LED LIGHTING CATALOGUE

Outdoor / Indoor

2019

CREE

GRAFICA: VANESSA**CAMA**

Published in 2018

Cree Europe is a member of the Ecolight organization.

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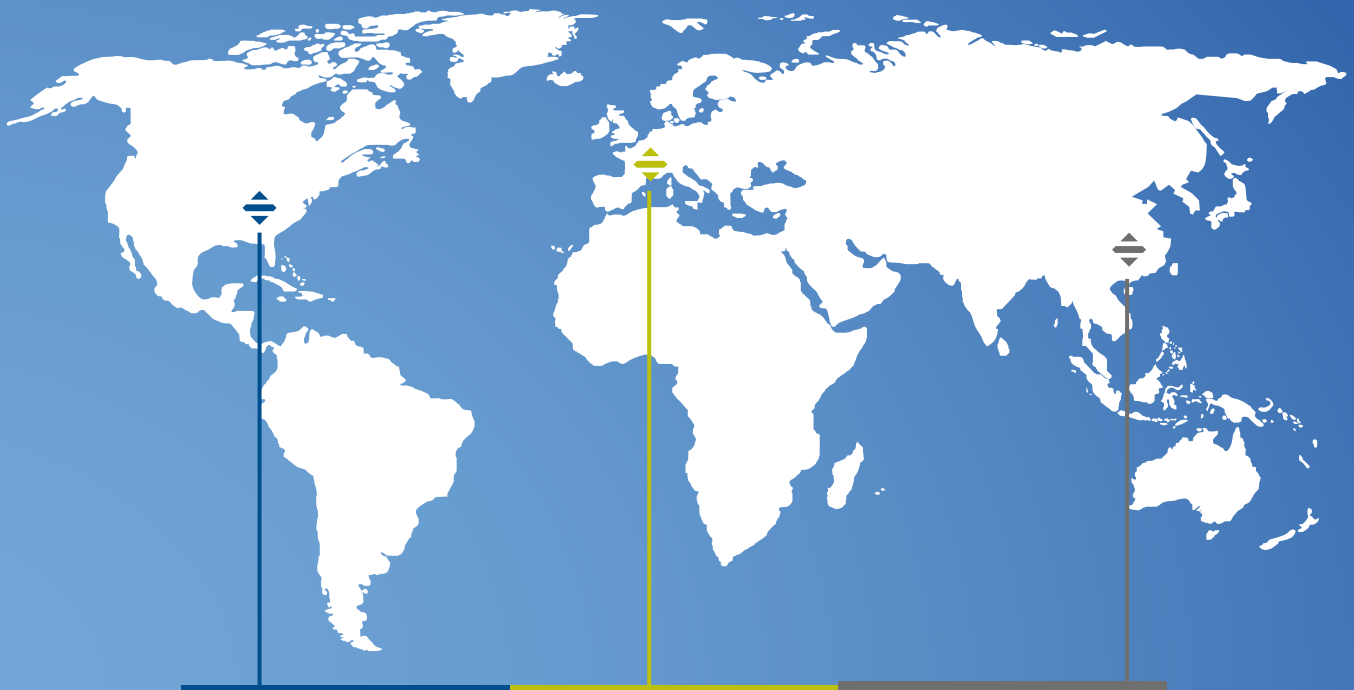
CREE
TM

GLOBAL PLAYER



NORTH AMERICA

RTP / Durham, NC

Fayetteville, AR

Chandler, AZ

Morgan Hill, CA

Racine, WI

Toronto, Canada

EUROPE

Florence, Italy

London, England

Munich, Germany

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Hong Kong, China

Huizhou, China

Shanghai, China

Shenzhen, China

Gurgaon, India

Tokyo, Japan

Suwon, Korea

New Taipei City, Taiwan

CREE 30 EST. 1987

HEADQUARTERS
REGIONAL OFFICES
MANUFACTURING
R&D
SALES

The cree difference

VERTICAL INNOVATION

Cree innovates at every stage, from base materials to finished devices and solutions. We are constantly driving for change, challenging the status quo and unlocking new possibilities.

WAFERS, CHIPS AND COMPONENTS

MODULES, SUBSYSTEMS, TECHNOLOGIES

SMART TECHNOLOGY

The Cree difference

MARKET-DEFINING TECHNOLOGY PLATFORMS

it's what drives everything we do. Cree's leadership begins with innovative materials that provide high-efficiency performance for each lamp and luminaire found within our product portfolio. With over a quarter century of experience, Cree has a deep understanding of the science behind LED lighting and provides a complete collection of indoor and outdoor LED lighting solutions to match your application.

Cree remains at the forefront today, dedicated to developing new LED solutions that improve both our customers' spaces and their bottom lines. As our product lines grow, we not only build on our history of innovation, we also extend our record of delivering superior value with beautiful, energy-efficient lighting.

CREE TRUE WHITE TECHNOLOGY

A revolutionary way to generate superior white light with LEDs.

CREE WAVEMAX® TECHNOLOGY

An optical breakthrough to redefine how light is delivered.

CREE SMARTCAST® TECHNOLOGY

An intelligent light control system.

CREE NANO OPTIC® TECHNOLOGY

Providing new possibilities for highly-optimized target illumination.

DeltaGuard® 10 Year Finishing System

The finest industrial-grade finish available for premium protection.

Premium Protection with Proven Results

SALT SPRAY TEST & DELTAGUARD FINISH

Colorfast DeltaGuard® Finish

Colorfast DeltaGuard Finish is the finest industrial-grade finish available, is exclusive to Cree exterior products, and carries an industry-leading 10-year limited warranty. Each product follows an immersion process that includes six cleaning stages, eight pre-treatment stages and an epoxy e-coat before the topcoat is applied. A baked-on ultra-durable powder topcoat is the last step to a truly outstanding finish that provides:

- Ultraviolet light resistance - Hard surfacing
- Superior adhesion
- Corrosion resistance - Fade protection
- Multiple finish options
- Endurance tested to withstand **5,000 hours** of elevated ambient salt fog conditions (ASTM Standard B117)warranty as a standard
- Aluminium alloy with ‹0,1% copper content

Color Finish Options

Black

Bronze

Silver Bronze

Silver

White

All backed by

INDUSTRY'S BROADEST WARRANTY

Our limited warranty covers the broadest time and product range in the lighting industry.

Up to 10 years, or Cree will replace it. That's our commitment. But most of the time, even under commercial conditions, Cree luminaires will last even longer.

5x

INDOOR LED LUMINAIRES
Longer lifetime than typical fluorescent light sources

15x

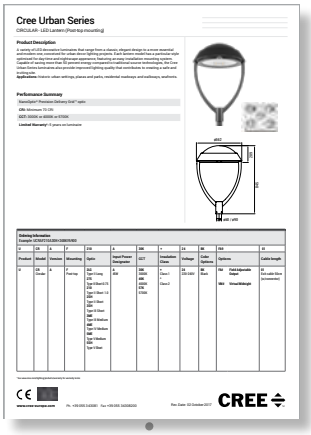
OUTDOOR LED LUMINAIRES
Longer lifetime than typical Sodium / Metal Halide light sources

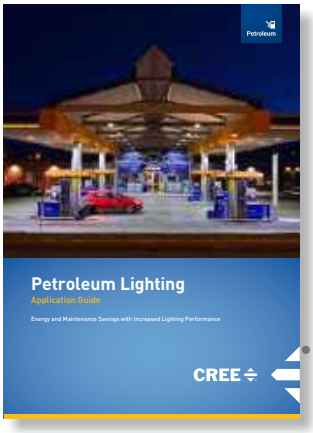
Service tools

SUPPORT

Cree® offers a variety of interactive services that help you imagine the possibilities a better light experience can bring to your project or space. Our talented application engineering team brings an exciting mix of experience and innovation to our clients.

Moreover, dedicated tools are available on our website for deeper information about products and case studies.





Applications

THE DIFFERENCE YOU CAN SEE. THE PAYBACK YOU EXPECT

From an inviting parking lot to pathways to a comfortable well-lit interior, Cree can formulate every solution to meet your unique lighting needs.

OUTDOOR LIGHTING

Cree lighting LED luminaires can dramatically improve visibility and put your facility in a whole new light — making outdoor areas safe and secure while reducing your operating expense.

INDOOR LIGHTING

Cree lighting LED luminaires can provide interiors with exceptional clarity and consistent full spectrum lighting without the flicker to help minimize fatigue, encourage alertness, and help people working and living spaces with ease.

SMART TECHNOLOGY

With Smart Technologies, Cree is providing value beyond illumination, enabling smart buildings and cities that are more efficient, deliver improved energy savings and lower maintenance costs. With an intelligent lighting platform, you can easily transform existing installations into energy-efficient solutions with automated intelligence that optimizes light levels and improves the effectiveness and productivity of your spaces — all in a way that's so intuitive and simple, it just works.

Roadway Lighting

Petroleum & C-Store

Indoor Educational

Urban dècor

Industrial & Warehouse

Indoor Commercial

Area Lighting

Indoor Office

Indoor Healthcare

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CIRCULAR Suspended 78

MODERN Adjustable Arm 80

MODERN Post-top 82

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RKT 86

EDGE PATHWAY Series 88

EDGE PATHWAY 90

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CFL small 96

CFL medium 98

CFL large 100


WELCOME TO
SOWWAH ISLAND

APPLICATIONS

OUTDOOR

Cree® XSP Series

Get more for less.

Street lighting is an important and significant investment for most municipalities. Designed to resemble traditional street lights but with improved performance, Cree XSP Series is the result of a from-the-ground-up design that provides unmatched illumination performance and value at the street level. The XSP Series luminaires are ideal for any street and roadway applications.

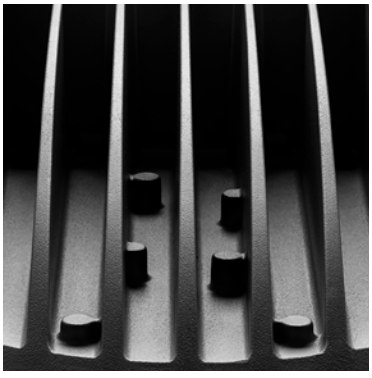
- Built in our state-of-the-art ISO9001 facility, the XSP Series is designed to provide more than a decade of near-maintenance-free service. And it's backed by our industry-leading 10-year limited warranty.
- Engineered to optimize both illumination and economic performance in roadway lighting, the XSP Series is an affordable LED solution that delivers unbeatable value to the street light market.
- With a lightweight body, tool-less entry and quick connection features, the XSP Series can be reliably installed in a few short minutes. This means less disruption to drivers and residents as well as reduced safety risks for installers.
- Capable of reducing energy usage by 70% compared to traditional light source technologies, the XSP Series couples high efficiency with improved light quality to help make neighborhoods safer without wasting resources.

PLUS - Cree XSP Series

Optical Control

A highly refined refractor system offers multiple configuration options to enable site-specific customisation of light quality, improving illumination. The system delivers more lumens in the target area, improves uniformity ratios, and controls high-angle brightness.

The NanoOptics® Precision Delivery Grid™ optic efficiently delivers light where it is needed. Our innovations in LED and optic technologies improve efficiency compared to previous generations of our LED streetlights, and allow luminaires to deliver unmatched efficacy. In addition, the uniform white light makes communities appear cleaner and safer.



Durability

A passive thermal management approach utilises a flow-through heat sink to efficiently draw heat away from the LED chip package, maximising performance and reliability.

Colorfast DeltaGuard® Finish by Cree protects outdoor LED fixtures without compromise. Immersive conditioning across 18 stages delivers an e-coat epoxy primer with an ultra-durable powder topcoat, providing unmatched protection against corrosion, UV light, fading and weathering - complete with a 10-year limited warranty.

Smart City ready

A NEMA® receptacle can be mounted on XSP Series streetlights to allow for the installation of photocell controls. The Cree® NEMA 7-pin receptacle is a two-piece rotational receptacle with seven conductors. It can be used with an ANSI C136.10 compliant photocell or shorting cap, or an ANSI C136.41 compatible control system module (both available by other providers).

The receptacle is constructed of durable polycarbonate, and features gaskets on the base of the component to prevent water entering the housing of the luminaire.

Versatility

The XSP Series offers a range of input powers to suit different markets and applications. With multiple control options and mounting options for two different tenon sizes (60mm or 76mm OD), the versatility of the product range is unmatched in the industry.

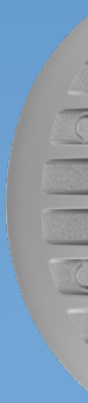
XSPM - PERFORMING, VERSATILE, COMPACT

Building upon the innovation of the Cree XSP Series Street Light, the new XSPM luminaire increases lumen output and efficacy compared to its predecessors.

Cree XSPM brings together the latest advancements in LED technology, combining extreme optical control, advanced thermal management and brilliant quality of light.

And it doesn't stop there — we added clean, modern housing (the same cobra-head style as the XSP series) and versatile mounting options, all with an attractive price point.

Whether for new construction or upgrade applications, XSPM is perfect for urban streets, parking lots, internal roadways and general site lighting.

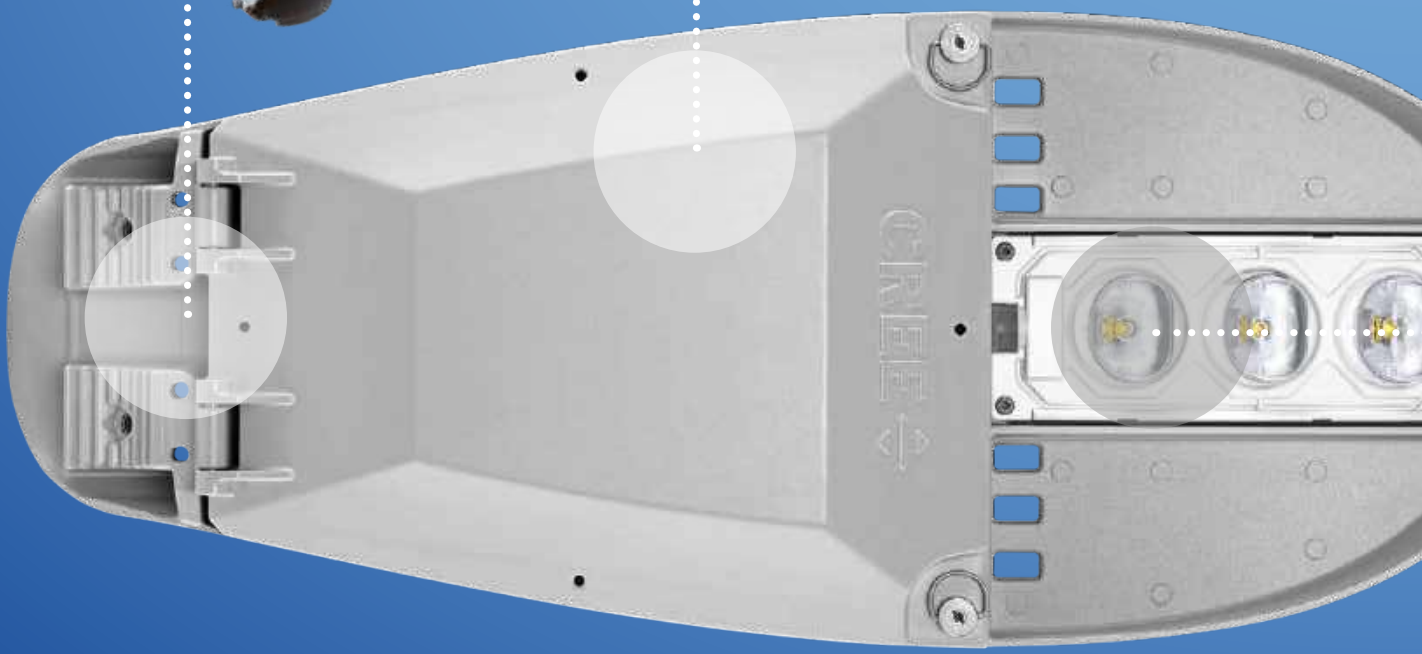


MATERIALS AND CONSTRUCTION

The front door is made of Makrolon®, a Bulk molding compound that is lighter and easier to manage during the installation phase. This also makes it possible to install internal nodes within the fixture, as the wires transmission will not be stopped by the material characteristics.

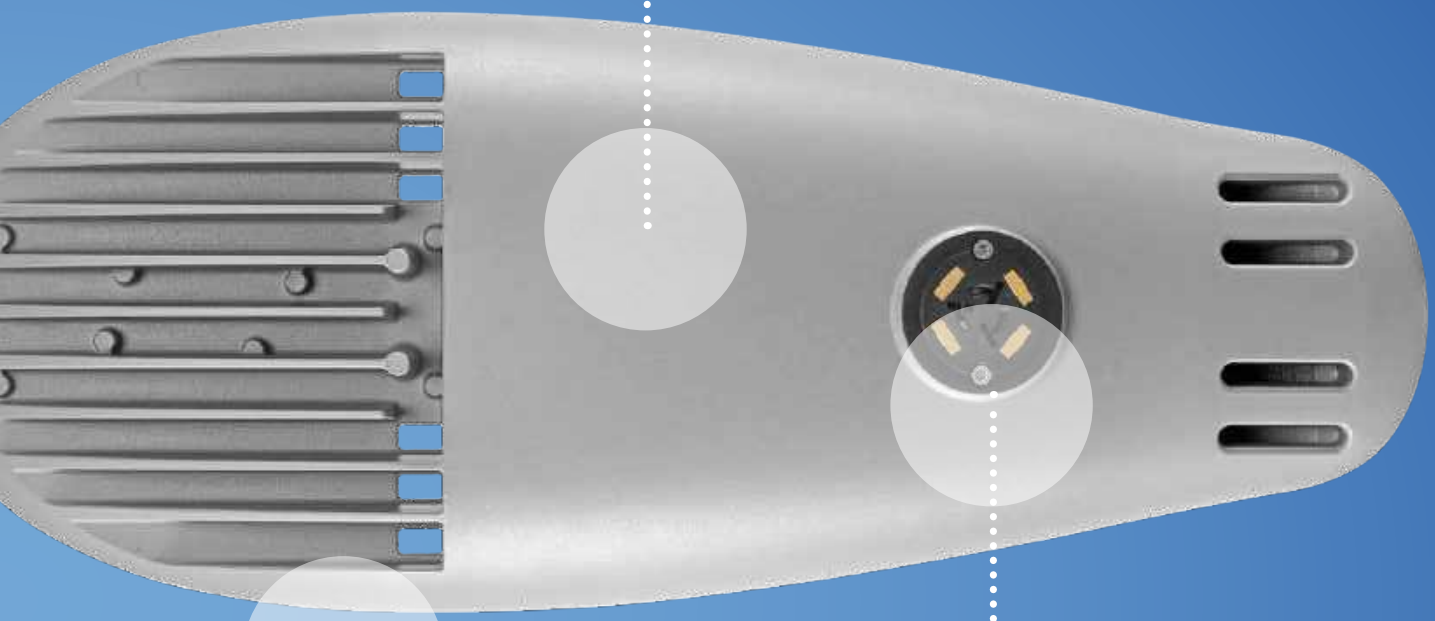
MOUNTING SYSTEM

Mounts on Ø60mm and Ø76mm arms or poles



DELTAGUARD FINISH

Thanks to the new diecast body, diodes can be powered at 1,5A instead of 1,05A without compromising the lifetime of the product. A special alloy has been selected to guarantee the utmost quality in terms of resistance to corrosion and reliability through time. XSPM features our best in class Deltaguard treatment that leads to an exceptional protection of all metal components reaching 10 yrs warranty as a standard.



NEMA SOCKET OPTION

The housing is designed to accommodate a photocell at the top.

A standard Nema® Socket option makes the fixture compatible with additional external sensors to be used within the Smart City scenario.

THERMAL CONTROL

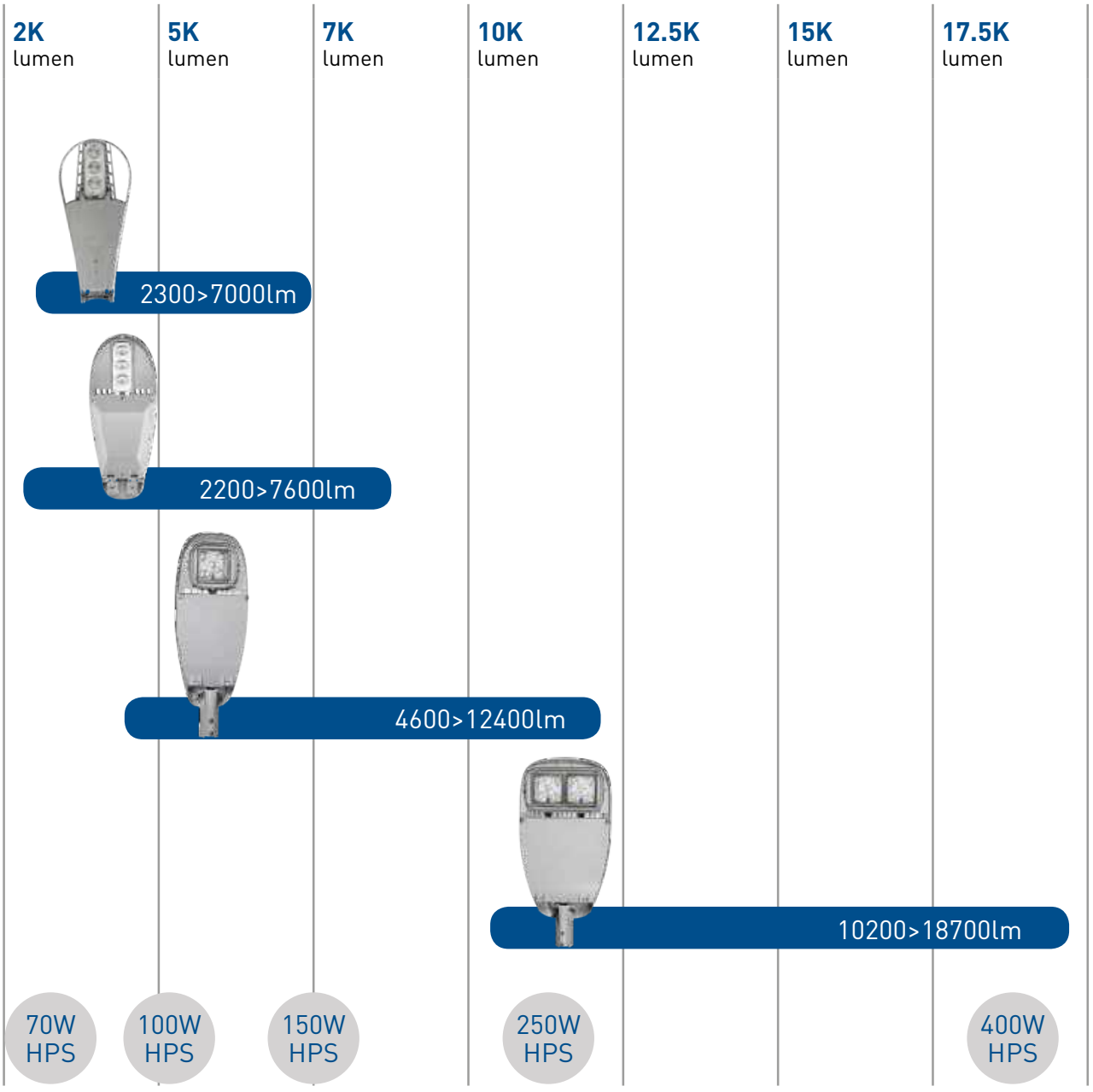
The thermal management in the fixture allows it to work with perfect efficiency, safe from the damaging effects that excessive heat can have on LEDs. XSPM guarantees a lifetime of over 100.000hrs.

NANOOPTIC PRECISION DELIVERY GRID OPTIC

In addition to substantial energy and maintenance savings, the luminaires achieve better optical control with the NanoOptic® Precision Delivery Grid™ optic over incumbent street lighting solutions from 70W up to 250W.

XSP Range - PERFORMANCE

Every aspect of the XSP Series has been innovated to deliver outstanding illumination, lasting performance and optimum energy efficiency.



Lumen Output @40K

LIGHTING PERFORMANCE

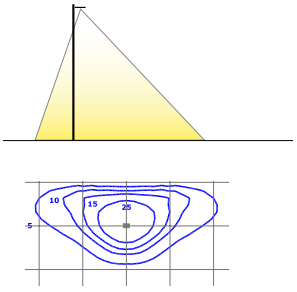
With patented NanoOptic® Precision Delivery Grid™ available in multiple distributions, Cree XSP Series provide precise optical control for exceptional application performance and energy savings. The refractor system offers superior light control with more lumens delivered in the target area, improved uniformity ratios, and controlled high-angle brightness.

Optical system

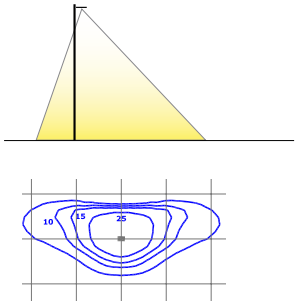
- Utilising highly-diffused performance optics for soft, glare-free light
- Better optical control with our NanoOptic® Precision Delivery Grid™ optic

Through the new optical system, it is now possible to control more accurately the LED source light emission, directing the light where it's required. The intensity distribution of the new optics has been designed by Cree's Optical Engineers specifically for the lighting requirements of the European market, with the aim of improving performance in the most widely used configurations, in both linear or staggered pole positioning situations.

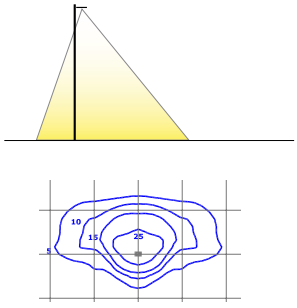
ASYMMETRIC OPTICS FOR STREET LIGHTING



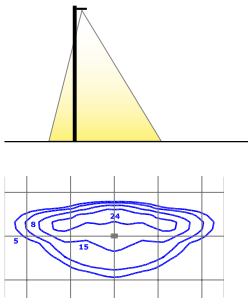
210 - Type II Short 1.0



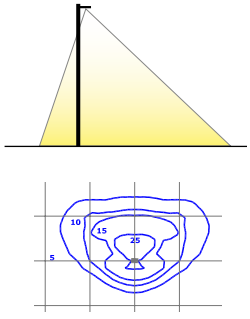
275 - Type II Short 0.75



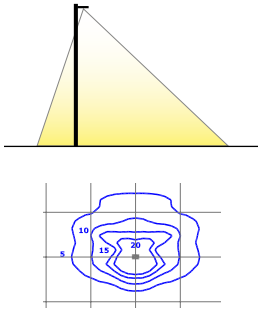
2SH - Type II Short



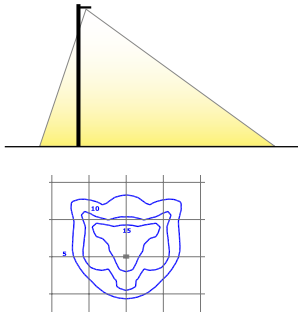
2LG - Type II Long



3ME - Type III Medium

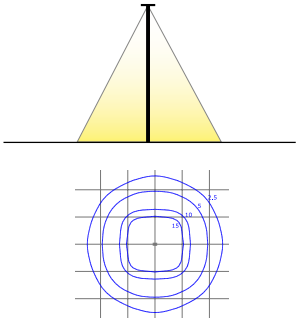


3SH - Type III Short

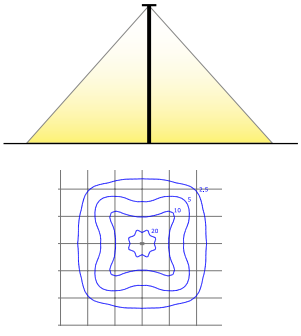


4ME- Type IV Medium

SYMMETRIC OPTICS*



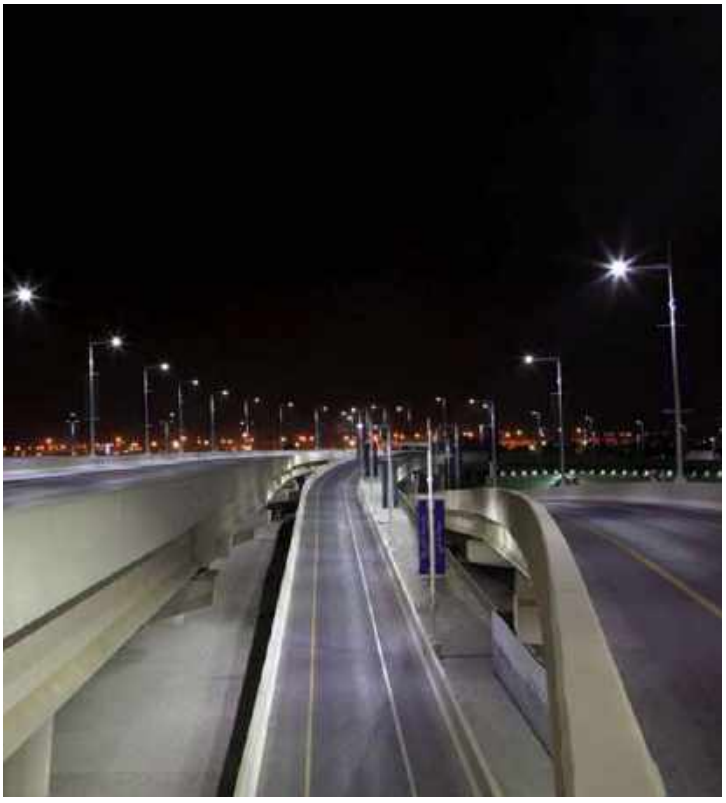
5SH - Type V Short



5ME - Type V Medium

*Available on request

Cree® XSPM



FEATURES

- Full cut-off optics (NanoOptic® Precision Delivery Grid™)
- Input Power: A = 58W, B / C =41w
- Lumen output: 1900 – 7000lm
- System efficacy: Up to 145lm/W
- CCT: 3000K, 4000K, 5700K
  (CRI Standard min.70, CRI 80 @3000K on request for MOQ)
- Initial Colour Consistency: 4 MacAdam steps
- Input Voltage: 220-240V
- Driver equipped with temperature sensor to preserve optimal working conditions
- Power factor: Up to > 0.98 at full load
- Lifetime: L80F10 Up to >180Khrs Ta=25°C (>180Khrs L80 IESNA TM-21)
- Surge protection: 10kV CM/DM surge immunity according to EN 61000-4-5 and EN 61547 (Class I SPD equipped with LED signal)
- Fuse option available
- Operative temperature: -40°C up to +50°C
- Insulation class: Class I – Class II
- Enclosure rated IP66 per IEC 60529
- Impact resistance IK08
- Cable type H07RN-F (Cable length Up to 12mt)
- Control options: Fixed, Field Adjustable Output, DALI, Virtual Midnight reprog., Flux Regulator, Lineswitch, Dynadimmer, Constant Lumen Output
- Nema socket option available
- Tool-less entry
- Removable tray
- LED Board equipped with integral ESD and Surge protection
- Fixture assembled without the use of glues, totally dismountable and recyclable.

CONSTRUCTION AND MATERIALS

- Die cast, low copper <0,1%, aluminum alloy housing w/ UV stabilized polymeric door for long weathering and reliability
- Luminaire is designed to mount directly to 76mm or 60mm outer dimension tenons or poles and can be tilted +/- 20°, in steps of 5°
- Luminaire fitter 02 can mount to 60mm OD tenons and fitter 03 to 76mm
- Exclusive Colorfast DeltaGuard® finish features an E-Coat epoxy primer with an ultra-durable powder topcoat, providing excellent resistance to corrosion, ultraviolet degradation and abrasion.

WARRANTY AND CERTIFICATIONS

- Limited Warranty†: Class 1 — 10 years on Colorfast DeltaGuard® finish / 10 years on luminaire
- Class 2 — 10 years on Colorfast DeltaGuard® finish / 5 years on luminaire
- CE mark / CB mark / ENEC mark / RoHs compliant
- UMSUG Charge code (UK Power performance test)
- Risk group exempt in accordance with Standard CEI EN 62471 for photobiological safety (Tested IEC/TR62778)
- Luminaire and finish endurance tested to withstand 5,000 hours of elevated ambient salt fog conditions as defined in ASTM Standard B 117
- Compliant to: EN 60598-1; EN 60598-2-3

† See www.cree-europe.com/en/resources/warranty for warranty terms

Ordering Information

Example: XSPM-E-02-2LG-A-30K-+-24-SV-FX-S-00

XSPM	-	E	-	02	-	2LG	-	A	-	30K	-	+	-	24	-	SV	-	FX	-	S	-	00
Product		**Version**		**Mounting**		**Optic**		**Input Power**		**CCT**		**Insulation Class**		**Voltage**		**Finish**		**Options**		**Variant**		**Cable length**
XSPM	-	E	-	**02** horiz/vert tenon 60mm OD **03** horiz/vert tenon 76mm OD	-	**2LG** Type II long **275** Type II short 0.75 **210** Type II short 1,0 **2SH** Type II short **3SH** Type III short **3ME** Type III medium **4ME** Type IV medium	-	**A** 58W **B** 41W **C** 41W	-	**30K** 3000K **40K** 4000K **57K** 5700K	-	**+** Class 1 **^** Class 2	-	**24** 220-240V	-	**SV** Silver **BK** Black **BZ** Bronze **SB** Silver Bronze **WH** White	-	Input Power A: **FX** **Fixed Input Power** **Q** **Field Adjustable Output** **DQ** **Field adjustable output** (1-10V) **Y- Z** **1-10V on virtual midnight reprogrammable** Input Power B: **FX** **Fixed Input Power** **G** **Lineswitch** **RF** **Flux regulator** **DY** **DynaDimmer** **DL** **DALI** **CL** **Constant Lumen Output** **DC** **DynaDimmer + CLO** Input Power C: **CR** **Virtual Midnight Chronostep reprogrammable**	-	**S** Standard **N** Nema 7pin longjoin **F*** Fuse	-	**00** Standard (w/o cable) **01** Exit cable 30cm **03** Exit cable 3m **06** Exit cable 6m **10** Exit cable 10m **12** Exit cable 12m

* Fuse option available with Standard or Nema configurations (Specify SF or NF)

Ordering information is for reference only. Some product configurations are not available. Please consult spec sheets for specific product availability and for further details.

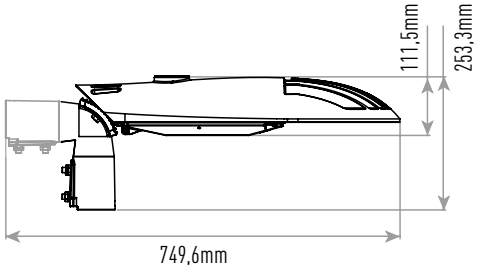
AVAILABLE NEMA OPTIONS		
DQ-N	Nema 7 pin with Field Adj	(on-off + Dim)
Y-N / Z-N	Nema 7 pin with VM Reprog	(on-off)
DL-N	Nema 7 pin with DALI	(on-off + Dim)
DY-N	Nema 7 pin with Dynadimmer	(on-off)
CL-N	Nema 7 pin with CLO	(on-off)
DC-N	Nema 7 pin with Dynadimmer and CLO	(on-off)

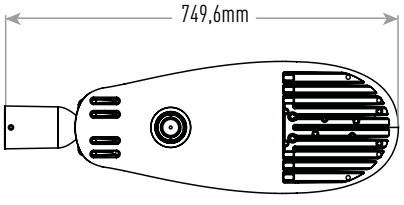
Accessory Information

ADAPTER	
KIT-XSP-AP60-34-G0 Fitter kit to mount to 34mm tenon	**KIT-XSP-AP60-48-G0** Fitter kit to mount to 48mm tenon
KIT-XSP-AP60-42-G0 Fitter kit to mount to 42mm tenon	

Dimensions

Weight: 7 kg





Cree® XSPR

FEATURES

- Full cut-off optics (NanoOptic® Precision Delivery Grid™)
- Input Power: A = 52W, B = 38W
- Lumen output: 2000 – 6400lm
- Efficacy: Up to 142lm/W
- CCT: 3000K, 4000K, 5700K
  (CRI Standard min.70, CRI 80 @3000K on request for MOQ)
- Initial Colour Consistency: 4 MacAdam steps
- Input Voltage: 220-240V
- Driver equipped with temperature sensor to preserve optimal working conditions
- Power factor: Up to > 0.98 at full load
- Lifetime: L80F10 Up to >180Khrs Ta=25°C (>180Khrs L80 IESNA TM-21)
- Surge protection: 10kV CM/DM surge immunity according to EN 61000-4-5 and EN 61547 (Class I SPD equipped with LED signal)
- Fuse option available
- Operative temperature: -40°C up to +50°C
- Insulation class: Class I – Class II
- Enclosure rated IP66 per IEC 60529
- Impact resistance IK08
- Cable type H07RN-F (Cable length Up to 12mt)
- Control options: Fixed, Field Adjustable Output, Dimming 1-10V, DALI, Virtual Midnight reprog., Flux Regulator, Dynadimmer, Constant Lumen Output
- Removable tray
- Fixture assembled without the use of glues, totally dismountable and recyclable.
- LED Board equipped with integral ESD and Surge protection

CONSTRUCTION AND MATERIALS

- Die cast, low copper <0,1%, aluminum alloy housing w/ UV stabilized polymeric door for long weathering and reliability
- Luminaire is designed to mount directly to 76mm or 60mm outer dimension tenons or poles and can be tilted +/- 5°
- Luminaire fitter 07 can mount to 60mm OD tenons and fitter 08 to 76mm
- Exclusive Colorfast DeltaGuard® finish features an E-Coat epoxy primer with an ultra-durable powder topcoat, providing excellent resistance to corrosion, ultraviolet degradation and abrasion.

WARRANTY AND CERTIFICATIONS

- Limited Warranty†: Class 1 — 10 years on Colorfast DeltaGuard® finish / 10 years on luminaire
- Class 2 — 10 years on Colorfast DeltaGuard® finish / 5 years on luminaire
- CE mark / CB mark / ENEC mark / RoHs compliant
- UMSUG Charge code (UK Power performance test)
- Risk group exempt in accordance with Standard CEI EN 62471 for photobiological safety (Tested IEC/TR62778)
- Luminaire and finish endurance tested to withstand 5,000 hours of elevated ambient salt fog conditions as defined in ASTM Standard B 117
- Compliant to: EN 60598-1; EN 60598-2-3

† See www.cree-europe.com/en/resources/warranty for warranty terms

Ordering Information

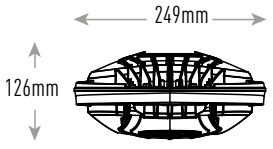
Example: XSPR-E-HT-2LG-A-30K-+-24-SV-FX-S-00

XSPR	-	E	-	HT	-	2LG	-	A	-	30K	-	+	-	24	-	SV	-	Y	-	S	-	00
Product		**Version**		**Mounting**		**Optic**		**Input Power**		**CCT**		**Insulation Class**		**Voltage**		**Finish**		**Options**		**Variant**		**Cable length**
XSPR	-	E	-	**HT** Horizontal Tenon **07** Adjustable Mount (60mm) **08** Adjustable Mount (76mm)	-	**2LG** Type II long **275** Type II short 0.75 **210** Type II short 1,0 **2SH** Type II short **3SH** Type III short **3ME** Type III medium **4ME** Type IV medium	-	**A** 52W **B** 38W	-	**30K** 3000K **40K** 4000K **57K** 5700K	-	**+** Class 1 **^** Class 2	-	**24** 220-240V	-	**SV** Silver **BK** Black **BZ** Bronze **SB** Silver Bronze **WH** White	-	Input Power A: **FX** **Fixed Input Power** **Q** **Field adjustable output** **DQ** **1-10V dimming on field adjustable output** **Y- Z** **1-10V on virtual midnight reprogrammable** Input Power B: **FX** **Fixed Input Power** **CL** **Constant Lumen Output** **DY** **DynaDimmer** **DL** **DALI** **RF** **Flux Regulator**	-	**S** Standard **F** Fuse	-	**01** Exit cable 30cm **03** Exit cable 3m **06** Exit cable 6m **10** Exit cable 10m **12** Exit cable 12m

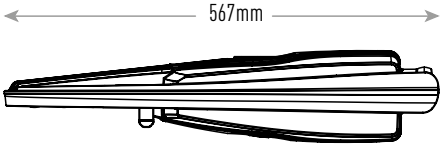
Ordering information is for reference only. Some product configurations are not available. Please consult spec sheets for specific product availability and for further details.

Dimensions

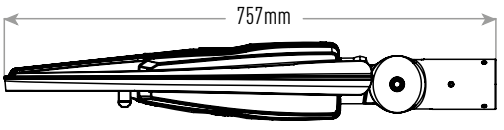
Weight: 5 kg



SIDE VIEW HT MOUNTING



SIDE VIEW ADJUSTABLE MOUNTING



Accessory Information

ADAPTER For mounting system 07 only	
KIT ADATT. PALO 34MM Adaptor Kit for dia. 34mm poles **KIT ADATT. PALO 42MM** Adaptor Kit for dia. 42mm poles	**KIT ADATT. PALO 48MM** Adaptor Kit for dia. 48mm poles

Cree® XSP1

FEATURES

- Full cut-off optics (NanoOptic® Precision Delivery Grid™)
- Input Power: E=94W / H=63W
- Lumen output: 4000 – 11500lm
- Efficacy: Up to 155lm/W
- CCT: 3000K, 4000K, 5700K
  (CRI Standard min.70, CRI 80 @3000K on request for MOQ)
- Initial Colour Consistency: 4 MacAdam steps
- Input Voltage: 220-240V
- Driver equipped with temperature sensor to preserve optimal working conditions
- Power factor: Up to > 0.99 at full load
- Lifetime: L80F10 Up to >180Khrs Ta=25°C (>180Khrs L80 IESNA TM-21)
- Surge protection: 10kV CM/DM surge immunity according to EN 61000-4-5 and EN 61547 (Class I SPD equipped with LED signal)
- Fuse option available
- Operative temperature: -40°C up to +50°C
- Insulation class: Class I – Class II
- Enclosure rated IP66 per IEC 60529
- Impact resistance IK08
- Cable type H07RN-F (Cable length Up to 12mt)
- Tool-less entry
- Removable tray
- Control options: Fixed, Field Adjustable Output, Virtual Midnight reprog., DALI, Flux Regulator, Lineswitch, Lumistep, Dynadimmer, Constant Lumen Output
- Nema socket option available
- LED Board equipped with integral ESD and Surge protection
- Fixture assembled without the use of glues, totally dismountable and recyclable.

CONSTRUCTION AND MATERIALS

- Die cast, low copper <0,1%, aluminum alloy housing for long weathering and reliability
- Luminaire is designed to mount directly to 76mm or 60mm outer dimension tenons or poles and can be tilted +/- 20°, in steps of 5°
- Luminaire fitter 02 can mount to 60mm OD tenons and fitter 03 to 76mm
- Exclusive Colorfast DeltaGuard® finish features an E-Coat epoxy primer with an ultra-durable powder topcoat, providing excellent resistance to corrosion, ultraviolet degradation and abrasion.

WARRANTY AND CERTIFICATIONS

- Limited Warranty†: Class 1 — 10 years on Colorfast DeltaGuard® finish / 10 years on luminaire
- Class 2 — 10 years on Colorfast DeltaGuard® finish / 5 years on luminaire
- CE mark / CB mark / ENEC mark / RoHs compliant
- UMSUG Charge code (UK Power performance test)
- Risk group exempt in accordance with Standard CEI EN 62471 for photobiological safety (Tested IEC/TR62778)
- Luminaire and finish endurance tested to withstand 5,000 hours of elevated ambient salt fog conditions as defined in ASTM Standard B 117
- Compliant to: EN 60598-1; EN 60598-2-3

2LG Type II long


275 Type II short 0.75


210 Type II short 1,0


2SH Type II short


3SH Type III short


3ME Type III medium


4ME Type IV medium


† See www.cree-europe.com/en/resources/warranty for warranty terms

Ordering Information

Example: XSP-E-02-2LG-E-30K-+-24-SV-FX-S-00

XSP	-	E	-	02	-	2LG	-	E	-	30K	-	+	-	24	-	SV	-	FX	-	S	-	00
Product		**Version**		**Mounting**		**Optic**		**Input Power**		**CCT**		**Insulation Class**		**Voltage**		**Finish**		**Options**		**Variant**		**Cable length**
XSP	-	E	-	**02** horiz/vert tenon 60mm OD **03** horiz/vert tenon 76mm OD	-	**2LG** Type II long **275** Type II short 0.75 **210** Type II short 1,0 **2SH** Type II short **3SH** Type III short **3ME** Type III medium **4ME** Type IV medium	-	**E** 94W **H** 63W	-	**30K** 3000K **40K** 4000K **57K** 5700K	-	**+** Class 1 **^** Class 2	-	**24** 220-240V	-	**SV** Silver **BK** Black **BZ** Bronze **SB** Silver Bronze **WH** White	-	Input Power E: **FX** **Fixed Input Power** **Q** **Field Adjustable Output** **Y- Z** **1-10V on virtual midnight reprogrammable** Input Power H: **FX** **Fixed Input Power** **G** **Lineswitch** **LS** **Lumistep** **DL** **DALI** **CL** **Constant lumen output** **DC** **DynaDimmer + CLO** **DY** **Dynadimmer** **RF** **Flux regulator**	-	**S** Standard **N** Nema 7pin longjoin **F*** Fuse	-	**00** Standard (w/o cable) **01** Exit cable 30cm **03** Exit cable 3m **06** Exit cable 6m **10** Exit cable 10m **12** Exit cable 12m

* Fuse option available with Standard or Nema configurations (Specify SF or NF)

Ordering information is for reference only. Some product configurations are not available. Please consult spec sheets for specific product availability and for further details.

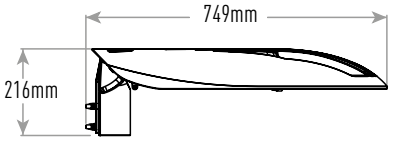
AVAILABLE NEMA OPTIONS		
FX-N	Nema 7 pin with Fixed Output - Input E only	(on-off)
Q-N	Nema 7 pin with Field Adj	(on-off + Dim)
Y-N / Z-N	Nema 7 pin with VM Reprog	(on-off)
DL-N	Nema 7 pin with DALI	(on-off + Dim)
DY-N	Nema 7 pin with Dynadimmer	(on-off)
CL-N	Nema 7 pin with CLO	(on-off)
DC-N	Nema 7 pin with Dynadimmer and CLO	(on-off)

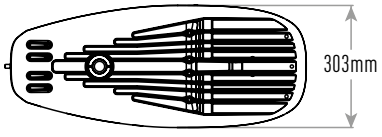
Accessory Information

ADAPTER	
KIT-XSP-AP60-34-GO Fitter kit to mount to 34mm tenon	**KIT-XSP-AP60-48-GO** Fitter kit to mount to 48mm tenon
KIT-XSP-AP60-42-GO Fitter kit to mount to 42mm tenon	

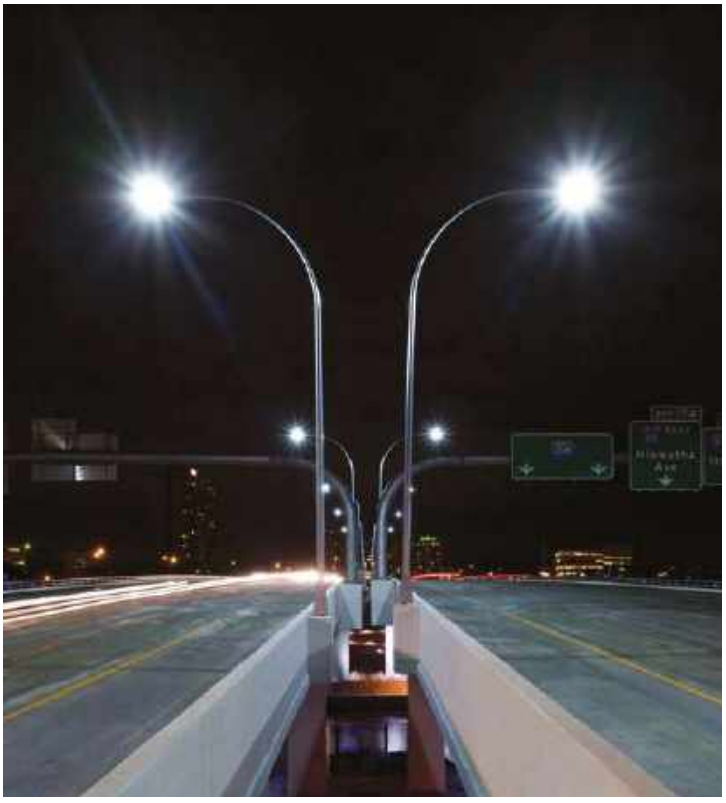
Dimensions

Weight: 12.5 kg





Cree® XSP2



FEATURES

- Full cut-off optics (NanoOptic® Precision Delivery Grid™)
- Input Power: F=128W / I=110W
- Lumen output: 9500 – 17000lm
- Efficacy: Up to 146lm/W
- CCT: 3000K, 4000K, 5700K
  (CRI Standard min.70, CRI 80 @3000K on request for MOQ)
- Initial Colour Consistency: 4 MacAdam steps
- Input Voltage: 220-240V
- Driver equipped with temperature sensor to preserve optimal working conditions
- Power factor: Up to > 0.98 at full load
- Lifetime: L80F10 Up to >180Khrs Ta=25°C (>180Khrs L80 IESNA TM-21)
- Surge protection: 10kV CM/DM surge immunity according to EN 61000-4-5 and EN 61547 (Class I SPD equipped with LED signal)
- Fuse option available
- Operative temperature: -40°C up to +50°C
- Insulation class: Class I – Class II
- Enclosure rated IP66 per IEC 60529
- Impact resistance IK08
- Cable type H07RN-F (Cable length Up to 12mt)
- Tool-less entry
- Removable tray
- Control options: Fixed, Field Adjustable Output, Virtual Midnight reprog., DALI, Flux Regulator, Lineswitch, Lumistep, Dynadimmer, Constant Lumen Output
- Nema socket option available
- LED Board equipped with integral ESD and Surge protection
- Fixture assembled without the use of glues, totally dismountable and recyclable.

