40K R5 PIRH
KAD LED 40C 1000 40K R3 MVOLT PUMBAK09 PIRH DDBXD*	KADL 40C 40K R3 PIRH
KAD LED 40C 1000 40K R5 MVOLT PUMBAK09 PIRH DDBXD*	KADL 40C 40K R5 PIRH

*PUMBAK is not standard nomenclature.

Accessories

Ordered and shipped separately.

DLL127F 1.5 JU	Photocell - SSL twist-lock (120-277V) ¹⁷
DLL347F 1.5 CUL JU	Photocell - SSL twist-lock (347V) ¹⁷
DLL480F 1.5 CUL JU	Photocell - SSL twist-lock (480V) ¹⁷
DSHORT SBK U	Shorting cap ¹⁷
KADLEDHS 20C U	Houseside shield for 20 LED unit
KADLEDHS 30C U	Houseside shield for 30 LED unit
KADLEDHS 40C U	Houseside shield for 40 LED unit
KADLEDHS 60C U	Houseside shield for 60 LED unit
KMA DDBXD U	Mast arm adaptor (specify finish)
KADWG U	Wire guard accessory
PUMBAK DDBXD U*	Square and round pole universal mounting bracket adaptor (specify finish)

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

*Round pole top must be 3.25" O.D. minimum.

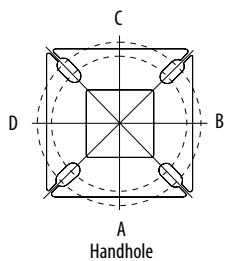
NOTES

- 20C or 30C LED are not available with 530 Drive Current and 347V or 480V
- Any PIRx with BL30, BL50 or PNMT, is not available with 208V, 240V, 347V, 480V or MVOLT. It is only available in 120V or 277V specified
- MVOLT driver operates on any line voltage from 120-277V (50/60 Hz). Single fuse (SF) requires 120, 277 or 347 voltage option. Double fuse (DF) requires 208, 240 or 480 voltage option.
- 9" or 12" arm is required when two or more luminaires are oriented on a 90° drilling pattern.
- Available as a separate combination accessory: PUMBAK (finish) U.
- Mounting must be restricted to ±45° from horizontal aim per ANSI C136.10-2010. Not available with motion sensor.
- Photocell ordered and shipped as a separate line item from Acuity Brands Controls. See accessories. Not available with DS option. Shorting cap included.
- If ROAM[®] node required, it must be ordered and shipped as a separate line item from Acuity Brands Controls. Not available with DCR. Node with integral dimming. Shorting cap included.
- PIR and PIRH1FC3V 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.
- Maximum ambient temperature with 347V or 480V is 30°C.
- Reference Motion Sensor table.
- Reference PER table on page 3 to see functionality.
- Requires an additional switched circuit with same phase as main luminaire power. Supply circuit and control circuit are required to be in the same phase.
- Dimming driver standard. MVOLT only. Not available with 347V, 480V, PER5, PER7 or PNMT options.
- Dimming driver standard. MVOLT only. Not available with 347V, 480V, PER5, PER7, BL30 or BL50.
- Also available as a separate accessory; see Accessories information.
- Requires luminaire to be specified with PER option. Ordered and shipped as a separate line item from Acuity Brands Controls.

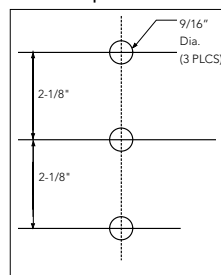
Drilling

Template #5

HANDHOLE ORIENTATION



Top of Pole



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"	T20-190	T20-280	T20-290	T20-320 †	T20-390	T20-490
2-7/8"	T25-190	T25-280	T25-290	T25-320	T25-390	T25-490
4"	T35-190	T35-280	T35-290	T35-320	T35-390	T35-490

** For round pole mounting (RPDXX) only. † Requires 9" or 12" arm.

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

DM19	DM28	DM29	DM39	DM49
1 @ 90°	2 @ 280°	2 @ 90°	3 @ 90°	4 @ 90°
Side B	Side B & D	Side B & C	Side B, C, & D	Sides A, B, C, D

