

# ACORN SERIES

DECORATIVE LIGHTING

## FEATURES

- Available with a choice of different LED Wattage configurations and optical distributions designed to replace HID lighting up to 400W MH or HPS
- Lifeshield thermal circuit protection insures optimum LED performance
- Contributes to a "Green" environment and provides substantial power savings
- High Performance LED Decorative Fixture



## SPECIFICATIONS

### CONSTRUCTION

- The decorative fitter shall be cast aluminum and accommodate the driver assembly in its entirety
- Fitters shall slip over a 3" OD x 3" H tenon. All fitters shall be secured by three or more stainless steel set screws
- IFS polyester powder-coat electrostatically applied and thermocured
- IFS finish consists of a five stage pretreatment regimen with a polymer primer sealer and top coated with a thermoset super TGIC polyester powder coat finish
- The finish meets the AAMA 605.2 performance specification which includes passing a 3000 hour salt spray test for corrosion resistance and resists cracking or loss of adhesion per ASTM D522 and resists surface impacts of up to 160 inch-pounds

### CONTROLS

- Available with Energeni for optional set dimming, timed dimming with simple delay, or timed dimming based on time of night
- Available with SiteSync™ wireless control system for reduction in energy and maintenance costs while optimizing light quality 24/7

### ELECTRICAL

- 100V through 277V, 50 Hz to 60 Hz (UNV)
- Power factor is  $\geq 0.90$  at full load
- One piece optical cartridge system consisting of an LED engine, optics, gasket and stainless steel bezel
- Cartridge is held together with internal brass standoffs soldered to the board so that it can be field replaced as a one piece optical system
- Silicone gasket ensures a weather-proof seal around each individual LED
- Fixture electrical compartment shall contain all LED driver components
- A Button Photocell is available for this fixture
- Rated ambient operating temperature -40°C to 40°C
- Surge protection -20KA
- Lifeshield™ Circuit - protects luminaire from excessive temperature. The device activates at a specific, factory-preset temperature, and progressively reduce power over a finite temperature range

### ELECTRICAL (CONTINUED)

- Operation shall be smooth and undetectable to the eye
- Thermal circuit is designed to "fail on", allowing the luminaire to revert to full power in the event of an interruption of its power supply, or faulty wiring connection to the drivers
- The device shall be able to co-exist with other 0-10V control devices (occupancy sensors, external dimmers, etc.)

### CERTIFICATIONS

- Listed to UL8750, UL1598 and CSA22.2#250.13-14 for wet locations

### WARRANTY

- 5 year warranty
- See [HLI Standard Warranty](#) for additional information

## ORDERING GUIDE

Example: 2A24-ACT-H3-24L-27-4K7-UNV-4-FIN-PEC-PT-BBT

CATALOG # \_\_\_\_\_

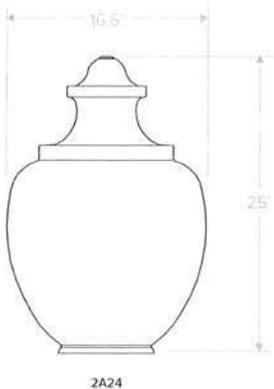
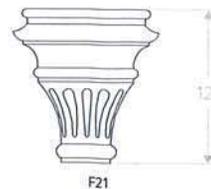
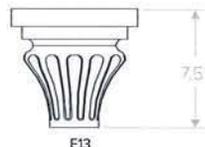
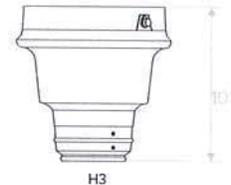
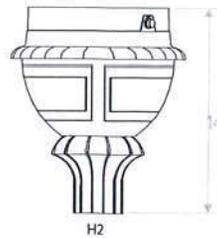
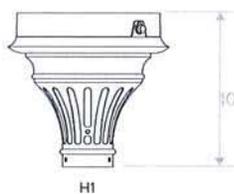
Series	Lens Options	Lens Finish	Fitter	Cage	Source	LED Color	Voltage
2A24 Acorn	A Acrylic P Polycarbonate	CT Clear Textured R3 Refractive Type III R5 Refractive Type V	H1 Mediterranean H2 London H3 Monaco F13 F13 F21 F21	C1 Mediterranean	24L-27 27 Watts - LED array 28L-32 32 Watts - LED array <sup>2</sup> 24L-55 55 Watts - LED array <sup>2</sup> 28L-65 65 Watts - LED array <sup>2</sup>	3K7 3000K, 70CRI 4K7 4000K, 70CRI 5K7 5000K, 70CRI	UNV 120-277V 347 347V 480 480V

Optics	Type Options	Control Options	Electrical Options	Mounting	Finish
2 Type 2 3 Type 3 4 Type 4 5 Type 5	FIN Finial BB Brass Band <sup>5</sup> PBB Painted Brass Band <sup>5</sup> BB/FIN Finial and Brass Band <sup>5</sup> PBB/FIN Finial and Painted Brass Band <sup>5</sup>	GE-NI-XX Energeni <sup>3</sup>	PEC-120 Button, 120V PEC-208 Button, 208V PEC-240 Button, 240V PEC-277 Button, 277V	PT Post Top	BLT Black Matte Textured BLS Black Gloss Smooth DBT Dark Bronze Matte Textured DBS Dark Bronze Gloss Smooth GTT Graphite Matte Textured LGS Light Grey Gloss Smooth PSS Platinum Silver Smooth WHT White Matte Textured WHS White Gloss Smooth VGT Verde Green Textured <b>Color Option</b> CC Custom Color

**Notes:**

- 1 For ACT and PCT only
- 2 AR3 and AR5 globes only
- 3 When ordering Energeni, specify the routine setting code (example GENI-04). See Energeni brochure and instructions for setting table and options. Not available with sensor option
- 4 H2 base only
- 5 For ACT only
- 6 Not available with "F" Series Fitters

## DIMENSIONS


**Fitters**


## USE OF TRADEMARKS AND TRADE NAMES

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<b>LRK-2V</b> <b>SERIES</b> TOWER LED RETROFIT KIT	Cat.#	Type	
	Job		

**SPECIFICATIONS**

**Intended Use:**  
The Beacon LRK-2V LED retrofit kit gives the site owner an economical way to upgrade to LED lighting. The product is available in a choice of different wattages designed to replace HID lighting up to 175W. The LED lamp arrangement is designed to be used in tandem with a refractive globe in the host fixture. These kits are considered custom products that may require additional information. Dimensions and pictures of the host fixture may need to be provided and in some cases, a physical sample may be required for analysis or processing. Kits are suitable for installation in luminaires rated for wet locations.

**Construction:**

- Four (4) LED arrays mounted on vertical heat sink. Heat sink shall be octagonal in shape, made of self interlocking, extruded aluminum sections with internal cooling fins.
- Aluminum mounting plate is engineered to order to fit the host fixture, and supports the heat sink and electrical gear.
- Electrical components including drivers shall be positioned below the mounting plate and concealed within the electrical compartment of the host fixture.

**Electrical:**

- 100V through 277V, 50 Hz to 60 Hz (UNV).
- Power factor is  $\geq .90$  at full load.
- Dimming drivers are standard, but must contact factory to request wiring leads for purpose of external dimming controls.

**Electrical (cont.)**

- Component-to-component wiring within the retrofit kit may carry no more than 80% of rated load and is certified by UL for use at 600VAC at 50°C or higher.
- Plug disconnects are certified by UL for use at 600 VAC, 13A or higher. 13A rating applies to primary (AC) side only
- Surge protection - 20kA.

**Controls/Options:**

- Available with Energeni for optional set dimming, timed dimming with simple delay, or timed dimming based on time of night (see [www.beaconproducts.com/products/energeni](http://www.beaconproducts.com/products/energeni)).

**Finish:**

- IFS polyester powder-coat electrostatically applied and thermocured.
- IFS finish consists of a five stage pretreatment regimen with a polymer primer sealer and top coated with a thermoset super TGIC polyester powder coat finish.
- The finish meets the AAMA 2604 performance specification which includes passing a 3000 hour salt spray test for corrosion resistance and resists cracking or loss of adhesion per ASTM D522 and resists surface impacts of up to 160 inch-pounds.

**Listings:**

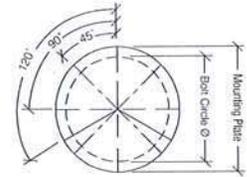
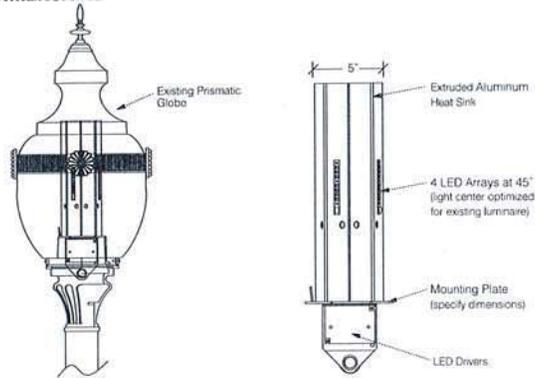
- CSA certified to CSA TIL B-97A and UL 1598C.

**Warranty:**  
Five year limited warranty. For more information visit: [www.hubbellighting.com/resources/warranty](http://www.hubbellighting.com/resources/warranty)

**PRODUCT IMAGE(S)**



**DIMENSIONS**



**Bolt Circle Plate**

The mounting plate facilitates a simplified conversion process of many of the existing globe style luminaires.

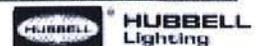
**CERTIFICATIONS/LISTINGS**



**ORDERING INFORMATION** ORDERING EXAMPLE: LRK-2V/32W/3K/UNV/3/120/8/1/6/10-24

<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<b>SERIES</b>	<b>CCT/CRI</b>	<b>VOLTAGE</b>	<b>NUMBER OF BOLTS</b>	<b>CONTROL OPTIONS</b>	<b>MOUNTING PLATE Ø</b>	<b>BOLT LENGTH</b>	<b>BOLT CIRCLE Ø</b>	<b>BOLT SIZE</b>	
LRK-2V Tower LED retrofit Kit	3K 3000K 4K 4000K 5K 5000K	UNV 120-277V	2 Two bolts 3 Three bolts 4 Four bolts	GENI-XX Energeni <sup>1</sup>	Specify	Specify	Specify	Specify	
	<b>LIGHT ENGINE</b>		<b>BOLT PATTERN</b>						
	32W 32W, LED 65W 65W, LED		45 45° Bolt Pattern 90 90° Bolt Pattern 120 120° Bolt Pattern 180 180° Bolt Pattern						

<sup>1</sup> When ordering Energeni, specify the routine setting code (example GENI-04). See Energeni brochure and instructions for setting table and options



# LRK-3D SERIES

DIRECT LED RETROFIT KIT

Cat.#	
Job	Type



Approvals

## SPECIFICATIONS

### Intended Use:

The Beacon LRK-3D LED retrofit kit gives the site owner an economical way to upgrade to LED lighting. The product is available in a choice of different wattages designed to replace HID lighting up to 175W. The LED lamp arrangement is designed to be used in tandem with a plain or textured globe in the host fixture. These kits are considered custom products that may require additional information. Dimensions and pictures of the host fixture may need to be provided and in some cases, a physical sample may be required for analysis or processing. Kits are suitable for installation in luminaires rated for wet locations.

### Construction:

- One piece optical cartridge system consisting of an LED engine, LED lamps, optics, gasket and stainless steel bezel.
- Cartridge is held together with internal brass standoffs soldered to the board so that it can be field replaced as a one piece optical system.
- Two-piece silicone and micro-cellular polyurethane foam gasket ensures a weather-proof seal around each individual LED.
- Aluminum mounting plate is engineered to order to fit the host fixture

### Electrical:

- 100V through 277V, 50 Hz to 60 Hz (UNV), or 347V or 480V input.
- Power factor is  $\geq .90$  at full load.
- Dimming drivers are standard, but must contact factory to request wiring leads for purpose of external dimming controls.
- Component-to-component wiring within the retrofit kit may carry no more than 80% of rated load and is listed by UL for use at 600VAC at 50°C or higher.
- Plug disconnects are listed by UL for use at 600 VAC, 13A or higher. 13A rating applies to primary (AC) side only
- Ambient operating temperature -25°C to 25°C
- Surge protection - 20kA.

### Electrical (cont.)

- Lifeshield™ Circuit - protects luminaire from excessive temperatures. The device shall activate at a specific, factory-preset temperature, and progressively reduce power over a finite temperature range. Operation shall be smooth and undetectable to the eye. Thermal circuit is designed to "fail on", allowing the luminaire to revert to full power in the event of an interruption of its power supply, or faulty wiring connection to the drivers. The device shall be able to co-exist with other 0-10V control devices (occupancy sensors, external dimmers, etc.).

### Controls/Options:

- Available with Energeni for optional set dimming, timed dimming with simple delay, or timed dimming based on time of night (see [www.beaconproducts.com/products/energeni](http://www.beaconproducts.com/products/energeni)).

### Finish:

- IFS polyester powder-coat electrostatically applied and thermocured.
- IFS finish consists of a five stage pretreatment regimen with a polymer primer sealer and top coated with a thermoset super TGIC polyester powder coat finish.
- The finish meets the AAMA 2604 performance specification which includes passing a 3000 hour salt spray test for corrosion resistance and resists cracking or loss of adhesion per ASTM D522 and resists surface impacts of up to 160 inch-pounds.

### Listings:

- CSA certified to CSA TIL B-97A and UL 1598C.

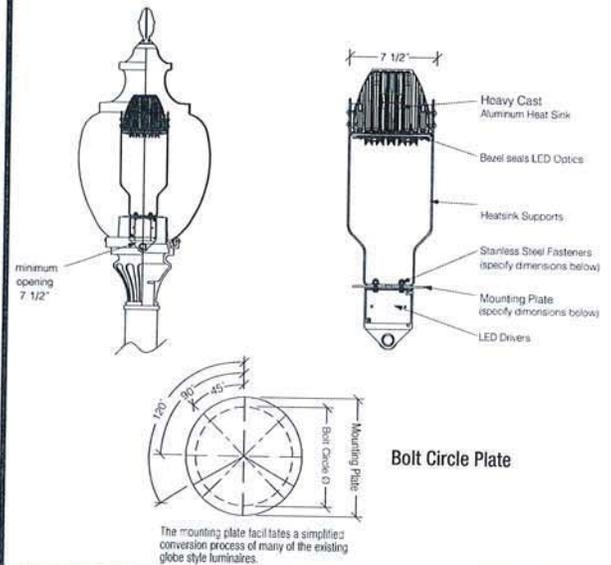
### Warranty:

Five year limited warranty. For more information visit: [www.hubbellighting.com/resources/warranty](http://www.hubbellighting.com/resources/warranty)

## PRODUCT IMAGE(S)



## DIMENSIONS



## CERTIFICATIONS/LISTINGS



## ORDERING INFORMATION

ORDERING EXAMPLE: LRK-3D/4K/T5R/UNV/3/45/10-24

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SERIES	CCT/CRI	VOLTAGE	NUMBER OF BOLTS	CONTROL OPTIONS	MOUNTING PLATE Ø	BOLT LENGTH	BOLT CIRCLE Ø	BOLT SIZE	
LRK-3D Tower LED retrofit Kit	3K 3000K 4K 4000K 5K 5000K	UNV 120-277V 347 347V 480 480V	2 Two bolts 3 Three bolts 4 Four bolts	GENI-XX Energeni <sup>1</sup>	Specify	Specify	Specify	Specify	
LIGHT ENGINE	OPTICS		BOLT PATTERN						
24NB-27 27W, LED 24NB-55 55W, LED	T2 Type II T3 Type III T4 Type IV T5R Type V Rectangular T5W Type V Round Wide	45 45° Bolt Pattern 90 90° Bolt Pattern 120 120° Bolt Pattern 180 180° Bolt Pattern Other (Specify)							

<sup>1</sup> When ordering Energeni, specify the routine setting code (example GENI-04). See Energeni brochure and instructions for setting table and options



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Due to our continued efforts to improve our products, product specifications are subject to change without notice.

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# MET30

METROPOLIS LUMINAIRE

## FEATURES

- High performance precision optics
- Three unique shade options
- Die cast aluminum two-piece housing with a polycarbonate lens
- 20kA surge protection standard



## CONTROL TECHNOLOGY



## SPECIFICATIONS

### CONSTRUCTION

- All cast aluminum parts are low copper alloy A356. All extruded aluminum parts are alloy 6061-T6, 6063-T5 or equal
- Fasteners are corrosion resistant. When tamper resistant fasteners are required, spanner HD (snake eye) style is provided (special tool required, available at additional cost)
- IFS polyester powder-coat electrostatically applied and thermocured
- IFS finish consists of a five stage pretreatment regimen with a polymer primer sealer and top coated with a thermoset super TGIC polyester powder coat finish
- The finish meets the AAMA 2604 performance specification which includes passing a 3000 hour salt spray test for corrosion resistance and resists cracking or loss of adhesion per ASTM D522 and resists surface impacts of up to 160 inch-pounds
- For Pendant Mounting, a 2CC coupling is needed. This would be included with the order for the arm

### ELECTRICAL

- Luminaire accepts 100V through 277V, or 347V or 480V input, 50 Hz to 60 Hz (UNV)
- Power factor is  $\geq .90$  at full load
- Dimming drivers are standard, but must contact factory to request wiring leads for purpose of external dimming controls
- Component-to-component wiring within the luminaire may carry no more than 80% of rated load and is listed by UL for use at 600 VAC at 50°C or higher
- Plug disconnects are listed by UL for use at 600 VAC, 13A or higher. 13A rating applies to primary (AC) side only
- Surge protection -20kA
- Operates normally in temperatures from -25°C to 40°C

### CONTROLS

- Available with Energeni for optional set dimming, timed dimming with simple delay, or timed dimming based on time of night
- Specified with SiteSync™ wireless control system for reduction in energy and maintenance cost while optimizing light quality 24/7
- **CERTIFICATIONS**
- The luminaire bears an NRTL label and be marked suitable for wet locations
- CSA labelled suitable for wet locations (standard)
- Listed to UL

### WARRANTY

- 5 year warranty
- See [HLI Standard Warranty](#) for additional information



### RELATED PRODUCTS

- Ø [Pierwalk](#)
- Ø [Urban](#)

KEY DATA	
Lumen Range	4,100–11,700
Wattage Range	27–136
Efficacy Range (LPW)	74–109
Reported Life (Hours)	L70>470,000
Weight lbs. (kg)	50 (22.68)

# MET30

METROPOLIS LUMINAIRE

DATE: \_\_\_\_\_ LOCATION: \_\_\_\_\_

TYPE: \_\_\_\_\_ PROJECT: \_\_\_\_\_

CATALOG #: \_\_\_\_\_

## ORDERING GUIDE

Example: MET30-PC-24L-27-3K7-UNV-FR-SHA-GENI-04-PEC-120-BLT

 CATALOG # 

MET30		Lens Option		Engine-Watts		CCT/CRI		Voltage		Optics	
<b>Series</b>		<b>PC</b>	Polycarbonate, Clear	<b>24L-27</b>	27 Watts - LED array	<b>3K7</b>	3000K, 70 CRI	<b>UNV</b>	120-277V	<b>FR</b>	Type I
MET30	Metropolis 30 <sup>®</sup>	<b>NL</b>	No lens	<b>24L-55</b>	55 Watts - LED array	<b>4K7</b>	4000K, 70 CRI	<b>347</b>	347V	<b>2</b>	Type II
				<b>36L-80</b>	80 Watts - LED array	<b>5K7</b>	5000K, 70 CRI	<b>480</b>	480V	<b>3</b>	Type III
				<b>48L-110</b>	110 Watts - LED array					<b>4</b>	Type IV
				<b>60L-136</b>	136 Watts - LED array					<b>4W</b>	Type IV, Wide
										<b>5R</b>	Type V, Rectangular
										<b>SQM</b>	Type V, Square medium
										<b>5W</b>	Type V, Round wide

Style Options		Control Options		Electrical Options		Color	
<b>SHA</b>	Spun aluminum shade	<b>GENI-XX</b>	Energeni <sup>1</sup>	<b>PEC-120</b>	Button, 120V	<b>BLT</b>	Black Matte Textured
<b>DPF</b>	Decorative finial for twist-lock photocell	<b>SWP</b>	SiteSync Wireless Pre-Commission <sup>2,3</sup>	<b>PEC-208</b>	Button, 208V	<b>BLS</b>	Black Gloss Smooth
<b>DEF</b>	Decorative finial			<b>PEC-240</b>	Button, 240V	<b>DBT</b>	Dark Bronze Matte Textured
				<b>PEC-277</b>	Button, 277V	<b>DBS</b>	Dark Bronze Gloss Smooth
						<b>GTT</b>	Graphite Matte Textured
						<b>LGS</b>	Light Grey Gloss Smooth
						<b>PSS</b>	Platinum Silver Smooth
						<b>WHT</b>	White Matte Textured
						<b>WHS</b>	White Gloss Smooth
						<b>VGT</b>	Verde Green Texture
						<b>Color Option</b>	
						<b>CC</b>	Custom color

### Notes

- When ordering Energeni, specify the routine setting code (example GENI-04). See Energeni brochure and instructions for setting table and options. Not available with sensor options
- Must specify group and zone information at time or order. See [www.hubbell-automation.com/products/sitesync/](http://www.hubbell-automation.com/products/sitesync/) for further details
- Not available with other control or sensor options

### Accessories

- SWUSB<sup>\*</sup>** SiteSync interface software loaded on USB flash drive for use with owner supplied PC (Windows based only). Includes SiteSync license, software and USB radio bridge node<sup>†</sup>
- SWTAB<sup>\*</sup>** Windows tablet and SiteSync interface software. Includes tablet with preloaded software, SiteSync license and USB radio bridge node<sup>†</sup>
- SWBRG<sup>\*</sup>** SiteSync USB radio bridge node only. Order if a replacement is required or if an extra bridge node is requested<sup>‡</sup>

<sup>\*</sup> When ordering with SiteSync, either the SWTAB or the SWUSB option must be chosen and ordered separately. Each option contains the SiteSync License, GUI and Bridge Node

<sup>†</sup> If needed, an additional Bridge Node can be ordered



# MET30

METROPOLIS LUMINAIRE

DATE: \_\_\_\_\_ LOCATION: \_\_\_\_\_  
 TYPE: \_\_\_\_\_ PROJECT: \_\_\_\_\_  
 CATALOG #: \_\_\_\_\_

## CONTROLS

### SiteSync – Precommissioned Ordering Information:

When ordering a fixture with the SiteSync lighting control option, additional information will be required to complete the order. The SiteSync Commissioning Form or alternate schedule information must be completed. This form includes Project location, Group information, and Operating schedules. For more detailed information please visit [the SiteSync family page on our website](#) or contact Hubbell Lighting tech support at 864.678.1000.



