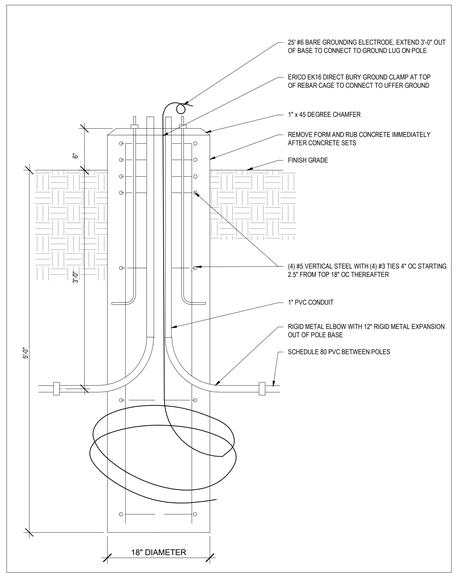
SITE LIGHTING FIXTURE SCHEDULE

TYPE	DESCRIPTION	MANUFACTURER	MODEL NUMBER	VOLTAGE	WATTS	LAMP	MOUNTING	NOTES
C	EXTERIOR WALL LIGHT	LITHONIA	OVFL LED 2RH 40K 120 WH HP17	120 V	20 W	LED	WALL	
E	EXTERIOR WALL LIGHT	LITHONIA	WDGE2 LED P3 40K 80CRI VW MVOLT SRM DNAXD	120 V	23 W	LED	WALL	
F	EXTERIOR CANOPY LIGHT	LITHONIA	VCVL LED V4 P3 40K 80CRI T5E MVOLT SRM	120 V	43 W	LED	SURFACE	
G	UPLIGHT/DOWNLIGHT WALL SCONCE	WAC LIGHTING	WS-W2505-AL	120 V	30 W	LED	WALL	PROVIDE 4000K COLOR TEMPERATURE.
S1	PARKING LOT POLE LIGHT	LITHONIA	KAD LED 20C 530 40K R5 MVOLT DWHXD	120 V	71 W	LED	POLE	PROVIDE MANUFACTURER'S MOUNTING ACCESSORIES AS REQUIRED. PROVIDE LIGHT POLE, MODEL SSS18B4-4-BH, AS MANUFACTURED BY HAPCO, OR EQUAL.

SITE PHOTOMETRICS SCHEDULE

Calculation Points Name	Average	Minimum	Max. Uniformity Ratio (Avg/Min)
School South	1.16 fc	0.26 fc	4.4
Property Line	0.00 fc	0.00 fc	0.0
Parking Lot	1.56 fc	0.45 fc	3.4
Courtyard	1.89 fc	0.32 fc	5.9
Remaining Site (Not Pedestrain Traffic)	0.00 fc	0.00 fc	0.0



PLAN NORTH N 2

POLE BASE DETAIL

NONE

TYPE S1 LIGHT FIXTURES ARE POLE-MOUNTED AT 18'-0" AFG.

TYPE C LIGHT FIXTURES ARE SURFACE-MOUNTED UNDER THE CANOPY AWNING AT 6'-4" AFG.

TYPE E LIGHT FIXTURES ARE WALL-MOUNTED AT 8'-6" AFG.

TYPE F LIGHT FIXTURES ARE SURFACE-MOUNTED UNDER CANOPY AREAS AT 9'-6" AFG.

TYPE G LIGHT FIXTURES ARE WALL-MOUNTED AT HEIGHTS SHOWN ON THIS DRAWING.

PLAN NORTH N 1

SITE ELECTRICAL PHOTOMETRICS PLAN

1" = 30'-0"

ICONICA

901 DEMING WAY // MADISON, WI 53717
Ph: 608.664.3500 // Fx: 608.664.3535
iconicacreates.com

Isthmus Montessori Academy

1802 Pankratz St, Madison WI 53704

Isthmus Montessori Academy

1802 Pankratz St
Madison, WI 53704

ISSUE DATES:

Issue	Description	Date

RESUBMITTAL OF SITE PHOTOMETRIC PLAN 04/25/2022

Sheet Title

SITE PHOTOMETRICS

Project Number: 20210400

Sheet Number

E100P.C

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ISTHMUS MONTESSORI ACADEMY

LITHONIA LIGHTING

TYPE C

OVFL 2RH

2-Head LED Security Floodlight

Performance & Value Combined

The OVFL 2RH LED security floodlight provides more light at an attractive cost providing the best combination of performance and value. Delivering 1,770 lumens, at only 20 inputs watts, the OVFL 2RH replaces up to (1) 150W par incandescent lamp offering 87% energy savings. The standard photocell offers a no-hassle, cost effective solution for any application requiring reliable dusk-to-dawn security lighting. This compact form features two heads allowing for more flexibility in application versus traditional single head solutions.

- **Replaces:** Up to (1) 150W PAR lamp
- **Lumens:** 1,770
- **Input Watts:** 20W
- **Voltage:** 120V
- **Color Temperature:** 4000K
- **Expected Service Life:** Approximately 10 years (35,000 hours[1])
- **Mounting:** Easily mounts to ceiling or wall on a recessed junction box
- Ideal for residential and commercial applications

1 LED lifespan based on IESNA LM-80-08 results and calculated per IESNA TM-21-11 methodology.

TYPE C

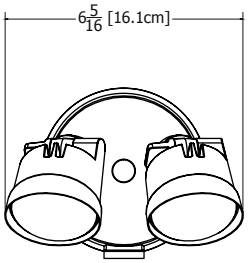
OVFL LED 2HR Floodlight

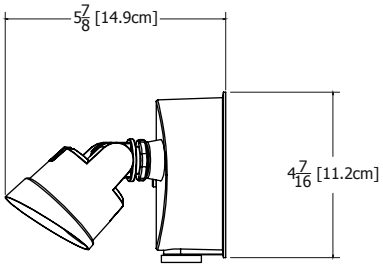
Ordering Information

EXAMPLE: OVFL LED 2RH 40K 120 PE DDB HP17

OVFL

Series	Lightheads	Color Temperature	Voltage	Control Options	Finish
OVFL LED LED Floodlight	**2RH** 2 Heads, Round	**40K** 4000K[1]	**120** 120V	**PE** PE 120V Button Photocell	**DDB HP17** Dark Bronze **WH HP17** White





Need more out of your LED luminaires?

You replace

150W PAR Incandescent
150 Watts

You save

$52 per year or 87% energy savings[2]

You win

Luminaire pays for itself in less than 1 year!

Notes

1 Correlated Color Temperature (CCT) shown is nominal per ANSI C78,377-2008.
2 Based on 10 hours operation per day and energy costs of $.11 per kWH. Savings from energy only, not including maintenance costs.

Visit www.lithonia.com for more information

WDGE2 LED

Architectural Wall Sconce
Visual Comfort Optic

Buy American

Catalog Number

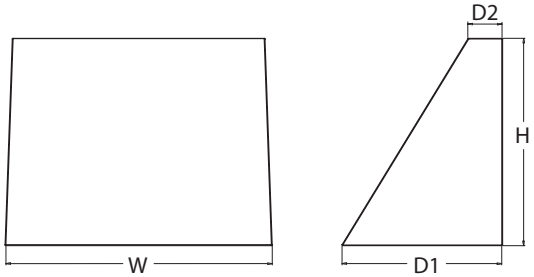
Notes

Type TYPE E

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

Specifications

Depth (D1): 7"
Depth (D2): 1.5"
Height: 9"
Width: 11.5"
Weight: (without options) 13.5 lbs



Introduction

The WDGE LED family is designed to meet specifier's every wall-mounted lighting need in a widely accepted shape that blends with any architecture. The clean rectilinear design comes in four sizes with lumen packages ranging from 1,200 to 25,000 lumens, providing a true site-wide solution. Embedded with nLight® AIR wireless controls, the WDGE family provides additional energy savings and code compliance.

WDGE2 delivers up to 6,000 lumens with a soft, non-pixelated light source, creating a visually comfortable environment. When combined with multiple integrated emergency battery backup options, including an 18W cold temperature option, the WDGE2 becomes the ideal wall-mounted lighting solution for pedestrian scale applications in any environment.

