



# New and Existing Construction

## LB6LEDA8L

LED Downlight Module  
 13W High Efficacy  
 Wet Location  
 120V



**LiteBox** 6"

Aperture: Nominal 6"  
 See Housing Specification Sheet for ceiling cutout requirements  
 Not to Scale

### APPLICATIONS:

LiteBox LED modules are designed for use in new construction as well as retrofit applications with existing Prescolite or competitive 6" housings using the screw base adapter included. Lumen output and distribution comparable to a 65W BR30 while consuming only 13 watts. ENERGY STAR® qualified. Can be used to comply with California Title 24 Commercial and IECC watts per square foot requirements. Suitable for use with continuous room side ambient temperature up to 25°C. Continuous dimming to 15% with most standard dimmers. (See Dimming Notes).

### LIGHT ENGINE:

High efficacy LED light engine, 3000K, 80+ CRI, integrated with durable aluminum heat sink for excellent thermal management. 120V, 50/60Hz, powered directly to AC without the need for a driver. >0.9 power factor, dimmable to 15% with standard incandescent or electronic low voltage dimmers. Cycles at 120Hz output. (See Dimming Notes for recommended dimmers.) Output over-voltage, over-current, and short circuit protection. System designed for optimal life and lumen maintenance (42,000 hours at 70% lumen maintenance per TM-21).

### LENS/REFLECTOR:

All LiteBox LED modules are provided standard with a diffuse impact resistant Polycarbonate lens for uniform illumination and superior glare control. Reflector powder coat finish creates aesthetic ceiling appearance and visually comfortable 55° cutoff.

### INSTALLATION:

For New Construction: Use with Prescolite DBX QuickLink LED housings. QuickLink connector mates directly to housing connector without a screw base adapter for compliance to California Title 24 non-screw base socket requirement.

For Retrofit: Use in Prescolite or other compatible 6" recessed housings using supplied screw base adapter.

Easy installation with (3) stainless steel spring clips (pre-installed).

### CERTIFICATIONS:

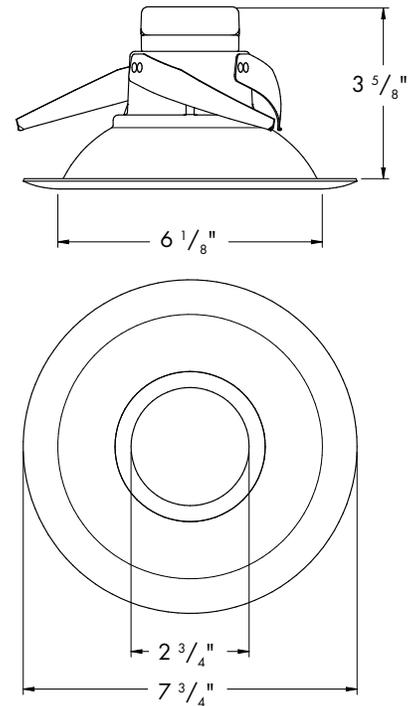
cCSAus Classified for use in Prescolite or other 6" recessed housings including Halo, Juno, and Lithonia. (See page 3 for more details) Suitable for wet locations. ENERGY STAR qualified. Can be used to meet California Title 24 commercial with DBXQL.

### WARRANTY:

5 year warranty

Additional information on pg 3.

See [www.prescolite.com](http://www.prescolite.com) for details.



CATALOG NUMBER

EXAMPLE: LB6LEDA8L30K WH

TRIM	LED COLOR	CRI	TRIM COLOR
------	-----------	-----	------------

- |   |  |  |   |
|---|--|--|---|
| <input type="checkbox"/> <b>LB6LEDA8L</b><br>6" Litebox LED Module with dimming to 15% 120V | <input type="checkbox"/> <b>30K</b><br>3000 Kelvin | <input type="checkbox"/> <b>Blank</b><br>80+ CRI | <input type="checkbox"/> <b>WH</b><br>White |
|---|--|--|---|

ACCESSORIES
-------------

- LiteGear**<sup>1</sup>  
Inverter, single phase central lighting, 125VA-250VA
- LPS Series**<sup>1</sup>  
LitePower micro-inverter, 20VA-55VA
- DBXQL**  
IC/Non-IC Airtight housing with supply wire quick connects

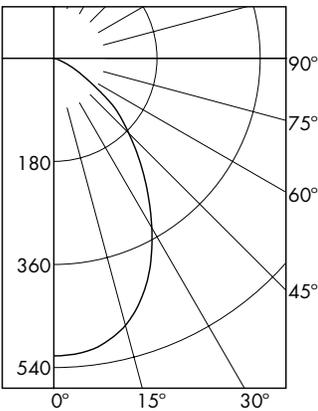
<sup>1</sup> See Central Inverter compatibility note and web links on page 2.