SiteSync

Examples: MET30-24L-55-4K7-5W-UNV-SWP-WHT

## PERFORMANCE DATA

### MET30 PC LENS

# LED'S	Drive Current	System Watts	Distribution Type	5K (5000K nominal, 70CRI)					4K (4000K nominal, 70CRI)					3K (3000K nominal, 70CRI)				
				Lumens	LPW <sup>1</sup>	B	U	G	Lumens	LPW <sup>1</sup>	B	U	G	Lumens	LPW <sup>1</sup>	B	U	G
24	700mA	55	2	4570	83	1	2	1	4663	85	1	2	1	4150	74	1	2	1
			3	5071	92	1	1	2	5175	94	1	1	2	4605	84	1	1	2
			4	4667	85	1	2	2	4763	87	1	2	2	4239	77	1	2	1
			5W	4806	87	3	2	1	4904	89	3	2	1	4365	79	3	2	1
36	700mA	80	2	6854	83	2	2	2	6994	85	2	2	2	6225	78	2	2	2
			3	7607	92	2	1	3	7762	94	2	1	3	6908	86	2	1	3
			4	7001	85	1	2	2	7144	86	1	2	2	6358	79	1	2	2
			5W	7209	87	3	2	2	7356	89	3	2	2	6547	82	3	2	1
48	700mA	110	2	9139	83	2	3	2	9326	85	2	3	2	8300	75	2	3	2
			3	10142	92	2	1	3	10349	94	2	1	3	9211	84	2	1	3
			4	9335	85	1	2	2	9525	86	1	2	2	8478	77	1	2	2
			5W	9612	87	4	2	2	9808	89	4	2	2	8729	79	3	2	2
60	700mA	136	2	11424	83	2	3	3	11657	85	2	3	3	10375	75	2	3	2
			3	12678	82	3	1	3	12937	94	3	1	3	11514	84	2	1	3
			4	11669	85	2	2	3	11907	87	2	3	3	10597	77	1	2	2
			5W	12138	88	4	3	2	12607	89	4	3	2	10912	79	4	3	2

<sup>1</sup> Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown. Actual performance may differ as a result of end-user environment and application

# MET30

METROPOLIS LUMINAIRE

DATE: \_\_\_\_\_ LOCATION: \_\_\_\_\_

TYPE: \_\_\_\_\_ PROJECT: \_\_\_\_\_

CATALOG #: \_\_\_\_\_

## PERFORMANCE DATA (CONTINUED)

### MET30 NO LENS

# LED'S	Drive Current	System Watts	Distribution Type	5K (5000K nominal, 70CRI)					4K (4000K nominal, 70CRI)					3K (3000K nominal, 70CRI)				
				Lumens	LPW <sup>1</sup>	B	U	G	Lumens	LPW <sup>1</sup>	B	U	G	Lumens	LPW <sup>1</sup>	B	U	G
24	700mA	55	2	5368	98	1	2	2	5422	99	1	2	2	4455	81	1	2	1
			3	5958	108	1	1	2	6017	109	1	1	2	4945	90	1	1	2
			4	5483	100	1	2	2	5538	101	1	2	2	4551	83	1	2	2
			5W	5646	103	3	2	1	5703	104	3	2	1	4686	85	3	2	1
36	700mA	80	2	8052	97	2	3	2	8132	98	2	3	2	7852	95	2	0	3
			3	8936	108	2	1	3	9026	109	2	1	3	7772	94	2	0	3
			4	8225	99	1	2	2	8307	100	1	2	2	8552	103	1	0	3
			5W	8469	102	3	2	2	8554	103	3	2	2	8435	102	3	0	2
48	700mA	110	2	10736	97	2	3	2	10843	98	2	3	2	8911	81	2	3	2
			3	11915	108	2	1	3	12034	109	2	1	3	9890	90	2	1	3
			4	10966	99	2	2	3	11076	100	2	2	3	9102	82	1	2	2
			5W	11292	102	4	3	2	11405	103	4	3	2	9372	85	3	2	2
60	700mA	136	2	13420	97	3	3	3	13554	98	3	3	3	11139	81	2	3	2
			3	14874	108	3	1	4	15043	109	3	1	4	12362	90	2	1	3
			4	13708	100	2	3	3	13845	101	2	3	3	11378	83	2	2	3
			5W	14115	102	4	3	2	14257	103	4	3	2	11716	85	4	3	2

<sup>1</sup> Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown. Actual performance may differ as a result of end-user environment and application.

# MET30

METROPOLIS LUMINAIRE

DATE: \_\_\_\_\_ LOCATION: \_\_\_\_\_

TYPE: \_\_\_\_\_ PROJECT: \_\_\_\_\_

CATALOG #: \_\_\_\_\_

## ELECTRICAL DATA

# of LEDs	Number of Drivers	Drive Current	Input Voltage (V)	System Power (Watts)	Current(A)
24	2	700 mA	120	55	0.55
			277		0.24
			347		0.19
			480		0.14
36	1	700 mA	120	80	0.80
			277		0.35
			347		0.28
			480		0.20
48	1	700 mA	120	110	1.10
			277		0.48
			347		0.38
			480		0.28
60	1	700 mA	120	136	1.36
			277		0.59
			347		0.47
			480		0.34

## LUMINAIRE AMBIENT TEMPERATURE FACTOR (LATF)

Ambient Temperature		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	0.98
40°C	104°F	0.98

Use these factors to determine relative lumen output for average ambient temperatures from 0-50°C (32-122°F)

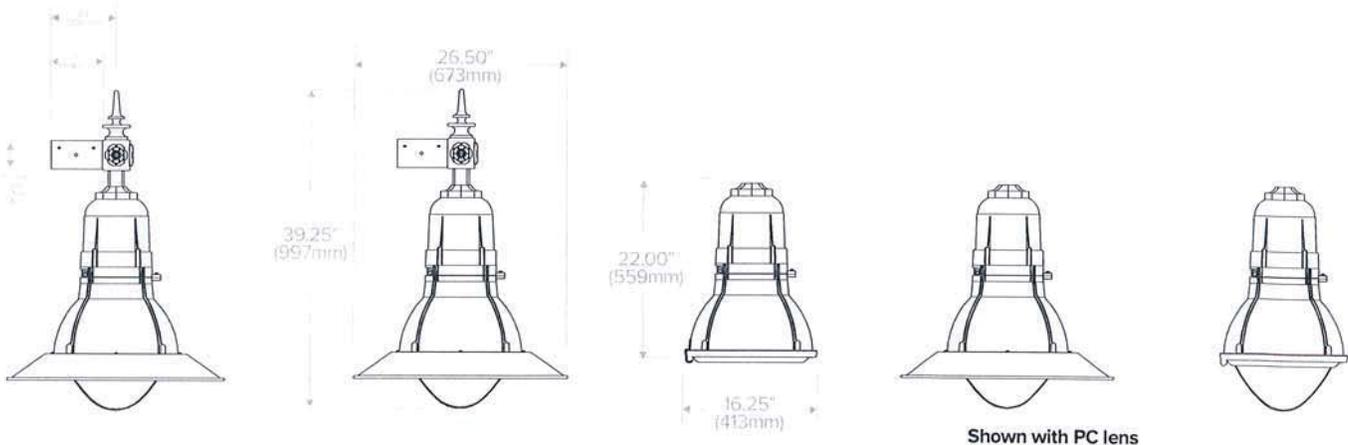
## PROJECTED LUMEN MAINTENANCE

Ambient Temp.	0	25,000	50,000	TM-21-11 60,000 <sup>1</sup>	100,000	Calculated L70 (Hours)
25°C / 77°C	1.00	0.97	0.95	0.95	0.92	>470,000

<sup>1</sup> Projected per IESNA TM-21-11

Data references the extrapolated performance projections for the base model in a 40°C ambient, based on 10,000 hours of LED testing per IESNA LM-80-08

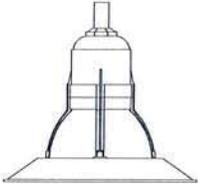
## DIMENSIONS



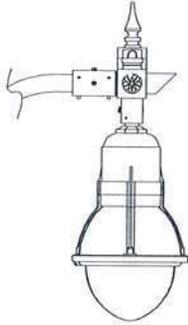
Shown with PC lens

**ADDITIONAL INFORMATION**

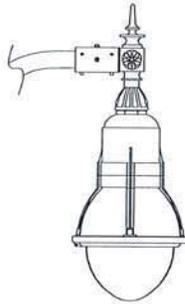
**STYLE OPTIONS**



Spun Aluminum Shade (SHA)



Decorative Finial for  
Twistlock photocell (DPF)



Decorative Finial (DEF)

# HADCO

by  Signify

Urban

Teardrop

TXF9 Pendant



Replaces Cyclone Fixture: CO12P1UF-DP3AR-GAL-3-80W-4K-120-ADH-F7AP-RA1900STX

Project: \_\_\_\_\_  
 Location: \_\_\_\_\_  
 Cat.No: \_\_\_\_\_  
 Type: \_\_\_\_\_  
 Lamp: \_\_\_\_\_ Qty: \_\_\_\_\_  
 Notes: \_\_\_\_\_

Hadco's Teardrop LED pendant seamlessly replaces HID technology while maintaining that traditional "teardrop" look. The Teardrop uses latest LED technology which maximizes energy savings and lowered maintenance cost to reduce your total cost of ownership. By combining modern LED technology and traditional design, the Teardrop LED luminaires are perfectly suited for several applications including residential streets, city streets, campuses, parking lots and retail centers.

**Ordering guide**

example: TXF948G2NAGF2WA5DDASTNNSPIH

Series	LEDs	Gen.	Mountings	Finishes	Lenses	Optics
<input type="checkbox"/> TXF9	<input type="checkbox"/>	<input type="checkbox"/> G2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TXF9 Teardrop LED pendant	32 32 <sup>3</sup> 48 48 64 64 80 80 <sup>1</sup>	G2 Gen2	N Cast Neck P Threaded Pipe	A Black B White G Verde H Bronze J Green	GF Flat Glass KL Acrylic Long Globe	2 Type II 3 Type III 4 Type IV 5 Type V

**Ordering guide continued**

Color Temps	Voltages	Currents	Optional dimming <sup>2</sup>	Optional programs			Surge protection	Options
				1st option <sup>2</sup>	2nd option <sup>2</sup>	3rd option <sup>2</sup>		
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
W 3000K N 4000K	A 120-277 VAC B 347-480 VAC <sup>2,3</sup>	3 350mA 5 530 mA 7 700mA <sup>1</sup>	DA 4hrs 25% reduction DB 4hrs 50% reduction DC 4hrs 75% reduction DD 6hrs 25% reduction DE 6hrs 50% reduction DF 6hrs 75% reduction DG 8hrs 25% reduction DH 8hrs 50% reduction DJ 8hrs 75% reduction DALI Compatible with DALI N No dimming	AST Adjustable Start Up N No 1st option	CLO Constant Light Output N No 2nd option	OTL Over The Life N No 3rd option	SP1 10kV/10kA (standard) SP2 20kV/20kA (optional)	H HSS N No options

- Configurations with 80 (80) LED array board are not compatible with the 700mA (7) drive current (consult factory for this option as a custom solution).
- Configurations with 347-480VAC (B) voltage are not compatible with optional dimming or optional programming.
- Configurations with 32 (32) LEDs at 350mA (3) and 530mA (5) currents are not compatible with 347-480 VAC (B) voltage.

# TXF9 Teardrop

## Pendant

### Lumen Charts

LED Module: N - 4000K	LED qty	System current	Color Temp.	Avg. System Watts*	Type 2			Type 3			Type 4			Type 5		
					Lumen Output	BUG Rating	Efficacy									
TXF932-G2-KLN3-16	32	350mA	4000K	35	5006	B1-U2-G1	141	4958	B1-U2-G1	140	4971	B1-U2-G2	140	4880	B3-U2-G1	138
TXF932-G2-KLN5-16	32	530mA	4000K	52	7095	B2-U3-G2	137	7028	B2-U3-G2	136	7046	B1-U2-G2	136	6917	B3-U2-G2	134
TXF932-G2-KLN7-16	32	700mA	4000K	71	9243	B2-U3-G2	130	9155	B2-U3-G2	129	9179	B2-U3-G2	129	9011	B4-U2-G2	127
TXF948-G2-KLN3-16	48	350mA	4000K	51	7439	B2-U3-G2	145	7368	B2-U3-G2	143	7387	B2-U3-G2	144	7252	B3-U2-G2	141
TXF948-G2-KLN5-16	48	530mA	4000K	76	10500	B2-U3-G2	139	10400	B2-U3-G2	138	10427	B2-U3-G2	138	10236	B4-U3-G2	136
TXF948-G2-KLN7-16	48	700mA	4000K	104	13646	B3-U3-G3	132	13516	B3-U3-G3	130	13551	B2-U3-G3	131	13303	B4-U3-G2	128
TXF964-G2-KLN3-16	64	350mA	4000K	70	9931	B2-U3-G2	142	9705	B2-U3-G2	139	9645	B2-U3-G2	138	9563	B4-U3-G2	137
TXF964-G2-KLN5-16	64	530mA	4000K	105	14635	B3-U3-G3	139	14302	B3-U3-G3	136	14214	B2-U3-G3	135	14093	B4-U3-G2	134
TXF964-G2-KLN7-16	64	700mA	4000K	137	18134	B3-U3-G3	132	17722	B3-U3-G3	129	17613	B3-U3-G3	128	17463	B5-U3-G3	127
TXF980-G2-KLN3-16	80	350mA	4000K	86	12211	B2-U3-G2	142	11933	B2-U3-G2	139	11860	B2-U3-G2	138	11759	B4-U3-G2	137
TXF980-G2-KLN5-16	80	530mA	4000K	130	17881	B3-U3-G3	138	17474	B3-U3-G3	134	17364	B3-U3-G3	134	17219	B5-U3-G3	132

LED Module: N - 4000K - w_HSS					Type 2			Type 3			Type 4		
LED qty	System current	Color Temp.	Avg. System Watts*	Lumen Output	BUG Rating	Efficacy	Lumen Output	BUG Rating	Efficacy	Lumen Output	BUG Rating	Efficacy	
TXF932-G2-KLN3-16	32	350mA	4000K	35	4179	B1-U2-G1	118	4155	B1-U2-G1	117	4093	B1-U2-G1	116
TXF932-G2-KLN5-16	32	530mA	4000K	52	5923	B1-U2-G1	114	5889	B1-U2-G1	114	5802	B1-U2-G2	112
TXF932-G2-KLN7-16	32	700mA	4000K	71	7716	B1-U3-G2	108	7672	B1-U3-G2	108	7558	B1-U3-G2	106
TXF948-G2-KLN3-16	48	350mA	4000K	51	6210	B1-U2-G1	121	6175	B1-U2-G2	120	6083	B1-U2-G2	118
TXF948-G2-KLN5-16	48	530mA	4000K	76	8765	B2-U3-G2	116	8716	B1-U3-G2	115	8586	B2-U3-G2	114
TXF948-G2-KLN7-16	48	700mA	4000K	104	11391	B2-U3-G2	110	11327	B2-U3-G2	109	11158	B2-U3-G2	108
TXF964-G2-KLN3-16	64	350mA	4000K	70	8189	B1-U3-G2	117	8142	B1-U3-G2	117	8021	B1-U3-G2	115
TXF964-G2-KLN5-16	64	530mA	4000K	105	12067	B2-U3-G2	115	11999	B2-U3-G2	114	11820	B2-U3-G2	112
TXF964-G2-KLN7-16	64	700mA	4000K	137	14953	B2-U3-G2	109	14869	B2-U3-G2	108	14647	B2-U3-G3	107
TXF980-G2-KLN3-16	80	350mA	4000K	86	10069	B2-U3-G2	117	10012	B2-U3-G2	117	9863	B2-U3-G2	115
TXF980-G2-KLN5-16	80	530mA	4000K	130	14744	B2-U3-G2	113	14661	B2-U3-G2	113	14442	B2-U3-G3	111

LED Module: N - 3000K	LED qty	System current	Color Temp.	Avg. System Watts*	Type 2			Type 3			Type 4			Type 5		
					Lumen Output	BUG Rating	Efficacy									
TXF932-G2-KLW3-16	32	350mA	3000K	35	4390	B1-U2-G1	124	4348	B1-U2-G1	123	4359	B1-U2-G1	123	4380	B3-U2-G1	124
TXF932-G2-KLW5-16	32	530mA	3000K	52	6222	B2-U2-G2	120	6163	B1-U2-G2	119	6179	B1-U2-G2	119	6066	B3-U2-G2	117
TXF932-G2-KLW7-16	32	700mA	3000K	71	8106	B2-U3-G2	114	8028	B2-U3-G2	113	8049	B2-U3-G2	113	7902	B4-U2-G2	111
TXF948-G2-KLW3-16	48	350mA	3000K	51	6523	B2-U2-G2	127	6461	B2-U2-G2	126	6478	B1-U2-G2	126	6360	B3-U2-G2	124
TXF948-G2-KLW5-16	48	530mA	3000K	76	9208	B2-U3-G2	122	9120	B2-U3-G2	121	9143	B2-U3-G2	121	8976	B4-U2-G2	119
TXF948-G2-KLW7-16	48	700mA	3000K	104	11967	B2-U3-G2	115	11852	B2-U3-G2	114	11883	B2-U3-G2	115	11665	B4-U3-G2	112
TXF964-G2-KLW3-16	64	350mA	3000K	70	8708	B2-U3-G2	125	8510	B2-U3-G2	122	8458	B2-U3-G2	121	8386	B4-U2-G2	120
TXF964-G2-KLW5-16	64	530mA	3000K	105	12833	B3-U3-G3	122	12541	B2-U3-G2	119	12464	B2-U3-G2	118	12359	B4-U3-G2	117
TXF964-G2-KLW7-16	64	700mA	3000K	137	15902	B3-U3-G3	116	15541	B3-U3-G3	113	15445	B3-U3-G3	113	15314	B4-U3-G2	112
TXF980-G2-KLW3-16	80	350mA	3000K	86	10708	B2-U3-G2	125	10465	B2-U3-G2	122	10400	B2-U3-G2	121	10311	B4-U3-G2	120
TXF980-G2-KLW5-16	80	530mA	3000K	130	15680	B3-U3-G3	121	15323	B3-U3-G3	118	15227	B3-U3-G3	117	15100	B4-U3-G2	116

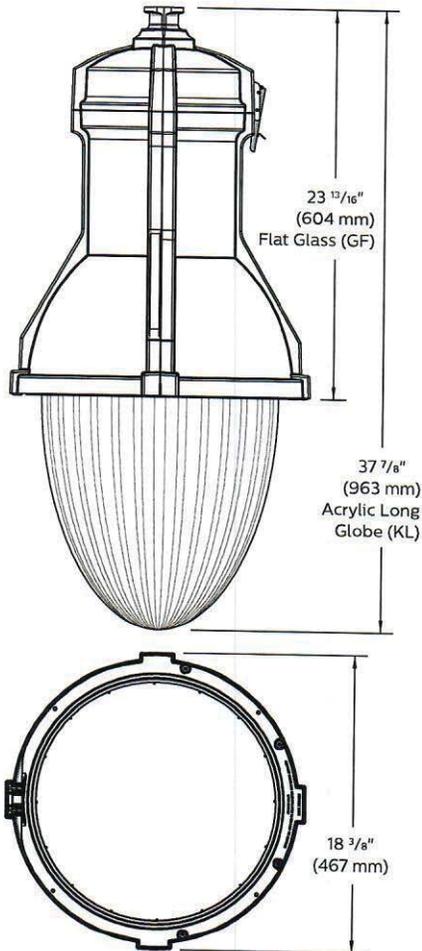
LED Module: N - 3000K - w_HSS					Type 2			Type 3			Type 4		
LED qty	System current	Color Temp.	Avg. System Watts*	Lumen Output	BUG Rating	Efficacy	Lumen Output	BUG Rating	Efficacy	Lumen Output	BUG Rating	Efficacy	
TXF932-G2-KLW3-16	32	350mA	3000K	35	3664	B1-U2-G1	104	3644	B1-U2-G1	103	3589	B1-U2-G1	101
TXF932-G2-KLW5-16	32	530mA	3000K	52	5194	B1-U2-G1	100	5165	B1-U2-G1	100	5088	B1-U2-G2	98
TXF932-G2-KLW7-16	32	700mA	3000K	71	6766	B1-U3-G1	95	6728	B1-U3-G2	94	6628	B1-U2-G2	93
TXF948-G2-KLW3-16	48	350mA	3000K	51	5445	B1-U2-G1	106	5415	B1-U2-G1	105	5334	B1-U2-G2	104
TXF948-G2-KLW5-16	48	530mA	3000K	76	7686	B1-U3-G2	102	7643	B1-U3-G2	101	7529	B1-U3-G2	100
TXF948-G2-KLW7-16	48	700mA	3000K	104	9989	B2-U3-G2	96	9933	B2-U3-G2	96	9785	B2-U3-G2	94
TXF964-G2-KLW3-16	64	350mA	3000K	70	7181	B1-U3-G1	103	7140	B1-U3-G2	102	7034	B1-U3-G2	101
TXF964-G2-KLW5-16	64	530mA	3000K	105	10582	B2-U3-G2	101	10523	B2-U3-G2	100	10366	B2-U3-G2	99
TXF964-G2-KLW7-16	64	700mA	3000K	137	13113	B2-U3-G2	96	13039	B2-U3-G2	95	12844	B2-U3-G2	94
TXF980-G2-KLW3-16	80	350mA	3000K	86	8830	B2-U3-G2	103	8780	B1-U3-G2	102	8649	B2-U3-G2	101
TXF980-G2-KLW5-16	80	530mA	3000K	130	12930	B2-U3-G2	99	12857	B2-U3-G2	99	12665	B2-U3-G2	97

\* System wattage or total luminaire wattage includes the LED module and the LED driver.  
 Note: Equivalence should always be confirmed by a photometric layout.

Due to rapid and continuous advances in LED technology, LED luminaire data is subject to change without notice and at the discretion of Hadco.

# TXF9 Teardrop Pendant

## Dimensions



### Flat glass

**Height:** 23 13/16" (60cm)  
**Width:** 18 3/8" (47cm)  
**Max. EPA:** 2.00 sq. ft.  
**Max. Weight:** 25 lbs

### Acrylic long globe

**Height:** 37 7/8" (96cm)  
**Width:** 18 3/8" (46cm)  
**Max. EPA:** 2.60 sq. ft.  
**Max. Weight:** 32 lbs

## Housing

The housing is constructed of low copper die-cast aluminum. All non-ferrous fasteners prevent corrosion and ensure longer life. The Cast neck or Pipe Threading mounting options and Flat Glass or Long Acrylic Lens options provide versatility in your designs.

## Mounting

Cast Neck option (N) for use with clamp collar, or Threaded Pipe option (P) 1-1/2-11.5 NPT pipe nipple for mounting to arm.

## Light Engine

LEDgine is composed of five main components: Heat Sink, Lens, LED lamp, Optical System, and Driver. Electrical components are RoHS compliant.

## LED Module

LED type Philips Lumileds LUXEON T. Composed of high-performance white LEDs. Color temperature as per ANSI/NEMA bin Neutral White, 4000 Kelvin nominal (3985K +/- 275K or 3710K to 4260K) or Warm White, 3000 Kelvin nominal (3045K +/- 175K or 2870K to 3220K), CRI 70 Min. 75 Typical.

## Heat Sink

Made of cast aluminum optimizing the LEDs efficiency and life. Product does not use any cooling device with moving parts (only passive cooling device).

## Optical System

Type II, Type III, Type IV and Type V are composed of high performance optical grade PMMA acrylic refractor lenses to achieve desired distribution optimized to get maximum spacing, target lumens and a superior lighting uniformity. Optical system is rated IP66. Performance shall be tested per LM 63, LM 79 and TM 15 (IESNA) certifying its photometric performance. Street side indicated.

## Driver

Driver comes standard with dimming compatible 0-10V. High power factor of 95%. Electronic driver, operating range 50/60 Hz. Auto adjusting universal voltage input from 120 to 277 VAC rated for both application line to line or line to neutral, Class I, THD of 20% max. Maximum ambient operating temperature from 40°F (4°C) to 130°F (55°C). Certified in compliance to UL1310 cULus requirement (dry and damp location). Assembled on a unitized removable tray with Tyco quick disconnect plug resisting to 221°F (105°C). The current supplying the LEDs will be reduced by the driver if the driver experiences internal overheating as a protection to the LEDs and the electrical components. Output is protected from short circuits, voltage overload and current overload. Automatic recovery after correction. Standard built in driver surge protection of 2.5kV (min).

## Driver Options

**AST:** Pre-set driver for progressive start-up of the LED module(s) to optimize energy management and enhance visual comfort at start-up.

**CLO:** Pre-set driver to manage the lumen depreciation by adjusting the power given to the LEDs offering the same lighting intensity during the entire lifespan of the LED module.

**OTL:** Pre-set driver to signal end of life of the LED module(s) for better fixture management.

## Dimming Options

**DA:** 4 Hrs 25% Reduction

**DB:** 4 Hrs 50% Reduction

**DC:** 4 Hrs 75% Reduction

**DD:** 6 Hrs 25% Reduction

**DE:** 6 Hrs 50% Reduction

**DF:** 6 Hrs 75% Reduction

**DG:** 8 Hrs 25% Reduction

**DH:** 8 Hrs 50% Reduction

**DJ:** 8 Hrs 75% Reduction

**DALI:** Pre-set driver compatible with the DALI logarithmic control system.

## Surge Protection

Surge protector tested in accordance with ANSI/IEEE C62.45 per ANSI/IEEE C62.41.2 Scenario I Category C High Exposure 10kV/10kA waveforms for Line Ground, Line Neutral and Neutral Ground, and in accordance with U.S. DOE (Department of Energy) MSSSLC (Municipal Solid State Street Lighting Consortium) model specification for LED roadway luminaires electrical immunity requirements for High Test Level 10kV / 10kA. Option for SP2 20kV/20kA

## Finish

Color in accordance with the AAMA 2603 standard. Application of polyester powder coat paint (4 mils/100 microns) with ± 1 mils / 24 microns of tolerance. The Thermosetting resins provides a discoloration resistant finish in accordance with the ASTM D2244 standard, as well as luster retention in keeping with the ASTM D523 standard and humidity proof in accordance with the ASTM D2247 standard. The surface treatment achieves a minimum of 2000 hours for salt spray resistant finish in accordance with testing performed and per ASTM B117 standard.

