

XSP SERIES

LED STREET LIGHTS

Trusted for value and performance.





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 residences as well as reduced safety risks for installers.



BUILT TO TAKE OVER TRADITIONAL STREET LIGHTING.

The XSP Series is made possible by innovation in every aspect of the product to deliver outstanding illumination, lasting performance and optimum energy efficiency.

HEAT SINK TECHNOLOGY

- Maximize LED lifetime
- Utilizes a flow through heat sink design
- Outstanding lumen maintenance and reliability throughout the life of the application

DATENTED MANOODTIC® TECHNOLOGY

- Delivers unmatched target efficacy
- Improves uniformity ratios
- Multiple optical distribution patterns

DIMMING

- •Designed with 0-10V dimming capabilities
- Added light level flexibility
- Control by others

NEMA® PHOTOCELL RECEPTACLE

- 7-pin receptacle per ANSI C136.41
- Factory pre-wired for dimming controls
- •Photocell or shorting cap by others



ADDITIONAL OPTIONS

BACKLIGHT SHIFLD

Factory-installed or added in the field, municipalities can meet strict cut-off requirements or address back lighting concerns of residents by utilizing the backlight shield.

BIRD DETERRENT

Birds are prevented from perching on street lights by incorporating spikes on the top of the luminaire.

FIELD ADJUSTABLE OUTPUT

Tune the XSP Series Street Light to the exact needs of a particular location after it's been installed. Plus, a single stocked replacement street light can be adjusted to a variety of outputs used throughout the city.

REMOTE MONITORING COMPATIBILITY

A perfect addition to a city-wide upgrade that includes central monitoring and control, the XSP Series street light was designed to be compatible with other control modules.

EXCLUSIVE COLORFAST DELTAGUARD® FINISH

- •Resistant to corrosion, ultraviolet degradation and abrasion
- •Industry-leading 10-year limited warranty

PROVEN INNOVATION AND VALUE.

The innovative technologies that make up Cree® products have revolutionized the lighting industry by making high-quality, sustainable LED lighting affordable and available to all. With this advantage, we remain at the forefront today, dedicated to developing new LED lighting solutions that improve both our customers' spaces and their bottom lines, and all backed by an incredible warranty.

NanoOptic® Technology

With patented NanoOptic® Technology available in multiple 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.

DeltaGuard® Finish

Cree's exclusive Colorfast DeltaGuard® Finish protects our LED outdoor 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.

Comparison: High Pressure Sodium Lighting vs. LED Lighting with NanoOptic® Technology







After: XSP™ LED Street Light (52W)

Cree 10-year Limited Warranty*

Cree offers a 10-year limited warranty that covers the broadest product range in the industry. As a leading innovator of LED chips, components and lighting, Cree has more than 30 years of experience in commercial LED development, bringing an unprecedented level of expertise to all facets of the LED lighting design and development process. To learn more, please visit lighting.cree.com/warranty.

FAMILIAR SHAPE, SUPERIOR FUNCTION.

Designed from the bottom up as a totally optimized LED street light system that looks like a street light, the XSP Series delivers incredible efficacy — almost double the lumens per dollar of previous generations of LED street lights — without sacrificing application performance. Beyond substantial energy savings and reduced maintenance, Cree achieved better optical control with our NanoOptic® Precision Delivery Grid™ optic than a traditional cobra head luminaire.

PERFORMANCE SUMMARY

Utilizes NanoOptic® Precision Delivery Grid™ optic

Efficacy: Up to 129 LPW

CCT: 2700K, 3000K, 4000K, 5000K, 5700K

Color Rendering Index (CRI): Minimum 70 CRI

Input Voltage: 120-277V or 347-480V, 50/60Hz

Limited Warranty†:

10 years on luminaire/10 years on DeltaGuard $^{\circ}$ finish

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

CONSTRUCTION & MATERIALS

- Traditional cobra-head appearance with die cast aluminum housing
- Mounts on 1.25" (32mm) IP, 1.66" (42mm) 0.D. or 2" (51mm) IP, 2.375" (60mm) 0.D. horizontal tenon (minimum 8" [203mm] in length) and is adjustable +/- 5° to allow for fixture leveling (includes two axis T-level to aid in leveling)
- Luminaire secures with two 410 stainless steel mounting bolts; optional four point mounting available
- 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 for select models

ACCESSORIES

Backlight Control Shield

XSP-SP*BLSS XA-SPR3BLS

Designed to control backlight - put the light where you want it and not where you don't. Provides one mounting height cutoff.

Bird Spikes

XSP-SP*BRDSPK

Designed to prevent birds from landing or setting up a nest on the luminaire.

