



Project: _____

Fixture Type: _____

Location: _____

Contact/Phone: _____

4" IC AND TC 1000 LUMEN INTERNALLY ADJUSTABLE LED DOWNLIGHT NEW CONSTRUCTION

IC4AL, TC4AL(10LM) RECESSED HOUSING



LENSED TRIMS



PRODUCT DESCRIPTION

Patent pending dedicated LED, Air-Loc® sealed new construction housing with integral internally adjustable light engine • Double wall, shallow housing construction • IC4AL series can be completely covered with insulation and installs in 2 x 6 construction • TC4AL series for use in non-insulated areas (If installed where insulation is present, the insulation must be pulled back 3" from all sides of the TC housing) • Fully sealed housing stops infiltration and exfiltration of air, reducing heating and cooling costs without the use of additional gaskets • LED housing is designed to provide 50,000 hours of life • 5 year limited warranty on LED components.

ENVIRONMENTALLY FRIENDLY, ENERGY EFFICIENT

- No harmful ultraviolet or infrared wavelengths
- No lead or mercury, RoHS compliant
- Comparable light output to 75W incandescent

PRODUCT SPECIFICATIONS

LED LightEngine LED array attached to cast aluminum sliding heatsink integrated directly with housing provides superior heat transfer to ensure long life of the LED • Replaceable light engine mounts directly to inner housing assembly and incorporates the latest generation, high lumen output LED array • LEDs are binned within a 3-step MacAdam Ellipse exceeding ENERGY STAR® requirements for superior fixture to fixture color uniformity • 2700K, 3000K, 3500K, or 4000K color temperatures available • 90 CRI minimum.

Optics Three field interchangeable, TIR optics available in 18°, 30° and 40° beam angles • Module can accommodate one 2-inch diameter beam control lens or filter • Adjustable light engine module provides up to 35° vertical adjustment and 360° rotation.

Aesthetic Trim Selections Adjustable perimeter frosted lensed trim • Shadow free, knife edge design blends seamlessly into ceiling • Trims are wet location approved for covered ceiling applications.

LED Driver Choice of dedicated 120 volt (120) driver or universal voltage (MVOLT) driver that accommodates input voltages from 120-277 volts AC at 50/60Hz • Power factor > 0.9 at 120V input • 120 volt only driver is dimmable with the use of most incandescent, magnetic low voltage and electronic low voltage wall box dimmers • Universal voltage driver is dimmable with the use of most 0-10V wall box dimmers • For a list of compatible dimmers, see [JUNOICLED-DIM](#).

Life Rated for 50,000 hours at 70% lumen maintenance.

Labels UL listed for U.S. and Canada for through-branch wiring, wet locations (covered ceilings) • Union made • UL and cUL.

Testing All reports are based on published industry procedures; field performance may differ from laboratory performance.

Specifications subject to change without notice.

HOUSING FEATURES

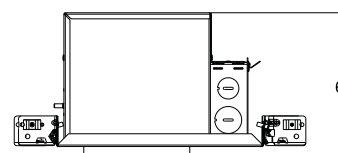
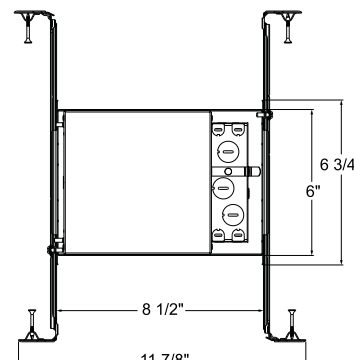
Housing IC4AL designed for use in IC (insulated ceiling) or non-IC construction • TC4AL designed for use in non-IC construction • Aluminum housing sealed for Air-Loc® compliance • Housing is vertically adjustable to accommodate up to a 1½" ceiling thickness.

Junction Box Pre-wired junction box provided with (6) ½" and (1) ¾" knockouts, (4) knockouts for 12/2 or 14/2 NM cable and ground wire • UL listed and cUL listed for through-branch wiring, maximum 4 #12 branch circuit conductors • Junction box provided with removable access plates • Knockouts equipped with pryout slots • Quick connect electrical connectors supplied as standard for fast, secure installation.

Mounting Frame 22-gauge die-formed galvanized steel mounting frame • Rough-in section (junction box, mounting frame, housing and bar hangers) fully assembled for ease of installation.

Real Nail® 3 Bar Hangers Patented (US Patent D552,969) Real Nail® 3 bar hangers: telescoping system permits quick placement of housing anywhere within 24" O.C. joists or suspended ceilings • Includes removable nail for repositioning of fixture in wood joist construction • Integral T-bar notch and clip for suspended ceiling.

DIMENSIONS



4 1/2" CEILING CUTOUT

ELECTRICAL DATA

Dedicated 120V Only Driver Option (120) 120V

| | |
|-----------------------|---|
| Input Power | 16.4W (+/-5%) |
| Input Current | 0.15A |
| Frequency | 50/60Hz |
| EMI/RFI | FCC Title 47 CFR, Part 15, Class B (Residential) |
| Minimum starting temp | -25°C (-13°F) |

Universal Voltage Driver (MVOLT ZT)

| | 120V | 277V |
|-----------------------|--|--|
| Input Power | 16.0W (+/-5%) | 16.0W (+/-5%) |
| Input Current | 0.15A | 0.06A |
| Frequency | 50/60Hz | 50/60Hz |
| EMI/RFI | FCC Title 47 CFR, Part 15, Class A (Commercial) | FCC Title 47 CFR, Part 15, Class A (Commercial) |
| Minimum starting temp | -20°C (-4°F) | -20°C (-4°F) |

Lutron Hi-Lume LED Driver (MVOLT ECOS3)

| | 120V | 277V |
|-----------------------|--|--|
| Input Power | 16.4W (+/-5%) | 16.6W (+/-5%) |
| Input Current | 0.15A | 0.06A |
| Frequency | 50/60Hz | 50/60Hz |
| EMI/RFI | FCC Title 47 CFR, Part 15, Class A (Commercial) | FCC Title 47 CFR, Part 15, Class A (Commercial) |
| Minimum starting temp | 0°C (32°F) | 0°C (32°F) |

4" IC AND TC 1000 LUMEN INTERNALLY ADJUSTABLE LED DOWNLIGHT NEW CONSTRUCTION

IC4AL, TC4AL(10LM) RECESSED HOUSING
LENSED TRIMS

ORDERING INFORMATION Housing and trim can be ordered together or separate, but will always ship separately.

Example: IC4AL10LM 27K 90CRI FL 120 FRPC

| Series | Lumens | Color Temperature | CRI | Distribution | Voltage | Driver |
|--|---------------------------|--|----------------|---|---|---|
| IC4AL 4" LED Internally Adjustable New Const. IC Downlight | 10 LM 1000 Nominal Lumens | 27K 2700K 30K 3000K 35K 3500K 40K 4000K | 90 CRI 90+ CRI | FL Flood NFL Narrow Flood SP Spot | 120 120V MVOLT Multi-Volt (120-277V) | FRPC Forward/Reverse Phase Cut ZT 0-10V Dimming Driver |

Notes: 120 must be ordered with FRPC. MVOLT must be ordered with ZT

Example: TC4AL10LM 27K 90CRI FL MVOLTECOS3

| Series | Lumens | Color Temperature | CRI | Distribution | Voltage | Driver |
|--|---------------------------|--|----------------|---|------------------|--|
| TC4AL 4" LED Internally Adjustable New Const. Non IC Downlight | 10 LM 1000 Nominal Lumens | 27K 2700K 30K 3000K 35K 3500K 40K 4000K | 90 CRI 90+ CRI | FL Flood NFL Narrow Flood SP Spot | MVOLT Multi-Volt | ECOS3 Lumen Hi - Lume A Series, 3-wire fluorescent controls & Lutron Ecosystem |

Trim/Description



- 41L ABZ 4" Adjustable Lens Shower Trim - Classic Aged Bronze
- 41L SC 4" Adjustable Lens Shower Trim - Satin Chrome
- 41L WH 4" Adjustable Lens Shower Trim - White



Trim Size: 5" O.D.

Note: In Canada when insulation is present, Type IC fixtures must be used.

Accessories (ordered separately)

| Catalog Number | Description |
|-----------------|--|
| CGF 200 MPINK | Color Glass Filter - 2" Diameter - Medium Pink |
| CGF 200 WRED | Color Glass Filter - 2" Diameter - Warm Red |
| CGF 200 DLTBLUE | Color Glass Filter - 2" Diameter - Daylight Blue |
| CGF 200 MBLU | Color Glass Filter - 2" Diameter - Medium Blue |
| CGF 200 MAMB | Color Glass Filter - 2" Diameter - Medium Amber |
| CGF 200 MGRN | Color Glass Filter - 2" Diameter - Medium Green |
| DGF 200 DRED | Dichroic Glass Filter - 2" Diameter - Red |
| DGF 200 MGRN | Dichroic Glass Filter - 2" Diameter - Medium Green |
| DGF 200 MBLU | Dichroic Glass Filter - 2" Diameter - Medium Blue |
| DGF 200 DYEL | Dichroic Glass Filter - 2" Diameter - Yellow (Dichroic) |
| DGF 200 MAGEN | Dichroic Glass Filter - 2" Diameter - Magenta |
| DGF 200 CYAN | Dichroic Glass Filter - 2" Diameter - Cyan |
| DCCF 200 HL4250 | Dichroic Color Correction Filter - 2" Diameter - Halogen - to - Daylight |
| DIFF 20 0 | Diffusion Glass Lens - 2" Diameter |
| UVF 20 0 | UV Filter Lens - 2" Diameter |
| HCLBL20 0 | Hexagonal Cell Louver - Black - 2" Diameter |
| LSPREAD 20 0 | Linear Spread Glass Lens - 2" Diameter |
| PRISM 20 0 | Prismatic Glass Lens - 2" Diameter |
| TIR2 SPT | TIR Optic - Spot |
| TIR2 NFLD | TIR Optic - Narrow Flood |
| TIR2 FLD | TIR Optic - Flood |

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KR Series

KR4™ LED Specification Downlight – Round 4"

TYPE DL2E
KR4-20L-35K-120-10V-EB7 / KR4TSSGC-FF

Product Description

The KR4™ LED specification downlight features Cree TrueWhite® Technology and delivers beautiful, high-quality light with efficacy up to 73 lumens per watt. Designed for new construction applications, the KR Series is available in a variety of color temperatures, round and square trims with high-quality anodized aluminum reflector finishes, a sloped ceiling adaptor accessory and a variety of dimming options including Cree Sunset Dimming Technology which provides rich, warm light that transitions from 2700K to 1800K as naturally as an incandescent source.