# PHOTOMETRIC DATA

# Litebox LED - 6" LED Downlight Module

ELECTRICAL DATA	LB6LEDA8L
Input Voltage	120V AC
Input Frequency	50/60 Hz
Input Current	0.11A
Input Power	13.1W
Power Factor	>0.90
THD	<20%
EMI Filtering	FCC 47CFR Part 15, Class B
Operating Temperature	-30°C to 60°C
Dimming	Yes*
Over-voltage, over-current, short-circuit protected	
*See Dimming Notes for more information	

**LB6LEDA8L30K WH**  
 LED Light Engine: 3000K 83 CRI  
 System Wattage: 13  
 Fixture delivered lumens: 825  
 Fixture Efficacy: 63.5  
 Spacing Criteria: 1.0



CANDELA DISTRIBUTION	
DEG	CANDELA
0	520
5	517
15	483
25	398
35	285
45	185
55	92
65	30
75	6
85	3
90	0

Test No. CSA 2660998.7431  
 Tested at 25°C Ambient in accordance to IESNA LM-79-2008  
 Tested in DBX housing

## PERFORMANCE DATA CHART

Single Unit, Initial Footcandles, 30" Work Plane						Ceiling to Floor Height (ft)	Multiple Units, Initial Footcandles, 30" Work Plane				
Nadir		10°		20°			Spacing is Maximum Over Work Plane, SMH = 1				
FC	FC	Dia (ft)	FC	Dia (ft)	FC	Dia (ft)	Fixture Spacing (ft)	RCR 2	RCR 5	RCR 7	
42	39	1	30	3	18	4	6	4.0	55	41	34
17	16	2	12	4	7	6	8	6.0	22	17	14
8	8	3	6	6	3	9	10.5	9.0	10	8	7
6	5	3	4	7	2	11	12	10.0	7	6	5

## ZONAL LUMEN SUMMARY

ZONE	LUMENS	%LUMINAIRE
0-30	369	44.7%
0-40	550	66.7%
0-60	785	95.1%
0-90	825	100.0%

## COEFFICIENTS OF UTILIZATION

### Zonal Cavity Method

Room Cavity Ratio	% Effective Ceiling Cavity Reflectance																					
	80%				70%				50%				30%									
	20% Effective Floor Cavity Reflectance																					
													% Wall Reflectance									
													70	50	30	10	70	10	50	30	50	30
1	112	108	105	102	109	103	102	100	98	96												
3	97	89	82	77	95	81	85	80	82	78												
5	84	74	66	61	82	66	71	65	69	64												
7	74	62	55	49	72	54	60	54	59	53												
9	65	53	46	41	64	46	52	45	51	45												

LB6LEDA8L30K WH

Test No. 2660998.7431

## Central Inverters

For full fixture output in back-up mode, we recommend you visit [www.dual-lite.com](http://www.dual-lite.com) for your Central Lighting Inverter options. Please contact your local Hubbell representative for any assistance with proper sizing and loading of your inverter selection. Central lighting inverters must be ordered separately.

**LiteGear:** [www.dual-lite.com/products/litegear\\_lg\\_series](http://www.dual-lite.com/products/litegear_lg_series)  
**LPS Series:** [www.dual-lite.com/products/lps](http://www.dual-lite.com/products/lps)

## NOTES

Refer to [www.prescolite.com](http://www.prescolite.com) for additional photometric tests (IES Files).



Web: [www.prescolite.com](http://www.prescolite.com) • Tech Support: (888) 777-4832  
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**HUBBELL**  
 Lighting, Inc.

## DIMMING NOTES:

LiteBox LB6LEDA8L is designed to be compatible with many 120VAC phase control dimmer controls including Incandescent (Forward Phase) and Electronic Low Voltage (ELV-Reverse Phase) controls. LED rated dimmer controls may offer favorable dimming performance. The following is a partial list of known compatible dimmer controls:

### TRIAC - Forward Phase Controls

Lutron	Diva Series	(Part number DV-600P)
Lutron	Skylark Series	(Part Number S-600P)
Lutron	Ariadni Series	(Part Number AY-600P)
Lutron	Faedra Series	(Part Number FA-600P)
Lutron	Lumea	(Part Number LG-600PH)
Leviton	Renoir II	(Part Number AWRMG-MAW)

### Electronic Low Voltage ELV Reverse Phase Controls

Lutron	Diva Series	(Part Number DVELV-300)
Lutron	Nova T Series	(Part Number NTELV-300)
Lutron	Vierti Series	(Part Number VTELV-600)

### LED Rated Controls

Pass & Seymour (Part Number DCL453PTCCCV6)

Incandescent Digital type dimmers are not recommended.

Dimming capabilities will vary depending on the dimmer control, load, and circuit installation. Always refer to dimmer manufacturer instructions or a controls specialist for specific requirements.