OPTICAL SYSTEM

- Utilizing highly-diffused performance optics for soft, glare-free light.
- Targeted optical control with our NanoOptic® Precision Delivery Grid™ optic.
- Field Adjustable Output option offers full range lumen adjustability
- Locked Lumen Output option permanently locks the lumen output to the setting selected













ELECTRICAL SYSTEM

•Input Voltage: 120-277V or 347-480V, 50/60Hz

• Power Factor: > 0.9 at full load

• Total Harmonic Distortion: < 20% at full load

• 10V Source Current: 0.15mA

- Integral 10kV surge suppression protection standard
- Designed with 0-10V dimming capabilities. Controls by others
- Tool-less access door allows for easy wiring and fast installation

^{*} Insert 1 (for Medium) or 2 (for Large) to indicate luminaire type

[†]See <u>lighting.cree.com/warranty</u> for warranty terms.

st XSPSM is only available in silver (SV).

XSP - SMALL



PERFORMANCE SUMMARY

 ${\sf NanoOptic}^{\tiny{\textcircled{\tiny \$}}} \ {\sf Precision Delivery Grid}^{\tiny{\texttt{TM}}} \ {\sf optic}$

Initial Delivered Lumens: Up to 7,825 lumens

Input Power: Up to 69 watts

CCT: 2700K, 3000K, 4000K, 5000K, 5700K

Dimensions: L: 22.3" (567mm) / W: 9.8" (249mm) / H: 5.1" (131mm)

Weight: 5L: 9.0 lbs. (4.1kg); 8L: 9.2 lbs. (4.2kg)

Replaces up to: 100W HPS (5L) or 150W HPS (8L)

APPLICATIONS



Residential Street Lighting

The XSP Series has NanoOptic® Precision Delivery Grid™ optics that provide better optical control than traditional street lighting. With a range of CCTs, the XSP Small luminaire efficiently delivers warm or cool uniform light away from windows and back on the streets for safer-feeling communities.

ORDERING INFORMATION

Example: XSPSM-D-HT-2LG-5L-27K7-UL-SV-N

Example: Asi Sir B III 220 02 2717 02 37 II									
Product	Version	Mounting	Optic	Lumen Package**	CCT/CRI	Voltage	Color	Utility Label/Receptacle	Options
XSPSM Small	D	HT Horizontal Tenon	Asymmetric 2LG* Type II Long 2ME* Type II Medium 3ME* Type III Medium 4ME* Type IV Medium	5L 5,000 Lumens 8L 8,000 Lumens	27K7 2700K/70CRI 30K7 3000K/70CRI 40K7 4000K/70CRI 50K7 5000K/70CRI 57K7 5700K/70CRI	UL Universal 120-277V UH Universal 347-480V	SV Silver	N Utility Label and NEMA® 7-Pin Photocell Receptacle	09/08/07/06/05/04/03/02/0 7 Field Adjustable Output X8/X7/X6/X5/X4/X3/X2/X1 Locked Lumen Output

 $Product\ specifications\ subject\ to\ change\ at\ any\ time.\ Visit\ \underline{lighting.cree.com}\ to\ find\ the\ most\ up-to-date\ information$

 $[\]ensuremath{^{*}}$ Available with Backlight Shield when ordered with field-installed accessory

^{**} Lumen Package codes identify approximate light output only. Actual lumen output levels may vary depending on CCT and optic selection.

Refer to Initial Delivered Lumen tables for specific lumen values

XSP - MEDIUM



PERFORMANCE SUMMARY

NanoOptic® Precision Delivery Grid™ optic

Initial Delivered Lumens: Up to 11,875 lumens

Input Power: Up to 95 watts

CCT: 2700K, 3000K, 4000K, 5000K, 5700K

Dimensions: L: 23.7" (601mm) / W: 5.8" (148mm) / H: 9.3" (237mm)

Weight: 13.9 lbs. (6.3kg)

Replaces up to: 150W to 250W HPS

APPLICATIONS



Collector Roads

Driving in a busy downtown or commercial area can be stressful. The XSP Medium luminaire ensures that you have the visibility needed to see a pedestrian in the crosswalk and an open parking spot! Plus, energy consumption is reduced up to 60% compared to HPS technologies, delivering significant cost savings over the life of the installation.