CONSTRUCTION AND MATERIALS

- Die cast, low copper <0,1%, aluminum alloy housing for long weathering and reliability
- Luminaire is designed to mount directly to 76mm or 60mm outer dimension tenons or poles and can be tilted +/- 20°, in steps of 5°
- Luminaire fitter 02 can mount to 60mm OD tenons and fitter 03 to 76mm
- Exclusive Colorfast DeltaGuard® finish features an E-Coat epoxy primer with an ultra-durable powder topcoat, providing excellent resistance to corrosion, ultraviolet degradation and abrasion.

WARRANTY AND CERTIFICATIONS

- Limited Warranty†: Class 1 — 10 years on Colorfast DeltaGuard® finish / 10 years on luminaire
- Class 2 — 10 years on Colorfast DeltaGuard® finish / 5 years on luminaire
- CE mark / CB mark / ENEC mark / RoHs compliant
- UMSUG Charge code (UK Power performance test)
- Risk group exempt in accordance with Standard CEI EN 62471 for photobiological safety (Tested IEC/TR62778)
- Luminaire and finish endurance tested to withstand 5,000 hours of elevated ambient salt fog conditions as defined in ASTM Standard B 117
- Compliant to: EN 60598-1; EN 60598-2-3

2LG Type II long **275** Type II short 0.75 **210** Type II short 1,0 **2SH** Type II short **3SH** Type III short **3ME** Type III medium **4ME** Type IV medium

† See www.cree-europe.com/en/resources/warranty for warranty terms

Ordering Information

Example: XSP-E-02-2LG-F-30K-+-24-SV-FX-S-00

XSP	-	E	-	02	-	2LG	-	F	-	30K	-	+	-	24	-	SV	-	FX	-	S	-	00
Product		**Version**		**Mounting**		**Optic**		**Input Power**		**CCT**		**Insulation Class**		**Voltage**		**Finish**		**Options**		**Variant**		**Cable length**
XSP	-	E	-	**02** horiz/vert tenon 60mm OD **03** horiz/vert tenon 76mm OD	-	**2LG** Type II long **275** Type II short 0.75 **210** Type II short 1,0 **2SH** Type II short **3SH** Type III short **3ME** Type III medium **4ME** Type IV medium	-	**F** 120W **I** 110W	-	**30K** 3000K **40K** 4000K **57K** 5700K	-	**+** Class 1 **^** Class 2	-	**24** 220-240V	-	**SV** Silver **BK** Black **BZ** Bronze **SB** Silver Bronze **WH** White	-	Input Power F: **FX** Fixed Input Power **Q** Field Adjustable Output **Y- Z** 1-10V on virtual midnight reprogrammable Input Power I: **FX** Fixed Input Power **G** Lineswitch **LS** Lumistep **DL** DALI **CL** Constant lumen output **DC** DynaDimmer + CLO **DY** Dynadimmer **RF** Flux regulator	-	**S** Standard **N** Nema 7pin longjoin **F*** Fuse	-	**00** Standard (w/o cable) **01** Exit cable 30cm **03** Exit cable 3m **06** Exit cable 6m **10** Exit cable 10m **12** Exit cable 12m

* Fuse option available with Standard or Nema configurations (Specify SF or NF)

Ordering information is for reference only. Some product configurations are not available. Please consult spec sheets for specific product availability and for further details.

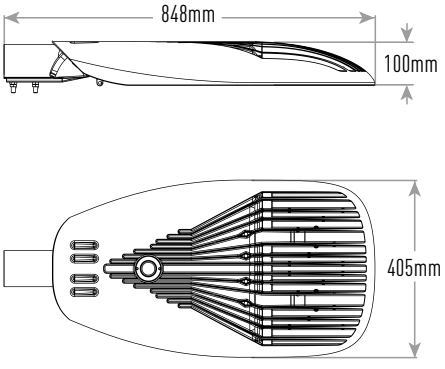
AVAILABLE NEMA OPTIONS		
FX-N	Nema 7 pin with Fixed Output	(on-off)
Q-N	Nema 7 pin with Field Adj	(on-off + Dim)
Y-N / Z-N	Nema 7 pin with VM Reprog	(on-off)
DL-N	Nema 7 pin with DALI	(on-off + Dim)
DY-N	Nema 7 pin with Dynadimmer	(on-off)
CL-N	Nema 7 pin with CLO	(on-off)
DC-N	Nema 7 pin with Dynadimmer and CLO	(on-off)

Accessory Information

ADAPTER	
KIT-XSP-AP60-34-G0 Fitter kit to mount to 34mm tenon	**KIT-XSP-AP60-48-G0** Fitter kit to mount to 48mm tenon
KIT-XSP-AP60-42-G0 Fitter kit to mount to 42mm tenon	

Dimensions

Weight: 15 kg



Cree® XSPW

FEATURES

- Full cut-off optics (NanoOptic® Precision Delivery Grid™)
- Input Power: D=38W / G=21W
- Lumen output: up to 4000lm
- Efficacy: Up to 120lm/W
- CCT: 4000K, 5700K (CRI Minimum 70)
- Initial Colour Consistency: 4 steps MacAdam
- Input Voltage: 220-240V
- Power factor: Up to > 0.9 at full load
- Lifetime: L80F10 Up to >100Khrs Ta=25°C (>100Khrs L80 IESNA TM-21)
- Surge protection: 9kV CM/DM surge immunity according to EN 61000-4-5 and EN 61547
- Operative temperature: -40°C up to +50°C
- Insulation class: Class I
- Enclosure rated IP65 per IEC 60529
- Impact resistance IK08
- Control options: Fixed Output
- LED Board equipped with integral ESD and Surge protection

CONSTRUCTION AND MATERIALS

- Die cast, low copper <0,1%, aluminum alloy housing for long weathering and reliability
- Luminaire housing specifically designed for LED applications with advanced LED thermal management and driver
- Luminaire can be direct mounted to a wall and surface wired
- Conduit entry from top, bottom, sides, and rear
- Designed for easy through-wiring
- Exclusive Colorfast DeltaGuard® finish features an E-Coat epoxy primer with an ultra-durable powder topcoat, providing excellent resistance to corrosion, ultraviolet degradation and abrasion.

WARRANTY AND CERTIFICATIONS

- Limited Warranty†: 10 years on Colorfast DeltaGuard® finish / 5 years on luminaire
- CE mark
- RoHs compliant
- Risk group exempt in accordance with Standard CEI EN 62471 for photobiological safety (Tested IEC/TR62778)
- Luminaire and finish endurance tested to withstand 5,000 hours of elevated ambient salt fog conditions as defined in ASTM Standard B 117
- Compliant to: EN 60598-1; EN 60598-2-3

2ME Type II medium

3ME Type III medium

† See www.cree-europe.com/en/resources/warranty for warranty terms

Ordering Information

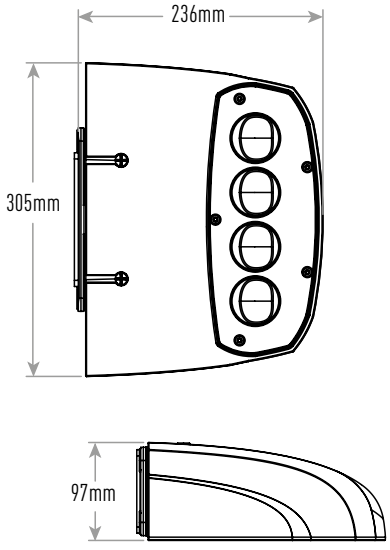
Example: XSPW-E-WM-2ME-2L-40K-+-24-SV

XSPW	-	E	-	WM	-	2ME	-	2L	-	40K	-	+	-	24	-	SV	-	
Product		**Version**		**Mounting**		**Optic**		**Lumen Package**		**CCT**		**Insulation Class**		**Voltage**		**Finish**		**Option**
XSPW	-	**E**	-	**WM** Wall	-	**2ME** Type II medium **3ME** Type III medium **4ME** Type IV medium	-	**2L** **4L**	-	**40K** 4000K **57K** 5700K	-	**+** Class 1	-	**24** 220-240V	-	**SV** Silver **BK** Black **BZ** Bronze **WH** White	-	**No code** Fixed output

Ordering information is for reference only. Some product configurations are not available. Please consult spec sheets for specific product availability and for further details.

Dimensions

Weight: 4,3 kg



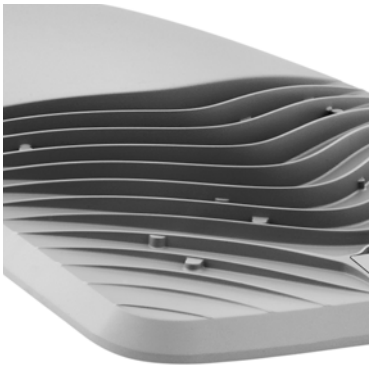
Cree® VSL Series

Efficient, cost effective solution.

Designed with a lightweight, compact body the VSL series allows for an easy replacement of old traditional light sources and luminaires.

Available in two different sizes sharing the same forward-looking appearance both lighting and economic performances in streetlighting applications are easy to reach with this affordable solution that can rapidly ensure a short term full payback.

PLUS - Cree VSL



High performing design

Arc-shaped cooling fins accelerate airflow, enhancing the heat dissipation performance.

The fixture has been designed to stand an ambient temperature within 50°C maximizing LED and driver lifetime through safe working conditions.

Easy maintenance

With its slim, light weight body, tool-less entry and quick connection features, the product can be easily installed in a few short minutes.

This means reduces installation costs as well as reduced safety risks for installers. Thanks to the automatic power-off protection power will be off once the fixture is opened.

Cost effective solution

VSL guarantees rapid payback and significant cost savings.

Capable of reducing energy usage by 60% compared to traditional light source technologies, the Series matches efficiency and cost providing high quality lighting with a relatively low initial cost.

Durability

High attention has been paid to the material selection to guarantee a high reliability of the whole assembly. The fixture's body is made of Diecast aluminium treated with electrophoresis and powder coating for strong anti-corrosion performance.

Products are tested in Salt spray chamber for 2500hrs to guarantee their long-lasting quality and durability. A 10Kv surge protection is featured as a standard to protect the fixture from overvoltage of atmospheric origin.


NOVÉ ZÁMKY
KOMJATICE
BRANČ

Cree® VSL

FEATURES

- Input Power: A = 30W, B = 80W
- Lumen output: 3900 – 12000lm
- System efficacy: Up to 130lm/W
- CRI Minimum 70
- CCT: 3000K, 4000K
- Initial Colour Consistency: 5 steps MacAdam
- Input Voltage: 220-240V
- Power factor: Up to > 0.95 at full load
- Surge protection: 10kV surge immunity according to EN 61000-4-5 and EN 61547
- Operative temperature: -30°C up to +35°C
- Insulation class: Class I – Class II
- Enclosure rated IP66 per IEC 60529
- Impact resistance IK08
- Cable type H07RN-F (Cable length 1mt)
- Control options: Dimming 1-10V, Virtual Midnight
- Knife Switch integrated for automatic power off
- Nema socket option available

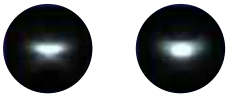
CONSTRUCTION AND MATERIALS

- Die cast aluminum alloy treated with powder coating for strong anti-corrosion performance
- Tool-less entry
- Luminaire is designed to mount directly to 76mm or 60mm outer dimension tenons or poles and can be tilted +/- 15°

WARRANTY AND CERTIFICATIONS

- Limited Warranty†: 5 years
- CE mark / CB mark / ENEC mark / RoHs compliant
- Risk group exempt in accordance with Standard CEI EN 62471 for photobiological safety (Tested IEC/TR62778)
- Luminaire and finish endurance tested to withstand 2,500 hours of elevated ambient salt fog conditions as defined in ASTM Standard B 117
- Compliant to: EN 60598-1; EN 60598-2-3

275 Type II short 0.75 **210** Type II short 1,0



† See www.cree-europe.com/en/resources/warranty for warranty terms

Ordering Information

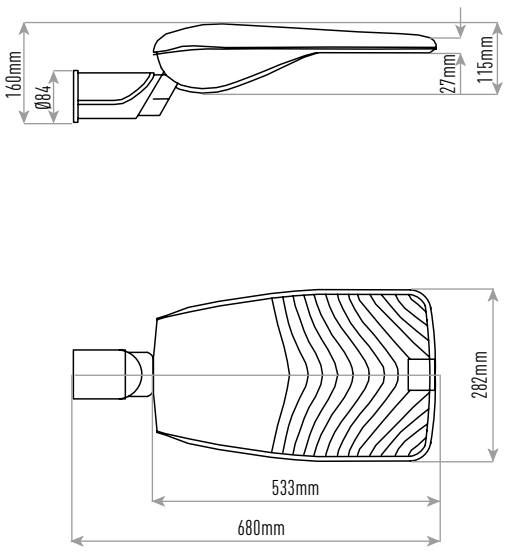
Example: VSL-02-275-A-30K-+-24-SV-DIM-S-01

VSL	-	02	-	275	-	A	-	30K	-	+	-	24	-	SV	-	DIM	-	S	-	01
Product		**Mounting**		**Optic**		**Input Power**		**CCT**		**Insulation Class**		**Voltage**		**Finish**		**Options**		**Variant**		**Cable length**
VSL	-	**02** horiz/vert tenon 60mm OD **03** horiz/vert tenon 76mm OD	-	**275** Type II short 0.75 **210** Type II short 1,0	-	**A** 30W **B** 80W	-	**30K** Ra70 **40K** Ra70	-	**+** Class 1 **^** Class 2	-	**24** 220-240V	-	**SV** Silver	-	**DIM** **Dimmable 0-10V)** **VM** **Virtual midnight**	-	**S** Standard **N** Nema 7pin	-	**01** Exit cable 1mt

Ordering information is for reference only. Some product configurations are not available. Please consult spec sheets for specific product availability and for further details.

Dimensions

Weight: 6,8 kg



Cree® VSL HO

FEATURES

- Input Power: C = 120W, D = 150W
- Lumen output: 15000 – 18000lm
- System efficacy: Up to 130lm/W
- CRI Minimum 70
- CCT: 3000K, 4000K
- Initial Colour Consistency: 5 steps MacAdam
- Input Voltage: 220-240V
- Power factor: Up to > 0.95 at full load
- Surge protection: 10kV surge immunity according to EN 61000-4-5 and EN 61547
- Operative temperature: -30°C up to +35°C
- Insulation class: Class I – Class II
- Enclosure rated IP66 per IEC 60529
- Impact resistance IK08
- Cable type H07RN-F (Cable length 1mt)
- Control options: Dimming 1-10V, Virtual Midnight
- Knife Switch integrated for automatic power off
- Nema socket option available

CONSTRUCTION AND MATERIALS

- Die cast aluminum alloy treated with powder coating for strong anti-corrosion performance
- Tool-less entry
- Luminaire is designed to mount directly to 76mm or 60mm outer dimension tenons or poles and can be tilted +/- 15°

WARRANTY AND CERTIFICATIONS

- Limited Warranty†: 5 years
- CE mark / CB mark / ENEC mark / RoHs compliant
- Risk group exempt in accordance with Standard CEI EN 62471 for photobiological safety (Tested IEC/TR62778)
- Luminaire and finish endurance tested to withstand 2,500 hours of elevated ambient salt fog conditions as defined in ASTM Standard B 117
- Compliant to: EN 60598-1; EN 60598-2-3

275 Type II short 0.75

210 Type II short 1,0

† See www.cree-europe.com/en/resources/warranty for warranty terms

Ordering Information

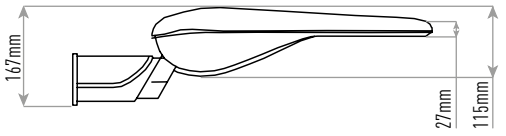
Example: VSL-02-275-C-30K-+-24-SV-DIM-S-01

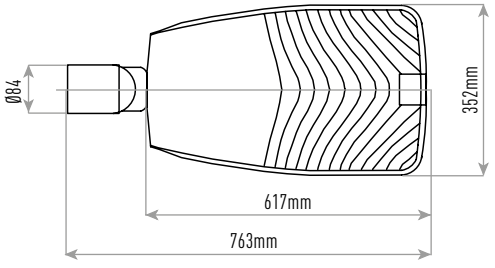
VSL	-	02	-	275	-	C	-	30K	-	+	-	24	-	SV	-	DIM	-	S	-	01
Product		**Mounting**		**Optic**		**Input Power**		**CCT**		**Insulation Class**		**Voltage**		**Finish**		**Options**		**Variant**		**Cable length**
VSL	-	**02** horiz/vert tenon 60mm OD **03** horiz/vert tenon 76mm OD	-	**275** Type II short 0.75 **210** Type II short 1,0	-	**C** 120W **D** 150W	-	**30K** Ra70 **40K** Ra70	-	**+** Class 1 **^** Class 2	-	**24** 220-240V	-	**SV** Silver	-	**DIM** **Dimmable 0-10V)** **VM** **Virtual midnight**	-	**S** Standard **N** Nema 7pin	-	**01** Exit cable 1mt

Ordering information is for reference only. Some product configurations are not available. Please consult spec sheets for specific product availability and for further details.

Dimensions

Weight: 9,2 kg





Cree LEDway® Series

Proven performance, proven value.

Since its launch, Cree Ledway Series has become one of the most successful Cree street lights, gaining a reputation based on performance and value. Available in 10-LED increments (20 to 120 LEDs), flexible drive currents and more than 20 optical distributions, the Ledway Series luminaires can be "right-sized" to provide exacting illumination performance that minimizes first cost while maximizing energy savings.

While others can make performance promises, the LEDway street light has already delivered proven performance.

- **CREE LEDway® Road**

  Cree Ledway Road is a fixture designed to provide the best performance for street and urban lighting. It offers high levels of illumination, excellent uniformity and high color rendering.

- **Cree Ledway Multi**

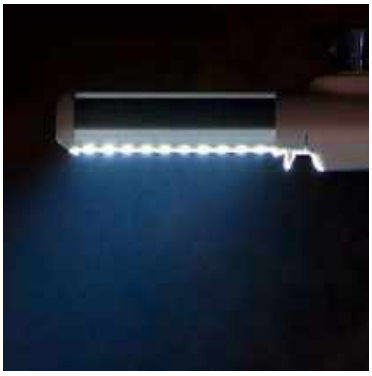
  Cree Ledway Multi is a modular system available in 10-LED increments (20 to 120 LEDs), flexible drive currents and many optical distributions. The various different mounting systems available make this fixture extremely versatile and ideal for any ceiling, busway and wall mounting installation.

- **Cree Ledway E-Tunnel**

  Cree Ledway E-Tunnel is a solution developed specifically for the LED-based lighting of tunnels and underpasses. The patented universal bracket provided with the fixtures is designed to allow the installation of Ledway E-Tunnel fixtures on the most common types of metal cable holders. The fixed bracket with 0 degrees of tilt adjustment adapts to tunnel-specific design requirements. On request we can supply custom brackets made of AISI304 or higher grade.


coop

PLUS - Cree LEDway® Series



Extraordinary Performance

The white light and high colour rendition of the LED's guarantees extraordinary visual comfort for clear and uniform vision in any environmental context. The abscencr of areas of shadow and the clear perception of the colours are advantages from which citizen benefit in term of increase. The Patented Nano Optic™ technology control the light flow emitted by each individual LED, directing the beam to obtain incredibly precise light distribution. The performance of every single LED is optimised and light dispersion is practically reduced to zero thanks to the precision of the optical control that provides excellent lighting performance: uniform – stable – well distributed light flow – high lighting level and clear vision of the environment.

ECO – Friendly – A Natural Skill

Ledway Series sastisfies sustainability and energy saving criteria, respect for which is important for public administrator and for citizens who wish to reduce the cost of public lighting and improve the quality of the environment in which they live.

The reduction in energy consumption has positive repercussion on the quality of the air that we breath in our cities.Ledway Series reduce CO_2 emissions into the atmosphere and contributes toward a reduction in pollution levels. Furthemor reduced the quantity of waste released into the environment because are longer laster. Neither mercury nor other heavy metals are used in the production and therefore no special disposal procedures are required.

Thermal Management

Excellent thermal management contributes to optimal illumination, reliability and longevity.

From advanced heat sink technology to our vented outdoor housings, Cree luminaires are designed to maximize cooling, making their unmatched performance and longevity possible.

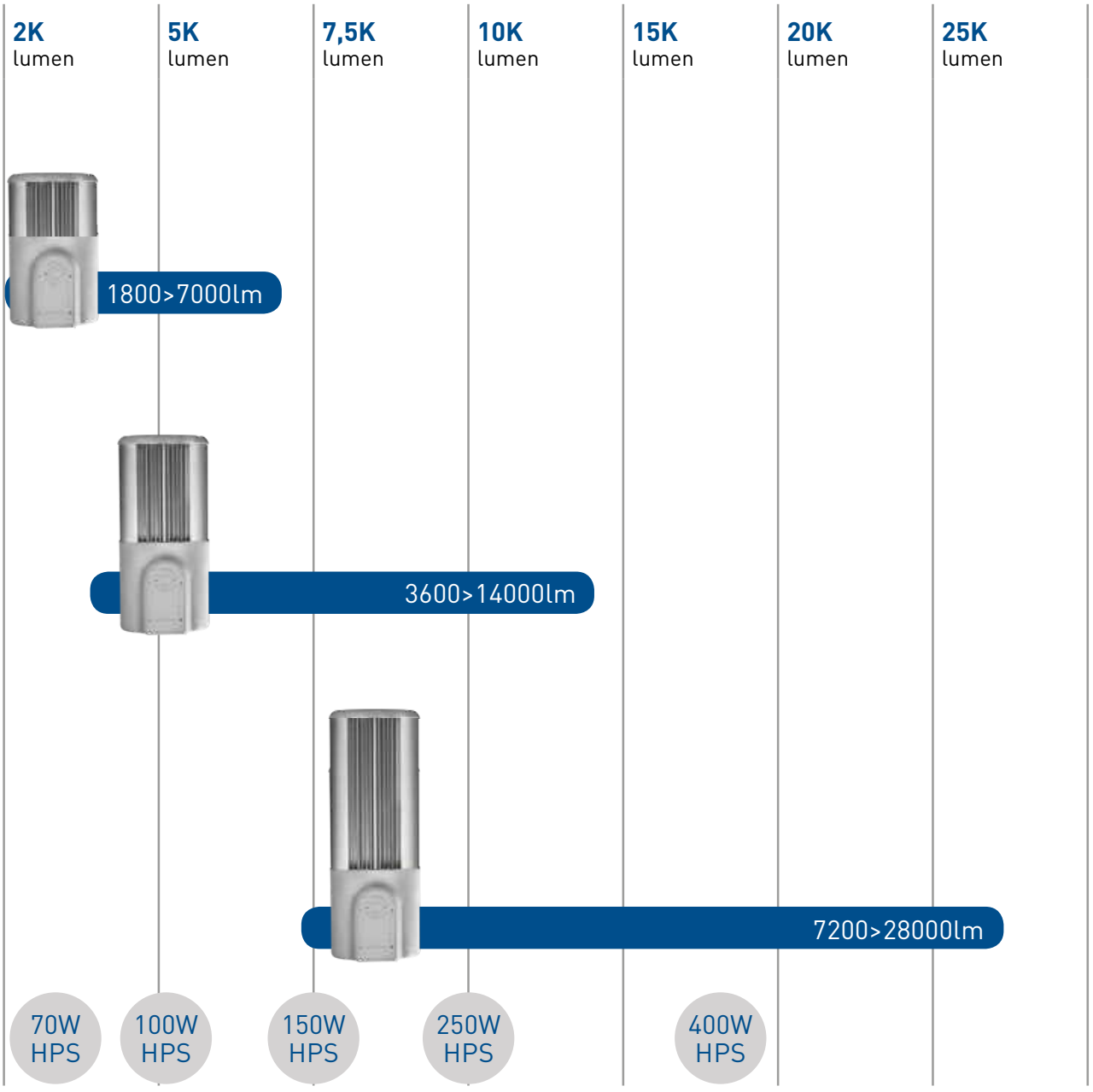
Modularity

Ledway is a versatile, modular fixture which is naturally flexible and therefore highly popular with designers. With the Ledway Series there is no need to compromise: it is the product that adapts to the project, not the other way around. Every LED module is composed of 10 or 20 diodes; in addition the product can be assembled with a number of LEDs that ranges from a minimum of 20 to a maximum of 120. The electronic management of the LED power supply represents a further opportunity to personalise the fixture. Thaks to remote and non-remote control systems Ledway series may be fitted with a system capable of luminous flux regulation. Through the use of timers, photocells and presence detectors, the light intensity of the fixture may be adjusted in order to adapt to various traffic, time and safety requirements.


CIMOLAI S.p.A.

LEDway® Series - PERFORMANCE

The LEDway® Series, with its unrivaled lumen output for roadway lighting, expands the appliction range replacing up to 400W HPS.



Lumen Output @40K

LIGHTING PERFORMANCE

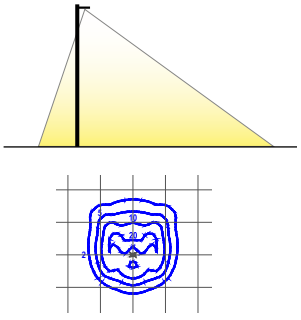
With patented NanoOptic® Precision Delivery Grid™ available in multiple distributions, the LEDWAY Series, provide precise optical control for exceptional application performance and energy savings. The refractor system offers superior light control with more lumens delivered in the target area, improved uniformity ratios, and controlled high-angle brightness.

Optical system

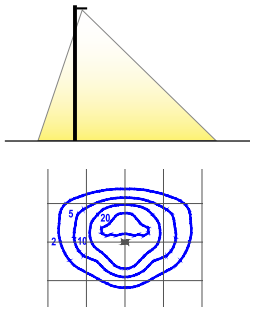
- Utilising highly-diffused performance optics for soft, glare-free light
- Better optical control with our NanoOptic® Precision Delivery Grid™ optic

Through the new optical system, it is now possible to control more accurately the LED source light emission, directing the light where it's required. The intensity distribution of the new optics has been designed by Cree's Optical Engineers specifically for the lighting requirements of the European market, with the aim of improving performance in the most widely used configurations, in both linear or staggered pole positioning situations.

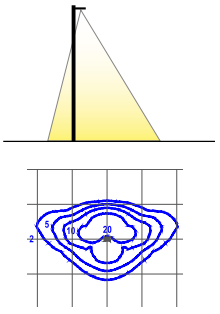
ASYMMETRIC OPTICS FOR STREET LIGHTING



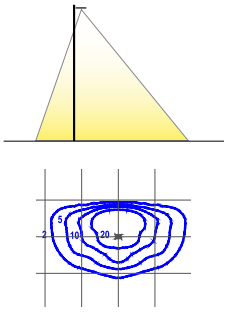
AC - Type IV Medium



PR - Type III Medium

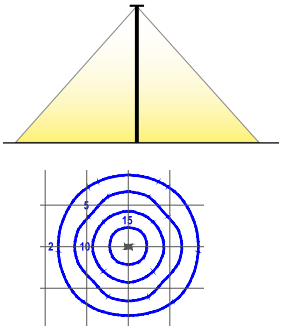


TM - Type II Medium

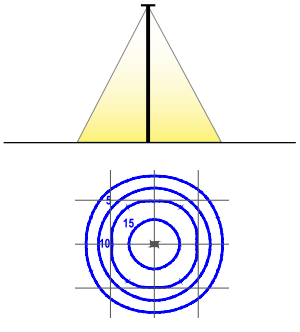


TS - Type II Short

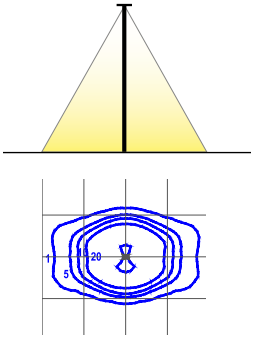
SYMMETRIC OPTICS



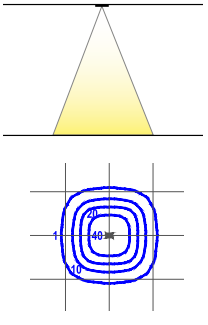
QVM



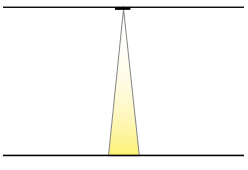
QVS - Type V Short



1S - Type I Short



FS - Petroleum Canopy



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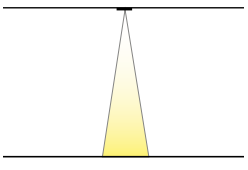

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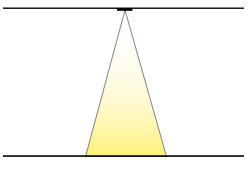

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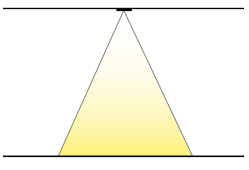


70

Cree LEDway® Road

FEATURES

- Full cut-off optics (NanoOptic®)
- Input power Up to 264W
- Lumen output: 1800 - 28000lm
- System efficacy: Up to 110lm/W
- CCT: 4000K, 5700K (CRI Minimum 70)
- Initial Colour Consistency: 7 MacAdam steps
- Input Voltage: 220-240V
- Driver equipped with temperature sensor to preserve optimal working conditions
- Power factor: Up to > 0.9 at full load
- Lifetime: L80F10 Up to >200Khrs Ta=25°C (>200Khrs L80 IESNA TM-21)
- Surge protection: 10kV CM/DM surge immunity according to EN 61000-4-5 and EN 61547 for Class I only (Class I SPD equipped with LED signal)
- Operative temperature: -40°C up to +50°C
- Insulation class: Class I – Class II
- Enclosure rated IP66 per IEC 60529
- Impact resistance IK08
- Electrical connection / cabling: Cable type H07RN-F
- Control options: Field Adjustable Output, Dimming 1-10V, DALI, Virtual Midnight reprog., Lineswitch
- Occupancy sensor option available
- Fixture assembled without the use of glues, totally dismountable and recyclable.
- LED Board equipped with integral ESD and Surge protection on Class II versions.

CONSTRUCTION AND MATERIALS

- Die cast aluminium housing integrated with extruded anodized aluminium components
- Adjustable mounting arm made of rugged die cast aluminum and mounts to a 60mm outer dimension tenon
- Luminaire will also mount to 34-42-48mm outer dimension tenon or pole with an accessory fitter kit
- Die cast parts are treated with exclusive Colorfast DeltaGuard® finish featuring an E-Coat epoxy primer with an ultra-durable powder topcoat, providing excellent resistance to corrosion, ultraviolet degradation and abrasion

WARRANTY AND CERTIFICATIONS

- Limited Warranty†: Class 1 — 10 years on Colorfast DeltaGuard® finish / 10 years on luminaire
- Class 2 — 10 years on Colorfast DeltaGuard® finish / 5 years on luminaire
- CE mark / CB mark / ENEC mark / RoHs compliant
- Risk group exempt in accordance with Standard CEI EN 62471 for photobiological safety (Tested IEC/TR62778)
- Luminaire and finish endurance tested to withstand 5,000 hours of elevated ambient salt fog conditions as defined in ASTM Standard B 117
- Compliant to: EN 60598-1; EN 60598-2-3

AC Type IV Medium

PR Type III Medium

TS Type II Short

TM Type II Medium

QV Type V Medium

QVS Type V Short

1S Type I Short

† See www.cree-europe.com/en/resources/warranty for warranty terms

Ordering Information

Example: LXDAC702E43FXSV

L	X	D	AC	7	02	E	43	FX	SV
Product	**Insulation Class**	**Model**	**Optic***	**Mounting**	**LED Count (x10)**	**Version**	**CCT**	**Options**	**Finish**
L LEDway	**X** Class 1 **Y** Class 2	**D** Road	**AC** Type IV Medium **ACB** Type IV Medium w/backlight shield **PR** Type III Medium **PRB** Type III Medium w/backlight shield **TS** Type II Short **TSB** Type II Short w/backlight shield **TM** Type II Medium **TMB** Type II Medium w/backlight shield **QV** Type V Medium **QVS** Type V Short **1S** Type I Short	**7** Tenon 60mm OD	**02** **03** **04** **05** **06** **08** **09** **10** **11** **12**	**E**	**No code** 5700K **43** 4000K	**FX** **Fixed Input Power** **K#** **Light Control with Occupancy Sensor** - Flux dimming control with occupancy sensor - Available up to 60 LEDs **D#** **Dimming** - Dimmable driver 1-10V with external controller **G#** **Lineswitch (Bi-Level Control)** - Two distinct power levels, High/Low - Available up to 60 LEDs **S#** **Virtual Midnight** - Two levels option with virtual midnight - Available up to 100 LEDs in class 1 - Available up to 60 LEDs in class 2 **T#** **Reprogrammable Virtual Midnight** - Reprogrammable 2 levels option with virtual midnight **Q#** **Field Adjustable Output** - Requires no additional wiring **DL** **DALI** - Available up to 100 LEDs in class 1 - Available up to 60 LEDs in class 2	**SV** Silver **BK** Black **BZ** Bronze **SB** Silver Bronze **WH** White

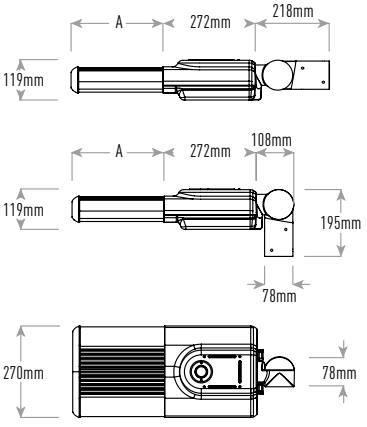
* Other optics available on request

Ordering information is for reference only. Some product configurations are not available. Please consult spec sheets for specific product availability and for further details.

Finish options available

SV Silver **BK** Black **BZ** Bronze **SB** Silver Bronze **WH** White

Dimensions



LED count	Dimension	Measurement	Weight
20	"A"	156mm	7,52kg
30		156mm	7,92kg
40		270mm	9,22kg
50		270mm	10,42kg
60		270mm	10,52kg
80		552mm	14,72kg
90		552mm	14,82kg
100		552mm	14,92kg
110		552mm	15,02kg
120		552mm	15,12kg

Accessory Information

BIRD SPIKE OPTIONS	ADAPTOR
BRDSPK30 Bird Spikes for Light Engine, 20-30 LEDs **BRDSPK60** Bird Spikes for Light Engine, 40-60 LEDs **BRDSPK120** Bird Spikes for Light Engine, 80-120 LEDs **BRDSPKHSG** Bird Spikes for Housing	**KIT ADATT. PALO 34MM** Adaptor Kit for dia. 34mm poles **KIT ADATT. PALO 42MM** Adaptor Kit for dia. 42mm poles **KIT ADATT. PALO 48MM** Adaptor Kit for dia. 48mm poles

Cree LEDway® Multi

FEATURES

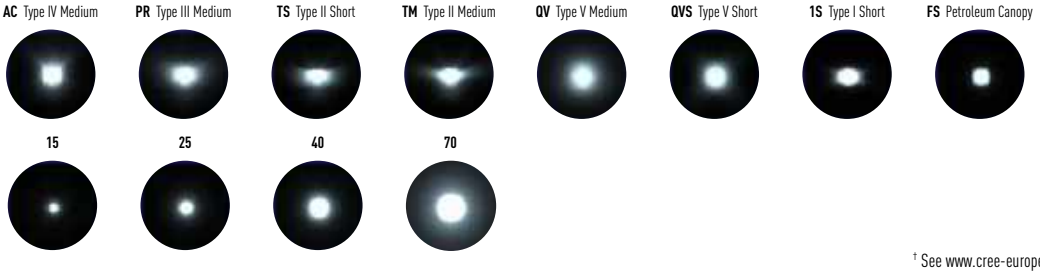
- Full cut-off optics (NanoOptic®)
- Input power Up to 264W
- Lumen output: 1800 - 28000lm
- System efficacy: Up to 110lm/W
- CCT: 4000K, 5700K (CRI Minimum 70)
- Initial Colour Consistency: 7 MacAdam steps
- Input Voltage: 220-240V
- Driver equipped with temperature sensor to preserve optimal working conditions
- Power factor: Up to > 0.9 at full load
- Lifetime: L80F10 Up to >200Khrs Ta=25°C (>200Khrs L80 IESNA TM-21)
- Surge protection: 10kV CM/DM surge immunity according to EN 61000-4-5 and EN 61547 for Class I only(Class I SPD equipped with LED signal)
- Operative temperature: -40°C up to +50°C
- Insulation class: Class I – Class II
- Enclosure rated IP66 per IEC 60529
- Impact resistance IK08
- Cable type H07RN-F, Cable length 1mt (Other lengths available on request); connector included
- Control options: Field Adjustable Output, Dimming 1-10V, DALI, Virtual Midnight reprog., Lineswitch
- Occupancy sensor option available
- LED Board equipped with integral ESD and Surge protection on Class II versions

CONSTRUCTION AND MATERIALS

- Die cast aluminium housing integrated with extruded anodized aluminium components
- PM-MLW mounting system for ceiling applications AISI 304 1,5mm. Configured for busway mounting (M6 bolts) 20-60 LEDs
- PM-MLLW mounting system for ceiling applications AISI 304 1,5mm. Configured for busway mounting (M6 bolts) 80-120 LEDs
- Die cast parts are treated with exclusive Colorfast DeltaGuard® finish featuring an E-Coat epoxy primer with an ultra-durable powder topcoat, providing excellent resistance to corrosion, ultraviolet degradation and abrasion

WARRANTY AND CERTIFICATIONS

- Limited Warranty†: Class 1 — 10 years on Colorfast DeltaGuard® finish / 10 years on luminaire
- Class 2 — 10 years on Colorfast DeltaGuard® finish / 5 years on luminaire
- CE mark / CB mark / ENEC mark / RoHs compliant
- Risk group exempt in accordance with Standard CEI EN 62471 for photobiological safety (Tested IEC/TR62778)
- Luminaire and finish endurance tested to withstand 5,000 hours of elevated ambient salt fog conditions as defined in ASTM Standard B 117
- Compliant to: EN 60598-1; EN 60598-2-3



† See www.cree-europe.com/en/resources/warranty for warranty terms

Ordering Information

Example: LXDACM02E43FXSV

L	X	D	AC	M	02	E	43	FX	SV
Product	**Insulation Class**	**Model**	**Optic**	**Mounting**	**LED Count (x10)**	**Version**	**CCT**	**Options**	**Finish**
L LEDway	**X** Class 1 **Y** Class 2	**D** Multi	Available with M: **AC** Type IV Medium **PR** Type III Medium **TS** Type II Short **TM** Type II Medium **QV** Type V Medium **QVS** Type V Short **1S** Type I Short **FS** Petroleum Canopy **15*** **25*** **40*** **70*** Available with M90: **ACB** **PRB** **TSB** **TMB** (with backlight shield) Available with M180: **ACB** **PRB** **TSB** **TMB** (with backlight shield)	**M** Configuration for ceiling, busway mounting and wall mounting bracket at 90° **4M** Configuration for ceiling, busway mounting and wall mounting bracket at 180°	**02** **03** **04** **05** **06** **08** **09** **10** **11** **12**	**E**	**No code** 5700K **43** 4000K	**FX** **Fixed Input Power** **K#** **Light Control with Occupancy Sensor** - Flux dimming control with occupancy sensor - Available up to 60 LEDs **D#** **Dimming** - Dimmable driver 1-10V with external controller **G#** **Lineswitch (Bi-Level Control)** - Two distinct power levels, High/Low - Available up to 60 LEDs **S#** **Virtual Midnight** - Two levels option with virtual midnight - Available up to 100 LEDs in class 1 - Available up to 60 LEDs in class 2 **T#** **Reprogrammable Virtual Midnight** - Reprogrammable 2 levels option with virtual midnight **Q#** **Field Adjustable Output** - Requires no additional wiring **DL** **DALI** - Available up to 100 LEDs in class 1 - Available up to 60 LEDs in class 2	**SV** Silver **BK** Black **BZ** Bronze **SB** Silver Bronze **WH** White

* Available only in Class 1

Ordering information is for reference only. Some product configurations are not available. Please consult spec sheets for specific product availability and for further details.

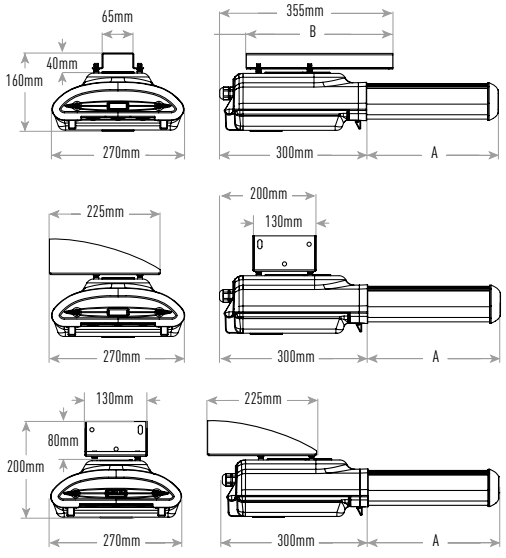
Mounting Options

Accessory Information

BIRD SPIKE OPTIONS	BRACKET OPTIONS
BRDSPK30 Bird Spikes for Light Engine, 20-30 LEDs **BRDSPK60** Bird Spikes for Light Engine, 40-60 LEDs **BRDSPK120** Bird Spikes for Light Engine, 80-120 LEDs	**PM-MLW** Mounting for ceiling applications. Configured for busway mounting (M6 bolts) 20-60 LEDs **PM-MLLW** Mounting for ceiling applications. Configured for busway mounting (M6 bolts) 80-120 LEDs **PM-WLW** Mounting for wall applications

Dimensions

Weight: From 7 to 15 kg



LED count	Dim. A	Dim. B
20 / 30	156mm	300mm
40 / 50 / 60	270mm	300mm
80 / 90 / 100 / 110 / 120	552mm	600mm

Cree LEDway® Tunnel

FEATURES

- Full cut-off optics (NanoOptic®)
- Input power Up to 264W
- Lumen output: 1800 - 28000lm
- System efficacy: Up to 110lm/W
- CCT: 4000K, 5700K (CRI Minimum 70)
- Initial Colour Consistency: 7 MacAdam steps
- Input Voltage: 220-240V
- Driver equipped with temperature sensor to preserve optimal working conditions
- Power factor: Up to > 0.9 at full load
- Lifetime: L80F10 Up to >200Khrs Ta=25°C (>200Khrs L80 IESNA TM-21)
- Surge protection: 10kV CM/DM surge immunity according to EN 61000-4-5 and EN 61547 for Class I only(Class I SPD equipped with LED signal)
- Operative temperature: -40°C up to +50°C
- Insulation class: Class I – Class II
- Enclosure rated IP66 per IEC 60529
- Impact resistance IK08
- Cable type FG16OM16, Cable length 1mt (Other lengths available on request); Industrial plug IP67 included
- Control options: Field Adjustable Output, Dimming 1-10V, DALI, Virtual Midnight reprog., Lineswitch
- Occupancy sensor option available
- Fixture assembled without the use of glues, totally dismountable and recyclable
- LED Board equipped with integral ESD and Surge protection on Class II versions

CONSTRUCTION AND MATERIALS

- Die cast aluminium housing integrated with extruded anodized aluminium components
- Adjustable mounting arm made of rugged die cast aluminum and mounts to a 60mm outer dimension tenon
- Fixed orientation mounting bracket designed for Tunnel installations AISI 304 1,5mm
- Die cast parts are treated with exclusive Colorfast DeltaGuard® finish featuring an E-Coat epoxy primer with an ultra-durable powder topcoat, providing excellent resistance to corrosion, ultraviolet degradation and abrasion

WARRANTY AND CERTIFICATIONS

- Limited Warranty†: Class 1 — 10 years on Colorfast DeltaGuard® finish / 10 years on luminaire
- Class 2 — 10 years on Colorfast DeltaGuard® finish / 5 years on luminaire
- CE mark / CB mark / ENEC mark / RoHs compliant
- Risk group exempt in accordance with Standard CEI EN 62471 for photobiological safety (Tested IEC/TR62778)
- Luminaire and finish endurance tested to withstand 5,000 hours of elevated ambient salt fog conditions as defined in ASTM Standard B 117
- Compliant to: EN 60598-1; EN 60598-2-3

AC Type IV Medium

PR Type III Medium

TS Type II Short

TM Type II Medium

QV Type V Medium

QVS Type V Short

1S Type I Short

† See www.cree-europe.com/en/resources/warranty for warranty terms

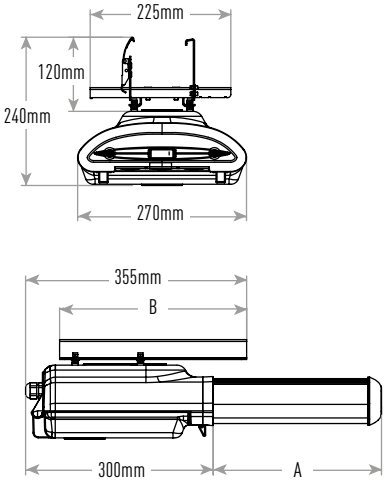
Ordering Information

Example: LXDACT02E43FXSV

L	X	D	AC	T	02	E	43	FX	SV
Product	**Insulation Class**	**Model**	**Optic**	**Mounting**	**LED Count (x10)**	**Version**	**CCT**	**Options**	**Finish**
L LEDway	**X** Class 1 **Y** Class 2	**D** E-Tunnel	Available with M: **AC** Type IV Medium **PR** Type III Medium **TS** Type II Short **TM** Type II Medium **QV** Type V Medium **QVS** Type V Short **1S** Type I Short	**T** (Tunnel mounting system - fixed tilt adjustment)	**02** **03** **04** **05** **06** **08** **09** **10** **11** **12**	**E**	**No code** 5700K **43** 4000K	**FX** **Fixed Input Power** **K#** **Light Control with Occupancy Sensor** - Flux dimming control with occupancy sensor - Available up to 60 LEDs **D#** **Dimming** - Dimmable driver 1-10V with external controller **G#** **Lineswitch (Bi-Level Control)** - Two distinct power levels, High/Low - Available up to 60 LEDs **S#** **Virtual Midnight** - Two levels option with virtual midnight - Available up to 100 LEDs in class 1 - Available up to 60 LEDs in class 2 **T#** **Reprogrammable Virtual Midnight** - Reprogrammable 2 levels option with virtual midnight **Q#** **Field Adjustable Output** - Requires no additional wiring **DL** **DALI** - Available up to 100 LEDs in class 1 - Available up to 60 LEDs in class 2	**SV** Silver **BK** Black **BZ** Bronze **SB** Silver Bronze **WH** White

Ordering information is for reference only. Some product configurations are not available. Please consult spec sheets for specific product availability and for further details.

Dimensions



LED count	Dimension	Measurement	Weight
20	"A"	156mm	7,52kg
30		156mm	7,92kg
40		270mm	9,22kg
50		270mm	10,42kg
60		270mm	10,52kg
80		552mm	14,72kg
90		552mm	14,82kg
100		552mm	14,92kg
110		552mm	15,02kg
120		552mm	15,12kg

Accessory Information

BIRD SPIKE OPTIONS	BRACKET OPTIONS
BRDSPK30 Bird Spikes for Light Engine, 20-30 LEDs **BRDSPK60** Bird Spikes for Light Engine, 40-60 LEDs **BRDSPK120** Bird Spikes for Light Engine, 80-120 LEDs	**PM-T0LW** Fixed orientation 0° (mounting T0) NOTE: Custom design brackets are available on request

Cree® SQUARE LED Series

The shape you know with the performance you need.

Conceived with an essential design, this luminaire has a simple square shape which practically integrates in all environments; also its square profile with rounded edges reduces wind exposure.