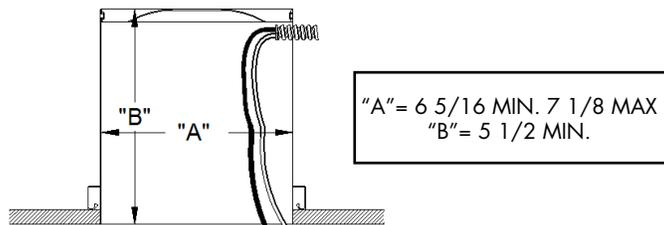
Dimmer control brand names where identified above are tradenames or registered trademarks of each respective company.

## COMPATIBILITY OF 6" RECESSED HOUSINGS:

LiteBox LED modules are cCSAus classified for use with Prescolite and most competitive recessed cans (with "A" and "B" dimensions) including:

### Prescolite

Capri	Lithonia
Commercial Electric	Lumapro
Elco	Luminaire
Emerald	Nora
Halo	Progress
Intense	Sea Gull
Jimway	WAC
Juno	



**LED lighting facts**  
A Program of the U.S. DOE

Light Output (Lumens)	825
Watts	13
Lumens per Watt (Efficacy)	63

Color Accuracy Color Rendering Index (CRI)	83
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Light Color Correlated Color Temperature (CCT)	2875 (Warm White)
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2700K 3000K 4500K 6500K

All results are according to IESNA LM-79-2008: Approved Method for the Electrical and Photometric Testing of Solid-State Lighting. The U.S. Department of Energy (DOE) verifies product test data and results.

Visit [www.lightingfacts.com](http://www.lightingfacts.com) for the Label Reference Guide.

Registration Number: TH64-LQ130B (7/17/2013)  
Model Number: LB6LEDA8L30K WH  
Type: Luminaire - Downlight

## NOTES

1. Operation in ambient temperatures higher than those specified will shorten life and void warranty.
2. Warranty is limited to repair and replacement of defective parts of the LED system and does not include labor or installation. See [www.prescolite.com](http://www.prescolite.com) for details.



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## OVERVIEW

The Cireon Cascade Series is the industry's longest lasting high performance solid state luminaires. With the best in thermal management, proprietary optics, and the highest quality componentry available, Cireon products provide beautifully uniform lighting while maintaining unmatched output over the industry's longest lifetimes.

## FEATURES



### Thermal Management

The industry's only combination of the superior thermal conductivity of an aluminum extrusion heat sink with a bird-protected ventilated housing. Dual-sided copper clad boards with thermally inductive interfaces optimize thermal conductivity. Tall, frequent fin geometry paired with largest in class LED spacing provides 15.1in<sup>2</sup> convective surface area per LED.

### Superior Optics

Proprietary freeform low bay optics designed by Cireon for the specific output signature of our LEDs combine class-leading efficiency and uniformity with soft, undetectable edges.

### Quality Componentry

From injection molding to metal fabrication, extrusion to board population and beyond, 100% of our proprietary componentry is domestically sourced and designed to provide the longest lasting fixture life in the industry. We are dedicated to robust design with uncompromising quality in a single technology. Our sole purpose is to deliver the best of the best in commercial solid state lighting.

### Mechanical

Dimensions: 20"W x 19"D x 5.6"H. Carton Weight: 40lbs..  
 EPA Rating- 3.0  
 Solid aluminum housing, baked powder coat finish on all exterior and interior surfaces.  
 Stainless steel fasteners and hardware; no ferrous metals.  
 Bayer Makrolon V-0 polycarbonate optics for superior chemical and impact resistance.  
 Operating Temperature Range: -40°C/-40°F to 55°C/130°F.

### Electrical

UL/cUL Wet Listed to UL 1598 and 8750.  
 Driver reduces power if case temperature exceeds 80°C/176°F.  
 Class A sound rating.  
 0-10V dimming standard, 100% to 10%, available with optional integral sensors.  
 >0.9 power factor, <20% THD, RoHS.  
 Standard 3kV surge suppression. Optional 10kV and 20kV surge suppression.

## CASCADE SERIES - AREA AND SITE

Part #:	CA6-144-AJ-AK-AF-BZ-AF-NS
Project:	HRH PLAINFIELD
Notes:	P11
Date:	



System Watts:	292
LEDs:	144
Delivered Lumens:	27,740
Distribution:	Type II
Color Temperature:	5000K
Input Voltage:	120-277V
	<i>also available in 347-480V</i>
CRI:	75 Typ
Mount:	2AF Slip Fitter
Integral Sensor:	No Sensor

Housing Color: Architectural Bronze  
*available in White, Black, Bronze, and Custom Colors*