# TXF9 Teardrop

## Pendant

### Luminaire Useful Life

Refer to IES files for energy consumption and delivered lumens for each option. Based on ISTMT in situ thermal testing in accordance with UL1598 and UL8750, using LM-80 data from LED manufacturers and engineering prediction methods, the luminaire useful life is expected to reach 100,000+ hours with >L70 lumen maintenance @ 25°C. (48 LED and 64 LED@700mA is 82,000) Luminaire useful life accounts for LED lumen maintenance and additional factors, including LED life, driver life, PCB substrate, solder joints on/off cycles and burning hours for nominal applications.

### LED products manufacturing standard

The electronic components sensitive to electrostatic discharge (ESD) such as light emitting diodes (LEDs) are assembled in compliance with IEC61340 5 1 and ANSI/ESD S20.20 standards so as to eliminate ESD events that could decrease the useful life of the product

### Quality Control

The manufacturer must provide a written confirmation of its ISO 9001 2008 and ISO 14001 2004 International Quality Standards Certification.

### Vibration Resistance

Threaded Pipe option - Meets the ANSI C136.31 2001, American National Standard for Roadway Luminaire Vibration specifications for normal Applications.

### Certifications and Compliance

cETL listed to Canadian safety standards for wet locations. Manufactured to ISO 9001:2008 Standards. UL8750 and UL1598 compliant. ETL listed to U.S. safety standards for wet locations. cETL listed to Canadian safety standards for wet locations. LM80 & LM79 tested.

**IP Rating:** The LED optics chamber is IP66 rated. The LED driver is IP66 rated.

**Warranty:** 5 year extended warranty.

### LED Performance

Predicted lumen depreciation data <sup>1</sup>				
Ambient Temperature (°C)	Driver mA	Calculated L <sub>70</sub> hours <sup>1,2</sup>	L <sub>70</sub> per TM-21 <sup>2,3</sup>	Lumen Maintenance % @ 60,000 hours
25°C	up to 700 mA	>100,000	>60,000	87%

1. Predicted performance derived from LED manufacturer's data and engineering design estimates, based on IESNA LM-80 methodology. Actual experience may vary due to field application conditions.
2. L<sub>70</sub> is the predicted time when LED performance depreciates to 70% of initial lumen output.
3. Calculated per IESNA TM21-11. Published L<sub>70</sub> hours limited to 6 times actual LED test hours.



# HADCO

by  Signify

Urban

Teardrop

TXF9 Pendant



Replaces Cyclone Fixture: CO12P1UF-DP3AR-GAL-3-80W-4K-120-ADH-F7AP-RA1900STX

Project: \_\_\_\_\_  
 Location: \_\_\_\_\_  
 Cat. No.: \_\_\_\_\_  
 Type: \_\_\_\_\_  
 Lamp: \_\_\_\_\_ Qty: \_\_\_\_\_  
 Notes: \_\_\_\_\_

Hadco's Teardrop LED pendant seamlessly replaces HID technology while maintaining that traditional "teardrop" look. The Teardrop uses latest LED technology which maximizes energy savings and lowered maintenance cost to reduce your total cost of ownership. By combining modern LED technology and traditional design, the Teardrop LED luminaires are perfectly suited for several applications including residential streets, city streets, campuses, parking lots and retail centers.

**Ordering guide**

example: TXF948G2NAGF2WA5DDASTNNSPIH

Series	LEDs	Gen.	Mountings	Finishes	Lenses	Optics
<input type="checkbox"/> TXF9	<input type="checkbox"/>	<input type="checkbox"/> G2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TXF9 Teardrop LED pendant	32 32 <sup>3</sup> 48 48 64 64 80 80 <sup>1</sup>	G2 Gen2	N Cast Neck P Threaded Pipe	A Black B White G Verde H Bronze J Green	GF Flat Glass KL Acrylic Long Globe	2 Type II 3 Type III 4 Type IV 5 Type V

**Ordering guide continued**

Color Temps	Voltages	Currents	Optional dimming <sup>2</sup>	Optional programs			Surge protection	Options
				1st option <sup>2</sup>	2nd option <sup>2</sup>	3rd option <sup>2</sup>		
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
W 3000K N 4000K	A 120-277 VAC B 347-480 VAC <sup>2,3</sup>	3 350mA 5 530 mA 7 700mA <sup>1</sup>	DA 4hrs 25% reduction DB 4hrs 50% reduction DC 4hrs 75% reduction DD 6hrs 25% reduction DE 6hrs 50% reduction DF 6hrs 75% reduction DG 8hrs 25% reduction DH 8hrs 50% reduction DJ 8hrs 75% reduction DALI Compatible with DALI N No dimming	AST Adjustable Start Up N No 1st option	CLO Constant Light Output N No 2nd option	OTL Over The Life N No 3rd option	SP1 10kV/10kA (standard) SP2 20kV/20kA (optional)	H HSS N No options

1. Configurations with 80 (80) LED array board are not compatible with the 700mA (7) drive current (consult factory for this option as a custom solution).
2. Configurations with 347-480VAC (B) voltage are not compatible with optional dimming or optional programming.
3. Configurations with 32 (32) LEDs at 350mA (3) and 530mA (5) currents are not compatible with 347-480 VAC (B) voltage.

# TXF9 Teardrop

## Pendant

### Lumen Charts

LED Module: N - 4000K	LED qty	System current	Color Temp.	Avg. System Watts*	Type 2			Type 3			Type 4			Type 5		
					Lumen Output	BUG Rating	Efficacy									
TXF932-G2-KLN3-16	32	350mA	4000K	35	5006	B1-U2-G1	141	4958	B1-U2-G1	140	4971	B1-U2-G2	140	4880	B3-U2-G1	138
TXF932-G2-KLN5-16	32	530mA	4000K	52	7095	B2-U3-G2	137	7028	B2-U3-G2	136	7046	B1-U2-G2	136	6917	B3-U2-G2	134
TXF932-G2-KLN7-16	32	700mA	4000K	71	9243	B2-U3-G2	130	9155	B2-U3-G2	129	9179	B2-U3-G2	129	9011	B4-U2-G2	127
TXF948-G2-KLN3-16	48	350mA	4000K	51	7439	B2-U3-G2	145	7368	B2-U3-G2	143	7387	B2-U3-G2	144	7252	B3-U2-G2	141
TXF948-G2-KLN5-16	48	530mA	4000K	76	10500	B2-U3-G2	139	10400	B2-U3-G2	138	10427	B2-U3-G2	138	10236	B4-U3-G2	136
TXF948-G2-KLN7-16	48	700mA	4000K	104	13646	B3-U3-G3	132	13516	B3-U3-G3	130	13551	B2-U3-G3	131	13303	B4-U3-G2	128
TXF964-G2-KLN3-16	64	350mA	4000K	70	9931	B2-U3-G2	142	9705	B2-U3-G2	139	9645	B2-U3-G2	138	9563	B4-U3-G2	137
TXF964-G2-KLN5-16	64	530mA	4000K	105	14635	B3-U3-G3	139	14302	B3-U3-G3	136	14214	B2-U3-G3	135	14093	B4-U3-G2	134
TXF964-G2-KLN7-16	64	700mA	4000K	137	18134	B3-U3-G3	132	17722	B3-U3-G3	129	17613	B3-U3-G3	128	17463	B5-U3-G3	127
TXF980-G2-KLN3-16	80	350mA	4000K	86	12211	B2-U3-G2	142	11933	B2-U3-G2	139	11860	B2-U3-G2	138	11759	B4-U3-G2	137
TXF980-G2-KLN5-16	80	530mA	4000K	130	17881	B3-U3-G3	138	17474	B3-U3-G3	134	17364	B3-U3-G3	134	17219	B5-U3-G3	132

LED Module: N - 4000K - w_ HSS					Type 2			Type 3			Type 4		
LED qty	System current	Color Temp.	Avg. System Watts*	Lumen Output	BUG Rating	Efficacy	Lumen Output	BUG Rating	Efficacy	Lumen Output	BUG Rating	Efficacy	
TXF932-G2-KLN3-16	32	350mA	4000K	35	4179	B1-U2-G1	118	4155	B1-U2-G1	117	4093	B1-U2-G1	116
TXF932-G2-KLN5-16	32	530mA	4000K	52	5923	B1-U2-G1	114	5889	B1-U2-G1	114	5802	B1-U2-G2	112
TXF932-G2-KLN7-16	32	700mA	4000K	71	7716	B1-U3-G2	108	7672	B1-U3-G2	108	7558	B1-U3-G2	106
TXF948-G2-KLN3-16	48	350mA	4000K	51	6210	B1-U2-G1	121	6175	B1-U2-G2	120	6083	B1-U2-G2	118
TXF948-G2-KLN5-16	48	530mA	4000K	76	8765	B2-U3-G2	116	8716	B1-U3-G2	115	8586	B2-U3-G2	114
TXF948-G2-KLN7-16	48	700mA	4000K	104	11391	B2-U3-G2	110	11327	B2-U3-G2	109	11158	B2-U3-G2	108
TXF964-G2-KLN3-16	64	350mA	4000K	70	8189	B1-U3-G2	117	8142	B1-U3-G2	117	8021	B1-U3-G2	115
TXF964-G2-KLN5-16	64	530mA	4000K	105	12067	B2-U3-G2	115	11999	B2-U3-G2	114	11820	B2-U3-G2	112
TXF964-G2-KLN7-16	64	700mA	4000K	137	14953	B2-U3-G2	109	14869	B2-U3-G2	108	14647	B2-U3-G3	107
TXF980-G2-KLN3-16	80	350mA	4000K	86	10069	B2-U3-G2	117	10012	B2-U3-G2	117	9863	B2-U3-G2	115
TXF980-G2-KLN5-16	80	530mA	4000K	130	14744	B2-U3-G2	113	14661	B2-U3-G2	113	14442	B2-U3-G3	111

LED Module: N - 3000K	LED qty	System current	Color Temp.	Avg. System Watts*	Type 2			Type 3			Type 4			Type 5		
					Lumen Output	BUG Rating	Efficacy									
TXF932-G2-KLW3-16	32	350mA	3000K	35	4390	B1-U2-G1	124	4348	B1-U2-G1	123	4359	B1-U2-G1	123	4380	B3-U2-G1	124
TXF932-G2-KLW5-16	32	530mA	3000K	52	6222	B2-U2-G2	120	6163	B1-U2-G2	119	6179	B1-U2-G2	119	6066	B3-U2-G2	117
TXF932-G2-KLW7-16	32	700mA	3000K	71	8106	B2-U3-G2	114	8028	B2-U3-G2	113	8049	B2-U3-G2	113	7902	B4-U2-G2	111
TXF948-G2-KLW3-16	48	350mA	3000K	51	6523	B2-U2-G2	127	6461	B2-U2-G2	126	6478	B1-U2-G2	126	6360	B3-U2-G2	124
TXF948-G2-KLW5-16	48	530mA	3000K	76	9208	B2-U3-G2	122	9120	B2-U3-G2	121	9143	B2-U3-G2	121	8976	B4-U2-G2	119
TXF948-G2-KLW7-16	48	700mA	3000K	104	11967	B2-U3-G2	115	11852	B2-U3-G2	114	11883	B2-U3-G2	115	11665	B4-U3-G2	112
TXF964-G2-KLW3-16	64	350mA	3000K	70	8708	B2-U3-G2	125	8510	B2-U3-G2	122	8458	B2-U3-G2	121	8386	B4-U2-G2	120
TXF964-G2-KLW5-16	64	530mA	3000K	105	12833	B3-U3-G3	122	12541	B2-U3-G2	119	12464	B2-U3-G2	118	12359	B4-U3-G2	117
TXF964-G2-KLW7-16	64	700mA	3000K	137	15902	B3-U3-G3	116	15541	B3-U3-G3	113	15445	B3-U3-G3	113	15314	B4-U3-G2	112
TXF980-G2-KLW3-16	80	350mA	3000K	86	10708	B2-U3-G2	125	10465	B2-U3-G2	122	10400	B2-U3-G2	121	10311	B4-U3-G2	120
TXF980-G2-KLW5-16	80	530mA	3000K	130	15680	B3-U3-G3	121	15323	B3-U3-G3	118	15227	B3-U3-G3	117	15100	B4-U3-G2	116

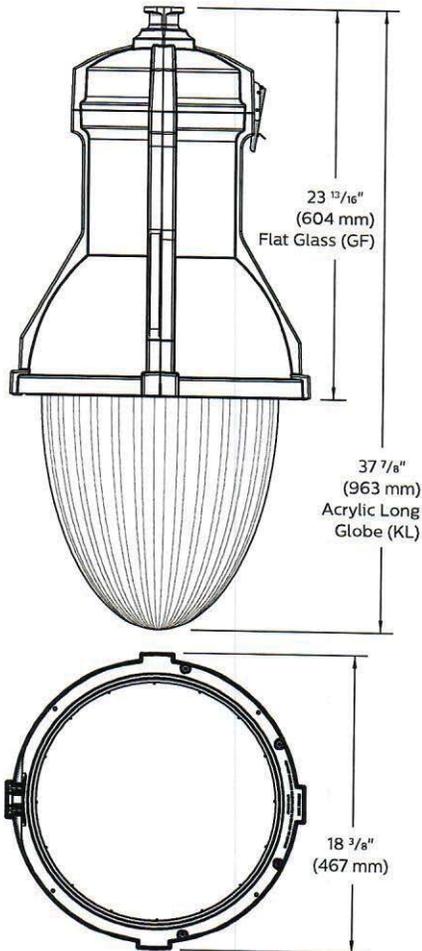
LED Module: N - 3000K - w_ HSS					Type 2			Type 3			Type 4		
LED qty	System current	Color Temp.	Avg. System Watts*	Lumen Output	BUG Rating	Efficacy	Lumen Output	BUG Rating	Efficacy	Lumen Output	BUG Rating	Efficacy	
TXF932-G2-KLW3-16	32	350mA	3000K	35	3664	B1-U2-G1	104	3644	B1-U2-G1	103	3589	B1-U2-G1	101
TXF932-G2-KLW5-16	32	530mA	3000K	52	5194	B1-U2-G1	100	5165	B1-U2-G1	100	5088	B1-U2-G2	98
TXF932-G2-KLW7-16	32	700mA	3000K	71	6766	B1-U3-G1	95	6728	B1-U3-G2	94	6628	B1-U2-G2	93
TXF948-G2-KLW3-16	48	350mA	3000K	51	5445	B1-U2-G1	106	5415	B1-U2-G1	105	5334	B1-U2-G2	104
TXF948-G2-KLW5-16	48	530mA	3000K	76	7686	B1-U3-G2	102	7643	B1-U3-G2	101	7529	B1-U3-G2	100
TXF948-G2-KLW7-16	48	700mA	3000K	104	9989	B2-U3-G2	96	9933	B2-U3-G2	96	9785	B2-U3-G2	94
TXF964-G2-KLW3-16	64	350mA	3000K	70	7181	B1-U3-G1	103	7140	B1-U3-G2	102	7034	B1-U3-G2	101
TXF964-G2-KLW5-16	64	530mA	3000K	105	10582	B2-U3-G2	101	10523	B2-U3-G2	100	10366	B2-U3-G2	99
TXF964-G2-KLW7-16	64	700mA	3000K	137	13113	B2-U3-G2	96	13039	B2-U3-G2	95	12844	B2-U3-G2	94
TXF980-G2-KLW3-16	80	350mA	3000K	86	8830	B2-U3-G2	103	8780	B1-U3-G2	102	8649	B2-U3-G2	101
TXF980-G2-KLW5-16	80	530mA	3000K	130	12930	B2-U3-G2	99	12857	B2-U3-G2	99	12665	B2-U3-G2	97

\* System wattage or total luminaire wattage includes the LED module and the LED driver.  
 Note: Equivalence should always be confirmed by a photometric layout.

Due to rapid and continuous advances in LED technology, LED luminaire data is subject to change without notice and at the discretion of Hadco.

# TXF9 Teardrop Pendant

## Dimensions



### Flat glass

**Height:** 23 13/16" (60cm)  
**Width:** 18 3/8" (47cm)  
**Max. EPA:** 2.00 sq. ft.  
**Max. Weight:** 25 lbs

### Acrylic long globe

**Height:** 37 7/8" (96cm)  
**Width:** 18 3/8" (46cm)  
**Max. EPA:** 2.60 sq. ft.  
**Max. Weight:** 32 lbs

## Housing

The housing is constructed of low copper die-cast aluminum. All non-ferrous fasteners prevent corrosion and ensure longer life. The Cast neck or Pipe Threading mounting options and Flat Glass or Long Acrylic Lens options provide versatility in your designs.

## Mounting

Cast Neck option (N) for use with clamp collar, or Threaded Pipe option (P) 1-1/2-11.5 NPT pipe nipple for mounting to arm.

## Light Engine

LEDgine is composed of five main components: Heat Sink, Lens, LED lamp, Optical System, and Driver. Electrical components are RoHS compliant.

## LED Module

LED type Philips Lumileds LUXEON T. Composed of high-performance white LEDs. Color temperature as per ANSI/NEMA bin Neutral White, 4000 Kelvin nominal (3985K +/- 275K or 3710K to 4260K) or Warm White, 3000 Kelvin nominal (3045K +/- 175K or 2870K to 3220K), CRI 70 Min. 75 Typical.

## Heat Sink

Made of cast aluminum optimizing the LEDs efficiency and life. Product does not use any cooling device with moving parts (only passive cooling device).

## Optical System

Type II, Type III, Type IV and Type V are composed of high performance optical grade PMMA acrylic refractor lenses to achieve desired distribution optimized to get maximum spacing, target lumens and a superior lighting uniformity. Optical system is rated IP66. Performance shall be tested per LM 63, LM 79 and TM 15 (IESNA) certifying its photometric performance. Street side indicated.

## Driver

Driver comes standard with dimming compatible 0-10V. High power factor of 95%. Electronic driver, operating range 50/60 Hz. Auto adjusting universal voltage input from 120 to 277 VAC rated for both application line to line or line to neutral, Class I, THD of 20% max. Maximum ambient operating temperature from 40°F (4°C) to 130°F (55°C). Certified in compliance to UL1310 cULus requirement (dry and damp location). Assembled on a unitized removable tray with Tyco quick disconnect plug resisting to 221°F (105°C). The current supplying the LEDs will be reduced by the driver if the driver experiences internal overheating as a protection to the LEDs and the electrical components. Output is protected from short circuits, voltage overload and current overload. Automatic recovery after correction. Standard built in driver surge protection of 2.5kV (min).

## Driver Options

**AST:** Pre-set driver for progressive start-up of the LED module(s) to optimize energy management and enhance visual comfort at start-up.

**CLO:** Pre-set driver to manage the lumen depreciation by adjusting the power given to the LEDs offering the same lighting intensity during the entire lifespan of the LED module.

**OTL:** Pre-set driver to signal end of life of the LED module(s) for better fixture management.

## Dimming Options

**DA:** 4 Hrs 25% Reduction

**DB:** 4 Hrs 50% Reduction

**DC:** 4 Hrs 75% Reduction

**DD:** 6 Hrs 25% Reduction

**DE:** 6 Hrs 50% Reduction

**DF:** 6 Hrs 75% Reduction

**DG:** 8 Hrs 25% Reduction

**DH:** 8 Hrs 50% Reduction

**DJ:** 8 Hrs 75% Reduction

**DALI:** Pre-set driver compatible with the DALI logarithmic control system.

## Surge Protection

Surge protector tested in accordance with ANSI/IEEE C62.45 per ANSI/IEEE C62.41.2 Scenario I Category C High Exposure 10kV/10kA waveforms for Line Ground, Line Neutral and Neutral Ground, and in accordance with U.S. DOE (Department of Energy) MSSSLC (Municipal Solid State Street Lighting Consortium) model specification for LED roadway luminaires electrical immunity requirements for High Test Level 10kV / 10kA. Option for SP2 20kV/20kA

## Finish

Color in accordance with the AAMA 2603 standard. Application of polyester powder coat paint (4 mils/100 microns) with ± 1 mils / 24 microns of tolerance. The Thermosetting resins provides a discoloration resistant finish in accordance with the ASTM D2244 standard, as well as luster retention in keeping with the ASTM D523 standard and humidity proof in accordance with the ASTM D2247 standard. The surface treatment achieves a minimum of 2000 hours for salt spray resistant finish in accordance with testing performed and per ASTM B117 standard.

# TXF9 Teardrop

## Pendant

### Luminaire Useful Life

Refer to IES files for energy consumption and delivered lumens for each option. Based on ISTMT in situ thermal testing in accordance with UL1598 and UL8750, using LM-80 data from LED manufacturers and engineering prediction methods, the luminaire useful life is expected to reach 100,000+ hours with >L70 lumen maintenance @ 25°C. (48 LED and 64 LED@700mA is 82,000) Luminaire useful life accounts for LED lumen maintenance and additional factors, including LED life, driver life, PCB substrate, solder joints on/off cycles and burning hours for nominal applications.

### LED products manufacturing standard

The electronic components sensitive to electrostatic discharge (ESD) such as light emitting diodes (LEDs) are assembled in compliance with IEC61340 5 1 and ANSI/ESD S20.20 standards so as to eliminate ESD events that could decrease the useful life of the product

### Quality Control

The manufacturer must provide a written confirmation of its ISO 9001 2008 and ISO 14001 2004 International Quality Standards Certification.

### Vibration Resistance

Threaded Pipe option - Meets the ANSI C136.31 2001, American National Standard for Roadway Luminaire Vibration specifications for normal Applications.

### Certifications and Compliance

cETL listed to Canadian safety standards for wet locations. Manufactured to ISO 9001:2008 Standards. UL8750 and UL1598 compliant. ETL listed to U.S. safety standards for wet locations. cETL listed to Canadian safety standards for wet locations. LM80 & LM79 tested.

**IP Rating:** The LED optics chamber is IP66 rated. The LED driver is IP66 rated.

**Warranty:** 5 year extended warranty.

### LED Performance

Predicted lumen depreciation data <sup>1</sup>				
Ambient Temperature (°C)	Driver mA	Calculated L <sub>70</sub> hours <sup>1,2</sup>	L <sub>70</sub> per TM-21 <sup>2,3</sup>	Lumen Maintenance % @ 60,000 hours
25°C	up to 700 mA	>100,000	>60,000	87%

1. Predicted performance derived from LED manufacturer's data and engineering design estimates, based on IESNA LM-80 methodology. Actual experience may vary due to field application conditions.
2. L<sub>70</sub> is the predicted time when LED performance depreciates to 70% of initial lumen output.
3. Calculated per IESNA TM21-11. Published L<sub>70</sub> hours limited to 6 times actual LED test hours.



# HADCO

by Signify

Urban

MainView

MV Post top



Replaces LV: LPBA60LEDEB

Hadco MainView LED post top is a traditionally styled luminaire created for comfort and ease of maintenance. This post top offers offers you multiple wattage options and is designed to be future-proof, giving you maximum flexibility at an affordable price. MainView facilitates lower maintenance due to easy component replacement, a longer life, and fewer internal parts than traditional post tops. This makes the MainView a clear choice for communities looking to provide comfortable lighting for less.

Project: \_\_\_\_\_  
 Location: \_\_\_\_\_  
 Cat.No: \_\_\_\_\_  
 Type: \_\_\_\_\_  
 Lamps: \_\_\_\_\_ Qty: \_\_\_\_\_  
 Notes: \_\_\_\_\_

**Ordering guide**

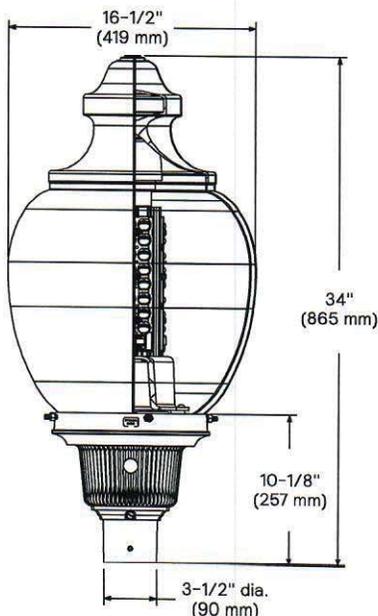
example: MV-G-CA-G1-425-5-730-A-S-N-R7-SP1-BKS

Model code	Pod	Globe/roof	Generation code	Drive current	Distribution	Color temperature	Voltage
<b>MV</b>	<b>G</b>	<b>CA</b>	<b>G1</b>				
MV MainView post top	G Tall round fluted 3"	CA Visual comfort acorn	G1 Generation 1	250 250mA 350 350mA 450 450mA 530 530mA 600 600mA	3 Assymetric 3H with HSS  5 Symmetric	727 2700K (70 CRI) 730 3000K (70 CRI) 740 4000K (70 CRI)	A 120-277V B 347-480V

Integral controls	Pod photo control	Internal future-proof receptacle	Surge protection	Finish
DL <sup>1</sup> DALI (default: logarithmic) SRD <sup>1,2</sup> Sensor ready driver, standard configuration SRD1 <sup>1,2</sup> Sensor ready driver, alternate configuration S FAWS Field Adjustable Wattage Selector N None	R 3 Pin Receptacle N None	R7 <sup>3</sup> 7 Pin Receptacle on top of LED engine N None	SP1 Parallel 10kV standard SP2 Parallel 20kV	BKS Black Smooth WHS White Smooth BZS Bronze Smooth GNS Green Smooth BK Black Texture WH White Texture BZ Bronze Texture GN Green Texture

- Contact Custom Engineering for specific programming required.
- Not available with 347-480V.
- If ordering Interact City control node, use the Astroclock version.