With many available optics and an extensive range of mounting brackets, Cree LED Square Series enhance interchangeable configurations.

PLUS - Cree SQUARE LED Series

Nanooptic® Technology

Patented NanoOptic® Technology available in more than 20 distributions, Cree® outdoor LED fixtures provide precise optical control for exceptional application performance and energy savings. The NanoOptic® refractor system offers superior light control with more lumens delivered in the target area, improved uniformity ratios, and controlled high-angle brightness.

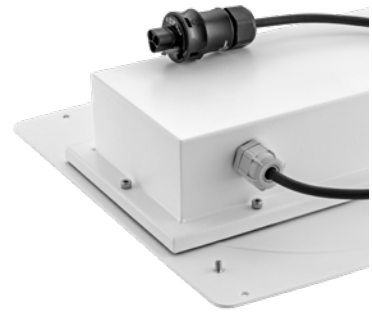
Range of Mounting

With an extensive range of mounting bracket options the possible applications are endless: street lighting, outdoor parking lots, or as spotlight for architectural details of monuments and facades.

Essential Design

A light that perfectly integrates in any urban environment, delivering unequalled performance.

Welcoming residents with beautiful light, while enhancing the charm of each urban space. Enhance your public spaces with perfect on target lighting. It will provide dramatically better visibility, making public areas safe and secure.



New RKT

Square has been updated in order to get better performances, new control options and technical features.

A dedicated Retrofit kit is also available for upgrading original Square fixtures equipped with traditional lamps with the best performance of our LED and Optical engine.

The RKT features an IP66 protection rate and an option available for 10Kv surge suppression.

It can reach a lumen output up to 8000lm to replace any original Square Mini installations.

Cree® SQUARE LED

FEATURES

- Full cut-off optics (NanoOptic® Precision Delivery Grid™)
- Input Power: A = 45W / B=63W
- Lumen output: Up to 8000Lm
- Efficacy: Up to 140m/W
- CCT: 3000K, 4000K, 5700K
  (CRI Standard min.70, CRI 80 @3000K on request for MOQ)
- Initial Colour Consistency: 4 MacAdam steps
- Input Voltage: 220-240V
- Power factor: Up to > 0.95 at full load
- Lifetime: L80F10 Up to >100Khrs Ta=25°C (>100Khrs L80 IESNA TM-21)
- Surge protection according to EN 61000-4-5 and EN 61547: 6kV CM/DM surge immunity (Input power A); up to 10kV CM/DM surge immunity (Input power B). Class I SPD equipped with LED signal.
- Fuse option available
- Operative temperature: -40°C up to +40°C
- Insulation class: Class I – Class II
- Enclosure rated per IEC 60529: IP65 (Input power A); IP66 (Input power B)
- Impact resistance IK08
- Electrical connection / cabling: Cable type H05RN-F
- Control options: (Input power A) Field Adjustable Output, Virtual Midnight; (Input power B)Field Adjustable Output, Virtual Midnight reprog., Dimming 1-10V, DALI, Dynadimmer, Constant Lumen Output

CONSTRUCTION AND MATERIALS

- Die cast aluminum housing
- High resistance powder coating with increased anti-ageing and anti-corrosion performance for long weathering and reliability
- Luminaire is designed to feature multiple mounting options available as accessories

WARRANTY AND CERTIFICATIONS

- Limited Warranty†: 5 years on luminaire
- CE mark
- CB mark (Input power B)
- UMSUG Charge code (UK Power performance test)
- RoHS compliant
- Risk group exempt in accordance with Standard CEI EN 62471 for photobiological safety (Tested IEC/TR62778)
- Luminaire and finish endurance tested to withstand 2,500 hours of elevated ambient salt fog conditions as defined in ASTM Standard B 117
- Compliant to: EN 60598-1; EN 60598-2-3

A special Retrofit kit is available on request to upgrade existing SQUARE installations. Please ask us for more information.

2LG Type II long | **275** Type II short 0.75 | **210** Type II short 1,0 | **2SH** Type II short | **3SH** Type III short | **3ME** Type III medium | **4ME** Type IV medium | **5ME** Type V medium | **5SH** Type V Short

† See www.cree-europe.com/en/resources/warranty for warranty terms

Ordering Information

Example: SMI-E-2LG-A-30K-+-24-WH-FA-S-01

SMI	-	E	-	2LG	-	A	-	30K	-	+	-	24	-	WH	-	FA	-	S	01
Product		**Version**		**Optic**		**Input Power Designator**		**CCT**		**Insulation Class**		**Voltage**		**Finish**		**Options**		**Variant**	**Cable lengh**
SMI	-	E	-	**2LG** Type II long **275** Type II short 0.75 **210** Type II short 1,0 **2SH** Type II short **3SH** Type III short **4ME** Type IV medium **5ME** Type V Medium **5SH** Type V Short	-	**A** 45W	-	**30K** 3000K **40K** 4000K **57K** 5700K	-	**+** Class 1 **^** Class 2	-	**24** 220-240V	-	**WH** White **BK** Black **SV** Silver **BZ** Bronze	-	**FA** Field Adjustable Output **VM** Virtual Midnight	-	**S** Standard **F** Fuse	**01** Exit cable 50cm (w/connector)
						B 63W		**30K** 3000K **40K** 4000K **57K** 5700K		**+** Class 1 **^** Class 2		**24** 220-240V		**WH** White **BK** Black **SV** Silver **BZ** Bronze		**FX** Fixed Output **Q** Field Adjustable Output **DM** Dimmable 1-10V **DQ** Field adjustable dimming **Y - Z** Virtual midnight field programmable **DL** DALI **DY** Dynadimmer **DC** DynaDimmer + CLO **CL** Constant Lumen Output		**S** Standard **U** 10kV **F**** Fuse	**01** Exit cable 50cm (w/connector)

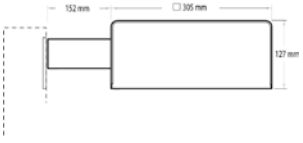
STANDARD

HIGH OUTPUT

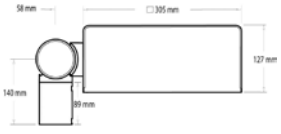
** Fuse option available with Standard or 10kV configurations (Specify SF or UF)

Ordering information is for reference only. Some product configurations are not available. Please consult spec sheets for specific product availability and for further details.

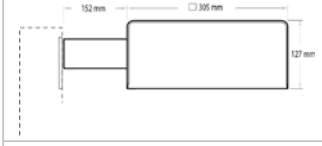
Mounting Options



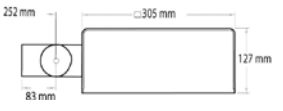
Mounting SMI-SQ – Side arm for square pole
Fixed pole bracket with a length of 152 mm for square poles.



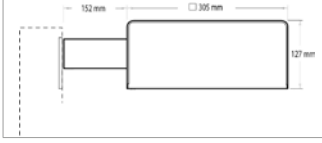
Mounting SMI-ADJ - Adjustable arm (OD 60mm)
Micro-adjustment jointed fitting which turns 360° on the horizontal plane and can be tilted 180° on the vertical plane at 2.5° increments.



Mounting SMI-SC1 – Side arm for cylindric pole
Fixed pole bracket with a length of 152 mm for ø 102 round poles.



Mounting SMI-YM - Yoke mount
This mounting bracket can be tilted 180° on the vertical plane with double locking steps every 5° increments. It can be adjusted with to side-screws and a safety bolt.



Mounting SMI- SC2 – Side arm for cylindric pole
Fixed pole bracket with a length of 152 mm for ø 120 round poles.

Mounting SMI-WM - Wall mount
Die-cast aluminium wall mounting box which can be used for direct or indirect lighting. The W-type plate comes with watertight gasket and three knockouts for surface conduits.

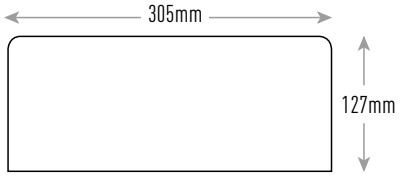
Accessory Information

MOUNT (LUMINAIRE MUST BE ORDERED SEPARATELY)	
SMI-WM	Wall mount (Black finish)
SMI-SQ*	Side arm - square section
SMI-SC1*	Side arm - round section Ø102mm
SMI-SC2*	Side arm - round section Ø120mm
SMI-ADJ*	Adjustable arm (OD 60mm)
SMI-YM*	Yoke mount

* Color options are: **WH** White **BK** Black **SV** Silver **BZ** Bronze

Dimensions

Weight: 5 kg



Cree® URBAN Series

Led decorative lighting solutions.

The URBAN Series is dedicated to show the endless possibilities available within the Urban programme. At Cree we always take extreme care in developing the best technical solutions to provide a better light for our customers.

When the fixtures are installed within an Urban scenario though we also need to take specific care of their appereance; products not only need to look good during daylight but their integration within the surrounding architectures and style is fundamental in order to match the identity of the place.

- **VERSATILE** - Retrofit Kit is shown in multiple applications from the standard square plate, to a customized version tailored onto a traditional lantern head as well as within the Square LED product series.
- **CUSTOMIZABLE** - Custom finishes are shown to visualize how the products can be easily integrated within any urban context achieving a perfect match between style and technology.
- **COMPLETE** - New adapters and mounting kits are available for the range.

ARTISTIC
Post-top

CONTEMPORARY
Post-top

MODERN
Post-top

CIRCULAR
Adjustable Arm

PLUS - Cree URBAN Series

Custom finishes

At Cree we always take extreme care in developing the best technical solutions to provide a better light for our customers.

When the fixtures are installed within an Urban scenario though we also need to take specific care of their appereance; products not only need to look good during daylight but their integration within the surrounding architectures and style is fundamental in order to match the identity of the place.

Brand new Performances

Thanks to a new design of the product our Urban HO series boosts up to over 8000lm and 140lm/W. A new dedicated white recuperator has been designed to reach a better control in terms of distribution.

Equipped with our NanoOptic® Precision Delivery Grid™ optics, including the new redesigned street ones the series is now able to achieve better optical control delivering high quality uniform light for safer good looking urban contexts.

New RKT

Our Urban bestseller has been updated in order to get better performances, new control options and technical features.

The new High Output RKT features an IP66 protection rate and the option available for 10Kv surge suppression.

Standard RKT versions will still be maintained, according to the size of the lantern to be retrofitted there might be some space limitations that force us to work with this version instead of the new one which is slightly bigger.

New mountings

In most applications Urban fixtures are used to substitute existing lighting fixtures installed, therefore customer need multiple options available in order to fit the existing brackets and holders. In order to optimize this we developed a whole new series of adapters that can be used to match most of the existing installations. All adapters can be supplied raw or painted in the same finish of the lantern.

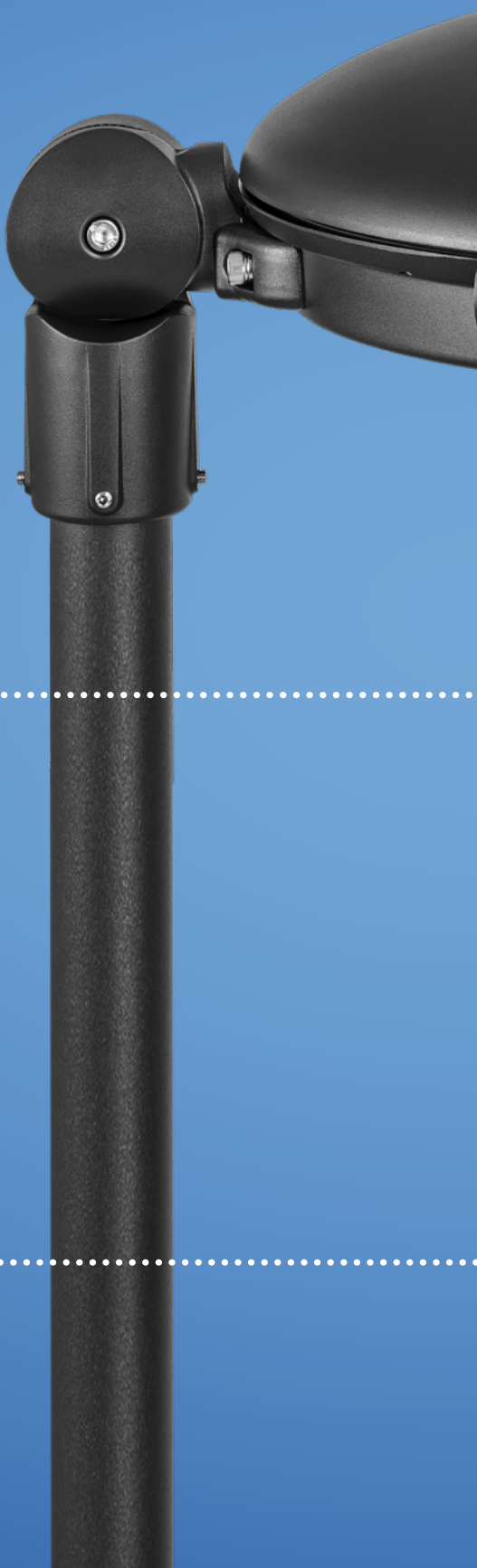
Furthermore the rigid cord mounting is meant to be used to provide street lighting where no wall mounted supports or poles are available.

Both the Artistic and Circular collections are now available with a specific mounting option that is compatible to this kind of applications.

TRADITIONAL LIGHTING CUTTING EDGE TECHNOLOGY

Cree® lighting systems are the highest expression of the latest LED technology.

They are the result of continual investment in R&D, the culmination of decades of experience which enables us to assure the highest quality available today.

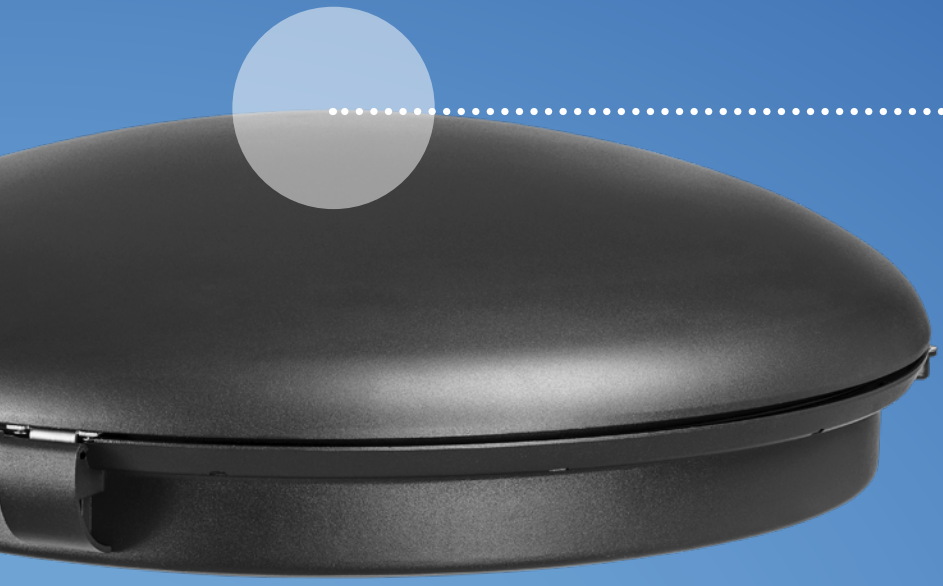


IMPROVED COLOUR QUALITY AND PERFORMANCE

In addition to colour shifts and random lamp outages, metal halide technology is a very narrow spectrum colour source. The Cree® Urban Series luminaire offers an LED solution with a much broader colour range. This fuller colour spectrum provides more realistic and distinctive colour renderings that can contribute to a more consistent visual experience, lighting your spaces with beautiful white light.

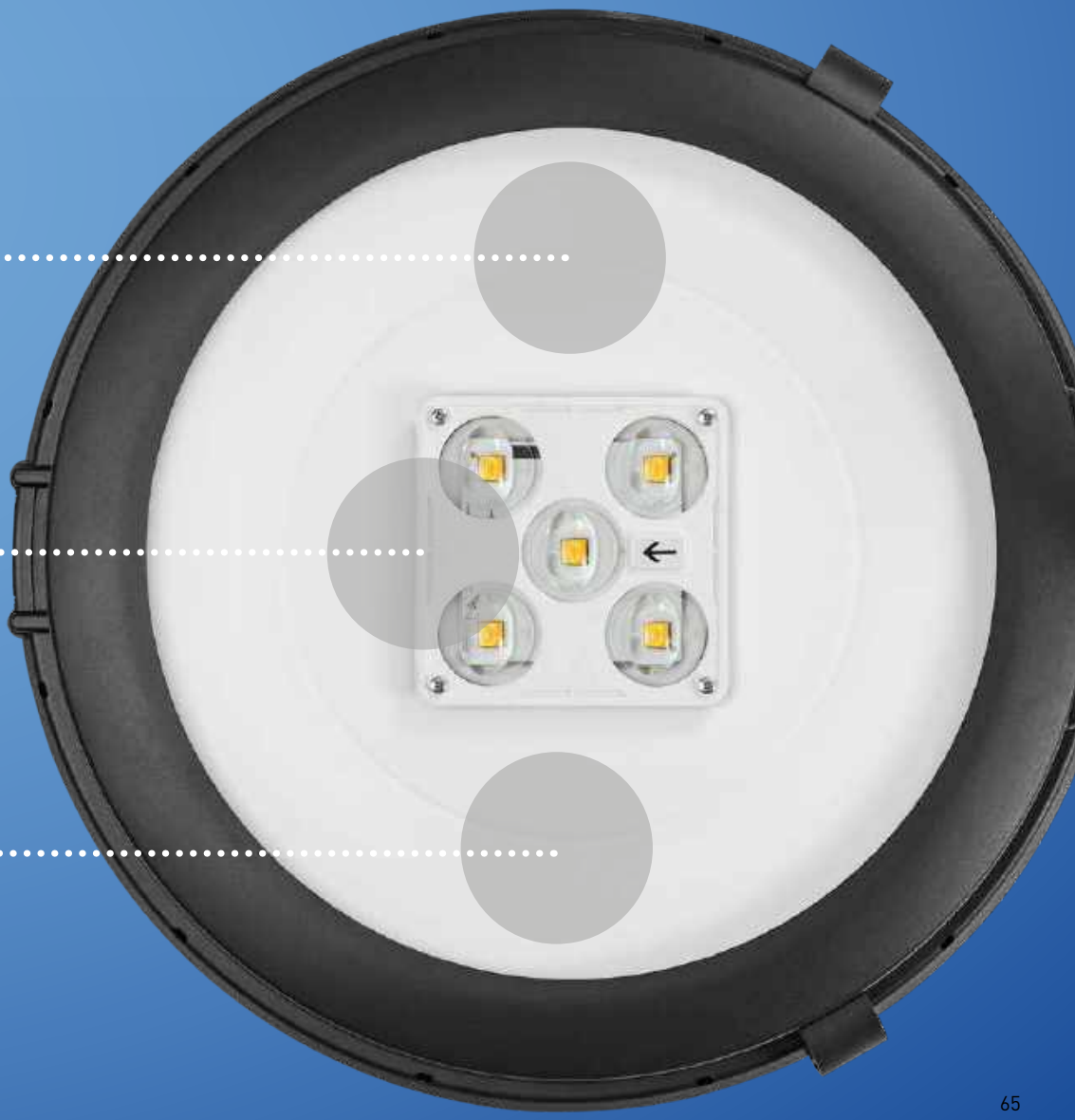
OPTIMIZED TARGET-ILLUMINATION PERFORMANCE

Dramatically reduce uplight and spill-light without sacrificing nightscape appearance through advances in the primary optical system designed specifically for Cree® LEDs. Each luminaire is built with Cree's NanoOptic® Precision Delivery GridTM optic system, which prevents spill-light and will direct the light where it is needed, on pathways, plazas, parks and every place that needs to be enhanced with beautiful light, delivering the exact amount of light required in all locations with no waste.



SUSTAINABILITY

Cree® Urban Series fixtures combine advanced LED technology to offer great benefits of performance, energy savings and reduced maintenance with a simple modern or a classical elegant style that blends harmoniously in every urban context.



TUNE FOR THE APPLICATION

Field Adjustable Output or Virtual Midnight control: select just the right amount of light for each application to minimize energy costs.

URBAN Range - PERFORMANCE

With the Urban Series, you can have all the great benefits of performance, energy saving, and reduced maintenance of a LED luminaire.

Lumen Output @40K

LIGHTING PERFORMANCE

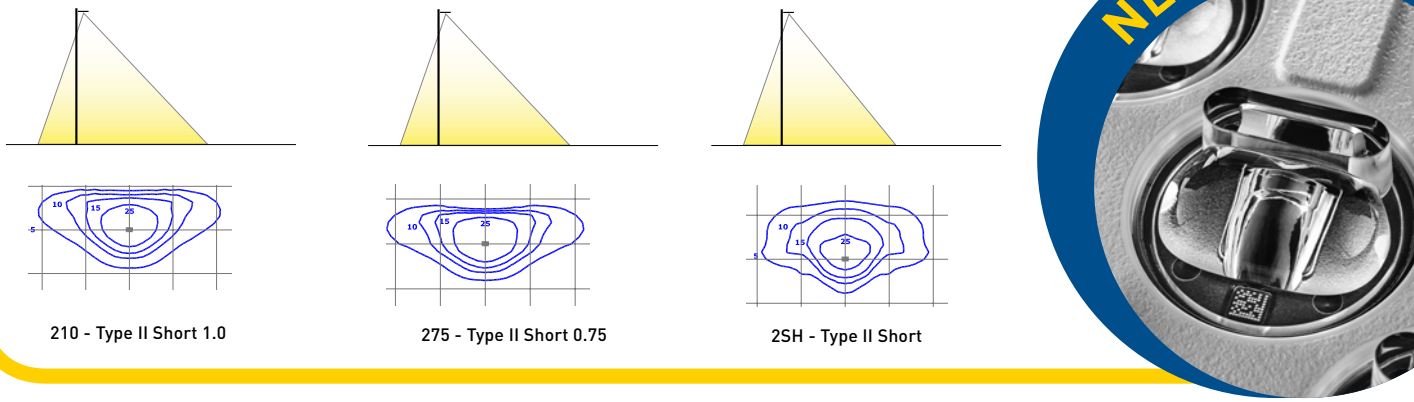
With patented NanoOptic® Precision Delivery Grid™ available in multiple distributions, the Urban Series, provide precise optical control for exceptional application performance and energy savings. The refractor system offers superior light control with more lumens delivered in the target area, improved uniformity ratios, and controlled high-angle brightness.

Optical system

- Utilising highly-diffused performance optics for soft, glare-free light
- Better optical control with our NanoOptic® Precision Delivery Grid™ optic

Through the new optical system, it is now possible to control more accurately the LED source light emission, directing the light where it's required. The intensity distribution of the new optics has been designed by Cree's Optical Engineers specifically for the lighting requirements of the European market, with the aim of improving performance in the most widely used configurations, in both linear or staggered pole positioning situations.

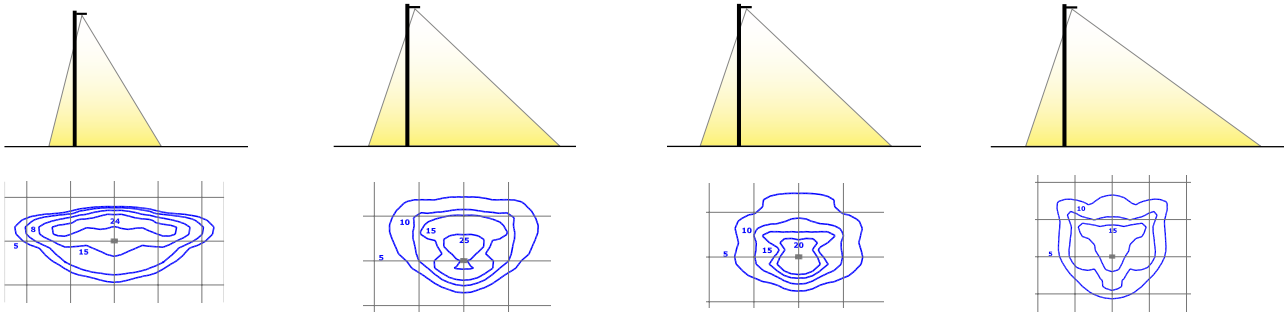
ASYMMETRIC OPTICS FOR STREET LIGHTING



210 - Type II Short 1.0

275 - Type II Short 0.75

2SH - Type II Short



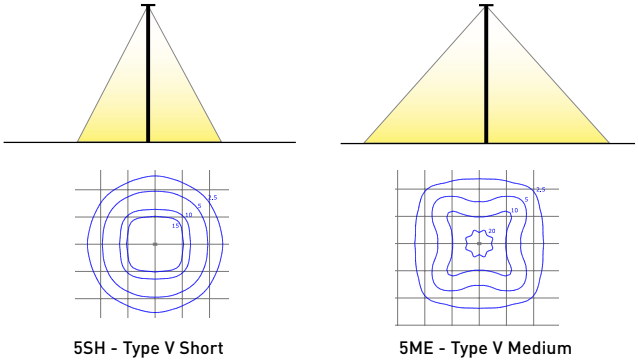
2LG - Type II Long

3ME - Type III Medium

3SH - Type III Short

4ME- Type IV Medium

SYMMETRIC OPTICS



5SH - Type V Short

5ME - Type V Medium

Cree® ARTISTIC - Post-top

FEATURES

- Full cut-off optics (NanoOptic® Precision Delivery Grid™)
- Input Power: A = 45W / B=63W
- Lumen output: Up to 8000Lm
- Efficacy: Up to 140m/W
- CCT: 3000K, 4000K, 5700K
  (CRI Standard min.70, CRI 80 @3000K on request for MOQ)
- Initial Colour Consistency: 4 MacAdam steps
- Input Voltage: 220-240V
- Power factor: Up to > 0.95 at full load
- Lifetime: L80F10 Up to >130Khrs Ta=25°C (>140Khrs L80 IESNA TM-21)
- Surge protection according to EN 61000-4-5 and EN 61547: 6kV CM/DM surge immunity (Input power A); up to 10kV CM/DM surge immunity (Input power B). Class I SPD equipped with LED signal.
- Fuse option available
- Operative temperature: -40°C up to +50°C
- Insulation class: Class I – Class II
- Enclosure rated per IEC 60529: IP65 (Input power A); IP66 (Input power B)
- Impact resistance IK08
- Electrical connection / cabling: Cable type H05RN-F
- Control options: (Input power A) Field Adjustable Output, Virtual Midnight; (Input power B)Field Adjustable Output, Virtual Midnight reprog., Dimming 1-10V, DALI, Dynadimmer, Constant Lumen Output

CONSTRUCTION AND MATERIALS

- Die cast aluminum housing
- High resistance powder coating with increased anti-ageing and anti-corrosion performance for long weathering and reliability
- Luminaire is designed to mount directly to 60mm outer dimension tenons or poles

WARRANTY AND CERTIFICATIONS

- Limited Warranty†: 5 years on luminaire
- CE mark
- CB mark (Input power B)
- UMSUG Charge code (UK Power performance test)
- RoHS compliant
- Risk group exempt in accordance with Standard CEI EN 62471 for photobiological safety (Tested IEC/TR62778)
- Luminaire and finish endurance tested to withstand 2,500 hours of elevated ambient salt fog conditions as defined in ASTM Standard B 117
- Compliant to: EN 60598-1; EN 60598-2-3

2LG Type II long | **275** Type II short 0.75 | **210** Type II short 1,0 | **2SH** Type II short | **3SH** Type III short | **3ME** Type III medium | **4ME** Type IV medium | **5ME** Type V medium | **5SH** Type V Short

† See www.cree-europe.com/en/resources/warranty for warranty terms

Ordering Information

Example: UAR-E-F-2LG-A-30K-+-24-BK-FA-S-01

UAR	-	E	-	F	-	2LG	-	A	-	30K	-	+	-	24	-	BK	-	FA	-	S	-	01
Product		**Version**		**Mounting**		**Optic**		**Input Power**		**CCT**		**Insulation Class**		**Voltage**		**Finish**		**Control Options**		**Variant**		**Cable length**
UAR	-	E	-	**F** Post-top	-	**2LG** Type II long **275** Type II short 0.75 **210** Type II short 1,0 **2SH** Type II short **3SH** Type III short **3ME** Type III medium **4ME** Type IV medium **5ME** Type V medium **5SH** Type V short	-	**A** 45W	-	**30K** 3000K **40K** 4000K **57K** 5700K	-	**+** Class 1 **^** Class 2	-	**24** 220-240V	-	**BK** Black **CI** Classic Ivory **HB** Heritage Brown **BG** Brutalist Grey **LG** Landscape Green	-	**FA** **Field adjustable** **VM** **Virtual Midnight**	-	**S** Standard **F** Fuse	-	**01** Exit cable 50cm (w/ connector)
								B 63W		**30K** 3000K **40K** 4000K **57K** 5700K		**+** Class 1 **^** Class 2		**24** 220-240V		**BK** Black **CI** Classic Ivory **HB** Heritage Brown **BG** Brutalist Grey **LG** Landscape Green		**FX** **Fixed Output** **Q** **Field Adjustable Output** **DM** **Dimmable 1-10V** **DQ** **Field adjustable dimming** **Y - Z** **Virtual midnight field programmable** **DL** **DALI** **DY** **Dynadimmer** **DC** **DynaDimmer + CLO** **CL** **Constant Lumen Output**		**S** Standard **U** 10kV **F**** Fuse		**01** Exit cable 50cm (w/ connector)

STANDARD

HIGH OUTPUT

** Fuse option available with Standard or 10kV configurations (Specify SF or UF)

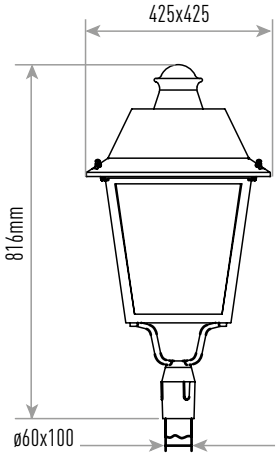
Ordering information is for reference only. Some product configurations are not available. Please consult spec sheets for specific product availability and for further details.

New Finishes

CI Classic Ivory **HB** Heritage Brown **BG** Brutalist Grey **LG** Landscape Green

Dimensions

Weight: 8.3 kg



Cree® ARTISTIC - Suspended

FEATURES

- Full cut-off optics (NanoOptic® Precision Delivery Grid™)
- Input Power: A = 45W / B=63W
- Lumen output: Up to 8000Lm
- Efficacy: Up to 140m/W
- CCT: 3000K, 4000K, 5700K
  (CRI Standard min.70, CRI 80 @3000K on request for MOQ)
- Initial Colour Consistency: 4 MacAdam steps
- Input Voltage: 220-240V
- Power factor: Up to > 0.95 at full load
- Lifetime: L80F10 Up to >130Khrs Ta=25°C (>140Khrs L80 IESNA TM-21)
- Surge protection according to EN 61000-4-5 and EN 61547: 6kV CM/DM surge immunity (Input power A); up to 10kV CM/DM surge immunity (Input power B). Class I SPD equipped with LED signal.
- Fuse option available
- Operative temperature: -40°C up to +50°C
- Insulation class: Class I – Class II
- Enclosure rated per IEC 60529: IP65 (Input power A); IP66 (Input power B)
- Impact resistance IK08
- Electrical connection / cabling: Cable type H05RN-F
- Control options: (Input power A) Field Adjustable Output, Virtual Midnight; (Input power B)Field Adjustable Output, Virtual Midnight reprog., Dimming 1-10V, DALI, Dynadimmer, Constant Lumen Output

CONSTRUCTION AND MATERIALS

- Die cast aluminum housing
- High resistance powder coating with increased anti-ageing and anti-corrosion performance for long weathering and reliability
- Luminaire is designed to mount directly on wall brackets or as a rigid cord suspension by means of dedicated accessories

WARRANTY AND CERTIFICATIONS

- Limited Warranty†: 5 years on luminaire
- CE mark
- CB mark (Input power B)
- UMSUG Charge code (UK Power performance test)
- RoHS compliant
- Risk group exempt in accordance with Standard CEI EN 62471 for photobiological safety (Tested IEC/TR62778)
- Luminaire and finish endurance tested to withstand 2,500 hours of elevated ambient salt fog conditions as defined in ASTM Standard B 117
- Compliant to: EN 60598-1; EN 60598-2-3

2LG Type II long
275 Type II short 0.75
210 Type II short 1,0
2SH Type II short
3SH Type III short
3ME Type III medium
4ME Type IV medium
5ME Type V medium
5SH Type V Short

† See www.cree-europe.com/en/resources/warranty for warranty terms

Ordering Information

Example: UAR-E-9-2LG-A-30K-+-24-BK-FA-S-00

UAR	-	E	-	9	-	2LG	-	A	-	30K	-	+	-	24	-	BK	-	FA	-	S	-	00
Product		**Version**		**Mounting**		**Optic**		**Input Power**		**CCT**		**Insulation Class**		**Voltage**		**Finish**		**Control Options**		**Variant**		**Cable length**
UAR	-	E	-	**9** Suspended **L*** Rigid cord	-	**2LG** Type II long **275** Type II short 0.75 **210** Type II short 1,0 **2SH** Type II short **3SH** Type III short **3ME** Type III medium **4ME** Type IV medium **5ME** Type V medium **5SH** Type V short	-	**A** 45W	-	**30K** 3000K **40K** 4000K **57K** 5700K	-	**+** Class 1 **^** Class 2	-	**24** 220-240V	-	**BK** Black **CI** Classic Ivory **HB** Heritage Brown **BG** Brutalist Grey **LG** Landscape Green	-	**FA** Field adjustable **VM** Virtual Midnight	-	**S** Standard **F** Fuse	-	**00** No cable
								B 63W		**30K** 3000K **40K** 4000K **57K** 5700K		**+** Class 1 **^** Class 2		**24** 220-240V		**BK** Black **CI** Classic Ivory **HB** Heritage Brown **BG** Brutalist Grey **LG** Landscape Green		**FX** Fixed Output **Q** Field Adjustable Output **DM** Dimmable 1-10V **DQ** Field adjustable dimming **Y - Z** Virtual midnight field programmable **DL** DALI **DY** Dynadimmer **DC** DynaDimmer + CLO **CL** Constant Lumen Output		**S** Standard **U** 10kV **F**** Fuse		**01** Exit cable 50cm (w/ connector)

STANDARD

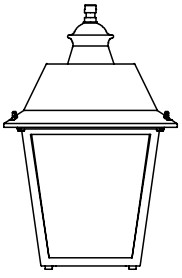
HIGH OUTPUT

** Fuse option available with Standard or 10kV configurations (Specify SF or UF)

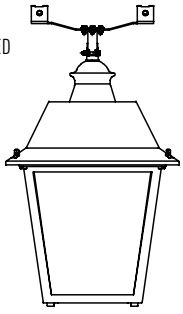
Ordering information is for reference only. Some product configurations are not available. Please consult spec sheets for specific product availability and for further details.

Mounting Options

9
SUSPENDED



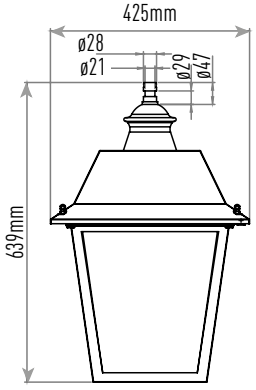
L*
RIGID CORD SUSPENDED



* MOUNTING "L" TO BE COMPLETED WITH DEDICATED BRACKET	
PM-L/URB/A2-GR	Rigid cord bracket AISI304

Dimensions

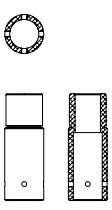
Weight: 8.5 kg



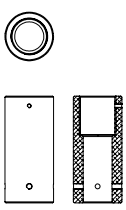
Accessory Information

***ACCESSORIES FOR MOUNTING SYSTEM 9 (SUSPENDED) - ADAPTORS**

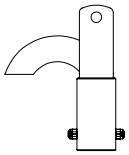
MALE CONNECTION
AD0011S03V - External thread 1" 1/8
AD0012S03V - External thread 1"
AD0013S03V - External thread ¾"
AD0014S03V -External thread ½"



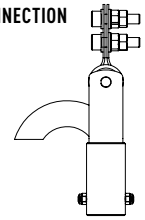
FEMALE CONNECTION
AD0006S03V - Internal thread 1" 1/8
AD0008S03V - Internal thread 1"
AD0009S03V - Internal thread ¾"
AD0010S03V -Internal thread ½"



PIVOTING CONNECTION
AD0015S03V



PIVOTING CONNECTION
AD0016S03V



Cree® CONTEMPORARY - Post-top

FEATURES

- Full cut-off optics (NanoOptic® Precision Delivery Grid™)
- Input Power: A = 45W / B=63W
- Lumen output: Up to 8000Lm
- Efficacy: Up to 140m/W
- CCT: 3000K, 4000K, 5700K
  (CRI Standard min.70, CRI 80 @3000K on request for MOQ)
- Initial Colour Consistency: 4 MacAdam steps
- Input Voltage: 220-240V
- Power factor: Up to > 0.95 at full load
- Lifetime: L80F10 Up to >130Khrs Ta=25°C (>140Khrs L80 IESNA TM-21)
- Surge protection according to EN 61000-4-5 and EN 61547: 6kV CM/DM surge immunity (Input power A); up to 10kV CM/DM surge immunity (Input power B). Class I SPD equipped with LED signal.
- Fuse option available
- Operative temperature: -40°C up to +50°C
- Insulation class: Class I – Class II
- Enclosure rated per IEC 60529: IP65 (Input power A); IP66 (Input power B)
- Impact resistance IK08
- Electrical connection / cabling: Cable type H05RN-F
- Control options: (Input power A) Field Adjustable Output, Virtual Midnight; (Input power B)Field Adjustable Output, Virtual Midnight reprog., Dimming 1-10V, DALI, Dynadimmer, Constant Lumen Output

CONSTRUCTION AND MATERIALS

- Die cast aluminum housing
- High resistance powder coating with increased anti-ageing and anti-corrosion performance for long weathering and reliability
- Luminaire is designed to mount directly to 60mm outer dimension tenons or poles

WARRANTY AND CERTIFICATIONS

- Limited Warranty†: 5 years on luminaire
- CE mark
- CB mark (Input power B)
- UMSUG Charge code (UK Power performance test)
- RoHS compliant
- Risk group exempt in accordance with Standard CEI EN 62471 for photobiological safety (Tested IEC/TR62778)
- Luminaire and finish endurance tested to withstand 2,500 hours of elevated ambient salt fog conditions as defined in ASTM Standard B 117
- Compliant to: EN 60598-1; EN 60598-2-3

2LG Type II long | **275** Type II short 0.75 | **210** Type II short 1,0 | **2SH** Type II short | **3SH** Type III short | **3ME** Type III medium | **4ME** Type IV medium | **5ME** Type V medium | **5SH** Type V Short

† See www.cree-europe.com/en/resources/warranty for warranty terms

Ordering Information

Example: UCN-E-F-2LG-A-30K-+-24-BK-FA-S-01

UCN	-	E	-	F	-	2LG	-	A	-	30K	-	+	-	24	-	BK	-	FA	-	S	-	01
Product		**Version**		**Mounting**		**Optic**		**Input Power**		**CCT**		**Insulation Class**		**Voltage**		**Finish**		**Control Options**		**Variant**		**Cable length**
UCN	-	E	-	**F** Post-top	-	**2LG** Type II long **275** Type II short 0.75 **210** Type II short 1,0 **2SH** Type II short **3SH** Type III short **3ME** Type III medium **4ME** Type IV medium **5ME** Type V medium **5SH** Type V short	-	**A** 45W	-	**30K** 3000K **40K** 4000K **57K** 5700K	-	**+** Class 1 **^** Class 2	-	**24** 220-240V	-	**BK** Black **CI** Classic Ivory **HB** Heritage Brown **BG** Brutalist Grey **LG** Landscape Green	-	**FA** **Field adjustable** **VM** **Virtual Midnight**	-	**S** Standard **F** Fuse	-	**01** Exit cable 50cm (w/ connector)
								B 63W		**30K** 3000K **40K** 4000K **57K** 5700K		**+** Class 1 **^** Class 2		**24** 220-240V		**BK** Black **CI** Classic Ivory **HB** Heritage Brown **BG** Brutalist Grey **LG** Landscape Green		**FX** **Fixed Output** **Q** **Field Adjustable Output** **DM** **Dimmable 1-10V** **DQ** **Field adjustable dimming** **Y - Z** **Virtual midnight field programmable** **DL** **DALI** **DY** **Dynadimmer** **DC** **DynaDimmer + CLO** **CL** **Constant Lumen Output**		**S** Standard **U** 10kV **F**** Fuse		**01** Exit cable 50cm (w/ connector)

STANDARD

HIGH OUTPUT

** Fuse option available with Standard or 10kV configurations (Specify SF or UF)

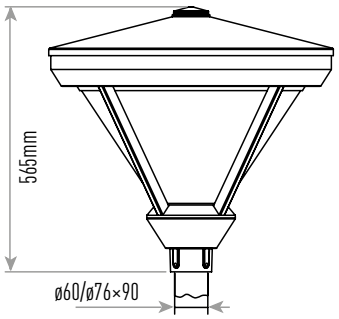
Ordering information is for reference only. Some product configurations are not available. Please consult spec sheets for specific product availability and for further details.

New Finishes

CI Classic Ivory **HB** Heritage Brown **BG** Brutalist Grey **LG** Landscape Green

Dimensions

Weight: 10.6 kg



Cree® CIRCULAR - Adjustable Arm

FEATURES

- Full cut-off optics (NanoOptic® Precision Delivery Grid™)
- Input Power: A = 45W / B=63W
- Lumen output: Up to 8000Lm
- Efficacy: Up to 140m/W
- CCT: 3000K, 4000K, 5700K
  (CRI Standard min.70, CRI 80 @3000K on request for MOQ)
- Initial Colour Consistency: 4 MacAdam steps
- Input Voltage: 220-240V
- Power factor: Up to > 0.95 at full load
- Lifetime: L80F10 Up to >130Khrs Ta=25°C (>140Khrs L80 IESNA TM-21)
- Surge protection according to EN 61000-4-5 and EN 61547: 6kV CM/DM surge immunity (Input power A); up to 10kV CM/DM surge immunity (Input power B). Class I SPD equipped with LED signal.
- Fuse option available
- Operative temperature: -40°C up to +50°C
- Insulation class: Class I – Class II
- Enclosure rated per IEC 60529: IP65 (Input power A); IP66 (Input power B)
- Impact resistance IK08
- Electrical connection / cabling: Cable type H05RN-F
- Control options: (Input power A) Field Adjustable Output, Virtual Midnight; (Input power B)Field Adjustable Output, Virtual Midnight reprog., Dimming 1-10V, DALI, Dynadimmer, Constant Lumen Output

CONSTRUCTION AND MATERIALS

- Die cast aluminum housing
- High resistance powder coating with increased anti-ageing and anti-corrosion performance for long weathering and reliability
- Luminaire is designed to mount directly to 60mm outer dimension tenons or poles. Full housing adjustability with integrated mechanical locking system.

WARRANTY AND CERTIFICATIONS

- Limited Warranty†: 5 years on luminaire
- CE mark
- CB mark (Input power B)
- UMSUG Charge code (UK Power performance test)
- RoHS compliant
- Risk group exempt in accordance with Standard CEI EN 62471 for photobiological safety (Tested IEC/TR62778)
- Luminaire and finish endurance tested to withstand 2,500 hours of elevated ambient salt fog conditions as defined in ASTM Standard B 117
- Compliant to: EN 60598-1; EN 60598-2-3

2LG Type II long | **275** Type II short 0.75 | **210** Type II short 1,0 | **2SH** Type II short | **3SH** Type III short | **3ME** Type III medium | **4ME** Type IV medium | **5ME** Type V medium | **5SH** Type V Short

† See www.cree-europe.com/en/resources/warranty for warranty terms

Ordering Information

Example: UCR-E-3-2LG-A-30K-+-24-BK-FA-S-01

UCR	-	E	-	3	-	2LG	-	A	-	30K	-	+	-	24	-	BK	-	FA	-	S	-	01
Product		**Version**		**Mounting**		**Optic**		**Input Power**		**CCT**		**Insulation Class**		**Voltage**		**Finish**		**Control Options**		**Variant**		**Cable length**
UCR	-	E	-	**3** Side Arm	-	**2LG** Type II long **275** Type II short 0.75 **210** Type II short 1,0 **2SH** Type II short **3SH** Type III short **3ME** Type III medium **4ME** Type IV medium **5ME** Type V medium **5SH** Type V short	-	**A** 45W	-	**30K** 3000K **40K** 4000K **57K** 5700K	-	**+** Class 1 **^** Class 2	-	**24** 220-240V	-	**BK** Black **CI** Classic Ivory **HB** Heritage Brown **BG** Brutalist Grey **LG** Landscape Green	-	**FA** **Field adjustable** **VM** **Virtual Midnight**	-	**S** Standard **F** Fuse	-	**01** Exit cable 50cm (w/ connector)
								B 63W		**30K** 3000K **40K** 4000K **57K** 5700K		**+** Class 1 **^** Class 2		**24** 220-240V		**BK** Black **CI** Classic Ivory **HB** Heritage Brown **BG** Brutalist Grey **LG** Landscape Green		**FX** **Fixed Output** **Q** **Field Adjustable Output** **DM** **Dimmable 1-10V** **DQ** **Field adjustable dimming** **Y - Z** **Virtual midnight field programmable** **DL** **DALI** **DY** **Dynadimmer** **DC** **DynaDimmer + CLO** **CL** **Constant Lumen Output**		**S** Standard **U** 10kV **F**** Fuse		**01** Exit cable 50cm (w/ connector)

STANDARD

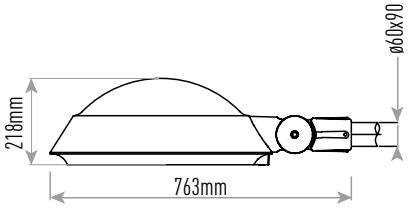
HIGH OUTPUT

** Fuse option available with Standard or 10kV configurations (Specify SF or UF)

Ordering information is for reference only. Some product configurations are not available. Please consult spec sheets for specific product availability and for further details.

Dimensions

Weight: 9.1 kg



Cree® CIRCULAR - Post-top

FEATURES

- Full cut-off optics (NanoOptic® Precision Delivery Grid™)
- Input Power: A = 45W / B=63W
- Lumen output: Up to 8000Lm
- Efficacy: Up to 140m/W
- CCT: 3000K, 4000K, 5700K
  (CRI Standard min.70, CRI 80 @3000K on request for MOQ)
- Initial Colour Consistency: 4 MacAdam steps
- Input Voltage: 220-240V
- Power factor: Up to > 0.95 at full load
- Lifetime: L80F10 Up to >130Khrs Ta=25°C (>140Khrs L80 IESNA TM-21)
- Surge protection according to EN 61000-4-5 and EN 61547: 6kV CM/DM surge immunity (Input power A); up to 10kV CM/DM surge immunity (Input power B). Class I SPD equipped with LED signal.
- Fuse option available
- Operative temperature: -40°C up to +50°C
- Insulation class: Class I – Class II
- Enclosure rated per IEC 60529: IP65 (Input power A); IP66 (Input power B)
- Impact resistance IK08
- Electrical connection / cabling: Cable type H05RN-F
- Control options: (Input power A) Field Adjustable Output, Virtual Midnight; (Input power B)Field Adjustable Output, Virtual Midnight reprog., Dimming 1-10V, DALI, Dynadimmer, Constant Lumen Output

CONSTRUCTION AND MATERIALS

- Die cast aluminum housing
- High resistance powder coating with increased anti-ageing and anti-corrosion performance for long weathering and reliability
- Luminaire is designed to mount directly to 60mm up to 76mm outer dimension tenons or poles

WARRANTY AND CERTIFICATIONS

- Limited Warranty†: 5 years on luminaire
- CE mark
- CB mark (Input power B)
- UMSUG Charge code (UK Power performance test)
- RoHS compliant
- Risk group exempt in accordance with Standard CEI EN 62471 for photobiological safety (Tested IEC/TR62778)
- Luminaire and finish endurance tested to withstand 2,500 hours of elevated ambient salt fog conditions as defined in ASTM Standard B 117
- Compliant to: EN 60598-1; EN 60598-2-3

† See www.cree-europe.com/en/resources/warranty for warranty terms

Ordering Information

Example: UCR-E-F-2LG-A-30K-+-24-BK-FA-S-01

UCR	-	E	-	F	-	2LG	-	A	-	30K	-	+	-	24	-	BK	-	FA	-	S	-	01
Product		Version		Mounting		Optic		Input Power		CCT		Insulation Class		Voltage		Finish		Control Options		Variant		Cable length
UCR	-	E	-	**F** Post-top	-	**2LG** Type II long **275** Type II short 0.75 **210** Type II short 1,0 **2SH** Type II short **3SH** Type III short **3ME** Type III medium **4ME** Type IV medium **5ME** Type V medium **5SH** Type V short	-	**A** 45W	-	**30K** 3000K **40K** 4000K **57K** 5700K	-	**+** Class 1 **^** Class 2	-	**24** 220-240V	-	**BK** Black **CI** Classic Ivory **HB** Heritage Brown **BG** Brutalist Grey **LG** Landscape Green	-	**FA** Field adjustable **VM** Virtual Midnight	-	**S** Standard **F** Fuse	-	**01** Exit cable 50cm (w/ connector)
								B 63W		**30K** 3000K **40K** 4000K **57K** 5700K		**+** Class 1 **^** Class 2		**24** 220-240V		**BK** Black **CI** Classic Ivory **HB** Heritage Brown **BG** Brutalist Grey **LG** Landscape Green		**FX** Fixed Output **Q** Field Adjustable Output **DM** Dimmable 1-10V **DQ** Field adjustable dimming **Y - Z** Virtual midnight field programmable **DL** DALI **DY** Dynadimmer **DC** DynaDimmer + CLO **CL** Constant Lumen Output		**S** Standard **U** 10kV **F**** Fuse		**01** Exit cable 50cm (w/ connector)

STANDARD

HIGH OUTPUT

** Fuse option available with Standard or 10kV configurations (Specify SF or UF)

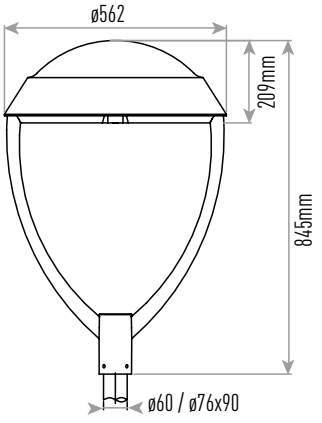
Ordering information is for reference only. Some product configurations are not available. Please consult spec sheets for specific product availability and for further details.