Note: Review luminaire spec sheet for specific nomenclature

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	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		
20C	530 mA	35W	R2	4,140	1	0	1	118	4,446	1	0	1	127	4,473	1	0	1	128		
			R3	4,123	1	0	1	118	4,427	1	0	1	126	4,455	1	0	1	127		
			R4	4,128	1	0	1	118	4,433	1	0	1	127	4,460	1	0	1	127		
			R5	4,381	2	0	1	125	4,704	3	0	1	134	4,734	3	0	1	135		
	700 mA	45W	R2	5,271	1	0	1	117	5,660	1	0	1	126	5,696	1	0	2	127		
			R3	5,250	1	0	2	117	5,637	1	0	2	125	5,672	1	0	2	126		
			R4	5,256	1	0	2	117	5,644	1	0	2	125	5,679	1	0	2	126		
			R5	5,578	3	0	1	124	5,990	3	0	1	133	6,027	3	0	1	134		
	1000 mA	73W	R2	7,344	1	0	2	101	7,886	2	0	2	108	7,935	2	0	2	109		
			R3	7,314	1	0	2	100	7,854	1	0	2	108	7,903	1	0	2	108		
			R4	7,322	1	0	2	100	7,863	1	0	2	108	7,912	1	0	2	108		
			R5	7,771	3	0	1	106	8,345	3	0	1	114	8,397	3	0	1	115		
30C	530 mA	53W	R2	6,166	1	0	2	116	6,621	1	0	2	125	6,663	1	0	2	126		
			R3	6,141	1	0	2	116	6,594	1	0	2	124	6,635	1	0	2	125		
			R4	6,148	1	0	2	116	6,602	1	0	2	125	6,643	1	0	2	125		
			R5	6,525	3	0	1	123	7,006	3	0	1	132	7,050	3	0	1	133		
	700 mA	69W	R2	7,817	2	0	2	113	8,395	2	0	2	122	8,447	2	0	2	122		
			R3	7,785	1	0	2	113	8,360	2	0	2	121	8,412	2	0	2	122		
			R4	7,794	1	0	2	113	8,370	1	0	2	121	8,422	1	0	2	122		
			R5	8,272	3	0	2	120	8,883	3	0	2	129	8,938	3	0	2	130		
	1000 mA	108W	R2	10,755	2	0	2	100	11,549	2	0	2	107	11,621	2	0	2	108		
			R3	10,711	2	0	2	99	11,502	2	0	2	106	11,574	2	0	2	107		
			R4	10,724	2	0	2	99	11,515	2	0	2	107	11,587	2	0	2	107		
			R5	11,381	3	0	2	105	12,221	4	0	2	113	12,297	4	0	2	114		
40C	530 mA	71W	R2	8,156	2	0	2	115	8,758	2	0	2	123	8,812	2	0	2	124		
			R3	8,122	2	0	2	114	8,722	2	0	2	123	8,776	2	0	2	124		
			R4	8,132	1	0	2	115	8,732	1	0	2	123	8,786	1	0	2	124		
			R5	8,630	3	0	2	122	9,267	3	0	2	131	9,325	3	0	2	131		
	700 mA	94W	R2	10,286	2	0	2	109	11,045	2	0	2	118	11,114	2	0	2	118		
			R3	10,244	2	0	2	109	11,000	2	0	2	117	11,069	2	0	2	118		
			R4	10,256	2	0	2	109	11,013	2	0	2	117	11,081	2	0	2	118		
			R5	10,884	3	0	2	116	11,688	4	0	2	124	11,761	4	0	2	125		
	1000 mA	141W	R2	13,923	2	0	2	99	14,951	2	0	2	106	15,045	2	0	2	107		
			R3	13,866	2	0	3	98	14,890	2	0	3	106	14,983	2	0	3	106		
			R4	13,882	2	0	3	98	14,907	2	0	3	106	15,000	2	0	3	106		
			R5	14,733	4	0	2	104	15,821	4	0	2	112	15,920	4	0	2	113		
60C	530 mA	103W	R2	11,996	2	0	2	116	12,882	2	0	2	125	12,963	2	0	2	126		
			R3	11,947	2	0	2	116	12,829	2	0	2	125	12,909	2	0	2	125		
			R4	11,961	2	0	2	116	12,844	2	0	2	125	12,925	2	0	2	125		
			R5	12,694	4	0	2	123	13,632	4	0	2	132	13,717	4	0	2	133		
	700 mA	137W	R2	14,927	2	0	2	109	16,029	3	0	3	117	16,130	3	0	3	118		
			R3	14,866	2	0	3	109	15,964	2	0	3	117	16,063	2	0	3	117		
			R4	14,884	2	0	2	109	15,982	2	0	3	117	16,082	2	0	3	117		
			R5	15,796	4	0	2	115	16,962	4	0	2	124	17,068	4	0	2	125		
	1000 mA	216W	R2	19,328	3	0	3	89	20,754	3	0	3	96	20,884	3	0	3	97		
			R3	19,248	3	0	3	89	20,669	3	0	4	96	20,799	3	0	4	96		
			R4	19,271	3	0	3	89	20,693	3	0	4	96	20,823	3	0	4	96		
			R5	20,452	4	0	2	95	21,962	4	0	2	102	22,099	4	0	2	102		

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
25°C	77°F	1.00
30°C	86°F	1.00
40°C	104°F	0.99

Projected LED Lumen Maintenance

Data references the extrapolated performance projections for the **KAD LED** 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	KAD LED 60C 1000			
	1.0	0.91	0.86	0.76
	KAD LED 40C 1000			
	1.0	0.93	0.88	0.79
KAD LED 60C 700				
1.0	0.98	0.97	0.94	

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

*for use with Inline Dusk to Dawn or timer.