**Dimensions**



**Width:** 16-1/2" / 419 mm diameter  
**Height:** 34" / 865 mm  
**EPA:** 1.17 sq. ft (maximum)  
**Weight:** 20 lbs / 9.1 kg (maximum)

# MV MainView

## LED post top

### Field Adjustable Wattage Selector (FAWS) Multiplier Chart

#### Type 3

FAWS Position	Power Ratio	Lumen Ratio
1	0.30	0.33
2	0.50	0.532
3	0.58	0.63
4	0.69	0.71
5	0.74	0.74
6	0.80	0.71
7	0.860	0.87
8	0.91	0.89
9	0.95	0.91
10	1	1

Note: Typical value accuracy +/- 5%

#### Type 5

FAWS Position	Power Ratio	Lumen Ratio
1	0.30	0.46
2	0.50	0.54
3	0.58	0.62
4	0.69	0.72
5	0.74	0.77
6	0.80	0.72
7	0.86	0.88
8	0.91	0.89
9	0.95	0.96
10	1	1

Note: Typical value accuracy +/- 5%

### LED Wattage and Lumen Values

#### Asymmetric with comfort globe

Catalog Number	LED Qty	System Current (mA)	Color Temperature	Avg System Wattage (W)	Type 3		
					Lumen Output	Efficacy (Lm/W)	BUG Rating
MV-CA-G1-250-x-730	48	250	3000	37	4627	124	B1-U5-G3
MV-CA-G1-350-x-730	48	350	3000	51	6309	124	B2-U5-G3
MV-CA-G1-450-x-730	48	450	3000	66	7975	121	B2-U5-G3
MV-CA-G1-530-x-730	48	530	3000	77	9130	119	B2-U5-G4
MV-CA-G1-600-x-730	48	600	3000	88	10157	116	B2-U5-G4
MV-CA-G1-250-x-740	48	250	4000	37	5341	144	B1-U5-G3
MV-CA-G1-350-x-740	48	350	4000	51	7282	143	B2-U5-G3
MV-CA-G1-450-x-740	48	450	4000	66	9205	140	B2-U5-G4
MV-CA-G1-530-x-740	48	530	4000	77	10537	137	B2-U5-G4
MV-CA-G1-600-x-740	48	600	4000	88	11723	134	B3-U5-G4

#### Asymmetric with comfort globe and internal house-side shield

Catalog Number	LED Qty	System Current (mA)	Color Temperature	Avg System Wattage (W)	Type 3H		
					Lumen Output	Efficacy (Lm/W)	BUG Rating
MV-CA-G1-250-x-730	48	250	3000	37	4441	119	B1-U5-G3
MV-CA-G1-350-x-730	48	350	3000	51	6055	119	B1-U5-G3
MV-CA-G1-450-x-730	48	450	3000	66	7654	116	B2-U5-G3
MV-CA-G1-530-x-730	48	530	3000	77	8762	114	B2-U5-G4
MV-CA-G1-600-x-730	48	600	3000	88	9747	111	B2-U5-G4
MV-CA-G1-250-x-740	48	250	4000	37	5126	138	B1-U5-G3
MV-CA-G1-350-x-740	48	350	4000	51	6988	137	B1-U5-G3
MV-CA-G1-450-x-740	48	450	4000	66	8834	134	B2-U5-G4
MV-CA-G1-530-x-740	48	530	4000	77	10113	131	B2-U5-G4
MV-CA-G1-600-x-740	48	600	4000	88	11250	128	B2-U5-G4

#### Symmetric with comfort globe

Catalog Number	LED Qty	System Current (mA)	Color Temperature	Avg System Wattage (W)	Type 5		
					Lumen Output	Efficacy (Lm/W)	BUG Rating
MV-CA-G1-200-x-730	64	200	3000	40	5227	131	B2-U5-G3
MV-CA-G1-250-x-730	64	250	3000	49	6418	131	B2-U5-G3
MV-CA-G1-300-x-730	64	300	3000	59	7576	129	B3-U5-G3
MV-CA-G1-350-x-730	64	350	3000	68	8696	128	B3-U5-G3
MV-CA-G1-425-x-730	64	425	3000	83	10255	124	B3-U5-G3
MV-CA-G1-200-x-740	64	200	4000	40	5920	149	B2-U5-G3
MV-CA-G1-250-x-740	64	250	4000	49	7268	148	B2-U5-G3
MV-CA-G1-300-x-740	64	300	4000	59	8579	146	B3-U5-G3
MV-CA-G1-350-x-740	64	350	4000	68	9848	145	B3-U5-G3
MV-CA-G1-425-x-740	64	425	4000	83	11614	141	B3-U5-G4

Actual performance may vary due to installation variables including optics, mounting/ceiling height, dirt depreciation, light loss factor, etc.; highly recommended to confirm performance with a layout - contact Applications at [outdoorlighting.applications@signify.com](mailto:outdoorlighting.applications@signify.com).

# MV MainView

## LED post top

### Predicted Lumen Depreciation Data

Predicted performance derived from LED manufacturer's data and engineering design estimates, based on IESNA LM-80 methodology. Actual experience may vary due to field application conditions. L70 is the predicted time when LED performance depreciates to 70% of initial lumen output. Calculated per IESNA TM21-11. Published L70 hours limited to 6 times actual LED test hours.

Ambient Temperature °C	Driver mA	Calculated L70 Hours	L70 per TM-21	Lumen Maintenance % at 54,000 hrs
25°C	500 mA	>100,000 hours	>60,000 hours	>96%

### Specifications

#### Housing/fitter

Tall Round fluted fitter is constructed of diecast 360 aluminum alloy with removable door providing entry into the fitter assembly for easy access to the electrical components. Wiring block to accept three #8 solid or stranded wires. Easy access to photo eye through the door on the pod. Heavy cast aluminum post fitter utilizes four 5/16-18 black cadmium stainless steel set screws (Hex head) for mounting to 3" O.D. post tenon. Globe holder has an internal water trap to prevent water from entering ballast compartment. Globe is held by utilizing four 5/16-18 black cadmium stainless steel fasteners (Hex head). All hardware to be stainless steel and captive. Pod height is 10-1/8" and width is 10-1/2".

#### Light engine

Light engine is composed of four main components: Heat Sink, LED, Optical System, and Driver. Electrical components are RoHS compliant.

Entire luminaire is rated for operation in ambient temperature of -40°C / -40°F up to +40°C / +104°F. B Voltage configurations rated for operation in ambient temperature of -40°C / -40°F up to +35°C / +95°F.

#### LED and optics

Composed of 48 or 64 high power LEDs. LED board substrate is MCPCB (Metal Core Printed Circuit Board), designed to minimize thermal resistance from LED junction to heat sinks. Color temperature as per ANSI/NEMA bin Neutral White, 4000 Kelvin nominal (3985K+/275K or 3710K to 4260K) or Warm White, 3000 Kelvin nominal (3045K +/- 175K or 2870K to 3220K), CRI 70 Min. 75 Typical.

Type 3 and Type 5 distribution choices are available. Optics form an IP66 light engine to ensure complete environmental protection against water and dust ingress and corrosion, critical to long term LED reliability. All wiring is full copper, with 105C rated insulation. LED modules are secured to heatsinks using #8 stainless steel hardware, guaranteeing construction rigidity and vibration resistance.

#### Heat sinks

LED Engine construction consists of four 6063-T5 aluminum heat sinks, clear anodized to MIL-A-8625 specifications for excellent corrosion resistance and surface finish. Fin spacing has been optimized for maximum convective heat transfer under natural convection conditions, maximizing LED life and efficiency. Heat sinks provide greater than 700 sq. in. of convective surface area total, ensuring proper junction temperature control, lumen maintenance, and system reliability. Extruded heatsinks meet or exceed tolerances as specified by AEC (Aluminum Extruders Council) standards and have been designed to provide superior surface flatness, ensuring excellent contact between heatsinks and LEDs.

Product does not use any cooling device with moving parts (passive cooling only).

Heat sinks are secured using galvanized steel brackets and stainless steel hardware to provide additional corrosion resistance.

#### Driver

Driver comes standard with 0-10V dimming capability. High power factor of 95%. Electronic driver, operating range 50/60 Hz. Auto adjusting universal voltage input from 120 to 277 VAC rated for both application line to line or line to neutral, Class I, THD of 20% max. Driver operating ambient temperature range is -40F (-40C) to +130F (+55C). Certified in compliance to UL1310 cULus requirement (dry and damp location). Driver is part of the light engine assembly. The light engine assembly is removable by loosening two screws and twisting the light engine assembly. Quick connect Wago connectors are used for the power and ground wires to the light engine. The current supplying the LEDs will be reduced by the driver if the driver experiences internal overheating as a protection to the LEDs and the electrical components. Output is protected from short circuits, voltage overload and current overload. Automatic recovery after correction. Standard built in driver surge protection of 2.5kV (min).

**SRD:** Sensor Ready Driver including SR communication (used for dimming and other functionalities) 24V auxiliary supply connected and enabled. Logical signal input (LSI) connected to the top NEMA twist lock receptacle, functionality disabled.

**SRD1:** Sensor Ready Driver including SR communication (used for dimming and other functionalities) but with 24V auxiliary supply and a logical signal input (LSI) not connected to the top NEMA twist, functionality disabled for LSI and 24V auxiliary supply.

**DL:** Pre-set driver compatible with the DALI control system. Logarithmic standard.

#### FAWS

Field Adjustable Wattage Selector, pre set to the highest position, can be easily switched in the field to the required position. This reduces total luminaire wattage consumption and reduces the light level - see the FAWS multiplier chart for more details. Note: It is not recommended to use FAWS with other dimming or controls; if you do, set the switch to position 10 (maximum output) to enable the other dimming or controls. Switching FAWS to any position other than 10 will disable the other dimming or controls.

#### Surge protection

**SP1:** Surge protection device tested in accordance with ANSI/IEEE C62.45 per ANSI/ IEEE C62.41.2 Scenario I Category C High Exposure 10kV/10kA waveforms for Line-Ground, Line-Neutral and Neutral-Ground, and in accordance with DOE MSSLC Model Specification for LED Roadway Luminaires Appendix D Electrical Immunity High test level 10kV/10kA.

**SP2:** Optional 20kV / 10kA surge protection device that provides extra protection beyond the SP1 10kV/10kA level.

#### Photo control options

**R7:** Available on top of the LED engine inside the globe. (if inside the globe an astro-clock smart node must be used) Receptacle with 7 pins enabling dimming and additional functionality (to be determined). Can be used with a twist lock node or a shorting cap. Will ship with a shorting cap installed for this product. Remove shorting cap when you are ready to install your node.

#### Luminaire useful life

Refer to IES files for energy consumption and delivered lumens for each option. Based on ISTMT in situ thermal testing in accordance with UL1598 and UL8750, using LM-80 data from LED manufacturers and engineering prediction methods, the luminaire useful life is expected to reach 100,000+ hours with >L70 lumen maintenance @ 25°C Luminaire useful life accounts for LED lumen maintenance and additional factors, including LED life, driver life, PCB substrate, solder joints on/off cycles and burning hours for nominal applications.

#### Hardware

All non-ferrous fasteners prevent corrosion and ensure longer life.

#### Wiring

18 AWG wire, 6" (152mm) minimum exceeding from luminaire.

#### Options

House side shield included for optional field installation.

#### Finish

Color in accordance with the AAMA 2603 standard. Application of polyester powder coat paint (4 mils/100 microns) with ± 1 mils / 24 microns of tolerance. The Thermosetting resins provides a discoloration resistant finish in accordance with the ASTM D2244 standard, as well as luster retention in keeping with the ASTM D523 standard and humidity proof in accordance with the ASTM D2247 standard. The surface treatment achieves a minimum of 2000 hours for salt spray resistant finish in accordance with testing performed and per ASTM B117 standard.

**BKS:** Black Smooth

**WHS:** White Smooth

**BZS:** Bronze Smooth

**GNS:** Green Smooth

**BK:** Black Texture

**WH:** White Texture

**BZ:** Bronze Texture

**GN:** Green Texture

# MV MainView

## LED post top

### Specifications

#### LED products

##### manufacturing standard

Electrostatic discharge (ESD) such as light emitting diodes (LEDs) are assembled in compliance with IEC61340 5 1 and ANSI/ ESD S20.20 standards so as to eliminate ESD events that could decrease the useful life of the product.

##### Quality Control

The manufacturer must provide a written confirmation of its ISO 9001 2008 and ISO 14001 2004 International Quality Standards Certification. Meets the ANSI C136.31 2010, American national Standard for Roadway Luminaire Vibration specifications for Normal Applications.

##### Certifications and Compliance

Manufactured to ISO 9001:2008 Standards. UL8750 and UL1598 compliant. ETL listed to U.S. safety standards for wet locations. cETL listed to Canadian safety standards for wet locations. LM80 & LM79 tested.

##### Warranty

5 year standard warranty. Options available for extended warranties – contact factory. See [signify.com/warranties](http://signify.com/warranties) for details and restrictions.



# HADCO

by Signify

Urban

MainView

MV Post top



Replaces LV: LPBA60LEDEB

Hadco MainView LED post top is a traditionally styled luminaire created for comfort and ease of maintenance. This post top offers offers you multiple wattage options and is designed to be future-proof, giving you maximum flexibility at an affordable price. MainView facilitates lower maintenance due to easy component replacement, a longer life, and fewer internal parts than traditional post tops. This makes the MainView a clear choice for communities looking to provide comfortable lighting for less.

Project: \_\_\_\_\_  
 Location: \_\_\_\_\_  
 Cat.No: \_\_\_\_\_  
 Type: \_\_\_\_\_  
 Lamps: \_\_\_\_\_ Qty: \_\_\_\_\_  
 Notes: \_\_\_\_\_

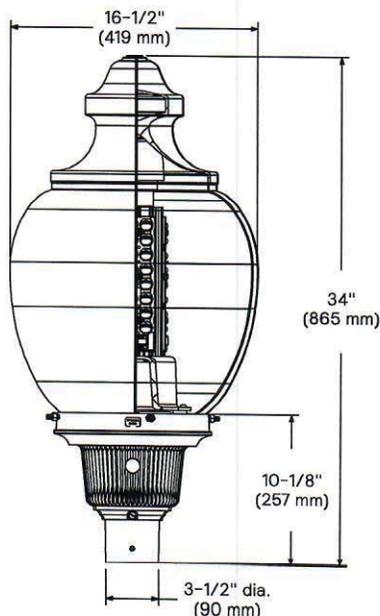
**Ordering guide**

example: MV-G-CA-G1-425-5-730-A-S-N-R7-SP1-BKS

Model code	Pod	Globe/roof	Generation code	Drive current	Distribution	Color temperature	Voltage
<b>MV</b>	<b>G</b>	<b>CA</b>	<b>G1</b>				
MV MainView post top	G Tall round fluted 3"	CA Visual comfort acorn	G1 Generation 1	250 250mA 350 350mA 450 450mA 530 530mA 600 600mA	3 Assymetric 3H with HSS  5 Symmetric	727 2700K (70 CRI) 730 3000K (70 CRI) 740 4000K (70 CRI)	A 120-277V B 347-480V
Integral controls	Pod photo control	Internal future-proof receptacle	Surge protection	Finish			
DL <sup>1</sup> DALI (default: logarithmic) SRD <sup>1,2</sup> Sensor ready driver, standard configuration SRD1 <sup>1,2</sup> Sensor ready driver, alternate configuration S FAWS Field Adjustable Wattage Selector N None	R 3 Pin Receptacle N None	R7 <sup>3</sup> 7 Pin Receptacle on top of LED engine N None	SP1 Parallel 10kV standard SP2 Parallel 20kV	BKS Black Smooth WHS White Smooth BZS Bronze Smooth GNS Green Smooth BK Black Texture WH White Texture BZ Bronze Texture GN Green Texture			

1. Contact Custom Engineering for specific programming required.
2. Not available with 347-480V.
3. If ordering Interact City control node, use the Astroclock version.

**Dimensions**



**Width:** 16-1/2" / 419 mm diameter  
**Height:** 34" / 865 mm  
**EPA:** 1.17 sq. ft (maximum)  
**Weight:** 20 lbs / 9.1 kg (maximum)

# MV MainView

## LED post top

### Field Adjustable Wattage Selector (FAWS) Multiplier Chart

#### Type 3

FAWS Position	Power Ratio	Lumen Ratio
1	0.30	0.33
2	0.50	0.532
3	0.58	0.63
4	0.69	0.71
5	0.74	0.74
6	0.80	0.71
7	0.860	0.87
8	0.91	0.89
9	0.95	0.91
10	1	1

Note: Typical value accuracy +/- 5%

#### Type 5

FAWS Position	Power Ratio	Lumen Ratio
1	0.30	0.46
2	0.50	0.54
3	0.58	0.62
4	0.69	0.72
5	0.74	0.77
6	0.80	0.72
7	0.86	0.88
8	0.91	0.89
9	0.95	0.96
10	1	1

Note: Typical value accuracy +/- 5%

### LED Wattage and Lumen Values

#### Asymmetric with comfort globe

Catalog Number	LED Qty	System Current (mA)	Color Temperature	Avg System Wattage (W)	Type 3		
					Lumen Output	Efficacy (Lm/W)	BUG Rating
MV-CA-G1-250-x-730	48	250	3000	37	4627	124	B1-U5-G3
MV-CA-G1-350-x-730	48	350	3000	51	6309	124	B2-U5-G3
MV-CA-G1-450-x-730	48	450	3000	66	7975	121	B2-U5-G3
MV-CA-G1-530-x-730	48	530	3000	77	9130	119	B2-U5-G4
MV-CA-G1-600-x-730	48	600	3000	88	10157	116	B2-U5-G4
MV-CA-G1-250-x-740	48	250	4000	37	5341	144	B1-U5-G3
MV-CA-G1-350-x-740	48	350	4000	51	7282	143	B2-U5-G3
MV-CA-G1-450-x-740	48	450	4000	66	9205	140	B2-U5-G4
MV-CA-G1-530-x-740	48	530	4000	77	10537	137	B2-U5-G4
MV-CA-G1-600-x-740	48	600	4000	88	11723	134	B3-U5-G4

#### Asymmetric with comfort globe and internal house-side shield

Catalog Number	LED Qty	System Current (mA)	Color Temperature	Avg System Wattage (W)	Type 3H		
					Lumen Output	Efficacy (Lm/W)	BUG Rating
MV-CA-G1-250-x-730	48	250	3000	37	4441	119	B1-U5-G3
MV-CA-G1-350-x-730	48	350	3000	51	6055	119	B1-U5-G3
MV-CA-G1-450-x-730	48	450	3000	66	7654	116	B2-U5-G3
MV-CA-G1-530-x-730	48	530	3000	77	8762	114	B2-U5-G4
MV-CA-G1-600-x-730	48	600	3000	88	9747	111	B2-U5-G4
MV-CA-G1-250-x-740	48	250	4000	37	5126	138	B1-U5-G3
MV-CA-G1-350-x-740	48	350	4000	51	6988	137	B1-U5-G3
MV-CA-G1-450-x-740	48	450	4000	66	8834	134	B2-U5-G4
MV-CA-G1-530-x-740	48	530	4000	77	10113	131	B2-U5-G4
MV-CA-G1-600-x-740	48	600	4000	88	11250	128	B2-U5-G4

#### Symmetric with comfort globe

Catalog Number	LED Qty	System Current (mA)	Color Temperature	Avg System Wattage (W)	Type 5		
					Lumen Output	Efficacy (Lm/W)	BUG Rating
MV-CA-G1-200-x-730	64	200	3000	40	5227	131	B2-U5-G3
MV-CA-G1-250-x-730	64	250	3000	49	6418	131	B2-U5-G3
MV-CA-G1-300-x-730	64	300	3000	59	7576	129	B3-U5-G3
MV-CA-G1-350-x-730	64	350	3000	68	8696	128	B3-U5-G3
MV-CA-G1-425-x-730	64	425	3000	83	10255	124	B3-U5-G3
MV-CA-G1-200-x-740	64	200	4000	40	5920	149	B2-U5-G3
MV-CA-G1-250-x-740	64	250	4000	49	7268	148	B2-U5-G3
MV-CA-G1-300-x-740	64	300	4000	59	8579	146	B3-U5-G3
MV-CA-G1-350-x-740	64	350	4000	68	9848	145	B3-U5-G3
MV-CA-G1-425-x-740	64	425	4000	83	11614	141	B3-U5-G4

Actual performance may vary due to installation variables including optics, mounting/ceiling height, dirt depreciation, light loss factor, etc.; highly recommended to confirm performance with a layout - contact Applications at [outdoorlighting.applications@signify.com](mailto:outdoorlighting.applications@signify.com).

# MV MainView

## LED post top

### Predicted Lumen Depreciation Data

Predicted performance derived from LED manufacturer's data and engineering design estimates, based on IESNA LM-80 methodology. Actual experience may vary due to field application conditions. L70 is the predicted time when LED performance depreciates to 70% of initial lumen output. Calculated per IESNA TM21-11. Published L70 hours limited to 6 times actual LED test hours.

Ambient Temperature °C	Driver mA	Calculated L70 Hours	L70 per TM-21	Lumen Maintenance % at 54,000 hrs
25°C	500 mA	>100,000 hours	>60,000 hours	>96%

### Specifications

#### Housing/fitter

Tall Round fluted fitter is constructed of diecast 360 aluminum alloy with removable door providing entry into the fitter assembly for easy access to the electrical components. Wiring block to accept three #8 solid or stranded wires. Easy access to photo eye through the door on the pod. Heavy cast aluminum post fitter utilizes four 5/16-18 black cadmium stainless steel set screws (Hex head) for mounting to 3" O.D. post tenon. Globe holder has an internal water trap to prevent water from entering ballast compartment. Globe is held by utilizing four 5/16-18 black cadmium stainless steel fasteners (Hex head). All hardware to be stainless steel and captive. Pod height is 10-1/8" and width is 10-1/2".

#### Light engine

Light engine is composed of four main components: Heat Sink, LED, Optical System, and Driver. Electrical components are RoHS compliant.

Entire luminaire is rated for operation in ambient temperature of -40°C / -40°F up to +40°C / +104°F. B Voltage configurations rated for operation in ambient temperature of -40°C / -40°F up to +35°C / +95°F.

#### LED and optics

Composed of 48 or 64 high power LEDs. LED board substrate is MCPCB (Metal Core Printed Circuit Board), designed to minimize thermal resistance from LED junction to heat sinks. Color temperature as per ANSI/NEMA bin Neutral White, 4000 Kelvin nominal (3985K+/275K or 3710K to 4260K) or Warm White, 3000 Kelvin nominal (3045K +/- 175K or 2870K to 3220K), CRI 70 Min. 75 Typical.

Type 3 and Type 5 distribution choices are available. Optics form an IP66 light engine to ensure complete environmental protection against water and dust ingress and corrosion, critical to long term LED reliability. All wiring is full copper, with 105C rated insulation. LED modules are secured to heatsinks using #8 stainless steel hardware, guaranteeing construction rigidity and vibration resistance.

#### Heat sinks

LED Engine construction consists of four 6063-T5 aluminum heat sinks, clear anodized to MIL-A-8625 specifications for excellent corrosion resistance and surface finish. Fin spacing has been optimized for maximum convective heat transfer under natural convection conditions, maximizing LED life and efficiency. Heat sinks provide greater than 700 sq. in. of convective surface area total, ensuring proper junction temperature control, lumen maintenance, and system reliability. Extruded heatsinks meet or exceed tolerances as specified by AEC (Aluminum Extruders Council) standards and have been designed to provide superior surface flatness, ensuring excellent contact between heatsinks and LEDs.