New Finishes

CI Classic Ivory **HB** Heritage Brown **BG** Brutalist Grey **LG** Landscape Green

Dimensions

Weight: 13.2 kg



Cree® CIRCULAR - Suspended

FEATURES

- Full cut-off optics (NanoOptic® Precision Delivery Grid™)
- Input Power: A = 45W / B=63W
- Lumen output: Up to 8000Lm
- Efficacy: Up to 140m/W
- CCT: 3000K, 4000K, 5700K
  (CRI Standard min.70, CRI 80 @3000K on request for MOQ)
- Initial Colour Consistency: 4 MacAdam steps
- Input Voltage: 220-240V
- Driver equipped with temperature sensor to preserve optimal working conditions
- Power factor: Up to > 0.95 at full load
- Lifetime: L80F10 Up to >130Khrs Ta=25°C (>140Khrs L80 IESNA TM-21)
- Surge protection according to EN 61000-4-5 and EN 61547: 6kV CM/DM surge immunity (Input power A); up to 10kV CM/DM surge immunity (Input power B). Class I SPD equipped with LED signal.
- Fuse option available
- Operative temperature: -40°C up to +50°C
- Insulation class: Class I – Class II
- Enclosure rated per IEC 60529: IP65 (Input power A); IP66 (Input power B)
- Impact resistance IK08
- Electrical connection / cabling: Cable type H05RN-F, Precabled with connector; Cable length 50 cm.
- Control options: (Input power A) Field Adjustable Output, Virtual Midnight; (Input power B)Field Adjustable Output, Virtual Midnight reprog., Dimming 1-10V, DALI, Dynadimmer, Constant Lumen Output
- LED Board equipped with integral ESD and Surge protection

CONSTRUCTION AND MATERIALS

- Die cast aluminum housing
- High resistance powder coating with increased anti-ageing and anti-corrosion performance for long weathering and reliability
- Luminaire is designed to mount directly on wall brackets or as a rigid cord suspension by means of dedicated accessories

WARRANTY AND CERTIFICATIONS

- Limited Warranty†: 5 years on luminaire
- CE mark / CB mark (Input power B) / RoHS compliant
- UMSUG Charge code (UK Power performance test)
- Risk group exempt in accordance with Standard CEI EN 62471 for photobiological safety (Tested IEC/TR62778)
- Luminaire and finish endurance tested to withstand 2,500 hours of elevated ambient salt fog conditions as defined in ASTM Standard B 117
- Compliant to: EN 60598-1; EN 60598-2-3

2LG Type II long | **275** Type II short 0.75 | **210** Type II short 1,0 | **2SH** Type II short | **3SH** Type III short | **3ME** Type III medium | **4ME** Type IV medium | **5ME** Type V medium | **5SH** Type V Short

† See www.cree-europe.com/en/resources/warranty for warranty terms

Ordering Information

Example: UCR-E-9-2LG-A-30K-+-24-BK-FA-S-00

UCR	-	E	-	9	-	2LG	-	A	-	30K	-	+	-	24	-	BK	-	FA	-	S	-	00
Product		**Version**		**Mounting**		**Optic**		**Input Power**		**CCT**		**Insulation Class**		**Voltage**		**Finish**		**Control Options**		**Variant**		**Cable length**
UCR	-	E	-	**9** Suspended **L*** Rigid cord	-	**2LG** Type II long **275** Type II short 0.75 **210** Type II short 1,0 **2SH** Type II short **3SH** Type III short **3ME** Type III medium **4ME** Type IV medium **5ME** Type V medium **5SH** Type V short	-	**A** 45W	-	**30K** 3000K **40K** 4000K **57K** 5700K	-	**+** Class 1 **^** Class 2	-	**24** 220-240V	-	**BK** Black **CI** Classic Ivory **HB** Heritage Brown **BG** Brutalist Grey **LG** Landscape Green	-	**FA** Field adjustable **VM** Virtual Midnight	-	**S** Standard **F** Fuse	-	**00** No cable
								B 63W		**30K** 3000K **40K** 4000K **57K** 5700K		**+** Class 1 **^** Class 2		**24** 220-240V		**BK** Black **CI** Classic Ivory **HB** Heritage Brown **BG** Brutalist Grey **LG** Landscape Green		**FX** Fixed Output **Q** Field Adjustable Output **DM** Dimmable 1-10V **DQ** Field adjustable dimming **Y - Z** Virtual midnight field programmable **DL** DALI **DY** Dynadimmer **DC** DynaDimmer + CLO **CL** Constant Lumen Output		**S** Standard **U** 10kV **F**** Fuse		**01** Exit cable 50cm (w/ connector)

STANDARD

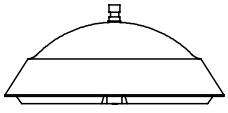
HIGH OUTPUT

** Fuse option available with Standard or 10kV configurations (Specify SF or UF)

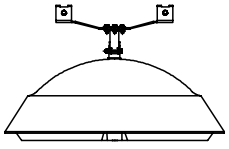
Ordering information is for reference only. Some product configurations are not available. Please consult spec sheets for specific product availability and for further details.

Mounting Options

9
SUSPENDED



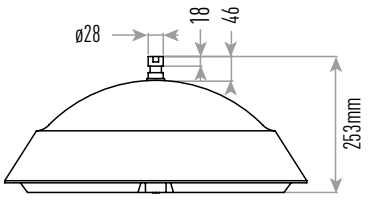
L*
RIGID CORD SUSPENDED



* MOUNTING "L" TO BE COMPLETED WITH DEDICATED BRACKET	
PM-L/URB/A2-GR	Rigid cord bracket AISI304

Dimensions

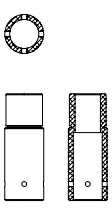
Weight: 8.5 kg



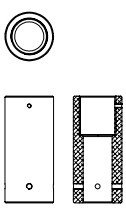
Accessory Information

***ACCESSORIES FOR MOUNTING SYSTEM 9 (SUSPENDED) - ADAPTORS**

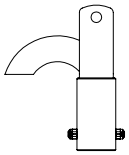
MALE CONNECTION
AD0011S03V - External thread 1" 1/8
AD0012S03V - External thread 1"
AD0013S03V - External thread ¾"
AD0014S03V -External thread ½"



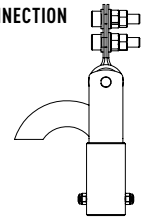
FEMALE CONNECTION
AD0006S03V - Internal thread 1" 1/8
AD0008S03V - Internal thread 1"
AD0009S03V - Internal thread ¾"
AD0010S03V -Internal thread ½"



PIVOTING CONNECTION
AD0015S03V



PIVOTING CONNECTION
AD0016S03V



Cree® MODERN - Adjustable Arm

FEATURES

- Full cut-off optics (NanoOptic® Precision Delivery Grid™)
- Input Power: A = 45W / B=63W
- Lumen output: Up to 8000Lm
- Efficacy: Up to 140m/W
- CCT: 3000K, 4000K, 5700K
  (CRI Standard min.70, CRI 80 @3000K on request for MOQ)
- Initial Colour Consistency: 4 MacAdam steps
- Input Voltage: 220-240V
- Driver equipped with temperature sensor to preserve optimal working conditions
- Power factor: Up to > 0.95 at full load
- Lifetime: L80F10 Up to >130Khrs Ta=25°C (>140Khrs L80 IESNA TM-21)
- Surge protection according to EN 61000-4-5 and EN 61547: 6kV CM/DM surge immunity (Input power A); up to 10kV CM/DM surge immunity (Input power B). Class I SPD equipped with LED signal.
- Fuse option available
- Operative temperature: -40°C up to +50°C
- Insulation class: Class I – Class II
- Enclosure rated per IEC 60529: IP65 (Input power A); IP66 (Input power B)
- Impact resistance IK08
- Electrical connection / cabling: Cable type H05RN-F, Precabled with connector; Cable length 50 cm.
- Control options: (Input power A) Field Adjustable Output, Virtual Midnight; (Input power B)Field Adjustable Output, Virtual Midnight reprog., Dimming 1-10V, DALI, Dynadimmer, Constant Lumen Output
- LED Board equipped with integral ESD and Surge protection

CONSTRUCTION AND MATERIALS

- Die cast aluminum housing
- High resistance powder coating with increased anti-ageing and anti-corrosion performance for long weathering and reliability
- Luminaire is designed to mount directly to 60mm outer dimension tenons or poles. Full housing adjustability with integrated mechanical locking system.

WARRANTY AND CERTIFICATIONS

- Limited Warranty†: 5 years on luminaire
- CE mark / CB mark (Input power B) / RoHS compliant
- UMSUG Charge code (UK Power performance test)
- Risk group exempt in accordance with Standard CEI EN 62471 for photobiological safety (Tested IEC/TR62778)
- Luminaire and finish endurance tested to withstand 2,500 hours of elevated ambient salt fog conditions as defined in ASTM Standard B 117
- Compliant to: EN 60598-1; EN 60598-2-3;

† See www.cree-europe.com/en/resources/warranty for warranty terms

Ordering Information

Example: UMD-E-3-2LG-A-30K-+-24-BK-FA-S-01

UMD	-	E	-	3	-	2LG	-	A	-	30K	-	+	-	24	-	BK	-	FA	-	S	-	01
Product		**Version**		**Mounting**		**Optic**		**Input Power**		**CCT**		**Insulation Class**		**Voltage**		**Finish**		**Control Options**		**Variant**		**Cable length**
UMD	-	E	-	**3** Side Arm	-	**2LG** Type II long **275** Type II short 0.75 **210** Type II short 1,0 **2SH** Type II short **3SH** Type III short **3ME** Type III medium **4ME** Type IV medium **5ME** Type V medium **5SH** Type V short	-	**A** 45W	-	**30K** 3000K **40K** 4000K **57K** 5700K	-	**+** Class 1 **^** Class 2	-	**24** 220-240V	-	**BK** Black **CI** Classic Ivory **HB** Heritage Brown **BG** Brutalist Grey **LG** Landscape Green	-	**FA** **Field adjustable** **VM** **Virtual Midnight**	-	**S** Standard **F** Fuse	-	**01** Exit cable 50cm (w/ connector)
								B 63W		**30K** 3000K **40K** 4000K **57K** 5700K		**+** Class 1 **^** Class 2		**24** 220-240V		**BK** Black **CI** Classic Ivory **HB** Heritage Brown **BG** Brutalist Grey **LG** Landscape Green		**FX** **Fixed Output** **Q** **Field Adjustable Output** **DM** **Dimmable 1-10V** **DQ** **Field adjustable dimming** **Y - Z** **Virtual midnight field programmable** **DL** **DALI** **DY** **Dynadimmer** **DC** **DynaDimmer + CLO** **CL** **Constant Lumen Output**		**S** Standard **U** 10kV **F**** Fuse		**01** Exit cable 50cm (w/ connector)

STANDARD

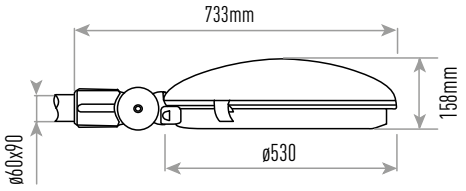
HIGH OUTPUT

** Fuse option available with Standard or 10kV configurations (Specify SF or UF)

Ordering information is for reference only. Some product configurations are not available. Please consult spec sheets for specific product availability and for further details.

Dimensions

Weight: 9.5 kg



Cree® MODERN - Post-top

FEATURES

- Full cut-off optics (NanoOptic® Precision Delivery Grid™)
- Input Power: A = 45W / B=63W
- Lumen output: Up to 8000Lm
- Efficacy: Up to 140m/W
- CCT: 3000K, 4000K, 5700K
  (CRI Standard min.70, CRI 80 @3000K on request for MOQ)
- Initial Colour Consistency: 4 MacAdam steps
- Input Voltage: 220-240V
- Driver equipped with temperature sensor to preserve optimal working conditions
- Power factor: Up to > 0.95 at full load
- Lifetime: L80F10 Up to >130Khrs Ta=25°C (>140Khrs L80 IESNA TM-21)
- Surge protection according to EN 61000-4-5 and EN 61547: 6kV CM/DM surge immunity (Input power A); up to 10kV CM/DM surge immunity (Input power B). Class I SPD equipped with LED signal.
- Fuse option available
- Operative temperature: -40°C up to +50°C
- Insulation class: Class I – Class II
- Enclosure rated per IEC 60529: IP65 (Input power A); IP66 (Input power B)
- Impact resistance IK08
- Electrical connection / cabling: Cable type H05RN-F, Precabled with connector; Cable length 50 cm.
- Control options: (Input power A) Field Adjustable Output, Virtual Midnight; (Input power B)Field Adjustable Output, Virtual Midnight reprog., Dimming 1-10V, DALI, Dynadimmer, Constant Lumen Output
- LED Board equipped with integral ESD and Surge protection

CONSTRUCTION AND MATERIALS

- Die cast aluminum housing
- High resistance powder coating with increased anti-ageing and anti-corrosion performance for long weathering and reliability
- Luminaire is designed to mount directly to 60mm up to 76mm outer dimension tenons or poles

WARRANTY AND CERTIFICATIONS

- Limited Warranty†: 5 years on luminaire
- CE mark / CB mark (Input power B) / RoHS compliant
- UMSUG Charge code (UK Power performance test)
- Risk group exempt in accordance with Standard CEI EN 62471 for photobiological safety (Tested IEC/TR62778)
- Luminaire and finish endurance tested to withstand 2,500 hours of elevated ambient salt fog conditions as defined in ASTM Standard B 117
- Compliant to: EN 60598-1; EN 60598-2-3

2LG Type II long | **275** Type II short 0.75 | **210** Type II short 1,0 | **2SH** Type II short | **3SH** Type III short | **3ME** Type III medium | **4ME** Type IV medium | **5ME** Type V medium | **5SH** Type V Short

† See www.cree-europe.com/en/resources/warranty for warranty terms

Ordering Information

Example: UMD-E-F-2LG-A-30K-+-24-BK-FA-S-01

UMD	-	E	-	F	-	2LG	-	A	-	30K	-	+	-	24	-	BK	-	FA	-	S	-	01
Product		**Version**		**Mounting**		**Optic**		**Input Power**		**CCT**		**Insulation Class**		**Voltage**		**Finish**		**Control Options**		**Variant**		**Cable length**
UMD	-	E	-	**F** Post-top	-	**2LG** Type II long **275** Type II short 0.75 **210** Type II short 1,0 **2SH** Type II short **3SH** Type III short **3ME** Type III medium **4ME** Type IV medium **5ME** Type V medium **5SH** Type V short	-	**A** 45W	-	**30K** 3000K **40K** 4000K **57K** 5700K	-	**+** Class 1 **^** Class 2	-	**24** 220-240V	-	**BK** Black **CI** Classic Ivory **HB** Heritage Brown **BG** Brutalist Grey **LG** Landscape Green	-	**FA** **Field adjustable** **VM** **Virtual Midnight**	-	**S** Standard **F** Fuse	-	**01** Exit cable 50cm (w/ connector)
								B 63W		**30K** 3000K **40K** 4000K **57K** 5700K		**+** Class 1 **^** Class 2		**24** 220-240V		**BK** Black **CI** Classic Ivory **HB** Heritage Brown **BG** Brutalist Grey **LG** Landscape Green		**FX** **Fixed Output** **Q** **Field Adjustable Output** **DM** **Dimmable 1-10V** **DQ** **Field adjustable dimming** **Y - Z** **Virtual midnight field programmable** **DL** **DALI** **DY** **Dynadimmer** **DC** **DynaDimmer + CLO** **CL** **Constant Lumen Output**		**S** Standard **U** 10kV **F**** Fuse		**01** Exit cable 50cm (w/ connector)

STANDARD

HIGH OUTPUT

** Fuse option available with Standard or 10kV configurations (Specify SF or UF)

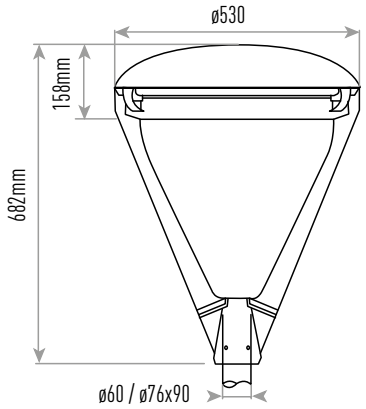
Ordering information is for reference only. Some product configurations are not available. Please consult spec sheets for specific product availability and for further details.

New Finishes

CI Classic Ivory **HB** Heritage Brown **BG** Brutalist Grey **LG** Landscape Green

Dimensions

Weight: 9.5 kg



Cree® RKT Series

Yesterday's products, today's technology.

The Cree RKT Series allows municipalities to seamlessly transform existing inefficient post-top luminaires with poor optical control into energy-efficient , low-maintenance LED luminaires.

The result is improved optical control and target efficacy that combines a classic day-form style with a beautiful nightscape appearance. The easy-to-install upgrade kit can be easily adapted onto the existing luminaire, resulting in little waste while maintaining a consistent look – a seamless transition from yesterday to today.

Cree® RKT

RKT Standard

RKT High Output

FEATURES

- Full cut-off optics (NanoOptic® Precision Delivery Grid™)
- Input Power: A = 45W / B=63W
- Lumen output: Up to 8000Lm
- Efficacy: Up to 140m/W
- CCT: 3000K, 4000K, 5700K
  (CRI Standard min.70, CRI 80 @3000K on request for MOQ)
- Initial Colour Consistency: 4 MacAdam steps
- Input Voltage: 220-240V
- Driver equipped with temperature sensor to preserve optimal working conditions
- Power factor: Up to > 0.95 at full load
- Lifetime: L80F10 Up to >100Khrs Ta=25°C (>100Khrs L80 IESNA TM-21)
- Surge protection according to EN 61000-4-5 and EN 61547: 6kV CM/DM surge immunity (Input power A); up to 10kV CM/DM surge immunity (Input power B). Class I SPD equipped with LED signal.
- Fuse option available
- Operative temperature: -40°C up to +40°C
- Insulation class: Class I – Class II
- Enclosure rated per IEC 60529: IP65 (Input power A); IP66 (Input power B)
- Impact resistance IK08
- Electrical connection / cabling: Cable type H05RN-F, Precabled with connector; Cable length 50 cm.
- Control options: (Input power A) Field Adjustable Output, Virtual Midnight; (Input power B)Field Adjustable Output, Virtual Midnight reprog., Dimming 1-10V, DALI, Dynadimmer, Constant Lumen Output
- LED Board equipped with integral ESD and Surge protection

CONSTRUCTION AND MATERIALS

- Aluminium mounting plate equipped with LED board and optics guaranteeing an optimized thermal management, to ensure long term reliability
- High resistance powder coating with increased anti-ageing and anti-corrosion performance for long weathering and reliability
- The kit is designed to mount onto existing fixtures in order to retrofit them. The plate can be customized in terms of size in order to fit the existing fixture or selected in the standard square shape.

WARRANTY AND CERTIFICATIONS

- Limited Warranty†: 5 years on luminaire
- CE mark / CB mark (Input power B) / RoHS compliant
- Risk group exempt in accordance with Standard CEI EN 62471 for photobiological safety (Tested IEC/TR62778)
- Luminaire and finish endurance tested to withstand 2,500 hours of elevated ambient salt fog conditions as defined in ASTM Standard B 117
- Compliant to: EN 60598-1; EN 60598-2-3

2LG Type II long | **275** Type II short 0.75 | **210** Type II short 1,0 | **2SH** Type II short | **3SH** Type III short | **3ME** Type III medium | **4ME** Type IV medium | **5ME** Type V medium | **5SH** Type V Short

† See www.cree-europe.com/en/resources/warranty for warranty terms

Ordering Information

Example: RKT-E-2LG-A-30K-+-24-WH-FA-S-00-A00

RKT	-	E	-	2LG	-	A	-	30K	-	+	-	24	-	WH	-	FA	-	S	-	00	-	A00
Product		**Version**		**Optic**		**Input Power**		**CCT**		**Insulation Class**		**Voltage**		**Finish**		**Control Options**		**Variant**		**Cable length**		**Size**
RKT	-	E	-	**2LG** Type II long **275** Type II short 0.75 **210** Type II short 1,0 **2SH** Type II short	-	**A** 45W	-	**30K** 3000K **40K** 4000K **57K** 5700K	-	**+** Class 1 **^** Class 2	-	**24** 220-240V	-	**WH** White	-	**FA** Field adjustable **VM** Virtual Midnight	-	**S** Standard **F** Fuse	-	**00** No cable	-	**A00** 31x31cm **AXX** Custom Size (to be specified)
				3SH Type III short **3ME** Type III medium **4ME** Type IV medium **5ME** Type V medium **5SH** Type V short		**B** 63W		**30K** 3000K **40K** 4000K **57K** 5700K		**+** Class 1 **^** Class 2		**24** 220-240V		**WH** White		**FX** Fixed Output **Q** Field Adjustable Output **DM** Dimmable 1-10V **DQ** Field adjustable dimming **Y - Z** Virtual midnight field programmable **DL** DALI **DY** Dynadimmer **DC** DynaDimmer + CLO **CL** Constant Lumen Output		**S** Standard **U** 10kV **F**** Fuse		**01** Exit cable 50cm (w/ connector)		**A00** 31x31cm **AXX** Custom Size (to be specified)

STANDARD

HIGH OUTPUT

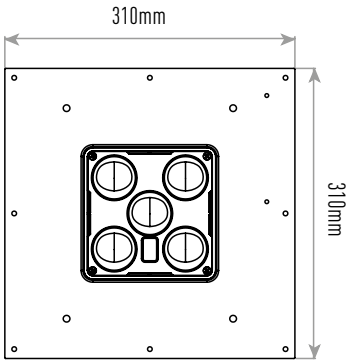
** Fuse option available with Standard or 10kV configurations (Specify SF or UF)

Ordering information is for reference only. Some product configurations are not available. Please consult spec sheets for specific product availability and for further details.

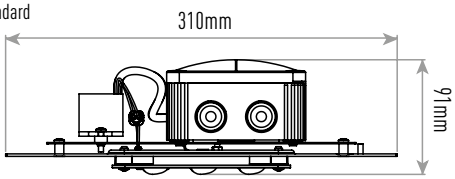
On request we can design special shapes of the Retrofit Kit according to the exigences of the project.

Dimensions

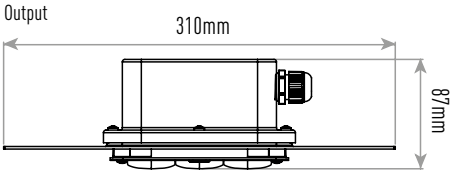
Weight: 2 kg



RKT Standard



RKT High Output



Cree® EDGE PATHWAY Series

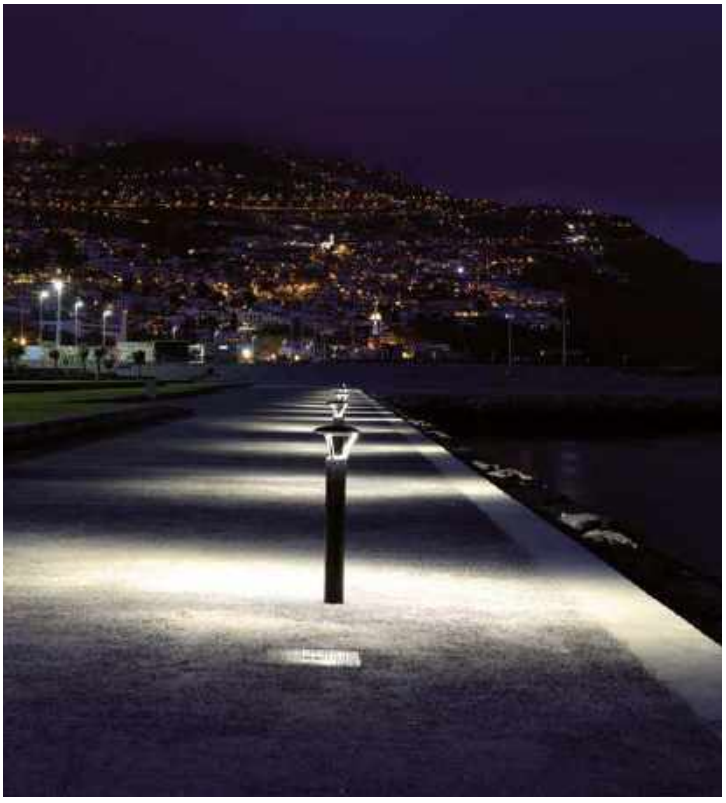
A pathway to style and performance.

Cree Edge Pathway is a solution specifically designed for lighting footpaths, access paths and building perimeters.

It is designed to blend with any architectural style and, thanks to the three expected configurations, permits extreme flexibility for lighting design projects.


OTTAWA WORKSHOPS

Cree® EDGE PATHWAY



FEATURES

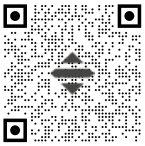
- Full cut-off optics (NanoOptic®)
- Input power: Up to 34W
- Lumen output: Up to 3370Lm
- System efficacy: Up to 100lm/W
- CCT: 3500K, 4000K, 5700K (CRI: Minimum 75)
- Initial Colour Consistency: 7 MacAdam steps
- Input Voltage: 220-240V
- Power factor: Up to > 0.9 at full load
- Lifetime: L80F10 Up to >100Khrs Ta=25°C (>100Khrs L80 IESNA TM-21)
- Surge protection: 10kV CM/DM surge immunity according to EN 61000-4-5 and EN 61547
- Operative temperature: -40°C up to +50°C
- Insulation class: Class I – Class II
- Enclosure rated IP65 per IEC 60529
- Impact resistance IK08
- Electrical connection / cabling: Cable type H07RN-F
- Control options: Fixed Output

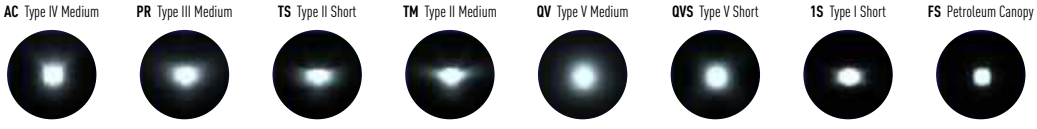
CONSTRUCTION AND MATERIALS

- Die cast aluminium housing integrated with extruded anodized aluminium components
- Die cast parts are treated with exclusive Colorfast DeltaGuard® finish featuring an E-Coat epoxy primer with an ultra-durable powder topcoat, providing excellent resistance to corrosion, ultraviolet degradation and abrasion

WARRANTY AND CERTIFICATIONS

- Limited Warranty†: Class 1 — 10 years on Colorfast DeltaGuard® finish / 10 years on luminaire
- Class 2 — 10 years on Colorfast DeltaGuard® finish / 5 years on luminaire
- CE mark / ROHS COMPLIANT
- Risk group exempt in accordance with Standard CEI EN 62471 for photobiological safety (Tested IEC/TR62778)
- Luminaire and finish endurance tested to withstand 5,000 hours of elevated ambient salt fog conditions as defined in ASTM Standard B 117
- Compliant to: EN 60598-1; EN 60598-2-3





† See www.cree-europe.com/en/resources/warranty for warranty terms

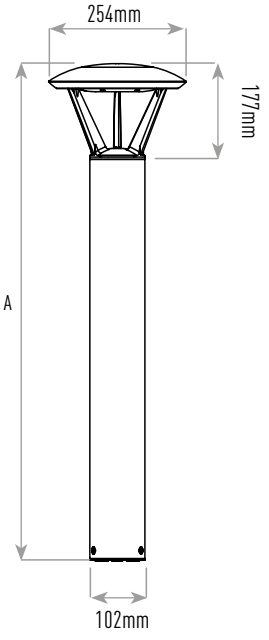
Ordering Information

Example: LXHAC01804E43SVI3

L	X	H	AC	O	18	04	E	43	SV	I3
Product	**Insulation Class**	**Model**	**Optic**	**Mounting**	**LED Count**	**Height**	**Series**	**Options**	**Color Options**	**Drive Current**
L Edge	**X** Class 1 **Y** Class 2	**H** Pathway	**AC** Type IV Medium **PR** Type III Medium **TS** Type II Short **TM** Type II Medium **QV** Type V Medium **QVS** Type V Short **1S** Type I Short **FS** Petroleum Canopy	**0** Direct mount	**18**	**04** 450mm **09** 900mm **24** 2400mm	**E**	**No code** 5700K **43** 4000K	**SV** Silver **BK** Black **BZ** Bronze **SB** Silver Bronze **WH** White	**I3** 350mA **I5** 525mA - Available only in Class 1

Ordering information is for reference only. Some product configurations are not available. Please consult spec sheets for specific product availability and for further details.

Dimensions



Height	Dimension	Measurement	Weight
04	"A"	450mm	5,30kg
09		900mm	7,00kg
24		2400mm	12,00kg

Cree® CFL Series

Flood lighting with precise optical control.

The CFL Series Floodlight improve the overall look of façades and signage. The slim, low profile design adds architectural appeal to any general flood lighting application with crisp uniform white light that offer exacting illumination performance maximizing energy savings. With remarkable light quality and smooth white light, buildings and signage will stand out in the crowd.


MODINE

PLUS - Cree CFL

Slim, low profile design

An essential, lightweight design has been developed for the housing in order to minimize the visual impact once installed, maximizing at the same time the heat management and performances.

The fixture's body is made of Diecast aluminium treated with electrophoresis and powder coating for strong anti-corrosion performance. Products are tested in Salt spray chamber for 2500hrs in order to guarantee their long-lasting quality and reliability.

Optic selection

A complete selection of lighting effects is available to manage every project requirement. The four beam apertures included in the Series cover a range of distribution from asymmetric to Flood and Narrow intensive light beams.

Easy maintenance

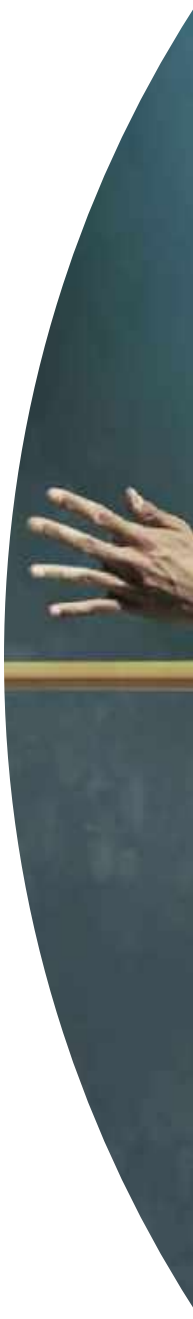
Access to the driver compartment is easy and safe through external buckles integrated.

The fixture features an extra clear 4mm silk printed tempered glass flip design reaching IK08 protection without any screws in the surface. Furthermore an integrated valve on the fixture's body avoids internal fogging and frosting.

Secured aiming

The fixtures can be adjusted tool free in steps of 10°with a graduated scale to help setting the lighting aiming accurately.

The adjustable bracket has high strength and corrosion resistance. Bracket surface treated by means of hot galvanizing processing, providing strong corrosion resistance.



Cree® CFL small

FEATURES

- Input Power: A = 40W
- Lumen output: Up to 5400lm
- System efficacy: Up to 135lm/W
- CCT: 4000K (CRI: Minimum 70)
- Initial Colour Consistency: 5 steps MacAdam
- Input Voltage: 220-240V
- Power factor: Up to > 0.92 at full load
- Lifetime: L80F10 Up to >180Khrs Ta=25°C (>180Khrs L80 IESNA TM-21)
- Surge protection: 10kV CM / 6kV DM surge immunity according to EN 61000-4-5 and EN 61547
- Operative temperature: -30°C up to +40°C
- Insulation class: Class I
- Enclosure rated IP66 per IEC 60529
- Impact resistance IK08
- Cable type H07RN-F (Cable length 1mt)
- Control options: Fixed Output
- Tool-less entry through buckles integrated
- Tool free adjustable bracket +/-90° by means of mechanical locking with graduated scale of 10°
- Vent integrated to prevent moisture and balance atmosphere pressure

CONSTRUCTION AND MATERIALS

- Die cast aluminum housing treated with electrophoresis and powder coating for strong anti-corrosion performance
- Extra clear silk printed tempered glass
- Bracket surface featuring hot galvanizing processing, providing strong corrosion resistance

WARRANTY AND CERTIFICATIONS

- Limited Warranty†: 5 years
- CE mark / CB mark / ENEC mark / RoHs compliant
- Risk group exempt in accordance with Standard CEI EN 62471 for photobiological safety (Tested IEC/TR62778)
- Luminaire and finish endurance tested to withstand 2,500 hours of elevated ambient salt fog conditions as defined in ASTM Standard B 117
- Compliant to: EN 60598-1; EN 60598-2-3

ASM Asymmetric

WFL Wide Flood

30 Flood 30°

15 Spot 15°

† See www.cree-europe.com/en/resources/warranty for warranty terms

Ordering Information

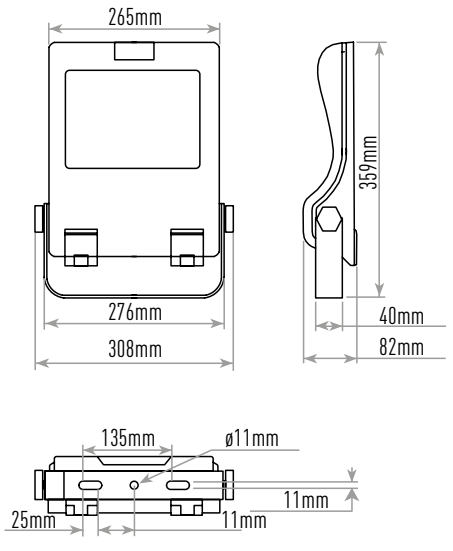
Example: CFL-ASM-A-40K-+-24-BK-FX-01

CFL	-	ASM	-	A	-	40K	-	+	-	24	-	BK	-	FX	-	01
Product		**Optic**		**Input Power**		**CCT**		**Insulation Class**		**Voltage**		**Finish**		**Options**		**Cable length**
CFL	-	**ASM** Asymmetric **WFL** Wide Flood **30** Flood 30° **15** Spot 15°	-	**A** 40W	-	**40K** Ra70 **30K** Ra70 (on request for MOQ)	-	**+** Class 1	-	**24** 220-240V	-	**BK** Black	-	**FX** **Fixed Output**	-	**01** Exit cable XXcm

Ordering information is for reference only. Some product configurations are not available. Please consult spec sheets for specific product availability and for further details.

Dimensions

Weight: 4,3 kg



Cree® CFL medium

FEATURES

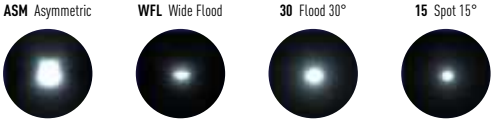
- Input Power: C = 100W, D = 150W
- Lumen output: 13500 - 20000lm
- System efficacy: Up to 135lm/W
- CCT: 4000K (CRI: Minimum 70)
- Initial Colour Consistency: 5 steps MacAdam
- Input Voltage: 220-240V
- Power factor: Up to > 0.92 at full load
- Lifetime: L80F10 Up to >125Khrs Ta=25°C (>125Khrs L80 IESNA TM-21)
- Surge protection: 10kV CM / 6kV DM surge immunity according to EN 61000-4-5 and EN 61547
- Operative temperature: -30°C up to +40°C
- Insulation class: Class I
- Enclosure rated IP66 per IEC 60529
- Impact resistance IK08
- Cable type H07RN-F (Cable length 1mt)
- Control options: Fixed Output
- Tool-less entry through buckles integrated
- Tool free adjustable bracket +/-90° by means of mechanical locking with graduated scale of 10°
- Vent integrated to prevent moisture and balance atmosphere pressure

CONSTRUCTION AND MATERIALS

- Die cast aluminum housing treated with electrophoresis and powder coating for strong anti-corrosion performance
- Extra clear silk printed tempered glass
- Bracket surface featuring hot galvanizing processing, providing strong corrosion resistance

WARRANTY AND CERTIFICATIONS

- Limited Warranty†: 5 years
- CE mark
- Risk group exempt in accordance with Standard CEI EN 62471 for photobiological safety (Tested IEC/TR62778)
- Luminaire and finish endurance tested to withstand 2,500 hours of elevated ambient salt fog conditions as defined in ASTM Standard B 117
- Compliant to: EN 60598-1; EN 60598-2-3



† See www.cree-europe.com/en/resources/warranty for warranty terms

Ordering Information

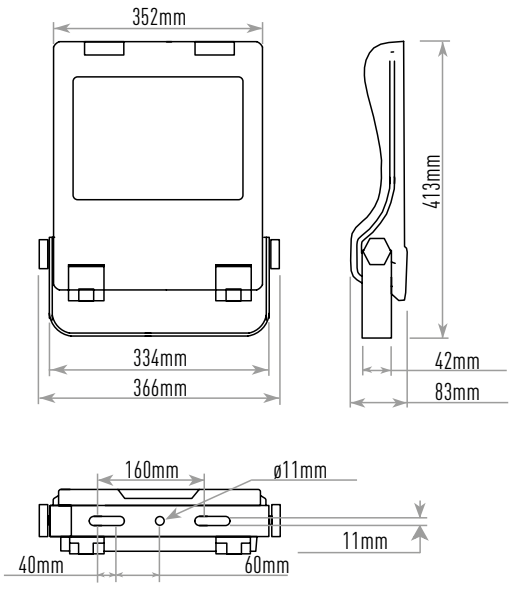
Example: CFL-ASM-C-40K-+-24-BK-FX-01

CFL	-	ASM	-	C	-	40K	-	+	-	24	-	BK	-	FX	-	01
Product		**Optic**		**Input Power**		**CCT**		**Insulation Class**		**Voltage**		**Finish**		**Options**		**Cable length**
CFL	-	**ASM** Asymmetric **WFL** Wide Flood **30** Flood 30° **15** Spot 15°	-	**C** 100W **D** 150W	-	**40K** Ra70 **30K** Ra70 (on request for MOQ)	-	**+** Class 1	-	**24** 220-240V	-	**BK** Black	-	**FX** **Fixed Output**	-	**01** Exit cable XXcm

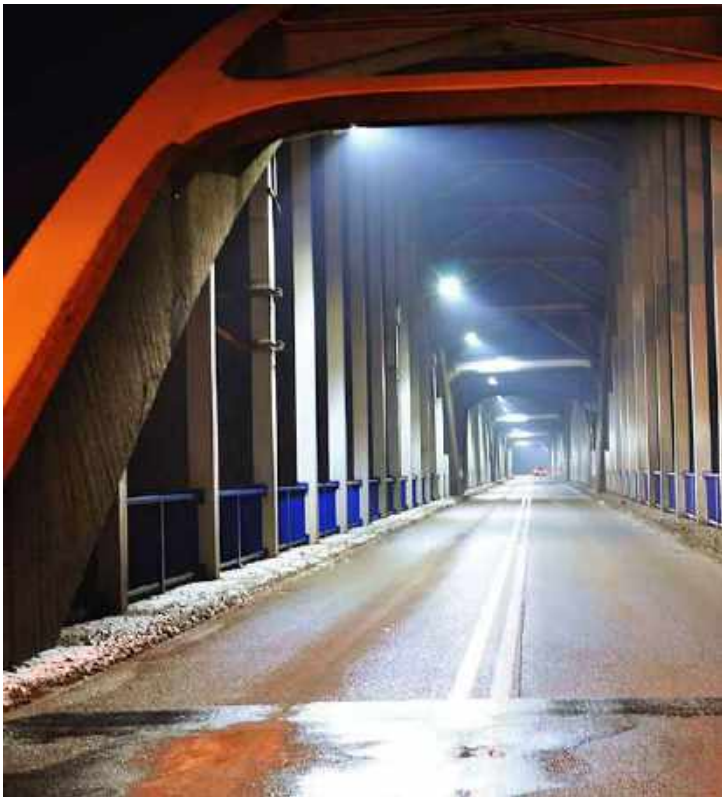
Ordering information is for reference only. Some product configurations are not available. Please consult spec sheets for specific product availability and for further details.

Dimensions

Weight: 6,8 kg



Cree® CFL large



FEATURES

- Input Power: E = 200W; F = 250W
- Lumen output: 27000 - 32000lm
- System efficacy: Up to 135lm/W
- CCT: 4000K (CRI: Minimum 70)
- Initial Colour Consistency: 5 steps MacAdam
- Input Voltage: 220-240V
- Power factor: Up to > 0.92 at full load
- Lifetime: L80F10 Up to >110Khrs Ta=25°C (>120Khrs L80 IESNA TM-21)
- Surge protection: 10kV CM / 6kV DM surge immunity according to EN 61000-4-5 and EN 61547
- Operative temperature: -30°C up to +40°C
- Insulation class: Class I
- Enclosure rated IP66 per IEC 60529
- Impact resistance IK08
- Cable type H07RN-F (Cable length 1mt)
- Control options: Fixed Output
- Tool-less entry through buckles integrated
- Tool free adjustable bracket +/-90° by means of mechanical locking with graduated scale of 10°
- Vent integrated to prevent moisture and balance atmosphere pressure

CONSTRUCTION AND MATERIALS

- Die cast aluminum housing treated with electrophoresis and powder coating for strong anti-corrosion performance
- Extra clear silk printed tempered glass
- Bracket surface featuring hot galvanizing processing, providing strong corrosion resistance

WARRANTY AND CERTIFICATIONS

- Limited Warranty†: 5 years
- CE mark
- Risk group exempt in accordance with Standard CEI EN 62471 for photobiological safety (Tested IEC/TR62778)
- Luminaire and finish endurance tested to withstand 2,500 hours of elevated ambient salt fog conditions as defined in ASTM Standard B 117
- Compliant to: EN 60598-1; EN 60598-2-3;

ASM Asymmetric

WFL Wide Flood

30 Flood 30°

15 Spot 15°

† See www.cree-europe.com/en/resources/warranty for warranty terms

Ordering Information

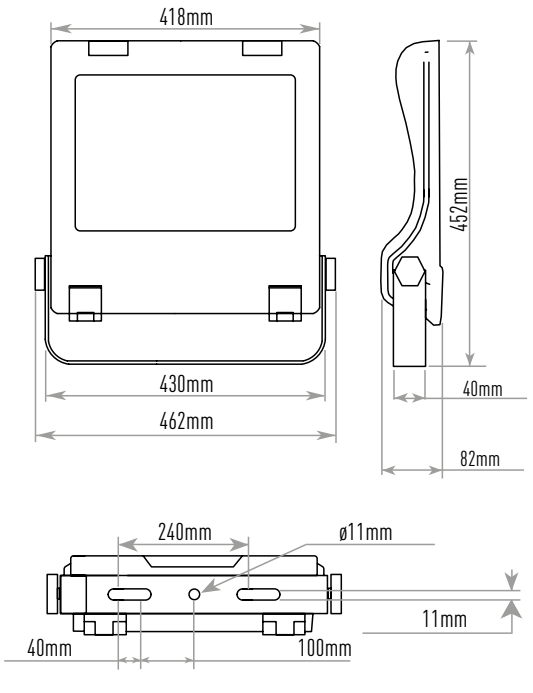
Example: CFL-ASM-E-40K-+-24-BK-FX-01

CFL	-	ASM	-	E	-	40K	-	+	-	24	-	BK	-	FX	-	01
Product		**Optic**		**Input Power**		**CCT**		**Insulation Class**		**Voltage**		**Finish**		**Options**		**Cable length**
CFL	-	**ASM** Asymmetric **WFL** Wide Flood **30** Flood 30° **15** Spot 15°	-	**E** 200W **F** 250W	-	**40K** Ra70 **30K** Ra70 (on request for MOQ)	-	**+** Class 1	-	**24** 220-240V	-	**BK** Black	-	**FX** **Fixed Output**	-	**01** Exit cable XXcm

Ordering information is for reference only. Some product configurations are not available. Please consult spec sheets for specific product availability and for further details.

Dimensions

Weight: 8,9 kg



Cree® OSQ Series

Advancing light throughout your site.

At Cree, we're obsessed with going beyond the imagined possibilities of what light can do. The OSQ Series is the result of advanced LED technology and Cree's need to constantly improve the overall performance and value of our products. The OSQ Area luminaire blends extreme optical control, advanced thermal management and modern, clean aesthetics. Built to last, the housing is rugged cast aluminum with an integral, weathertight LED driver compartment. Versatile mounting configurations offer simple installation.


STOP

PLUS - Cree OSQ Series

Exceptional light quality

Utilizing our NanoOptic® Technology, the OSQ Series has the right optics to effectively meet the illumination needs of projects while minimizing waste and spill light.

With precise optical control and increased lumen output, the OSQ™ LED Area/Flood luminaire vastly improves area and flood lighting experiences. Neighboring properties will thank you.

Energy savings

The next generation of area lighting surpasses traditional lighting technology with market-leading optical performance and an extensive lifetime, leading to energy savings of up to 70 percent compared to HID.

Increasing opportunities

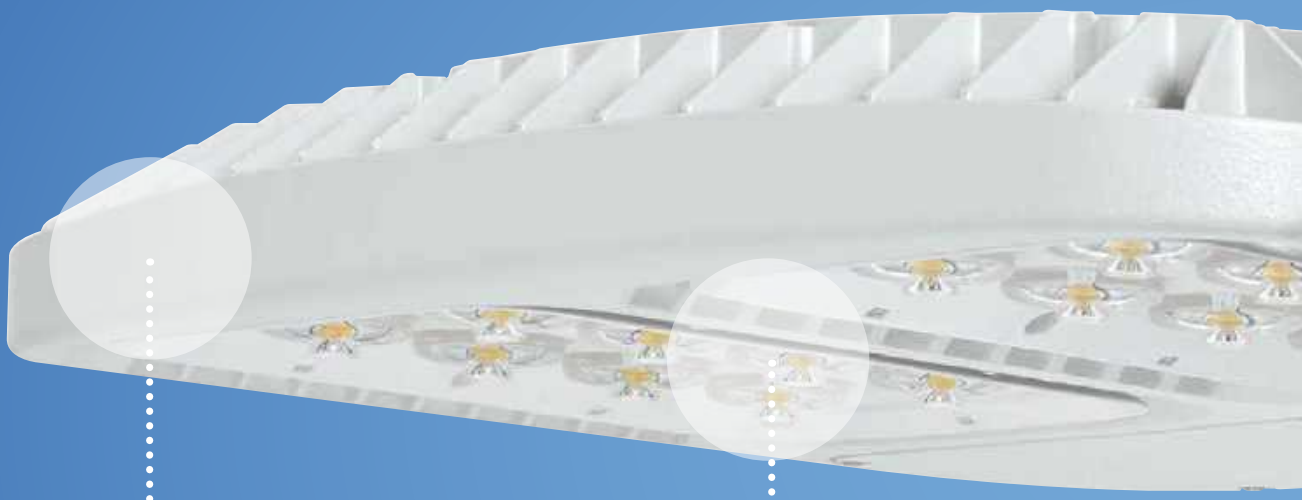
We continue to advance LED lighting solutions that outperform our first generation of luminaires. The OSQ Series High Output can now deliver up to 68,691 lumens — improving our replacement range for applications using multiple 1000W HID.

High mast

Extreme mounting heights lead to higher costs in maintenance. Avoid unnecessary relamping with our OSQ-HO luminaires that are built to last. Compared to other area light¬ing options, the OSQ-HO is smaller and lighter, making it easier to install with existing high mast rings.