Performance Summary

Utilizes Cree TrueWhite® Technology

Initial Delivered Lumens: 700-3,200 lumens; Delivered lumen output is typical when using a SSGC type reflector

Input Power: 13-44 watts

Emergency Performance: Up to 1,210 Lumens; 10W; Minimum 90 Minutes

CRI: 90

CCT: 2700K, 3000K, 3500K, 4000K

Controls: Triac, 0/1-10V; See control availability chart on page 3

Limited Warranty: 10 years on KR4™ luminaire

Limited Warranty Emergency Back Up (EB) Battery: 1 Year Battery Back Up. Test regularly in accordance with local codes

* See <http://lighting.cree.com/warranty> for warranty terms

Accessories

| Field-Installed | | |
|--|---|---|
| Sloped Ceiling Adaptor KXKS4**WW ** 0-35 (order in 5 degree increments) | C-Channel Hanger Bars RBH30C - Pair of 30" (762mm) rigid 3/4" x 1/2" (19mm x 13mm) C-Channel bars RBH24C-1 - Pair of 24" (610mm) x 1-1/2" (38mm) x 1/2" (13mm) standard C-Channel bars | T-Bar Clips RARC7 - Set of four - For use with RBH24C-1 hanger bars Trim Ring KR4TA - White beauty ring to cover pan head fasteners on KR4T reflector |

Ordering Information

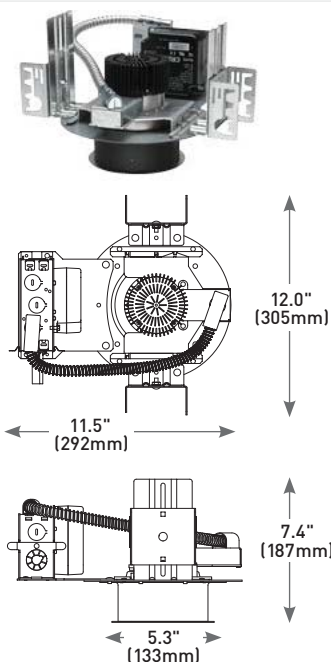
Fully assembled luminaire is composed of two components that must be ordered separately:

Example: **Housing:** KR4-20L-35K-120V-10V + **Reflector:** KR4TR-SSGC-FF

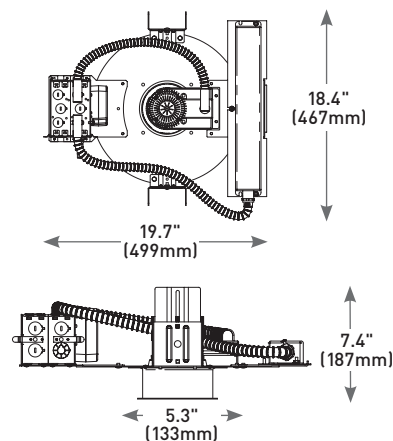
| Reflector (Housing must be ordered separately) | | |
|--|------------------------------------|--|
| KR4T | SSGC | FF |
| Series | Reflector Finish | Flange Finish |
| KR4T Standard Trim - Reflector attaches to housing with pan head fasteners and keyhole slots KR4TR Beauty Trim - Reflector attaches to housing with retention springs for seamless appearance | SSGC Soft Satin Glow, Clear | FF Matches Reflector WF White Paint |

| Housing (Reflector must be ordered separately) | | | | | | | | |
|--|---------|-------------|---|----------------------|--|--|---|---|
| KR4 | Size | Reflector | Initial Delivered Lumens | Optic | CCT | Voltage | Controls | Options |
| KR | 4 in ch | Blank Round | 9L 13W, 700 Lumens - 54 LPW 13L 18W, 1,000 Lumens - 56 LPW 20L 30W, 1,550 Lumens - 52 LPW 30L 39W, 2,350 Lumens - 60 LPW 40L 44W, 3,200 Lumens - 73 LPW | Blank 70° Beam Angle | 27K 2700K 30K 3000K 35K 3500K 40K 4000K | 120V 120 Volts 277V 277 Volts 347V 347 Volts | Blank - For standard control offering refer to control availability chart on page 3 0V 0/1-10V Dimming - Refer to control availability chart on page 3 | WD Sunset Dim - 9L and 13L @ 27K with Triac Dimming only EB7 Emergency Backup - Minimum 90 minutes - 120V, 277V only - Minimum operating temperature: 0°C (32°F) |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

NOTE: Price adder may apply depending on configuration



Emergency Backup



US: lighting.cree.com



T (800) 236-6800 F (262) 504-5418



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07/06/2021

Rev. Date: V11 05/23/2017

Canada: www.cree.com/canada



PZ18-12000030
04/02/2019

Product Specifications

CREETRUETHITE® TECHNOLOGY

A revolutionary way to generate high-quality white light, Cree TrueWhite® Technology is a patented approach that delivers an exclusive combination of 90+ CRI, beautiful light characteristics, and lifelong color consistency, all while maintaining high luminous efficacy – a true no-compromise solution.

CONSTRUCTION & MATERIAL

- Low brightness parabolic spun Alzak aluminum cone, 0.06" (2mm) thick with polished radius and conical self-flange
- Soft Satin Glow Clear finish, standard
- 2" (51mm) aperture throat to accommodate all standard and up to 3" (76mm) thick ceilings and provide flexibility in mounting within grid
- Provided with quick mounting brackets for optional carrying channels
- Light engine, optics, and driver accessible from below ceiling

ELECTRICAL SYSTEM

- **Power Factor:** > 0.9 for 120V and 277V
- **Total Harmonic Distortion:** < 20% at full load
- **Input Power:** 120, 277V, or 347V, 50/60Hz
- **Operating Temperature Range:** -18°C - +40°C (0°F - +104°F); minimum operating temperature with EB7 option is 0°C (32°F)

CONTROLS

- For standard control offering refer to control availability chart on page 3
- Triac dimming to 5%
- Continuous dimming to 10% with 0-10V DC control protocol
- **10V Source Current:** 9L & 12L: 0.15mA; 20L-40L: 2.2mA
- For use with Class 2 dimming systems only
- Use only lighting controls with neutral connection or controls intended for use with LED fixtures
- Reference <http://lighting.cree.com/products/indoor/new-construction-downlights/kr-series> for recommended dimming controls and wiring diagrams

REGULATORY & VOLUNTARY QUALIFICATIONS

- cULus Listed
- Suitable for thru-wiring 8#12AWG-90°C
- Suitable for damp locations
- Designed for indoor use
- Thermally protected Type NON-IC in accordance with Article 410 of the NEC and UL 1598
- Meets FCC Part 15, Subpart B, Class A standards for conducted and radiated emission
- RoHS compliant. Consult factory for additional details

| Recommended KR Series Lumen Maintenance Factors (LMF) ¹ | | | | | | |
|--|--------------------------|-------------|-----------------------------------|-----------------------------------|------------------------------------|-------------------------------------|
| Ambient | Initial Delivered Lumens | Initial LMF | 25K hr Projected ² LMF | 50K hr Projected ² LMF | 75K hr Calculated ³ LMF | 100K hr Calculated ³ LMF |
| 5°C (41°F) | 9L and 13L | 1.05 | 1.04 | 1.03 | 1.03 | 1.02 |
| | 20L and 30L | 1.03 | 0.99 | 0.94 | 0.90 | 0.86 |
| | 40L | 1.03 | 0.96 | 0.90 | 0.83 | 0.77 |
| 10°C (50°F) | 9L and 13L | 1.04 | 1.03 | 1.03 | 1.02 | 1.02 |
| | 20L and 30L | 1.02 | 0.97 | 0.93 | 0.89 | 0.85 |
| | 40L | 1.03 | 0.95 | 0.88 | 0.82 | 0.76 |
| 15°C (59°F) | 9L and 13L | 1.03 | 1.02 | 1.02 | 1.01 | 1.01 |
| | 20L and 30L | 1.01 | 0.96 | 0.91 | 0.88 | 0.84 |
| | 40L | 1.02 | 0.94 | 0.87 | 0.81 | 0.75 |
| 20°C (68°F) | 9L and 13L | 1.02 | 1.01 | 1.00 | 1.00 | 0.99 |
| | 20L and 30L | 1.01 | 0.95 | 0.90 | 0.87 | 0.83 |
| | 40L | 1.01 | 0.93 | 0.86 | 0.80 | 0.74 |
| 25°C (77°F) | 9L and 13L | 1.00 | 1.00 | 0.99 | 0.99 | 0.99 |
| | 20L and 30L | 1.00 | 0.94 | 0.89 | 0.86 | 0.82 |
| | 40L | 1.00 | 0.92 | 0.85 | 0.79 | 0.74 |
| 30°C (86°F) | 9L and 13L | 0.99 | 0.99 | 0.98 | 0.98 | 0.98 |
| | 20L and 30L | 0.97 | 0.93 | 0.88 | 0.85 | 0.81 |
| | 40L | 0.98 | 0.91 | 0.84 | 0.78 | 0.73 |
| 35°C (95°F) | 9L and 13L | 0.98 | 0.97 | 0.97 | 0.97 | 0.97 |
| | 20L and 30L | 0.96 | 0.92 | 0.87 | 0.84 | 0.80 |
| | 40L | 0.96 | 0.90 | 0.83 | 0.77 | 0.72 |
| 40°C (104°F) | 9L and 13L | 0.97 | 0.96 | 0.96 | 0.96 | 0.95 |
| | 20L and 30L | 0.95 | 0.90 | 0.86 | 0.83 | 0.79 |
| | 40L | 0.95 | 0.88 | 0.82 | 0.76 | 0.71 |

¹ Lumen maintenance values at 25°C (77°F) are calculated per TM-21 based on LM-80 data an in-situ luminaire testing

² In accordance with IESNA TM-21-11, Projected Values represent interpolated value based on time duration that are within six times (6X) the IESNA LM-80-08 total test duration (in hours) for the device under testing (DUT) i.e. the packaged LED chip

³ In accordance with IESNA TM-21-11, Calculated Values represent time duration that exceed six times (6X) the IESNA LM-80-08 total test duration (in hours) for the device under testing (DUT) i.e. the packaged LED chip

Installation

- Recommended ceiling cutout 4.75" (120mm)



Note: 30L and 40L versions require marked spacing: 24" (600mm) x 12" (300mm) x 1/2" (12mm). 24" (600mm) luminaire to luminaire, 12" (300mm) luminaire to side wall, 1/2" (12mm) above luminaire

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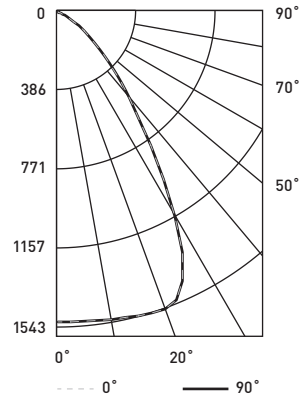
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KR4™ LED Specification Downlight – Round 4"

Photometry

KR4-30L-27K-120V W/KR4T-SSGC-FF BASED ON UL REPORT TEST #: 157461

Luminaire photometry has been conducted in accordance with IESNA LM-79-08. IESNA LM-79-08 specifies the entire luminaire as the source resulting in a luminaire efficiency of 100%.



UL Test Report #: 157461
 KR4-30L-27K-120V
 w/KR4T-SSGC-FF
 Initial Delivered Lumens: 2,235
 Efficacy: 59.0 LPW
 S/M: 1.1

| Coefficients Of Utilization – Zonal Cavity Method | | | | |
|---|-----|-----|-----|-----|
| RC %: | 80 | | | |
| RW %: | 70 | 50 | 30 | 10 |
| RCR: 0 | 119 | 119 | 119 | 119 |
| 1 | 112 | 109 | 106 | 104 |
| 2 | 106 | 100 | 95 | 91 |
| 3 | 99 | 91 | 86 | 81 |
| 4 | 93 | 84 | 77 | 73 |
| 5 | 87 | 77 | 71 | 66 |
| 6 | 82 | 72 | 65 | 60 |
| 7 | 77 | 66 | 59 | 54 |
| 8 | 73 | 62 | 55 | 50 |
| 9 | 69 | 58 | 51 | 46 |
| 10 | 65 | 54 | 47 | 43 |

Effective Floor Cavity Reflectance: 20%

| Average Luminance Table (cd/m²) | | | |
|---------------------------------|------------------|--------|--------|
| Vertical Angle | Horizontal Angle | | |
| | 0° | 45° | 90° |
| 45° | 59,182 | 59,182 | 59,182 |
| 55° | 30,926 | 30,926 | 30,926 |
| 65° | 12,854 | 12,854 | 12,854 |
| 75° | 6,046 | 6,046 | 6,046 |
| 85° | 1,795 | 1,795 | 1,795 |

| Zonal Lumen Summary | | | |
|---------------------|--------|--------|-----------|
| Zone | Lumens | % Lamp | Luminaire |
| 0-30 | 1,228 | N/A | 54.8% |
| 0-40 | 1,733 | N/A | 77.4% |
| 0-60 | 2,170 | N/A | 96.9% |
| 0-90 | 2,239 | N/A | 100.0% |
| 0-180 | 2,239 | N/A | 100.0% |

| Cone of Light | | |
|-------------------------|-------------|---------------|
| Distance from Workplane | Footcandles | Beam Diameter |
| 6' (1.8m) | 42 | 6.9' (2.1m) |
| 8' (2.4m) | 24 | 9.1' (2.8m) |
| 10' (3.0m) | 15 | 11.5' (3.5m) |
| 12' (3.7m) | 11 | 13.5' (4.1m) |
| 14' (4.3m) | 8 | 15.8' (4.8m) |