Product does not use any cooling device with moving parts (passive cooling only).

Heat sinks are secured using galvanized steel brackets and stainless steel hardware to provide additional corrosion resistance.

#### Driver

Driver comes standard with 0-10V dimming capability. High power factor of 95%. Electronic driver, operating range 50/60 Hz. Auto adjusting universal voltage input from 120 to 277 VAC rated for both application line to line or line to neutral, Class I, THD of 20% max. Driver operating ambient temperature range is -40F (-40C) to +130F (+55C). Certified in compliance to UL1310 cULus requirement (dry and damp location). Driver is part of the light engine assembly. The light engine assembly is removable by loosening two screws and twisting the light engine assembly. Quick connect Wago connectors are used for the power and ground wires to the light engine. The current supplying the LEDs will be reduced by the driver if the driver experiences internal overheating as a protection to the LEDs and the electrical components. Output is protected from short circuits, voltage overload and current overload. Automatic recovery after correction. Standard built in driver surge protection of 2.5kV (min).

**SRD:** Sensor Ready Driver including SR communication (used for dimming and other functionalities) 24V auxiliary supply connected and enabled. Logical signal input (LSI) connected to the top NEMA twist lock receptacle, functionality disabled.

**SRD1:** Sensor Ready Driver including SR communication (used for dimming and other functionalities) but with 24V auxiliary supply and a logical signal input (LSI) not connected to the top NEMA twist, functionality disabled for LSI and 24V auxiliary supply.

**DL:** Pre-set driver compatible with the DALI control system. Logarithmic standard.

#### FAWS

Field Adjustable Wattage Selector, pre set to the highest position, can be easily switched in the field to the required position. This reduces total luminaire wattage consumption and reduces the light level - see the FAWS multiplier chart for more details. Note: It is not recommended to use FAWS with other dimming or controls; if you do, set the switch to position 10 (maximum output) to enable the other dimming or controls. Switching FAWS to any position other than 10 will disable the other dimming or controls.

#### Surge protection

**SP1:** Surge protection device tested in accordance with ANSI/IEEE C62.45 per ANSI/ IEEE C62.41.2 Scenario I Category C High Exposure 10kV/10kA waveforms for Line-Ground, Line-Neutral and Neutral-Ground, and in accordance with DOE MSSLC Model Specification for LED Roadway Luminaires Appendix D Electrical Immunity High test level 10kV/10kA.

**SP2:** Optional 20kV / 10kA surge protection device that provides extra protection beyond the SP1 10kV/10kA level.

#### Photo control options

**R7:** Available on top of the LED engine inside the globe. (if inside the globe an astro-clock smart node must be used) Receptacle with 7 pins enabling dimming and additional functionality (to be determined). Can be used with a twist lock node or a shorting cap. Will ship with a shorting cap installed for this product. Remove shorting cap when you are ready to install your node.

#### Luminaire useful life

Refer to IES files for energy consumption and delivered lumens for each option. Based on ISTMT in situ thermal testing in accordance with UL1598 and UL8750, using LM-80 data from LED manufacturers and engineering prediction methods, the luminaire useful life is expected to reach 100,000+ hours with >L70 lumen maintenance @ 25°C Luminaire useful life accounts for LED lumen maintenance and additional factors, including LED life, driver life, PCB substrate, solder joints on/off cycles and burning hours for nominal applications.

#### Hardware

All non-ferrous fasteners prevent corrosion and ensure longer life.

#### Wiring

18 AWG wire, 6" (152mm) minimum exceeding from luminaire.

#### Options

House side shield included for optional field installation.

#### Finish

Color in accordance with the AAMA 2603 standard. Application of polyester powder coat paint (4 mils/100 microns) with ± 1 mils / 24 microns of tolerance. The Thermosetting resins provides a discoloration resistant finish in accordance with the ASTM D2244 standard, as well as luster retention in keeping with the ASTM D523 standard and humidity proof in accordance with the ASTM D2247 standard. The surface treatment achieves a minimum of 2000 hours for salt spray resistant finish in accordance with testing performed and per ASTM B117 standard.

**BKS:** Black Smooth  
**WHS:** White Smooth  
**BZS:** Bronze Smooth  
**GNS:** Green Smooth  
**BK:** Black Texture  
**WH:** White Texture  
**BZ:** Bronze Texture  
**GN:** Green Texture

# MV MainView

## LED post top

### Specifications

#### LED products

##### manufacturing standard

Electrostatic discharge (ESD) such as light emitting diodes (LEDs) are assembled in compliance with IEC61340 5 1 and ANSI/ ESD S20.20 standards so as to eliminate ESD events that could decrease the useful life of the product.

##### Quality Control

The manufacturer must provide a written confirmation of its ISO 9001 2008 and ISO 14001 2004 International Quality Standards Certification. Meets the ANSI C136.31 2010, American national Standard for Roadway Luminaire Vibration specifications for Normal Applications.

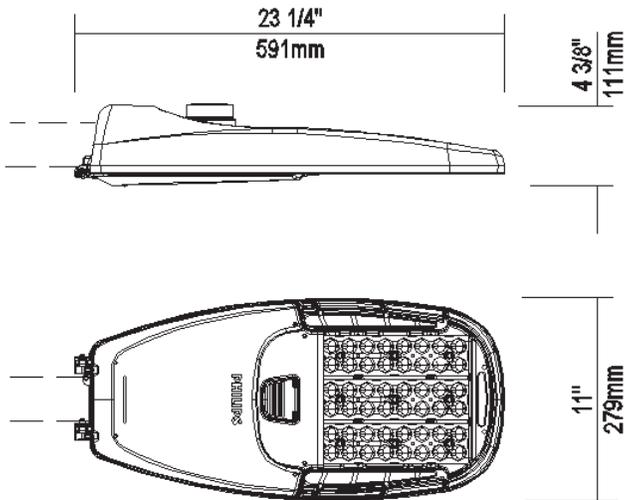
##### Certifications and Compliance

Manufactured to ISO 9001:2008 Standards. UL8750 and UL1598 compliant. ETL listed to U.S. safety standards for wet locations. cETL listed to Canadian safety standards for wet locations. LM80 & LM79 tested.

##### Warranty

5 year standard warranty. Options available for extended warranties – contact factory. See [signify.com/warranties](http://signify.com/warranties) for details and restrictions.



**Aurora RFM160W48LED4K (Reference=L75856-1)**

EPA: 0.523 sq ft / weight: 12.3 lb (5.6 kg)

Note: 3D image may not represent color or option selected.  
Logos above include link, click to access.

Qty	1	Luminaire	<b>RFM-160W48LED4K-G2-R3M-UNV-DMG-2C-RCD7-BK</b>
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### Description of Components:

**Housing:** Made of a low copper die cast Aluminum alloy (A360), 0.100" (2.5mm) minimum thickness. Fits on a 1.66" (42mm) O.D. (1.25" NPS), 1.9" (48mm) O.D. (1.5" NPS) or 2 3/8" (60mm) O.D. (2" NPS) by 5 1/2" (140mm) minimum long tenon. Comes with a zinc plated clamp fixed by 2 zinc plated hexagonal bolts 3/8 16 UNC for ease of installation. Provides an easy step adjustment of +/- 5° tilt in 2.5° increments. Includes integral bubble level standard (always included). A quick release, tool less entry, single latch, hinged, removable door opens downward to provide access to electronic components and to a terminal block. Door is secured to prevent accidental dropping or disengagement. A clearance of 13" (330mm) at the rear is required in order to remove the door. Complete with a bird guard protecting against birds and similar intruders and an ANSI label as per C136.15-2015 to identify wattage and source (both included in box).

**Light Engine:** Composed of 4 main components: **Heat Sink / LED Module / Optical System / Driver**

Electrical components are RoHS compliant, IP66 sealed light engine.

LEDs tested by ISO 17025-2005 accredited lab in accordance with IESNA LM-80 guidelines, extrapolations in accordance with IESNA TM-21. Metal core board ensures greater heat transfer and longer lifespan.

**Heat Sink:** Built in the housing, designed to ensure high efficacy and superior cooling by natural vertical convection air flow pattern always close to LEDs and driver optimising their efficiency and life. Product does not use any cooling device with moving parts (only passive cooling). Wide openings enable natural cleaning and removal of dirt and debris. Entire luminaire is rated for operation in ambient temperature of -40°C / -40°F up to +40°C / +104°F.

**LED Module:** Composed of 48 high-performance white LEDs. Color temperature as per ANSI/NEMA bin Neutral White, 4000 Kelvin nominal (3985K +/- 275K or 3710K to 4260K), CRI 70 Min. 75 Typical.

**Optical System:** (R3M), IES type III medium (asymmetrical). Composed of high-performance UV stabilized optical grade

## Aurora RFM160W48LED4K (Reference=L75856-1)

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polymer refractor lenses to achieve desired distribution optimized to get maximum spacing, target lumens and a superior lighting uniformity. System is rated IP66. Performance shall be tested per LM-63, LM-79 and TM-15 (IESNA) certifying its photometric performance.0% uplight and U0 per IESNA TM-15.

**Driver:** High power factor of 90% minimum. Electronic driver, operating range 50/60 Hz. Auto-adjusting universal voltage input from 120 to 277 VAC rated for both application line to line or line to neutral, Class 1, THD of 20% max. **Driver comes with dimming compatible 0-10 volts.**

The current supplying the LEDs will be reduced by the driver if the driver experiences internal overheating as a protection to the LEDs and the electrical components. Output is protected from short circuits, voltage overload and current overload. Automatic recovery after correction. Standard built-in driver surge protection of 2.5kV (min).

**Driver Options: (DMG) Integrated Feature**, Dimming compatible 0-10 volts. For applicable warranty, certification and operation guide see Lumec dimmable luminaire specification document for unapproved device installed by other. To get document, click on this link: [Specification document](https://www.signify.com/b-dam/signify/en-us/brands/lumec/Lumec-un-approved-control-device-installed-by-others-7_d.pdf) or go on web site on this address: [https://www.signify.com/b-dam/signify/en-us/brands/lumec/Lumec-un-approved-control-device-installed-by-others-7\\_d.pdf](https://www.signify.com/b-dam/signify/en-us/brands/lumec/Lumec-un-approved-control-device-installed-by-others-7_d.pdf)

**Surge Protector: Integrated Feature**, Surge protector tested in accordance with ANSI/IEEE C62.45 per ANSI/IEEE C62.41.2 Scenario I Category C High Exposure 10kV/10kA waveforms for Line-Ground, Line-Neutral and Neutral-Ground, and in accordance with U.S. DOE (Department of Energy) MSSLC (Municipal Solid-State Street Lighting Consortium) model specification for LED roadway luminaires electrical immunity requirements for High Test Level 10kV / 10kA.

**Luminaire Options: (2C)**, Two (2) clamps / four (4) bolts. **(RCD7)**, Receptacle with 7 pins enabling dimming and with two extra connections for future use (these connections are capped off at the factory - requires connections to be made in the field), can be used with a twist-lock control device or photoelectric cell or a shorting cap. Use of photocell or shorting cap is required to ensure proper illumination.

**Luminaire Useful Life:** Refer to IES files for energy consumption and delivered lumens for each option. Based on ISTMT in-situ thermal testing in accordance with UL1598 and UL8750, System Reliability Tool. Advance data and LED manufacturer LM-80/TM-21 data, expected to reach 100,000 + hours with >L70 lumen maintenance @ 25°C. Luminaire Useful Life accounts for LED lumen maintenance AND all of these additional factors including: LED life, driver life, PCB substrate, solder joints, on/off cycles, burning hours and corrosion.

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## Aurora RFM160W48LED4K (Reference=L75856-1)

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Miscellaneous
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### Description of Components:

**Wiring:** The connection of the luminaire is done using a terminal block connector 600V, 85A for use with #2-14 AWG. wires from the primary circuit, located inside the housing. Due to the inrush current that occurs with electronic drivers, recommend using a 10Amp time delay fuse to avoid unwanted fuse blowing (false tripping) that can occur with normal or fast acting fuses.

**Hardware:** All exposed screws shall be complete with Ceramic primer-seal basecoat to reduce seizing of the parts and offers a high resistance to corrosion. All seals and sealing devices are made and/or lined with EPDM and/or silicone and/or rubber.

**Finish:** Color to be **black RAL9005 (BK)** and in accordance with the AAMA 2603 standard. Application of polyester powder coat paint (4 mils/100 microns) with  $\pm 1$  mils/24 microns of tolerance. The Thermosetting resins provides a discoloration resistant finish in accordance with the ASTM D2244 standard, as well as luster retention in keeping with the ASTM D523 standard and humidity proof in accordance with the ASTM D2247 standard.

The surface treatment achieves a minimum of 5000 hours for salt spray resistant finish in accordance with testing performed and per ASTM B117 standard.

**LED products manufacturing standard:** The electronic components sensitive to electrostatic discharge (ESD) such as light emitting diodes (LEDs) are assembled in compliance with IEC61340-5-1 and ANSI/ESD S20.20 standards so as to eliminate ESD events that could decrease the useful life of the product.

**Vibration Resistance:** The RFM meets the **ANSI C136.31, 2010**, American National Standard for Roadway Luminaire Vibration specifications for Bridge/overpass applications (Tested 3G over 100 000 cycles).

The RFM meets the **California Test 611, Testing durability of mast arm mounted luminaires**, specifications (a 2 000 000 cycles test).

**Service Tag:** Each individual luminaire is uniquely identifiable, thanks to the Service tag application. With a simple scan of a QR code, placed on the inside of the mast door, you gain instant access to the luminaire configuration, making installation and maintenance operations faster and easier, no matter what stage of the luminaire's lifetime. Just download the APP and register your product right away. For more details visit: [Signify.com/servicetag](http://Signify.com/servicetag)

**Warranty:** Luminaire comes with a warranty of 10 years on product and finish.

**Certifications and Compliance:** cULus Listed for Canada and USA. Luminaire meets DOE and MSSLC Model Specification for LED Roadway Luminaires. RoadFocus LED Cobra head luminaires are DesignLights Consortium qualified, consult DLC QPL to confirm your specific fixture selection is approved. Luminaire complies with or exceeds the following ANSI C136 standards: .2, .3, .10, .14, .15, .22, .25, .31, .37, .41.

**Web site information details:** Click on any specific information details you need: / [cULus Certification](#)

# Aurora RFM160W48LED4K (Reference=L75856-1)

### LED Wattage values

Ordering Code	Total LEDs	Average System Watts <sup>15</sup>	Wattage label <sup>16</sup>
RFM-130W32LED	32	129	130
RFM-135W40LED	40	135	140
RFM-55W48LED	48	55	60
RFM-80W48LED	48	81	80
RFM-108W48LED	48	106	110
RFM-160W48LED	48	161	160
RFM-50W60LED	60	52	50
RFM-75W60LED	60	77	80
RFM-100W60LED	60	99	100
RFM-120W60LED	60	122	120
RFM-150W60LED	60	149	150
RFM-170W60LED	60	170	170

15. Typical values, rounded.  
 16. As per ANSI C136.15-2015. Consult factory for other labeling needs.

### 4000K LED Lumen values

Ordering Code	Color Temp.	Type R2M			Type R2S			Type R3M			Type R3S			Type 4			Type 5		
		Lumen Output	Efficacy (LPW)	BUG Rating	Lumen Output	Efficacy (LPW)	BUG Rating	Lumen Output	Efficacy (LPW)	BUG Rating	Lumen Output	Efficacy (LPW)	BUG Rating	Lumen Output	Efficacy (LPW)	BUG Rating	Lumen Output	Efficacy (LPW)	BUG Rating
RFM-130W32LED	4000	14,913	116	B3-U0-G2	15,633	121	B3-U0-G2	14,971	116	B3-U0-G2	15,172	118	B2-U0-G2	14,901	116	B2-U0-G3	15,500	120	B4-U0-G2
RFM-135W40LED	4000	15,954	118	B3-U0-G3	N/A	N/A	N/A	16,040	119	B3-U0-G3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RFM-55W48LED	4000	7,747	141	B2-U0-G1	8,123	147	B2-U0-G1	7,778	141	B2-U0-G1	7,883	143	B1-U0-G2	7,742	141	B1-U0-G2	8,053	146	B3-U0-G1
RFM-80W48LED	4000	11,109	138	B2-U0-G2	11,647	145	B2-U0-G2	11,153	138	B2-U0-G2	11,302	140	B2-U0-G2	11,101	138	B2-U0-G2	11,546	143	B4-U0-G2
RFM-108W48LED	4000	14,024	132	B3-U0-G2	14,702	139	B3-U0-G2	14,079	133	B3-U0-G2	14,268	135	B2-U0-G2	14,013	132	B2-U0-G2	14,576	138	B4-U0-G2
RFM-160W48LED	4000	19,412	121	B3-U0-G3	20,351	127	B3-U0-G2	19,489	121	B3-U0-G3	19,750	123	B2-U0-G3	19,397	121	B3-U0-G3	20,176	126	B4-U0-G2
RFM-50W60LED	4000	8,038	154	B2-U0-G2	N/A	N/A	N/A	8,081	155	B2-U0-G2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RFM-75W60LED	4000	10,979	143	B2-U0-G2	N/A	N/A	N/A	11,038	143	B2-U0-G2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RFM-100W60LED	4000	13,615	138	B3-U0-G3	N/A	N/A	N/A	13,688	138	B3-U0-G2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RFM-120W60LED	4000	16,094	132	B3-U0-G3	N/A	N/A	N/A	16,181	133	B3-U0-G3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RFM-150W60LED	4000	19,078	128	B3-U0-G3	N/A	N/A	N/A	19,180	129	B3-U0-G3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RFM-170W60LED	4000	21,037	124	B3-U0-G3	N/A	N/A	N/A	21,150	124	B3-U0-G3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

### 3000K LED Lumen values

Ordering Code	Color Temp.	Type R2M			Type R2S			Type R3M			Type R3S			Type 4			Type 5		
		Lumen Output	Efficacy (LPW)	BUG Rating	Lumen Output	Efficacy (LPW)	BUG Rating	Lumen Output	Efficacy (LPW)	BUG Rating	Lumen Output	Efficacy (LPW)	BUG Rating	Lumen Output	Efficacy (LPW)	BUG Rating	Lumen Output	Efficacy (LPW)	BUG Rating
RFM-130W32LED	3000	13,990	109	B3-U0-G2	14,666	114	B3-U0-G2	14,045	109	B3-U0-G2	14,233	111	B2-U0-G2	13,979	109	B2-U0-G3	14,541	113	B4-U0-G2
RFM-135W40LED	3000	15,169	112	B3-U0-G3	N/A	N/A	N/A	15,251	113	B3-U0-G3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RFM-55W48LED	3000	7,268	132	B2-U0-G1	7,620	138	B2-U0-G1	7,297	132	B2-U0-G1	7,395	134	B1-U0-G2	7,263	132	B1-U0-G2	7,555	137	B3-U0-G1
RFM-80W48LED	3000	10,422	129	B2-U0-G2	10,926	136	B2-U0-G2	10,463	130	B2-U0-G2	10,603	132	B2-U0-G2	10,414	129	B2-U0-G2	10,832	134	B4-U0-G2
RFM-108W48LED	3000	13,156	124	B3-U0-G2	13,792	130	B3-U0-G2	13,208	125	B3-U0-G2	13,385	126	B2-U0-G2	13,146	124	B2-U0-G2	13,674	129	B4-U0-G2
RFM-160W48LED	3000	18,211	113	B3-U0-G3	19,092	119	B3-U0-G2	18,283	114	B3-U0-G3	18,528	115	B2-U0-G3	18,197	113	B3-U0-G3	18,928	118	B4-U0-G2
RFM-50W60LED	3000	7,643	146	B2-U0-G2	N/A	N/A	N/A	7,684	147	B2-U0-G2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RFM-75W60LED	3000	10,439	136	B2-U0-G2	N/A	N/A	N/A	10,495	136	B2-U0-G2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RFM-100W60LED	3000	12,945	131	B3-U0-G2	N/A	N/A	N/A	13,015	131	B3-U0-G2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RFM-120W60LED	3000	15,302	125	B3-U0-G3	N/A	N/A	N/A	15,384	126	B3-U0-G3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RFM-150W60LED	3000	18,139	122	B3-U0-G3	N/A	N/A	N/A	18,237	122	B3-U0-G3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RFM-170W60LED	3000	20,002	118	B3-U0-G3	N/A	N/A	N/A	20,110	118	B3-U0-G3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Actual performance may vary due to installation variables including optics, mounting/ceiling height, dirt depreciation, light loss factor, etc.; highly recommended to confirm performance with a layout - contact Applications at [signify.com/outdoorluminaire](http://signify.com/outdoorluminaire). Consult DLC QPL to confirm your specific fixture selection is DLC approved.

Note: Some data may be scaled based on tests of similar but not identical luminaires.

## Aurora RFM160W48LED4K (Reference=L75856-1)

## LED Wattage values

Ordering Code	Total LEDs	Average System Watts <sup>15</sup>	Wattage label <sup>16</sup>
RFM-130W32LED	32	129	130
RFM-135W40LED	40	135	140
RFM-55W48LED	48	55	60
RFM-80W48LED	48	81	80
RFM-108W48LED	48	106	110
RFM-160W48LED	48	161	160
RFM-50W60LED	60	52	50
RFM-75W60LED	60	77	80
RFM-100W60LED	60	99	100
RFM-120W60LED	60	122	120
RFM-150W60LED	60	149	150
RFM-170W60LED	60	170	170

15. Typical values, rounded.

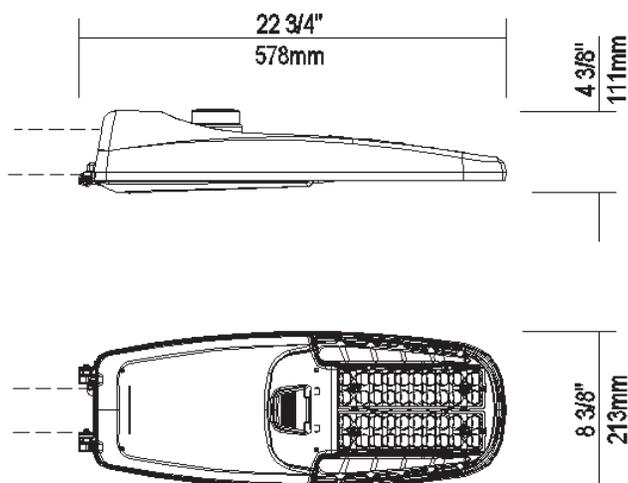
16. As per ANSI C136.15-2015. Consult factory for other labeling needs.

## 2700K LED Lumen values

Ordering Code	Color Temp.	Type R2M			Type R2S			Type R3M			Type R3S			Type 4			Type 5		
		Lumen Output	Efficacy (LPW)	BUG Rating	Lumen Output	Efficacy (LPW)	BUG Rating	Lumen Output	Efficacy (LPW)	BUG Rating	Lumen Output	Efficacy (LPW)	BUG Rating	Lumen Output	Efficacy (LPW)	BUG Rating	Lumen Output	Efficacy (LPW)	BUG Rating
RFM-130W32LED	2700	12,829	100	B3-U0-G2	13,449	104	B3-U0-G2	14,045	109	B3-U0-G2	13,052	109	B2-U0-G2	12,819	100	B2-U0-G3	13,334	104	B4-U0-G2
RFM-135W40LED	2700	13,860	103	B3-U0-G3	N/A	N/A	N/A	13,935	103	B3-U0-G2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RFM-55W48LED	2700	6,665	121	B2-U0-G1	6,988	127	B2-U0-G1	7,297	132	B2-U0-G1	6,781	132	B1-U0-G2	6,660	121	B1-U0-G2	6,928	126	B3-U0-G1
RFM-80W48LED	2700	9,557	119	B2-U0-G2	10,019	124	B2-U0-G2	10,560	131	B2-U0-G2	9,723	131	B2-U0-G2	9,550	119	B2-U0-G2	9,933	123	B4-U0-G2
RFM-108W48LED	2700	12,064	114	B3-U0-G2	12,648	119	B3-U0-G2	13,208	125	B3-U0-G2	12,274	125	B2-U0-G2	12,055	114	B2-U0-G2	12,539	118	B4-U0-G2
RFM-160W48LED	2700	16,700	104	B3-U0-G3	17,508	109	B3-U0-G2	18,283	114	B3-U0-G3	16,991	114	B2-U0-G3	16,687	104	B3-U0-G3	17,357	108	B4-U0-G2
RFM-50W60LED	2700	6,983	134	B2-U0-G2	N/A	N/A	N/A	7,021	134	B2-U0-G1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RFM-75W60LED	2700	9,538	124	B2-U0-G2	N/A	N/A	N/A	9,589	125	B2-U0-G2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RFM-100W60LED	2700	11,828	119	B2-U0-G2	N/A	N/A	N/A	11,892	120	B2-U0-G2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RFM-120W60LED	2700	13,982	115	B3-U0-G3	N/A	N/A	N/A	14,057	115	B3-U0-G2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RFM-150W60LED	2700	16,574	111	B3-U0-G3	N/A	N/A	N/A	16,663	112	B3-U0-G3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RFM-170W60LED	2700	18,276	108	B3-U0-G3	N/A	N/A	N/A	18,374	108	B3-U0-G3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Actual performance may vary due to installation variables including optics, mounting/ceiling height, dirt depreciation, light loss factor, etc.; highly recommended to confirm performance with a layout - contact Applications at [signify.com/outdoorluminaires](mailto:signify.com/outdoorluminaires). Consult DLC QPL to confirm your specific fixture selection is DLC approved.