TIMELESS DESIGN WITH THE TECHNOLOGY OF THE FUTURE

Cree OSQ Series blends architectural aesthetics, robust mechanics and optimal performance creating the best value LED area lighting solution.

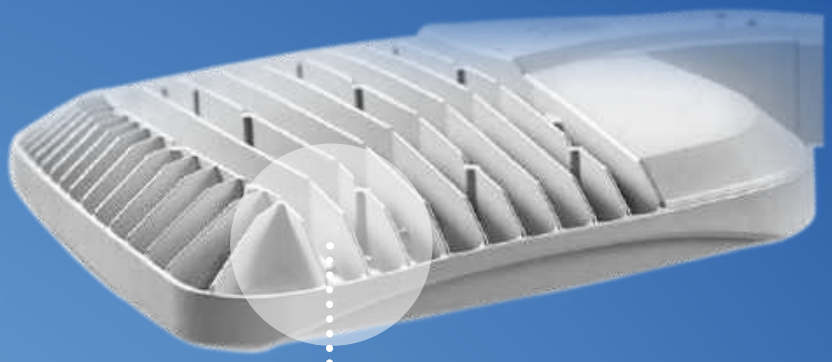


STYLE AND INTELLIGENCE COMBINE

- Sleek, modern housing provides an elegant aesthetic
- Improve the daytime look of application site and the night time environment
- Colourfast DeltaGuard® finish provides the luminaire with unrivalled protection from the elements for many years to come

PRECISE LIGHT CONTROL

- Precision optical illumination with NanoOptic® Technology
- Excellent uniformity produced by Precision Delivery Grid™ optics
- Delivering light where you want it, when you want it
- Wide variety of optical choice to meet your requirements



THERMAL OPTIMIZATION

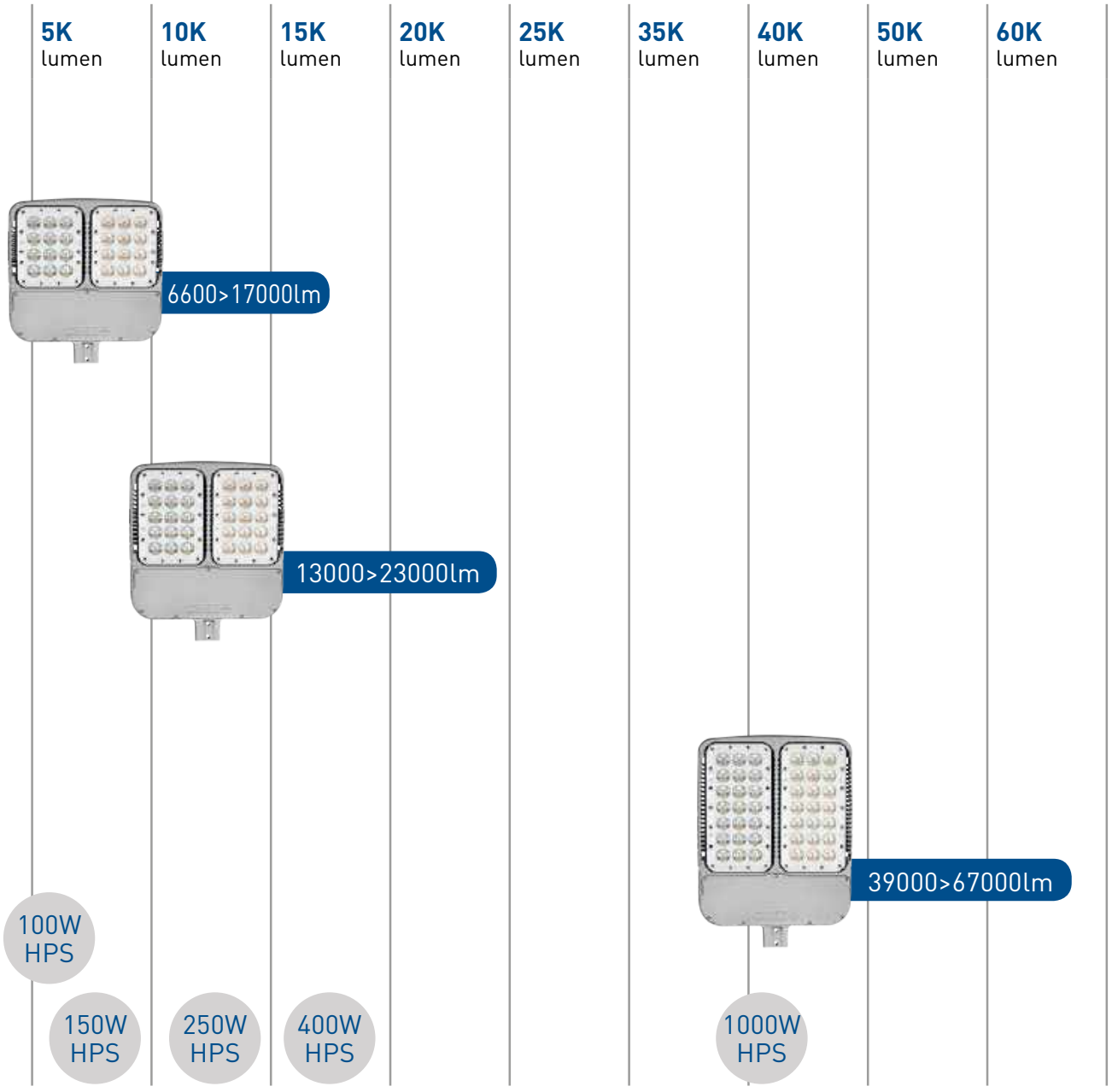
- Advanced thermal management
- Fin design allows for efficient heat transfer
- Airflow closer to LEDs for greater efficiency

VARIOUS MOUNTING OPTIONS

- Uplight or downlight configuration available
- Round or square pole mounting available
- Adjustable arm mount for angled lighting applications

OSQ Range - PERFORMANCE

The OSQ Series blends extreme optical control, advanced thermal management and light quality to bring you the latest advancements in LED technology.



Lumen Output @40K

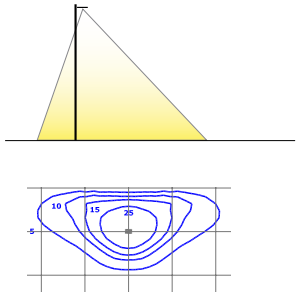
ILLUMINATION PERFORMANCE

With patented NanoOptic® Precision Delivery Grid™ available in multiple distributions, the OSQ Series, provide precise optical control for exceptional application performance and energy savings. The refractor system offers superior light control with more lumens delivered in the target area, improved uniformity ratios, and controlled high-angle brightness.

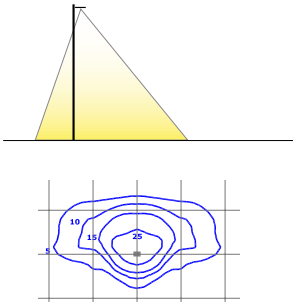
Optical system

- Utilizing highly-diffused performance optics for soft, glare-free light
- Better optical control with our NanoOptic® Precision Delivery Grid™ optic

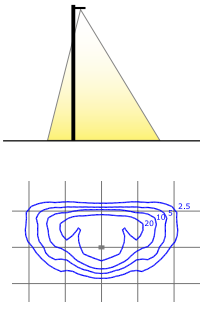
ASYMMETRIC OPTICS



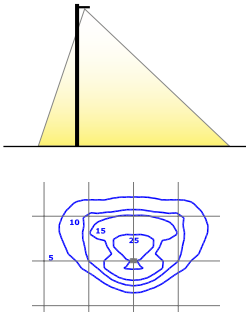
210 - Type II Short 1.0



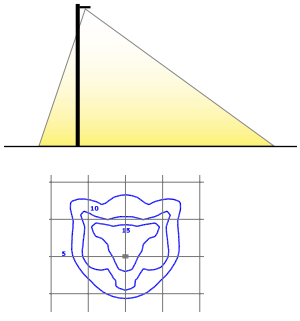
2SH - Type II Short



2ME -Type II Medium

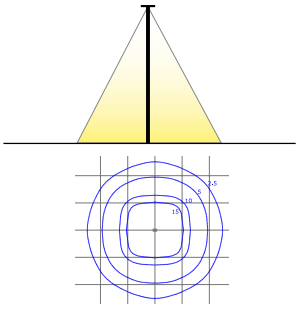


3ME - Type III Medium

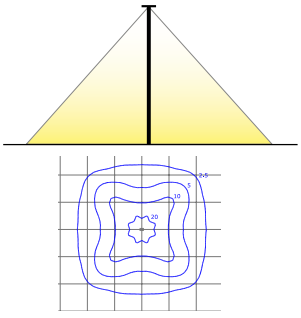


4ME- Type IV Medium

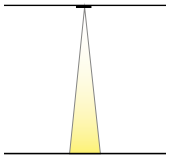
SYMMETRIC OPTICS



5SH - Type V Short



5ME - Type V Medium



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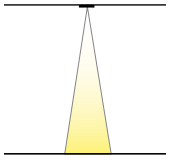

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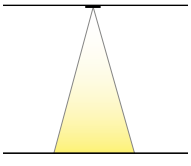

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Cree® OSQ

FEATURES

- Full cut-off optics (NanoOptic® Precision Delivery Grid™)
- Input Power: A = 112W, K = 130W, J = 168W, S = 223W
- Lumen output: 6300 – 67000lm
- System efficacy: >100lm/W
- CCT: 3000K, 4000K, 5700K
  (CRI Standard min.70, CRI 80 @3000K on request for MOQ)
- Initial Colour Consistency: 4 steps MacAdam
- Input Voltage: 220-240V
- Driver equipped with temperature sensor to preserve optimal working conditions
- Power factor: Up to > 0.9 at full load
- Lifetime: L80F10 Up to >110Khrs Ta=25°C (>110Khrs L80 IESNA TM-21)
- Surge protection: 10kV CM/DM surge immunity according to EN 61000-4-5 and EN 61547 (Class I SPD equipped with LED signal).
- Operative temperature: -40°C up to +50°C
- Insulation class: Class I
- Enclosure rated IP66 per IEC 60529
- Impact resistance IK08
- Cable type H07RN-F (Cable length Up to 10mt)
- Control options: Field Adjustable Output, Dimming 1-10V, Virtual Midnight
- Fixture assembled without the use of glues, totally dismountable and recyclable.
- LED Board equipped with integral ESD and Surge protection

CONSTRUCTION AND MATERIALS

- Die cast, low copper <0,01%, aluminum alloy housing for long weathering and reliability
- Tool-less entry
- Removable tray
- Slim, low profile design minimizes wind load requirements. Integral, weathertight LED driver compartment and high performance heat sink integrated
- Luminaire is designed to mount directly on 60mm tenons or poles through the AA (Adjustable arm) mount option and can be tilted +/-180°, in steps of 2.5°
- The DA (Direct arm) mount option adapts to 76-152mm square or round poles
- Exclusive Colorfast DeltaGuard® finish features an E-Coat epoxy primer with an ultra-durable powder topcoat, providing excellent resistance to corrosion, ultraviolet degradation and abrasion

WARRANTY AND CERTIFICATIONS

- Limited Warranty†: 10 years on Colorfast DeltaGuard® finish / 10 years on luminaire
- CE mark / RoHs compliant
- Pending certification to ANSI C136.31-2001, 3G bridge and overpass vibration standards
- Risk group exempt in accordance with Standard CEI EN 62471 for photobiological safety (Tested IEC/TR62778)
- Luminaire and finish endurance tested to withstand 5,000 hours of elevated ambient salt fog conditions as defined in ASTM Standard B 117
- Compliant to: EN 60598-1; EN 60598-2-3

2ME Type II Medium **3ME** Type III Medium **4ME** Type IV Medium **5ME** Type V Medium **5SH** Type V Short

† See www.cree-europe.com/en/resources/warranty for warranty terms

Ordering Information

Example: OSQ-E-NM-2ME-A-30K-+-24-SV-DIM

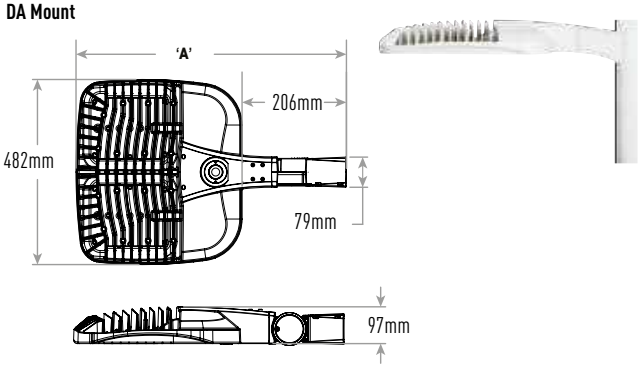
OSQ	-	E	-	NM	-	2ME	-	A	-	30K	-	+	-	24	-	SV	-	DIM	
Product		**Version**		**Mounting**		**Optic**		**Input Power**		**CCT**		**Insulation Class**		**Voltage**		**Finish**		**Control Options**	
OSQ	-	E	-	**NM** Mo mount	-	**2ME*** Type II Medium **3ME*** Type III Medium **4ME*** Type IV Medium	-	**A** 112W **K** 130W **S** 223W	-	**30K** 3000K **40K** 4000K **57K** 5700K	-	**+** Class 1	-	**24** 220-240V	-	**SV** Silver **BK** Black **BZ** Bronze **PB** Silver Bronze **WH** White	-	**DIM** Dimmable 1-10V **Q** Field Adjustable Output **VM** Virtual Midnight **RL** Rotate left **RR** Rotate right	ASYMMETRIC
						5ME Type V Medium **5SH** Type V Short		**A** 112W **J** 168W **S** 223W		**30K** 3000K **40K** 4000K **57K** 5700K		**+** Class 1		**24** 220-240V		**SV** Silver **BK** Black **BZ** Bronze **PB** Silver Bronze **WH** White		**DIM** Dimmable 1-10V **Q** Field Adjustable Output **VM** Virtual Midnight	SYMMETRIC

* Available with Backlight Shield when ordered with field-installed accessory (see table below)

Ordering information is for reference only. Some product configurations are not available. Please consult spec sheets for specific product availability and for further details.

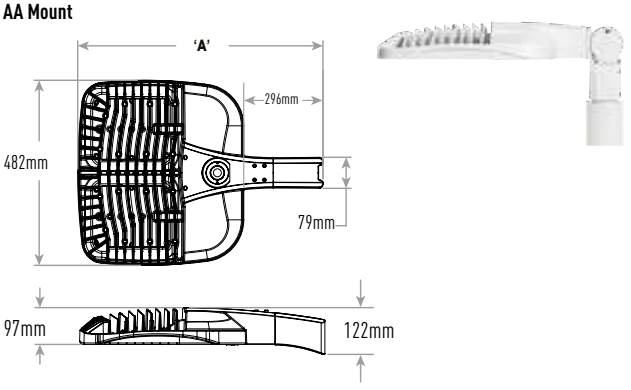
Mounting Options

DA Mount



'A' Dimension			
	Medium	701mm	12 kg
	Large	757mm	13 kg

AA Mount



'A' Dimension			
	Medium	701mm	12 kg
	Large	757mm	13 kg

Accessory Information

MOUNT (LUMINAIRE MUST BE ORDERED SEPARATELY)	BACKLIGHT SHIELD
OSQ-AA* Adjustable Arm **OSQ-DA*** Direct Arm	**OSQ-BLSMF** **OSQ-BLSMR** Rotated optics

* Color options are: **WH** White **BK** Black **SV** Silver **BZ** Bronze **PB** Silver Bronze

Cree® OSQ HO

FEATURES

- Full cut-off optics (NanoOptic® Precision Delivery Grid™)
- Input Power: 45L = 315W, 65L = 550W
- Lumen output: 39000 – 67000lm
- System efficacy: >100lm/W
- CCT: 3000K, 4000K, 5700K
  (CRI Standard min.70, CRI 80 @3000K on request for MOQ)
- Initial Colour Consistency: 4 steps MacAdam
- Input Voltage: 220-240V
- Driver equipped with temperature sensor to preserve optimal working conditions
- Power factor: Up to > 0.9 at full load
- Lifetime: L80F10 Up to >100Khrs Ta=25°C (>100Khrs L80 IESNA TM-21)
- Surge protection: 10kV CM/DM surge immunity according to EN 61000-4-5 and EN 61547 (Class I SPD equipped with LED signal).
- Operative temperature: -40°C up to +40°C
- Insulation class: Class I
- Enclosure rated IP66 per IEC 60529
- Impact resistance IK08
- Cable type H07RN-F (Cable length Up to 10mt)
- Control options: Field Adjustable Output, Dimming 1-10V, Virtual Midnight reprog.
- Fixture assembled without the use of glues, totally dismountable and recyclable.
- LED Board equipped with integral ESD and Surge protection
- Nema socket option available

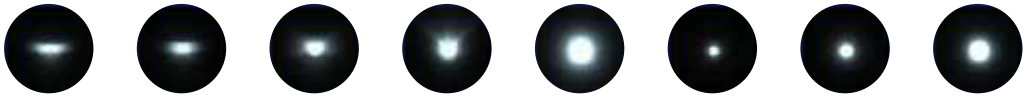
CONSTRUCTION AND MATERIALS

- Die cast, low copper <0,01%, aluminum alloy housing for long weathering and reliability
- Tool-less entry
- Removable tray
- Slim, low profile design minimizes wind load requirements. Integral, weathertight LED driver compartment and high performance heat sink integrated.
- Luminaire is designed to mount directly on 60mm tenons or poles through the Adjustable arm mount option and can be tilted +/-180°, in steps of 5°
- The Direct arm mount option adapts to 76-152mm square or round poles
- The High Mast mount option is made of galvanized steel 5mm thickness and can be tilted +/-45°, in steps of 15°
- Exclusive Colorfast DeltaGuard® finish features an E-Coat epoxy primer with an ultra-durable powder topcoat, providing excellent resistance to corrosion, ultraviolet degradation and abrasion

WARRANTY AND CERTIFICATIONS

- Limited Warranty†: 10 years on Colorfast DeltaGuard® finish / 10 years on luminaire
- CE mark / RoHs compliant
- Risk group exempt in accordance with Standard CEI EN 62471 for photobiological safety (Tested IEC/TR62778)
- Luminaire and finish endurance tested to withstand 5,000 hours of elevated ambient salt fog conditions as defined in ASTM Standard B 117
- Compliant to: EN 60598-1; EN 60598-2-3

210 Type II Short 1.0 | **2SH** Type III Short | **3ME** Type III Medium | **4ME** Type IV Medium | **5SH** Type V Short | **15D** 15° Flood | **25D** 25° Flood | **40D** 40° Flood



† See www.cree-europe.com/en/resources/warranty for warranty terms

Ordering Information

Example: OSQ-HO-E-NM-210-45L-30K-+-24-SV-DIM-S

OSQ-HO	-	E	-	NM	-	210	-	45L	-	30K	-	+	-	24	-	SV	-	DIM	-	S
Product		**Version**		**Mounting**		**Optic**		**Lumen Package**		**CCT**		**Insulation Class**		**Voltage**		**Finish**		**Control Options**		**Variant**
OSQ-HO	-	**E**	-	**NM** No mount	-	**210** Type II Short 1.0 **2SH** Type III Short **3ME** Type III Medium **4ME** Type IV Medium	-	**45L** **65L**	-	**30K** 3000K - 70 CRI **40K** 4000K - 70 CRI **50K** 5700K - 90 CRI **57K** 5700K - 70 CRI	-	**+** Class 1	-	**24** 24V	-	**SV** Silver **BK** Black **BZ** Bronze **WH** White	-	**DIM** Dimmable 1-10V **Q** Field Adjustable Output **Y** Y# Option (1-10V on virtual midnight reprogrammable) **Z** Z# Option (1-10V on virtual midnight reprogrammable)	-	**S** Standard **F*** Fuse **N** Nema 7 pin longjoin
						5SH Type V Short **15D** 15° Flood **25D** 25° Flood **40D** 40° Flood		**45L** **65L**		**30K** 3000K - 70 CRI **40K** 4000K - 70 CRI **50K** 5700K - 90 CRI **57K** 5700K - 70 CRI		**+** Class 1		**24** 24V		**SV** Silver **BK** Black **BZ** Bronze **WH** White		**DIM** Dimmable 1-10V **Q** Field Adjustable Output **Y** Y# Option (1-10V on virtual midnight reprogrammable) **Z** Z# Option (1-10V on virtual midnight reprogrammable)		**S** Standard **F*** Fuse **N** Nema 7 pin longjoin

ASYMMETRIC

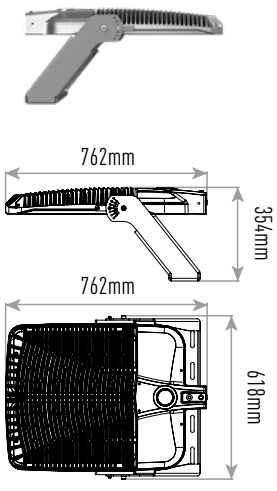
SYMMETRIC

* Fuse option available with Standard or Nema configurations (Specify SF or NF)

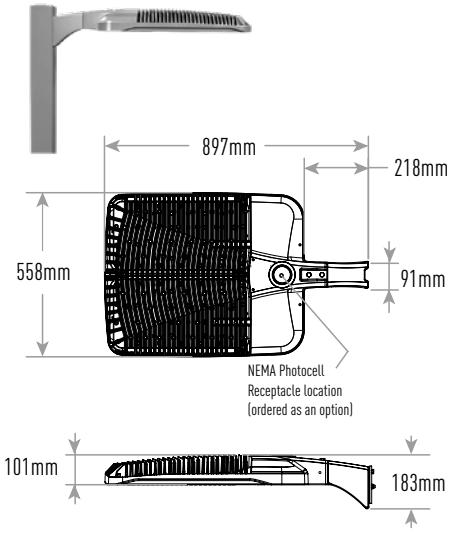
Ordering information is for reference only. Some product configurations are not available. Please consult spec sheets for specific product availability and for further details.

Mounting Options e Dimensions

HIGH MAST



DIRECT MOUNT



ADJUSTABLE MOUNT

Weight: up to 28 kg

Accessory Information

MOUNT (LUMINAIRE MUST BE ORDERED SEPARATELY)	BACKLIGHT SHIELD
OSQ-AA* Adjustable Arm	**OSQ-BLSMF**
OSQ-DA* Direct Arm	**OSQ-BLSMR** Rotated optics

* Color options are: **WH** White **BK** Black **SV** Silver **BZ** Bronze

Cree® EDGE™ HO Series

It's a brand new night in high output lighting.

Cree EdgeTM High Output luminaire is designed to deliver high lumen packages with precise optical control. Upgrade friendly unit features a slim, low profile design that minimizes wind load requirements.

Available with rugged die cast aluminum adjustable arm that mounts to a vertical 60-76mm O.D. minimum 95mm tall tenon, or with direct/surface mount to vertical or horizontal surfaces. Also, available with Cree TrueWhite Technology, the Cree Edge High Output helps to beautifully render true colors and deliver value beyond energy savings.

PLUS - Cree EDGE HO Series

Make the right first impression with your customers

Exterior lighting is a critical element in shaping the customer perception of your dealership and the vehicle inventory you'd like to sell after dark.

The result? Cree products simply showcase your business and vehicles in a better light. Cree EDGE HO is capable of saving in excess of 70% in energy.

Leading – EDGE performance

Cree LED lighting offers efficient and reliable solution that optimize illumination while blending in with your architecture. Our uniform, shadow-free illumination also improves nighttime visibility, creating a safer environment for your employees and visitors.

Show your true color

Delivering uncompromising color for outdoor spaces. Cree Edge High Output is available with Cree True White Technology. With 90+ CRI true-to-life color rendering never looked so good.

Unbeatable paint finish

Faded poles and fixtures compromise the aesthetics of any property. The Cree Edge HO luminaires features our exclusive Colorfast DeltaGuard Finish, backed with 10-year finish warranty.


JOHNSON LEXUS

BETTER COLOR, QUALITY AND CONTROL

Unmatched design delivers unmatched results.

Redefining what's possible in high output lighting, the Cree Edge™ High Output luminaire delivers exceptional illumination performance that's designed to last for more than a decade.

UNMATCHED FINISH

- Exclusive Colorfast DeltaGuard® finish
- E-coat epoxy primer with an ultradurable powder topcoat
- Excellent resistance to corrosion, ultraviolet degradation and abrasion
- Backed by a 10-year finish warranty

CREE TRUEWHITE® TECHNOLOGY

- True-to-life color rendering
- 5000K 90+ CRI
- Brings superior color quality to exterior spaces

PATENTED NANOOPTIC® TECHNOLOGY

- Optical control and precision
- Reduces first costs, maximizes energy savings and meets illumination performance objectives
- More than 20 optical choices to fit every application need

DRIVER COMPARTMENT

- Integral
- Enclosure rated IP65

SUPERIOR THERMAL MANAGEMENT

- Passive thermal management system
- Flow through design
- Performance and reliability improved

DIRECT MOUNT (DM)

Mounts directly to 127mm or larger poles using mounting hardware and anchor plate provided. Luminaire can also be surface wired and mounted directly to vertical or horizontal surfaces.

ADJUSTABLE ARM (AA)

Rugged die cast aluminum adjustable arm that mounts to a vertical 60–76mm O.D. minimum 95mm tall tenon.

Optional Uplight configuration in either mount is also available.

HIGH-BAY

Mounting options for High-Bay applications also available.

Cree® EDGE™ HO - Adjustable Arm

FEATURES

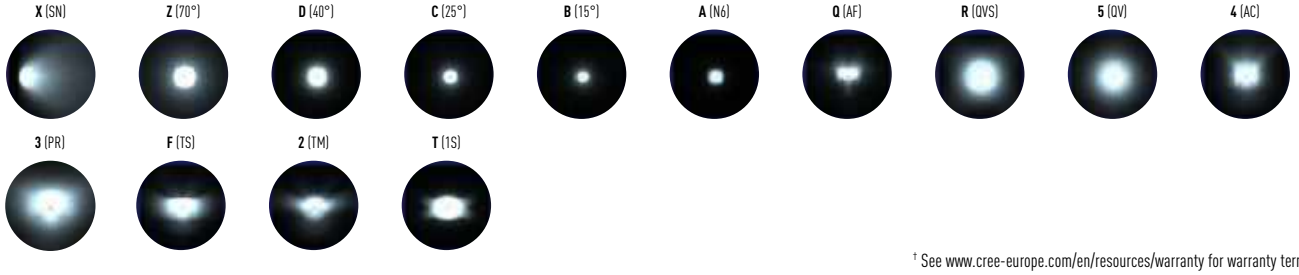
- Full cut-off optics (NanoOptic®)
- Input power Up to 831W
- Lumen output: 22500 - 78000lm
- System efficacy: >100lm/W
- CCT: 4000K, 5700K (CRI Minimum 70)
- CCT: 5000K (CRI Minimum 90) featuring Cree TrueWhite Technology
- Initial Colour Consistency: 7 MacAdam steps
- Input Voltage: 220-240V
- Driver equipped with temperature sensor to preserve optimal working conditions
- Power factor: Up to > 0.9 at full load
- Lifetime: L80F10 Up to >100Khrs Ta=25°C (>100Khrs L80 IESNA TM-21)
- Surge protection: 10kV CM/DM surge immunity according to EN 61000-4-5 and EN 61547 for Class I only (Class I SPD equipped with LED signal)
- Operative temperature: -40°C up to +50°C
- Insulation class: Class I
- Enclosure rated IP65 per IEC 60529
- Impact resistance IK08
- Cable type H07RN-F; Precabled with connector; Cable length 1mt (Other lengths available on request)
- Control options: Dimming 1-10V
- Fixture assembled without the use of glues, totally dismountable and recyclable

CONSTRUCTION AND MATERIALS

- Die cast aluminium housing integrated with extruded anodized aluminium components
- Adjustable mounting arm made of rugged die cast aluminum and mounts to a 60 - 76mm outer dimension tenon, minimum 95mm tall vertical tenon
- Luminaire is adjustable from horizontal 90° towards pole and 12° away from pole
- Die cast parts are treated with exclusive Colorfast DeltaGuard® finish featuring an E-Coat epoxy primer with an ultra-durable powder topcoat, providing excellent resistance to corrosion, ultraviolet degradation and abrasion

WARRANTY AND CERTIFICATIONS

- Limited Warranty†: 10 years on Colorfast DeltaGuard® finish / 10 years on luminaire
- CE mark / CB mark / RoHs compliant
- Certified to ANSI C136.31-2001, 3G bridge and overpass vibration standards
- Luminaire and finish endurance tested to withstand 5,000 hours of elevated ambient salt fog conditions as defined in ASTM Standard B 117
- Compliant to: EN 60598-1; EN 60598-2-3



† See www.cree-europe.com/en/resources/warranty for warranty terms

Ordering Information

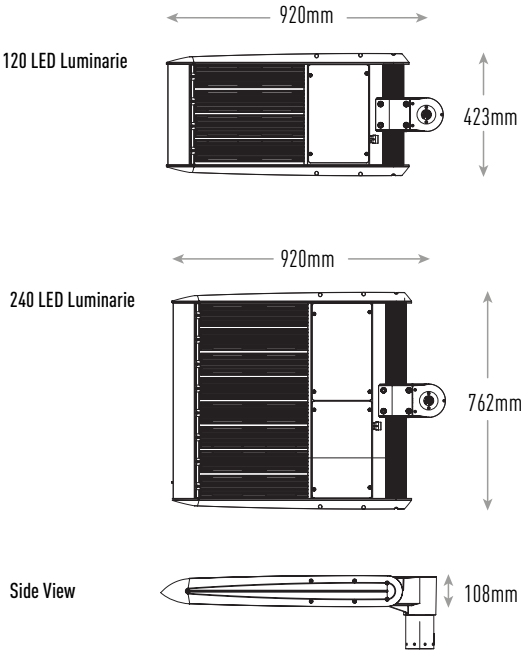
Example: XAK3X12E+4DYS9

XAK	3	X	12	E	+	4	D	Y	S	9
Product	**Mounting**	**Optic**	**LED Count (x10)**	**Series**	**Insulation Class**	**Voltage**	**Drive Current**	**Options**	**Finish**	**Color Temperature**
XAK	**3** Adj Slip fitter Downlight **7** Adj Slip fitter Uplight **2** Adj Slip fitter Downlight - LEFT (relative to mounting) **C** Adj Slip fitter Downlight - RIGHT (relative to mounting) **4** Adj Slip fitter Uplight - LEFT (relative to mounting) **F** Adj Slip fitter Uplight - RIGHT (relative to mounting)	**X** (SN) **Z** (70°) **D** (40°) **C** (25°) **B** (15°) **A** (N6) **Q** (AF) **R** (QVS) **5** (QV) **J** (ACB) **4** (AC) **H** (PRB) **3** (PR) **K** (TSB) **F** (TS) **G** (TMB) **2** (TM) **T** (1S)	**12** **24**	**E**	**+** Class 1	**4** 230V	**D** 700mA **X** 1A	**Y** **1-10V Dimming** - Control by others	**S** Silver (Standard) **T** Black **Z** Bronze **B** Silver Bronze **W** White	**No code** **5700K** - Minimum 70 CRI **9** **5000K** - Minimum 90 CRI - Utilizes Cree TrueWhite® Technology **7** **4000K** - Minimum 70 CRI

Ordering information is for reference only. Some product configurations are not available. Please consult spec sheets for specific product availability and for further details.

Dimensions

Weight: From 20,4 kg to 36,3 kg



Accessory Information

BIRD SPIKE OPTIONS
XA-BRDSPKXAK12 Bird Spikes for 120 LED luminaires **XA-BRDSPKXAK24** Bird Spikes for 240 LED luminaires


Bluewater Auto Collision
519-542-9444
pepsi
Libro
Lambton


91
KAL TIRE
POPEYES
MITTEN
omnia direct

Cree® EDGE™ HO - Direct Arm

FEATURES

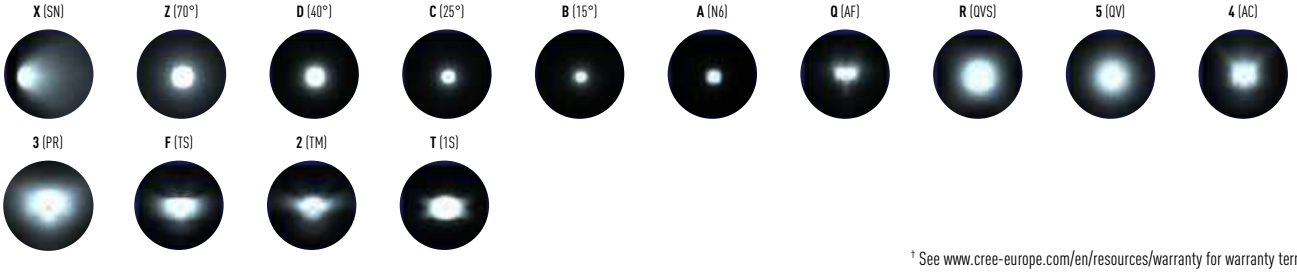
- Full cut-off optics (NanoOptic®)
- Input power Up to 831W
- Lumen output: 22500 - 78000lm
- System efficacy: >100lm/W
- CCT: 4000K, 5700K (CRI Minimum 70)
- CCT: 5000K (CRI Minimum 90) featuring Cree TrueWhite Technology
- Initial Colour Consistency: 7 MacAdam steps
- Input Voltage: 220-240V
- Driver equipped with temperature sensor to preserve optimal working conditions
- Power factor: Up to > 0.9 at full load
- Lifetime: L80F10 Up to >100Khrs Ta=25°C (>100Khrs L80 IESNA TM-21)
- Surge protection: 10kV CM/DM surge immunity according to EN 61000-4-5 and EN 61547 for Class I only (Class I SPD equipped with LED signal)
- Operative temperature: -40°C up to +50°C
- Insulation class: Class I
- Enclosure rated IP65 per IEC 60529
- Impact resistance IK08
- Cable type H07RN-F; Precabled with connector; Cable length 1mt (Other lengths available on request)
- Control options: Dimming 1-10V
- Fixture assembled without the use of glues, totally dismountable and recyclable

CONSTRUCTION AND MATERIALS

- Die cast aluminium housing integrated with extruded anodized aluminium components
- Mounting pre-set with two NPT plugs for surface wiring.
- Luminaire is adjustable 90° up from horizontal in 5° increments
- Die cast parts are treated with exclusive Colorfast DeltaGuard® finish featuring an E-Coat epoxy primer with an ultra-durable powder topcoat, providing excellent resistance to corrosion, ultraviolet degradation and abrasion

WARRANTY AND CERTIFICATIONS

- Limited Warranty†: 10 years on Colorfast DeltaGuard® finish / 10 years on luminaire
- CE mark / CB mark / RoHs compliant
- Certified to ANSI C136.31-2001, 3G bridge and overpass vibration standards
- Luminaire and finish endurance tested to withstand 5,000 hours of elevated ambient salt fog conditions as defined in ASTM Standard B 117
- Compliant to: EN 60598-1; EN 60598-2-3



† See www.cree-europe.com/en/resources/warranty for warranty terms

Ordering Information

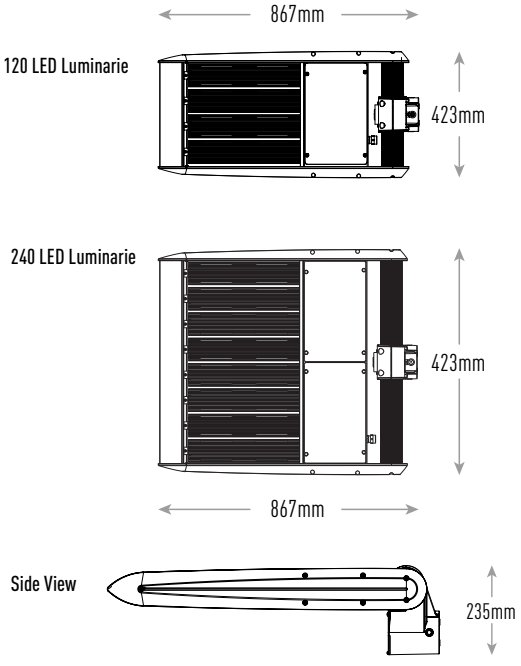
Example: XAKDX12E+4DYS9

XAK	D	X	12	E	+	4	D	Y	S	9
Product	**Mounting**	**Optic**	**LED Count (x10)**	**Series**	**Insulation Class**	**Voltage**	**Drive Current**	**Options**	**Finish**	**Color Temperature**
XAK	**D** Direct/Surface mount Downlight **U** Direct/Surface mount Uplight **5** Direct/Surface mount Downlight - LEFT (relative to mounting) **A** Direct/Surface mount Downlight - RIGHT (relative to mounting) **6** Direct/Surface mount Uplight - LEFT (relative to mounting) **B** Direct/Surface mount Uplight - RIGHT (relative to mounting)	**X** (SN) **Z** (70°) **D** (40°) **C** (25°) **B** (15°) **A** (N6) **Q** (AF) **R** (QVS) **5** (QV) **J** (ACB) **4** (AC) **H** (PRB) **3** (PR) **K** (TSB) **F** (TS) **G** (TMB) **2** (TM) **T** (1S)	**12** **24**	**E**	**+** Class 1	**4** 230V	**D** 700mA **X** 1A	**Y** **1-10V Dimming** - Control by others	**S** Silver (Standard) **T** Black **Z** Bronze **B** Silver Bronze **W** White	**No code** **5700K** - Minimum 70 CRI **9** **5000K** - Minimum 90 CRI - Utilizes Cree TrueWhite® Technology **7** **4000K** - Minimum 70 CRI

Ordering information is for reference only. Some product configurations are not available. Please consult spec sheets for specific product availability and for further details.

Dimensions

Weight: From 20,4 kg to 36,3 kg



Accessory Information

BIRD SPIKE OPTIONS
XA-BRDSPKXAK12 Bird Spikes for 120 LED luminaires **XA-BRDSPKXAK24** Bird Spikes for 240 LED luminaires


SAN FRANCISCO INTERNATIONAL

Cree® EDGE™ HO - High Bay

FEATURES

- Full cut-off optics (NanoOptic®)
- Input power Up to 831W
- Lumen output: 22500 - 78000lm
- System efficacy: >100lm/W
- CCT: 4000K, 5700K (CRI Minimum 70)
- CCT: 5000K (CRI Minimum 90) featuring Cree TrueWhite Technology
- Initial Colour Consistency: 7 MacAdam steps
- Input Voltage: 220-240V
- Driver equipped with temperature sensor to preserve optimal working conditions
- Power factor: Up to > 0.9 at full load
- Lifetime: L80F10 Up to >100Khrs Ta=25°C (>100Khrs L80 IESNA TM-21)
- Surge protection: 10kV CM/DM surge immunity according to EN 61000-4-5 and EN 61547 for Class I only (Class I SPD equipped with LED signal)
- Operative temperature: -40°C up to +50°C
- Insulation class: Class I
- Enclosure rated IP65 per IEC 60529
- Impact resistance IK08
- Cable type H07RN-F; Precabled with connector; Cable length 1mt (Other lengths available on request)
- Control options: Dimming 1-10V
- Fixture assembled without the use of glues, totally dismountable and recyclable

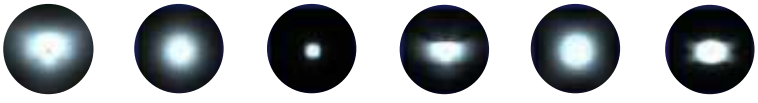
CONSTRUCTION AND MATERIALS

- Die cast aluminium housing integrated with extruded anodized aluminium components
- Luminaire mounts directly to solid surface with stainless steel mounting brackets
- Includes a 1m cord for mounting to customer supplied connectors
- Die cast parts are treated with exclusive Colorfast DeltaGuard® finish featuring an E-Coat epoxy primer with an ultra-durable powder topcoat, providing excellent resistance to corrosion, ultraviolet degradation and abrasion

WARRANTY AND CERTIFICATIONS

- Limited Warranty†: 10 years on Colorfast DeltaGuard® finish / 10 years on luminaire
- CE mark / CB mark / RoHs compliant
- Certified to ANSI C136.31-2001, 3G bridge and overpass vibration standards
- Luminaire and finish endurance tested to withstand 5,000 hours of elevated ambient salt fog conditions as defined in ASTM Standard B 117
- Compliant to: EN 60598-1; EN 60598-2-3

3 (PR) **5** (QV) **A** (N6) **F** (TS) **R** (QVS) **T** (1S)



† See www.cree-europe.com/en/resources/warranty for warranty terms

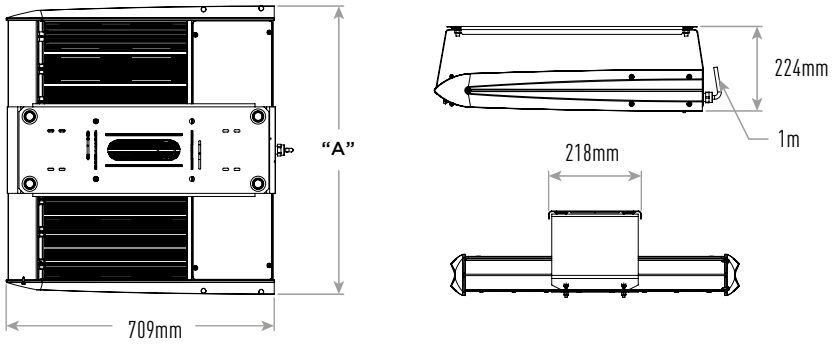
Ordering Information

Example: XAKT312E+4DYS9

XAK	T	3	12	E	+	4	D	Y	S	9
Product	**Mounting**	**Optic**	**LED Count (x10)**	**Series**	**Insulation Class**	**Voltage**	**Drive Current**	**Options**	**Finish**	**Color Temperature**
XAK	**T** Surface/Direct mount	**3** (PR) **5** (QV) **A** (N6) **F** (TS) **R** (QVS) **T** (1S)	**12** **24**	**E**	**+** Class 1	**4** 230V	**D** 700mA **X** 1A	**Y** **1-10V Dimming** - Control by others	**S** Silver (Standard) **T** Black **Z** Bronze **B** Silver Bronze **W** White	**No code** **5700K** - Minimum 70 CRI **9** **5000K** - Minimum 90 CRI - Utilizes Cree TrueWhite® Technology **7** **4000K** - Minimum 70 CRI

Ordering information is for reference only. Some product configurations are not available. Please consult spec sheets for specific product availability and for further details.

Dimensions



LED count (x10)	Dim. A	Weight
12	418mm	20.4 kg
24	762mm	36.3 kg

This mounting is suitable for Indoor applications only.

Cree® CPY Series

Lighting the way to your site and maximum savings.

The CPY250™ LED Canopy/Soffit Luminaire has an extremely thin profile constructed of rugged cast aluminum. It can be surface mounted easily from below the canopy deck.

Direct imaging of the LEDs is eliminated with a highly efficient patterned flat or drop glass lens.


Chevron

PLUS - Cree CPY Series

Beautiful aesthetics, rugged construction

With optimum illumination and clean architectural blending, the CPY Series delivers impressive first impressions for visitors, while also promoting safe and secure exteriors for pedestrians, putting your facilities in a whole new light.

Dramatic lighting, operational savings

By blending technological innovation with architectural aesthetics, the CPY250® LED Canopy Luminaire achieves superior illumination performance with a low total cost of ownership and dramatically better visibility.

Easy installation

Designed for ease of installation and versatility, the CPY250® LED Canopy luminaire can seamlessly mount directly to virtually any canopy. Cree® recessed canopy and soffit luminaires efficiently light the way to exterior sites, surrounding areas and interior high-bay applications leading to an overall low total cost of ownership.

Maximize the payback you expect

Cree® LED luminaires are built to last and will save the municipality service team up to 10 years of relamping. Adopting an additional luminous flux control system that allows to adjust the lighting levels throughout the whole installation based on the varying required lighting needs throughout the night, it was possible to anticipate a reduction in annual energy use of 70%, all while transforming the neighborhoods with uniform white light.


enercoop

DRAMATIC LIGHTING, OPERATIONAL SAVINGS

By blending technological innovation with architectural aesthetics, the CPY250® LED Canopy Luminaire achieves superior illumination performance with a low total cost of ownership and dramatically better visibility.

FLAT LENS

- Tempered textured glass
- Increased customer visibility of the site
- Helps in delivering a comfortable safe visual environment

STATE-OF-THE-ART CREE LEDS

- Industry-leading LED portfolio
- High performance and proven reliability
- Optimized for lighting applications

OPTIONAL MULTI-LEVEL

- Reduced light levels and energy costs when the coverage area is vacant
- Ambient and occupancy control

DROP LENS

Molded glass with prismatic contours

QUICK AND RELIABLE INSTALLATION

- Integrated driver
- Self-sealing screws
- Mounts to virtually any canopy deck

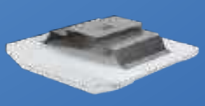
SUPERIOR THERMAL MANAGEMENT

- High performance heat sink
- Improves lumen performance and reliability

AVAILABLE MOUNTING OPTIONS

STANDARD:

DIRECT MOUNT
Mounts directly to the canopy deck in a 51mm to 102mm round hole and is secured in place with self-sealing screws.



ACCESSORIES:

BUSWAY MOUNT
Stainless steel kit for surface/ busway mounting

RECESSED MOUNT
Retrofit kit for recessed mounting

Cree® CPY

FEATURES

- Flat lens for diffused emission and Drop lens for intensive emission
- Input Power: A = 65W, B=94W, E=140W
- Lumen output: 7800 – 19300lm
- Efficacy: Up to 140lm/W
- CCT: 4000K, 5700K (CRI Minimum 70)
- Initial Colour Consistency: 4 steps MacAdam
- Input Voltage: 220-240V
- Driver equipped with temperature sensor to preserve optimal working conditions
- Power factor: Up to > 0.9 at full load
- Lifetime: L80F10 Up to >160Khrs Ta=25°C (>160Khrs L80 IESNA TM-21)
- Surge protection: Up to 10kV CM/DM surge immunity according to EN 61000-4-5 and EN 61547 (Class I SPD equipped with LED signal)
- Operative Temperature: Input Power A: -40°C to +40°C (direct mount to plywood), -40°C to +45°C (direct mount to sheet metal); Input Power B - E: -40°C to +35°C (plywood), -40°C to +40°C (sheet metal)
- Insulation class: Class I
- Enclosure rated IP66 per IEC 60529
- Cable type H07RN (Cable length Up to 10mt)
- Control options: Fixed Output, 1-10V Dimming, Sensor with remote control
- Easy mounting and servicing from below the deck
- LED Board equipped with integral ESD and Surge protection

CONSTRUCTION AND MATERIALS

- Die cast, low copper <0,01%, aluminum alloy housing for long weathering and reliability with integral heatsink
- Flat lens is 3mm tempered Solite® glass
- Drop lens is 4mm molded borosilicate glass
- Direct mount is suitable for use in single or double skin canopies with a minimum 102mm wide panels and a minimum 22 gauge, 0.7mm canopy thickness
- Direct mount luminaire mounts directly to the canopy deck with the drilling of a single 51mm to 102mm round hole, is secured in place with self-sealing screws that provide a weathertight seal and includes 19mm conduit entry for direct wire feed
- Exclusive Colorfast DeltaGuard® finish features an E-Coat epoxy primer with an ultra-durable powder topcoat, providing excellent resistance to corrosion, ultraviolet degradation and abrasion

WARRANTY AND CERTIFICATIONS

- Limited Warranty†: 10 years on Colorfast DeltaGuard® finish / 10 years on luminaire
- CE mark / CB mark / RoHs compliant
- Risk group exempt in accordance with Standard CEI EN 62471 for photobiological safety
- Luminaire and finish endurance tested to withstand 5,000 hours of elevated ambient salt fog conditions as defined in ASTM Standard B 117
- Compliant to: EN 60598-1; EN 60598-2-3

A Flat lens

D Drop lens

† See www.cree-europe.com/en/resources/warranty for warranty terms

Ordering Information

Example: XCCB0AA+4S7

XCC	B	0	A	A	+	4	S	7		
Product	**Version**	**Mounting**	**Optic**	**Input Power Designator**	**Insulation Class**	**Voltage**	**Finish**	**Control Options**	**Surge**	**CCT**
XCC	**B**	**0** Direct	**A** Flat lens **D** Drop lens	**A** 65W **B** 94W **E** 140W	**+** Class 1	**4** 220-240V	**S** Silver **T** Black **Z** Bronze **B** Silver Bronze **W** White	**No code** **Fixed power** **Y** **1–10V Dimming** - Control by others **E*** **Sensor with remote control** - Flux dimming with occupancy sensor with remote control (to complete with remote control XA-SENSREM)	**No code** 6kV surge suppressor **U** 10kV surge suppressor	**No code** 5700K **7** 4000K

* Option to be combined with "U" (10kV surge suppressor)

Ordering information is for reference only. Some product configurations are not available. Please consult spec sheets for specific product availability and for further details.