**10 YEAR**



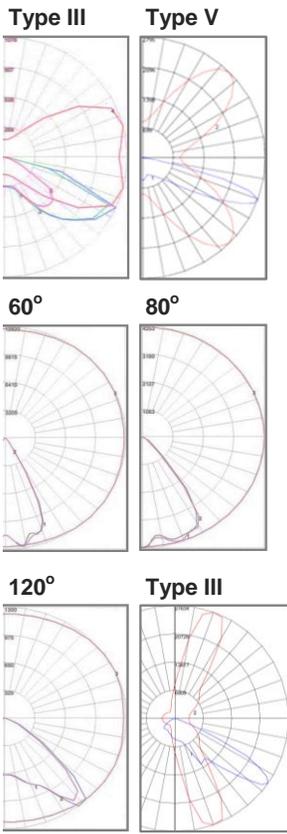
**WARRANTY**

### Spacing Criteria:

Cireon's proprietary Type 2 free form optic delivers an avg:min uniformity of better than 1.2:1 when spaced at 2.5 x 4.0 times the mounting height. At 3.1 x 5.4 times the mounting height, uniformity is better than 2:1.

**Your Authorized Cireon Agent**





**Proven Longevity**

The Cascade family's unified flow-through thermal management system provides a **life expectancy of 201,000 to 440,000 hours** to 70% output<sup>(1)</sup>.

TM-21 using LM-79 in situ and LM-80 data:

<b>In-Situ Inputs</b>	
Drive current for each LED package/array/module (mA):	0.7
In-situ case temperature (T <sub>c</sub> , °C):	89.9
Percentage of initial lumens to project to (e.g. for L <sub>70</sub> , enter 70):	70
<b>Results</b>	
Time (t) at which to estimate lumen maintenance (hours):	54,000
Lumen maintenance at time (t) (%):	93.60%
Calculated L70 (hours):	201,000
Reported L70 (hours):	>54000



**Optional Integral Sensor**

Choose Occupancy, Photocell, or Hybrid (combined). Suitable for mounting heights from 7' to 45'; specify mounting height when ordering.



**Mounting Options**

Standard 2AF Slip Fitter (2-1/2" ID)



Standard Four and Two Bolt Arms



Standard Yoke Mount



Standard Wall Pack Flush Mount



Custom mounts available

**ORDERING INFORMATION**

(Example: CA6-144-AG-AK-AB-BK-AF-NS)

Family	No. of 24 LED Modules	Total LED Count	Kelvin Temperature, CRI (Typical)	Drive Current, Input Voltage	Optic, Included Angle	Housing Color	Mounting Method	Integral Sensor
CA Cascade	4	-096	-AG 5700K, 75CRI	-AH 350mA, 120-277V	-AB 80° included	-BK Black	-AF 2AF Slip Fitter	-NS No Sensor
	6	-144	-AH 4000K, 75CRI	-AJ 530mA, 120-277V	-AC 60° included	-BZ Architectural Bronze	-TB Two-Bolt Arm	-WS With Sensor
	8	-192	-AJ 5000K, 75CRI	-AK 700mA, 120-277V	-AF Type 2, wide rectangle	-WH White	-FB Four-Bolt Arm	
			-CU Custom color temperature and CRI levels	-AL 700mA, 347-480V	-AG Type 5, wide square	-CU Custom Colors	-WM Wall Pack Flush Mount	
				-AM 530mA, 347-480V	-AL 120° included		-YM Yoke Mount	
				-AN 350mA, 347-480V	-AN Type 3 Forward Rectangle		-FM Flush Mount	
							-CU Custom Mount	



383 Science Drive, Moorpark, CA 93021 Office • 805-557-9100 Fax • 866-418-1315 www.cireon.com



Some possible product configurations are outside the Qualified Products List as determined by DLC.



100% of Cireon's proprietary componentry is manufactured by US suppliers in US facilities. All final assembly done in the US.

## OVERVIEW

The Cireon Cascade Series is the industry's longest lasting high performance solid state luminaires. With the best in thermal management, proprietary optics, and the highest quality componentry available, Cireon products provide beautifully uniform lighting while maintaining unmatched output over the industry's longest lifetimes.

## FEATURES



### Thermal Management

The industry's only combination of the superior thermal conductivity of an aluminum extrusion heat sink with a bird-protected ventilated housing. Dual-sided copper clad boards with thermally inductive interfaces optimize thermal conductivity. Tall, frequent fin geometry paired with largest in class LED spacing provides 15.1in<sup>2</sup> convective surface area per LED.

### Superior Optics

Proprietary freeform low bay optics designed by Cireon for the specific output signature of our LEDs combine class-leading efficiency and uniformity with soft, undetectable edges.

### Quality Componentry

From injection molding to metal fabrication, extrusion to board population and beyond, 100% of our proprietary componentry is domestically sourced and designed to provide the longest lasting fixture life in the industry. We are dedicated to robust design with uncompromising quality in a single technology. Our sole purpose is to deliver the best of the best in commercial solid state lighting.