For exact photometric data, please reference our available IES and LM-79 test results at <http://lighting.cree.com/products/indoor/new-construction-downlights/kr-series>

Application Reference

Based on KR4-30L-27K-120V W/KR4T-SSGC-FF Luminaire

| Open Space | | | | | |
|------------|--------|---------|-----|-------|------------|
| Spacing | Lumens | Wattage | LPW | w/ft² | Average FC |
| 4 x 4 | 2,350 | 39 | 60 | 2.34 | 144 |
| 6 x 6 | | | | 1.09 | 67 |
| 8 x 8 | | | | 0.59 | 36 |
| 10 x 10 | | | | 0.39 | 24 |

10' Ceiling, 80/50/20 Reflectances, 2.5 workplane. LLF: 1.0 Initial. Open Space: 50' x 40' x 10'

| Corridor | | | | | |
|---------------|--------|---------|-----|-------|------------|
| Spacing | Lumens | Wattage | LPW | w/ft² | Average FC |
| 4' on Center | 2,350 | 39 | 60 | 1.63 | 57 |
| 6' on Center | | | | 1.04 | 36 |
| 8' on Center | | | | 0.78 | 27 |
| 10' on Center | | | | 0.65 | 23 |

10' Ceiling, 80/20/50 Reflectances, Light levels on the ground. LLF: 1.0 Initial. Corridor: 6' Wide x 100' Long

Control Availability Chart

| Initial Delivered Lumens | Non Dimming | | | Triac Dimming to 5% | | | 0/1-10V Dimming to 10% | | |
|--------------------------|-------------|------|------|---------------------|------|------|------------------------|------|------|
| | 120V | 277V | 347V | 120V | 277V | 347V | 120V | 277V | 347V |
| 9L | N/A | S | N/A | S | N/A | N/A | O | O | O |
| 13L | N/A | S | N/A | S | N/A | N/A | O | O | O |
| 20L | N/A | N/A | N/A | N/A | N/A | N/A | S | S | S |
| 30L | N/A | N/A | N/A | N/A | N/A | N/A | S | S | S |
| 40L | N/A | N/A | N/A | N/A | N/A | N/A | S | S | S |

S = Standard Offering
 O = Optional Offering

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PZ18-12000030

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Canada: www.cree.com/canada



PZ18-12000030

04/02/2019

KR Series

KR6™ LED Specification Downlight – Round 6"

Product Description

The KR6™ LED specification downlight features Cree TrueWhite® Technology and delivers beautiful, high-quality light with efficacy up to 76 lumens per watt. Designed for new construction applications, the KR Series is available in a variety of color temperatures, round and square trims with high-quality anodized aluminum reflector finishes, a sloped ceiling adaptor accessory, and a variety of dimming options including Cree Sunset Dimming Technology which provides rich, warm light that transitions from 2700K to 1800K as naturally as an incandescent source.

Performance Summary

Utilizes Cree TrueWhite® Technology

Initial Delivered Lumens: 700-5,300 lumens; Delivered lumen output is typical when using a SSGC type reflector

Input Power: 13-87 watts

Emergency Performance: Up to 1,210 Lumens; 10W; Minimum 90 Minutes

CRI: 90

CCT: 2700K, 3000K, 3500K, 4000K

Controls: Triac, 0/1-10V; See control availability chart on page 3

Limited Warranty*: 10 years on KR6™ luminaire/1 year on emergency battery pack

*See www.cree.com/lighting/products/warranty for warranty terms

Accessories

| Field-Installed | | |
|--|---|---|
| Sloped Ceiling Adaptor KRKS6**WW ** 0-35 (order in 5 degree increments) | C-Channel Hanger Bars RBH30C - Pair of 30" (762mm) rigid 3/4" x 1/2" (19mm x 13mm) C-Channel bars RBH24C-1 - Pair of 24" (610mm) x 1-1/2" (38mm) x 1/2" (13mm) standard C-Channel bars | T-Bar Clips RARC7 - Set of four - For use with RBH24C-1 hanger bars Trim Ring KR6TA - White |

Ordering Information

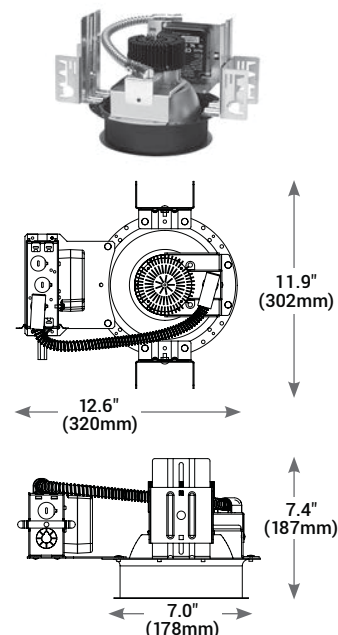
Fully assembled luminaire is composed of two components that must be ordered separately:

Example: **Housing:** KR6-20L-35K-120V-10V + **Reflector:** KR6T-SSGC-FF

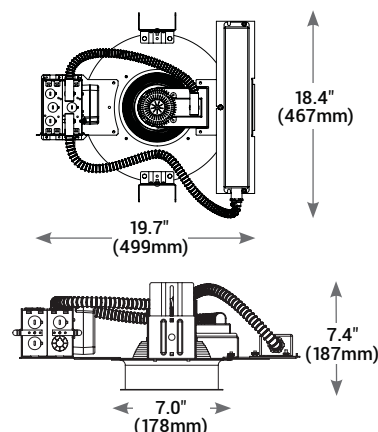
| Reflector (Housing must be ordered separately) | | | |
|--|-----------------------------|--|--------------|
| KR6T | | | |
| Series | Reflector Finish | Flange Finish | Options |
| KR6T | SSGC Soft Satin Glow, Clear | FF Matches Reflector WF White Paint | WW Wall Wash |

| Housing (Reflector must be ordered separately) | | | | | | | | |
|--|--------|-------------|---|----------------------------|---|---|--|---|
| Series | Size | Reflector | Initial Delivered Lumens | Optic | CCT | Voltage | Controls | Options |
| KR | 6 inch | Blank Round | 9L 13W, 700 Lumens – 54 LPW 13L 18W, 1,100 Lumens – 61 LPW 20L 30W, 1,700 Lumens – 57 LPW 30L 39W, 2,550 Lumens – 65 LPW 40L 44W, 3,350 Lumens – 76 LPW 60L 87W, 5,300 Lumens – 61 LPW | Blank 70° Beam Angle | 27K - 2700K - 9L thru 40L only 30K 3000K 35K 3500K 40K 4000K 50K 5000K - Available on 40L and 60L only | 120V 120 Volts 277V 277 Volts 347V 347 Volts | Blank - For standard control offering refer to control availability chart on page 3 10V 0/1-10V Dimming - Refer to control availability chart on page 3 | WD SunsetDim - 9L and 13L @ 27K with Triac Dimming only EB7 EmergencyBackup - Minimum 90 minutes - 120V, 277V only - Minimum operating temperature: 0°C (32°F) US US Manufactured Luminaire |

NOTE: Price adder may apply depending on configuration



Emergency Backup



AAC

Rev. Date: V6 09/03/2015

AAC

US: www.cree.com/lighting

T (800) 236-6800

F (262) 594-5415

PZ18-12000030

07/06/2021

Canada: www.cree.com/canada

T (800) 873-2222

F (603) 880-7507

PZ18-12000030

04/02/2019

KR6™ LED Specification Downlight – Round 6"

Product Specifications

CREETRUETHITE® TECHNOLOGY

A revolutionary way to generate high-quality white light, Cree TrueWhite® Technology is a patented approach that delivers an exclusive combination of 90+ CRI, beautiful light characteristics, and lifelong color consistency, all while maintaining high luminous efficacy – a true no compromise solution.

CONSTRUCTION & MATERIAL

- Low brightness parabolic spun Alzak aluminum cone, 0.06" (2mm) thick with polished radius and continuous self-flange
- Soft Satin Glow Clear finish, standard
- 2" (51mm) aperture throat to accommodate all standard and up to 3" (76mm) thick ceilings and provide flexibility in mounting within grid
- Provided with quick mounting brackets for optional carrying channels
- Light engine, optics, and driver accessible from below ceiling

ELECTRICAL SYSTEM

- **Power Factor:** > 0.9 for 120V and 277V
- **Total Harmonic Distortion:** < 20% at full load
- **Input Power:** 120, 277V, or 347V, 50/60Hz
- **Operating Temperature Range:** -18°C - +40°C (0°F - +104°F); minimum operating temperature with EB7 option is 0°C (32°F)
- **10V Source Current:** 9L & 12L: 0.15mA; 20L-40L: 2.2mA; 60L: 0.11mA

CONTROLS

- For standard control offering refer to control availability chart on page 3
- For use with Class 2 dimming systems only. Reference <http://lighting.cree.com/products/indoor/new-construction-downlights/kr-series> for recommended dimming controls and wiring diagrams

REGULATORY & VOLUNTARY QUALIFICATIONS

- cULus Listed
- Suitable for thru-wiring 8#12AWG-90°C
- Suitable for damp locations
- Designed for indoor use
- Thermally protected Type NON-IC in accordance with Article 410 of the NEC and UL 1598
- Meets FCC Part 15, Subpart B, Class A standards for conducted and radiated emissions
- EnergyStar® certified. Please refer to <https://www.energystar.gov/productfinder/product/certified-light-fixtures/results> for most current information
- RoHS compliant. Consult factory for additional details

| Recommended KR Series Lumen Maintenance Factors (LMF) ¹ | | | | | | |
|--|--------------------------|-------------|-----------------------------------|-----------------------------------|------------------------------------|-------------------------------------|
| Ambient | Initial Delivered Lumens | Initial LMF | 25K hr Projected ² LMF | 50K hr Projected ² LMF | 75K hr Calculated ³ LMF | 100K hr Calculated ³ LMF |
| 5°C (41°F) | 9L and 13L | 1.05 | 1.04 | 1.03 | 1.03 | 1.02 |
| | 20L and 30L | 1.03 | 0.99 | 0.94 | 0.90 | 0.86 |
| | 40L and 60L | 1.03 | 0.96 | 0.90 | 0.83 | 0.77 |
| 10°C (50°F) | 9L and 13L | 1.04 | 1.03 | 1.03 | 1.02 | 1.02 |
| | 20L and 30L | 1.02 | 0.97 | 0.93 | 0.89 | 0.85 |
| | 40L and 60L | 1.03 | 0.95 | 0.88 | 0.82 | 0.76 |
| 15°C (59°F) | 9L and 13L | 1.03 | 1.02 | 1.02 | 1.01 | 1.01 |
| | 20L and 30L | 1.01 | 0.96 | 0.91 | 0.88 | 0.84 |
| | 40L and 60L | 1.02 | 0.94 | 0.87 | 0.81 | 0.75 |
| 20°C (68°F) | 9L and 13L | 1.02 | 1.01 | 1.00 | 1.00 | 0.99 |
| | 20L and 30L | 1.01 | 0.95 | 0.90 | 0.87 | 0.83 |
| | 40L and 60L | 1.01 | 0.93 | 0.86 | 0.80 | 0.74 |
| 25°C (77°F) | 9L and 13L | 1.00 | 1.00 | 0.99 | 0.99 | 0.99 |
| | 20L and 30L | 1.00 | 0.94 | 0.89 | 0.86 | 0.82 |
| | 40L and 60L | 1.00 | 0.92 | 0.85 | 0.79 | 0.74 |
| 30°C (86°F) | 9L and 13L | 0.99 | 0.99 | 0.98 | 0.98 | 0.98 |
| | 20L and 30L | 0.97 | 0.93 | 0.88 | 0.85 | 0.81 |
| | 40L and 60L | 0.98 | 0.91 | 0.84 | 0.78 | 0.73 |
| 35°C (95°F) | 9L and 13L | 0.98 | 0.97 | 0.97 | 0.97 | 0.97 |
| | 20L and 30L | 0.96 | 0.92 | 0.87 | 0.84 | 0.80 |
| | 40L and 60L | 0.96 | 0.90 | 0.83 | 0.77 | 0.72 |
| 40°C (104°F) | 9L and 13L | 0.97 | 0.96 | 0.96 | 0.96 | 0.95 |
| | 20L and 30L | 0.95 | 0.90 | 0.86 | 0.83 | 0.79 |
| | 40L and 60L | 0.95 | 0.88 | 0.82 | 0.76 | 0.71 |