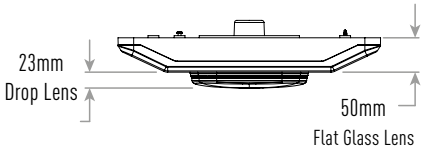
Optics

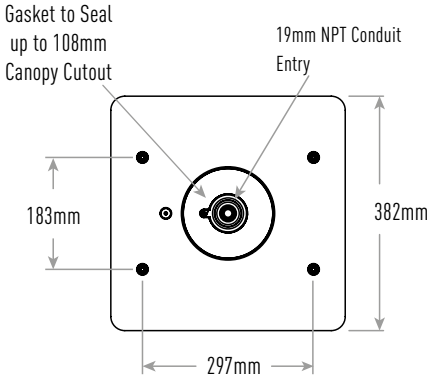
Flat Lens

Drop Lens

Dimensions

Weight: 5.7 kg





Accessory Information

DIRECT MOUNT - BEAUTY PLATE	RECESSED OR SURFACE/BUSWAY MOUNT - ACCESSORY KIT	HAND-HELD REMOTE
Metal plate for replacing surface-mounted HID luminaires. **XA-BXCCBPW** 665mm Beauty Plate **XA-BXCCBPB12W** Beauty Plate w/ 305mm Backer **XA-BXCCBPB16W** Beauty Plate w/ 406mm Backer 	Retrofit kit for recessed mounting. **RTF-RCS-A0-CPY**  Kit for surface/busway mounting. **PM-BCPY-I-R0** Stainless steel kit **PM-BCPY-V-R0** Galvanized sheet kit 	**XA-SENSREM** For successful implementation of the programmable multi-level option, a minimum of one hand-held remote is required.


Langham
Way Out


Way Out

Cree® 304 Series™

Surround your clients with clean, white light.

Cree 304 Series is an extremely versatile fixture which adapts to a wide range of applications: from gas station forecourt canopies, to industrial installations and tunnel lighting.

The driver is located in a separate compartment from the fixture to allow simple and easy access to the wiring compartment for any maintenance or inspection operations required even after the fixture has been installed.


arico e scarico
erci max 15 min.

Cree® 304 Series™

FEATURES

- Full cut-off optics (NanoOptic®)
- Input power : 40 LED = 91W, 60 LED = 132W
- Lumen output: 3800 - 21000lm
- Efficay: >130Lm/W
- CCT: 4000K, 5700K (CRI Minimum 70)
- Initial Colour Consistency: 7 MacAdam steps
- Input Voltage: 220-240V
- Driver equipped with temperature sensor to preserve optimal working conditions
- Power factor: Up to > 0.9 at full load
- Lifetime: L80F10 Up to >200Khrs Ta=25°C (>200Khrs L80 IESNA TM-21)
- Surge protection: 10kV CM/DM surge immunity according to EN 61000-4-5 and EN 61547 for Class I only (Class I SPD equipped with LED signal)
- Operative temperature: -40°C up to +50°C
- Insulation class: Class I
- Enclosure rated IP66 per IEC 60529
- Impact resistance IK08
- Cable type H07RN-F; Precabled with connector; Cable length 1mt (Other lengths available on request)
- Easy access to driver compartment located below the luminaire.
- Control options: Field Adjustable Output, Dimming 1-10V, DALI, Virtual Midnight reprog., Lineswitch
- Occupancy sensor option available
- LED Board equipped with integral ESD and Surge protection on Class II versions

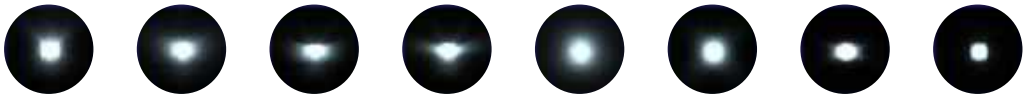
CONSTRUCTION AND MATERIALS

- Die cast aluminium housing integrated with extruded anodized aluminium components
- Mounting "0" bracket is designed to mount directly over existing flat ceilings for direct mount
- Mounting "Y" bracket is made of A2 stainless steel, designed for maximum fixture's adjustability it allows for +/- 90° adjustment in 5° increments
- Die cast parts are treated with exclusive Colorfast DeltaGuard® finish featuring an E-Coat epoxy primer with an ultra-durable powder topcoat, providing excellent resistance to corrosion, ultraviolet degradation and abrasion

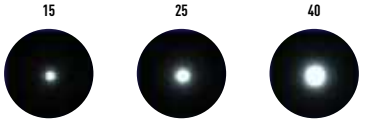
WARRANTY AND CERTIFICATIONS

- Limited Warranty†: 10 years on Colorfast DeltaGuard® finish / 10 years on luminaire
- CE mark / CB mark / ENEC mark / RoHs compliant
- Risk group exempt in accordance with Standard CEI EN 62471 for photobiological safety (Tested IEC/TR62778)
- Luminaire and finish endurance tested to withstand 5,000 hours of elevated ambient salt fog conditions as defined in ASTM Standard B 117
- Compliant to: EN 60598-1; EN 60598-2-3

AC Type IV Medium | **PR** Type III Medium | **TS** Type II Short | **TM** Type II Medium | **QV** Type V Medium | **QVS** Type V Short | **1S** Type I Short | **FS** Petroleum Canopy



15 | 25 | 40



† See www.cree-europe.com/en/resources/warranty for warranty terms

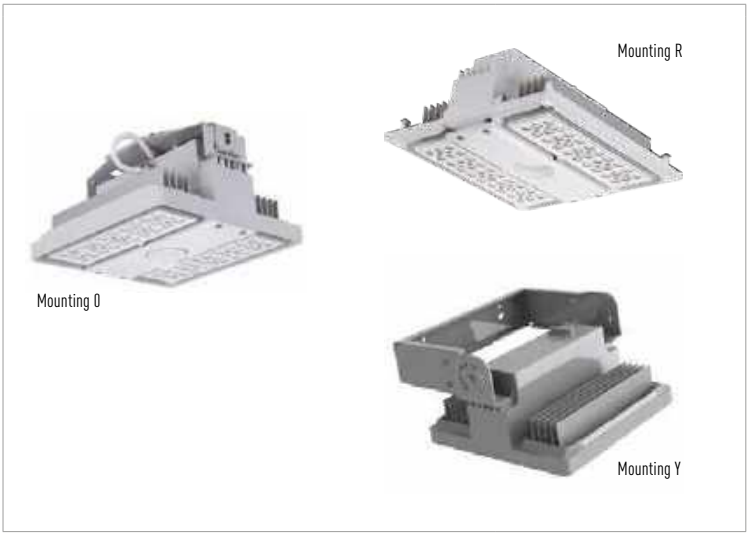
Ordering Information

Example: 30XAC004E43FXSV

30	X	AC	0	04	E	43	FX		SV
Product	**Insulation Class**	**Optic**	**Mounting**	**LED Count (x10)**	**Version**	**CCT**	**Options**		**Finish**
30	**X** Class 1	**AC** Type IV Medium **PR** Type III Medium **TS** Type II Short **TM** Type II Medium **QV** Type V Medium **QVS** Type V Short **1S** Type I Short **FS** Petroleum Canopy **15** **25** **40**	**0** Fixed ceiling mounting system **R** Recessed mount **Y** Yoke mount	**04** **06**	**E**	**No code** 5700K **43** 4000K	**FX** **K#** **E0** **N#** **D#** **G#** **Q#** **DL**	**Fixed Output** **Light Control with Occupancy Sensor** - Flux dimming control with occupancy sensor **Light Control with Occupancy Sensor with remote control** - Flux dimming control with occupancy sensor with remote control **Reprogrammable Virtual Midnight** - Reprogrammable 2 levels option with virtual midnight **1–10V Dimming** - Control by others **Lineswitch (Bi-Level Control)** - Two distinct power levels, High/Low **Field Adjustable Output** - Requires no additional wiring **DALI**	**SV** Silver **BK** Black **BZ** Bronze **SB** Silver Bronze **WH** White (Standard)

Ordering information is for reference only. Some product configurations are not available. Please consult spec sheets for specific product availability and for further details.

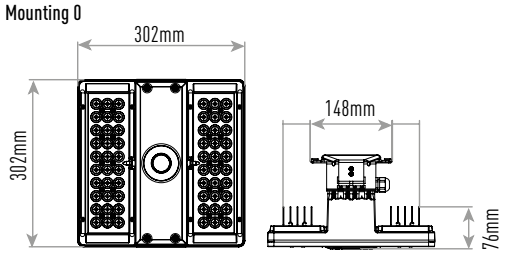
Mounting Options



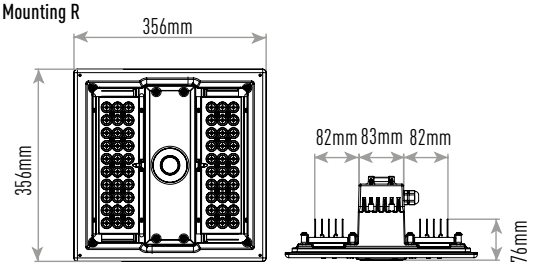
Dimensions

Weight: "0" 8kg; "R" 7,4kg; "Y" 9kg

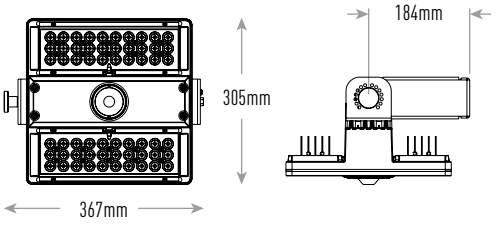
Mounting O



Mounting R



Mounting Y

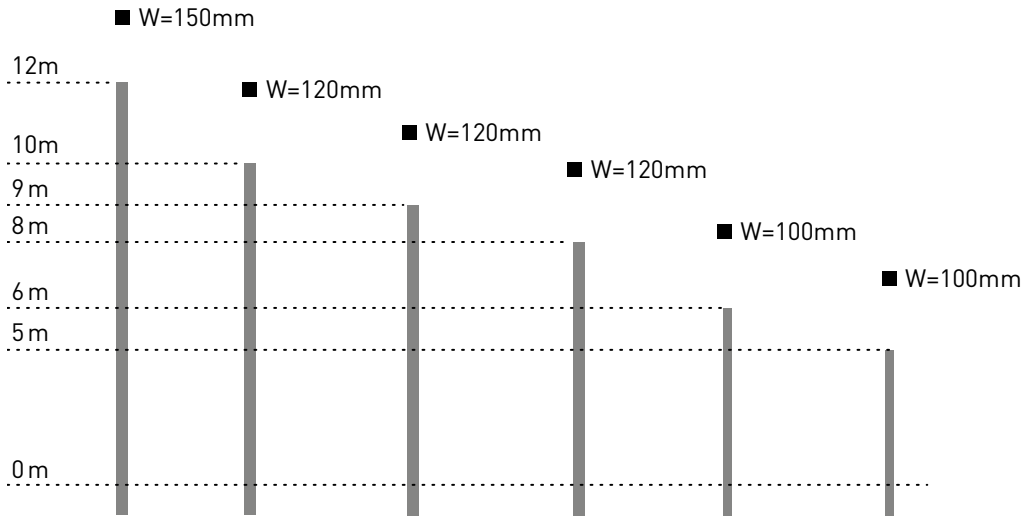


Accessory Information

FIELD INSTALLED ACCESSORIES (Mounting R)
RTF-RCS-A2-304## Retrofit kit

Configuration of Pole-top Products

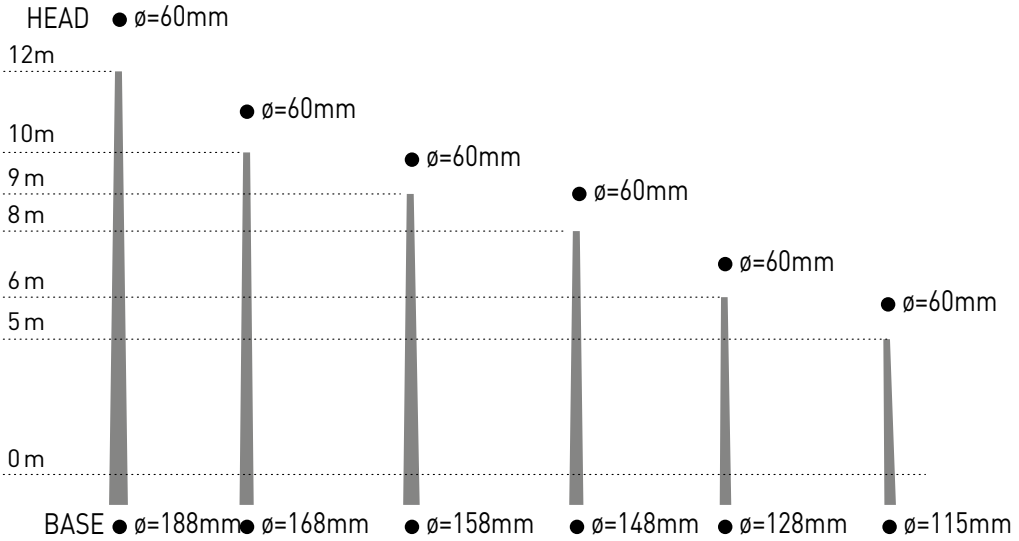
Square poles



	L= 150 hft= 12m thickness= 4mm	L= 120 hft= 10m thickness= 4mm	L= 120 hft= 9m thickness= 4mm	L= 120 hft= 8m thickness= 4mm	L= 100 hft= 6m thickness= 3mm	L= 100 hft= 5m thickness= 3mm
	PS412/150/S1/*	PS410/120/S1/*	PS409/120/S1/*	PS408/120/S1/*	PS306/100/S1/*	PS305/100/S1/*
	PS412/150/S2/*	PS410/120/S2/*	PS409/120/S2/*	PS408/120/S2/*	PS306/100/S2/*	PS305/100/S2/*
	PS412/150/T/*	PS410/120/T/*	PS409/120/T/*	PS408/120/T/*	PS306/100/T/*	PS305/100/T/*
	PS412/150/T7/*	PS410/120/T7/*	PS409/120/T7/*	PS408/120/T7/*	PS306/100/T7/*	PS305/100/T7/*

*colour T7 - reduction dia. 70mm for fixtures with central pole top and light beams

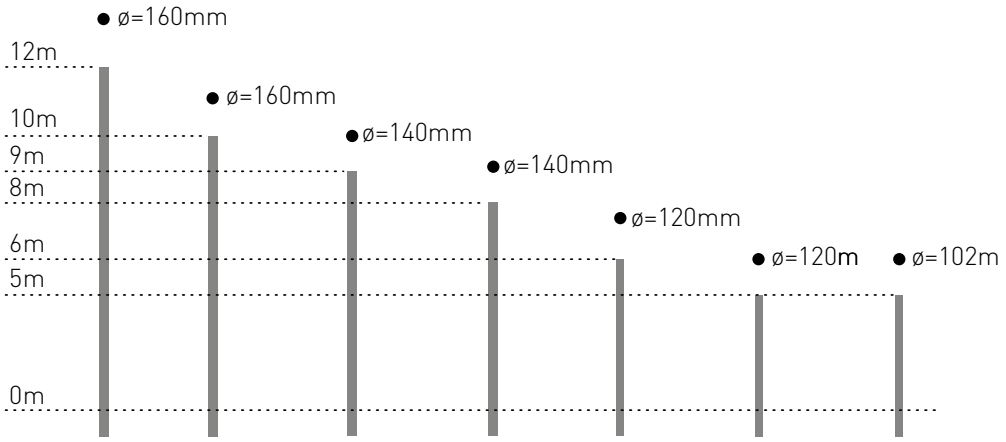
Conical poles



	T/B ø = 60/180 hft = 12m thickness = 4mm	T/B ø = 60/168 hft = 10m thickness = 4mm	T/B ø = 60/158 hft = 9m thickness = 4mm	T/B ø = 60/148 hft = 8m thickness = 4mm	T/B ø = 60/128 hft = 6m thickness = 3mm	T/B ø = 60/115 hft = 5m thickness = 3mm
	CP412/188-60/*	CP410/168-60/*	CP409/158-60/*	CP408/148-60/*	CP306/128-60/*	CP305/115-60/*

*colour
Consult the factory for available configurations

Cylindrical poles



	● ø = 160 hft = 12m thickness= 4mm	● ø = 160 hft = 10m thickness= 4mm	● ø = 140 hft = 9m thickness= 4mm	● ø = 140 hft = 8m thickness= 4mm	● ø = 120 hft = 6m thickness= 3mm	● ø = 120 hft = 5m thickness= 3mm	● ø = 102 hft = 5m thickness= 3mm
	PC412/160/L1/*	PC410/160/L1/*	PC409/140/L1/*	PC408/140/L1/*	PC306/120/L1/*	PC305/120/L1/*	PC305/102/L1/*
	PC412/160/L2/*	PC410/160/L2/*	PC409/140/L2/*	PC408/140/L2/*	PC306/120/L2/*	PC305/120/L2/*	PC305/102/L2/*
	PC412/160/T/*	PC410/160/T/*	PC409/140/T/*	PC408/140/T/*	PC306/120/T/*	PC305/120/T/*	PC305/102/T/*
	PC412/160/T7/*	PC410/160/T7/*	PC409/140/T7/*	PC408/140/T7/*	PC306/120/T7/*	PC305/120/T7/*	PC305/102/T7/*

*colour T7 - reduction dia. 70mm for fixtures with central pole top and light beams

Terminal boards and access flaps

Code	Description
PSMR2/ *	terminal board and access flap for square poles
PCMRR#/ *	Reset model terminal board and flush access flap for cylindrical and conical poles

In-ground poles: in-ground poles are supplied with three standard extra options: cable inlet slot, grounding tab and terminal board slot. The terminal board and access flap must be ordered separately.

Poles with anchoring plate and bolts: available on request.

Brackets and Tenons

FINISH
Exclusive Colorfast DeltaGuard® finish features an E-Coat epoxy primer with an ultra-durable powder topcoat, providing excellent resistance to corrosion, ultraviolet degradation and abrasion. Black, bronze, silver and white are available

LIMITED WARRANTY‡: 7 years on tenon/7 years on Colorfast DeltaGuard® finish

‡ See http://lighting.cree.com/warranty for warranty terms

PB Series

Square Internal Mount Vertical Steel Tenons (for use with Adjustable Arm & Horizontal/Vertical Tenon Mounts)

The square base of the PB Series steel brackets is designed to be inserted into square, non-tapered steel or aluminum poles ranging in size from 3" (76mm) to 6" (152mm) square with a maximum wall thickness of 0.188" (5mm). Square PB tenons are supplied with end caps to enclose the wiring chamber. Tenon base secures to pole with four 5/16" (8mm) hex head stainless steel black oxide bolts. Vertical tenons measure 2-3/8" (60mm) O.D. x 3.75" (95mm) tall and are made of steel tubing. Luminaires mounted to these tenons can be adjusted both vertically and horizontally.

PB	-			
Product	-	**Mounting Configurations**	**Pole Size (O.D.)**	**Color Options**
PB	-	**1A** Single **2A** 180˚ Twin **3A** 180˚ Triple **4A(90)** 90˚ Quad - Available for 4"-6" pole only **4A(180)** 180˚ Quad - Available for 4"-6" pole only	**3 3"** (76mm) **4 4"** (102mm) **5 5"** (127mm) **6 6"** (152mm)	**BK** Black **BZ** Bronze **S** Silver **WH** White

Round External Mount Vertical Tenons (for use with Adjustable Arm & Horizontal/Vertical Tenon Mounts)

The round base of the PB Series steel brackets is designed to mount over a steel or aluminum 2-3/8" (60mm) O.D. round pole or tenon. All are supplied with end caps to enclose the wiring chamber. Tenon base secures to pole with eight stainless steel allen head screws. Vertical tenons measure 2-3/8" (60mm) O.D. x 3.75" (95mm) tall and are made of steel tubing. Luminaires mounted to these tenons can be adjusted both vertically and horizontally.

PB	-			
Product	-	**Mounting Configurations**	**Pole Size (O.D.)**	**Color Options**
PB	-	**2R** 180˚ Twin **3R** 180˚ Triple **4R** 180˚ Quad	**2.375** 2.375" (60mm) - Consult factory for other pole sizes	**BK** Black **BZ** Bronze **S** Silver **WH** White

PT Series

Round External Mount Horizontal Tenons. Not for use with the Cree Edge™ or OSQ™ High Output Area/Flood Luminaires

The round base of the PT Series aluminum brackets is designed to mount over a steel or aluminum 2-3/8" (60mm) to 3" (76mm) O.D. round pole or tenon. Tenon base secures to pole with eight stainless steel allen head screws. Luminaires mounted to these tenons can only be adjusted vertically. The PT Series brackets can be mounted on a square pole, but require the use of the Single Vertical Tenon PB-1A.

PT	-		
Product	-	**Mounting Configurations**	**Color Options**
PT	-	**1** Single **2(90)** 90˚ Twin **2(180)** 180˚ Twin **3(90)** 90˚ Triple **3(120)** 120˚ Triple **4(90)** 90˚ Quad	**BK** Black **BZ** Bronze **S** Silver **WH** White

PD Series

Square Internal Mount Horizontal Tenons. Not for use with the Cree Edge™ or OSQ™ High Output Area/Flood Luminaires

The square base of the PD Series cast aluminum brackets is designed to be inserted into square, non-tapered steel or aluminum 4" (102mm) poles with a maximum wall thickness of 0.188" (5mm). Square PD tenons are supplied with end caps to enclose the wiring chamber. Tenon base secures to pole with four 5/16" (8mm) hex head stainless steel black oxide bolts. Luminaires mounted to these tenons can only be adjusted vertically.

PD	-		
Product	-	**Mounting Configurations**	**Color Options**
PD	-	**2A4 (90)** 90˚ Twin **2A4 (180)** 180˚ Twin **3A4 (90)** 90˚ Triple **4A4 (90)** 90˚ Quad	**BK** Black **BZ** Bronze **S** Silver **WH** White

WM Series

Surface Bracket (for use with Adjustable Arm & Horizontal/Vertical Tenon Mounts)

The WM-2 steel bracket is designed for mounting to ground, rooftop, wall or to the side of a wood pole. The bracket provides a 2-3/8" (60mm) O.D. tenon to mount a luminaire. The 0.25" (6mm) thick steel backplate provides wiring access. If surface wiring is required, consult factory. The use of 3/8" (9mm) diameter bolts to mount bracket to wall is recommended. Mounting holes are spaced 3-1/4" (83mm) apart. LEDway® and XSP Series luminaires must be used with extended mount only.

WM	-		
Product	**-**	**Mounting**	**Color Options**
WM	-	**2** L-shape **2L** Extended Horizontal	**BK** Black **BZ** Bronze **S** Silver **WH** White

2, 2L (shown)

L-Shaped Surface Bracket (for use with Adjustable Arm & Horizontal/Vertical Tenon Mounts)

The WM-4 steel bracket is designed for mounting to a wall or to the side of a wood pole. The bracket provides a 2-3/8" (60mm) O.D. elbow tenon to mount a luminaire. The 0.25" (6mm) thick steel backplate provides wiring access. If surface wiring is required, consult factory. For mounting the bracket to the wall, use only 3/8" (9mm) diameter bolts. Mounting holes are spaced 3-1/4" (83mm) apart.

WM	-		
Product	**-**	**Mounting**	**Color Options**
WM	-	**4** L-shape **4L** Extended L-shape	**BK** Black **BZ** Bronze **S** Silver **WH** White

4, 4L (shown)

Direct Arm Surface Bracket (for use with Cree Edge™ Direct Arm and Direct Arm Long, OSQ™ and OSQ™ High Output Direct Arm Mounts)

The WM-DM steel bracket is designed for mounting luminaires with direct mount arms to a wall or to the side of a wood pole. The 0.25" (6mm) thick steel back plate provides wiring access. The use of 3/8" (9mm) diameter bolts to mount bracket to wall is recommended. Mounting holes are spaced 4.0" (102mm) apart.

WM	-	DM	
Product	**-**	**Mounting**	**Color Options**
WM	-	**DM** Direct Mount	**BK** Black **BZ** Bronze **S** Silver **WH** White

DM

Beauty Plates

The WM-PLT is an aluminum plate designed for covering existing surfaces for LED security luminaire upgrades. The 0.08" (2mm) thick plate provides wiring access. The use of 3/8" (9mm) diameter bolts to mount bracket to wall is recommended. Mounting holes are spaced 4.0" (102mm) apart.

WM	-		
Product	**-**	**Mounting**	**Color Options**
WM	-	**PLT12** 12" Plate **PLT14** 14" Plate	**BK** Black **BZ** Bronze **S** Silver **WH** White

PLT12

PLT14

PGM Series

Ground Mount Post

The PGM-1 steel post is designed for ground mounted floodlight luminaires with an adjustable mounting arm. Wiring or conduit feed through the base of the post.

PB	-		
Product	**-**	**Mounting**	**Color Options**
PB	-	**1** Single Adjustable Arm Mount	**BK** Black **BZ** Bronze **S** Silver **WH** White

PGM-1

APPLICATIONS

INDOOR

Cree® CXB Series

The industry's best mix of quality, reliability and fast payback.

The CXB Series LED Low-Bay/High-Bay luminaire delivers 20,000 median and 26,000 median lumens with illumination performance to allow one-for-one replacement of 250W and 400W HID luminaires and multi-lamp fluorescent low-bay and high-bay fixtures.

With exceptional rated lifetimes, zero restrike time and a compact lightweight construction, the CXB Series is a direct replacement for incumbent HID and fluorescent light sources that provides additional benefits of energy savings and significantly reduced relamp maintenance costs. The CXB Series is offered with reflector choices of aluminum, clear and white acrylic with optional bottom lenses — making it ideal for a variety of applications. The CXB Series is available with 1-10V dimming option.

PLUS - Cree CXB Series

Exceptional Efficacy

The CXB Series High-Bay offers extreme efficacy in the industry's favorite form factor. Available in 20,000 and 26,000 nominal lumen packages, the fixture delivers up to 130 lm/W while saving up to 65% energy over traditional light sources.

Switching to LED has never been easier than with the CXB Series, the ideal replacement for 250/ 400W HID lamps offering you the ability to maximize rebates and virtually eliminate maintenance costs.

Sturdy Design

The CXB Series' clean lines and visually comfortable optics blend into any space while delivering the performance you expect.

Customize the fixture to your space with your choice of aluminum, clear or white acrylic reflectors; optional bottom lenses maximize uplight to reduce dark ceilings and give your space a more open feel.

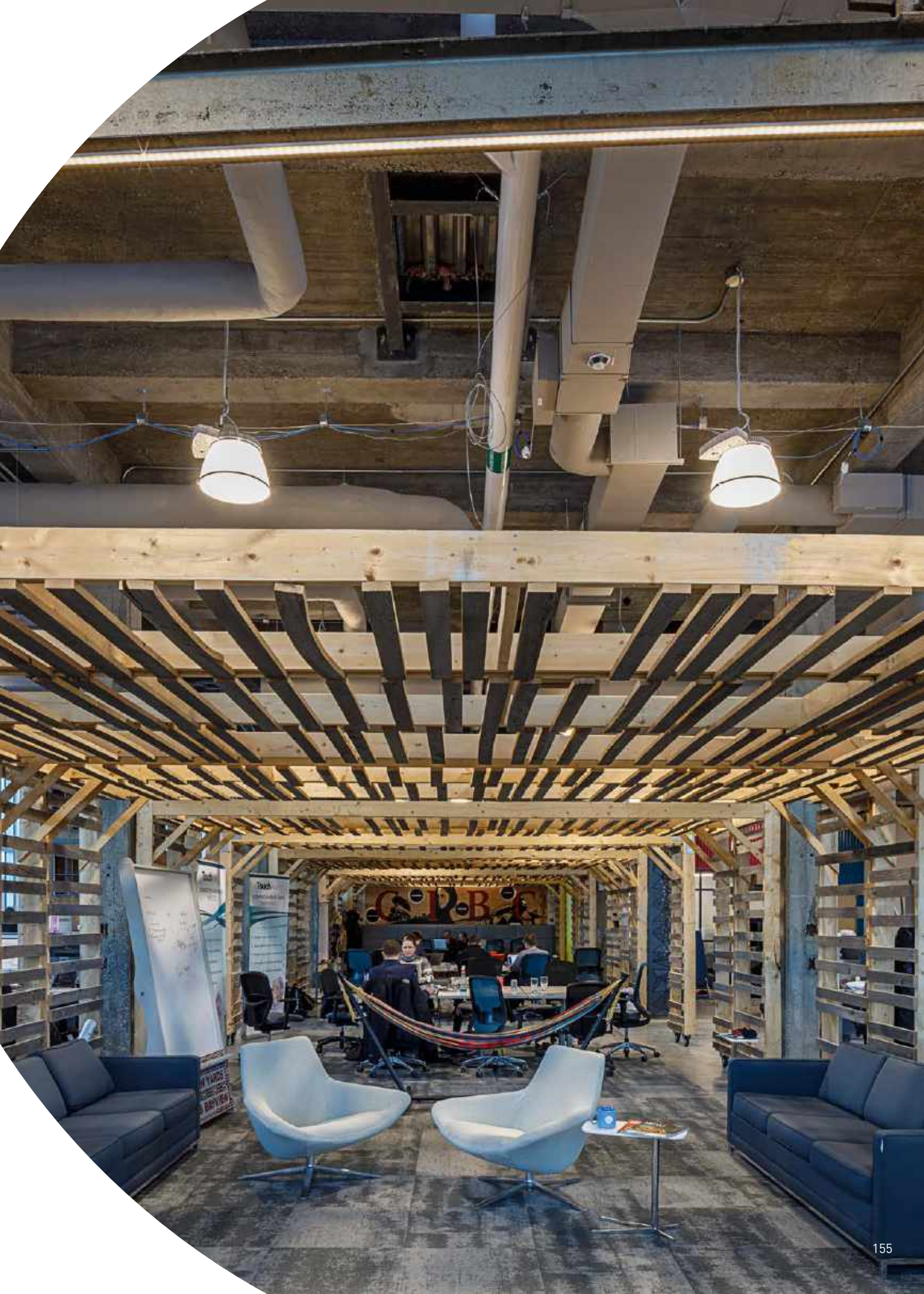
Remarkable Application Flexibility

The CXB Series is versatile and flexible enough for almost any space, whether new construction or retrofit - providing better light to support a safer, more productive environment. Its compact, lightweight construction and universal mounting option make the CXB Series ideal for retail, industrial, warehouse and manufacturing applications.

Longlasting performance

At Cree, we're redefining low/high-bay LED performance. With multiple lumen packages, reflectors and lenses, designing the ideal solution for your application is quick and easy.

Exceptional rated lifetimes, zero restrike time and compact lightweight construction allow you to put the CXB Series in the ceiling and forget about it.



Cree® CXB

FEATURES

- Drop or Clear Conical lens available for intensive emission
- Input power: M = 155W, H = 233W
- Lumen output: 20000 - 26000lm
- Efficacy: Up to 130lm/W
- CCT: 4000K, 5000K (CRI Minimum 80)
- Initial colour consistency
- Input voltage 220-240 V
- Power Factor > 0.9
- Lifetime: L80F10 Up to >100Khrs Ta=25°C (>100Khrs L80 IESNA TM-21)
- Surge protection: 6V CM/DM surge immunity according to EN 61000-4-5 and EN 61547
- Operative temperature: Input power M: 0°C / +50°C for ; Input power H: 0°C / +40°C
- Insulation class: Class I
- Enclosure rated IP20 per IEC 60529
- Cable type H07RN (Cable lenght)
- Control options: 1-10V Dimming
- Mounting choices of direct, pendant, hook or eye mount
- Factory calibrated to hang straight

CONSTRUCTION AND MATERIALS

- Die cast aluminum heatsink
- Low-profile, lightweight design provides ease of installation
- HH mount is provided with spring lock hook for mounting

WARRANTY AND CERTIFICATIONS

- Limited Warranty†: 10 years on luminaire
- CE mark
- RCM Approved

† See www.cree-europe.com/en/resources/warranty for warranty terms

Ordering Information

Light Engine (Reflector must be ordered separately)

Example: CXB-B-JP-M-40K-8-+-UC-ADIM-TS

CXB	-	B	-	JP	-	M	-	40K	-	8	-	+	-	UC	-	ADIM	-	TS
Product		**Version**		**Mounting**		**Lumen Output**		**Color Temp**		**CRI**		**Insulation Class**		**Voltage**		**Controls**		**Surge**
CXB	-	**B**	-	**JP** J-Box or Pendant **EY** Eye bolt mount **HH** Hook mount	-	**M** 155W, 20,000 Median Lumens **H** 233W, 26,000 Median Lumens	-	**40K** 4000K **50K** 5000K	-	**8** 80 CRI	-	**+** Class 1	-	**UC** 220-240V	-	**ADIM** 1-10V Dimming to 5%	-	**TS** 6kV

Ordering information is for reference only. Some product configurations are not available. Please consult spec sheets for specific product availability and for further details.

Reflector

Fully assembled luminaire is composed of two components that must be ordered separately:
Example: Reflector: CXBA16N + Light Engine: CXB B JP M 40K 8 + UC ADIM TS

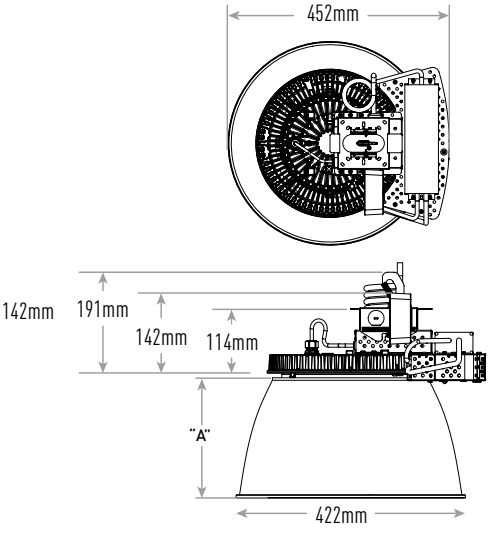
CXBA16N
- 406mm Aluminum

CXBP16
- 406mm Clear Acrylic
- Acrylic reflector is not impact resistant nor intended for use unprotected in a gymnasium

CXBW16
- 406mm White Acrylic
- Acrylic reflector is not impact resistant nor intended for use unprotected in a gymnasium

Dimensions

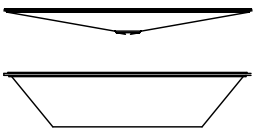
Weight: up to 6.4 kg



Reflector	"A" Height
CXBA16N (Aluminum)	229mm
CXBP16 (Clear Prismatic)	216mm
CXBW16 (White Acrylic)	216mm

Accessory Information

SAFETY CABLES	LENS OPTIONS	
SC-5 - 1.5m Cable **SC-10** - 3.0m Cable	Wire Guards **WG-A** - 406mm Wire Guard for Aluminum Reflector **WG-AP** - 406mm Wire Guard for Acrylic Reflector	Lenses **DL16** - 406mm Acrylic Clear Prismatic Drop Lens for Acrylic Reflector **CL16** - 406mm Acrylic Clear Conical Bottom Lens for Acrylic Reflector



Cree® WS Series

Ideal for environmentally-demanding locations.

Constructed of one-piece molded polycarbonate and UV stabilized impact-resistant diffused acrylic shielding. Cree WS Series meets critical mechanical requirements to enable wet location installations providing protection from external elements.

WS Series is ideal for low to medium mounting heights and is suitable for operating temperatures ranging from -25°C to 35°C, allowing for cold or hot weather climate installations. A great solution for both new construction and upgrade applications.

Cree® WS Series

FEATURES

- Input Power: Up to 52W
- Lumen output: Up to 5100 lumens
- Efficacy: up to 100lm/W
- CCT: 3000K, 4000K (CRI: Minimum 80)
- High-efficiency diffuser with high visual comfort (no pixelization)
- Initial colour consistency
- Input voltage 220 - 240 V
- Power Factor > 0.9
- Lifetime: L80F10 Up to >100Khrs Ta=25°C (>100Khrs L80 IESNA TM-21)
- Operative temperature: -25˚C up to 35˚C
- Insulation class: Class I
- Enclosure rated IP65 per IEC 60529
- Impact resistance IK08
- Control Option: Fixed output, DALI

CONSTRUCTION AND MATERIALS

- Housing constructed of one-piece molded polycarbonate
- Injection molded translucent, impact resistant, UV stabilised polycarbonate shielding
- Polyurethane gasketing is poured in place, providing a continuous, seamless seal
- PA6 (polyamide) latches

WARRANTY AND CERTIFICATIONS

- Limited Warranty†: 5 years on luminaire
- CE mark
- Risk group exempt in accordance with Standard CEI EN 62471 for photobiological safety

† See www.cree-europe.com/en/resources/warranty for warranty terms

Ordering Information

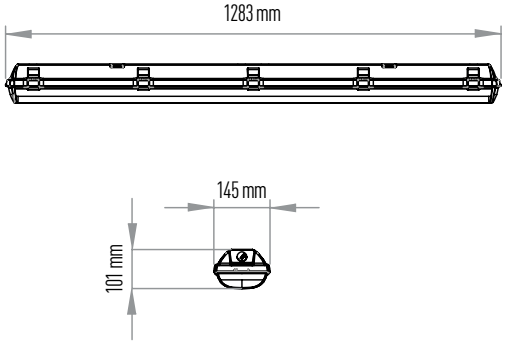
Example: WS-E-12-50-7-D

WS	-	E	-	12	-	50	-	7	-	D
Product		**Version**		**Length**		**Lumen Output**		**Color Temp**		**Options**
WS	-	**E** 220-240V	-	**12** 1,2m	-	**50** 52W 5000 lumens (40K) **40** 38W 4000 lumens (40K)	-	**7** 4000K	-	**No code** Fixed Output **D** DALI **C** Continuous line - max. 25 luminaires per line **S** Stainless steel clips **N** Panel connector **A** Increased eff. lens
						45 52W 4500 lumens (30K) **35** 38W 3500 lumens (30K)		**3** 3000K		

Ordering information is for reference only. Some product configurations are not available. Please consult spec sheets for specific product availability and for further details.

Dimensions

Weight: 3 kg



Accessory Information

MOUNTING OPTION
SUSMOUNT Suspended mounting

Cree® LR Series

A troffer design so quiet your ceilings will whisper about it for decades.

Our architecturally designed recessed troffer series blends seamlessly into any installation and offers soft, smooth, fully-luminous light, creating a quiet ceiling that keeps spaces bright and vibrant. The innovatively thin depth of the troffer easily accommodates narrow plenums and is ideal for both retrofit and new construction.

The LR22 LED troffer delivers 3400 lumens of exceptional 90 CRI light providing great lighting quality to any indoor environment. This breakthrough performance is achieved thanks to the high efficacy and high-quality light of Cree TrueWhite® Technology. Delivering 0-10V continuous dimming on every luminaire allows for further energy savings when utilized for even faster payback.


43
BEND PAK

PLUS - Cree LR Series

Inspired design

The LR22™ LED architectural troffer has a sleek, flat panel design with a recessed lens providing a more luminous surface that blends seamlessly into any ceiling and creating a smooth look that offers a beautifully soft, balanced light without the glare.

Remarkable performance

That's Truly Affordable Priced to deliver the shortest payback time of less than 2.5 years when compared to traditional CFL Troffers, the LR22 LED troffer is a no-compromise architectural luminaire that reduces energy consumption up to 60% and eliminates up to 3 maintenance cycles throughout its 10-year limited warranty.

Unrivaled color quality & efficiency

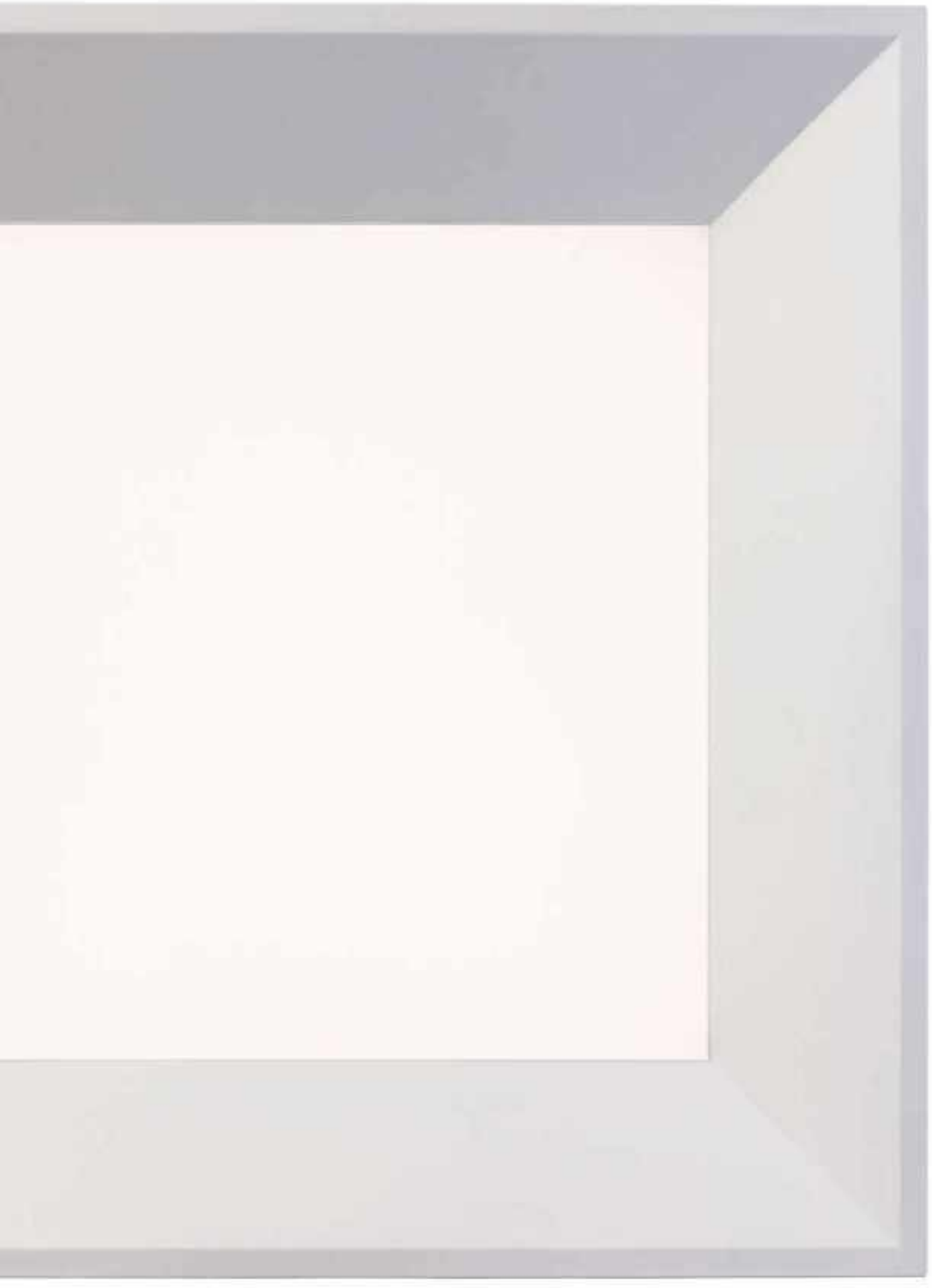
Engineered with Cree TrueWhite® Technology, the Cree LR22 LED troffer delivers 100 lumens per watt of stunning 90 CRI light with unparalleled lifetime color consistency to improve the aesthetics of any space.

Ultimate flexibility

Delivering 0-10V dimming standard, the LR Series can drastically reduce wattage per square meter, allowing more design freedom to meet energy saving requirements. In addition, the ultra-thin form factor allows the LR22 LED troffer to fit into almost any plenum space, opening up application opportunities in both healthcare and education.

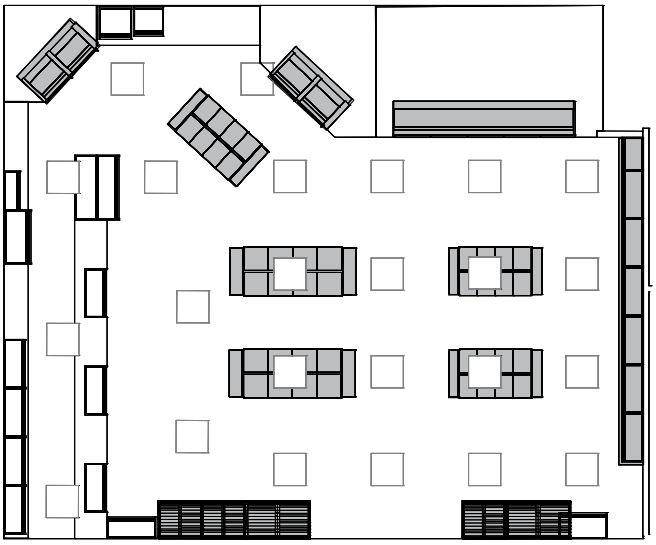

WASTE

LR Series - PERFORMANCE



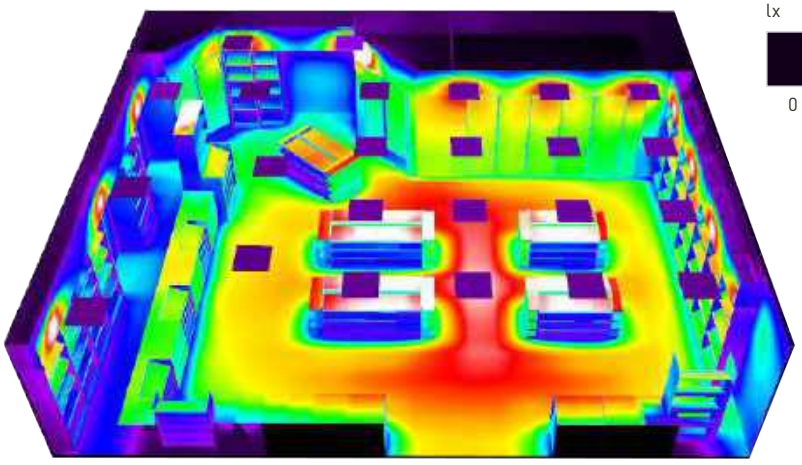
APPLICATION EXAMPLE: SHOP

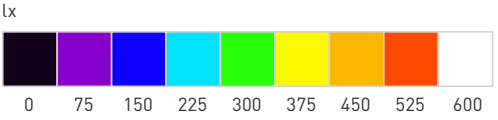
Sales areas represent a typical case for replacement of fluorescent fixtures with the LR22 series. The use of LED luminaires greatly improves the quality of light, giving brightness and materiality to the colors to enhance the quality of the items on sale and improving the shopping experience. Even the numbers improve, with a recovery in the cost of the investment in just one year and a saving over the life of the device of over 20 thousand euros.



Estimated total savings and payback (€)

	LR22 3200lm	Architectural troffer 4 x T5 lamps
Total number of fixtures (pcs)	24	24
Total power consumption (W)	816	1920
Lifetime (yrs)	10	2
Total annual costs	**612 €**	**2.640 €**
Annual energy cost	612 €	1.440 €
Annual maintenance cost	0 €	1.200 €
Estimated total savings		
Estimated total savings	20.280 €	
kWh total saving	55.200 kWh	
CO2 emission reduction	29 tons	
Payback time	**0,97 years**	





Product type
LR22 34W 3200lm 40K CRI90

Cree® LR

FEATURES

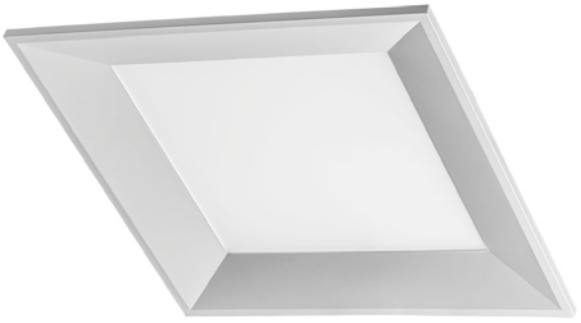
- Cree TrueWhite® Technology
- Input power: 34W
- Lumen output: Up to 3400lm
- Efficacy: up to 100lm/W
- CCT: 3000K, 4000K (CRI: Minimum 90)
- Initial Colour Consistency: 4 MacAdam steps
- High-efficiency diffuser with high visual comfort (no pixelization)
- UGR<19 according to EN 12464-1
- Input voltage 220 - 240 V
- Power Factor > 0.9
- Lifetime: L80F10 Up to >100Khrs Ta=25°C (>100Khrs L80 IESNA TM-21)
- Operative temperature: 0 - 30°C
- Enclosure rated IP20 per IEC 60529
- Control Option: 1-10V Dimming, DALI

CONSTRUCTION AND MATERIALS

- Durable 20 ga. galvanized steel housing provides strength and uniformity
- Ultra-thin 90mm fixture height and lightweight design effectively target a broad range of plenum spaces and allow for easy installations
- Fixture is powder coated for a soft textured finish
- Provided t-bar clips and holes for mounting support wires enable recessed or suspended installation
- Fixture sides and ends are hemmed in for safe, easy handling
- Includes lens gasket to prevent ingress of insects
- Recessed flat polycarbonate panel design delivers more surface area light creating a soft highly diffused light source

WARRANTY AND CERTIFICATIONS

- Limited Warranty†: 10 years on luminaire
- CE mark
- Risk group exempt in accordance with Standard CEI EN 62471 for photobiological safety (Tested IEC/TR62778)



† See www.cree-europe.com/en/resources/warranty for warranty terms

Ordering Information

Example: LR22-34L-30K-23A-DIM

LR22	-	32L	-	30K	-	23	-	ADIM
Product		**Lumen Output**		**Color Temp**		**Voltage**		**Control**
LR22	-	**32L** 34W 3300 lumen	-	**30K** 3000 Kelvin	-	**23** 220-240V (Standard)	-	**ADIM** Dimming to 5% **DALI** Dimming to 5%
		34L 34W 3400 lumen		**40K** 4000 Kelvin				

Ordering information is for reference only. Some product configurations are not available. Please consult spec sheets for specific product availability and for further details.