### Mechanical

Dimensions: 20"W x 19"D x 5.6"H. Carton Weight: 40lbs..  
 EPA Rating- 3.0  
 Solid aluminum housing, baked powder coat finish on all exterior and interior surfaces.  
 Stainless steel fasteners and hardware; no ferrous metals.  
 Bayer Makrolon V-0 polycarbonate optics for superior chemical and impact resistance.  
 Operating Temperature Range: -40°C/-40°F to 55°C/130°F.

### Electrical

UL/cUL Wet Listed to UL 1598 and 8750.  
 Driver reduces power if case temperature exceeds 80°C/176°F.  
 Class A sound rating.  
 0-10V dimming standard, 100% to 10%, available with optional integral sensors.  
 >0.9 power factor, <20% THD, RoHS.  
 Standard 3kV surge suppression. Optional 10kV and 20kV surge suppression.

## CASCADE SERIES - AREA AND SITE

Part #:	CA6-144-AJ-AK-AG-BZ-AF-NS
Project:	HRH PLAINFIELD
Notes:	P21 & P22
Date:	



System Watts:	292
LEDs:	144
Delivered Lumens:	28,032
Distribution:	Type V
Color Temperature:	5000K
Input Voltage:	120-277V
	<i>also available in 347-480V</i>
CRI:	75 Typ
Mount:	2AF Slip Fitter
Integral Sensor:	No Sensor

Housing Color: Architectural Bronze  
*available in White, Black, Bronze, and Custom Colors*

**10 YEAR**



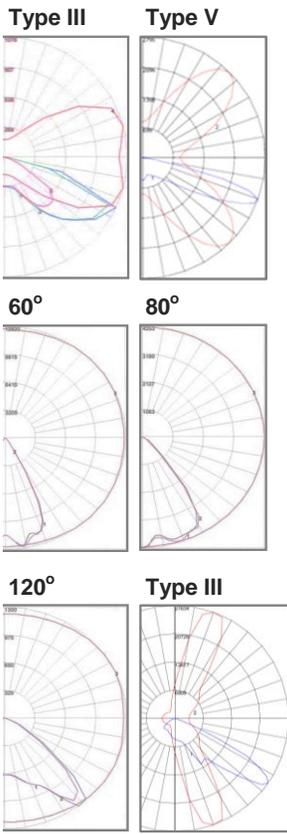
**WARRANTY**

### Spacing Criteria:

Cireon's proprietary Type 5 free form optic delivers an avg:min uniformity of better than 1.2:1 when spaced at 3.0 x 3.0 times the mounting height. At 4.2 x 4.2 times the mounting height, uniformity is better than 2:1.

**Your Authorized Cireon Agent**





**Proven Longevity**

The Cascade family's unified flow-through thermal management system provides a **life expectancy of 201,000 to 440,000 hours** to 70% output<sup>(1)</sup>.

TM-21 using LM-79 in situ and LM-80 data:

<b>In-Situ Inputs</b>	
Drive current for each LED package/array/module (mA):	0.7
In-situ case temperature (T <sub>c</sub> , °C):	89.9
Percentage of initial lumens to project to (e.g. for L <sub>70</sub> , enter 70):	70
<b>Results</b>	
Time (t) at which to estimate lumen maintenance (hours):	54,000
Lumen maintenance at time (t) (%):	93.60%
Calculated L70 (hours):	201,000
Reported L70 (hours):	>54000



**Optional Integral Sensor**

Choose Occupancy, Photocell, or Hybrid (combined). Suitable for mounting heights from 7' to 45'; specify mounting height when ordering.



**Mounting Options**

Standard 2AF Slip Fitter (2-1/2" ID)



Standard Four and Two Bolt Arms



Standard Yoke Mount



Standard Wall Pack Flush Mount



Custom mounts available

**ORDERING INFORMATION**

(Example: CA6-144-AG-AK-AB-BK-AF-NS)

Family	No. of 24 LED Modules	Total LED Count	Kelvin Temperature, CRI (Typical)	Drive Current, Input Voltage	Optic, Included Angle	Housing Color	Mounting Method	Integral Sensor
CA Cascade	4	-096	-AG 5700K, 75CRI	-AH 350mA, 120-277V	-AB 80° included	-BK Black	-AF 2AF Slip Fitter	-NS No Sensor
	6	-144	-AH 4000K, 75CRI	-AJ 530mA, 120-277V	-AC 60° included	-BZ Architectural Bronze	-TB Two-Bolt Arm	-WS With Sensor
	8	-192	-AJ 5000K, 75CRI	-AK 700mA, 120-277V	-AF Type 2, wide rectangle	-WH White	-FB Four-Bolt Arm	
			-CU Custom color temperature and CRI levels	-AL 700mA, 347-480V	-AG Type 5, wide square	-CU Custom Colors	-WM Wall Pack Flush Mount	
				-AM 530mA, 347-480V	-AL 120° included		-YM Yoke Mount	
				-AN 350mA, 347-480V	-AN Type 3 Forward Rectangle		-FM Flush Mount	
							-CU Custom Mount	