¹ Lumen maintenance values at 25°C (77°F) are calculated per TM-21 based on LM-80 data and in-situ luminaire testing

² In accordance with IESNA TM-21-11, Projected Values represent interpolated value based on time durations that are within six times (6X) the IESNA LM-80-08 total test duration (in hours) for the device under testing (DUT) i.e. the packaged LED chip

³ In accordance with IESNA TM-21-11, Calculated Values represent time durations that exceed six times (6X) the IESNA LM-80-08 total test duration (in hours) for the device under testing (DUT) i.e. the packaged LED chip

Installation

- Recommended ceiling cutout 6.5" (165mm)

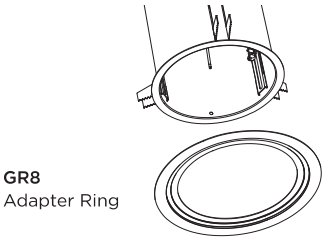


Note: 30L and 40L versions require marked spacing: 24" (600mm) x 12" (300mm) x 1/2" (12mm). 24" (600mm) luminaire to luminaire, 12" (300mm) luminaire to side wall, 1/2" (12mm) above luminaire
60L versions require marked spacing: 48" (1219 mm) x 24" (600mm) x 1" (25mm), 48" (1219 mm) luminaire to luminaire, 24" (600mm) luminaire to side wall, 1" (25mm) above luminaire

Accessories

| Accessories |
|--|
| <div>GR8</div> <div>Optional 8" Adapter Ring</div> |

Installation



KR Series

KR6™ LED Specification Downlight – Round 6"

Product Description

The KR6™ LED specification downlight features Cree TrueWhite® Technology and delivers beautiful, high-quality light with efficacy up to 76 lumens per watt. Designed for new construction applications, the KR Series is available in a variety of color temperatures, round and square trims with high-quality anodized aluminum reflector finishes, a sloped ceiling adaptor accessory, and a variety of dimming options including Cree Sunset Dimming Technology which provides rich, warm light that transitions from 2700K to 1800K as naturally as an incandescent source.

Performance Summary

Utilizes Cree TrueWhite® Technology

Initial Delivered Lumens: 700-5,300 lumens; Delivered lumen output is typical when using a SSGC type reflector

Input Power: 13-87 watts

Emergency Performance: Up to 1,210 Lumens; 10W; Minimum 90 Minutes

CRI: 90

CCT: 2700K, 3000K, 3500K, 4000K

Controls: Triac, 0/1-10V; See control availability chart on page 3

Limited Warranty: 10 years on KR6™ luminaire/1 year on emergency battery pack

* See www.cree.com/lighting/products/warranty for warranty terms

Accessories

| Field-Installed | | |
|--|---|---|
| Sloped Ceiling Adaptor KRKS6**WW ** 0-35 (order in 5 degree increments) | C-Channel Hanger Bars RBH30C - Pair of 30" (762mm) rigid 3/4" x 1/2" (19mm x 13mm) C-Channel bars RBH24C-1 - Pair of 24" (610mm) x 1-1/2" (38mm) x 1/2" (13mm) standard C-Channel bars | T-Bar Clips RARCT - Set of four - For use with RBH24C-1 hanger bars Trim Ring KR6TA - White |

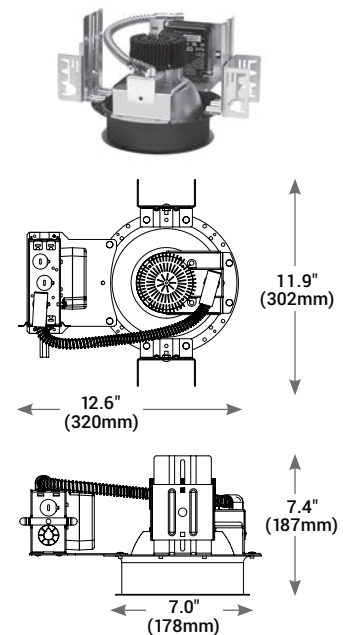
Ordering Information

Fully assembled luminaire is composed of two components that must be ordered separately:
Example: **Housing:** KR6-20L-35K-120V-10V + **Reflector:** KR6T-SSGC-FF

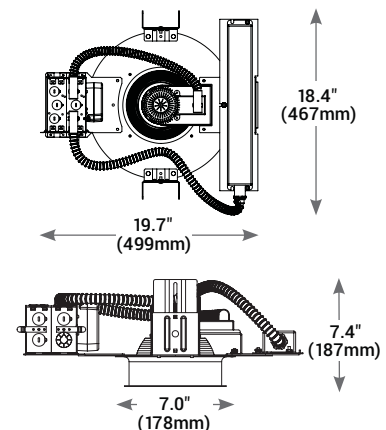
| Reflector (Housing must be ordered separately) | | | |
|--|-----------------------------|--|--------------|
| Series | Reflector Finish | Flange Finish | Options |
| KR6T | SSGC Soft Satin Glow, Clear | FF Matches Reflector WF White Paint | WW Wall Wash |

| Housing (Reflector must be ordered separately) | | | | | | | | |
|--|--------|-------------|---|----------------------------|---|---|--|---|
| Series | Size | Reflector | Initial Delivered Lumens | Optic | CCT | Voltage | Controls | Options |
| KR | 6 inch | Blank Round | 9L 13W, 700 Lumens – 54 LPW 13L 18W, 1,100 Lumens – 61 LPW 20L 30W, 1,700 Lumens – 57 LPW 30L 39W, 2,550 Lumens – 65 LPW 40L 44W, 3,350 Lumens – 76 LPW 60L 87W, 5,300 Lumens – 61 LPW | Blank 70° Beam Angle | 27K - 2700K - 9L thru 40L only 30K 3000K 35K 3500K 40K 4000K 50K 5000K - Available on 40L and 60L only | 120V 120 Volts 277V 277 Volts 347V 347 Volts | Blank For standard control offering refer to control availability chart on page 3 10V 0/1-10V Dimming - Refer to control availability chart on page 3 | WD Sunset Dim - 9L and 13L @ 27K with Triac Dimming only EB7 Emergency Backup - Minimum 90 minutes - 120V, 277V only - Minimum operating temperature: 0°C (32°F) US US Manufactured Luminaire |

NOTE: Price adder may apply depending on configuration



Emergency Backup



US: www.cree.com/lighting

T (800) 236-6800

F (262) 584-5415

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07/06/2021

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Canada: www.cree.com/canada



T (800) 473-1234

F (800) 890-7507

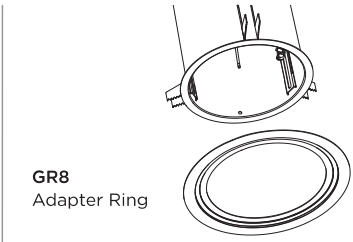
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Accessories

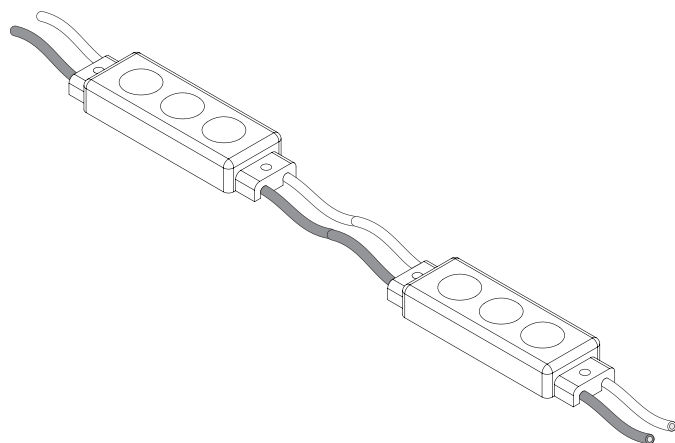
| Accessories |
|--|
| <div>GR8</div> <div>Optional 8" Adapter Ring</div> |

Installation

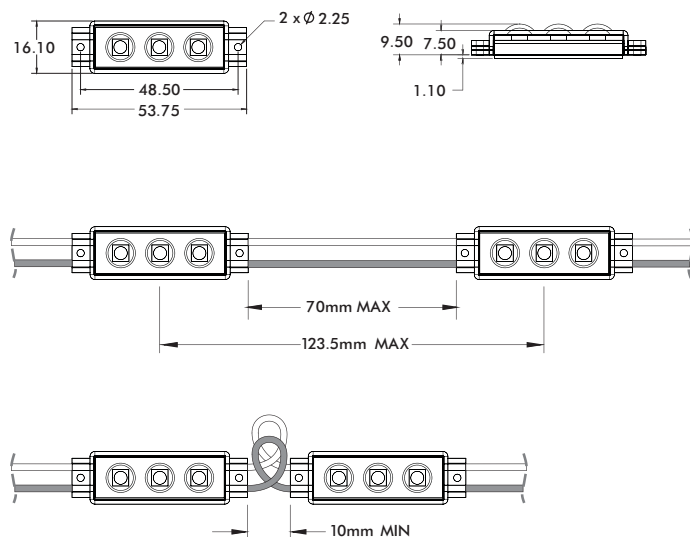


IP-SF-3™ Waterproof LED Light Module

Product Specification Sheet



Mechanical Drawing



Specification Logic

| FAMILY | LED COLOR |
|----------|------------|
| IP-SF-3™ | 2700K |
| | 3000K |
| | 3500K |
| | 4000K |
| | 5000K |
| | 6500K |
| | RD - Red |
| | GR - Green |
| | BL - Blue |
| | AM - Amber |

Product Configuration: IP-SF-3-3000K

Date: _____

Type: _____

Company: _____

Project: _____

IP-SF-3™ is a low voltage, low wattage LED light module offering an energy efficient, reliable and low cost lighting solution for both indoor and outdoor installations. Typical applications include cove and under-cabinet lighting, backlighting and channel letter signs, delineation and any application where moisture or extreme temperatures may occur.

Each module consists of three LEDs available in 6 color temperatures of white as well as Amber, Red, Green and Blue.

The modules are completely sealed and IP65 rated for wet locations and can operate in ambient temperatures from -40°C to +50°C.

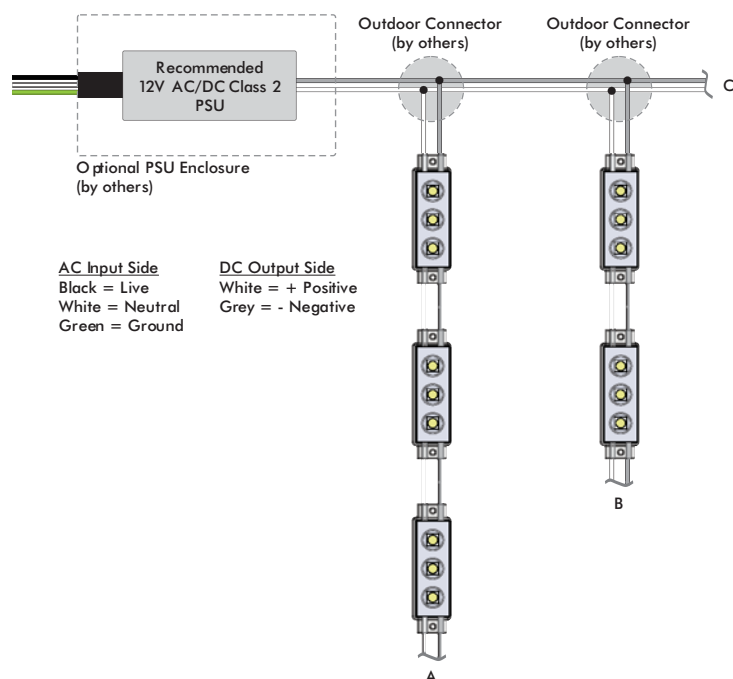
Each module is only 54mm long, 16mm wide, 9.5mm high and connected to adjacent modules with 70mm jumper wires (max. 123.5mm center-to-center). The compact size and flexibility of an IP-SF-3 assembly affords unlimited installation options. Standard assemblies are sold with 100 modules.