WDGE LED Family Overview

Luminaire	Optics	Standard EM, 0°C	Cold EM, -20°C	Sensor	Approximate Lumens (4000K, 80CRI)						
					P0	P1	P2	P3	P4	P5	P6
WDGE1 LED	Visual Comfort	4W		--	750	1,200	2,000	--	--	--	--
WDGE2 LED	Visual Comfort	10W	18W	Standalone / nLight	--	1,200	2,000	3,000	4,500	6,000	--
WDGE2 LED	Precision Refractive	10W	18W	Standalone / nLight	700	1,200	2,000	3,200	4,200	--	--
WDGE3 LED	Precision Refractive	15W	18W	Standalone / nLight	--	7,500	8,500	10,000	12,000	--	--
WDGE4 LED	Precision Refractive			Standalone / nLight	--	12,000	16,000	18,000	20,000	22,000	25,000

Ordering Information

EXAMPLE: WDGE2 LED P3 40K 80CRI VF MVOLT SRM DDBXD

Series	Package		Color Temperature		CRI	Distribution		Voltage	Mounting	
WDGE2 LED	P1[1]	P1SW	27K	2700K	80CRI	VF	Visual comfort forward throw	MVOLT	**Shipped included**	
	P2[1]	P2SW	30K	3000K	90CRI	VW	Visual comfort wide	347[3]	SRM	Surface mounting bracket
	P3[1]	P3SW	35K	3500K				480[3]	ICW	Indirect Canopy/Ceiling Washer bracket (dry/damp locations only)[7]
	P4[1]	Door with small window (SW) is required to accommodate sensors. See page 2 for more details.	40K	4000K					**Shipped separately**	
	P5[1]		50K[2]	5000K					AWS	3/8inch Architectural wall spacer
									PBBW	Surface-mounted back box (top, left, right conduit entry). Use when there is no junction box available.

Options

E4WH	Emergency battery backup, Certified in CA Title 20 MAEDBS (4W, 0°C min)
E10WH	Emergency battery backup, Certified in CA Title 20 MAEDBS (10W, 5°C min)
E20WC	Emergency battery backup, Certified in CA Title 20 MAEDBS (18W, -20°C min)
PE[4]	Photocell, Button Type
DS[5]	Dual switching (comes with 2 drivers and 2 light engines; see page 3 for details)
DMG[6]	0-10V dimming wires pulled outside fixture (for use with an external control, ordered separately)
BCE	Bottom conduit entry for back box (PBBW). Total of 4 entry points.
BAA	Buy America(n) Act Compliant

Standalone Sensors/Controls (only available with P1SW, P2SW & P3SW)

PIR	Bi-level (100/35%) motion sensor for 8-15' mounting heights. Intended for use on switched circuits with external dusk to dawn switching.
PIRH	Bi-level (100/35%) motion sensor for 15-30' mounting heights. Intended for use on switched circuits with external dusk to dawn switching
PIR1FC3V	Bi-level (100/35%) motion sensor for 8-15' mounting heights with photocell pre-programmed for dusk to dawn operation.
PIRH1FC3V	Bi-level (100/35%) motion sensor for 15-30' mounting heights with photocell pre-programmed for dusk to dawn operation.

Networked Sensors/Controls (only available with P1SW, P2SW & P3SW)

NLTAIR2 PIR	nLightAIR Wireless enabled bi-level motion/ambient sensor for 8-15' mounting heights.
NLTAIR2 PIRH	nLightAIR Wireless enabled bi-level motion/ambient sensor for 15-30' mounting heights.

See page 4 for out of box functionality

Finish

DDBXD	Dark bronze
DBLXD	Black
DNAXD	Natural aluminum
DWHXD	White
DSSXD	Sandstone
DDBTXD	Textured dark bronze
DBLBXD	Textured black
DNATXD	Textured natural aluminum
DWHGXD	Textured white
DSSTXD	Textured sandstone

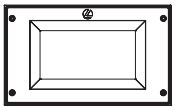
Accessories

Ordered and shipped separately.

WDGEAWS DDBXD	WDGE 3/8inch Architectural Wall Spacer (specify finish)
WDGE2PBBW DDBXD U	WDGE2 surface-mounted back box (specify finish)

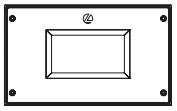
NOTES

1. P1-P5 not available with sensors/controls. Sensors/controls only available with P1SW, P2SW and P3SW.
2. 50K not available in 90CRI
3. 347V and 480V not available with E4WH, E10WH, E20WC or DS.
4. PE not available in 480V or with sensors/controls
5. DS option not available with E4WH, E10WH, E20WC or sensors/controls.
6. DMG option not available with sensors/controls
7. Not qualified for DLC. Not available with emergency battery backup or sensors/controls



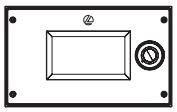
Default configuration with no sensors/controls.

Power Packages: P1, P2, P3, P4, P5



Small Window (SW) configuration

Power Packages: P1SW, P2SW, P3SW



Configuration with sensors/controls

Power Packages: P1SW, P2SW, P3SW

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	27K (2700K, 80 CRI)					30K (3000K, 80 CRI)					35K (3500K, 80 CRI)					40K (4000K, 80 CRI)					50K (5000K, 80 CRI)				
			Lumens	LPW	B	U	G	Lumens	LPW	B	U	G	Lumens	LPW	B	U	G	Lumens	LPW	B	U	G	Lumens	LPW	B	U	G
P1 / P1SW	10W	VF	1,166	119	0	0	0	1,209	123	0	0	0	1,251	128	0	0	0	1,256	128	0	0	0	1,254	128	0	0	0
		VW	1,197	122	0	0	0	1,241	126	0	0	0	1,284	131	0	0	0	1,289	131	0	0	0	1,286	131	0	0	0
P2 / P2SW	15W	VF	1,878	129	1	0	0	1,947	134	1	0	0	2,015	139	1	0	0	2,023	139	1	0	0	2,019	139	1	0	0
		VW	1,927	133	1	0	0	1,997	137	1	0	0	2,067	142	1	0	0	2,075	143	1	0	0	2,071	143	1	0	0
P3 / P3SW	23W	VF	2,908	129	1	0	0	3,015	134	1	0	0	3,119	138	1	0	0	3,132	139	1	0	0	3,126	139	1	0	0
		VW	2,983	132	1	0	0	3,093	137	1	0	0	3,200	142	1	0	0	3,213	143	1	0	0	3,206	142	1	0	0
P4	35W	VF	4,096	117	1	0	1	4,247	121	1	0	1	4,394	126	1	0	1	4,412	126	1	0	1	4,403	126	1	0	1
		VW	4,202	120	1	0	0	4,357	125	1	0	1	4,508	129	1	0	1	4,526	129	1	0	1	4,517	129	1	0	1
P5	48W	VF	5,567	115	1	0	1	5,772	119	1	0	1	5,972	123	1	0	1	5,996	124	1	0	1	5,984	124	1	0	1
		VW	5,711	118	1	0	1	5,921	122	1	0	1	6,127	126	1	0	1	6,151	127	1	0	1	6,139	127	1	0	1

Electrical Load

Performance Package	System Watts	Current (A)					
		120V	208V	240V	277V	347V	480V
P1 / P1SW	10W	0.082	0.049	0.043	0.038	--	--
	13W	--	--	--	--	0.046	0.033
P2 / P2SW	15W	0.132	0.081	0.072	0.064	--	--
	18W	--	--	--	--	0.056	0.041
P3 / P3SW	23W	0.195	0.114	0.100	0.088	--	--
	26W	--	--	--	--	0.079	0.058
P4	35W	0.302	0.175	0.152	0.134	--	--
	38W	--	--	--	--	0.115	0.086
P5	48W	0.434	0.241	0.211	0.184	--	--
	52W	--	--	--	--	0.157	0.119

Lumen Multiplier for 90CRI

CCT	Multiplier
27K	0.845
30K	0.867
35K	0.845
40K	0.885
50K	0.898

Lumen Output in Emergency Mode (4000K, 80 CRI)

Option	Dist. Type	Lumens
E4WH	VF	646
	VW	647
E10WH	VF	1,658
	VW	1,701
E20WC	VF	2,840
	VW	2,913

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	1.03
10°C	50°F	1.02
20°C	68°F	1.01
25°C	77°F	1.00
30°C	86°F	0.99
40°C	104°F	0.98

Projected LED Lumen Maintenance

Data references the extrapolated performance projections for the platforms noted 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	1.0	>0.96	>0.95	>0.91

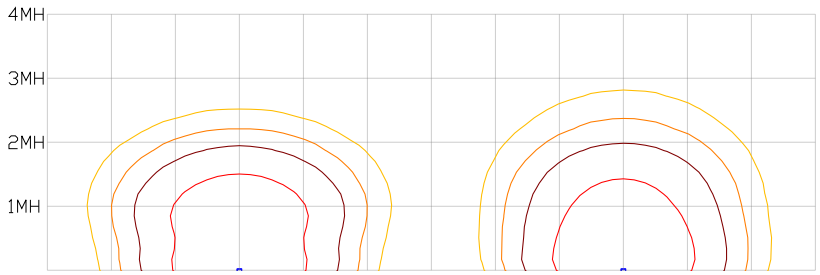
Photometric Diagrams

To see complete photometric reports or download .ies files for this product, visit the Lithonia Lighting WDGE LED homepage. Tested in accordance with IESNA LM-79 and LM-80 standards.