PER Table

Control	PER (3 wire)	PER5 (5 wire)		PER7 (7 wire)		
		Wire 4/Wire5	Wire 4/Wire5	Wire 4/Wire5	Wire 6/Wire7	
Photocontrol Only (On/Off)	✓	⚠	Wired to dimming leads on driver	⚠	Wired to dimming leads on driver	Wires Capped inside fixture
ROAM	⊘	✓	Wired to dimming leads on driver	⚠	Wired to dimming leads on driver	Wires Capped inside fixture
ROAM with Motion (ROAM on/off only)	⊘	⚠	Wires Capped inside fixture	⚠	Wires Capped inside fixture	Wires Capped inside fixture
Future-proof*	⊘	⚠	Wired to dimming leads on driver	✓	Wired to dimming leads on driver	Wires Capped inside fixture
Future-proof* with Motion	⊘	⚠	Wires Capped inside fixture	✓	Wires Capped inside fixture	Wires Capped inside fixture

- ✓ Recommended
- ⊘ Will not work
- ⚠ Alternate

*Future-proof means: Ability to change controls in the future.

Electrical Load

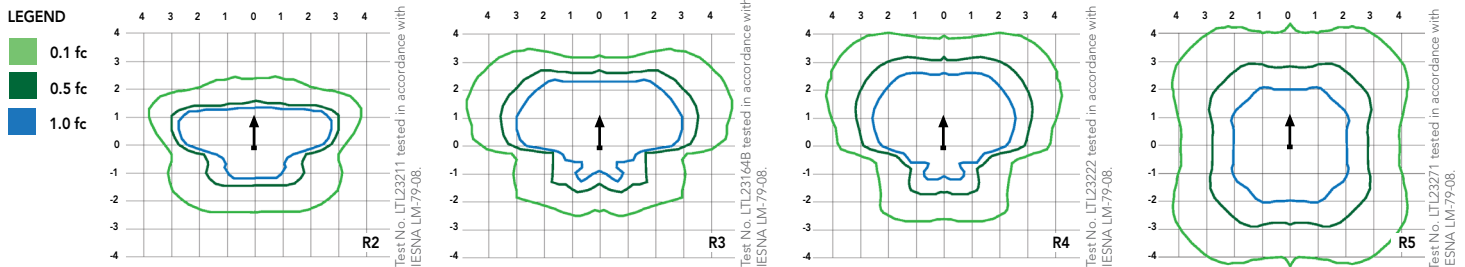
Number of LEDs	Drive Current (mA)	System Watts	Current (A)					
			120	208	240	277	347	480
20	530	35	0.30	0.18	0.16	0.15	-	-
	700	45	0.39	0.23	0.20	0.18	0.15	0.12
	1000	73	0.61	0.35	0.31	0.27	0.22	0.17
30	530	53	0.44	0.26	0.23	0.20	-	-
	700	69	0.58	0.34	0.29	0.26	0.21	0.16
	1000	108	0.90	0.52	0.46	0.40	0.32	0.24
40	530	71	0.60	0.35	0.32	0.29	0.21	0.16
	700	94	0.79	0.46	0.41	0.36	0.27	0.20
	1000	141	1.18	0.68	0.59	0.52	0.42	0.30
60	530	103	0.87	0.50	0.44	0.39	0.29	0.22
	700	137	1.15	0.66	0.58	0.51	0.40	0.29
	1000	216	1.81	1.04	0.92	0.81	0.63	0.47

NOTE: All ratings in this table are for a nominal system operated at 25°C ambient temperature. Current and power specifications in this table do not include branch circuit derating specified in the National Electrical Code. Please observe all applicable electrical codes and ratings.

Photometric Diagrams

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

Isofootcandle plots for the KAD LED 60C 1000 40K. Distances are in units of mounting height (20').



FEATURES & SPECIFICATIONS

INTENDED USE

The energy savings and long life of the KAD 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 contoured edges has a 0.12" nominal wall thickness. Die-cast door frame has an impact-resistant, tempered glass lens that is fully gasketed with one piece tubular silicone.

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 lenses are available in four distributions. Light engines are available in standard 4000K, 3000K or 5000K (70 CRI) configurations.

ELECTRICAL

Light engine consists of 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

Included universal mounting block and extruded aluminum arm facilitate quick and easy installation using nearly any existing drilling pattern. Stainless steel bolts fasten the luminaire to the mounting block securing it to poles or walls. The KAD LED can withstand up to a 1.5 G vibration load rating per ANSI C136.31. The KAD LED also utilizes the standard K-Series (Template #5) for pole drilling.

LISTINGS

CSA certified to U.S. and Canadian standards. Luminaire is IP65 rated. Rated for -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/QPL 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.