The IP-SF-3™ modules can be mounted with the pre-applied Very High Bond (VHB) double sided tape or with screws through the pre-drilled mounting flanges on each end of the module.

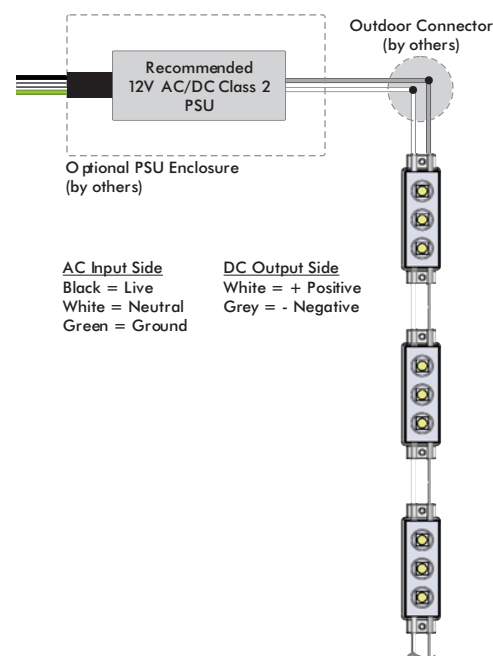
Features

- Three LEDs per module with wide 140° beam angle
- High luminous flux per module, 38lm
- Built-in constant current circuitry maintains equal luminous output module-to-module for full run length
- Projected lifetime 50,000 hours (L50)
- IP65 waterproof protection (sealed by epoxy resin)
- Extreme ambient temperature range: -40°C to +50°C (-40°F to +122°F)
- 100 pre-wired modules with 70mm (2-3/4") long jumper wires eliminate joints, save installation time and provide the ability to build curved illuminated lines
- Safe low voltage operation (12VDC)
- Very low power consumption; Maximum 0.5W per module
- LED available in 6 color temperatures of white as well as Amber, Red, Green and Blue
- Vibration resistant
- Pre-applied VHB double sided tape or built in screw flanges for quick installation
- Low cost

IP-SF-3™ Waterproof LED Light Module

Typical System Diagram
IP-SF-3 in Parallel System Installation


The sum of A+B+C=Maximum of 100 units

IP-SF-3 in Series System Installation


Maximum of 100 units in a series.

Product Specifications
IP-SF-3™

| | | | |
|------------|--------------------------------------|-----------|---|
| Electrical | Rated Input Voltage | | 12VDC |
| | Power Consumption (maximum) | | 0.5W |
| | Approved Remote AC/DC Power Supplies | | 12VDC Class 2 Power Supplies Only |
| | | CLG-60-12 | |
| | | PLC-60-12 | |
| LP-1040-12 | | | |
| Optical | Light Source | | 3 x SMT LEDs |
| | Lumens (typical per module) | | 38 |
| | Optic | | Wide Beam 140° |
| | Projected Lumen Maintenance | | 50,000 hours @ 50°C (B50, L70) |
| Physical | Length x Width x Height | mm | 54 x 16 x 9.5 |
| | | inches | 2.13 x 0.63 x 0.37 |
| | Weight | g | 6.5 |
| | | oz | 0.23 |
| | Housing | | Injection Molded ABS Body filled with Epoxy Resin |
| | Fixture Connections | | 70mm lead wires and 70mm jumper wires between modules |
| | Rated Operating Temperature | | -30°C to +50°C, -22°F to 122°F |
| | Environment | | Indoor/Outdoor, Dry or Damp or Wet Locations |

These figures are subject to change

AAC

AAC

Specification Sheet

lumenfacade™

WHITE & STATIC COLORS

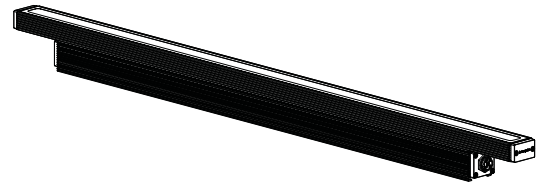
Client _____ Project name _____

Order# _____ Type _____ Qty _____

FEATURES AND BENEFITS

Physical :

- Low copper content extruded aluminum housing
- Available in 1', 2', 3' or 4' sections
- Electro-statically applied polyester powder coat finish
- Machined aluminum end caps and silicone gaskets
- Stainless steel hardware
- Clear tempered glass lens
- Asymmetric wall wash, 8° x 8°, 10° x 10°, 10° x 30°, 10° x 60°, 10° x 90°, 15° x 25°, 30° x 30°, 30° x 60°, 35° x 35°, 50° x 80°, 60° x 60°, 80° x 80°, or 90° x 90° optics
- IP66
- IK07 rated (asymmetric wall wash lens is IK06 rated)
- Meets 3G ANSI C136.31 Vibration standard for bridge applications
- Corrosion-resistant coating for hostile environments²



Photometric Summary

| 4ft HO, 4000K | Delivered Output [lm] | Intensity [peak cd] |
|---------------|-----------------------|---------------------|
| WW | 3,592 | 5,159 |
| 8°x8° | 4,045 | 77,896 |
| 10°x10° | 3,768* | 38,346* |
| 10°x30° | 3,830 | 30,056 |
| 10°x60° | 3,692 | 19,654 |
| 10°x90° | 3,576 | 7,897 |
| 30°x30° | 3,765 | 14,726 |
| 30°x60° | 3,862* | 5,119* |
| 60°x60° | 3,447* | 3,015* |
| 90°x90° | 3,592 | 1,886 |

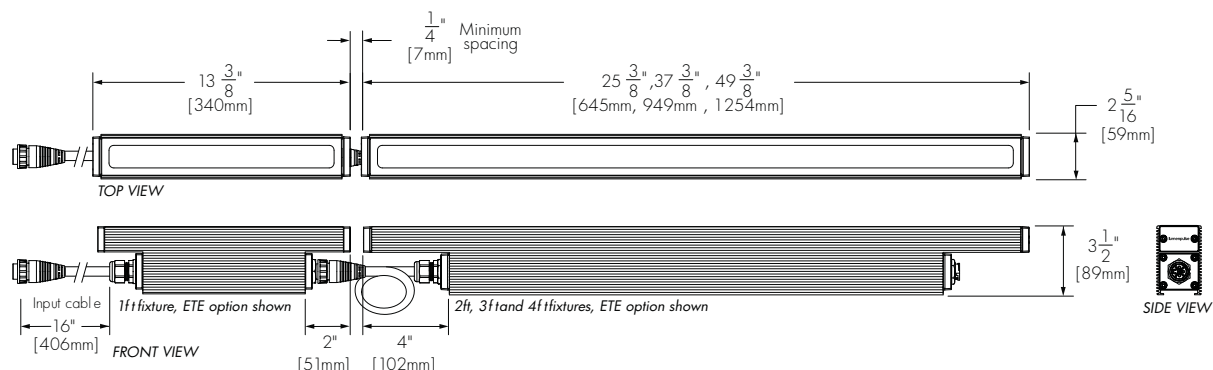
Photometric performance is measured in compliance with IESNA LM-79-08.
 *Estimated. Consult Lumenpulse website for the latest IES and LDT files.

Performance :

- 2200K, 2700K, 3000K, 3500K, 4000K, Red, Green, Blue static colors available
- CRI value: 80+
- Minimum 1fc (10.7 lux) @ 140ft (43m) distance (HO 4000K, 4' unit, 10° x 60° optic)
- Lumen maintenance: 120,000 hrs [L70 @ 25°C]
- Lumen measurements comply with LM-79-08 standard
- Resolution per foot or per fixture (configured with LumenID V3 software & DMX/RDM)
- Operating temperatures: -25° C to 50° C [-13F to 122F]

Electrical :

- Line voltage luminaire for 100 to 277V
- Power and data in 1 cable (#16-5)
- End-to-end option (ETE): 16" black input cable, no jumper cable needed
- 252ft [77m] maximum cable and fixture run length, non-dimming, 277V, RO version
- 164ft [50m] maximum cable and fixture run length, non-dimming, 277V, HO version
- 5W/ft version meets ASHRAE standards for linear lighting on building facades³
- 8.5W/ft Regular Output version³
- 15.25W/ft High Output version³
- Dimming options: Lumentalk, 0-10 volt, DALI, Lutron® EcoSystem® or DMX/RDM enabled



¹ Asymmetric wall wash lens is IK06 rated.

² Use only when exposed to salt spray and harsh chemicals. This option is not required for normal outdoor exposure!

³ ASHRAE version not available for 1' fixture lengths. Power consumption is typically 20% higher for 1' fixture lengths.

1/13

2017.07.21
MG - R65

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Montreal (Quebec) Canada
H3K 1G6

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P.514.937.3003
F.514.937.6289
info@lumenpulse.com
www.lumenpulsegroup.com

5-year limited warranty.

Consult www.lumenpulsegroup.com
for our complete Standard Terms
and Conditions of Sales.

lumenpulse™
GROUP

Lumenpulse reserves the right to make changes to its product without any time
without prior notice. Specifications are subject to change without notice.

PZ18-12000030
07/06/2021

PZ18-12000030
04/02/2019

Specification Sheet

lumenfacade™

WHITE & STATIC COLORS

HOW TO ORDER

LOG

1 | _____

Housing:

LOG ASHRAE - Lumenfacade™, 5W/ft ASHRAE compliant

LOG RO - Lumenfacade™ Regular Output, 8.5W/ft

LOG HO - Lumenfacade™ High Output, 15.25W/ft

2 | _____

Voltage:

100 - 100 volts

120 - 120 volts

208 - 208 volts

220 - 220 volts

240 - 240 volts

277 - 277 volts

3 | _____

Length:

12 - 13 3/8 inches (340mm) (2 kg/4.5 lbs)

24 - 25 3/8 inches (645mm) (3.17 kg/7 lbs)

36 - 37 3/8 inches (949mm) (4.75 kg/10.5 lbs)

48 - 49 3/8 inches (1254mm) (6.35 kg/14 lbs)

4 | _____

Colors and Color temperatures:

22K - 2200K

27K - 2700K

30K - 3000K

35K - 3500K

40K - 4000K

RD - Red

GR - Green

BL - Blue

Consult factory for availability of static Royal Blue, 6500K and 90+ CRI.

5 | _____

Optics:

Asymmetric

WWLF - Asymmetric Wallwash optic, left feed²WWRF - Asymmetric Wallwash optic, right feed²

Symmetric

8x8 - 8° x 8°³10x10 - 10° x 10°³

30x30 - 30° x 30°

35x35 - 35° x 35°

60x60 - 60° x 60°

80x80 - 80° x 80°

90x90 - 90° x 90°

Notes:

¹ Not available for 1' [0.3m] fixture lengths. ² Right feeding side is standard unless otherwise specified. ³ For best results use with HO fixtures at a 6-inch (15cm) setback from surface. Contact factory for applications support. ⁴ Suitable to use when 3GV option is specified. ⁵ North American RAL colors specified with RAL number only are provided with a smooth/high-gloss finish. Please consult factory for other RAL textures and glosses, or to match alternate color charts. Final color matching results may vary. ⁶ Lumentalk system is enabled with LDB accessory for 1' [0.3m] fixture lengths, see Typical Wiring Diagrams pages for details. ⁷ 1% minimum dimming value. ⁸ 10% minimum dimming value. Current Sink: 3mA/fixture, Current Source: 0.5mA/fixture. ⁹ 1% minimum dimming value. ¹⁰ 1% minimum dimming value. ¹¹ Available for 2' RO [0.6m], 3' [0.9m] and 4' [1.2m] fixture lengths only. ¹² 1% minimum dimming value. ¹³ EcoSystem® address per fixture length.