LEGEND

- 0.25 fc
- 0.5 fc
- 1.0 fc
- 3.0 fc

MH = 10ft
Grid = 10ft x 10ft



WDGE2 LED P3 40K 80CRI VW

WDGE2 LED P3 40K 80CRI VF

Emergency Egress Options

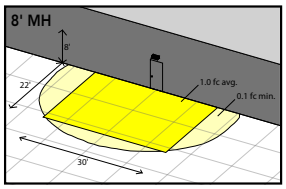
Emergency Battery Backup

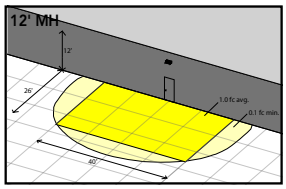
The emergency battery backup is integral to the luminaire — no external housing required! This design provides reliable emergency operation while maintaining the aesthetics of the product. All emergency battery backup configurations include an independent secondary driver with an integral relay to immediately detect loss of normal power and automatically energize the luminaire. The emergency battery will power the luminaire for a minimum duration of 90 minutes (maximum duration of three hours) from the time normal power is lost and maintain a minimum of 60% of the light output at the end of 90minutes.

Applicable codes: NFPA 70/NEC – section 700.16, NFPA 101 Life Safety Code Section 7.9

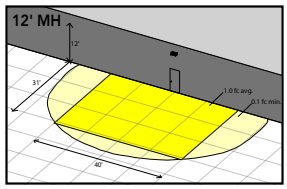
The examples below show illuminance of 1 fc average and 0.1 fc minimum in emergency mode with E10WH or E20WC and VF distribution.

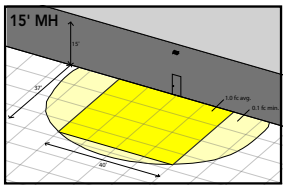
Grid = 10ft x 10ft





WDGE2 LED xx 40K 80CRI VF MVOLT E10WH



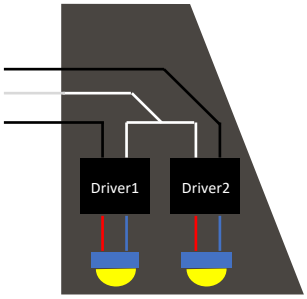


WDGE2 LED xx 40K 80CRI VF MVOLT E20WC

Dual Switching (DS) Option

The dual switching option offers operational redundancy that certain codes require. With this option the luminaire comes integrated with two drivers and two light engines. These work completely independent to each other so that a failure of any individual component does not cause the whole luminaire to go dark. This option is typically used with a back generator or inverter providing emergency power.

Applicable codes: NFPA 70/NEC – section 700.16, NFPA 101 Life Safety Code Section 7.9



Control / Sensor Options

Motion/Ambient Sensor (PIR_, PIRH_)

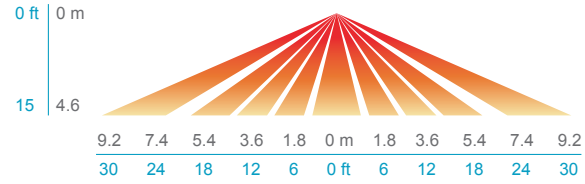
Motion/Ambeint sensor (Sensor Switch MSOD) is integrated into the the luminaire. The sensor provides both Motion and Daylight based dimming of the luminaire. For motion detection, the sensor utilizes 100% Digital Passive Infrared (PIR) technology that is tuned for walking size motion while preventing false tripping from the environment. The integrated photocell enables additional energy savings during daytime periods when there is sufficient daylight. Optimize sensor coverage by either selecting PIR or PIRH option. PIR option comes with a sensor lens that is optimized to provide maximum coverage for mounting heights between 8-15ft, while PIRH is optimized for 15-40ft mounting height.

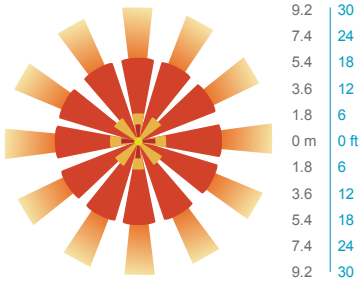
Networked Control (NLTAIR2)

nLight® AIR is a wireless lighting controls platform that allows for seamless integration of both indoor and outdoor luminaires. Five-tier security architecture, 900 MHz wireless communication and app (CLAIRITY™ Pro) based configurability combined together make nLight® AIR a secure, reliable and easy to use platform.

PIR

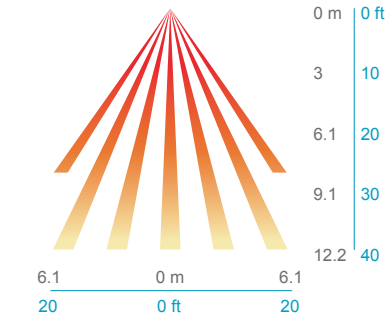
HIGH VIEW



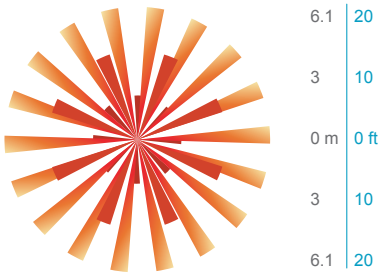


PIRH

SIDE VIEW



TOP VIEW



Option	Dim Level	High Level (when triggered	Photocell Operation	Motion Time Delay	Ramp-down Time	Ramp-up Time
PIR or PIRH	Motion - 3V (37% of full output) Photocell - 0V (turned off)	10V (100% output)	Enabled @ 5fc	5 min	5 min	Motion - 3 sec Photocell - 45 sec
PIR1FC3V, PIRH1FC3V	Motion - 3V (37% of full output) Photocell - 0V (turned off)	10V (100% output)	Enabled @ 1fc	5 min	5 min	Motion - 3 sec Photocell - 45 sec
NLTAIR2 PIR, NLTAIR2 PIRH (out of box)	Motion - 3V (37% of full output) Photocell - 0V (turned off)	10V (100% output)	Enabled @ 5fc	7.5 min	5 min	Motion - 3 sec Photocell - 45 sec

Mounting, Options & Accessories

NLTAIR2 PIR – nLight AIR Motion/Ambient Sensor

D = 7"

H = 11"

W = 11.5"

PBBW – Surface-Mounted Back Box
Use when there is no junction box available.

D = 1.75"

H = 9"

W = 11.5"

AWS – 3/8inch Architectural Wall Spacer

D = 0.38"

H = 4.4"

W = 7.5"

FEATURES & SPECIFICATIONS

INTENDED USE
Common architectural look, with clean rectilinear shape, of the WDGE LED was designed to blend with any type of construction, whether it be tilt-up, frame or brick. Applications include commercial offices, warehouses, hospitals, schools, malls, restaurants, and other commercial buildings.

CONSTRUCTION
The single-piece die-cast aluminum housing integrates secondary heat sinks to optimize thermal transfer from the internal light engine heat sinks and promote long life. The driver is mounted in direct contact with the casting for a low operating temperature and long life. The die-cast door frame is fully gasketed with a one-piece solid silicone gasket to keep out moisture and dust, providing an IP66 rating for the luminaire.

FINISH
Exterior painted 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 3 mils thickness for a finish that can withstand extreme climate changes without cracking or peeling. Standard Super Durable colors include dark bronze, black, natural aluminum, sandstone and white. Available in textured and non-textured finishes.

OPTICS
Well crafted reflector optics allow the light engine to be recessed within the luminaire, providing visual comfort, superior distribution, uniformity, and spacing in wall-mount applications. The WDGE LED 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.

ELECTRICAL
Light engine consists of high-efficacy LEDs mounted to metal-core circuit boards to maximize heat dissipation and promote long life (up to L91/100,000 hours at 25°C). The electronic driver has a power factor of >90%, THD <20%. Luminaire comes with built in 6kV surge protection, which meets a minimum Category C low exposure (per ANSI/IEEE C62.41.2). Fixture ships standard with 0-10v dimmable driver.

INSTALLATION
A universal mounting plate with integral mounting support arms allows the fixture to hinge down for easy access while making wiring connections. The 3/8" Architectural Wall Spacer (AWS) can be used to create a floating appearance or to accommodate small imperfections in the wall surface. The ICW option can be used to mount the luminaire inverted for indirect lighting in dry and damp locations. Design can withstand up to a 1.5 G vibration load rating per ANSI C136.31.

LISTINGS
CSA certified to U.S. and Canadian standards. Luminaire is IP66 rated. PIR options are rated for wet location. Rated for -40°C minimum ambient. DesignLights Consortium® (DLC) Premium qualified product and DLC qualified product. Not all versions of this product may be DLC Premium qualified or DLC qualified. Please check the DLC Qualified Products List at www.designlights.org/QPL to confirm which versions are qualified. International Dark-Sky Association (IDA) Fixture Seal of Approval (FSA) is available for all products on this page utilizing 2700K and 3000K color temperature only and SRM mounting only.