Note: Some data may be scaled based on tests of similar but not identical luminaires.

**Aurora RFS45W16LED4K (Reference=L75855-1)**

EPA: 0.52 sq ft / weight: 9.4 lb (4.3 kg)

Note: 3D image may not represent color or option selected.  
Logos above include link, click to access.

Qty	1	Luminaire	RFS-45W16LED4K-G2-R3M-UNV-DMG-RCD7-GY3
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### Description of Components:

**Housing:** Made of a low copper die cast Aluminum alloy (A360), 0.100" (2.5mm) minimum thickness. Fits on a 1.66" (42mm) O.D. (1.25" NPS), 1.9" (48mm) O.D. (1.5" NPS) or 2 3/8" (60mm) O.D. (2" NPS) by 5 1/2" (140mm) minimum long tenon. Comes with a zinc plated clamp fixed by 2 zinc plated hexagonal bolts 3/8 16 UNC for ease of installation. Provides an easy step adjustment of +/- 5° tilt in 2.5° increments. Includes integral bubble level standard (always included). A quick release, tool less entry, single latch, hinged, removable door opens downward to provide access to electronic components and to a terminal block. Door is secured to prevent accidental dropping or disengagement. A clearance of 13" (330mm) at the rear is required in order to remove the door. Complete with a bird guard protecting against birds and similar intruders and an ANSI label as per C136.15-2015 to identify wattage and source (both included in box).

**Light Engine:** Composed of 4 main components: **Heat Sink / LED Module / Optical System / Driver**

Electrical components are RoHS compliant, IP66 sealed light engine.

LEDs tested by ISO 17025-2005 accredited lab in accordance with IESNA LM-80 guidelines, extrapolations in accordance with IESNA TM-21. Metal core board ensures greater heat transfer and longer lifespan.

**Heat Sink:** Built in the housing, designed to ensure high efficacy and superior cooling by natural vertical convection air flow pattern always close to LEDs and driver optimising their efficiency and life. Product does not use any cooling device with moving parts (only passive cooling). Wide openings enable natural cleaning and removal of dirt and debris. Entire luminaire is rated for operation in ambient temperature of -40°C / -40°F up to +50°C / +122°F.

**LED Module:** Composed of 16 high-performance white LEDs. Color temperature as per ANSI/NEMA bin Neutral White, 4000 Kelvin nominal (3985K +/- 275K or 3710K to 4260K), CRI 70 Min. 75 Typical.

**Optical System:** (R3M), IES type III medium (asymmetrical). Composed of high-performance UV stabilized optical grade

## Aurora RFS45W16LED4K (Reference=L75855-1)

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polymer refractor lenses to achieve desired distribution optimized to get maximum spacing, target lumens and a superior lighting uniformity. System is rated IP66. Performance shall be tested per LM-63, LM-79 and TM-15 (IESNA) certifying its photometric performance.0% uplight and U0 per IESNA TM-15.

**Driver:** High power factor of 90% min. Electronic driver, operating range 50/60 Hz. Auto-adjusting universal voltage input from 120 to 277 VAC rated for both application line to line or line to neutral, Class 2, THD of 20% max. **Driver comes with dimming compatible 0-10 volts.**

The current supplying the LEDs will be reduced by the driver if the driver experiences internal overheating as a protection to the LEDs and the electrical components. Output is protected from short circuits, voltage overload and current overload. Automatic recovery after correction. Standard built-in driver surge protection of 2.5kV (min).

**Driver Options: (DMG) Integrated Feature,** Dimming compatible 0-10 volts. For applicable warranty, certification and operation guide see Lumec dimmable luminaire specification document for unapproved device installed by other. To get document, click on this link: [Specification document](https://www.signify.com/b-dam/signify/en-us/brands/lumec/Lumec-un-approved-control-device-installed-by-others-7_d.pdf) or go on web site on this address: [https://www.signify.com/b-dam/signify/en-us/brands/lumec/Lumec-un-approved-control-device-installed-by-others-7\\_d.pdf](https://www.signify.com/b-dam/signify/en-us/brands/lumec/Lumec-un-approved-control-device-installed-by-others-7_d.pdf)

**Surge Protector: Integrated Feature,** Surge protector tested in accordance with ANSI/IEEE C62.45 per ANSI/IEEE C62.41.2 Scenario I Category C High Exposure 10kV/10kA waveforms for Line-Ground, Line-Neutral and Neutral-Ground, and in accordance with U.S. DOE (Department of Energy) MSSLC (Municipal Solid-State Street Lighting Consortium) model specification for LED roadway luminaires electrical immunity requirements for High Test Level 10kV / 10kA.

**Luminaire Options: (RCD7),** Receptacle with 7 pins enabling dimming and with two extra connections for future use (these connections are capped off at the factory - requires connections to be made in the field), can be used with a twist-lock control device or photoelectric cell or a shorting cap. Use of photocell or shorting cap is required to ensure proper illumination.

**Luminaire Useful Life:** Refer to IES files for energy consumption and delivered lumens for each option. Based on ISTMT in-situ thermal testing in accordance with UL1598 and UL8750, System Reliability Tool. Advance data and LED manufacturer LM-80/TM-21 data, expected to reach 100,000 + hours with >L70 lumen maintenance @ 25°C. Luminaire Useful Life accounts for LED lumen maintenance AND all of these additional factors including: LED life, driver life, PCB substrate, solder joints, on/off cycles, burning hours and corrosion.

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## Aurora RFS45W16LED4K (Reference=L75855-1)

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Miscellaneous
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### Description of Components:

**Wiring:** The connection of the luminaire is done using a terminal block connector 600V, 85A for use with #2-14 AWG. wires from the primary circuit, located inside the housing. Due to the inrush current that occurs with electronic drivers, recommend using a 10Amp time delay fuse to avoid unwanted fuse blowing (false tripping) that can occur with normal or fast acting fuses.

**Hardware:** All exposed screws shall be complete with Ceramic primer-seal basecoat to reduce seizing of the parts and offers a high resistance to corrosion. All seals and sealing devices are made and/or lined with EPDM and/or silicone and/or rubber.

**Finish:** Color to be **medium grey (GY3)** and in accordance with the AAMA 2603 standard. Application of polyester powder coat paint (4 mils/100 microns) with  $\pm 1$  mils/24 microns of tolerance. The Thermosetting resins provides a discoloration resistant finish in accordance with the ASTM D2244 standard, as well as luster retention in keeping with the ASTM D523 standard and humidity proof in accordance with the ASTM D2247 standard.

The surface treatment achieves a minimum of 5000 hours for salt spray resistant finish in accordance with testing performed and per ASTM B117 standard.

**LED products manufacturing standard:** The electronic components sensitive to electrostatic discharge (ESD) such as light emitting diodes (LEDs) are assembled in compliance with IEC61340-5-1 and ANSI/ESD S20.20 standards so as to eliminate ESD events that could decrease the useful life of the product.

**Vibration Resistance:** The RFS meets the **ANSI C136.31, 2010**, American National Standard for Roadway Luminaire Vibration specifications for Bridge/overpass applications (Tested 3G over 100 000 cycles).

The RFS meets the **California Test 611, Testing durability of mast arm mounted luminaires**, specifications (a 2 000 000 cycles test).

**Service Tag:** Each individual luminaire is uniquely identifiable, thanks to the Service tag application. With a simple scan of a QR code, placed on the inside of the mast door, you gain instant access to the luminaire configuration, making installation and maintenance operations faster and easier, no matter what stage of the luminaire's lifetime. Just download the APP and register your product right away. For more details visit: [Signify.com/servicetag](http://Signify.com/servicetag)

**Warranty:** Luminaire comes with a warranty of 10 years on product and finish.

**Certifications and Compliance:** cULus Listed for Canada and USA. Luminaire meets DOE and MSSLC Model Specification for LED Roadway Luminaires. RoadFocus LED Cobra head luminaires are DesignLights Consortium qualified, consult DLC QPL to confirm your specific fixture selection is approved. Luminaire complies with or exceeds the following ANSI C136 standards: .2, .3, .10, .14, .15, .22, .25, .31, .37, .41.

**Web site information details:** Click on any specific information details you need: / [cULus Certification](#)

# Aurora RFS45W16LED4K (Reference=L75855-1)

## LED Wattage values

Ordering Code	Total LEDs	Average System Watts <sup>14</sup>	Wattage label <sup>15</sup>
RFS-15W12LED	12	14	10
RFS-20W12LED	12	19	20
RFS-25W12LED	12	25	20
RFS-25W16LED	16	24	20
RFS-30W16LED	16	29	30
RFS-35W16LED	16	38	40
RFS-45W16LED	16	45	50
RFS-50W16LED	16	50	50
RFS-54W16LED	16	53	50
RFS-60W16LED	16	61	60
RFS-20W20LED	20	20	20
RFS-40W20LED	20	40	40
RFS-65W20LED	20	64	60

Ordering Code	Total LEDs	Average System Watts <sup>14</sup>	Wattage label <sup>15</sup>
RFS-35W32LED	32	37	40
RFS-55W32LED	32	53	50
RFS-60W32LED	32	59	60
RFS-72W32LED	32	73	70
RFS-108W32LED	32	108	110
RFS-35W40LED	40	35	40
RFS-50W40LED	40	49	50
RFS-55W40LED	40	54	50
RFS-65W40LED	40	66	70
RFS-80W40LED	40	79	80
RFS-100W40LED	40	101	100

14. Typical values, rounded.  
 15. As per ANSI C136.15-2015. Consult factory for other labeling needs.

## 4000K LED Lumen values

Ordering Code	Color Temp.	Type R2M			Type R2S			Type R3M			Type R3S			Type 4			Type 5		
		Lumen Output	Efficacy (LPW)	BUG Rating	Lumen Output	Efficacy (LPW)	BUG Rating	Lumen Output	Efficacy (LPW)	BUG Rating	Lumen Output	Efficacy (LPW)	BUG Rating	Lumen Output	Efficacy (LPW)	BUG Rating	Lumen Output	Efficacy (LPW)	BUG Rating
RFS-15W12LED	4000	1,863	132	B1-U0-G1	1,940	138	B1-U0-G1	1,858	132	B1-U0-G1	1,882	134	B1-U0-G1	1,849	131	B1-U0-G1	1,924	137	B1-U0-G1
RFS-20W12LED	4000	2,525	130	B1-U0-G1	2,629	136	B1-U0-G1	2,518	130	B1-U0-G1	2,552	132	B1-U0-G1	2,506	129	B1-U0-G1	2,606	134	B1-U0-G1
RFS-25W12LED	4000	2,887	116	B1-U0-G1	3,005	121	B1-U0-G1	2,878	116	B1-U0-G1	2,916	117	B1-U0-G1	2,864	115	B1-U0-G1	2,979	120	B1-U0-G1
RFS-25W16LED	4000	3,323	137	B1-U0-G1	3,458	143	B1-U0-G1	3,312	137	B1-U0-G1	3,357	139	B1-U0-G1	3,296	136	B1-U0-G1	3,429	142	B1-U0-G1
RFS-30W16LED	4000	3,764	130	B1-U0-G1	3,918	136	B1-U0-G1	3,752	130	B1-U0-G1	3,802	132	B1-U0-G1	3,735	129	B1-U0-G1	3,884	135	B1-U0-G1
RFS-35W16LED	4000	4,810	127	B1-U0-G1	5,007	132	B1-U0-G1	4,795	126	B1-U0-G1	4,859	128	B1-U0-G1	4,772	126	B1-U0-G1	4,964	131	B1-U0-G1
RFS-45W16LED	4000	5,497	121	B1-U0-G1	5,722	126	B1-U0-G1	5,480	121	B1-U0-G1	5,554	123	B1-U0-G1	5,454	121	B1-U0-G1	5,673	125	B1-U0-G1
RFS-50W16LED	4000	5,825	116	B2-U0-G1	6,064	121	B2-U0-G1	5,807	116	B2-U0-G1	5,885	117	B2-U0-G1	5,780	115	B2-U0-G1	6,012	120	B2-U0-G1
RFS-54W16LED	4000	6,356	120	B2-U0-G1	6,616	125	B2-U0-G1	6,336	120	B2-U0-G1	6,421	121	B2-U0-G1	6,306	119	B2-U0-G1	6,560	124	B2-U0-G1
RFS-60W16LED	4000	6,929	113	B2-U0-G1	7,213	118	B2-U0-G1	6,907	113	B2-U0-G1	7,000	115	B2-U0-G1	6,875	113	B2-U0-G1	7,151	117	B2-U0-G1
RFS-20W20LED	4000	2,553	130	B1-U0-G1	N/A	N/A	N/A	2,567	131	B1-U0-G1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RFS-40W20LED	4000	5,083	128	B1-U0-G1	N/A	N/A	N/A	5,110	129	B1-U0-G1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RFS-65W20LED	4000	7,827	122	B2-U0-G2	N/A	N/A	N/A	7,869	123	B2-U0-G2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RFS-35W32LED	4000	5,197	141	B1-U0-G1	5,410	146	B1-U0-G1	5,181	140	B1-U0-G1	5,250	142	B1-U0-G1	5,156	139	B1-U0-G1	5,364	145	B1-U0-G1
RFS-55W32LED	4000	7,528	141	B2-U0-G1	7,836	147	B2-U0-G1	7,504	140	B2-U0-G1	7,605	142	B2-U0-G1	7,469	140	B2-U0-G1	7,770	145	B2-U0-G1
RFS-60W32LED	4000	7,630	130	B2-U0-G1	7,943	136	B2-U0-G1	7,607	130	B2-U0-G1	7,709	132	B2-U0-G1	7,571	129	B2-U0-G1	7,875	134	B2-U0-G1
RFS-72W32LED	4000	9,408	129	B2-U0-G2	9,794	134	B2-U0-G2	9,379	128	B2-U0-G2	9,505	130	B2-U0-G2	9,336	128	B2-U0-G2	9,711	133	B2-U0-G2
RFS-108W32LED	4000	13,025	121	B3-U0-G2	13,559	126	B3-U0-G2	12,984	120	B3-U0-G2	13,158	122	B3-U0-G2	12,924	120	B3-U0-G2	13,443	124	B3-U0-G2
RFS-35W40LED	4000	5,472	155	B1-U0-G1	N/A	N/A	N/A	5,502	156	B1-U0-G1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RFS-50W40LED	4000	7,319	150	B2-U0-G2	N/A	N/A	N/A	7,359	151	B2-U0-G2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RFS-55W40LED	4000	7,675	141	B2-U0-G2	N/A	N/A	N/A	7,716	142	B2-U0-G2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RFS-65W40LED	4000	9,024	137	B2-U0-G2	N/A	N/A	N/A	9,073	137	B2-U0-G2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RFS-80W40LED	4000	10,546	133	B2-U0-G2	N/A	N/A	N/A	10,603	134	B2-U0-G2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RFS-100W40LED	4000	12,861	127	B3-U0-G3	N/A	N/A	N/A	12,930	128	B3-U0-G2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Actual performance may vary due to installation variables including optics, mounting/ceiling height, dirt depreciation, light loss factor, etc.; highly recommended to confirm performance with a layout - contact Applications at signify.com/outdoorluminaires. Consult DLC QPL to confirm your specific fixture selection is DLC approved.

Note: Some data may be scaled based on tests of similar but not identical luminaires.

# Aurora RFS45W16LED4K (Reference=L75855-1)

## 2700K LED Lumen values

Ordering Code	Color Temp.	Type R2M			Type R2S			Type R3M			Type R3S			Type 4			Type 5		
		Lumen Output	Efficacy (LPW)	BUG Rating	Lumen Output	Efficacy (LPW)	BUG Rating	Lumen Output	Efficacy (LPW)	BUG Rating	Lumen Output	Efficacy (LPW)	BUG Rating	Lumen Output	Efficacy (LPW)	BUG Rating	Lumen Output	Efficacy (LPW)	BUG Rating
RFS-15W12LED	2700	1,603	114	B1-U0-G1	1,669	119	B1-U0-G0	1,598	113	B1-U0-G1	1,619	115	B0-U0-G0	1,591	113	B0-U0-G1	1,655	118	B1-U0-G0
RFS-20W12LED	2700	2,172	112	B1-U0-G1	2,261	117	B1-U0-G0	2,166	112	B1-U0-G1	2,195	113	B1-U0-G1	2,156	111	B1-U0-G1	2,242	116	B2-U0-G1
RFS-25W12LED	2700	2,483	100	B1-U0-G1	2,585	104	B1-U0-G0	2,476	99	B1-U0-G1	2,509	101	B1-U0-G1	2,464	99	B1-U0-G1	2,563	103	B2-U0-G1
RFS-25W16LED	2700	2,858	118	B1-U0-G1	2,975	123	B1-U0-G0	2,849	118	B1-U0-G1	2,888	119	B1-U0-G1	2,835	117	B1-U0-G1	2,950	122	B2-U0-G1
RFS-30W16LED	2700	3,238	112	B1-U0-G1	3,371	117	B1-U0-G0	3,228	112	B1-U0-G1	3,271	113	B1-U0-G1	3,213	111	B1-U0-G1	3,342	116	B2-U0-G1
RFS-35W16LED	2700	4,138	109	B1-U0-G1	4,307	113	B1-U0-G1	4,125	109	B1-U0-G1	4,180	110	B1-U0-G1	4,105	108	B1-U0-G1	4,271	112	B3-U0-G1
RFS-45W16LED	2700	4,729	104	B1-U0-G1	4,923	109	B1-U0-G1	4,714	104	B1-U0-G1	4,778	106	B1-U0-G1	4,692	104	B1-U0-G2	4,880	108	B3-U0-G1
RFS-50W16LED	2700	5,012	100	B1-U0-G1	5,217	104	B1-U0-G1	4,996	100	B1-U0-G1	5,063	101	B1-U0-G1	4,972	99	B1-U0-G2	5,172	103	B3-U0-G1
RFS-54W16LED	2700	5,468	103	B2-U0-G1	5,692	107	B2-U0-G1	5,451	103	B1-U0-G1	5,524	104	B1-U0-G1	5,425	102	B1-U0-G2	5,643	106	B3-U0-G1
RFS-60W16LED	2700	5,961	98	B2-U0-G1	6,205	102	B2-U0-G1	5,942	97	B2-U0-G1	6,022	99	B1-U0-G2	5,915	97	B1-U0-G2	6,152	101	B3-U0-G1
RFS-20W20LED	2700	2,218	113	B1-U0-G1	N/A	N/A	N/A	2,230	114	B1-U0-G1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RFS-40W20LED	2700	4,416	111	B1-U0-G1	N/A	N/A	N/A	4,440	112	B1-U0-G1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RFS-65W20LED	2700	6,800	106	B2-U0-G2	N/A	N/A	N/A	6,837	107	B2-U0-G1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RFS-35W32LED	2700	4,470	121	B1-U0-G1	4,654	126	B1-U0-G1	4,457	121	B1-U0-G1	4,516	122	B1-U0-G1	4,436	120	B1-U0-G1	4,614	125	B3-U0-G1
RFS-55W32LED	2700	6,476	121	B2-U0-G1	6,741	126	B2-U0-G1	6,456	121	B2-U0-G1	6,542	122	B1-U0-G2	6,426	120	B1-U0-G2	6,684	125	B3-U0-G1
RFS-60W32LED	2700	6,564	112	B2-U0-G1	6,834	117	B2-U0-G1	6,544	112	B2-U0-G1	6,632	113	B1-U0-G2	6,514	111	B1-U0-G2	6,775	116	B3-U0-G1
RFS-72W32LED	2700	8,094	111	B2-U0-G2	8,426	115	B2-U0-G1	8,069	111	B2-U0-G2	8,177	112	B1-U0-G2	8,031	110	B2-U0-G2	8,354	114	B3-U0-G2
RFS-108W32LED	2700	11,205	104	B3-U0-G2	11,664	108	B3-U0-G2	11,170	103	B2-U0-G2	11,320	105	B2-U0-G2	11,118	103	B2-U0-G2	11,565	107	B4-U0-G2
RFS-35W40LED	2700	4,754	135	B1-U0-G1	N/A	N/A	N/A	4,780	135	B1-U0-G1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RFS-50W40LED	2700	6,359	131	B2-U0-G2	N/A	N/A	N/A	6,393	131	B2-U0-G1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RFS-55W40LED	2700	6,667	123	B2-U0-G2	N/A	N/A	N/A	6,703	123	B2-U0-G1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RFS-65W40LED	2700	7,840	119	B2-U0-G2	N/A	N/A	N/A	7,882	119	B2-U0-G2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RFS-80W40LED	2700	9,162	116	B2-U0-G2	N/A	N/A	N/A	9,211	117	B2-U0-G2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RFS-100W40LED	2700	11,173	111	B2-U0-G2	N/A	N/A	N/A	11,233	111	B2-U0-G2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