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## OVERVIEW

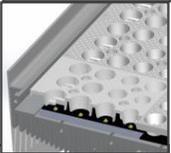
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## FEATURES



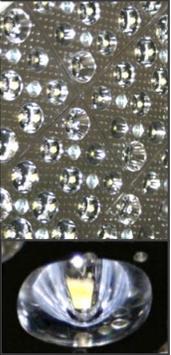
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### Superior Optics

Proprietary freeform low bay optics designed by Cireon for the specific output signature of our LEDs combine class-leading efficiency and uniformity with soft, undetectable edges.



### Quality Componentry

From injection molding to metal fabrication, extrusion to board population and beyond, 100% of our proprietary componentry is domestically sourced and designed to provide the longest lasting fixture life in the industry. We are dedicated to robust design with uncompromising quality in a single technology. Our sole purpose is to deliver the best of the best in commercial solid state lighting.

### Mechanical

Dimensions: 12"W x 19"D x 5.6"H. Carton Weight: 22lbs..

EPA Rating- 1.5

Solid aluminum housing, baked powder coat finish on all exterior and interior surfaces. Stainless steel fasteners and hardware; no ferrous metals.

Bayer Makrolon V-0 polycarbonate optics for superior chemical and impact resistance.

Operating Temperature Range: -40°C/-40°F to 55°C/130°F.

### Electrical

UL/cUL Wet Listed to UL 1598 and 8750.

Driver reduces power if case temperature exceeds 80°C/176°F.

Class A sound rating.

0-10V dimming standard, 100% to 10%, available with optional integral sensors.

>0.9 power factor, <20% THD, RoHS.

Standard 3kV surge suppression. Optional 10kV and 20kV surge suppression.

## CASCADE SERIES - AREA AND SITE

Part #:	CA3-072-AJ-AK-AF-BZ-AF-NS
Project:	HRH PLAINFIELD
Notes:	P31 & P41
Date:	



System Watts:	146
LEDs:	72
Delivered Lumens:	13870
Distribution:	Type II
Color Temperature:	5000K
Input Voltage:	120-277V
	<i>also available in 347-480V</i>
CRI:	75 Typ
Mount:	2AF Slip Fitter
Integral Sensor:	No Sensor

Housing Color: Architectural Bronze  
*also available in White, Black, and Custom Colors*

**10 YEAR**



**WARRANTY**

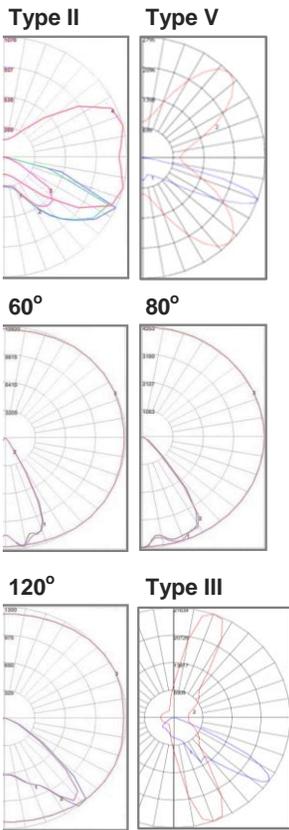
### Spacing Criteria:

Cireon's proprietary Type 2 free form optic delivers an avg:min uniformity of better than 1.2:1 when spaced at 2.5 x 4.0 times the mounting height. At 3.1 x 5.4 times the mounting height, uniformity is better than 2:1.

**Your Authorized Cireon Agent**



Notes: <sup>(1)</sup> Combines LM-79 in situ at 25°C/76°F ambient and LM-80 data in the DOE's TM-21 Calculation.



### Proven Longevity

The Cascade family's unified flow-through thermal management system provides a **life expectancy of 201,000 to 440,000 hours** to 70% output<sup>(1)</sup>.

TM-21 using LM-79 in situ and LM-80 data:

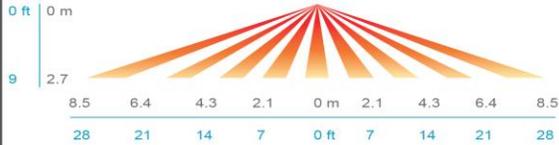
In-Situ Inputs	
Drive current for each LED package/array/module (mA):	0.7
In-situ case temperature (T <sub>c</sub> , °C):	89.9
Percentage of initial lumens to project to (e.g. for L <sub>70</sub> , enter 70):	70
Results	
Time (t) at which to estimate lumen maintenance (hours):	54,000
Lumen maintenance at time (t) (%):	93.60%
Calculated L70 (hours):	201,000
Reported L70 (hours):	>54000



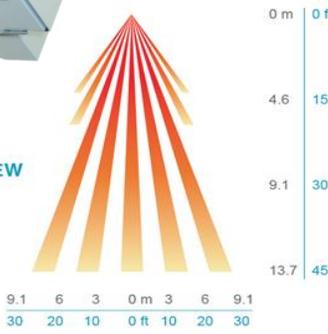
### Optional Integral Sensor

Choose Occupancy, Photocell, or Hybrid (combined). Suitable for mounting heights from 7' to 45'; specify mounting height when ordering.