BUY AMERICAN
Product with the BAA option is assembled in the USA and meets the Buy America(n) government procurement requirements under FAR, DFARS and DOT. Please refer to www.acuitybrands.com/buy-american for additional information.

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

VCVL LED
Architectural Luminaire

Buy American

Catalog Number

Notes

Type TYPE F

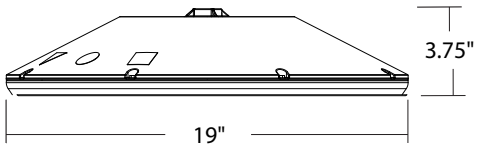
Hit the Tab key or mouse over the page to see all interactive elements.

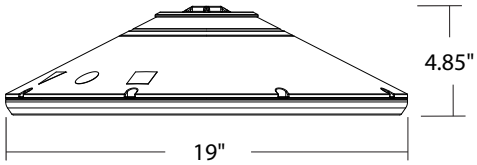
Specifications

Diameter: 19"

Height: 3.75"
(4.85" with Up-Light)

Weight (max, with no options): 18 lbs





A+ Capable options indicated by this color background.

Introduction

The VCVL LED, Visually Comfortable Versatile Luminaire, is designed to bring glare control, optical performance and energy savings into one package. The recessed lens design of VCVL LED minimizes high angle glare, while its precision molded acrylic lens eliminates LED pixilation and delivers uniform distribution. The dedicated up-light module option reduces the contrast between the luminaire and the ceiling creating a more visually comfortable environment.

Ordering Information

EXAMPLE: VCVL LED V4 P4 40K 70CRI T5M MVOLT AC6 DNAXD

VCVL LED

Series	LED Light Engines	Package	Color temperature	Color Rendering Index	Distribution	Voltage		Mounting
VCVL LED	V4[1] 4 Light Engines	P1[1]	30K 3000 K	70CRI	T5E Concentrated	MVOLT	For ordering with fuse	**Shipped included**
	V8[1] 8 Light Engines	P2[1]	35K 3500 K	80CRI	T5M Medium	347	120	PM Pendant mount standard (24-inch length supply leads)
		P3[1]	40K 4000 K		T5W Wide	480	208	SRM Surface mount (24-inch length supply leads)
		P4[1]	50K 5000 K		T5R[2] Rectangular		240	ARM Arm mount (use RSXWBA accessory to mount to a wall)
		P5[1]					277	
		P6[1]					347	**Shipped separately**
		P7[1]					480	AC6 Aircraft cable with white 6' cord (adjustable, max 6')
								HC5 Male cast hook with black 5' cord (sealed, no plug)

Options

Shipped installed

UPL1	Up-Light: 500 lumens
UPL2	Up-Light: 700 lumens
E8WC	Emergency battery backup, Certified in CA Title 20 MAEDBS (8W, -20°C min)[3,4,5]
E10WH	Emergency battery backup, Certified in CA Title 20 MAEDBS (10W, 5°C min)[3,4,5]
HA	High ambient (50°C, only P1-P4)
SF	Single fuse (120V, 277V, 347V)
DF	Double fuse (208V, 240V, 480V)
SPD10KV	10KV Surge Pack
LDS36	36in (3ft) lead length
LDS72	72in (6ft) lead length
LDS108	108in (9ft) lead length
DMG	External 0-10V leads (no controls)[6]

Shipped Separately

WG	Wire Guard

Standalone Sensors/Controls[2]

PIR	Motion/ambient sensor for 8-15' mounting heights
PIRH	Motion/ambient sensor for 15-30' mounting heights
PIR3FC3V	Motion/ambient sensor for 8-15' mounting heights, pre programmed to 3fc and 35% light output
PIRH3FC3V	Motion/ambient sensor for 15-30' mounting heights, pre programmed to 3fc and 35% light output
PIR3FC3V924	UL924 Listed motion/ambient sensor for emergency circuit for 8-15' mounting heights, pre programmed to 3fc and 35% light output[7]
PIRH3FC3V924	UL924 Listed motion/ambient sensor for emergency circuit for 15-30' mounting heights, pre programmed to 3fc and 35% light output[7]

Networked Sensors/Controls[2]

NLTAIR2 PIR	nLIGHT AIR Wireless enabled motion/ambient sensor for 8-15' mounting heights
NLTAIR2 PIRH	nLIGHT AIR Wireless enabled motion/ambient sensor for 15'-30' mounting heights
NLTAIR2 PIR924	nLIGHT AIR Wireless enabled, UL 924 Listed motion/ambient sensor for emergency circuits for 8-15' mounting heights[8]
NLTAIR2 PIRH924	nLIGHT AIR Wireless enabled, UL 924 Listed motion/ambient sensor for emergency circuits for 15-30' mounting heights[8]

Finish *(required)*

DWHXD	White
DNAXD	Natural aluminum
DDBXD	Dark bronze
DBLXD	Black

Ordering Information Cont.

Accessories
Ordered and shipped separately.

VCPGSRM U	Surface mount kit, with no Up-Light
VCPGUSRM U	Surface mount kit, with Up-Light
VCPGWG U	Wire guard
SLVSQ	Quick mount pendant swivel kit, square
SLVRD	Quick mount pendant swivel kit, round
RSXWBA DWHXD U	RSX WBA wall bracket (specify finish)
VCVLSC12	Safety cable 120"
VCVLSC240	Safety cable 240"

NOTES

1 P1-P6 not available with V8. P7 not available with V4.
2 Not available with P7.
3 Not available with 347V, 480V, AC6 or HC5.
4 E8WC and E10WH only rated up to 35°C ambient.
5 E8WC & E10WH only available with P1-P4 packages.
6 DMG option not available with AC6, HC5 and standalone or networked sensors/controls.
7 Power interruption delay >30 milliseconds required for operation. Refer sequence of operations on page 4 for more details.
8 Power interruption delay >200 milliseconds required for operation. Refer sequence of operations on page 4 for more details.

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	Watts	Distribution Type	30K (3000K, 70 CRI)		35K (3500K, 70 CRI)		40K (4000K, 70 CRI)		50K (5000K, 70 CRI)	
			Lumens	LPW	Lumens	LPW	Lumens	LPW	Lumens	LPW
P1	27W	T5E	3,581	135	3,670	138	3,815	144	3,876	146
		T5M	3,620	136	3,710	140	3,856	145	3,917	147
		T5W	3,592	135	3,681	139	3,827	144	3,888	146
		T5R	3,464	130	3,550	134	3,690	139	3,749	141
		LANE	3,507	132	3,594	135	3,736	141	3,796	143
P2	34W	T5E	4,577	135	4,691	138	4,876	144	4,954	146
		T5M	4,626	136	4,741	140	4,928	145	5,007	147
		T5W	4,591	135	4,705	139	4,891	144	4,968	146
		T5R	4,427	130	4,537	134	4,716	139	4,791	141
		LANE	4,482	132	4,594	135	4,775	141	4,851	143
P3	43W	T5E	5,808	134	5,952	137	6,187	143	6,286	145
		T5M	5,870	135	6,015	139	6,253	144	6,353	146
		T5W	5,825	134	5,970	138	6,205	143	6,304	145
		T5R	5,617	130	5,757	133	5,984	138	6,079	140
		LANE	5,688	131	5,829	134	6,059	140	6,155	142
P4	56W	T5E	7,391	131	7,575	135	7,874	140	7,999	142
		T5M	7,470	133	7,656	136	7,958	141	8,085	144
		T5W	7,414	132	7,597	135	7,898	140	8,023	143
		T5R	7,149	127	7,326	130	7,615	135	7,737	137
		LANE	7,238	129	7,418	132	7,711	137	7,834	139
P5	82W	T5E	10,189	124	10,442	127	10,854	132	11,027	134
		T5M	10,298	125	10,553	128	10,970	134	11,145	136
		T5W	10,220	124	10,473	128	10,887	133	11,060	135
		T5R	9,855	120	10,099	123	10,498	128	10,665	130
		LANE	9,978	121	10,226	124	10,629	129	10,799	131
P6	108W	T5E	12,878	120	13,197	123	13,719	127	13,937	129
		T5M	13,015	121	13,338	124	13,865	129	14,086	131
		T5W	12,917	120	13,237	123	13,760	128	13,979	130
		T5R	12,455	116	12,764	119	13,268	123	13,480	125
		LANE	12,611	117	12,924	120	13,435	125	13,649	127
P7	122W	T5E	15,503	125	15,887	128	16,515	133	16,778	135
		T5M	15,668	126	16,057	129	16,691	135	16,957	137
		T5W	15,549	125	15,935	129	16,564	134	16,828	136