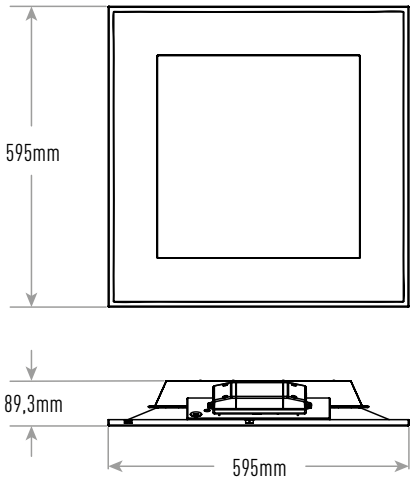
Application Reference

OPEN SPACE				
Spacing (mt)	**Lumens**	**Wattage**	**W/m²**	**Actual Lux**
2.4 x 2.4	3400	34	5,64	517
2.4 x 3.0	3400	34	4,69	431
3.0 x 3.0	3400	34	3,76	344
3.0 x 3.6	3400	34	3,03	280

3mt ceiling: 80/50/20 reflectances; 0,75mt workplane, open room.
LLF: 1.0 Initial
Open Space: 15mt x 12mt x 3mt

Dimensions

Weight: 7 kg



Cree® CR Series

Superior light, better by design.

The CR series demonstrates Cree technical ingenuity at its finest, delivering a superior combination of performance, aesthetics, and affordability. Every fixture in the series is designed to be compact and effective for spaces that require high efficiency, high quality general purpose lighting. Ideal applications include office, education, medical, and retail environments.


DUNKIN' DONUTS
COFFEE & MORE
BURGER KING

PLUS - Cree CR Series

Seamless form & function

The CR Series integrates functional elements into the aesthetics to achieve a sleek architectural look while delivering standard-setting performance and efficiency. The room-side heat sink creates a sleek architectural look while also delivering a breakthrough in thermal management. Its unconventional design shows what can be achieved when form follows function, as it enables the CR Series to outperform the industry in efficacy, lifetime, and light quality.

Room-side heat sink

An innovative thermal management system designed to maximize cooling effectiveness by integrating a unique room-side heat sink into the diffusing lens. Because of this, the CR Series can use the moderate interior climate to maximize cooling effectiveness so the LEDs consistently run cooler, dramatically improving their performance.

Soft, brilliant light

The room-side heat sink also delivers the benefit of recessed indirect lighting with an upward-facing, high CRI linear LED array integrated with a highly reflective mixing chamber and diffusing lens. This design ensures uniform lens luminance without pixelation and an optimal light distribution that softly washes walls while effectively illuminating horizontal work surfaces.

Color rendering does matter

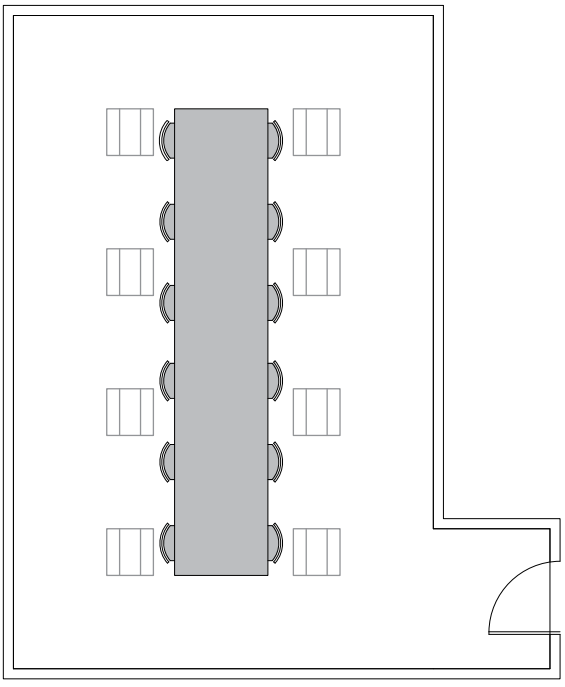
Color is a powerful element in every space. It establishes the tone and personality of our businesses. It not only shapes our moods, it can influence our buying decisions and enhance our ability to learn, perform, and interact. With 90+ CRI, CR Series troffers beautifully render the true colors of everything from furnishings to apparel. Their high CRI also helps increase perceived brightness which can lower overall lumen requirements, delivering business value far beyond their inherent energy savings.


Busy Bee
Hive
BEE-Refreshed
Busy Bee
BEE-Re

CR Series - PERFORMANCE

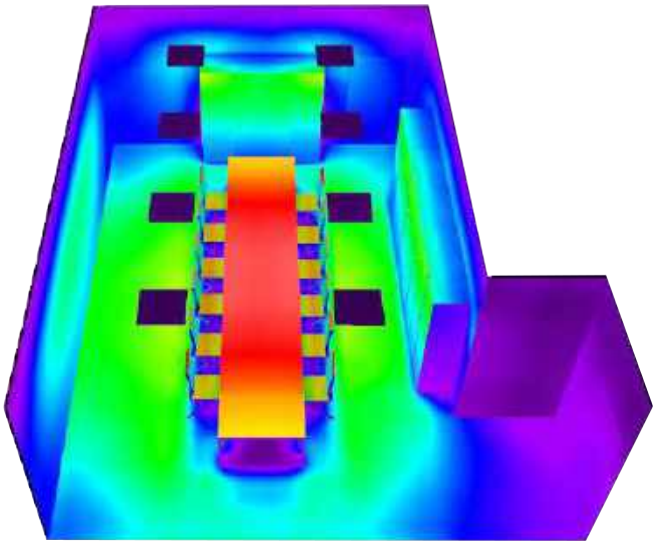
APPLICATION EXAMPLE: MEETING ROOM

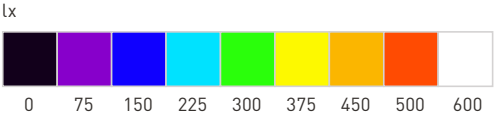
In a typical meeting room, the use of CR22 LED recessed fixtures in substitution of conventional luminaires equipped with fluorescent lamps allows to recover the small difference in initial investment costs in less than a year. In addition, the new lighting fixtures guarantee a higher quality of light and greater savings over the life of the luminaire.



Estimated total savings and payback (€)

	CR22 3200lm	Architectural troffer 4 x T5 lamps
Total number of fixtures (pcs)	8	8
Total power consumption (W)	280W	640W
Lifetime (yrs)	10	2
Total annual costs	**210 €**	**880 €**
Annual energy cost	210 €	480 €
Annual maintenance cost	0 €	400 €
Estimated total savings		
Estimated total savings	6.700 €	
kWh total saving	14.400 kWh	
CO2 emission reduction	7,6 tons	
Payback time	**1,07 years**	





Product type
CR22 35W 3200lm 40K CRI90

Cree® CR14

FEATURES

- Cree TrueWhite® Technology
- Field replaceable light engine
- Input power : Up to 50W
- Lumen output: Up to 5000 Lm
- Efficacy: Up to 110lm/W
- CCT: 3000K, 4000K (CRI: Minimum 90)
- Initial Colour Consistency: 4 MacAdam steps
- Diffusing lens integrated with upward-facing LED strip eliminates direct view of LEDs while lower reflector balances brightness of lens with the ceiling to create a low-glare high angle appearance
- UGR<19 according to EN 12464-1
- Input voltage 220 - 240 V
- Power Factor > 0.9
- Lifetime: L80F10 Up to >100Khrs Ta=25°C (>100Khrs L80 IESNA TM-21)
- Operative temperature: 0 - 40°C
- Enclosure rated IP23 per IEC 60529
- Control Option: Fixed output, 1-10V Dimming, DALI

CONSTRUCTION AND MATERIALS

- Durable 20-gauge steel housing with standard troffer access plate for electrical installation.
- Field replaceable light engine integrates LEDs, driver, power supply, thermal management, and optical mixing components.
- One-piece lower reflector nished with a textured high reflectance white polyester powder coating creates a comfortable visual transition from the lens to the ceiling plane
- Provided t-bar clips and holes for mounting support wires enable recessed or suspended installation
- Individual fixtures may be mounted end to end for a continuous row of illumination

WARRANTY AND CERTIFICATIONS

- Limited Warranty†: 10 years on luminaire
- CE mark
- Risk group exempt in accordance with Standard CEI EN 62471 for photobiological safety (Tested IEC/TR62778)

† See www.cree-europe.com/en/resources/warranty for warranty terms

Ordering Information

Example: CR14-22L-30K-23-ADIM

CR14	-	22L	-	30K	-	23	-	ADIM	-	
Product		**Lumen Output**		**Color Temp**		**Voltage**		**Control**		**Options**
CR14	-	**22L** 22W 2200 lumens **40L** 44W 4000 lumens **40L HE** 36W 4000 lumens - (30 K) 38W 4000 lumens - (40 K) **50L** 50W 5000 lumens	-	**30K** 3000 Kelvin **40K** 4000 Kelvin	-	**23** 220-240V (Standard)	-	**No code** Non-dimming **ADIM** 1-10V Dimming to 5% **DALI*** DALI Dimming to 5%	-	**No code** CE/CB certified

* Not available for codes CR14-22L

Ordering information is for reference only. Some product configurations are not available. Please consult spec sheets for specific product availability and for further details.

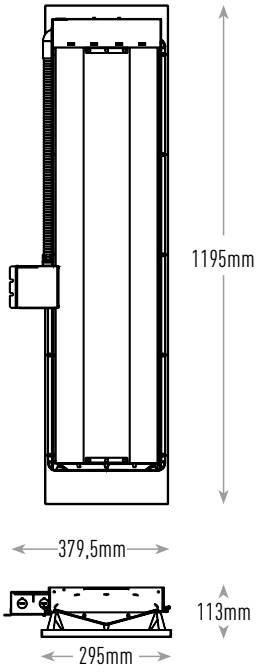
Application Reference

OPEN SPACE				
Spacing (mt)	**Lumens (lm)**	**Wattage (W)**	**W/m²**	**Actual Lux**
2.4 x 2.4	2200	22	3.76	330
	4000	44	7,42	590
	4000	36	6,02	590
	5000	50	8,39	740
2.4 x 3.0	2200	22	3,01	270
	4000	44	5,91	490
	4000	36	4,84	490
	5000	50	6,67	620
3.0 x 3.0	2200	22	2,37	230
	4000	44	4,73	415
	4000	36	3,87	415
	5000	50	5,38	525
3.0 x 3.6	2200	22	2,04	185
	4000	44	3,98	330
	4000	36	3,23	330
	5000	50	4,52	415

3mt ceiling: 80/50/20 reflectances; 0,75mt workplane, open room.
LLF: 1.0 Initial
Open Space: 15mt x 12mt x 3mt

Dimensions

Weight: 10 kg



Cree® CR22

FEATURES

- Cree TrueWhite® Technology
- Field replaceable light engine
- Input power : Up to 35W
- Lumen output: Up to 3200 Lm
- Efficacy: Up to 100lm/W
- CCT: 3000K, 4000K (CRI: Minimum 90)
- Initial Colour Consistency: 4 MacAdam steps
- Diffusing lens integrated with upward-facing LED strip eliminates direct view of LEDs while lower reflector balances brightness of lens with the ceiling to create a low-glare high angle appearance
- UGR<19 according to EN 12464-1
- Input voltage 220 - 240 V
- Power Factor > 0.9
- Lifetime: L80F10 Up to >100Khrs Ta=25°C (>100Khrs L80 IESNA TM-21)
- Operative temperature: 0 - 40°C
- Enclosure rated IP23 per IEC 60529
- Control Option: Fixed output, 1-10V Dimming, DALI

CONSTRUCTION AND MATERIALS

- Durable 20-gauge steel housing with standard troffer access plate for electrical installation.
- Field replaceable light engine integrates LEDs, driver, power supply, thermal management, and optical mixing components.
- One-piece lower reflector nished with a textured high reflectance white polyester powder coating creates a comfortable visual transition from the lens to the ceiling plane
- Provided t-bar clips and holes for mounting support wires enable recessed or suspended installation
- Individual fixtures may be mounted end to end for a continuous row of illumination

WARRANTY AND CERTIFICATIONS

- Limited Warranty†: 10 years on luminaire
- CE mark
- Risk group exempt in accordance with Standard CEI EN 62471 for photobiological safety (Tested IEC/TR62778)

† See www.cree-europe.com/en/resources/warranty for warranty terms

Ordering Information

Example: CR22-22L-30K-23-ADIM

CR22	-	22L	-	30K	-	23	-	ADIM	-	
Product		**Lumen Output**		**Color Temp**		**Voltage**		**Control**		**Options**
CR22	-	**22L** 22W 2200 lumens **32L** 35W 3200 lumen	-	**30K** 3000 Kelvin **40K** 4000 Kelvin	-	**23** 220-240V (Standard)	-	**No code** Non-dimming **ADIM** 1-10V Dimming to 5% **DALI*** DALI Dimming to 5%	-	**No code** CE/CB certified

* Not available for codes CR22-22L

Ordering information is for reference only. Some product configurations are not available. Please consult spec sheets for specific product availability and for further details.

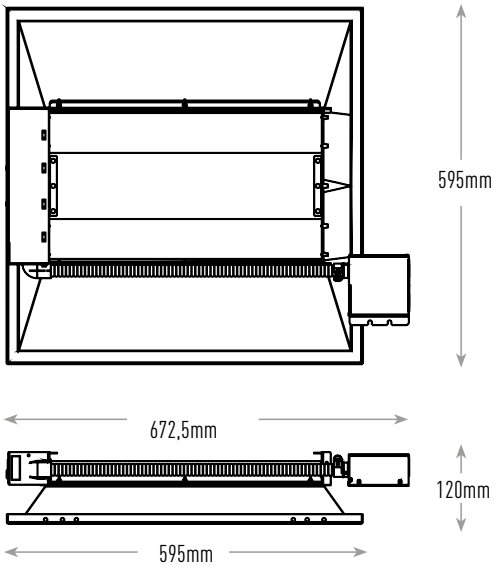
Application Reference

OPEN SPACE				
Spacing (mt)	**Lumens (lm)**	**Wattage (W)**	**W/m²**	**Actual Lux**
2.4 x 2.4	2200	22	3.76	305
	3200	35	5,91	480
2.4 x 3.0	2200	22	3,01	250
	3200	35	4,73	405
3.0 x 3.0	2200	22	2,37	215
	3200	35	3,76	340
3.0 x 3.6	2200	22	2,04	175
	3200	35	3,12	275

3mt ceiling: 80/50/20 reflectances; 0,75mt workplane, open room.
LLF: 1.0 Initial
Open Space: 15mt x 12mt x 3mt

Dimensions

Weight: 7 kg



Cree® CR24

FEATURES

- Cree TrueWhite® Technology
- Field replaceable light engine
- Input power : Up to 50W
- Lumen output: Up to 5000 Lm
- Efficacy: Up to 110lm/W
- CCT: 3000K, 4000K (CRI: Minimum 90)
- Initial Colour Consistency: 4 MacAdam steps
- Diffusing lens integrated with upward-facing LED strip eliminates direct view of LEDs while lower reflector balances brightness of lens with the ceiling to create a low-glare high angle appearance
- UGR<19 according to EN 12464-1
- Input voltage 220 - 240 V
- Power Factor > 0.9
- Lifetime: L80F10 Up to >100Khrs Ta=25°C (>100Khrs L80 IESNA TM-21)
- Operative temperature: 0 - 40°C
- Enclosure rated IP23 per IEC 60529
- Control Option: Fixed output, 1-10V Dimming, DALI

CONSTRUCTION AND MATERIALS

- Durable 20-gauge steel housing with standard troffer access plate for electrical installation.
- Field replaceable light engine integrates LEDs, driver, power supply, thermal management, and optical mixing components.
- One-piece lower reflector nished with a textured high reflectance white polyester powder coating creates a comfortable visual transition from the lens to the ceiling plane
- Provided t-bar clips and holes for mounting support wires enable recessed or suspended installation
- Individual fixtures may be mounted end to end for a continuous row of illumination

WARRANTY AND CERTIFICATIONS

- Limited Warranty†: 10 years on luminaire
- CE mark
- Risk group exempt in accordance with Standard CEI EN 62471 for photobiological safety (Tested IEC/TR62778)

† See www.cree-europe.com/en/resources/warranty for warranty terms

Ordering Information

Example: CR24-22L-30K-23-ADIM

CR24	-	22L	-	30K	-	23	-	ADIM	-	
Product		**Lumen Output**		**Color Temp**		**Voltage**		**Control**		**Options**
CR24	-	**22L** 22W 2200 lumens **40L** 44W 4000 lumens **40L HE** 36W 4000 lumens - (30 K) 38W 4000 lumens - (40 K) **50L** 50W 5000 lumens	-	**30K** 3000 Kelvin **40K** 4000 Kelvin	-	**23** 220-240V (Standard)	-	**No code** Non-dimming **ADIM** 1-10V Dimming to 5% **DALI*** DALI Dimming to 5%	-	**No code** CE/CB certified

* Not available for codes CR24-22L

Ordering information is for reference only. Some product configurations are not available. Please consult spec sheets for specific product availability and for further details.

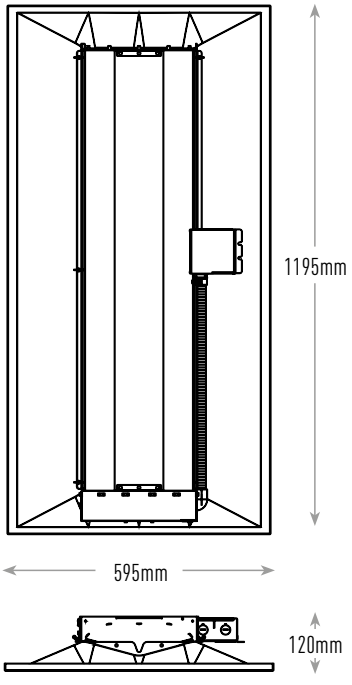
Application Reference

OPEN SPACE				
Spacing (mt)	**Lumens (lm)**	**Wattage (W)**	**W/m²**	**Actual Lux**
2.4 x 2.4	2200	22	3.76	330
	4000	44	7,42	600
	4000	36	6,02	600
	5000	50	8,39	750
2.4 x 3.0	2200	22	3,01	275
	4000	44	5,91	500
	4000	36	4,84	500
	5000	50	6,67	635
3.0 x 3.0	2200	22	2,37	230
	4000	44	4,73	425
	4000	36	3,87	425
	5000	50	5,38	535
3.0 x 3.6	2200	22	2,04	185
	4000	44	3,98	340
	4000	36	3,23	340
	5000	50	4,52	425

3mt ceiling: 80/50/20 reflectances; 0,75mt workplane, open room.
LLF: 1.0 Initial
Open Space: 15mt x 12mt x 3mt

Dimensions

Weight: 10 kg

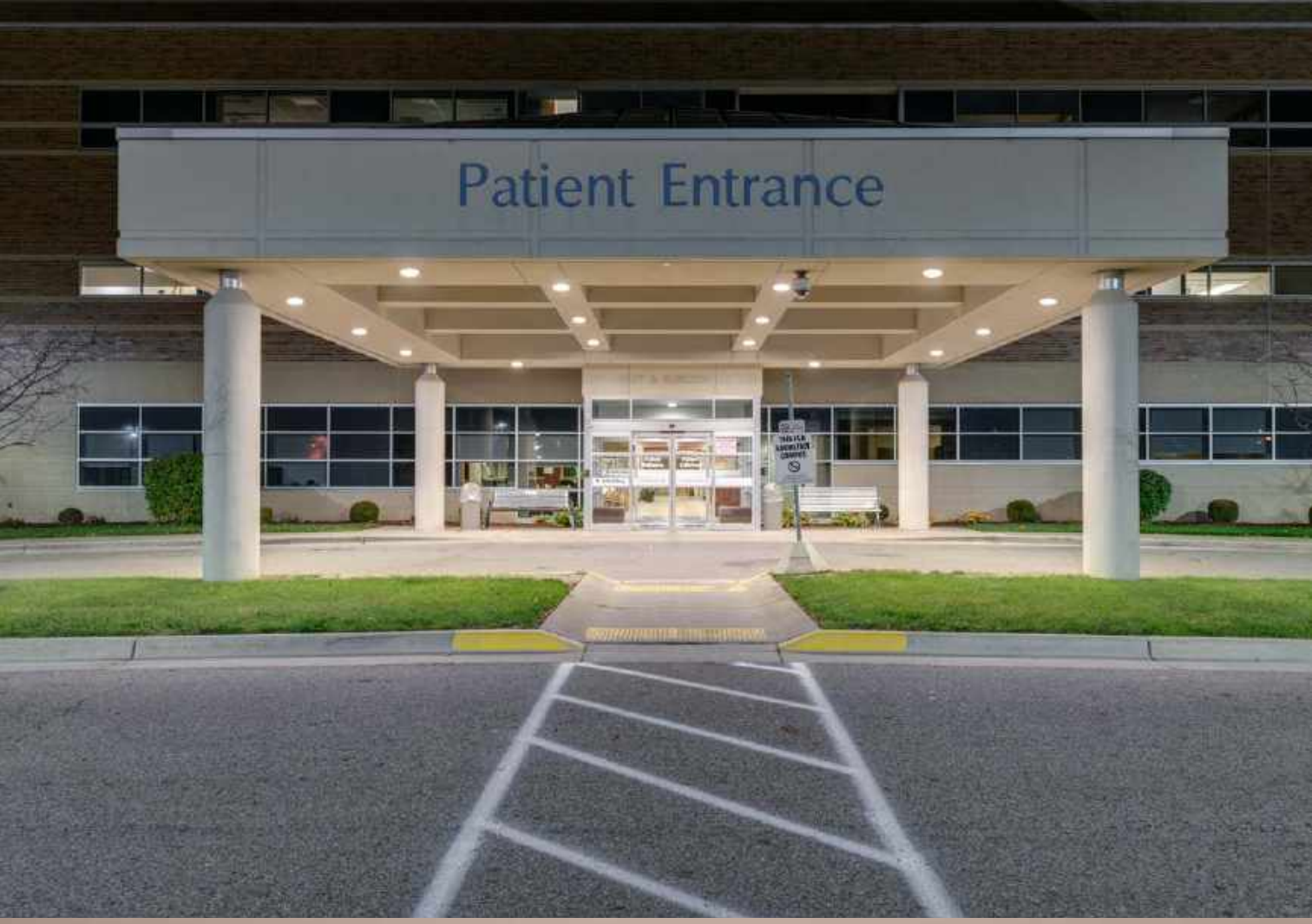


Cree® CRX Series

Compact shape. Extreme flexibility.

Cree unveils the new CRX Series, a range of downlights designed for both residential and commercial markets with increased effectiveness, lumen output and a high colour rendering index.

The CRX Series offers flexibility for various environments, with three sizes (100, 125 and 150mm); interchangeable metallic trim finishes; light output ranging from 750 up to 2600 lumens and multiple control options including DALI dimming. In a standard set-up, the downlights provide soft uniform light with a 100° viewing angle, which can be modified with tailored accessories to obtain angles of 12°, 24° or 38°.


Patient Entrance

PLUS - Cree CRX Series

Let colors play

Indoor lighting means respecting the mood of the interiors to be lit so colors and finished are fundamental in order to let the designers play.

CRX features matt metallized finishes that can be changed thanks to the integrated reflector.

Easy to install

Quick tool-free installation thanks to flexible springs and rapid electrical connectors. All versions available within the product range are conceived to guarantee the utmost flexibility in terms of installation and safety in terms of electrical connection.

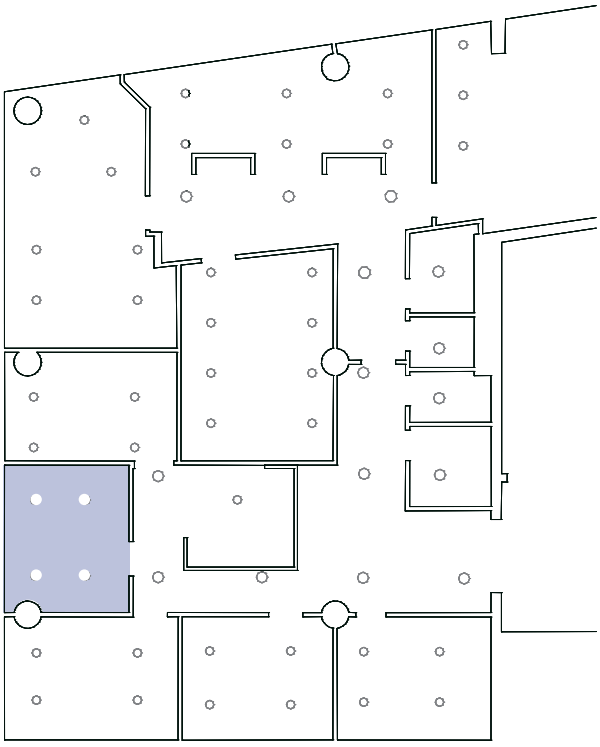
Flexible optical system

Unique combination of reflective and refractive optical components achieves a uniform, comfortable appearance while eliminating pixelation, hot spots and minimizing glare. Diffusing polycarbonate lens shields direct view of LEDs and provides greater visual cut-off. Components work together to optimize distribution, balancing the delivery of high illuminance levels on horizontal surfaces with an ideal amount of light on walls and vertical surfaces. This increases the perception of spaciousness.

CRX Series - PERFORMANCE

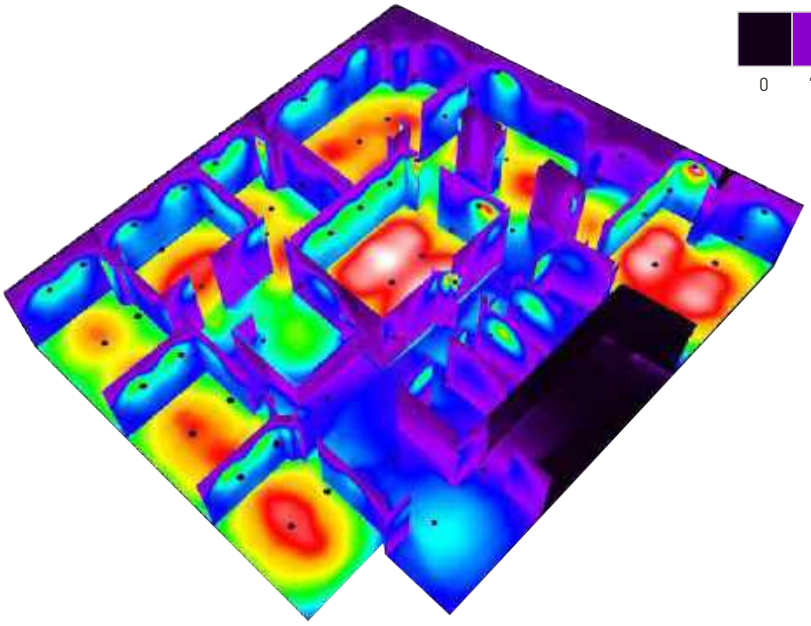
APPLICATION EXAMPLE: OFFICE

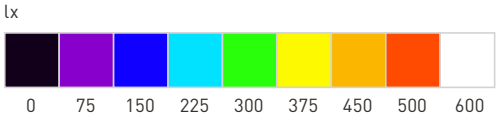
Replacing the general lighting of a work space with a more efficient and better quality lighting is a common requirement. The direct comparison between the CRX downlight and its corresponding version equipped with traditional low-consumption compact fluorescent lamps is immediately winning. The recovery of the investment is amortized over the first six months of the plant's life, guaranteeing concrete savings over time. The quality of light is excellent from all points of view: management of shadows, illumination of vertical planes and uniformity of the visual task are under control and meet all the required regulatory requirements.



Estimated total savings and payback (€)

	CRX150 2600lm	Architectural downlight 2 x TC-L lamps
Total number of fixtures (pcs)	4	4
Total power consumption (W)	112	208
Lifetime (yrs)	10	2
Total annual costs	**84 €**	**356 €**
Annual energy cost	84 €	156 €
Annual maintenance cost	0 €	200 €
Estimated total savings		
Estimated total savings	2.720 €	
kWh total saving	4800 kWh	
CO2 emission reduction	2,5 tonnellate	
Payback time	**0,6 years**	





Product types

CRX125 14W 1400lm 40K CRI90

CRX150 28W 2600lm 40K CRI90

Cree® CRX100

FEATURES

- Cree TrueWhite® Technology
- Input power:7W
- Lumen output: 650lm
- Efficacy: 95lm/W
- CCT: 3000K, 4000K, 5000K (CRI: Minimum 90)
- Initial Colour Consistency: 2 MacAdam steps
- Input voltage 220 - 240 V
- Power Factor Up to > 0.85
- Lifetime: L80F10 Up to >150Khrs Ta=25°C (>150Khrs L80 IESNA TM-21)
- Operative temperature: 0 - 35°C
- Enclosure rated IP20 per IEC 60529
- Control Option: Fixed otput, DALI

CONSTRUCTION AND MATERIALS

- Housing made of spun Aluminium powder coated
- Steel spring clips resist heat while providing retention for flush ceiling fit
- One-piece aluminum lower reflector redirects light while also conducting heat away from LEDs.
- Diffuser made of white polycarbonate V0
- Not for direct burial in insulation

WARRANTY AND CERTIFICATIONS

- Limited Warranty†: 5 years on luminaire
- CE mark
- CCC mark
- RCM mark
- RoHs compliant
- Risk group exempt in accordance with Standard CEI EN 62471 for photobiological safety (Tested IEC/TR62778)

† See www.cree-europe.com/en/resources/warranty for warranty terms

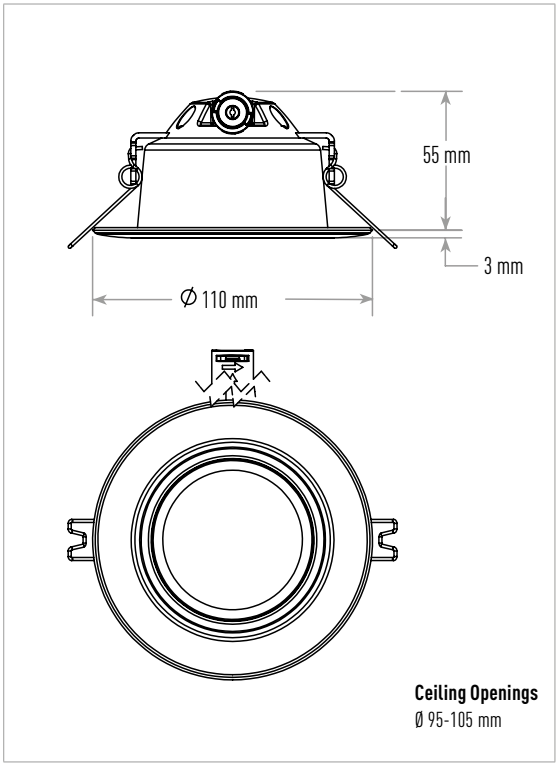
Ordering Information

Example: CRX100-7W-30K9-23-ND

CRX100	-	7W	-	30K9	-	23	-	ND	-	
Product		**Wattage**		**Color Temp**		**Voltage**		**Control**		**Options**
CRX100 100mm	-	**7W** 650 lumens 6.8W (ND) 7.5W (DALI)	-	**30K9** 3000 Kelvin, 90 CRI **40K9** 4000 Kelvin, 90 CRI **50K9** 5000 Kelvin, 90 CRI	-	**23** 220-240 VAC (Standard)	-	**ND** Non-Dimmable **DALI** DALI dimming to 1%	-	**BLANK** CE/RCM certified

Ordering information is for reference only. Some product configurations are not available. Please consult spec sheets for specific product availability and for further details.

Dimensions



Ceiling Openings
Ø 95-105 mm

Cree® CRX125

FEATURES

- Cree TrueWhite® Technology
- Input power: Up to 14W
- Lumen output: 1400lm
- Efficacy: 105lm/W
- CCT: 3000K, 4000K, 5000K (CRI: Minimum 90)
- Initial Colour Consistency: 2 MacAdam steps
- Input voltage 220 - 240 V
- Power Factor Up to > 0.85
- Lifetime: L80F10 Up to >150Khrs Ta=25°C (>150Khrs L80 IESNA TM-21)
- Operative temperature: 0 - 35°C
- Enclosure rated IP20 per IEC 60529
- Control Option: Fixed otput, DALI

CONSTRUCTION AND MATERIALS

- Housing made of spun Aluminium powder coated
- Steel spring clips resist heat while providing retention for flush ceiling fit
- One-piece aluminum lower reflector redirects light while also conducting heat away from LEDs.
- Diffuser made of white polycarbonate V0
- Not for direct burial in insulation

WARRANTY AND CERTIFICATIONS

- Limited Warranty†: 5 years on luminaire
- CE mark
- CCC mark
- RCM mark
- RoHs compliant
- Risk group exempt in accordance with Standard CEI EN 62471 for photobiological safety (Tested IEC/TR62778)

† See www.cree-europe.com/en/resources/warranty for warranty terms

Ordering Information

Example: CRX125-7W-30K9-23-ND

CRX125	-	7W	-	30K9	-	23	-	ND	-	
Product		**Wattage**		**Color Temp**		**Voltage**		**Control**		**Options**
CRX125 125mm	-	**7W** 650 lumens 6.8W (ND) 7.5W (DALI) **14W** 1400 lumens 13.7W (ND) 13.8W (DALI)	-	**30K9** 3000 Kelvin, 90 CRI **40K9** 4000 Kelvin, 90 CRI **50K9** 5000 Kelvin, 90 CRI	-	**23** 220-240 VAC (Standard)	-	**ND** Non-Dimmable **DALI** DALI dimming to 1%	-	**BLANK** CE/RCM certified **CP** CCC certified

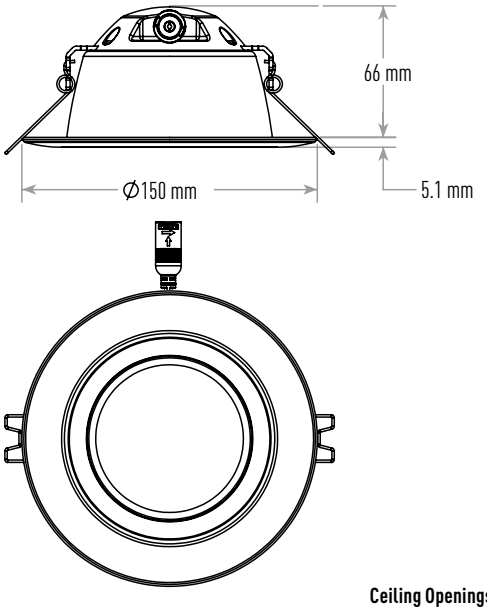
Ordering information is for reference only. Some product configurations are not available. Please consult spec sheets for specific product availability and for further details.

Application Reference

CORRIDOR				
Spacing (mt)	**Lumens**	**Wattage**	**W/m²**	**Actual Lux**
1.2 on center	1400	14	7,78	481
1.8 on center			5,29	329
2.4 on center			3,73	232
3.0 on center			3,11	192

2,7mt ceiling: 80/50/20 reflectances, light levels on the ground.
LLF: 1.0 Initial
Corridor: 1,5mt wide x 30mt long

Dimensions



Ceiling Openings
Ø 125-140 mm

Cree® CRX150

FEATURES

- Cree TrueWhite® Technology
- Input power: Up to 28W
- Lumen output: Up to 2600lm
- Efficacy: 105lm/W
- CCT: 3000K, 4000K, 5000K (CRI: Minimum 90)
- Initial Colour Consistency: 2 MacAdam steps
- Input voltage 220 - 240 V
- Power Factor Up to > 0.85
- Lifetime: L80F10 Up to >150Khrs Ta=25°C (>150Khrs L80 IESNA TM-21)
- Operative temperature: 0 - 35°C
- Enclosure rated IP20 per IEC 60529
- Control Option: Fixed otput, DALI

CONSTRUCTION AND MATERIALS

- Durable aluminum housing protects the light source
- Spring clips resist heat while providing retention for flush ceiling fit
- Thermal management system uses integral heat sink to conduct heat away from LEDs for optimal performance. LED junction temperatures stay below specified maximum even when installed in non-insulated ceiling applications. Not for direct burial in insulation
- One-piece aluminum lower reflector redirects light while also conducting heat away from LEDs. It creates a comfortable visual transition from the lens to the ceiling plane

WARRANTY AND CERTIFICATIONS

- Limited Warranty†: 5 years on luminaire
- CE mark
- CCC mark
- RCM mark
- RoHs compliant
- Risk group exempt in accordance with Standard CEI EN 62471 for photobiological safety (Tested IEC/TR62778)

† See www.cree-europe.com/en/resources/warranty for warranty terms

Ordering Information

Example: CRX150-7W-30K9-23-ND

CRX150	-	7W	-	30K9	-	23	-	ND	-	
Product		**Wattage**		**Color Temp**		**Voltage**		**Control**		**Options**
CRX150 150mm	-	**7W** 650 lumens 6.8W (ND) 7.5W (DALI) **14W** 1400 lumens 13.7W (ND) 13.8W (DALI) **20W** 1950 lumens 19.2W (ND) 19.1W (DALI) **28W** 2600 lumens 26.6W (ND) 27.4W (DALI)	-	**30K9** 3000 Kelvin, 90 CRI **40K9** 4000 Kelvin, 90 CRI **50K9** 5000 Kelvin, 90 CRI	-	**23** 220-240 VAC (Standard)	-	**ND** Non-Dimmable **DALI** DALI dimming to 1%	-	**BLANK** CE/RCM certified **CP** CCC certified

Ordering information is for reference only. Some product configurations are not available. Please consult spec sheets for specific product availability and for further details.

Application Reference

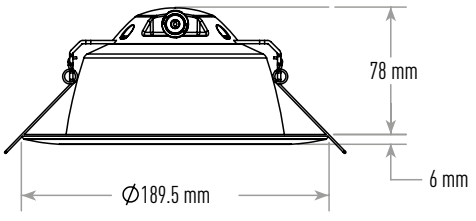
OPEN SPACE				
Spacing (mt)	**Lumens**	**Wattage**	**W/m²**	**Actual Lux**
1.2 x 1.2	1400	14	9,33	1283
1.8 x 1.8			4,36	613
2.4 x 2.4			2,33	340
3.0 x 3.0			1,56	226

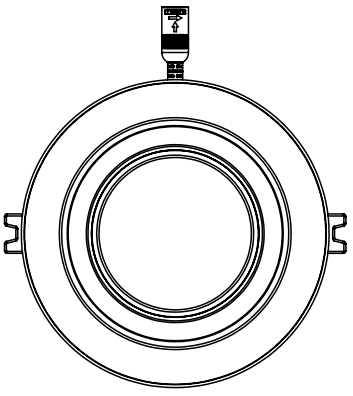
2,7mt ceiling: 80/50/20 reflectances, 0,75 workplane.
LLF: 1.0 Initial
Open space: 15mt x 12mt

Accessory Information

SECONDARY REFLECTORS		
CT6A Diffuse anodized finish reflector	**CT6AW** Wheat diffuse anodized finish reflector	**CT6AB** Black diffuse anodized finish reflector
		

Dimensions





Ceiling Openings
Ø 150-180 mm

Cree® LR Downlight Series

Simply beautiful light.

The LR Series high output architectural LED downlight delivers up to 3000 lumens of exceptional 90+ CRI light. This breakthrough performance is achieved by combining the high efficacy and high quality light of Cree TrueWhite® Technology.

Available in warm and cool color temperatures and featuring spec grade aesthetics with a polished lower reflector, the LR Series LED Downlight is designed for use as a CFL and metal halide downlight replacement in commercial new construction or retrofit applications.


NISSAN

PLUS - Cree LR Downlight Series

Glare free

Thanks to the integrated polished reflector the LR downlight series provides a beautiful even light with the utmost glare control.

The fixture's luminance is therefore reduced guaranteeing maximum visual comfort in every application, from office spaces up to general lighting.

Easy to install

Safe quick tool-free installation is available thanks to flexible springs integrated. All versions available within the product range are conceived to guarantee the best flexibility in terms of installation and safety in terms of electrical connection.

Color rendering does matter

Color is a powerful element in every space. It establishes the tone and personality of our businesses. It not only shapes our moods, it can influence our buying decisions and enhance our ability to learn, perform, and interact. With 90+ CRI, LR Series downlights beautifully render the true colors of everything from furnishings to apparel. Their high CRI also helps increase perceived brightness which can lower overall lumen requirements, delivering business value far beyond their inherent energy savings.

Complete range

The Series is available in two sizes optimizing lumen outputs according to the effective project needs. LR downlights guarantee a unique aesthetic approach with an absolute care of details; reduced flat trim edge, wide specular reflector, high quality lightweight dissipator and best in class LED Technology.


Information
GT
R

Cree® LR150

FEATURES

- Cree TrueWhite® Technology
- Input power: 30W
- Lumen output: 2000lm
- CCT: 3000K, 4000K (CRI: Minimum 90)
- Input voltage 220 - 240 V
- Power Factor Up to > 0.9
- Operative temperature: 0 - 35°C
- Thermal management system uses extruded aluminum heat sink to conduct heat away from LEDs and transfer it to the plenum space for optimal performance. LED junction temperatures stay below specified maximum when installed in non-insulated ceiling applications. Not for direct burial in insulation.
- Enclosure rated IP20 per IEC 60529
- Control Option: 1-10V Dimming, DALI
- Unique combination of refl ective and refractive optical components achieves a uniform, comfortable appearance while eliminating pixelation and color fringing. This ensures smooth light patterns are projected with no hot spots and minimal striations.
- Diffusing lens shields direct view of LEDs while lower refl ector balances brightness of lens with the ceiling to create a low-glare high angle appearance.
- UGR<19 according to EN 12464-1

CONSTRUCTION AND MATERIALS

- Durable engineered polycarbonate housing and support cup protect LEDs and optical lens
- One-piece engineered polycarbonate lower reflector with vacuum metalized finish redirects light while also conducting heat away from LEDs. It creates a comfortable visual transition from the lens to the ceiling plane
- Integral spring clips resist heat while providing retention for flush ceiling fit
- Engineered polycarbonate remote gear box protects driver, power supply and terminal block

WARRANTY AND CERTIFICATIONS

- Limited Warranty†: 10 years on luminaire
- CE mark / CB mark / CCC mark
- Risk group exempt in accordance with Standard CEI EN 62471 for photobiological safety (Tested IEC/TR62778)

† See www.cree-europe.com/en/resources/warranty for warranty terms

Ordering Information

Example: LR150-2000L-30K-23A-DIM

LR150	-	2000L	-	30K	-	23	-	ADIM	-	
Product		**Lumen Output**		**Color Temp**		**Voltage**		**Control**		**Options**
LR150	-	**2000L** 31W 2000 lumens	-	**30K** 3000 Kelvin **40K** 4000 Kelvin	-	**23** 220-240 Volt	-	**ADIM** 1-10V Dimming **DALI** Dimmable to 5%*	-	**BLANK** CE/RCM certified **CP** CCC certified

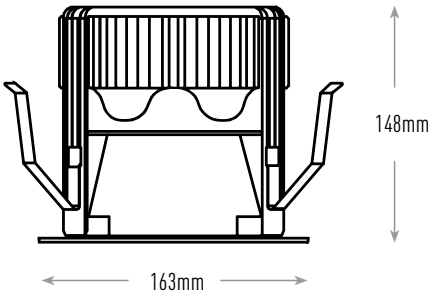
* Reference CreeLighting.com/International for recommended dimmers.
Ordering information is for reference only. Some product configurations are not available. Please consult spec sheets for specific product availability and for further details.

Application Reference

CORRIDOR				
Spacing (mt)	**Lumens**	**Wattage**	**W/m²**	**Actual Lux**
1.2 on center	2000	31	17,22	447
1.8 on center			11,71	302
2.4 on center			8,27	218
3.0 on center			6,89	180

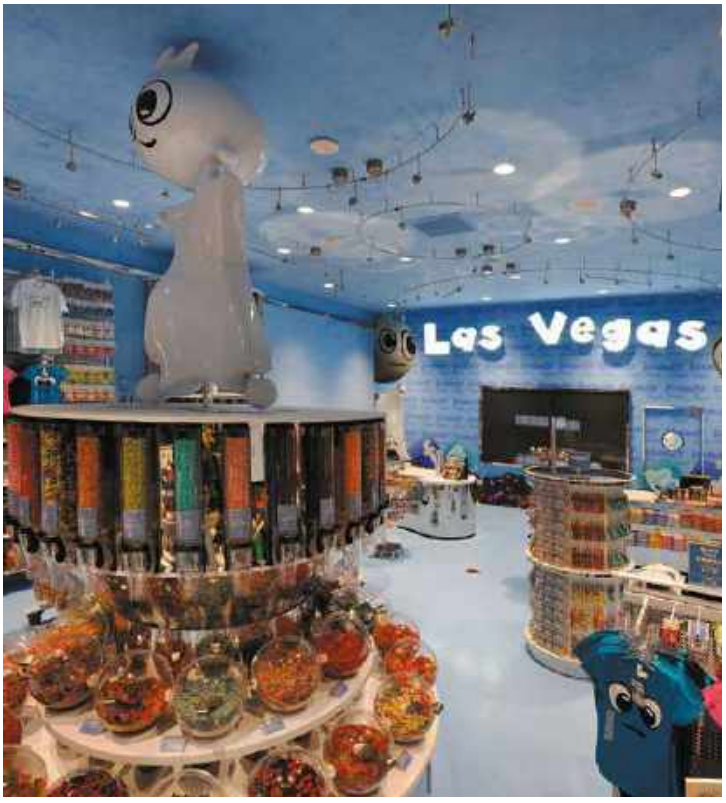
4,5mt ceiling: 80/50/20 reflectances, light levels on the ground.
LLF: 1.0 Initial
Corridor: 1,5mt wide x 30mt long

Dimensions



Ceiling Openings
Ø 150-160 mm

Cree® LR200



FEATURES

- Cree TrueWhite® Technology
- Input power: Up to 40W
- Lumen output: Up to 3000lm
- CCT: 3000K, 4000K (CRI: Minimum 90)
- Input voltage 220 - 240 V
- Power Factor Up to > 0.9
- Operative temperature: 0 - 35°C
- Thermal management system uses extruded aluminum heat sink to conduct heat away from LEDs and transfer it to the plenum space for optimal performance. LED junction temperatures stay below specified maximum when installed in non-insulated ceiling applications. Not for direct burial in insulation.
- Enclosure rated IP20 per IEC 60529
- Control Option: 1-10V Dimming, DALI
- Unique combination of refl ective and refractive optical components achieves a uniform, comfortable appearance while eliminating pixelation and color fringing. This ensures smooth light patterns are projected with no hot spots and minimal striations.
- Diffusing lens shields direct view of LEDs while lower refl ector balances brightness of lens with the ceiling to create a low-glare high angle appearance.
- UGR<19 according to EN 12464-1

CONSTRUCTION AND MATERIALS

- Durable engineered polycarbonate housing and support cup protect LEDs and optical lens
- One-piece engineered polycarbonate lower reflector with vacuum metalized finish redirects light while also conducting heat away from LEDs. It creates a comfortable visual transition from the lens to the ceiling plane
- Integral spring clips resist heat while providing retention for flush ceiling fit
- Engineered polycarbonate remote gear box protects driver, power supply and terminal block

WARRANTY AND CERTIFICATIONS

- Limited Warranty†: 10 years on luminaire
- CE mark / CB mark / CCC mark
- Risk group exempt in accordance with Standard CEI EN 62471 for photobiological safety (Tested IEC/TR62778)

† See www.cree-europe.com/en/resources/warranty for warranty terms

Ordering Information

Example: LR200-2000L-30K-23-ADIM

LR200	-	2000L	-	30K	-	23	-	ADIM	-	
Product		**Lumen Output**		**Color Temp**		**Voltage**		**Control**		**Options**
LR200	-	**2000L** 27W 2000 lumens **3000L** 40W 3000 lumens	-	**30K** 3000 Kelvin **40K** 4000 Kelvin	-	**23** 220-240 Volt	-	**ADIM** 1-10V Dimming **DALI** Dimmable to 5%	-	**BLANK** CE/RCM certified **CP** CCC certified

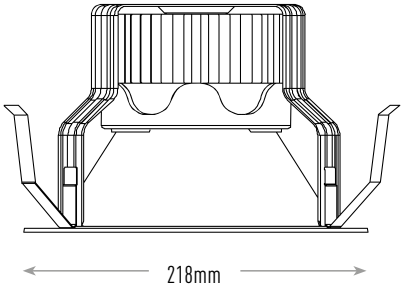
Ordering information is for reference only. Some product configurations are not available. Please consult spec sheets for specific product availability and for further details.