¹⁰ 1% minimum dimming value. Fixtures set to by fixture resolution. ¹¹ DMX address per fixture. ¹² Available with UMP and UMA S mounting options only.

Bi-symmetric

10x30 - 10° x 30°

10x60 - 10° x 60°

10x90 - 10° x 90°

15x25 - 15° x 25°

30x60 - 30° x 60°

50x80 - 50° x 80°

6 | _____

Mounting Option:

SAM - Slim Adjustable Mounting

UMP - Fixed Mounting⁴UMAS - Universal Adjustable Mounting⁴

WAM2 - Adjustable Wall Mounting 2"

WAM6 - Adjustable Extended Arm Mounting 6"

WAM12 - Adjustable Extended Arm Mounting 12"

WAM18 - Adjustable Extended Arm Mounting 18"

7 | _____

Finish:

BK - Black Sandtex

BRZ - Bronze Sandtex

SI - Silver Sandtex

WH - Smooth white

CC - Custom color and finish (please specify RAL color)⁵

8 | _____

Control:

NO - No Dimming

LT - Lumentalk Dimming⁶DIM - 0-10V Dimming option⁷DALI - DALI Dimming option⁸ES - Lutron® EcoSystem® Enabled Dimming⁹DMX/RDM - DMX/RDM enabled¹⁰

9 | _____

Option:

ETE - End-to-end configuration, 16" black input cable, no jumper cable needed

CRC - Corrosion-resistant coating for hostile environments

3GV - 3G ANSI C136.31 Vibration Rating¹¹

CE - CE (certification covers European Economic Area)

13/13

2017.07.21
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Montreal (Quebec) Canada
H3K 1G61.877.937.6203
P. 514.937.6203
F. 514.937.6203
info@lumenpulse.com
www.lumenpulsegroup.com5-year limited warranty.
Consult www.lumenpulsegroup.com
for our complete Standard Terms
and Conditions of Sales.Lumenpulse reserves the right to make changes to this product at any time
without prior notice and such modification shall be effective immediately.P218-12000030
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04/02/2019

Specification Sheet

lumenfacade™

WHITE & STATIC COLORS

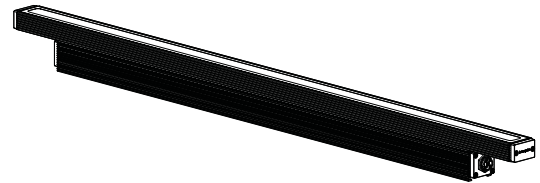
Client _____ Project name _____

Order# _____ Type _____ Qty _____

FEATURES AND BENEFITS

Physical :

- Low copper content extruded aluminum housing
- Available in 1', 2', 3' or 4' sections
- Electro-statically applied polyester powder coat finish
- Machined aluminum end caps and silicone gaskets
- Stainless steel hardware
- Clear tempered glass lens
- Asymmetric wall wash, 8° x 8°, 10° x 10°, 10° x 30°, 10° x 60°, 10° x 90°, 15° x 25°, 30° x 30°, 30° x 60°, 35° x 35°, 50° x 80°, 60° x 60°, 80° x 80°, or 90° x 90° optics
- IP66
- IK07 rated (asymmetric wall wash lens is IK06 rated)
- Meets 3G ANSI C136.31 Vibration standard for bridge applications
- Corrosion-resistant coating for hostile environments²



UL US CE RoHS IK07¹

lumen talk EcoSystem Enabled

Photometric Summary

| 4ft HO, 4000K | Delivered Output [lm] | Intensity [peak cd] |
|---------------|-----------------------|---------------------|
| WW | 3,592 | 5,159 |
| 8°x8° | 4,045 | 77,896 |
| 10°x10° | 3,768* | 38,346* |
| 10°x30° | 3,830 | 30,056 |
| 10°x60° | 3,692 | 19,654 |
| 10°x90° | 3,576 | 7,897 |
| 30°x30° | 3,765 | 14,726 |
| 30°x60° | 3,862* | 5,119* |
| 60°x60° | 3,447* | 3,015* |
| 90°x90° | 3,592 | 1,886 |

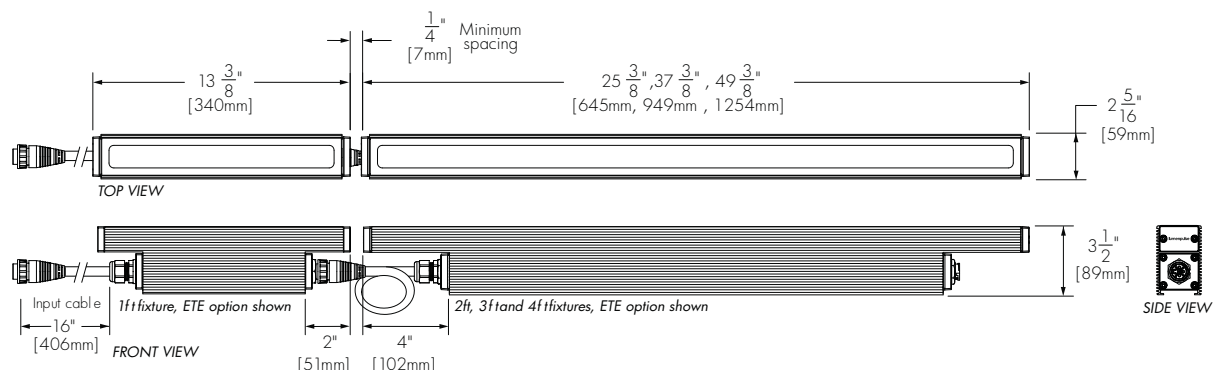
Photometric performance is measured in compliance with IESNA LM-79-08.
*Estimated. Consult Lumenpulse website for the latest IES and LDT files.

Performance :

- 2200K, 2700K, 3000K, 3500K, 4000K, Red, Green, Blue static colors available
- CRI value: 80+
- Minimum 1fc (10.7 lux) @ 140ft (43m) distance (HO 4000K, 4' unit, 10° x 60° optic)
- Lumen maintenance: 120,000 hrs [L70 @ 25°C]
- Lumen measurements comply with LM-79-08 standard
- Resolution per foot or per fixture (configured with LumenID V3 software & DMX/RDM)
- Operating temperatures: -25° C to 50° C [-13F to 122F]

Electrical :

- Line voltage luminaire for 100 to 277V
- Power and data in 1 cable (#16-5)
- End-to-end option (ETE): 16" black input cable, no jumper cable needed
- 252ft [77m] maximum cable and fixture run length, non-dimming, 277V, RO version
- 164ft [50m] maximum cable and fixture run length, non-dimming, 277V, HO version
- 5W/ft version meets ASHRAE standards for linear lighting on building facades³
- 8.5W/ft Regular Output version³
- 15.25W/ft High Output version³
- Dimming options: Lumentalk, 0-10 volt, DALI, Lutron® EcoSystem® or DMX/RDM enabled



¹ Asymmetric wall wash lens is IK06 rated.

² Use only when exposed to salt spray and harsh chemicals. This option is not required for normal outdoor exposure!

³ ASHRAE version not available for 1' fixture lengths. Power consumption is typically 20% higher for 1' fixture lengths.

1/13

2017.07.21
MG - R65

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5-year limited warranty.

Consult www.lumenpulsegroup.com
for our complete Standard Terms
and Conditions of Sales.

lumenpulse™
GROUP

Lumenpulse reserves the right to make changes to its product without any time
without prior notice. Specifications are subject to change without notice.

PZ18-12000030
07/06/2021

PZ18-12000030
04/02/2019

Specification Sheet

lumenfacade™

WHITE & STATIC COLORS

HOW TO ORDER

LOG

1 | _____

Housing:

LOG ASHRAE - Lumenfacade™, 5W/ft. ASHRAE compliant

LOG RO - Lumenfacade™ Regular Output, 8.5W/ft

LOG HO - Lumenfacade™ High Output, 15.25W/ft

2 | _____

Voltage:

100 - 100 volts

120 - 120 volts

208 - 208 volts

220 - 220 volts

240 - 240 volts

277 - 277 volts

3 | _____

Length:

12 - 13 3/8 inches (340mm) (2 kg/4.5 lbs)

24 - 25 3/8 inches (645mm) (3.17 kg/7 lbs)

36 - 37 3/8 inches (949mm) (4.75 kg/10.5 lbs)

48 - 49 3/8 inches (1254mm) (6.35 kg/14 lbs)

4 | _____

Colors and Color temperatures:

22K - 2200K

27K - 2700K

30K - 3000K

35K - 3500K

40K - 4000K

RD - Red

GR - Green

BL - Blue

Consult factory for availability of static Royal Blue, 6500K and 90+ CRI.

5 | _____

Optics:

Asymmetric

WWLF - Asymmetric Wallwash optic, left feed²WWRF - Asymmetric Wallwash optic, right feed²

Symmetric

8x8 - 8° x 8°³10x10 - 10° x 10°³

30x30 - 30° x 30°

35x35 - 35° x 35°

60x60 - 60° x 60°

80x80 - 80° x 80°

90x90 - 90° x 90°

Notes:

¹ Not available for 1' [0.3m] fixture lengths. ² Right feeding side is standard unless otherwise specified. ³ For best results use with HO fixtures at a 6-inch (15cm) setback from surface. Contact factory for applications support. ⁴ Suitable to use when 3GV option is specified. ⁵ North American RAL colors specified with RAL number only are provided with a smooth/high-gloss finish. Please consult factory for other RAL textures and glosses, or to match alternate color charts. Final color matching results may vary. ⁶ Lumentalk system is enabled with LDB accessory for 1' [0.3m] fixture lengths, see Typical Wiring Diagrams pages for details. ⁷ 1% minimum dimming value. ⁸ 10% minimum dimming value. Current Sink: 3mA/fixture, Current Source: 0.5mA/fixture. ⁹ 1% minimum dimming value. ¹⁰ 1% minimum dimming value. ¹¹ 1% minimum dimming value. ¹² Available for 2' RO [0.6m], 3' [0.9m] and 4' [1.2m] fixture lengths only. ¹³ EcoSystem® address per fixture length.

¹⁰ 1% minimum dimming value. Fixtures set to by fixture resolution. ¹¹ DMX address per fixture. ¹² Available with UMP and UMAS mounting options only.

Bi-symmetric

10x30 - 10° x 30°

10x60 - 10° x 60°

10x90 - 10° x 90°

15x25 - 15° x 25°

30x60 - 30° x 60°

50x80 - 50° x 80°

6 | _____

Mounting Option:

SAM - Slim Adjustable Mounting

UMP - Fixed Mounting⁴UMAS - Universal Adjustable Mounting⁴

WAM2 - Adjustable Wall Mounting 2"

WAM6 - Adjustable Extended Arm Mounting 6"

WAM12 - Adjustable Extended Arm Mounting 12"

WAM18 - Adjustable Extended Arm Mounting 18"

7 | _____

Finish:

BK - Black Sandtex

BRZ - Bronze Sandtex

SI - Silver Sandtex

WH - Smooth white

CC - Custom color and finish (please specify RAL color)⁵

8 | _____

Control:

NO - No Dimming

LT - Lumentalk Dimming⁶DIM - 0-10V Dimming option⁷DALI - DALI Dimming option⁸ES - Lutron® EcoSystem® Enabled Dimming⁹DMX/RDM - DMX/RDM enabled¹⁰

9 | _____

Option:

ETE - End-to-end configuration, 16" black input cable, no jumper cable needed

CRC - Corrosion-resistant coating for hostile environments

3GV - 3G ANSI C136.31 Vibration Rating¹¹

CE - CE (certification covers European Economic Area)

13/13

2017.07.21
MG - R65

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5-year limited warranty.

Consult www.lumenpulsegroup.com

for our complete Standard Terms

and Conditions of Sales.