Up-light Lumen Output

Up-light Option	Watts	Lumens
UPL1	6.5W	519
UPL2	8.5W	715

Lumen Multiplier for 80CRI

CCT	Multiplier
30K	0.926
35K	0.945
40K	0.967
50K	0.965

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	1.03
10°C	50°F	1.02
20°C	68°F	1.01
25°C	77°F	1
30°C	86°F	0.99
40°C	104°F	0.98

Projected LED Lumen Maintenance

Data references the extrapolated performance projections for the platforms noted 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	1.0	0.97	0.94	0.89

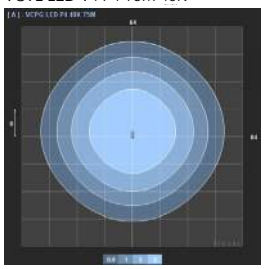
Electrical Load

Power Package	System Watts	Current (A)					
		120V	208V	240V	277V	347V	480V
P1	27W	0.22	0.13	0.12	0.10	0.08	0.06
P2	34W	0.28	0.16	0.14	0.13	0.10	0.08
P3	43W	0.37	0.21	0.18	0.16	0.13	0.09
P4	56W	0.48	0.28	0.24	0.21	0.16	0.12
P5	82W	0.68	0.40	0.35	0.30	0.24	0.18
P6	108W	0.91	0.52	0.45	0.39	0.32	0.23
P7	124W	1.03	0.59	0.51	0.44	0.37	0.27

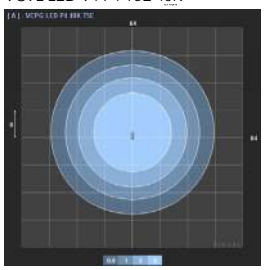
Photometric Diagrams

To see complete photometric reports or download .ies files for this product, visit the Lithonia Lighting VCVL LED homepage.
Tested in accordance with IESNA LM-79 and LM-80 standards

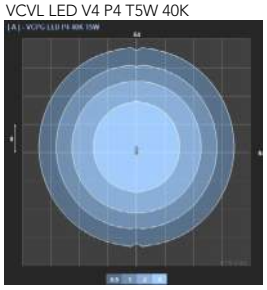
VCVL LED V4 P4 T5M 40K



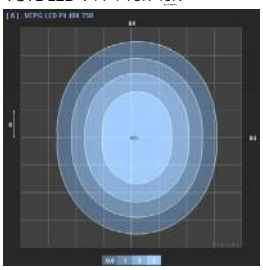
VCVL LED V4 P4 T5E 40K



VCVL LED V4 P4 T5W 40K



VCVL LED V4 P4 T5R 40K



Control/Sensor Options

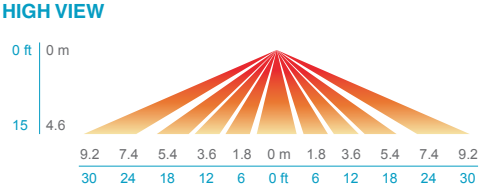
Motion/Ambient Sensor (PIR_, PIRH)

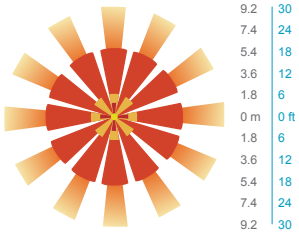
Motion/Ambeint sensor (Sensor Switch MSOD) is integrated into the luminaire. The sensor provides both Motion and Daylight based dimming of the luminaire. For motion detection, the sensor utilizes 100% Digital Passive Infrared (PIR) technology that is tuned for walking size motion while preventing false tripping from the environment. The integrated photocell enables additional energy savings during daytime periods when there is sufficient daylight. Optimize sensor coverage by either selecting PIR or PIRH option. PIR option comes with a sensor lens that is optimized to provide maximum coverage for mounting heights between 8-15ft, while PIRH is optimized for 15-40ft mounting height.

Networked Control (NLTAIR2)

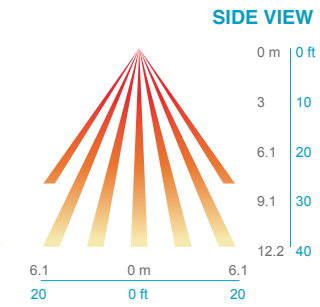
nLight® AIR is a wireless lighting controls platform that allows for seamless integration of both indoor and outdoor luminaires. Five-tier security architecture, 900 MHz wireless communication and app (CLAIRITY™ Pro) based configurability combined together make nLight® AIR a secure, reliable and easy to use platform.

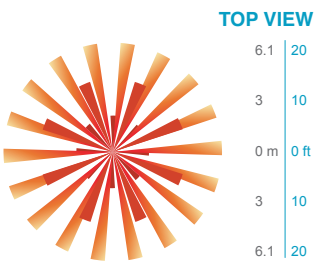
PIR





PIRH





Motion/Ambient Sensor Default Settings

Option	Dim Level	High Level (when triggered)	Photocell Operation	Motion Time Delay	Ramp-down Time	Ramp-up Time
PIR or PIRH	Motion - 3V (37% of full output) Photocell - 0V (turned off)	10V (100% output)	Enabled @ 5fc	5 min	5 min	Motion - 3 sec Photocell - 45 sec
PIR3FC3V or PIRH3FC3V	Motion - 3V (37% of full output) Photocell - 0V (turned off)	10V (100% output)	Enabled @ 3fc	5 min	5 min	Motion - 3 sec Photocell - 45 sec

Sequence of Operations for UL924 Listed Controls/Sensors (PIR3FC3V924, PIRH3FC3V924, NLTAIR2 PIR924, NLTAIR2 PIRH924)

The UL924 listed control/sensor ("device") is designed to provide full light output for 90 minutes following power loss ("Egress Mode"), ignoring both manual and automatic dimming/occupancy/daylight control signals during this time. The sequence of operations is as follows:

- Normal condition: device can dim and turn off the luminaire as normal, in response to automatic and manual control.
- Utility power fails, and luminaire loses power.
- Backup power source activates, transfer switch moves the emergency circuit powering the luminaire onto the backup source, and luminaire regains power.
- The device detects this power interruption, if it is >30ms (for PIR3FC3V924, PIRH3FC3V924) or >200ms (for NLTAIR2 PIR924, NLTAIR2 PIRH924).
- The device ignores all dimming commands and controls the driver to full light output for 90 minutes.
- The device resumes normal dimming controls after 90 minutes.

These UL924 listed controls/sensors are not intended for use with Non-interruptible central emergency power systems. The power interruption, when transferring from normal utility power to emergency backup power, is required for the controller to activate its Egress Mode and provide full light output.

Mounting, Options & Accessories

AC6 – Aircraft Cable

D = 19"
H = 12" - 72"

HC5 – Hook & Cord

D = 19"
H = 8" (no up-light)
or 9.2" (with up-light)

PM – Pendant Mount
(compatible with ¾ NPT, pendant stem provided by others)

D = 19"
H = 4.1" (no p-light)
or 5.3" (with up-light)

PIR & PIRH – Motion/ Ambient sensor

D = 19"
H = 4.6" (no up-light)
or 5.6" (with up-light)

SRM – Surface Mount

D = 19"
H = 4.1"

SRM – Surface Mount with Up-Light

D = 19"
H = 5.3"

ARM – Arm Mount

L = 28"
W = 19"
H = 8"

WG – Wire guard

D = 19"
H = 4.9" (no uplight)
or 5.9" (with up-light)

FEATURES & SPECIFICATIONS

INTENDED USE
The sleek styling and versatility offered by VCVL and VCVL Ultimate (VCVLX) makes them ideal for wide range of applications such as commercial offices, retail spaces, school gymnasiums, large conference rooms or any large open areas. And with VCVL's array of mounting options, you can install them in any building style or architectural design.

CONSTRUCTION
Two-piece die-cast aluminum housing has integral heat sink fins to optimize thermal management through conductive and convective cooling. The LED driver is separated from the heat generating light engines and mounted in direct contact with the casting to promote low operating temperatures, higher lumen maintenance and long life. The housing is completely sealed against moisture and environmental contaminants (IP66) and is suitable for hose-down application.

FINISH
Exterior painted 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 3 mils thickness for a finish that can withstand extreme climate changes without cracking or peeling.

OPTICS
Light guide technology provides a diffused light source, reducing glare from direct view of the LEDs. The light source is recessed into the luminaire, further reducing the high angle glare from the luminaire. A combination of precision molded micro prismatic acrylic lenses and back reflectors provide five different photometric distributions that allow you to create uniform distribution, no matter the application. Up-light option comes with a dedicated light engine and custom optic designed to efficiently spread light on to the ceiling, thus reducing the cave effect.

