



# KADR LED LED Retrofit Kit



Catalog  
Number

Notes

Type

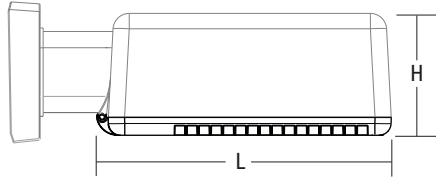
Hit the Tab key or mouse over the page to see all interactive elements.

## Introduction

The Contour® Series luminaires offer traditional square dayforms with softened edges for a versatile look that complements many applications. The KADR LED retrofits any existing 100 - 400W metal halide or high pressure sodium KAD into a high-performance LED luminaire, while realizing typical energy savings up to 65% with expected service life up to 100,000 hours. The KADR LED retrofit door simply replaces the existing KAD door containing the glass lens and installs in minutes.

## Specifications

<b>EPA:</b>	1.2 ft <sup>2</sup> (0.11 m <sup>2</sup> )
<b>Length:</b>	17-1/2" (44.5 cm)
<b>Width:</b>	17-1/2" (44.5 cm)
<b>Height:</b>	7-1/8" (18.1 cm)
<b>Weight (max):</b>	13 lbs. (5.9 kg)



## Ordering Information

**EXAMPLE: KADR LED 40C 1000 40K R5 MVOLT DDBXD**

KADR LED		Drive current		CCT		Distribution		Voltage	
Series	LEDs								
KADR LED	20C	20 LEDs	530	530 mA	30K	3000 K	R2	Type II	MVOLT
	30C	30 LEDs	700	700 mA	40K	4000 K	R3	Type III	120 <sup>2</sup>
	40C	40 LEDs	1000 <sup>1</sup>	1000 mA	50K	5000 K	R4	Type IV	208 <sup>2</sup>
	60C <sup>1</sup>	60 LEDs					R5	Type V	240 <sup>2</sup>
									277 <sup>2</sup>
									347
									480

Options		Finish (required)	
<b>Shipped installed</b>	<b>Shipped separately</b>	DDBXD	Dark bronze
PIR Motion sensor, 8-15' mounting height <sup>2</sup>	WG Wire guard <sup>3</sup>	DBLXD	Black
PIRH Motion sensor, 15-30' mounting height <sup>2</sup>		DNAXD	Natural aluminum
HS Houseside shield <sup>3</sup>		DWHXD	White
		DDBTXD	Textured dark bronze
		DBLBXD	Textured black
		DNATXD	Textured natural aluminum
		DWHGXD	Textured white

## Accessories

Ordered and shipped separately.