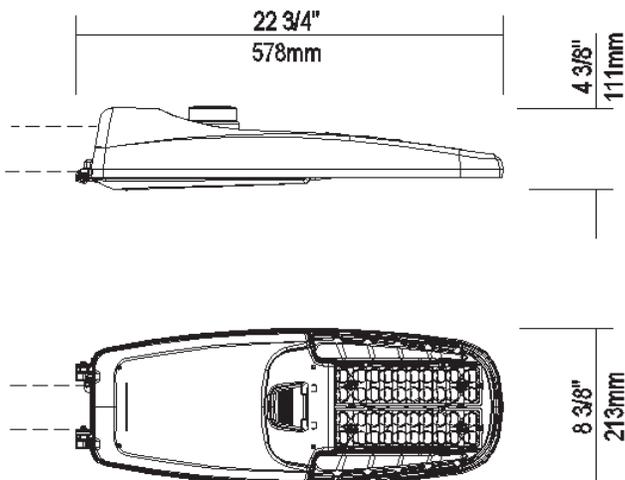
## 3000K LED Lumen values

Ordering Code	Color Temp.	Type R2M			Type R2S			Type R3M			Type R3S			Type 4			Type 5		
		Lumen Output	Efficacy (LPW)	BUG Rating	Lumen Output	Efficacy (LPW)	BUG Rating	Lumen Output	Efficacy (LPW)	BUG Rating	Lumen Output	Efficacy (LPW)	BUG Rating	Lumen Output	Efficacy (LPW)	BUG Rating	Lumen Output	Efficacy (LPW)	BUG Rating
RFS-15W12LED	3000	1,748	124	B1-U0-G1	1,820	129	B1-U0-G0	1,743	124	B1-U0-G1	1,766	125	B0-U0-G0	1,735	123	B0-U0-G1	1,805	128	B1-U0-G0
RFS-20W12LED	3000	2,369	122	B1-U0-G1	2,466	127	B1-U0-G0	2,362	122	B1-U0-G1	2,394	123	B1-U0-G1	2,351	121	B1-U0-G1	2,445	126	B2-U0-G1
RFS-25W12LED	3000	2,708	109	B1-U0-G1	2,819	113	B1-U0-G0	2,700	108	B1-U0-G1	2,736	110	B1-U0-G1	2,687	108	B1-U0-G1	2,795	112	B2-U0-G1
RFS-25W16LED	3000	3,117	129	B1-U0-G1	3,244	134	B1-U0-G0	3,107	128	B1-U0-G1	3,149	130	B1-U0-G1	3,092	128	B1-U0-G1	3,217	133	B2-U0-G1
RFS-30W16LED	3000	3,531	122	B1-U0-G1	3,676	127	B1-U0-G0	3,520	122	B1-U0-G1	3,567	124	B1-U0-G1	3,504	121	B1-U0-G1	3,644	126	B2-U0-G1
RFS-35W16LED	3000	4,512	119	B1-U0-G1	4,697	124	B1-U0-G1	4,498	118	B1-U0-G1	4,558	120	B1-U0-G1	4,477	118	B1-U0-G1	4,657	123	B3-U0-G1
RFS-45W16LED	3000	5,157	114	B1-U0-G1	5,368	119	B1-U0-G1	5,141	114	B1-U0-G1	5,201	115	B1-U0-G1	5,117	113	B1-U0-G2	5,322	118	B3-U0-G1
RFS-50W16LED	3000	5,465	109	B1-U0-G1	5,689	113	B1-U0-G1	5,448	109	B1-U0-G1	5,521	110	B1-U0-G1	5,422	108	B1-U0-G2	5,640	112	B3-U0-G1
RFS-54W16LED	3000	5,963	113	B2-U0-G1	6,207	117	B2-U0-G1	5,944	112	B1-U0-G1	6,024	114	B1-U0-G1	5,916	112	B1-U0-G2	6,154	116	B3-U0-G1
RFS-60W16LED	3000	6,500	106	B2-U0-G1	6,767	111	B2-U0-G1	6,480	106	B2-U0-G1	6,567	107	B1-U0-G2	6,450	106	B1-U0-G2	6,709	110	B3-U0-G1
RFS-20W20LED	3000	2,427	124	B1-U0-G1	N/A	N/A	N/A	2,440	124	B1-U0-G1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RFS-40W20LED	3000	4,833	122	B1-U0-G1	N/A	N/A	N/A	4,859	122	B1-U0-G1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RFS-65W20LED	3000	7,442	116	B2-U0-G2	N/A	N/A	N/A	7,482	117	B2-U0-G2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RFS-35W32LED	3000	4,875	132	B1-U0-G1	5,075	137	B1-U0-G1	4,860	131	B1-U0-G1	4,925	133	B1-U0-G1	4,837	131	B1-U0-G1	5,032	136	B3-U0-G1
RFS-55W32LED	3000	7,062	132	B2-U0-G1	7,351	137	B2-U0-G1	7,040	132	B2-U0-G1	7,134	133	B1-U0-G2	7,007	131	B1-U0-G2	7,289	136	B3-U0-G1
RFS-60W32LED	3000	7,158	122	B2-U0-G1	7,452	127	B2-U0-G1	7,136	122	B2-U0-G1	7,232	123	B1-U0-G2	7,103	121	B1-U0-G2	7,388	126	B3-U0-G1
RFS-72W32LED	3000	8,826	121	B2-U0-G2	9,188	126	B2-U0-G1	8,799	121	B2-U0-G2	8,917	122	B1-U0-G2	8,758	120	B2-U0-G2	9,110	125	B3-U0-G2
RFS-108W32LED	3000	12,219	113	B3-U0-G2	12,720	118	B3-U0-G2	12,181	113	B2-U0-G2	12,344	114	B2-U0-G2	12,124	112	B2-U0-G2	12,611	117	B4-U0-G2
RFS-35W40LED	3000	5,203	147	B1-U0-G1	N/A	N/A	N/A	5,231	148	B1-U0-G1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RFS-50W40LED	3000	6,959	143	B2-U0-G2	N/A	N/A	N/A	6,996	144	B2-U0-G1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RFS-55W40LED	3000	7,297	134	B2-U0-G2	N/A	N/A	N/A	7,336	135	B2-U0-G2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RFS-65W40LED	3000	8,580	130	B2-U0-G2	N/A	N/A	N/A	8,626	131	B2-U0-G2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RFS-80W40LED	3000	10,027	127	B2-U0-G2	N/A	N/A	N/A	10,081	128	B2-U0-G2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RFS-100W40LED	3000	12,228	121	B3-U0-G3	N/A	N/A	N/A	12,294	122	B3-U0-G2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Actual performance may vary due to installation variables including optics, mounting/ceiling height, dirt depreciation, light loss factor, etc.; highly recommended to confirm performance with a layout - contact Applications at [signify.com/outdoorluminaire](mailto:signify.com/outdoorluminaire). Consult DLC QPL to confirm your specific fixture selection is DLC approved.

Note: Some data may be scaled based on tests of similar but not identical luminaires.

## Aurora ComEd Program (Reference=L75811-1)



EPA: 0.52 sq ft / weight: 9.4 lb (4.3 kg)

Note: 3D image may not represent color or option selected.  
Logos above include link, click to access.

Qty	1	Luminaire	RFS-72W32LED4K-G2-R3M-UNV-DMG-RCD7-GY3
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### Description of Components:

**Housing:** Made of a low copper die cast Aluminum alloy (A360), 0.100" (2.5mm) minimum thickness. Fits on a 1.66" (42mm) O.D. (1.25" NPS), 1.9" (48mm) O.D. (1.5" NPS) or 2 3/8" (60mm) O.D. (2" NPS) by 5 1/2" (140mm) minimum long tenon. Comes with a zinc plated clamp fixed by 2 zinc plated hexagonal bolts 3/8 16 UNC for ease of installation. Provides an easy step adjustment of +/- 5° tilt in 2.5° increments. Includes integral bubble level standard (always included). A quick release, tool less entry, single latch, hinged, removable door opens downward to provide access to electronic components and to a terminal block. Door is secured to prevent accidental dropping or disengagement. A clearance of 13" (330mm) at the rear is required in order to remove the door. Complete with a bird guard protecting against birds and similar intruders and an ANSI label as per C136.15-2015 to identify wattage and source (both included in box).

**Light Engine:** Composed of 4 main components: **Heat Sink / LED Module / Optical System / Driver**

Electrical components are RoHS compliant, IP66 sealed light engine.

LEDs tested by ISO 17025-2005 accredited lab in accordance with IESNA LM-80 guidelines, extrapolations in accordance with IESNA TM-21. Metal core board ensures greater heat transfer and longer lifespan.

**Heat Sink:** Built in the housing, designed to ensure high efficacy and superior cooling by natural vertical convection air flow pattern always close to LEDs and driver optimising their efficiency and life. Product does not use any cooling device with moving parts (only passive cooling). Wide openings enable natural cleaning and removal of dirt and debris. Entire luminaire is rated for operation in ambient temperature of -40°C / -40°F up to +50°C / +122°F.

**LED Module:** Composed of 32 high-performance white LEDs. Color temperature as per ANSI/NEMA bin Neutral White, 4000 Kelvin nominal (3985K +/- 275K or 3710K to 4260K), CRI 70 Min. 75 Typical.

**Optical System:** (R3M), IES type III medium (asymmetrical). Composed of high-performance UV stabilized optical grade

## Aurora ComEd Program (Reference=L75811-1)

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polymer refractor lenses to achieve desired distribution optimized to get maximum spacing, target lumens and a superior lighting uniformity. System is rated IP66. Performance shall be tested per LM-63, LM-79 and TM-15 (IESNA) certifying its photometric performance.0% uplight and U0 per IESNA TM-15.

**Driver:** High power factor of 90% min. Electronic driver, operating range 50/60 Hz. Auto-adjusting universal voltage input from 120 to 277 VAC rated for both application line to line or line to neutral, Class 2, THD of 20% max. **Driver comes with dimming compatible 0-10 volts.**

The current supplying the LEDs will be reduced by the driver if the driver experiences internal overheating as a protection to the LEDs and the electrical components. Output is protected from short circuits, voltage overload and current overload. Automatic recovery after correction. Standard built-in driver surge protection of 2.5kV (min).

**Driver Options: (DMG) Integrated Feature,** Dimming compatible 0-10 volts. For applicable warranty, certification and operation guide see Lumec dimmable luminaire specification document for unapproved device installed by other. To get document, click on this link: [Specification document](https://www.signify.com/b-dam/signify/en-us/brands/lumec/Lumec-un-approved-control-device-installed-by-others-7_d.pdf) or go on web site on this address: [https://www.signify.com/b-dam/signify/en-us/brands/lumec/Lumec-un-approved-control-device-installed-by-others-7\\_d.pdf](https://www.signify.com/b-dam/signify/en-us/brands/lumec/Lumec-un-approved-control-device-installed-by-others-7_d.pdf)

**Surge Protector: Integrated Feature,** Surge protector tested in accordance with ANSI/IEEE C62.45 per ANSI/IEEE C62.41.2 Scenario I Category C High Exposure 10kV/10kA waveforms for Line-Ground, Line-Neutral and Neutral-Ground, and in accordance with U.S. DOE (Department of Energy) MSSLC (Municipal Solid-State Street Lighting Consortium) model specification for LED roadway luminaires electrical immunity requirements for High Test Level 10kV / 10kA.

**Luminaire Options: (RCD7),** Receptacle with 7 pins enabling dimming and with two extra connections for future use (these connections are capped off at the factory - requires connections to be made in the field), can be used with a twist-lock control device or photoelectric cell or a shorting cap. Use of photocell or shorting cap is required to ensure proper illumination.

**Luminaire Useful Life:** Refer to IES files for energy consumption and delivered lumens for each option. Based on ISTMT in-situ thermal testing in accordance with UL1598 and UL8750, System Reliability Tool. Advance data and LED manufacturer LM-80/TM-21 data, expected to reach 100,000 + hours with >L70 lumen maintenance @ 25°C. Luminaire Useful Life accounts for LED lumen maintenance AND all of these additional factors including: LED life, driver life, PCB substrate, solder joints, on/off cycles, burning hours and corrosion.

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## Aurora ComEd Program (Reference=L75811-1)

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Miscellaneous
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### Description of Components:

**Wiring:** The connection of the luminaire is done using a terminal block connector 600V, 85A for use with #2-14 AWG. wires from the primary circuit, located inside the housing. Due to the inrush current that occurs with electronic drivers, recommend using a 10Amp time delay fuse to avoid unwanted fuse blowing (false tripping) that can occur with normal or fast acting fuses.

**Hardware:** All exposed screws shall be complete with Ceramic primer-seal basecoat to reduce seizing of the parts and offers a high resistance to corrosion. All seals and sealing devices are made and/or lined with EPDM and/or silicone and/or rubber.

**Finish:** Color to be **medium grey (GY3)** and in accordance with the AAMA 2603 standard. Application of polyester powder coat paint (4 mils/100 microns) with  $\pm 1$  mils/24 microns of tolerance. The Thermosetting resins provides a discoloration resistant finish in accordance with the ASTM D2244 standard, as well as luster retention in keeping with the ASTM D523 standard and humidity proof in accordance with the ASTM D2247 standard.

The surface treatment achieves a minimum of 5000 hours for salt spray resistant finish in accordance with testing performed and per ASTM B117 standard.

**LED products manufacturing standard:** The electronic components sensitive to electrostatic discharge (ESD) such as light emitting diodes (LEDs) are assembled in compliance with IEC61340-5-1 and ANSI/ESD S20.20 standards so as to eliminate ESD events that could decrease the useful life of the product.

**Vibration Resistance:** The RFS meets the **ANSI C136.31, 2010**, American National Standard for Roadway Luminaire Vibration specifications for Bridge/overpass applications (Tested 3G over 100 000 cycles).

The RFS meets the **California Test 611, Testing durability of mast arm mounted luminaires**, specifications (a 2 000 000 cycles test).

**Service Tag:** Each individual luminaire is uniquely identifiable, thanks to the Service tag application. With a simple scan of a QR code, placed on the inside of the mast door, you gain instant access to the luminaire configuration, making installation and maintenance operations faster and easier, no matter what stage of the luminaire's lifetime. Just download the APP and register your product right away. For more details visit: [Signify.com/servicetag](http://Signify.com/servicetag)

**Warranty:** Luminaire comes with a warranty of 10 years on product and finish.

**Certifications and Compliance:** cULus Listed for Canada and USA. Luminaire meets DOE and MSSLC Model Specification for LED Roadway Luminaires. RoadFocus LED Cobra head luminaires are DesignLights Consortium qualified, consult DLC QPL to confirm your specific fixture selection is approved. Luminaire complies with or exceeds the following ANSI C136 standards: .2, .3, .10, .14, .15, .22, .25, .31, .37, .41.

**Web site information details:** Click on any specific information details you need: / [cULus Certification](#)

# Aurora ComEd Program (Reference=L75811-1)

## LED Wattage values

Ordering Code	Total LEDs	Average System Watts <sup>14</sup>	Wattage label <sup>15</sup>
RFS-15W12LED	12	14	10
RFS-20W12LED	12	19	20
RFS-25W12LED	12	25	20
RFS-25W16LED	16	24	20
RFS-30W16LED	16	29	30
RFS-35W16LED	16	38	40
RFS-45W16LED	16	45	50
RFS-50W16LED	16	50	50
RFS-54W16LED	16	53	50
RFS-60W16LED	16	61	60
RFS-20W20LED	20	20	20
RFS-40W20LED	20	40	40
RFS-65W20LED	20	64	60

Ordering Code	Total LEDs	Average System Watts <sup>14</sup>	Wattage label <sup>15</sup>
RFS-35W32LED	32	37	40
RFS-55W32LED	32	53	50
RFS-60W32LED	32	59	60
RFS-72W32LED	32	73	70
RFS-108W32LED	32	108	110
RFS-35W40LED	40	35	40
RFS-50W40LED	40	49	50
RFS-55W40LED	40	54	50
RFS-65W40LED	40	66	70
RFS-80W40LED	40	79	80
RFS-100W40LED	40	101	100

14. Typical values, rounded.  
 15. As per ANSI C136.15-2015. Consult factory for other labeling needs.

## 4000K LED Lumen values

Ordering Code	Color Temp.	Type R2M			Type R2S			Type R3M			Type R3S			Type 4			Type 5		
		Lumen Output	Efficacy (LPW)	BUG Rating	Lumen Output	Efficacy (LPW)	BUG Rating	Lumen Output	Efficacy (LPW)	BUG Rating	Lumen Output	Efficacy (LPW)	BUG Rating	Lumen Output	Efficacy (LPW)	BUG Rating	Lumen Output	Efficacy (LPW)	BUG Rating
RFS-15W12LED	4000	1,863	132	B1-U0-G1	1,940	138	B1-U0-G1	1,858	132	B1-U0-G1	1,882	134	B1-U0-G1	1,849	131	B1-U0-G1	1,924	137	B1-U0-G1
RFS-20W12LED	4000	2,525	130	B1-U0-G1	2,629	136	B1-U0-G1	2,518	130	B1-U0-G1	2,552	132	B1-U0-G1	2,506	129	B1-U0-G1	2,606	134	B1-U0-G1
RFS-25W12LED	4000	2,887	116	B1-U0-G1	3,005	121	B1-U0-G1	2,878	116	B1-U0-G1	2,916	117	B1-U0-G1	2,864	115	B1-U0-G1	2,979	120	B1-U0-G1
RFS-25W16LED	4000	3,323	137	B1-U0-G1	3,458	143	B1-U0-G1	3,312	137	B1-U0-G1	3,357	139	B1-U0-G1	3,296	136	B1-U0-G1	3,429	142	B1-U0-G1
RFS-30W16LED	4000	3,764	130	B1-U0-G1	3,918	136	B1-U0-G1	3,752	130	B1-U0-G1	3,802	132	B1-U0-G1	3,735	129	B1-U0-G1	3,884	135	B1-U0-G1
RFS-35W16LED	4000	4,810	127	B1-U0-G1	5,007	132	B1-U0-G1	4,795	126	B1-U0-G1	4,859	128	B1-U0-G1	4,772	126	B1-U0-G1	4,964	131	B1-U0-G1
RFS-45W16LED	4000	5,497	121	B1-U0-G1	5,722	126	B1-U0-G1	5,480	121	B1-U0-G1	5,554	123	B1-U0-G1	5,454	121	B1-U0-G1	5,673	125	B1-U0-G1
RFS-50W16LED	4000	5,825	116	B2-U0-G1	6,064	121	B2-U0-G1	5,807	116	B2-U0-G1	5,885	117	B2-U0-G1	5,780	115	B2-U0-G1	6,012	120	B2-U0-G1
RFS-54W16LED	4000	6,356	120	B2-U0-G1	6,616	125	B2-U0-G1	6,336	120	B2-U0-G1	6,421	121	B2-U0-G1	6,306	119	B2-U0-G1	6,560	124	B2-U0-G1
RFS-60W16LED	4000	6,929	113	B2-U0-G1	7,213	118	B2-U0-G1	6,907	113	B2-U0-G1	7,000	115	B2-U0-G1	6,875	113	B2-U0-G1	7,151	117	B2-U0-G1
RFS-20W20LED	4000	2,553	130	B1-U0-G1	N/A	N/A	N/A	2,567	131	B1-U0-G1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RFS-40W20LED	4000	5,083	128	B1-U0-G1	N/A	N/A	N/A	5,110	129	B1-U0-G1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RFS-65W20LED	4000	7,827	122	B2-U0-G2	N/A	N/A	N/A	7,869	123	B2-U0-G2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RFS-35W32LED	4000	5,197	141	B1-U0-G1	5,410	146	B1-U0-G1	5,181	140	B1-U0-G1	5,250	142	B1-U0-G1	5,156	139	B1-U0-G1	5,364	145	B1-U0-G1
RFS-55W32LED	4000	7,528	141	B2-U0-G1	7,836	147	B2-U0-G1	7,504	140	B2-U0-G1	7,605	142	B2-U0-G1	7,469	140	B2-U0-G1	7,770	145	B2-U0-G1
RFS-60W32LED	4000	7,630	130	B2-U0-G1	7,943	136	B2-U0-G1	7,607	130	B2-U0-G1	7,709	132	B2-U0-G1	7,571	129	B2-U0-G1	7,875	134	B2-U0-G1
RFS-72W32LED	4000	9,408	129	B2-U0-G2	9,794	134	B2-U0-G2	9,379	128	B2-U0-G2	9,505	130	B2-U0-G2	9,336	128	B2-U0-G2	9,711	133	B2-U0-G2
RFS-108W32LED	4000	13,025	121	B3-U0-G2	13,559	126	B3-U0-G2	12,984	120	B3-U0-G2	13,158	122	B3-U0-G2	12,924	120	B3-U0-G2	13,443	124	B3-U0-G2
RFS-35W40LED	4000	5,472	155	B1-U0-G1	N/A	N/A	N/A	5,502	156	B1-U0-G1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RFS-50W40LED	4000	7,319	150	B2-U0-G2	N/A	N/A	N/A	7,359	151	B2-U0-G2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RFS-55W40LED	4000	7,675	141	B2-U0-G2	N/A	N/A	N/A	7,716	142	B2-U0-G2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RFS-65W40LED	4000	9,024	137	B2-U0-G2	N/A	N/A	N/A	9,073	137	B2-U0-G2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RFS-80W40LED	4000	10,546	133	B2-U0-G2	N/A	N/A	N/A	10,603	134	B2-U0-G2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RFS-100W40LED	4000	12,861	127	B3-U0-G3	N/A	N/A	N/A	12,930	128	B3-U0-G2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Actual performance may vary due to installation variables including optics, mounting/ceiling height, dirt depreciation, light loss factor, etc.; highly recommended to confirm performance with a layout - contact Applications at signify.com/outdoorluminaires. Consult DLC QPL to confirm your specific fixture selection is DLC approved.

Note: Some data may be scaled based on tests of similar but not identical luminaires.

# Aurora ComEd Program (Reference=L75811-1)

## 2700K LED Lumen values

Ordering Code	Color Temp.	Type R2M			Type R2S			Type R3M			Type R3S			Type 4			Type 5		
		Lumen Output	Efficacy (LPW)	BUG Rating	Lumen Output	Efficacy (LPW)	BUG Rating	Lumen Output	Efficacy (LPW)	BUG Rating	Lumen Output	Efficacy (LPW)	BUG Rating	Lumen Output	Efficacy (LPW)	BUG Rating	Lumen Output	Efficacy (LPW)	BUG Rating
RFS-15W12LED	2700	1,603	114	B1-U0-G1	1,669	119	B1-U0-G0	1,598	113	B1-U0-G1	1,619	115	B0-U0-G0	1,591	113	B0-U0-G1	1,655	118	B1-U0-G0
RFS-20W12LED	2700	2,172	112	B1-U0-G1	2,261	117	B1-U0-G0	2,166	112	B1-U0-G1	2,195	113	B1-U0-G1	2,156	111	B1-U0-G1	2,242	116	B2-U0-G1
RFS-25W12LED	2700	2,483	100	B1-U0-G1	2,585	104	B1-U0-G0	2,476	99	B1-U0-G1	2,509	101	B1-U0-G1	2,464	99	B1-U0-G1	2,563	103	B2-U0-G1
RFS-25W16LED	2700	2,858	118	B1-U0-G1	2,975	123	B1-U0-G0	2,849	118	B1-U0-G1	2,888	119	B1-U0-G1	2,835	117	B1-U0-G1	2,950	122	B2-U0-G1
RFS-30W16LED	2700	3,238	112	B1-U0-G1	3,371	117	B1-U0-G0	3,228	112	B1-U0-G1	3,271	113	B1-U0-G1	3,213	111	B1-U0-G1	3,342	116	B2-U0-G1
RFS-35W16LED	2700	4,138	109	B1-U0-G1	4,307	113	B1-U0-G1	4,125	109	B1-U0-G1	4,180	110	B1-U0-G1	4,105	108	B1-U0-G1	4,271	112	B3-U0-G1
RFS-45W16LED	2700	4,729	104	B1-U0-G1	4,923	109	B1-U0-G1	4,714	104	B1-U0-G1	4,778	106	B1-U0-G1	4,692	104	B1-U0-G2	4,880	108	B3-U0-G1
RFS-50W16LED	2700	5,012	100	B1-U0-G1	5,217	104	B1-U0-G1	4,996	100	B1-U0-G1	5,063	101	B1-U0-G1	4,972	99	B1-U0-G2	5,172	103	B3-U0-G1
RFS-54W16LED	2700	5,468	103	B2-U0-G1	5,692	107	B2-U0-G1	5,451	103	B1-U0-G1	5,524	104	B1-U0-G1	5,425	102	B1-U0-G2	5,643	106	B3-U0-G1
RFS-60W16LED	2700	5,961	98	B2-U0-G1	6,205	102	B2-U0-G1	5,942	97	B2-U0-G1	6,022	99	B1-U0-G2	5,915	97	B1-U0-G2	6,152	101	B3-U0-G1
RFS-20W20LED	2700	2,218	113	B1-U0-G1	N/A	N/A	N/A	2,230	114	B1-U0-G1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RFS-40W20LED	2700	4,416	111	B1-U0-G1	N/A	N/A	N/A	4,440	112	B1-U0-G1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RFS-65W20LED	2700	6,800	106	B2-U0-G2	N/A	N/A	N/A	6,837	107	B2-U0-G1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RFS-35W32LED	2700	4,470	121	B1-U0-G1	4,654	126	B1-U0-G1	4,457	121	B1-U0-G1	4,516	122	B1-U0-G1	4,436	120	B1-U0-G1	4,614	125	B3-U0-G1
RFS-55W32LED	2700	6,476	121	B2-U0-G1	6,741	126	B2-U0-G1	6,456	121	B2-U0-G1	6,542	122	B1-U0-G2	6,426	120	B1-U0-G2	6,684	125	B3-U0-G1
RFS-60W32LED	2700	6,564	112	B2-U0-G1	6,834	117	B2-U0-G1	6,544	112	B2-U0-G1	6,632	113	B1-U0-G2	6,514	111	B1-U0-G2	6,775	116	B3-U0-G1
RFS-72W32LED	2700	8,094	111	B2-U0-G2	8,426	115	B2-U0-G1	8,069	111	B2-U0-G2	8,177	112	B1-U0-G2	8,031	110	B2-U0-G2	8,354	114	B3-U0-G2
RFS-108W32LED	2700	11,205	104	B3-U0-G2	11,664	108	B3-U0-G2	11,170	103	B2-U0-G2	11,320	105	B2-U0-G2	11,118	103	B2-U0-G2	11,565	107	B4-U0-G2
RFS-35W40LED	2700	4,754	135	B1-U0-G1	N/A	N/A	N/A	4,780	135	B1-U0-G1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RFS-50W40LED	2700	6,359	131	B2-U0-G2	N/A	N/A	N/A	6,393	131	B2-U0-G1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RFS-55W40LED	2700	6,667	123	B2-U0-G2	N/A	N/A	N/A	6,703	123	B2-U0-G1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RFS-65W40LED	2700	7,840	119	B2-U0-G2	N/A	N/A	N/A	7,882	119	B2-U0-G2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RFS-80W40LED	2700	9,162	116	B2-U0-G2	N/A	N/A	N/A	9,211	117	B2-U0-G2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RFS-100W40LED	2700	11,173	111	B2-U0-G2	N/A	N/A	N/A	11,233	111	B2-U0-G2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