ELECTRICAL
Light engine consists of high-efficacy LEDs mounted to metal-core circuit boards to maximize heat dissipation and promote long life (up to L89/100,000 hours at 25°C). The electronic driver has a power factor of >90%, THD <20%, and a minimum 6.0 KV surge rating. When ordering the SPD10KV option, a separate 10kV (5kA) surge protection device is installed within the luminaire which meets a minimum Category C low operation (per ANSI/IEEE C62.41.2). Luminaire is 0-10V dimmable down to 10% or lower.

INSTALLATION
Standard configuration accepts a rigid or free-swinging 3/4" NPT stem for pendant mounting. Aircraft cable and hook & cord options allow the luminaire to be suspended from the ceiling and come with a cord for easy wiring. The surface mount option attaches to a 4x4" recessed or surface mount outlet box using a quick-mount kit (included); kit contains galvanized steel luminaire and outlet box plates and a full pad gasket. Kit has an integral mounting support that allows the luminaire to hinge down for easy electrical connections. Luminaire and plates are secured with set screws. Supply leads are 24" in length as standard. Longer supply leads are available as additional options. PM and SRM can withstand up to a 3.0 G vibration load rating per ANSI C136.31.

LISTINGS
CSA certified to U.S. and Canadian standards. IP66 rated for outdoor applications. PIR options are rated for wet location. Rated for -40°C minimum ambient.

BUY AMERICAN
This product is assembled in the USA and meets the Buy America(n) government procurement requirements under FARS, DFARS and DOT. Please refer to www.acuitybrands.com/resources/buy-american for additional information.

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

WAC LIGHTING

Fixture Type: TYPE G

Catalog Number:

Project:

Location:

Rubix

Single & Double Wall Mount 3000K

Model & Size	Color Temp & CRI	Watt	Lumens	Finish
❍ WS-W2504 Single ❍ WS-W2505 Double	❍ 3000K 90	16W 30W	750 1400	❍ AL Brushed Aluminum ❍ BK Black ❍ BZ Bronze ❍ GH Graphite ❍ WT White

Example: **WS-W2504-AL**

DESCRIPTION

Available in single and twin light configurations, this die-cast aluminum LED wall luminaire is Wet Location listed for a broad range of exterior lighting applications. Designed with asquare profile, this version of Rubix mounts upwards or downwards.

FEATURES

- 2504 Single, 2505 Double
- Driver concealed within the fixture
- 5 year warranty

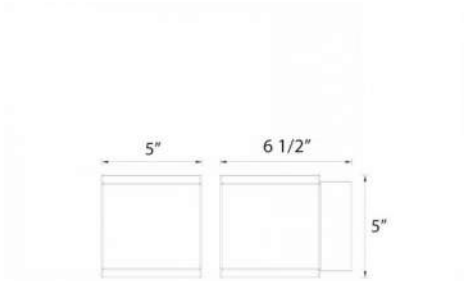
SPECIFICATIONS

Construction:	Die-cast Aluminum
Power:	30W, 16W
Input:	120-277 VAC, 50/60Hz
Dimming:	ELV: 100-15% , 0-10V: 100-10%
Light Source:	Integrated LED
Rated Life:	70000 Hours
Mounting:	Mounts directly to junction box, Can be mounted on wall in all orientations
Finish:	Electrostatically Powder Coated: White, Graphite, Bronze, Black, Brushed Aluminum
Operating Temp:	-40°F to 122°F (-40°C to 50°C)
Standards:	ETL, cETL, Wet Location Listed, IP65, Title 24 JA8-2019 Compliant

FINISHES:

White | Graphite | Bronze | Black | Brushed Aluminum

LINE DRAWING:



WS-W2504, WS-W2505

WAC LIGHTING

Fixture Type: TYPE H

Catalog Number:

Project:

Location:

Rubix

Single & Double Wall Mount 3000K

Model & Size	Color Temp & CRI	Watt	Lumens	Finish
❍ WS-W2504 Single ❍ WS-W2505 Double	❍ 3000K 90	16W 30W	750 1400	❍ AL Brushed Aluminum ❍ BK Black ❍ BZ Bronze ❍ GH Graphite ❍ WT White

Example: **WS-W2504-AL**

DESCRIPTION

Available in single and twin light configurations, this die-cast aluminum LED wall luminaire is Wet Location listed for a broad range of exterior lighting applications. Designed with asquare profile, this version of Rubix mounts upwards or downwards.

FEATURES

- 2504 Single, 2505 Double
- Driver concealed within the fixture
- 5 year warranty

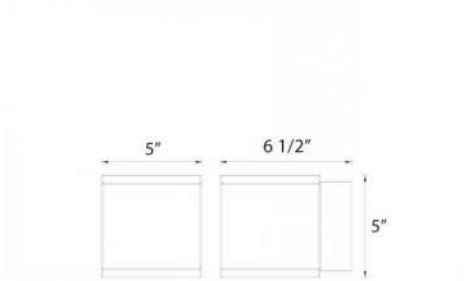
SPECIFICATIONS

Construction:	Die-cast Aluminum
Power:	30W, 16W
Input:	120-277 VAC, 50/60Hz
Dimming:	ELV: 100-15% , 0-10V: 100-10%
Light Source:	Integrated LED
Rated Life:	70000 Hours
Mounting:	Mounts directly to junction box, Can be mounted on wall in all orientations
Finish:	Electrostatically Powder Coated: White, Graphite, Bronze, Black, Brushed Aluminum
Operating Temp:	-40°F to 122°F (-40°C to 50°C)
Standards:	ETL, cETL, Wet Location Listed, IP65, Title 24 JA8-2019 Compliant

FINISHES:

White | Graphite | Bronze | Black | Brushed Aluminum

LINE DRAWING:

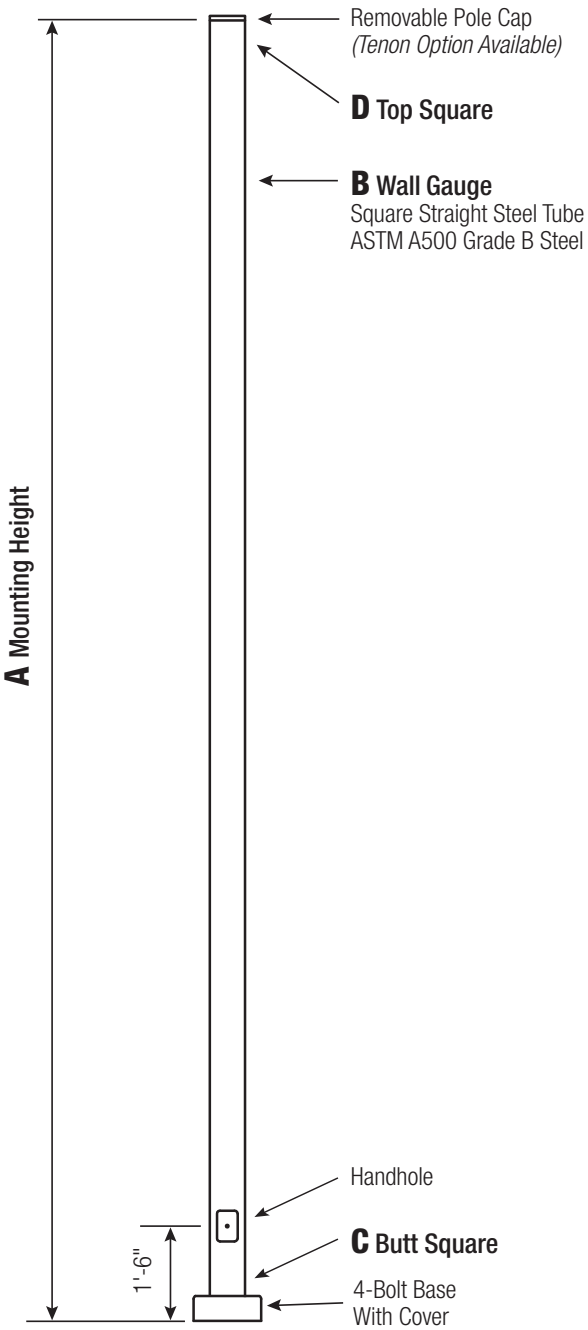


WS-W2504, WS-W2505

SSS

Square Straight Steel Pole
No Arm — 4-Bolt Base

TYPE S1



Powder Coated, Galvanized or Powder Coated over Galvanized Finish Per Customer Specification.