KADWG U	Wire guard accessory
KADLEDHS U	Houseside shield

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

## NOTES

- 60C and 1000mA not available together.
- PIR specifies the [SensorSwitch SBGR-10-ODP](#) control; PIRH specifies the [SensorSwitch SBGR-6-ODP](#) control; see [Motion Sensor Guide](#) for details. Dimming driver standard.
- 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. Actual performance may differ as a result of end-user environment and application. Actual wattage may differ by +/- 8% when operating between 120-480V +/-10%. 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 (20 LEDs)	530 mA	35 W	R2	3,436	1	0	1	98	3,657	1	0	1	104	3,670	1	0	1	105
			R3	3,422	1	0	1	98	3,642	1	0	1	104	3,655	1	0	1	104
			R4	3,426	1	0	1	98	3,647	1	0	1	104	3,659	1	0	1	105
			R5	3,637	2	0	1	104	3,870	2	0	1	111	3,883	2	0	1	111
	700 mA	46 W	R2	4,369	1	0	1	95	4,639	1	0	1	101	4,664	1	0	1	101
			R3	4,351	1	0	2	95	4,620	1	0	2	100	4,645	1	0	2	101
			R4	4,357	1	0	2	95	4,626	1	0	2	101	4,650	1	0	2	101
			R5	4,624	3	0	1	101	4,909	3	0	1	107	4,935	3	0	1	107
	1000 mA	73 W	R2	5,817	1	0	2	80	6,198	1	0	2	85	6,223	1	0	2	85
			R3	5,794	1	0	2	79	6,172	1	0	2	85	6,197	1	0	2	85
			R4	5,801	1	0	2	79	6,180	1	0	2	85	6,204	1	0	2	85
			R5	6,156	3	0	1	84	6,559	3	0	1	90	6,585	3	0	1	90
30C (30 LEDs)	530 mA	53 W	R2	5,118	1	0	2	97	5,453	1	0	2	103	5,462	1	0	2	103
			R3	5,097	1	0	2	96	5,431	1	0	2	102	5,439	1	0	2	103
			R4	5,103	1	0	2	96	5,437	1	0	2	103	5,446	1	0	2	103
			R5	5,416	3	0	1	102	5,770	3	0	1	109	5,779	3	0	1	109
	700 mA	70 W	R2	6,674	2	0	2	95	7,100	2	0	2	101	7,126	2	0	2	102
			R3	6,647	1	0	2	95	7,071	2	0	2	101	7,097	2	0	2	101
			R4	6,655	1	0	2	95	7,080	1	0	2	101	7,105	1	0	2	102
			R5	7,063	3	0	2	101	7,514	3	0	2	107	7,541	3	0	2	108
	1000 mA	108 W	R2	8,554	2	0	2	79	9,107	2	0	2	84	9,144	2	0	2	85
			R3	8,519	2	0	2	79	9,069	2	0	2	84	9,106	2	0	2	84
			R4	8,530	2	0	2	79	9,080	2	0	2	84	9,117	2	0	2	84
			R5	9,052	3	0	2	84	9,637	3	0	2	89	9,676	3	0	2	90
40C (40 LEDs)	530 mA	71 W	R2	6,763	2	0	2	95	7,192	2	0	2	101	7,217	2	0	2	102
			R3	6,735	1	0	2	95	7,162	2	0	2	101	7,187	2	0	2	101
			R4	6,743	1	0	2	95	7,171	1	0	2	101	7,196	1	0	2	101
			R5	7,156	3	0	2	101	7,611	3	0	2	107	7,637	3	0	2	108
	700 mA	94 W	R2	8,518	2	0	2	91	9,058	2	0	2	96	9,094	2	0	2	97
			R3	8,483	2	0	2	90	9,020	2	0	2	96	9,057	2	0	2	96
			R4	8,493	2	0	2	90	9,031	2	0	2	96	9,068	2	0	2	96
			R5	9,013	3	0	2	96	9,585	3	0	2	102	9,624	3	0	2	102
	1000 mA	141 W	R2	11,537	2	0	2	82	12,273	2	0	2	87	12,273	2	0	2	87
			R3	11,489	2	0	3	81	12,223	2	0	3	87	12,223	2	0	3	87
			R4	11,503	2	0	3	82	12,237	2	0	3	87	12,237	2	0	3	87
			R5	12,208	4	0	2	87	12,988	4	0	2	92	12,988	4	0	2	92
60C (60 LEDs)	530 mA	103 W	R2	9,954	2	0	2	97	10,592	2	0	2	103	10,629	2	0	2	103
			R3	9,913	2	0	2	96	10,548	2	0	2	102	10,585	2	0	2	103
			R4	9,925	2	0	2	96	10,561	2	0	2	103	10,598	2	0	2	103
			R5	10,533	4	0	2	102	11,208	4	0	2	109	11,247	4	0	2	109
	700 mA	134 W	R2	12,871	2	0	2	96	13,692	3	0	3	102	13,742	3	0	3	103
			R3	12,818	2	0	3	96	13,636	2	0	3	102	13,685	2	0	3	102
			R4	12,833	2	0	3	96	13,653	2	0	3	102	13,702	2	0	3	102
			R5	13,620	4	0	2	102	14,489	4	0	2	108	14,541	4	0	2	109

## 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
<b>25°C</b>	<b>77°F</b>	<b>1.00</b>
30°C	86°F	1.00
40°C	104°F	0.99

### Projected LED Lumen Maintenance

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

## Electrical Load

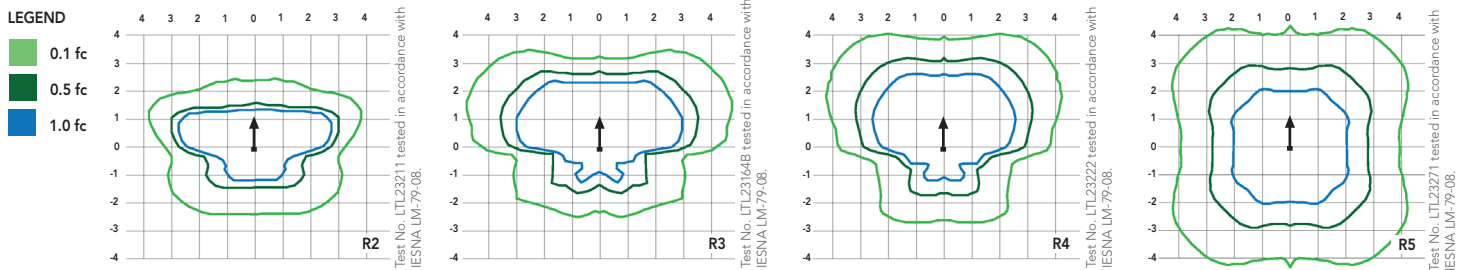
Number of LEDs	Drive Current (mA)	System Watts	Current (A)					
			120	208	240	277	347	480
20	530	35	0.30	0.18	0.16	0.15	-	-
	700	46	0.39	0.23	0.20	0.18	0.15	0.12
	1000	73	0.61	0.35	0.31	0.27	0.22	0.17
30	530	53	0.44	0.26	0.23	0.20	-	-
	700	69	0.58	0.34	0.29	0.26	0.21	0.16
	1000	108	0.90	0.52	0.46	0.40	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

**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 [KADR LED homepage](#).

Isofootcandle plots for the KADR LED 40C 530. Distances are in units of mounting height (20').



## FEATURES & SPECIFICATIONS

### INTENDED USE

The energy savings and long life of the KADR 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 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 or optional 3000K or 5000K (70 CRI) configurations.

### ELECTRICAL

Light engine consists of high-efficiency 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

Retrofit only--mounts directly on existing KAD or KAD-LED housing.

### 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](http://www.designlights.org) to confirm which versions are qualified.

### WARRANTY

Five 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:** Specifications subject to change without notice.