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P218-12000030

07/06/2021

P218-12000030

04/02/2019

VXBRLED26NDG



High performance 26W LED Vaporproof fixture. A classic design with cutting edge LED technology. Comes with die cast guard and frosted globe.

Color: Natural

Weight: 5.0 lbs

Project:

Type:

Prepared By:

Date:

Driver Info

Type: Constant Current
120V: 0.25A
208V: 0.14A
240V: 0.13A
277V: 0.11A
Input Watts: 27W
Efficiency: 98%

LED Info

Watts: 26W
Color Temp: 4000K
Color Accuracy: 82 CRI
L70 Lifespan: 100000
Lumens: 1,735
Efficacy: 65 LPW

Technical Specifications

Listings

UL Listing:

Suitable for wet locations as downlight.

IESNA LM-79 & LM-80 Testing:

RAB LED luminaires have been tested by an independent laboratory in accordance with IESNA LM-79 and LM-80, and have received the Department of Energy "Lighting Facts" label.

LED Characteristics

Lifespan:

100,000-hour LED lifespan based on IES LM-80 results and TM-21 calculations.

LED:

Multi-chip 26W high-output, long-life LED.

Color Temperature:

4000K

Color Consistency:

3-step MacAdam Ellipse binning to achieve consistent fixture-to-fixture color.

Color Stability:

LED color temperature is warranted to shift no more than 200K in CCT over a 5 year period.

Color Uniformity:

RAB's range of CCT (Correlated Color Temperature) follows the guidelines of the American National Standard for Specifications for the Chromaticity of Solid State Lighting (SSL) Products, ANSI C38.377-2011.

Construction

Globes and Guards:

Vaporproof LEDs are compatible with RAB Globes and Guards.

Cold Weather Starting:

Minimum starting temperature is -40°F / -40°C

Ambient Temperature:

Suitable for use in 40°C (104°F) ambient temps.

Housing:

All die-cast aluminum construction.

Gaskets:

High temperature silicone.

Finish:

Natural shot blasted aluminum.

Mounting:

(3) 1/2" NPS conduit entry points.

Guard and Globe:

Shot blasted guard with frosted globe.

Green Technology:

Mercury and UV free. RoHS compliant components. Polyester powder coat finish formulated without the use of VOC or toxic heavy metals.

Electrical

Driver:

Constant Current, 100V-277V, 50/60 Hz, 0.48 Amp, Power Factor 97.9%.

Other

Thermal Management (Patent Pending):

Die-cast LED housing designed for maximum heat dissipation.

California Title 24:

LVAPOR complies with California Title 24 building and electrical codes.

Patents:

The design of the LVAPOR is protected by the following patents US pat. pending; D651738 CN ZL201230040341.3; ZL201130028360.X, TW pat. 101301367 MX 35699; pat. pending CA.

Country of Origin:

Designed by RAB in New Jersey and assembled in the USA by RAB's IBEW Local 3 workers.

Buy American Act Compliant:

This product is a COTS item manufactured in the United States, and is compliant with the Buy American Act.

Recovery Act (ARRA) Compliant:

This product complies with the 52.225-21 "Required Use of American Iron, Steel, and Manufactured Goods-- Buy American Act-- Construction Materials (October 2010).

Trade Agreements Act Compliant:

This product is a COTS item manufactured in the United States, and is compliant with the Trade Agreements Act.

GSA Schedule:

Suitable in accordance with FAR Subpart 25.4.

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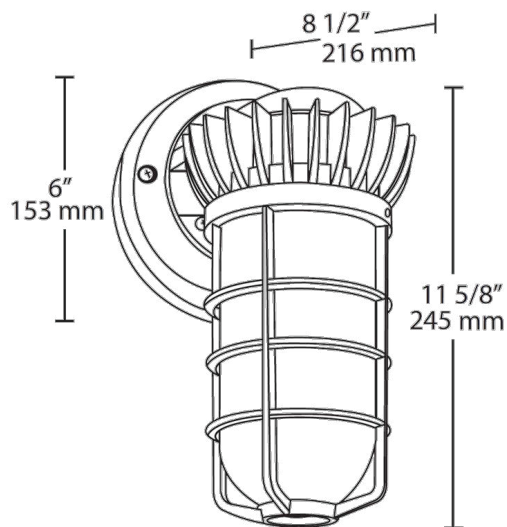
PZ18-12000030

04/02/2019

VXBRLED26NDG

**Technical Specifications (continued)****Other****Warranty:**

RAB warrants that our LED products will be free from defects in materials and workmanship for a period of five (5) years from the date of delivery to the end user, including coverage of light output, color stability, driver performance and fixture finish.

Dimensions**Features**

- Superior Thermal Management (Patent Pending)
- All Die-Cast Aluminum Construction
- 100,000 hour life based on LM-80 tests
- Thermal Shock-Resistant Frosted Glass Globe
- Traditional Look, Cutting-Edge Technology
- 5-year LED warranty

AAC

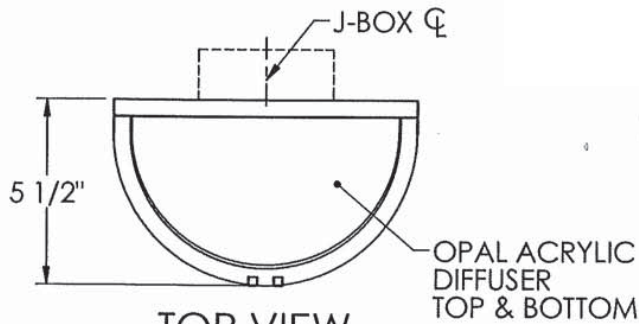
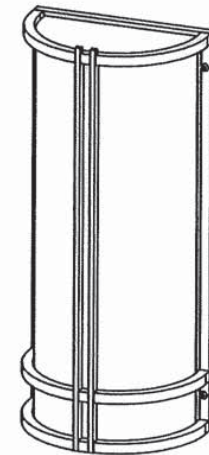
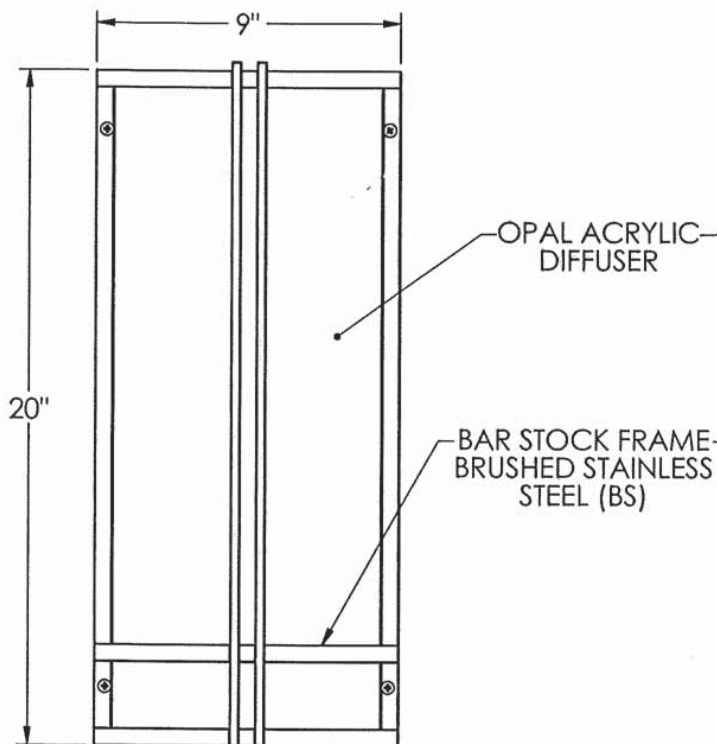
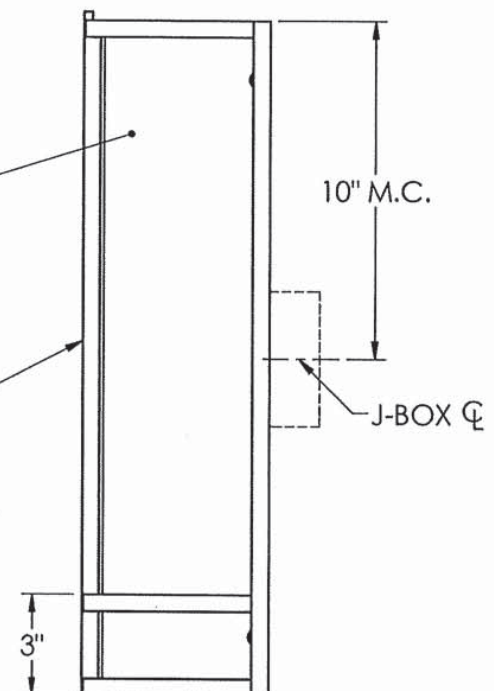
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NOTES:

1. OTHER LAMPING & FINISHES AVAILABLE
2. MOUNTS TO STANDARD 4" J-BOX (BY OTHERS)
3. INTEGRAL OSRAM ELECTRONIC LED MODULES & DRIVER (5 YEAR WARRANTY)
4. 0-10 VOLT DIMMING

CHANGES

| REV | BY | APP | DATE | NOTES |
|-----|----|-----|---------|----------------------|
| - | RL | JJ | 6-10-15 | INITIAL RELEASE |
| ◇ | JB | JJ | 8-03-15 | CHNGD TO 3000 KELVIN |

**TOP VIEW****ISOMETRIC VIEW****FRONT VIEW****SIDE VIEW**

U.L./C.U.L. LISTED
LUMINAIRE
WET LOCATION



ITEM NUMBER:

EXTERIOR - S9131-L23-30K-BS

LAMPING (BY OTHERS):

LED, 23 WATT, 3000 KELVIN, 3100 LUMENS ◇

FINISH:

(BS) BRUSHED STAINLESS STEEL

COMMENTS:

-

TYPE:

-

WEIGHT:

-

DWG NUMBER:

3099

SCALE:

N/A

DATE:

6-10-15

APP BY:

JJ

DRAWN BY:

RL

REVISION:

-

AAC**AAC**

PZ18-12000030

07/06/2021

PZ18-12000030

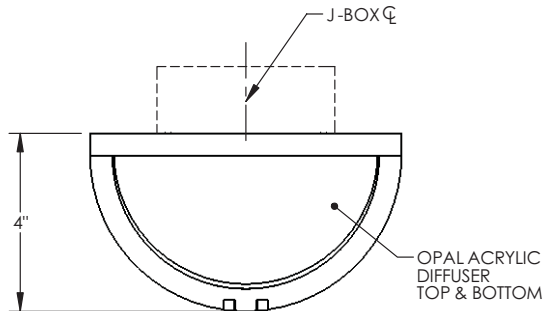
04/02/2019

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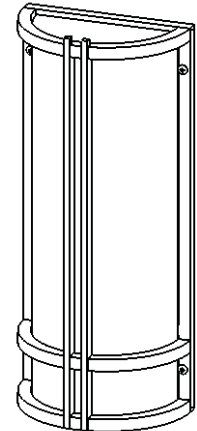
1. OTHER LAMPING & FINISHES AVAILABLE
2. MOUNTS TO STANDARD 4" J-BOX (BY OTHERS)
3. INTEGRAL OSRAM ELECTRONIC LED MODULES & DRIVER (5 YEAR WARRANTY)
4. 0-10 VOLT DIMMING

CHANGES

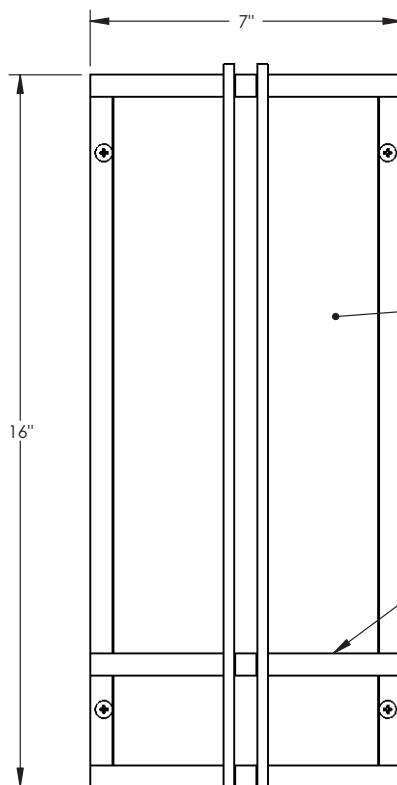
| REV | BY | APP | DATE | NOTES |
|-----|----|-----|------------|-----------------|
| - | R | L | JJ05-04-16 | INITIAL RELEASE |