C Butt Sq.	D Top Sq.	F Bolt Cir. Dia.	G Base Sq.	H Bolt Proj.	I Bolt Size
4 *(11 Gauge)*	4	8 - 9	8	3.75	.75 x 17 x 3
4 *(7 Gauge)*	4	8 - 9	8	3.75	.75 x 30 x 3
5 *(11 Gauge)**	5	10 - 12	11	4.875	.75 x 30 x 3
5 *(7 Gauge)*	5	10 - 12	11	4.875	1 x 36 x 4
6	6	11 - 13	12.5	4.875	1 x 36 x 4

**Requires the use of oversized washers (provided).*

Dimensions in Inches

Pole

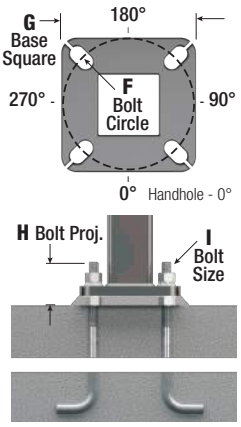
Pole shaft shall be weldable-grade, cold-rolled, commercial quality carbon steel tubing conforming to ASTM A500 Grade B. Options include 11 gauge and 7 gauge. All welds shall conform to AWS D1.1 using ER70S-6 electrodes.

Base Style

4-Bolt Steel Plate Base Flange of fabricated hot rolled carbon steel conforming to ASTM A36 or equivalent (36 ksi minimum yield) with 2-piece Base Cover and attaching hardware.

Anchorage

Anchorage Kit will include four (4) L-shaped Steel Anchor Bolts conforming to AASHTO M314-90 Grade 55. Ten inches (10") of threaded end will be galvanized per ASTM A153. Kits will contain eight (8) Hex Nuts, four (4) Lock Washers, and eight (8) Flat Washers (all components Galvanized Steel). A paper bolt circle template will be provided.

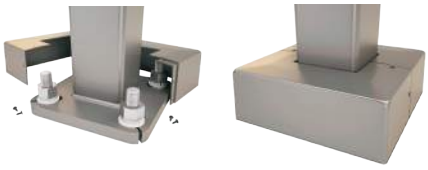


Handhole

Reinforced, 3" x 5" Handhole with cover, stainless steel screw and backbar. A grounding provision incorporating a tapped 1/2"-13NC hole will be provided.

Base Cover

Square ABS plastic Base Covers are standard on all SSS poles specified in BA-Black, BM-Dark Bronze and BH-White. SSS poles specified in all other colors will be manufactured of metal materials. *Custom specification of SSS square metal style Base Covers in BA, BM and BH powder coated finishes is available.*



Vibration Damper

If determined necessary by Hapco, or if specified by the customer, a first and/or second mode vibration damper will be provided.

WARNING: *Do not install light pole without luminaire.*

A Mtg. Hgt.	B Wall Gauge	C Butt Sq.	Total Lum. Weight	Maximum EPA 90	100	110	120	130	140	Catalog Number
10	11	4	320	25.2	20.0	18.6	15.3	12.7	10.6	SSS10B4-4-**
12	11	4	285	20.6	16.2	14.9	12.1	9.9	8.2	SSS12B4-4-**
14	11	4	255	17.0	13.2	12.1	9.7	7.8	6.3	SSS14B4-4-**
15	11	4	245	15.5	11.9	10.9	8.6	6.8	5.4	SSS15B4-4-**
15	7	4	305	23.4	18.4	17.0	13.8	11.4	9.4	SSS15D4-4-**
16	11	4	235	14.0	10.7	9.7	7.6	5.9	4.6	SSS16B4-4-**
16	7	4	290	21.5	16.8	15.5	12.5	10.2	8.4	SSS16D4-4-**
18	11	4	215	11.3	8.4	7.6	5.7	4.3	3.2	SSS18B4-4-**
18	7	4	265	18.0	13.9	12.8	10.2	8.2	6.6	SSS18D4-4-**
20	11	4	200	9.1	6.5	5.8	4.2	2.9	1.9	SSS20B4-4-**
20	11	5	235	14.1	10.3	9.2	6.8	4.9	3.4	SSS20B5-4-**
20	7	4	240	15.1	11.5	10.5	8.2	6.5	5.0	SSS20D4-4-**
20	7	5	330	26.3	20.3	18.6	14.8	11.9	9.6	SSS20D5-4-**
22	11	4	200	7.2	4.9	4.2	2.8	1.7	0.8	SSS22B4-4-**
22	11	5	215	11.4	8.0	7.1	4.9	3.2	1.9	SSS22B5-4-**
22	7	4	225	12.7	9.5	8.6	6.6	5.0	3.7	SSS22D4-4-**
22	7	5	300	22.4	17.1	15.6	12.2	9.6	7.5	SSS22D5-4-**
25	11	4	200	4.7	2.8	2.2	1.0	-	-	SSS25B4-4-**
25	11	5	200	8.0	5.1	4.3	2.4	1.0	-	SSS25B5-4-**
25	7	4	205	9.7	6.9	6.2	4.4	3.1	2.0	SSS25D4-4-**
25	7	5	260	17.7	13.2	11.9	9.0	6.7	4.9	SSS25D5-4-**
28	11	4	200	2.6	1.0	-	-	-	-	SSS28B4-4-**
28	11	5	200	5.1	2.6	1.9	-	-	-	SSS28B5-4-**
28	7	4	200	7.1	4.8	4.1	2.6	1.5	-	SSS28D4-4-**
28	7	5	235	13.9	9.9	8.8	6.3	4.3	2.7	SSS28D5-4-**
30	11	5	200	3.4	1.1	-	-	-	-	SSS30B5-4-**
30	7	4	200	5.6	3.5	2.9	1.6	-	-	SSS30D4-4-**
30	7	5	215	11.7	8.0	7.0	4.7	2.9	1.5	SSS30D5-4-**
30	7	6	275	19.2	13.7	12.2	8.7	5.9	3.8	SSS30D6-4-**
35	7	5	200	6.9	4.0	3.1	1.2	-	-	SSS35D5-4-**
35	7	6	220	12.6	8.0	6.8	3.9	1.6	-	SSS35D6-4-**
39	7	6	200	8.2	4.2	3.1	0.6	-	-	SSS39D6-4-**

Catalog Number System

The catalog number for Hapco poles utilizes the following identification system.

MOUNTING HEIGHT | BUTT SQ. | BASE STYLE | FINISH

S S S | | | | - | 4 - | | -

SHAFT ASSEMBLY | WALL GAUGE | TOP SQ. | ACCESORIES OPTIONS

Catalog Number Example -

SSS 20 D 5 - 4 – BA

Square Straight Steel, 20' Mounting Height, 7 Gauge, 5" Butt Square, No Taper, 4-Bolt Base, Black Powder Coat Finish.

EPA Notes:

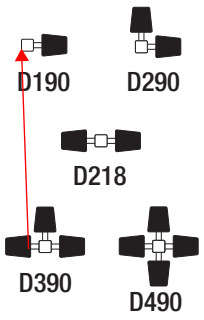
Effective Projected Area (EPA) in square feet. EPA's calculated using wind velocity (mph) indicated in accordance with 2009 AASHTO LTS-5 using a 25-year design life. Maximum EPA is based on the luminaire weight shown. Increased luminaire weight may reduce the maximum EPA. If weight is exceeded, or if other design life or code is required, please consult the factory.

Mounting Options

Side Drill Mount
Includes removable pole cap.
NOTE: A luminaire drilling template must be supplied at time of order.

Tenon Mount
For Tenon Mount applications specify both Tenon diameter and length.

Drill Mount Options



Electrical Box

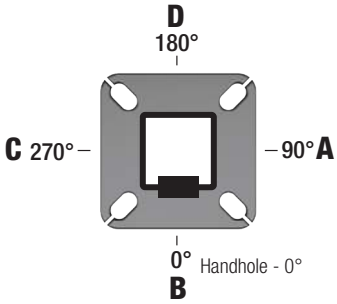

Box Only


GF1 Duplex GFI Receptacle *with Cover*


GF2 Duplex GFI *with In-Use Cover*

Note: *GFI Options must be specified in Accessories.*

Pole Orientation



SSS | | | | | - | 4 - | | | | | | - | | - | | | | - | | |

SSS- Square Straight Steel Pole

Height	Gauge	Butt Sq.	Top Sq.	Base Style
10 = 10' 12 = 12' 14 = 14' 16 = 16' 18 = 18' 20 = 20' 22 = 22' 25 = 25' 28 = 28' 30 = 30' 35 = 35' 39 = 39'	B = 11 Gauge D = 7 Gauge	4 = 4" 5 = 5" 6 = 6"	"-" = No Taper	4 = 4-Bolt Base

EC to provide as required based on site lighting design.