## 3000K LED Lumen values

Ordering Code	Color Temp.	Type R2M			Type R2S			Type R3M			Type R3S			Type 4			Type 5		
		Lumen Output	Efficacy (LPW)	BUG Rating	Lumen Output	Efficacy (LPW)	BUG Rating	Lumen Output	Efficacy (LPW)	BUG Rating	Lumen Output	Efficacy (LPW)	BUG Rating	Lumen Output	Efficacy (LPW)	BUG Rating	Lumen Output	Efficacy (LPW)	BUG Rating
RFS-15W12LED	3000	1,748	124	B1-U0-G1	1,820	129	B1-U0-G0	1,743	124	B1-U0-G1	1,766	125	B0-U0-G0	1,735	123	B0-U0-G1	1,805	128	B1-U0-G0
RFS-20W12LED	3000	2,369	122	B1-U0-G1	2,466	127	B1-U0-G0	2,362	122	B1-U0-G1	2,394	123	B1-U0-G1	2,351	121	B1-U0-G1	2,445	126	B2-U0-G1
RFS-25W12LED	3000	2,708	109	B1-U0-G1	2,819	113	B1-U0-G0	2,700	108	B1-U0-G1	2,736	110	B1-U0-G1	2,687	108	B1-U0-G1	2,795	112	B2-U0-G1
RFS-25W16LED	3000	3,117	129	B1-U0-G1	3,244	134	B1-U0-G0	3,107	128	B1-U0-G1	3,149	130	B1-U0-G1	3,092	128	B1-U0-G1	3,217	133	B2-U0-G1
RFS-30W16LED	3000	3,531	122	B1-U0-G1	3,676	127	B1-U0-G0	3,520	122	B1-U0-G1	3,567	124	B1-U0-G1	3,504	121	B1-U0-G1	3,644	126	B2-U0-G1
RFS-35W16LED	3000	4,512	119	B1-U0-G1	4,697	124	B1-U0-G1	4,498	118	B1-U0-G1	4,558	120	B1-U0-G1	4,477	118	B1-U0-G1	4,657	123	B3-U0-G1
RFS-45W16LED	3000	5,157	114	B1-U0-G1	5,368	119	B1-U0-G1	5,141	114	B1-U0-G1	5,201	115	B1-U0-G1	5,117	113	B1-U0-G2	5,322	118	B3-U0-G1
RFS-50W16LED	3000	5,465	109	B1-U0-G1	5,689	113	B1-U0-G1	5,448	109	B1-U0-G1	5,521	110	B1-U0-G1	5,422	108	B1-U0-G2	5,640	112	B3-U0-G1
RFS-54W16LED	3000	5,963	113	B2-U0-G1	6,207	117	B2-U0-G1	5,944	112	B1-U0-G1	6,024	114	B1-U0-G1	5,916	112	B1-U0-G2	6,154	116	B3-U0-G1
RFS-60W16LED	3000	6,500	106	B2-U0-G1	6,767	111	B2-U0-G1	6,480	106	B2-U0-G1	6,567	107	B1-U0-G2	6,450	106	B1-U0-G2	6,709	110	B3-U0-G1
RFS-20W20LED	3000	2,427	124	B1-U0-G1	N/A	N/A	N/A	2,440	124	B1-U0-G1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RFS-40W20LED	3000	4,833	122	B1-U0-G1	N/A	N/A	N/A	4,859	122	B1-U0-G1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RFS-65W20LED	3000	7,442	116	B2-U0-G2	N/A	N/A	N/A	7,482	117	B2-U0-G2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RFS-35W32LED	3000	4,875	132	B1-U0-G1	5,075	137	B1-U0-G1	4,860	131	B1-U0-G1	4,925	133	B1-U0-G1	4,837	131	B1-U0-G1	5,032	136	B3-U0-G1
RFS-55W32LED	3000	7,062	132	B2-U0-G1	7,351	137	B2-U0-G1	7,040	132	B2-U0-G1	7,134	133	B1-U0-G2	7,007	131	B1-U0-G2	7,289	136	B3-U0-G1
RFS-60W32LED	3000	7,158	122	B2-U0-G1	7,452	127	B2-U0-G1	7,136	122	B2-U0-G1	7,232	123	B1-U0-G2	7,103	121	B1-U0-G2	7,388	126	B3-U0-G1
RFS-72W32LED	3000	8,826	121	B2-U0-G2	9,188	126	B2-U0-G1	8,799	121	B2-U0-G2	8,917	122	B1-U0-G2	8,758	120	B2-U0-G2	9,110	125	B3-U0-G2
RFS-108W32LED	3000	12,219	113	B3-U0-G2	12,720	118	B3-U0-G2	12,181	113	B2-U0-G2	12,344	114	B2-U0-G2	12,124	112	B2-U0-G2	12,611	117	B4-U0-G2
RFS-35W40LED	3000	5,203	147	B1-U0-G1	N/A	N/A	N/A	5,231	148	B1-U0-G1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RFS-50W40LED	3000	6,959	143	B2-U0-G2	N/A	N/A	N/A	6,996	144	B2-U0-G1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RFS-55W40LED	3000	7,297	134	B2-U0-G2	N/A	N/A	N/A	7,336	135	B2-U0-G2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RFS-65W40LED	3000	8,580	130	B2-U0-G2	N/A	N/A	N/A	8,626	131	B2-U0-G2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RFS-80W40LED	3000	10,027	127	B2-U0-G2	N/A	N/A	N/A	10,081	128	B2-U0-G2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RFS-100W40LED	3000	12,228	121	B3-U0-G3	N/A	N/A	N/A	12,294	122	B3-U0-G2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Actual performance may vary due to installation variables including optics, mounting/ceiling height, dirt depreciation, light loss factor, etc.; highly recommended to confirm performance with a layout - contact Applications at [signify.com/outdoorluminaire](mailto:signify.com/outdoorluminaire). Consult DLC QPL to confirm your specific fixture selection is DLC approved.

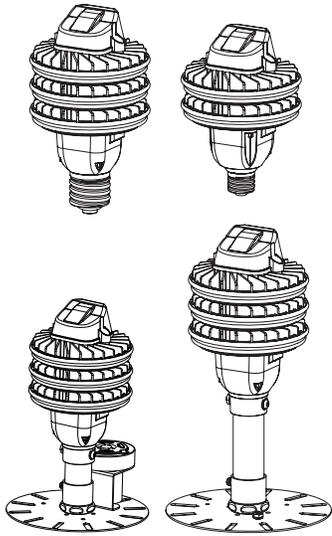
Note: Some data may be scaled based on tests of similar but not identical luminaires.

# D4A Adaptive Light Source

COST SAVINGS | EASY TO INSTALL | HIGH PERFORMANCE | ENVIRONMENTALLY FRIENDLY

The Vega D4A is revolutionary in performance, reliability, light control, and optional built in controls. Reduce cost, phone calls, and truck rolls with this fully controllable engineered product. It is designed to allow you to make changes after installation, is compatible with a variety of control systems, and is available with an advanced Bluetooth control system built in. Take control of your lighting with the D4A.

At 60 watts it can achieve IES RP-08 at 187' pole spacing, 16' mounting height. At 9,665 lumens directional (with 8% uplight) it will outperform a 18,000 lumen bulb (non-directional light 50% uplight). You can achieve 120W of LED performance at only 60W consumed.



## BEST IN CLASS PERFORMANCE



### Up to 160 Lumens Per Watt directional

- Up to 5 times the coverage and life of most LED Competitors
- 36 kV of surge suppression standard across all three lines
- Superior thermal design (no fans or moving parts)
- NOT Omnidirectional by design – engineered optics efficiently manage light and light position
- BUG Rating modification – independently modify Backlight or Glare
- Reduced glare by up to 60%
- Only 8% uplight where competitors are 50% on average
- DLC Listed & UL Classified

## OPTIONAL FEATURES

- Built in Controls - Bluetooth remote control using **VEGA Link IQ app**. Control dimming, night time dimming schedule, report diagnostics, burn time, and asset tag ID.
- PR7** - 7 pin photocell Receptacle Version.
- PRC** - Connector for external node or control signal.

## SOON TO BE RELEASED

- Built in Mesh Networking – VEGA Link Mesh Control (modify one unit settings and 'sync' all others), report diagnostics, faults, GPS location, and more.
- Adaptive Capability – modify distribution pattern from Type 5 to Type 3 for example. Shut off or dim backlight.
- RGBW - high output colored light array that can render over 1 million different colors or simply use preset colors for special events and holidays. White lights can remain on for safety.



\*Applies to Mogul Base, Mogul Fixed Plate, and Medium Fixed Plate. Medium Base is not a category within DLC.

## RATED LIFE

100,000+ Hrs Rated System Life  
80% Lumen Maintenance at 100,000 Hrs  
7 Year Warranty Standard, 10 Year Warranty Available

## TESTING

IESNA LM-80  
InSitu Thermal  
Energy Star TM-21  
3G Vibration Tested  
Surge & Transient Tested  
100% Production Test & Inspect

## LISTING

IP65 Wet Location Rated  
Certification to UL 1598C, 8750, 1993  
CSA C22.2 No.250.1  
UL Drivers  
Complies with IEEE C62.41

## SHIPPING INFORMATION

Ships from Michigan Mfg Plant  
ISO 9001 US Facility  
BAA Compliant  
ARRA Compliant

## ELECTRICAL

36 kV Surge Suppression  
Power Factor Correction >90%  
<10% Total Harmonic Distortion  
-40C to +50C Ambient Operating Temp  
Universal 120-277 VAC, 480 VAC Optional  
Thermal Overload Protected  
Electrical Short / Overload Protected  
Requires Live Voltage/Ballast Bypass



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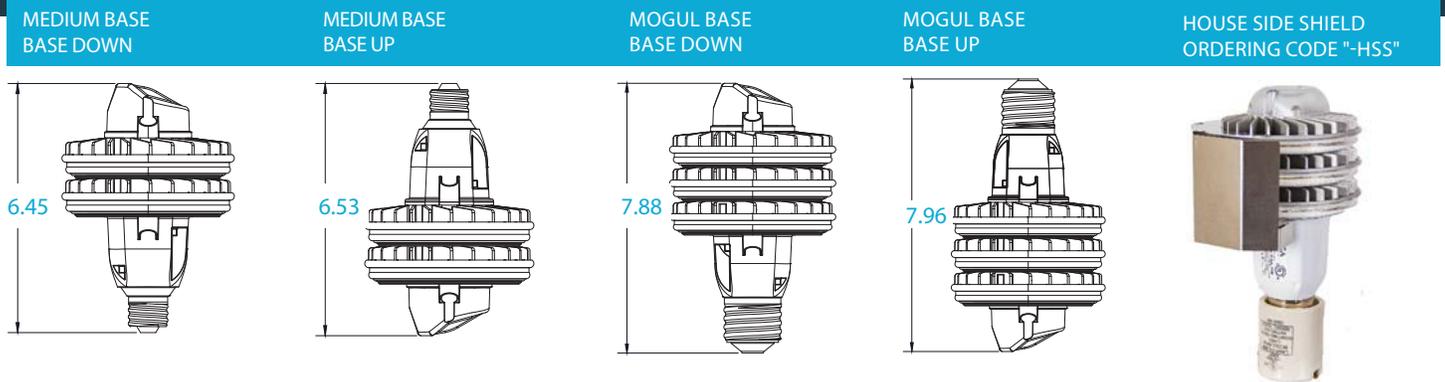


VEGA Link IQ D4A  
Available on:



# D4A Medium & Mogul Base

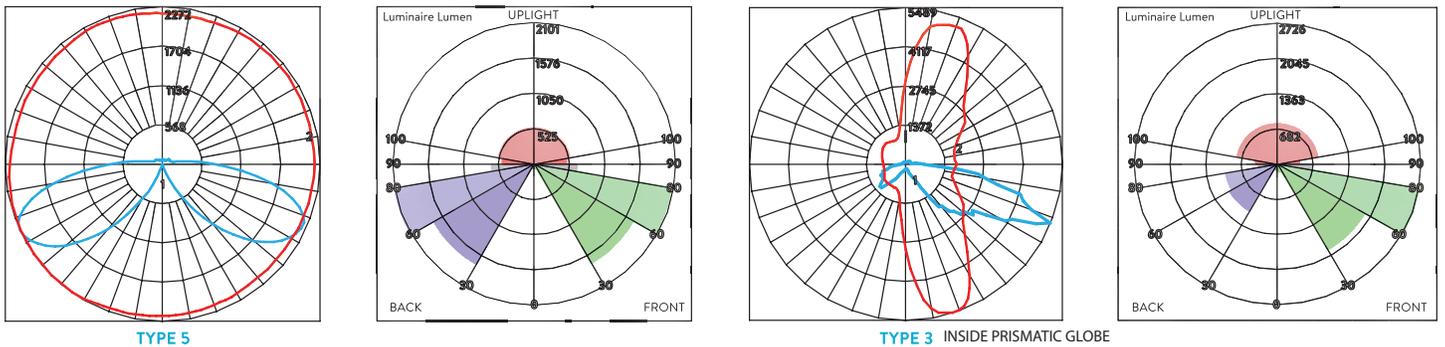
## Dimensions



## Performance Light Source Only

RATED WATTAGE	INPUT WATTAGE	DISTRIBUTION	2200K	3000K	4000K	5000K
			LUMEN OUTPUT			
20	20.6	T5M	2,230	3,280	3,457	3,457
30	30.5	T5M	3,401	4,857	5,119	5,119
40	40.4	T5M	4,454	6,353	6,696	6,696
50	50.5	T5M	5,349	7,796	8,217	8,217
60	62.7	T5M	6,269	9,170	9,665	9,665

## Distribution Plots



## Screw Base Ordering Instructions

STYLE	WATTS	LAMP SIZE	CCT	TYPE	REQUIRED PLACEHOLDER	BASE	BASE POSITION	DIMMING/CONTROL	CUSTOM
D4A	-20	M (MEDIUM)	-22K	-T5M	-NA	-E26 (MEDIUM)	D (BASE DOWN) OR U (BASE UP)	-STD (STANDARD) -DIM (BT DIM CONTROL)	-GLB -C### -HSS
	-30	M OR G (MOGUL)	-30K			-E26 OR -E39 (MOGUL)			
	-40	M OR G (MOGUL)	-40K			-E26 OR -E39 (MOGUL)			
	-50	G	-50K			-E39			
	-60	G				-E39			

### EXAMPLE #1

D4A-20M-22K-T5M-NA-E26D-STD



### DESCRIPTION

D4A, 20W, Medium Sized, 2200K CCT, Type 5 Distribution, NA, E26 Medium Base, Base Down, Standard without Bluetooth Dimming controls

### EXAMPLE #2

D4A-60G-40K-T5M-NA-E39D-DIM-HSS



D4A, 60W, Mogul Sized, 4000K CCT, Type 5 Distribution, NA, E39 Mogul Base, Base Down, With Bluetooth Dimming Controls, House Side Shield

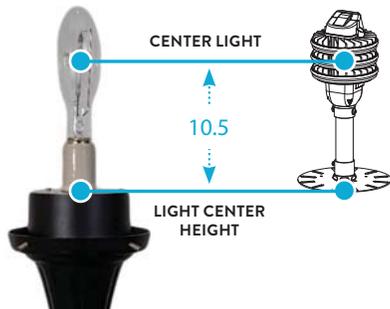
"GLB" = WHITE GLOBE OPTICS | "HSS" = house side shield | Base down for Post top | Base up for Pendant fixtures

# D4A Fixed Plate

## Correct Light Position Creates Perfect Light Performance

### Mounting Height Calculations

#### EXAMPLE:



**Step 1:** Measure light center from current fixture

**Step 2:** Specify by adding "HXXX" to end of part # = Measured height in inches

**Ex: Measure of center light is 10.5 inches = H105**

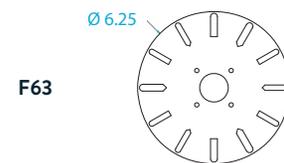
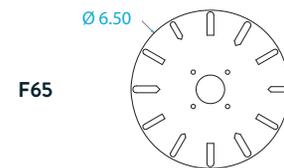
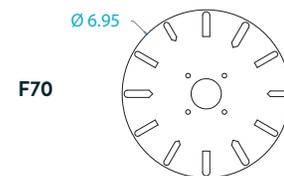
### Fixed Plate Kits

C## = Name Brand Fixed Plate Base Kits

Hadco Twist Lock Kit	<b>CHTL</b>	Mainstreet Kits	<b>CL200</b>
Hadco Screw & Pin Plate	<b>CHSP</b>	Mainstreet Kits	<b>CL300</b>
Holopane Arlington	<b>CHA9</b>	Mainstreet Kits	<b>CL920</b>
Holopane Granville Classic	<b>CGVC</b>	Mainstreet Kits	<b>CL470</b>
King Luminaire K38 Kit	<b>CK38</b>	Sternburg Spring Clip Kit	<b>CSBC</b>
King Luminaire K56 & K124 Kit	<b>CLAN</b>	Sternburg Top Hat Mount	<b>CSTH</b>
Lumec L72 Victorian	<b>CL72</b>	Visco/Lansing Fitter Bracket	<b>CVSC</b>
Mainstreet Kits	<b>CL100</b>		

### Standard Fixed Mounting Plates

F##=Standard Fixed Plate Base Options



We are happy to create a custom bracket for your project, just contact us!

### Fixed Plate Ordering Instructions

STYLE	WATTS	LAMP SIZE	CCT	TYPE	REQUIRED PLACEHOLDER	MOUNTING	BASE POSITION	DIMMING/CONTROL	CUSTOM	HEIGHT
D4A	-20 -30 -40 -50 -60	G (MOGUL)	-22K -30K -40K -50K	-T3M -T5M	-NA	-C### -F###	D (BASE DOWN) OR U (BASE UP)	-STD (STANDARD) -DIM (BT DIM CONTROL)	-GLB -PR7 (ONLY MOGUL) -PRC -C### -HSS	-H###

#### EXAMPLE #1

D4A-30G-30K-T5M-NA-CK38D-STD-H10



#### DESCRIPTION

D4A, 30W Fixed Plate, 3000K CCT, Type 5 Distribution, NA, Custom Plate for King Luminaire, Base Down Standard without Bluetooth Dimming controls, with height set at H10 (10")

#### EXAMPLE #2

D4A-60G-40K-T3M-NA-F65D-DIM-H115



D4A, 60W, Mogul Sized, 4000K CCT, Type 3 Distribution, NA, Fixed Plate with Ø 6.95" Plate, Base Down, Bluetooth Dimming Control, Custom 11.5" Set Height

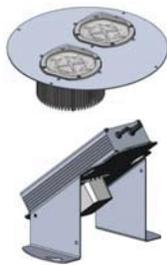
NOTE: Type 3 MUST have Bluetooth Dimming Control | "GLB" = WHITE GLOBE OPTICS | "HSS" = house side shield | Base down for Post top | Base up for Pendant fixtures



# P7 Pendant/Teardrop Retrofit

COST SAVINGS | EASY TO INSTALL | HIGH PERFORMANCE | ENVIRONMENTALLY FRIENDLY

Vega Light Control Systems' LED Pendant/Teardrop Retrofit offers customers a high performance retrofit for a wide variety of pendant and teardrop style fixtures. This system will replace up to a 400w HID light source while producing excellent photometrics and up to **65% energy savings and 80% labor savings.**



## KEY BENEFITS

- Ease of installation - modules come with brackets designed for your application
- Reduces energy by up to 65%
- Reduces maintenance by up to 80%
- Ultra long life components and system
- Extreme surge suppression for long life
- Thermally tested and approved for application in major manufacturers luminaires
- Dimmable and designed for controls interface
- Available in 120-277 VAC, and 480 VAC (See listing details)
- Mercury free and lead free

## PRODUCT ATTRIBUTES

- Available in 80w and 150w sizes
- Up to 20,000 lumens output in 3000K, 4000K, or 5000K CCTs
- Available in Type 3 or Type 5 distributions
- 100,000 hour rated life at 25C ambient
- Certified to UL 1598C, UL 8750, CSA TIL B-79A
- Surge suppression designed UL 1449 3rd Edition
- All components IP66 wet location rated
- 7 Year Warranty (extended warrant available)
- High temperature silicone optics for ultra long life and color stability



## RATED LIFE

100,000+ Hrs Rated System Life  
85% Lumen Maintenance at 100,000 Hrs

## TESTING

IESNA LM-80  
InSitu Thermal  
Energy Star TM-21  
Surge & Transient Tested  
100% Production Test & Inspect

## LISTING

IP66 Wet Location Rated Components  
Certified to UL 1598C, UL 8750, CSA TIL B-79A  
Surge suppression designed to UL 1449 3rd Edition  
UL Drivers  
Complies with IEEE C62.41

## SHIPPING INFORMATION

Ships from Michigan Mfg Plant  
ISO 9001 US Facility

## ELECTRICAL

36 kV Surge Suppression  
Power Factor Correction >92%  
<20% Total Harmonic Distortion  
-40C to +40C Ambient Operating Temp  
Universal 120-277 VAC, 480 VAC also available  
Thermal Overload Protected  
Electrical Short / Overload Protected



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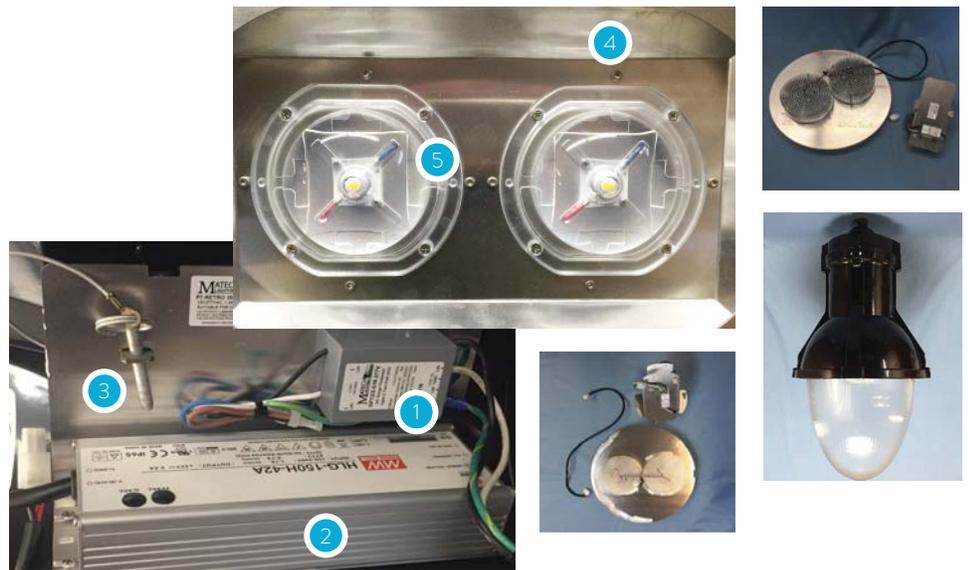
# P7 Pendant/Teardrop Retrofit

## Performance

WATTAGE	DISTRIBUTION	LUMEN OUTPUT		
		3000K	4000K	5000K
80	T3M	10,030	10,582	10,582
80	T5M	10,385	10,956	10,956
150	T3M	18,432	19,440	19,440
150	T5M	19,070	20,120	20,120

## Key Features

1. 36KV Surge Suppression Standard
2. Advanced LED Driver
3. Easy Install OEM Power Supply Bracket
4. Precisions Aluminum Panel for Robust Mounting & Thermal Management
5. High Performance Silicone Optics



## Ordering Instructions

MODEL	TARGET LUMINAIRE BRAND	WATTAGE	COLOR TEMP (CCT)	DISTRIBUTION	BRACKET STYLE	CONTROL
P7	-D (HADCO®)	-80 -150	-30K (3000K CCT)	-T5M (TYPE 5 MEDIUM)	-CXXXX (BRACKET-CALL VEGA)	-STD
	-H (HOLOPHANE®)		-40K (4000K CCT)	-T3M (TYPE 3 MEDIUM)		-DIM
	-K (KING LUMINAIRE®)		-50K (5000K CCT)			
	-L (LUMEC®)					

### EXAMPLE

P7-D150-40K-T5M-CHTF9-DIM



### DESCRIPTION

150w P7 4000K with Type 5 distribution, HADCO® TF9 mounting bracket, 0-10vdc dimming driver(s)

**NOTES:** Customized mounting brackets available please call for cost and lead time.



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