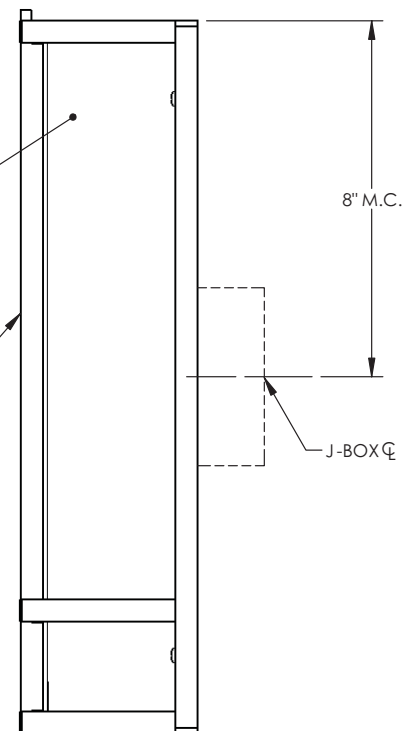
TOP VIEW



ISOMETRIC VIEW



FRONT VIEW



SIDE VIEW

U.L./C.U.L. LISTED
LUMINAIRE
WET LOCATION



ITEM NUMBER:

S9130-L12-35K-BS

LAMPING (BY OTHERS):

LED, 12 WATT, 3500 KELVIN, 1600 LUMENS

FINISH:

(BS) BRUSHED STAINLESS STEEL

COMMENTS:

-

TYPE:

-

WEIGHT:

-

DWG. NO.:

3568

SCALE:

1/4" = 1"

APP BY:

JJ

DATE:

05-04-16

DRAWN BY:

JJ

REVISION:

-

-

-

PZ18-12000030

07/06/2021

PZ18-12000030

04/02/2019

Cree Edge™ Series

LED Security Wall Pack Luminaire

Product Description

The Cree Edge™ wall mount luminaire has a slim, low profile design. The luminaire end caps are made from rugged die cast aluminum with integral, weathertight LED driver compartments and high performance aluminum heat sinks specifically designed for LED applications. Housing is rugged aluminum. Includes a lightweight mounting box for installation over standard and mud ring single gang J-Boxes. Secures to wall with four 3/16" (5mm) screws (by others). Conduit entry from top, bottom, sides and rear. Allows mounting for uplight or downlight. Designed and approved for easy through-wiring. Includes leaf/debris guard.

Applications: General area and security lighting

Performance Summary

Patented NanoOptic® Product Technology

Made in the U.S.A. of U.S. and imported parts

CRI: Minimum 70 CRI

CCT: 4000K (+/- 300K), 5700K (+/- 500K) standard

Limited Warranty*: 10 years on luminaire/10 years on Colorfast DeltaGuard® finish

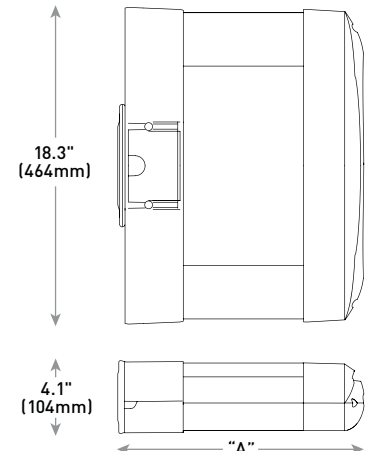
* See <http://lighting.cree.com/warranty> for warranty terms

Accessories

Field-Installed

Bird Spikes
XA-BRDSPK

Hand-Held Remote
XA-SENSREM
- For successful implementation of the programmable multi-level option, a minimum of one hand-held remote is required



| LED Count (x10) | Dim. "A" | Weight |
|-----------------|---------------|------------------|
| 02 | 9.9" (251mm) | 20 lbs. (9.1kg) |
| 04 | 11.9" (303mm) | 22 lbs. (10.0kg) |
| 06 | 13.9" (353mm) | 25 lbs. (11.3kg) |
| 08 | 15.9" (404mm) | 27 lbs. (12.2kg) |
| 10 | 17.9" (455mm) | 31 lbs. (14.1kg) |
| 12 | 19.9" (505mm) | 32 lbs. (14.5kg) |

Ordering Information

Example: SEC-EDG-2M-WM-06-E-UL-SV-700

| SEC-EDG | | WM | | E | | | | |
|---------|--|------------------|--|--------|---|--|---|---|
| Product | Optic | Mounting | LED Count (x10) | Series | Voltage | Color Options | Drive Current | Options |
| SEC-EDG | 2M Type II Medium 2MB Type II Medium w/BLS 2S Type II Short 2SB Type II Short w/BLS 3M Type III Medium 3MB Type III Medium w/BLS 4M Type IV Medium 4MB Type IV Medium w/BLS | WM Wall Mount | 02 04 06 08 10 12 | E | UL Universal 120-277V UH Universal 347-480V 34 347V | BK Black BZ Bronze SV Silver WH White | 350 350mA 525 525mA -Available with 20-80 LEDs 700 700mA -Available with 20-60 LEDs | DIM 0-10V Dimming - Control by others - Refer to Dimming spec sheet for details - Can't exceed specified drive current F Fuse - Refer to ML spec sheet for availability with ML options - Available with UL voltage only - When code dictates fusing, use time delay fuse ML Multi-Level - Refer to ML spec sheet for details - Intended for downlight applications of 0° tilt P Photocell - Refer to ML spec sheet for availability with ML options - Must specify UL or 34 voltage P ML Programmable Multi-Level - Refer to PML spec sheet for details - Intended for downlight applications of 0° tilt 40K 4000K Color Temperature - Minimum 70 CRI - Color temperature per luminaire |



AAC

Rev. Date: V2 07/28/2016



US: lighting.cree.com/lighting

T (800) 236-6800

F (262) 504-3415

P218-12000030

07/06/2021

Canada: www.cree.com/canada

T (800) 236-6800

F (262) 504-3415

P218-12000030

04/02/2019

Cree Edge™ LED Security Wall Pack Luminaire

Product Specifications

CONSTRUCTION & MATERIALS

- Slim, low profile design
- Luminaire sides are rugged die cast aluminum with integral, weathertight LED driver compartment and high performance aluminum heat sinks specifically designed for LED applications
- Housing is rugged aluminum
- Furnished with low copper, light weight mounting box designed for installation over standard and mud ring single gang J-Boxes
- Luminaire can also be direct mounted to a wall and surface wired
- Secures to wall with four 3/16" (5mm) screws (by others)
- Conduit entry from top, bottom, sides, and rear
- Allows mounting for uplight or downlight
- Designed and approved for easy through-wiring
- Includes leaf/debris guard
- Exclusive Colorfast DeltaGuard® finish features an E-Coat epoxy primer with an ultradurable powder topcoat, providing excellent resistance to corrosion, ultraviolet degradation and abrasion. Black, bronze, silver and white are available
- **Weight:** See Dimensions and Weight Chart on page 1

ELECTRICAL SYSTEM

- **Input Voltage:** 120–277V or 347–480V, 50/60Hz, Class 1 drivers
- **Power Factor:** > 0.9 at full load
- **Total Harmonic Distortion:** < 20% at full load
- Integral weathertight J-Box with leads (wire nuts) for easy power hook up
- Integral 10kV surge suppression protection standard
- To address inrush current, slow blow fuse or type C/D breakers should be used
- **Maximum 10V Source Current:** 20 LED (350mA): 10mA; 20LED (525 & 700 mA) and 40-120 LED: 0.15mA

REGULATORY & VOLUNTARY QUALIFICATIONS

- cULus Listed
- Suitable for wet locations
- Meets FCC Part 15 standards for conducted and radiated emissions
- Enclosure rated IP66 per IEC 60529 when ordered without P, PML or ML options
- 10kV surge suppression protection tested in accordance with IEEE/ANSI C62.41.2
- Luminaire and finish endurance tested to withstand 5,000 hours of elevated ambient salt fog conditions as defined in ASTM Standard B 117
- DLC qualified. Exceptions apply when ordered with full backlight control. Please refer to www.designlights.org/QPL for most current information
- **Dark Sky Friendly, IDA Approved. Please refer to www.darksky.org/ for most current information**
- Meets Buy American requirements within ARRA

| ElectricalData* | | | | | | | |
|--------------------|-----------------------------|---------------|------|------|------|------|------|
| LED Count (x10) | System Watts 120-480V | Total Current | | | | | |
| | | 120V | 208V | 240V | 277V | 347V | 480V |
| 350mA | | | | | | | |
| 02 | 25 | 0.21 | 0.13 | 0.11 | 0.10 | 0.08 | 0.07 |
| 04 | 46 | 0.36 | 0.23 | 0.21 | 0.20 | 0.15 | 0.12 |
| 06 | 66 | 0.52 | 0.31 | 0.28 | 0.26 | 0.20 | 0.15 |
| 08 | 90 | 0.75 | 0.44 | 0.38 | 0.34 | 0.26 | 0.20 |
| 10 | 110 | 0.92 | 0.53 | 0.47 | 0.41 | 0.32 | 0.24 |
| 12 | 130 | 1.10 | 0.63 | 0.55 | 0.48 | 0.38 | 0.28 |
| 525mA | | | | | | | |
| 02 | 37 | 0.30 | 0.19 | 0.17 | 0.16 | 0.12 | 0.10 |
| 04 | 70 | 0.58 | 0.34 | 0.31 | 0.28 | 0.21 | 0.16 |
| 06 | 101 | 0.84 | 0.49 | 0.43 | 0.38 | 0.30 | 0.22 |
| 08 | 133 | 1.13 | 0.66 | 0.58 | 0.51 | 0.39 | 0.28 |
| 700mA | | | | | | | |
| 02 | 50 | 0.41 | 0.25 | 0.22 | 0.20 | 0.15 | 0.12 |
| 04 | 93 | 0.78 | 0.46 | 0.40 | 0.36 | 0.27 | 0.20 |
| 06 | 134 | 1.14 | 0.65 | 0.57 | 0.50 | 0.39 | 0.29 |

* Electrical data at 25°C (77°F)

| Recommended Cree Edge™ Series Lumen Maintenance Factors (LMF) ¹ | | | | | |
|--|-------------|-----------------------------------|-----------------------------------|------------------------------------|-------------------------------------|
| Ambient | Initial LMF | 25K hr Projected ² LMF | 50K hr Projected ² LMF | 75K hr Calculated ³ LMF | 100K hr Calculated ³ LMF |
| 5°C (41°F) | 1.04 | 0.99 | 0.97 | 0.95 | 0.93 |
| 10°C (50°F) | 1.03 | 0.98 | 0.96 | 0.94 | 0.92 |
| 15°C (59°F) | 1.02 | 0.97 | 0.95 | 0.93 | 0.91 |
| 20°C (68°F) | 1.01 | 0.96 | 0.94 | 0.92 | 0.90 |
| 25°C (77°F) | 1.00 | 0.95 | 0.93 | 0.91 | 0.89 |

¹ Lumen maintenance values at 25°C are calculated per TM-21 based on LM-80 data and in-situ luminaire testing² In accordance with IESNA TM-21-11, Projected Values represent interpolated values based on time durations that are within six times (6X) the IESNA LM-80-08 total test duration (in hours) for the device under testing (DUT) i.e. the packaged LED chip³ In accordance with IESNA TM-21-11, Calculated Values represent time durations that exceed six times (6X) the IESNA LM-80-08 total test duration (in hours) for the device under testing (DUT) i.e. the packaged LED chip

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CREE