Mounting Options

DRILL MOUNT
D000 - No Drilling
D190 - Std. "A"
D290 - Std. "A" & "D"
D218 - Std. "A" & "C"
D390 - Std. "A", "D", & "C"
D490 - Std. "A", "B", "C", & "D"
DCUS - Custom*

TENON
T204 - 2-3/8" O.D. x 4"
T304 - 2-7/8" O.D. x 4"
T356 - 3-1/2" O.D. x 6"
T406 - 4" O.D. x 6"
TCUS - Custom Tenon**

** Specify Number and Orientation*
*** Specify O.D. and Height*

Electrical Box*

FA - 30" Up, "D"
FB - 30" Up, "B"
FC - 30" Up, "A"
FD - 30" Up, "C"
FE - 36" Up, "D"
FF - 36" Up, "B"
FG - 36" Up, "A"
FH - 36" Up, "C"
FI - 24" Up, "D"
FK - 24" Up, "A"
FL - 24" Up, "C"
FZ - Custom**

** GFI Receptacle Options Available (Specify in Accessories)*
*** Specify Height and Orientation*

Accessories/Options*

C12 - Threaded 1/2" Coupling**
C34 - Threaded 3/4" Coupling**
C10 - Threaded 1" Coupling**
EHH - Extra Handhole**
GF1 - Duplex GFI Receptacle *(WR) with Cover*
GF2 - Duplex GFI *(WR) with In-Use Cover*
LAB - Less Anchor Bolts
LPC - Less Pole Cap
PAB - Pre-shipped Anchor Bolts
VD1 - Vib. Damper - 1st Mode
VD2 - Vib. Damper - 2nd Mode

** Add all that apply (Example: CPL-LAB-VD1)*
*** Specify Location*

Finish

POWDER COAT COLORS
BA - Black Powder Coat
BH - White Powder Coat
BM - Dark Bronze Powder Coat
BV - Dark Green Powder Coat
GC - Gray Powder Coat
XX - Special Colors*

GALVANIZED
1Q - Galvanized Only
1C - Black PC Over Galv.
1D - White PC Over Galv.
1B - D. Bronze PC Over Galv.
1Y - D. Green PC Over Galv.
1J - Gray PC Over Galv.
XX - Special PC Over Galv.*

** Provide RAL # or Sample Color Chip*

KAD LED
LED Area Luminaire

Buy American

Catalog Number

Notes

Type TYPE S1

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

Specifications

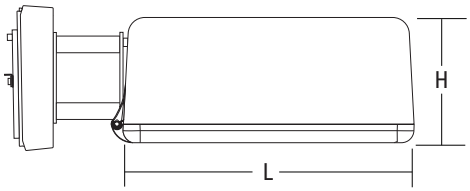
EPA: 1.2 ft² *(0.11 m²)*

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

EC to provide mounting brackets as required.

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 30C[1] 30 LEDs 40C 40 LEDs 60C 60 LEDs	530 530 mA[1] 700 700 mA 1000 1000 mA	30K 3000 K 40K 4000 K 50K 5000 K	R2 Type II R3 Type III R4 Type IV R5 Type V[2]	MVOLT[3] 277[4] 120[4] 347[1,3] 208[4,5] 480[1,3] 240[4,5]	**Shipped included** SPUMBAK___ Square pole universal mounting adaptor[6] RPUMBAK___ Round pole universal mounting adaptor[6] SPD___ Square pole RPD___ Round pole WBD___ Wall bracket[2] WWD___ Wood pole or wall 04 4" arm 06 6" arm 09 9" arm[5] 12 12" arm[6] **Shipped separately** DAD12P Degree arm (pole) DAD12WB Degree arm (wall) KMA Mast arm external fitter

Options

Shipped installed

- PER5 NEMA twist-lock five-wire receptacle only (no controls)[7,8,9]
- PER7 Seven-wire receptacle only (no controls)[7,8,9]
- SF Single fuse (120, 277, 347V)[4]
- DF Double fuse (208, 240, 480V)[4]
- PIR Bi-level, motion/ambient sensor, 8-15' mounting height, ambient sensor enabled at 5fc[3,10,11,12,13]
- PIRH Bi-level, motion/ambient sensor, 15-30' mounting height, ambient sensor enabled at 5fc[3,10,11,12,13]
- PIR1FC3V Bi-level, motion/ambient sensor, 8-15' mounting height, ambient sensor enabled at 1fc[3,10,11,12,13]
- PIRH1FC3V Bi-level, motion/ambient sensor, 15-30' mounting height, ambient sensor enabled at 1fc[3,10,11,12,13]
- BL30 Bi-level switched dimming, 30%[3,9,10,11]
- BL50 Bi-level switched dimming, 50%[3,9,10,11]
- PNMTDD3 Part night, dim till dawn[3,11,16]
- PNMT5D3 Part night, dim 5 hrs[3,11,16]
- PNMT6D3 Part night, dim 6 hrs[3,11,16]
- PNMT7D3 Part night, dim 7 hrs[3,11,16]
- HS Houseside shield[17]

Shipped separately[17]

- WG Wire guard

Finish *(required)*

- DDBXD Dark bronze
- DBLXD Black
- DNAXD Natural aluminum
- DWHXD White
- DDBTXD Textured dark bronze
- DBLBXD Textured black
- DNATXD Textured natural aluminum
- DWHGXD Textured white

One Lithonia Way • Conyers, Georgia 30012 • Phone: 800-705-SERV (7378) • www.lithonia.com

Ordering Information

Accessories

Ordered and shipped separately.

DLL127F 1.5 JU	Photocell - SSL twist-lock (120-277V) [18]
DLL347F 1.5 CUL JU	Photocell - SSL twist-lock (347V) [18]
DLL480F 1.5 CUL JU	Photocell - SSL twist-lock (480V) [18]
DSHORT SBK U	Shorting cap [18]
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 adapter (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.*

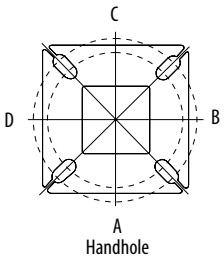
NOTES

1 20C or 30C LED are not available with 530 Drive Current and 347V or 480V.
2 Any Type 5 distribution, is not available with WBA.
3 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.
4 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.
5 9" or 12" arm is required when two or more luminaires are oriented on a 90° drilling pattern.
6 Available as a separate combination accessory: PUMBAK (finish) U.
7 Mounting must be restricted to ±45° from horizontal aim per ANSI C136.10-2010. Not available with motion sensor.
8 Photocell ordered and shipped as a separate line item from Acuity Brands Controls. See accessories. Not available with DS option. Shorting cap included.
9 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.
10 PIR and PIR1FC3V specify the SensorSwitch SBGR-10-ODP control; PIRH and PIRH1FC3V specify the SensorSwitch SBGR-6-ODP control. Dimming driver standard. Not available with PER5 or PER7.
11 Maximum ambient temperature with 347V or 480V is 30°C.
12 Reference Motion Sensor table.
13 Reference PER table on page 3 to see functionality.
14 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.
15 Dimming driver standard. MVOLT only. Not available with 347V, 480V, PER5, PER7 or PNMT options.
16 Dimming driver standard. MVOLT only. Not available with 347V, 480V, PER5, PER7, BL30 or BL50.
17 Also available as a separate accessory; see Accessories information.
18 Requires luminaire to be specified with PER option. Ordered and shipped as a separate line item from Acuity Brands Controls.

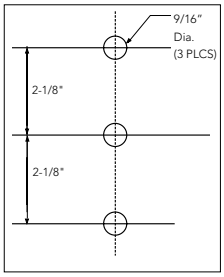
Drilling

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

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.

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 when motion sensor is used as dusk to dawn control						

PER Table						
Control	PER (3 wire)	PER5 (5 wire)		PER7 (7 wire)		
			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

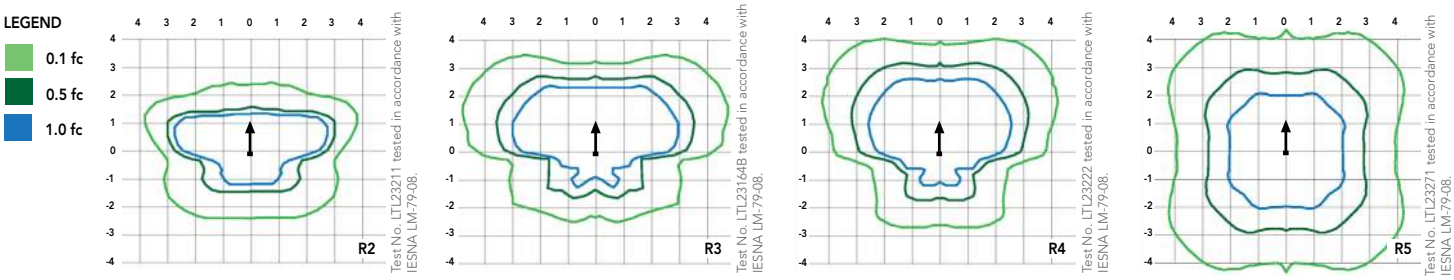
✔ Recommended
⊘ Will not work
⚠ Alternate

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

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.

BUY AMERICAN
This product is assembled in the USA and meets the Buy America(n) government procurement requirements under FAR, DFARS and DOT. Please refer to www.acuitybrands.com/resources/buy-american for additional information.

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