Application Reference

OPEN SPACE				
Spacing (mt)	**Lumens**	**Wattage**	**W/m²**	**Actual Lux**
1.2 x 1.2	2000	27	18,00	1298
1.8 x 1.8			8,40	602
2.4 x 2.4			4,50	331
3.0 x 3.0			3,00	241

4,5mt ceiling: 80/50/20 reflectances, 0,75 workplane.
LLF: 1.0 Initial
Open space: 15mt x 12mt

Dimensions



Ceiling Openings
Ø 190-210 mm


CREE

TECHNICAL SUMMARY

The Cree Advantage

NANOOPTIC® TECHNOLOGY

Dedicated Optic Choices for the Flexibility You Need

Traditional technologies offer limited choices when it comes to optical selections. Cree has changed this with our patented and highly-efficient NanoOptic® refractor technology. Our wide range of NanoOptic options provides new possibilities for highly-optimized target illumination performance and the flexibility needed for application-specific requirements. Our NanoOptic refractor system provides superior light control with:

- More lumens delivered in the target area
- Improved uniformity ratios
- Controlled high angle brightness
- Multiple optical distribution patterns to choose from

Future Proof Distribution

The special design of the optical units that equip our street devices is designed to ensure the same distribution of the photometric solid even in the event of catastrophic failures included in the maintenance factor L80F10 and for the entire useful life of the armature.
In this way, the accidental switching off of a diode or a reduction in the emitted flow cannot in any way cause a change in the footprint of the photometric solid, thus preserving the maintenance of uniform lighting parameters.

Dark Sky Compliant

Thanks to the NanoOptic® Precision Delivery Grid™ patent we are able to supply optics that do not emit light flux upwards, above 90°.

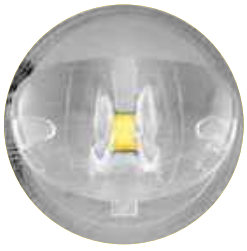
Better light changes everything.

NanoOptic® Technology Explained

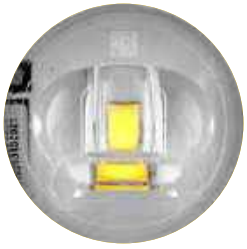
Unlike other LED technologies traditionally available on the market, the design and optical control in CREE starts with the selection and development of the LED source itself; the unique asymmetrical design of the primary lens that characterizes our diode ensures maximum system efficiency for road distribution.
Our optical engineers design our tailor made optical units around the best LED technology available on the market, the patented NanoOptic® Precision Delivery Grid™ system ensures a minimum optical efficiency of 93%, and up to 96%: a true record for road photometrics!
The special polymer with which we produce our lenses ensures maximum transmittance, is stabilized against UV rays and is guaranteed against yellowing over time.

The maximum loss of transparency reaches 3% over a period of 10 years.

NANOOPTIC® PRECISION DELIVERY GRID™ - ASYMMETRIC DISTRIBUTIONS

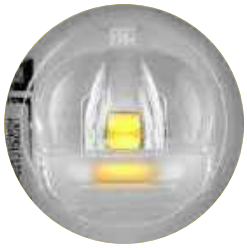


Type 2LG
Narrow/Wide Section
L / H = 0,25 > 0,50



Type 275
Standard Section
L / H = 0,75

Type 210
Standard Section
L / H = 1,0



Type 2SH
Standard Section
L / H = 1,25

Type 3SH
Narrow Section
L / H =1,50

Type 3ME
Narrow Section
L / H =1,50

Type 4ME
Narrow Section
L / H =2 > 2,50

NANOOPTIC® PRECISION DELIVERY GRID™ - SYMMETRIC DISTRIBUTIONS

Type 5SH

Type 5ME

Cree Technical summary

CONTROL OPTIONS

Lighting control is about the ability to manually or automatically turn light on/off or change the brightness level to respond to the environment, tasks or desired effects.

In today's increasingly connected world, the race is on to be leaner, faster, smarter, better. Smart devices, smart buildings and now smart lighting can engage with the Internet of Things (IoT), all with the promise of new opportunities.

From this point of view, we can consider lighting networks as genuine data transmission networks.

With this in mind, Cree offers a unique and complete range of technologically- advanced products for intelligent light control that are able to provide flexible reductions in the power consumption of lighting systems in order to improve efficiency based on each client's requirements.

The efficiency of a good lighting system can be achieved via the correct management of switching on, switching off and controlling lighting levels. Combining energy savings with the requirements set out in regional legislation against light pollution and standard UNI 11248 leads to a single solution: regulating the flux emitted by fixtures.

Cree provides its clients with a complete range of control options offering the highest levels of efficiency and reliability for light management.

CONTROL OPTIONS - Overview

	 NEMA not available	 NEMA available	 NEMA available	 NEMA available	 NEMA not available	 NEMA not available
Fixed Input Power		●			●	●
Dimmable 1-10V	●	●			●	●
Field Adjistable	●	●	●	●	●	●
Field Adj. Dimming	●	●	●	●	●	●
Virtual Midnight Repr.	●	●	●	●	●	●
DALI		●	●	●	● Up to 100 LEDs in class 1 Up to 60 LEDs in class 2	●
Lineswitch		●	●	●	●	●
Flux Regulator		●				●
Dynadimmer	●	●	●	●	● Up to 100 LEDs in class 1 Up to 60 LEDs in class 2	●
CLO	●	●	●	●	●	●
Chronostep		●				●

DIMMING INTERFACES

Interfacing with our dimmable drivers can be done via below options:

1-10V

1-10V dimming is a traditional way of dimming a driver, based on dimming voltage. It provides a way to control the output by means of an analog currentcontrolled voltage source. The different operating conditions available can be regulated to achieve the best balance between LED expected lifetime, light emission and energy savings, based on the system to be created.

DALI

Digital Addressable Lighting Interface (DALI) is a digital communication protocol commonly used in lighting systems. This protocol is standardized by IEC and there are many control devices that communicate using DALI. Using DALI, it is possible to send dimming commands (1-254 levels), set fade rates and fade times, query driver or LED status, etc.

LineSwitch

The LineSwitch feature requires the use of an extra mains pilot line. This offers a single-step dim solution which enables dimming of groups of luminaires, with only one push of a button, to a predefined level with only a simple switch controlled by a timer, presence detector etc. This option allows the fixture to operate at two distinct power levels (Low/High mode) via the use of an additional power cable.

Flux Regulator

Historically, mains voltage dimming was used on magnetic ballasts to dim conventional (HPS) lamps. By lowering the mains voltage, a proportionate reduction in light output was achieved. Until now electronic ballasts were not able to replicate this function. Flux regulator enables cabinet-based dimming without the need for additional control wires or infrastructure changes.

STAND ALONE OPTIONS

Allowing for light output regulation and/or dimming control of lighting fixtures with no need for external additional controls.
This options allow for self – regulation for individual or group of fixtures:

Constant Light Output

The CLO is not a true control system, but a self-regulating system. The CLO fights the natural decay of the LEDs' light output allowing for Energy savings and installation maintenance. Through a gradual rise in current, previously scheduled, it works to maintain the luminous flux constant and over a certain threshold level.

Field adjustable

The Field Adjustable Output option enables the street luminaire to be tuned to the exact light emission needs of a particular application through multiple levels of adjustment, directly on field. Through the selection of a rotary switch, the Field Adjustable Output option offers maximum flexibility to best meet a variety of applications using a single luminaire.

Virtual Midnight

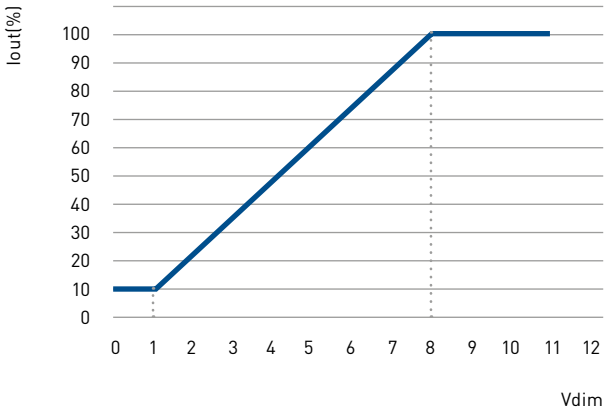
Lighting fixtures can be equipped with a device that regulates the fixture between preset power levels based on the "virtual midnight" calculation. The "virtual midnight" value is the average value between the time the fixture is switched on (sunset) and switched off (sunrise). The virtual midnight then becomes the point of reference for light emission reduction according to the specified profile. The reduction in luminous flux is achieved via a self-learning process performed by the fixture. Within our offer, we propose three different kinds of Virtual Midnights controls.

DIMMING INTERFACES

1-10V

1-10V dimming is a traditional way of dimming a driver, based on dimming voltage. It provides a way to control the output by means of an analog current- controlled voltage source. The different operating conditions available can be regulated to achieve the best balance between LED expected lifetime, light emission and energy savings, based on the system to be created.

Output Current versus Voltage 0-10V / 1-10V dimming curve



Cree offers a simple system for controlling the light emitted by LEDs via a 1-10 V interface using an external control (not provided), very common in ordinary systems. The different operating conditions available can be regulated to achieve the best balance between LED expected lifetime, light emission and energy savings, based on the system to be created. The system allows for the control of luminous flux in relation to the real lighting requirements based on timetables or installation requirements.

The interface is designed to comply with IEC60929 Annex 'Control by DC Voltage' (1-10V)'. The driver dimming interface sources a current of 150µA as a current-controlled voltage source.

Note that the 100% light level is determined by the configured AOC value. The minimum output current that can be supplied by the driver is specified in the datasheet. The 1-10V interface is enabled by default.

0-10V / 1-10V linear dimming curve: - minimum light output at 1V, max. light output at 8V and above - minimum dim level can be set at 10 % and up in 1% increments.

Notes:

The driver output cannot be turned off by pulling down the 1-10V interface to 0V. Between 0 and 1V, the minimum light output will be maintained.

DALI

Digital Addressable Lighting Interface (DALI) is a digital communication protocol commonly used in lighting systems. This protocol is standardized by IEC and there are many control devices from Philips and other manufacturers that communicate using DALI. Using DALI, it is possible to send dimming commands (1-254 levels), set fade rates and fade times, query driver or LED status, etc.

This protocol is standardized by IEC and there are many control devices from Philips and other manufacturers that communicate using DALI.

The voltage across DALI wires is typically 16V and it is polarity insensitive. Using DALI, it is possible to send dimming commands (1-254 levels), set fade rates and fade times, query driver or LED status, etc. The Xitanium LED drivers also respond to public LED specific DALI commands, for example: Query if the LED module is short- circuit or open-circuit.

For more information on DALI, refer to the IEC specification for DALI protocol.

- IEC 62386: 102 – General requirements – Control gear
- IEC 62386: 207 – Particular requirements for control gear.

Notes:

- By default, both the DALI interface and LineSwitch interface are enabled with LineSwitch being set as primary interface.

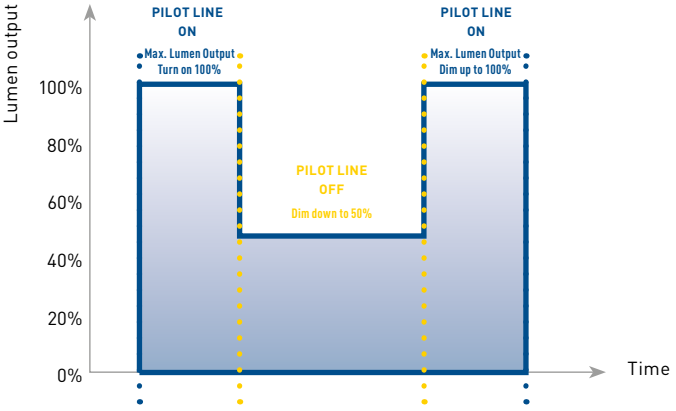
  On reception of a DALI frame, the driver will switch over to DALI mode and all other interfaces will be ignored until the next mains cycle.

  If LineSwitch is enabled then the DALI System Fail Level and Power On Level will be inactive.

- The DALI interface of the driver is not designed to handle differential-mode mains voltage. Driver damage may result if mains voltage is applied to both DALI terminals.

LineSwitch

The LineSwitch feature requires the use of an extra mains pilot line. This offers a single-step dim solution which enables dimming of groups of luminaires, with only one push of a button, to a predefined level with only a simple switch controlled by a timer, presence detector etc. This option allows the fixture to operate at two distinct power levels (Low/High mode) via the use of an additional power cable.



Historically, mains voltage dimming was used on magnetic ballasts to dim conventional luminaires with HID lamps. Lineswitch is a bi-level option allowing the fixture to operate at two distinct power levels (Low/High mode) via the use of an additional power cable.

Dimming to the desired level can be achieved by either applying or disconnecting mains voltage to the pilot-line. Connecting mains voltage to the pilot-line will lead to a 'High' level. A 'Low' level is obtained by disconnecting the pilot-line from mains voltage.

Cree offers 6 standard profiles, but both the minimum power and maximum one can be configurated on the fixture according to customer's requirements.

Just like the driver mains input, the pilot-line also has high surge immunity (10kV).

Notes:

- LineSwitch is able to override the Dynadimmer profile to temporarily set the light output to 100% (only), e.g. in case of emergencies or other special conditions that require maximum illumination.

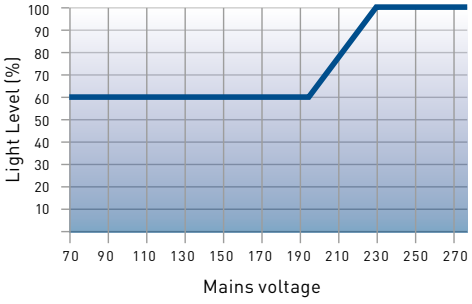
Flux Regulator

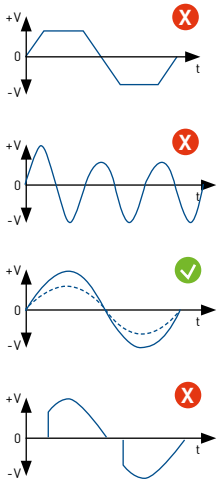
Historically, mains voltage dimming was used on magnetic ballasts to dim conventional (HPS) lamps. By lowering the mains voltage, a proportionate reduction in light output was achieved.

Until now electronic ballasts were not able to replicate this function. Flux Regulator enables cabinet-based dimming without the need for additional control wires or infrastructure changes.

A cabinet controller signals to the driver to lower the light output via a reduction in the amplitude of the mains voltage. The intelligence embedded in the LED driver allows for a configuration of multiple dimming levels based on the amplitude of the mains voltage. The total range of Flux Regulator is 170 V – 250 VAC. The range can be customized via the programming interface. It is possible to set the Start Voltage, Start Percent, Stop Voltage, and Stop Percent. The figure shows an example of the AmpDim programming interface.

Low %	**6.0**
Low V	195
High %	100
High V	230





AmpDim

Parameter	Min	Max	Increments
Start Voltage	150 V	240 V	1 V
Stop Voltage	150 V	220 V	1 V
Start Percent	30%	100%	1%
Stop Percent	30%	100%	1%
Start Voltage - Stop Voltage	20 V	100%	

Notes:

- There must be a minimum of 20V difference between Start and Stop Voltage settings when programming the driver.
- The Flux Regulator feature only supports dimming methods based on amplitude dimming with constant amplitude reduction and no sinewave waveshape modification.

  This option can be supplied on custom request together with DALI.

STAND ALONE OPTIONS

Constant Light Output

Traditional light sources suffer from depreciation in light output over time. This applies to LED light sources as well.

The CLO is not a true control system, but a self-regulating system. The CLO fights the natural decay of the LEDs' light output allowing for Energy savings and installation maintenance. Through a gradual rise in current, previously scheduled, it works to maintain the luminous flux constant and over a certain threshold level.

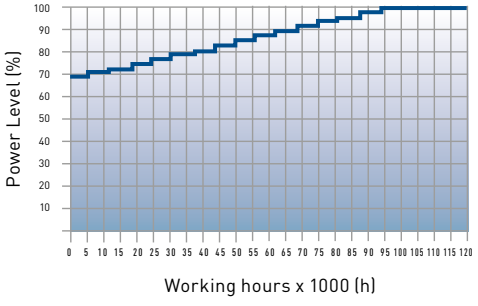
The CLO feature enables LED solutions to deliver a constant lumen output throughout the life of the LED module.

CLO will gradually increase the light level over time from an initial lower light level up to 100% light level in order to compensate for LED module depreciation over life. It can also serve as a means to reduce energy consumption.

Based on the type of LEDs used, heat sinking and driver output current, a correction of the lumen depreciation can be entered into the driver. The driver then counts the number of operating hours and will correct the output current based on this input. A dedicated curve can be set to differentiate on e.g. lumen output or power consumption over lifetime.

The precise programming of the CLO may be influenced by details of the lighting system under study like: maintenance factor, operating conditions, minimum luminous flux possible and any other key factor for the specific application.

Working hours	Power level
0	70
6000	72
12000	74
19000	76
25000	78
31000	80
38000	82
44000	84
50000	86
56000	88
62000	90
69000	92
75000	94
81000	96
88000	98
94000	100



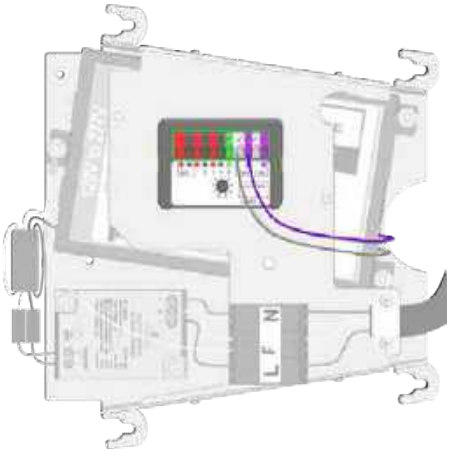
Notes:

- An increase in the current of the LEDs will bring, as a consequence, to an increase in the power consumption of the entire luminaire.
- CLO settings includes enabling disabling and redefining the CLO dimming curve. Changes are effective immediately. The allowed range for CLO is 0-100% with 1% increments (note that 0% results in the LEDs being switched off). The 100% level corresponds with the configured AOC value (ex. 1,5A).

Field adjustable

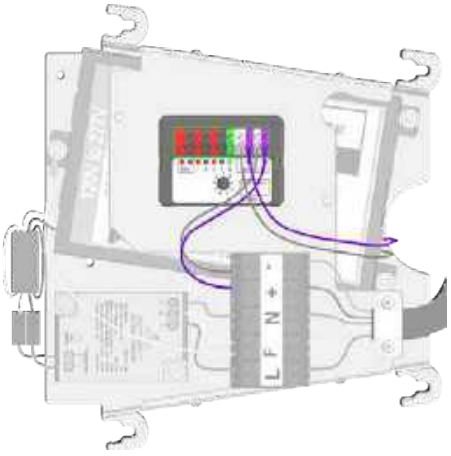
FIELD ADJUSTABLE OUTPUT

The Field Adjustable Output option enables the street luminaire to be tuned to the exact light emission needs of a particular application through multiple levels of adjustment, directly on field. Through the selection of a rotary switch, the Field Adjustable Output option offers maximum flexibility to best meet a variety of applications using a single luminaire.



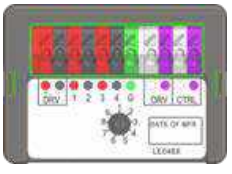
FIELD ADJUSTABLE OUTPUT + 1-10V INTERFACE

Cree offers a simple system for controlling the light emitted by LEDs via a 1-10 V interface added to the Field Adjustable. It is possible to set the fixture to a determined maximum power output through a rotary switch integrated and manage Dimming by using an external control (not provided). The different operating conditions available can then be regulated to achieve the best balance between LED expected lifetime, light emission and energy savings, based on the requirements of the application.



Notes:

To set the desired level of adjustment a rotary switch is integrated on the interface. The flat part of the selector is facing the number related to the Power level required.



Virtual Midnight

This stand-alone system has the advantage of not requiring additional wiring. It is very easy to install and highly reliable: the regulation follows preset steps and the results in terms of energy savings are optimum because the device updates itself automatically based on the system's switching on and switching off times. The reduction in luminous flux is achieved via a self-learning process performed by the fixture. Based on the previous switching on and switching off times, the device determines a hypothetical virtual midnight value. This is the average value between the time the fixture is switched on (sunset) and switched off (sunrise). The virtual midnight then becomes the point of reference for light emission reduction according to the specified profile.

In detail every lighting fixture can be equipped with a device that regulates the fixture between two preset power levels based on the "virtual midnight" calculation. This device is built into the fixture and does not require any control cable or any extra operation on the system by the installation technician. A micro-processor calculates the desired switching time based on the virtual midnight value.

Within our offer, we propose three different kinds of Virtual Midnights controls:

- **VM REPROGRAMMABLE**
- **DYNADIMMER**
- **CHRONOSTEP**

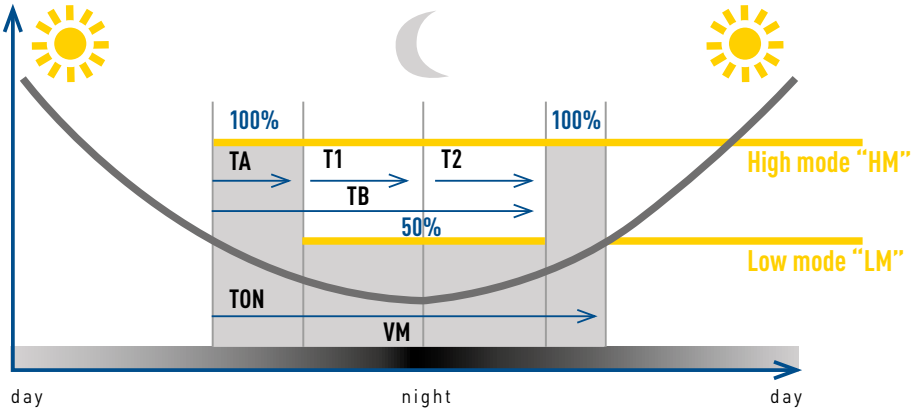
VIRTUAL MIDNIGHT REPROGRAMMABLE

The virtual midnight field programmable option is a proprietary CREE electronic circuit board. This circuit board enables the reduction of the LED driving current which improves energy savings during the middle hours of the night. The virtual midnight field programmable option is based on the "virtual midnight" mechanism: the circuit "remembers" the working time of the lighting fixture and calculates the central point of this time. Based on this central point, the customer can decide during which hours a lower driving current is desired.

The VM Device is powered directly by the 1-10V interface with no need for an external dedicated supply. It doesn't increase the power consumption of the fixture itself.

The added value of the VM Reprogrammable option is the on-field re-programmability. Usually all stand alone systems based on the «virtual midnight» concept consists in a dimming profile pre-programmed by the manufacturer. If the customer would like to modify the dimming profile he will need a PC, a proprietary software, a control board and a connection with every driver, doing a point-by-point programming. Doing that once your fixtures were already installed is not simple and isn't cost effective.

The Cree's VM Reprogrammable allows our customers to re-programm entire lines of fixtures on site, through simple external commands with no need for additional wiring or additional Software/PC. A simple turn on – off sequence on AC supply allows to set up all the installation.



DYNADIMMER

Dynadimmer is an autonomous dimming control that enables simple, pre-programmed customized multistep dimming. Its main function is energy reduction by reducing light levels during the night when it is not required to have full light output.

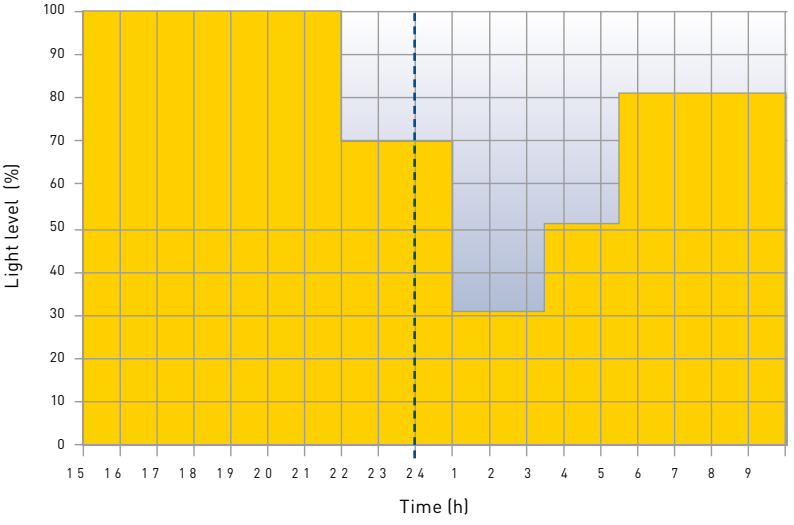
We can set up a regulation profile with up to 5 different levels, based on the virtual midnight, calculated automatically by the device in the first 3 days of operation.

Dynadimmer working principle – Time-based

The time-based option does not compensate for seasonal changes and starts executing the Dynadimmer profile as soon as power is applied to the driver. This option is best suited for applications with fixed power-on/off timing.

However, in most outdoor applications the timing will vary per season and the dimming schedule should thus be adapted accordingly. For this reason the programmable Dynadimmer feature simply uses the driver power-on time duration as reference. Based on the average power-on time of the previous periods, the driver is able to estimate the current time of day and uses this as a virtual clock time which serves as reference for the dimming schedule programmed by the user.

The Dynadimmer feature relies on a regular power-on time from one night to the next. Typically, the power-on time is based on sunset and sunrise and its duration will vary gradually throughout the seasons. The Dynadimmer therefore calculates the power-on time average of the five last preceding stable nights. A stable night is regarded as a night with a power-on time of at least four hours within a tolerance of one hour that equals the latest calculated average power-on time. This implies that after first installation the Dynadimmer will need three stable nights to be able to calculate the virtual clock time required for the programmed dimming schedule. During this synchronization phase the Dynadimmer will not dim the light output for the first three nights. So for the first three nights the fixture will works at the higher power.



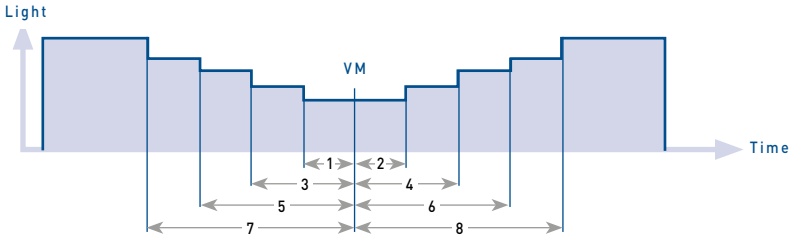
CHRONOSTEP

This option allows to dim the fixture according to pre-set dimming profiles based on the «virtual midnight» principle.

It combines the functionalities of both Dynadimmer and VM reprogrammable. The dimming profile can be programmed by manufacturer or "on-field" by the customer.

Both Time frames and dimming levels can be re-programmed on field. Customers can re-program entire lines of fixtures on site, through external commands with no need for additional wiring or additional Software/PC. A turn on – off sequence on AC supply allows to set up all the installation.

As a standard, we provide 19 different dimming profiles, set up with a regulation on 2 or 3 different dimming levels. We can also set up a custom regulation profile with up to 5 different dimming levels.



CONTROL OPTIONS – TERMINAL BLOCK OVERVIEW

OPTION	INSULATION CLASS	N° POLE TERMINAL BLOCK	POSITION TERMINAL BLOCK	COLOR	FUNCTION
FX / Q Y / Z DY / DC CL / RF CR	Class I	3	1	Brown	Phase
			2	Green / Yellow	Earth
			3	Blue	Neutral
	Class II	2	1	Brown	Phase
			2	Blue	Neutral
G	Class I	4	1	Brown	Phase
			2	Green / Yellow	Earth
			3	Blue	Neutral
			4	Black	Phase 2 (pilot)
	Class II	3	1	Brown	Phase 1
			2	Blue	Neutral
			3	Black	Phase 2 (pilot)
DQ / DL	Class I	5	1	Brown	Phase
			2	Blue	Neutral
			3	Green / Yellow	Earth
			4	Purple	1-10V+/Dali
			5	Gray	1-10V-/Dali
	Class II	4	1	Brown	Phase
			2	Blue	Neutral
			3	Purple	1-10V+/Dali
			4	Gray	1-10V-/Dali

LEGEND	
FX	Fixed Output
Q	Field Adjustable
DQ	Field Adjustable Dimming
Y - Z	Virtual Mid. Reprogram.
G	Lineswitch
RF	Flux Regulator
DY	Dynadimmer
DL	DALI
CL	Constant Lumen Output
CR	Chronostep

Cree

CONNECTIVITY

As CREE we have an open protocol about control systems.

Thanks to this we would work with whichever system the customers prefer to implement in their installations.

NEMA SOCKET – AVAILABLE OPTIONS

The Cree NEMA® 7-pin receptacle with its "Tool-Less" entry is ideal for your next generation Smart City solution. The receptacle is constructed of durable polycarbonate, and features dedicated cork gasket on the base of the component to prevent water and dust ingress into the housing of the luminaire.

Why 7 pins?

- 3 pins for mains/driver connection
- 2 pins for controls (1-10V or DALI)
- 2 conductive pads are free

The Cree NEMA® 7-pin receptacle can be associated with the following configuration option:

AVAILABLE NEMA OPTIONS			
FX-N	Nema 7 pin with Fixed Output	No control on the NEMA	Switching (on-off) only
Q-N	Nema 7 pin with Field Adj	DIM 1-10V goes on the NEMA Socket	Switching (on-off) + Dimming control
DQ-N	Nema 7 pin with Field Adj	DIM 1-10V goes on the NEMA Socket	Switching (on-off) + Dimming control
Y-N / Z-N	Nema 7 pin with VM Reprog	1-10V goes on the Virtual Mid	Switching (on-off) only
DL-N	Nema 7 pin with DALI	DALI wires go on the NEMA	Switching (on-off) + Dimming control
DY-N	Nema 7 pin with Dynadimmer	No control on the NEMA	Switching (on-off) only
CL-N	Nema 7 pin with CLO	No control on the NEMA	Switching (on-off) only
DC-N	Nema 7 pin with Dynadimmer and CLO	No control on the NEMA	Switching (on-off) only

All fixtures supplied with a Nema receptacle 7 pin are supplied with a shorting cap featured to maintain the correct IP rate of the fixture itself.

Every fixture supplied together with our Shorting cap on the Socket is granted to be IP66 compliant.

Extended time rain test and IPX6 test have been performed and passed. Further tests were done in order to make sure that water is not pumped inside the housing due to a pump effect.

To prevent water ingress due to difference of pressure during thermal cycles we also include a Gore® vent in the fixture.

Customers can choose to install whatever device they prefer on to the socket as long as it is ANSI C136.10-2010 compliant (Locking-Type Photocontrol devices and mating Receptacles) and ANSI C136.41-2013 (Dimming Control Between an External Locking type Photocontrol and Ballast or Driver) compliant.

The compliance to this Standards guarantees mechanical coupling and electrical working but it's not directly related to IP rate on the fixture.

NEMA devices may present lower IP rates compared to the fixture one and impact on the EMC Directive and Low Voltage Directive.

To support customers throughout the installation of the system, Cree can provide an internal qualification test to certify the overall assembly characteristics. This test will require samples of the Photocell/NEMA Device to be installed and any eventual Socket/ Gasket prescribed by the Photocell supplier. At the end of the test a CE Declaration of conformity can be released upon request according to the test results.

IP rate will be included in this document.

Notes:

- Without a NEMA equipment connected the fixture doesn't work.
- The IP rating of the fixture without NEMA device connected is the same IP rating of the NEMA receptacle without Shorting Cap, thus IP20.
- The IP66 degree and sealing the entrance of dust and water are not guaranteed once replaced the shorting cap

GLOSSARY

BIN
Classification and grouping of LEDs based on determined parameters, e.g. luminous flux or color temperature. LEDs are sold in groups belonging to the same color area. These groups/selections are known as BINs.

COLOUR TEMPERATURE
In lighting technology this is a value expressed in degrees Kelvin to indicate the color of emitted light. The values run from 1600K to 16000K. A low color temperature indicates a warm tone (tending to yellow-red). High values denote a cold tone (tending towards blue). Public lighting typically employs color temperatures of 4000K to 6000K.

CONSTANT CURRENT
A special current flow condition. The power supply provides the LEDs with a constant and continuous current, thus controlling the flux emitted.

CRI (COLOR RENDERING INDEX)
This index provides information on how faithfully LEDs render the colors of lit objects. The value is obtained by comparing the LED with a suitable standard sample light source and recording the chromatic differences on a reference diagram when a certain number of sample tiles are lit (CIE 1964).
The smaller the differences recorded, the better the general color rendering index (CRI) of the light source. Higher index values are better.

CUT-OFF ANGLE
The angle at which the light source can no longer be seen directly.

DIMMING
From the English verb “to dim”: indicates the option of attenuating the luminous flux with an electronic controller which regulates the electrical power absorbed by a load.

DIRECTIVE ROHS (Restriction of Hazardous Substances Directive)
Standard 2002/95/CE adopted by the European Community in February 2003. RoHS sets limits to the use of the following substances: lead, mercury, cadmium, hexavalent chrome, polybromide biphenyl (PBB) and polybromide diphenyl ether (PBDE).

EFFICIENCY
This is one of the most important indicators of product quality. It expresses the quantity of light emitted by the fixture with respect to the quantity of light emitted by the source. It is indicated by a pure number less than 1. The closer the efficiency value is to 1, the better the quality of the fixture.

ELECTROMAGNETIC SPECTRUM
Frequency distribution of the chromatic components of light radiation.

FIXTURE EFFICIENCY (efficacy)
The ratio between the luminous flux emitted by the fixture and its overall power consumption, including the power supply system (lm/W).

FORWARD VOLTAGE (V) (voltage drop at LED terminals)
This value expresses the voltage drop measured at the LED terminals. It is a fundamental parameter for defining the system's power uptake (W). This uptake (Forward Voltage X Current) is lower – and thereby better in terms of lower electricity costs - the lower the Forward Voltage.
It is also useful to consider the maximum voltage drop (and not just the average value), in order to define the worst power consumption possible.

ILLUMINATION
The quantity of luminous flux that strikes a surface. It is measured in LUX (lx), equivalent to 1 lm/m2.

ISOLUX CURVE
Defines the 'light at ground level' trend for a given installation height and displays the surface area lit by a determined fixture.

JUNCTION TEMPERATURE (Tj)
The temperature inside the LED at the junction. This is a critical parameter in evaluating the emitted flux and estimating the useful life of the LED. In order to correctly calculate the Tj, it is necessary to take into account the heat dissipation of the LED as in the following formula:
Power (W) = Vf (voltage drop at the LED terminals) x If (current)
Tj = Tsp + ([TR j-sp] X Power (W))

LIGHT INTENSITY CURVE
These are normally expressed by polar or Cartesian diagrams. The graph shows the light intensity trend in the directions of the reference planes. In order to make comparisons between fixtures possible, the curve should not express absolute values but rather values in relation to a flux of 1000 lm.
This curve can be used to identify:
- The type of emission (extensive, semi-intensive, intensive, asymmetrical, direct, indirect, etc.)
- Maximum intensity and direction
- Light beam opening
- Point illumination (illumination values in a determined direction and at a determined distance according to the formula E = I/d2)

LIGHT BEAM OPENING ANGLE
Indicates the angle at which the light intensity is half the maximum intensity and allows the fixture's light distribution to be assessed.

LUMEN MAINTENANCE (L70)
LEDs act as energy transducers, transforming electrical energy (W) into light (lumens). In doing this, heat is generated inside the LEDs. As with most electrical systems, this heat must be disposed of in order to ensure correct operation. To date, the parameter most commonly used to express the life of LEDs is the Lumen Maintenance Factor (L70). This figure defines the estimated time in hours within which the performance, in terms of flux emitted, remains above 70% of the initial value.
L70 is estimated based on different parameters, the most important of which is the temperature at which the LED junction is required to operate.
At an international level, parameters L80 and L90 referring respectively to 80% and 90% of the initial flux value are also adopted.

LUMINANCE
Quantity of light emitted or reflected from a primary or secondary light source in the direction of observation; also considers the apparent surface area and the nature of the source. It is measured in candelas per square meter (cd/m2).

LUMINOUS EFFICACY OF LEDS
The ratio between the luminous flux emitted by the LED and its power consumption (lm/W).

LUMINOUS FLUX
This value expresses the quantity of energy emitted by a light source in the form of visible radiation. It is measured in lumens (lm).
This is a fundamental parameter in that it indicates the quantity of light emitted by the LED (lm). In order to be able to size the final product correctly, it is essential to provide evidence of the minimum flux at 350mA and refer to specific color temperatures (e.g.: cold, neutral

and warm white). Driving currents greater than 350 mA provide lower levels of luminous efficacy.
By increasing the current there is an increase in the flux emitted. At 350mA, the current level at which minimum lumen levels are usually expressed, the emitted flux is equal to 100%. Bringing the current up to 1000mA generates a flux of approximately 250% of the original value.

LUMINOUS INTENSITY
The quantity of light directed towards a determined point. It is measured in candelas (cd).

MAINTENANCE FACTOR
This parameter assesses the maintenance requirements of a system on a scale of 0 to 1, where 0 indicates a greater need for maintenance and 1 a lesser need. The maintenance factor of a lighting fixture depends on its IP protection level, the type of light source used and the level of pollution and dirt in the area where the fixture is installed.

MTBE
In most LED applications, the power supply is required to be very reliable. This reliability can be estimated with the MTBF -Mean Time Between Failure. The MTBF represents a typical measurement of failure tolerance and consists of calculating the average time between two system crashes. This value is influenced by the quality of the components used and the attention paid during the design/manufacturing stages.
The MTBF is calculated based on a statistic gained from the operating hours of the largest possible number of fixtures. It can also be calculated using various calculation methods such as that used in Standard EN/IEC 61709 or that used in American Standard MIL-HDBK-217F. The higher the MTBF value, expressed in hours, the more reliable the entire LED system.

OPTICAL SYSTEM EFFICIENCY
This is the parameter for assessing the efficiency of the secondary optical system and is given by the candela/lumen ratio (cd/lm). This value determines the number of candelas that can be achieved by combining the LED with a secondary lens. The higher this value, the better the performance of the system.

PHOTOBIOLOGICAL SAFETY
Indications concerning electronically-powered wide-spectrum incoherent light sources aimed at preventing damaging effects on the skin and eyes. The parameters to be checked are the exposure limits for the different wavelength ranges. The reference Standard is EN 62471.

PHOTOMETRIC CURVES
Photometric curves graphically express the main lighting properties of a light source. They therefore provide a tool for making calculations, assessing the qualities of a fixture and making comparisons between similar products. The planes passing through the center of the fixtures are used as references (longitudinal and transversal planes for ceiling and arm-mounted fixtures, horizontal and vertical for spotlights). The data is then processed in the form of different curves based on the type of display required.

PHOTOPIC, SCOTOPIC AND MESOPIC VISION
The human eye transforms light stimulus into electrical messages sent to the brain using two types of photoreceptors on the retina: cones and rods. The first are mainly active under conditions of high luminance and are responsible for that which is defined as photopic (daytime) vision. The second are active under very low luminance conditions and are responsible for scotopic (night time) vision. Between these two extremes there is also an intermediate section known as mesopic vision.

POWER FACTOR (PF)
Phase displacement index between the input voltage and alternating current of a power supply system. Expressed by a value between 0 and 1. A high value means a high phase displacement and therefore a lesser quantity of "reactive" current absorbed by the power supply network. A minimum value of 0.9 is usually required for electrical systems.

POWER LEDS AND CRI
As with almost all light sources, the general color rendering index (CRI) is also defined for Power LEDs. Since the spectrum of a white LED is different from that of a filament bulb, its CRI is less than 100. As regards the latest generation Power LEDs which emit a cold light, thus over 5000K and hence with chromatic coordinates closer to the blues, products are commercially available with CRI = 75. As for warm and neutral lights - 3000K and 4000K - they are commercially available with CRI greater than 90.

POWER SUPPLY SYSTEM EFFICIENCY
This is the ratio between the output power and input power of the power supply system. High levels of power supply efficiency can make a significant contribution to reducing lighting costs.

REFERENCE STANDARDS
Recently ENERGY STAR, an international body for energy efficiency standards introduced by the American Environmental Protection Agency (EPA) in 1992, set out reference standards and criteria for LEDs (ENERGY STAR® Program Requirements for Integral LED Lamps ENERGY STAR Eligibility Criteria).
With regards to the flux emitted and above all the maintenance of the same over time (Lumen Maintenance), ENERGY STAR carried out the procedures and tests set out in IES LM-79 and IES LM-80. These procedures set out the conditions (time, temperature, etc.) under which performance tests are to be carried out.

SOLDER-POINT TEMPERATURE (Tsp)
Temperature measured at the LED pin soldered to the PCB and connected to the dissipater inside the LED.

TJ - TAIR RATIO
In order to provide data on a lighting fixture, it is necessary that the Tj of the Power LEDs used assumes determined values based on the ambient temperature (Tair) - measured in the immediate vicinity of the matrix - and the driving current. Once these figures have been acquired, it is possible to determine the life of the Power LED, which is closely correlated to that of the system.

THERMAL RESISTANCE: (C°/W):
This parameter indicates the difficulty experienced by the LED in expelling the heat generated inside it. This heat is the cause of the degradation in terms of performance and life of the LED (LM70). The lower the TR, the better the performance.
In order to suitably size structures that "extract" heat, it is indispensable to have values for the various thermal resistances (TR) that make up the system. These TR values represent the tool used to calculate, indicatively, the junction temperature (Tj) of the Power LED, which is closely connected to its lifetime (L70).

USEFUL LIFE
The life expectancy of a system. The estimated time during which a system can be defined as operative, before obsolescence or wear begin to compromise operation. The life of an LED is defined in terms of the residual flux emitted with respect to initial flux. Typically lifetime L70 (70% of initial flux) is used, but also L80 (80% of initial flux) and L90 (90% of initial flux), based on the details of the application and the ambient temperature Ta.


CREE
TM

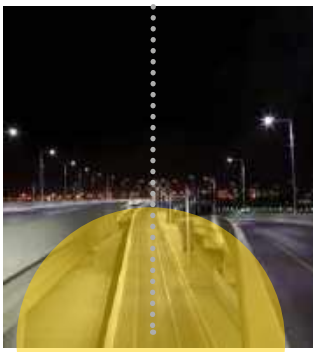
INSTRUCTIONS

ORDER INFORMATION

PRODUCT **IMAGE**

PRODUCT **SPECS**

Cree XSPM



FEATURES

- Full cut-off optics (NanoOptic® Precision Delivery Grid™)
- Input Power: A = 58W, B / C =41w
- Lumen output: 1900 – 7000lm
- System efficacy: Up to 145lm/W
- CCT: 3000K, 4000K, 5700K (CRI Minimum 70)
- Initial Colour Consistency: 4 MacAdam steps
- Input Voltage: 220-240V
- Driver equipped with temperature sensor to preserve optimal working conditions
- Power factor: > 0.98 at full load
- Lifetime: Designed to last >70Khrs L90F10; >100Khrs L85F10 (>100Khrs L85 IESNA TM-21)
- Surge protection: Up to 10kV CM/DM surge immunity according to EN 61000-4-5 and EN 61547 (Class I SPD equipped with LED signal)
- Fuse option available
- Operative temperature: -40°C +40°C
- Insulation class: Class I – Class II
- Enclosure rated IP66 per IEC 60529
- Impact resistance IK08
- Cable type H07RN-F (Cable length Up to 12mt)
- Control options: Fixed, Field Adjustable Output, DALI, Virtual Midnight reprog., Flux Regulator, Lineswitch, Dynadimmer, Constant Lumen Output
- Nema socket option available
- Tool-less entry
- Removable tray
- LED Board equipped with integral ESD and Surge protection
- Fixture assembled without the use of glues, totally dismountable and recyclable.

CONSTRUCTION AND MATERIALS

- Die cast, low copper <0,1%, aluminum alloy housing w/ UV stabilized polymeric door for long weathering and reliability
- Luminaire is designed to mount directly to 76mm or 60mm outer dimension tenons or poles and can be tilted +/- 20°, in steps of 5°
- Luminaire fitter 02 can mount to 60mm OD tenons and fitter 03 to 76mm
- Exclusive Colorfast DeltaGuard® finish features an E-Coat epoxy primer with an ultra-durable powder topcoat, providing excellent resistance to corrosion, ultraviolet degradation and abrasion.

WARRANTY AND CERTIFICATIONS

- Limited Warranty[1]: Class 1 — 10 years on luminaire / 10 years on Colorfast DeltaGuard® finish
- Class 2 — 5 years on luminaire / 10 years on Colorfast DeltaGuard® finish
- CE mark / CB mark / ENEC mark / RoHs compliant
- UMSUG Charge code (UK Power performance test)
- Risk group exempt in accordance with Standard CEI EN 62471 for photobiological safety
- Luminaire and finish endurance tested to withstand 5,000 hours of elevated ambient salt fog conditions as defined in ASTM Standard B 117
- Compliant to: EN 60598-1; EN 60598-2-3

[1] See www.cree-europe.com/en/resources/warranty for warranty terms

Ordering Information

Example: XSPM-E-02-2LG-A-30K-+-24-SV-FX-S-00

XSPM	-	E	-	02	-	2LG	-	A	-	30K	-	+	-	24	-	SV	-	FX	-	S	-	00
Product		Version		Mounting		Optic		Input Power		CCT		Insulation Class		Voltage		Color		Options		Variant		Cable length
XSPM	-	E	-	02 horiz/vert tenon 60mm OD 03 horiz/vert tenon 76mm OD	-	2LG Type II long 2S Type II short 0.75 2I0 Type II short 1.0 2SH Type II short 3SH Type III short 3ME Type III medium 4ME Type IV medium	-	A 58W B 41W C 41W	-	30K 3000K 40K 4000K 57K 5700K	-	+ Class I ^ Class II	-	24 220-240V	-	SV Silver BK Black BZ Bronze SB Silver Bronze WH White	-	Input Power A: FX Fixed Input Power Q Field Adjustable Output (01 ... 09) DQ Field adjustable output (1-10V) Y- Z 1-10V on virtual midnight reprogrammable Input Power B: FX Fixed Input Power G Lineswitch (G1...G4) RF Flux regulator DY DynaDimmer (DY1...DY8) DL DALI CL Constant Lumen Output DC DynaDimmer + CL0 Input Power C: CR Virtual Midnight Chronostep reprogrammable	-	S Standard N Nema 7pin longjoin F* Fuse	-	00 Standard (w/o cable) 01 Exit cable 30cm 03 Exit cable 3m 06 Exit cable 6m 10 Exit cable 10m 12 Exit cable 12m

* Fuse option available with Standard or Nema configurations (Specify SF or NF)

Ordering information is for reference only. Some product configurations are not available. Please consult spec sheets for specific product availability and for further details.

AVAILABLE NEMA OPTIONS

DQ-N	Nema 7 pin with Field Adj	(on-off + Dim)
Y-N / Z-N	Nema 7 pin with VM Reprog	(on-off)
DL-N	Nema 7 pin with DALI	(on-off + Dim)
DY-N	Nema 7 pin with Dynadimmer	(on-off)
CL-N	Nema 7 pin with CL0	(on-off)
DC-N	Nema 7 pin with Dynadimmer and CL0	(on-off)

Accessory Information

ADAPTER

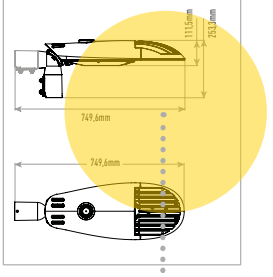
KIT-XSP-AP60-34-G0
Fitter kit to mount to 34mm tenon

KIT-XSP-AP60-42-G0
Fitter kit to mount to 42mm tenon

KIT-XSP-AP60-48-G0
Fitter kit to mount to 48mm tenon

Dimensions

Weight: 7 kg
Lateral Surface Wind Exposed: 0.08m²



QR SECTION

DISTRIBUTIONS AVAILABLE

WEIGHT + TECHNICAL DRAWINGS

ACCESSORIES

CREECATGEN19/EN

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