#### SIDE VIEW



#### HIGH VIEW



### Mounting Options

Standard 2AF Slip Fitter (2-1/2" ID)



Standard Four and Two Bolt Arms



Standard Yoke Mount



Standard Wall Pack Flush Mount



custom color shown

Custom Mounts available

### ORDERING INFORMATION

(Example: CA3-072-AJ-AK-AF-BZ-FB-WS)

Family	No. of 24 LED Modules	Total LED Count	Kelvin Temperature, CRI (Typical)	Drive Current, Input Voltage	Optic, Included Angle	Housing Color	Mounting Method	Integral Sensor
CA Cascade	2	-048	-AG 5700K, 75CRI	-AH 350mA, 120-277V	-AB 80° included	-BK Black	-AF 2AF Slip Fitter	-NS No Sensor
	3	-072	-AH 4000K, 75CRI	-AJ 530mA, 120-277V	-AC 60° included	-BZ Architectural Bronze	-TB Two-Bolt Arm	-WS With Sensor
			-AJ 5000K, 75CRI	-AK 700mA, 120-277V	-AF Type 2, wide rectangle	-WH White	-FB Four-Bolt Arm	
			-CU Custom color temperature and CRI levels	-AL 700mA, 347-480V	-AG Type 5, wide square	-CU Custom Colors	-WM Wall Mount Arm	
				-AM 530mA, 347-480V	-AL 120° included		-YM Yoke Mount	
				-AN 350mA, 347-480V	-AN Type III, forward rectangle		-FM Wall Pack Flush Mount	
							-CU Custom Mount	



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Some possible product configurations are outside the Qualified Products List as determined by DLC.

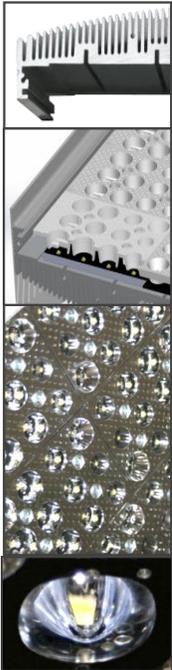


100% of Cireon's proprietary componentry is manufactured by US suppliers in US facilities. All final assembly done in the US.

## OVERVIEW

The Cireon Cascade Series is the industry's longest lasting high performance solid state luminaires. With the best in thermal management, proprietary optics, and the highest quality componentry available, Cireon products provide beautifully uniform lighting while maintaining unmatched output over the industry's longest lifetimes.

## FEATURES



### Thermal Management

The industry's only combination of the superior thermal conductivity of an aluminum extrusion heat sink with a bird-protected ventilated housing. Dual-sided copper clad boards with thermally inductive interfaces optimize thermal conductivity. Tall, frequent fin geometry paired with largest in class LED spacing provides 15.1in<sup>2</sup> convective surface area per LED.

### Superior Optics

Proprietary optics designed by Cireon for the specific output signature of our LEDs combine class-leading efficiency and uniformity with soft, undetectable edges.

### Quality Componentry

From injection molding to metal fabrication, extrusion to board population and beyond, 100% of our proprietary componentry is domestically sourced and designed to provide the longest lasting fixture life in the industry. We are dedicated to robust design with uncompromising quality in a single technology. Our sole purpose is to deliver the best of the best in commercial solid state lighting.

### Mechanical

Dimensions: 10"W x 13"D x 5.6"H. Carton Weight: 17lbs..

EPA Rating- 1.02

Solid aluminum housing, baked powder coat finish on all exterior and interior surfaces. Stainless steel fasteners and hardware; no ferrous metals.

Bayer Makrolon V-0 polycarbonate optics for superior chemical and impact resistance.

Operating Temperature Range: -40°C/-40°F to 55°C/130°F.

### Electrical

UL/cUL Wet Listed to UL 1598 and 8750.

Driver reduces power if case temperature exceeds 80°C/176°F.

Class A sound rating.

0-10V dimming standard, 100% to 10%, available with optional integral sensors.

>0.9 power factor, <20% THD, RoHS.

Standard 3kV surge suppression. Optional 10kV and 20kV surge suppression.

## CASCADE SERIES - AREA AND SITE

Part #:	CA1-024-AJ-AK-AN-BZ-AF-NS
Project:	HRH PLAINFIELD
Notes:	S3
Date:	



System Watts:	50
LEDs:	24
Delivered Lumens:	4700 lm
Distribution:	Type 3
Color Temperature:	5000K
Input Voltage:	120-277V
	<i>also available in 347-480V</i>
CRI:	75 Typ
Mount:	2AF Slip Fitter
Integral Sensor:	No Sensor

Housing Color: Architectural Bronze  
*available in White, Black, Bronze, and Custom Colors*

**10 YEAR**



**WARRANTY**

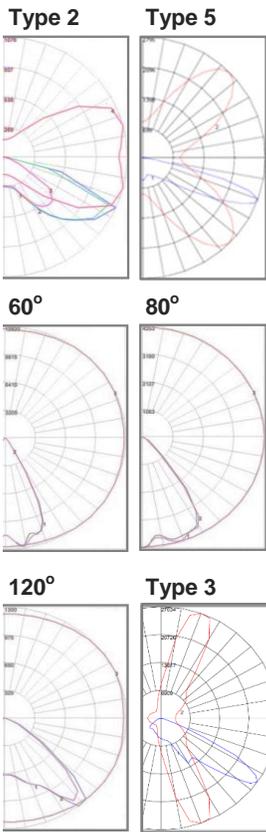
### Spacing Criteria:

Cireon's proprietary Type 3 free form optic delivers an avg:min uniformity of better than 1.2:1 when spaced at 2.5 x 4.0 times the mounting height. At 3.1 x 5.4 times the mounting height, uniformity is better than 2:1.

**Your Authorized Cireon Agent**



Notes: <sup>(1)</sup> Combines LM-79 in situ at 25°C/76°F ambient and LM-80 data in the DOE's TM-21 Calculation.



### Proven Longevity

The Cascade family's unified flow-through thermal management system provides a **life expectancy of 201,000 to 440,000 hours** to 70% output<sup>(1)</sup>.

TM-21 using LM-79 in situ and LM-80 data:

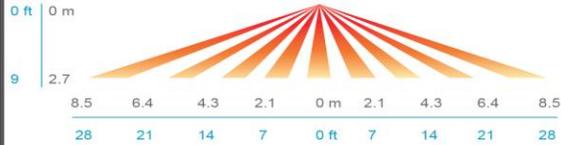
In-Situ Inputs	
Drive current for each LED package/array/module (mA):	0.7
In-situ case temperature (T <sub>c</sub> , °C):	89.9
Percentage of initial lumens to project to (e.g. for L <sub>70</sub> , enter 70):	70
Results	
Time (t) at which to estimate lumen maintenance (hours):	54,000
Lumen maintenance at time (t) (%):	93.60%
Calculated L70 (hours):	201,000
Reported L70 (hours):	>54000



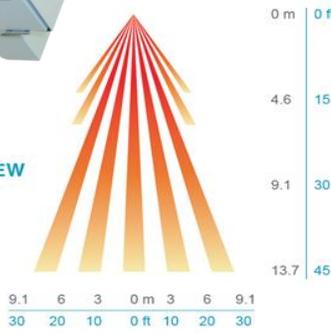
### Optional Integral Sensor

Choose Occupancy, Photocell, or Hybrid (combined). Suitable for mounting heights from 7' to 45'; specify mounting height when ordering.

#### SIDE VIEW



#### HIGH VIEW



### Mounting Options

Standard 2AF Slip Fitter (2-1/2" ID)



Standard Two and Four Bolt Arms



Standard Yoke Mount



Standard Wall Pack Mount



Custom mounts available

### ORDERING INFORMATION

(Example: CA2-048-AG-AJ-AL-WH-AF-PC)

Family	No. of 24 LED Modules	Total LED Count	Kelvin Temperature, CRI (Typical)	Drive Current, Input Voltage	Optic, Included Angle	Housing Color	Mounting Method	Integral Sensor
CA Cascade	1	-024	-AG 5700K, 75CRI	-AH 350mA, 120-277V	-AB 80° included	-BK Black	-AF 2AF Slip Fitter	-NS No Sensor
	2	-048	-AH 4000K, 75CRI	-AJ 530mA, 120-277V	-AC 60° included	-BZ Architectural Bronze	-TB Two-Bolt Arm	-WS With Sensor
-AJ 5000K, 75CRI			-AK 700mA, 120-277V	-AF Type 2, wide rectangle	-WH White	-FB Four-Bolt Arm		
-CU Custom color temperature and CRI levels			-AL 700mA, 347-480V	-AG Type 5, wide square	-CU Custom Colors	-WM Wall Pack Flush Mount		
			-AM 530mA, 347-480V	-AL 120° included	-YM Yoke Mount			
		-AN 350mA, 347-480V	-AN Type 3 Forward Rectangle	-FM Flush Mount				
				-CU Custom Mount				



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