ORDERING INFORMATION

Example: XSPMD-D-HT-2LG-12L-27K7-UL-SV-N

Example	Example: XSPMD-U-H1-ZLG-1ZL-Z/K/-UL-SV-N								
Product	Version	Mounting	Optic	Lumen Package**	CCT/CRI	Voltage	Color	Utility Label/Receptacle	Options
XSPMD Medium	D	HT Horizontal Tenon	Asymmetric 2LG* Type II Long 2ME* Type II Medium 3ME* Type III Medium 4ME* Type IV Medium	12L 12,000 Lumens	27K7 2700K/70CRI 30K7 3000K/70CRI 40K7 4000K/70CRI 50K7 5000K/70CRI 57K7 5700K/70CRI	UL Universal 120-277V UH Universal 347-480V	BK Black BZ Bronze SV Silver WH White	N Utility Label and NEMA® 7-Pin Photocell Receptacle	F Fuse G Small Four Bolt Mounting J Large Four Bolt Mounting Q9/Q8/Q7/Q6/Q5/Q4/Q3/Q2/Q1 Field Adjustable Output X8/X7/X6/X5/X4/X3/X2/X1 Locked Lumen Output

 $Product\ specifications\ subject\ to\ change\ at\ any\ time.\ Visit\ \underline{lighting.cree.com}\ to\ find\ the\ most\ up-to-date\ information$

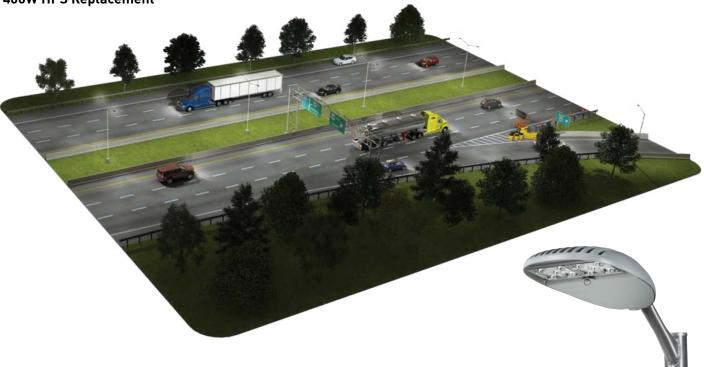
 $[\]ensuremath{^{*}}$ Available with Backlight Shield when ordered with field-installed accessory

^{**} Lumen Package codes identify approximate light output only. Actual lumen output levels may vary depending on CCT and optic selection.

Refer to Initial Delivered Lumen tables for specific lumen values

XSP - LARGE





PERFORMANCE SUMMARY

 ${\sf NanoOptic}^{\tiny{\textcircled{\tiny \$}}} \ {\sf Precision Delivery Grid}^{\tiny{\texttt{TM}}} \ {\sf optic}$

Initial Delivered Lumens: Up to 23,800 lumens

Input Power: Up to 184 watts

CCT: 2700K, 3000K, 4000K, 5000K, 5700K

Dimensions: L: 26.2" [665mm] / W: 14.5" [368mm] / H: 5.3" [136mm]

Weight: 23.4 lbs. (10.6kg)

Replaces up to: 250W HPS (18L) or 400W HPS (24L)

APPLICATIONS



Major Roads & Highways

Virtually maintenance-free, the XSP Large LED Street Luminaire is designed to last 100,000 hours. Now, maintenance crews can focus on more important projects, rather than replacing burnt out lamps.

ORDERING INFORMATION

Example: XSPLG-D-HT-2LG-24L-27K7-UL-SV-N

Product	Version	Mounting	Optic	Lumen Package**	CCT/CRI	Voltage	Color	Utility Label/Receptacle	Options
XSPLG Large	D	HT Horizontal Tenon	Asymmetric 2LG* Type II Long 2ME* Type II Medium 3ME* Type III Medium 4ME* Type IV Medium	18L 18,000 Lumens 24L 24,000 Lumens	27K7 2700K/70CRI 30K7 3000K/70CRI 40K7 4000K/70CRI 50K7 5000K/70CRI 57K7 5700K/70CRI	UL Universal 120-277V UH Universal 347-480V	BK Black BZ Bronze SV Silver WH White	N Utility Label and NEMA® 7-Pin Photocell Receptacle	F Fuse G Small Four Bolt Mounting J Large Four Bolt Mounting 09/08/07/06/05 Field Adjustable Output X8/X7/X6/X5 Locked Lumen Output

 $Product\ specifications\ subject\ to\ change\ at\ any\ time.\ Visit\ \underline{lighting.cree.com}\ to\ find\ the\ most\ up-to-date\ information$

^{*} Available with Backlight Shield when ordered with field-installed accessory

^{**} Lumen Package codes identify approximate light output only. Actual lumen output levels may vary depending on CCT and optic selection.

Refer to Initial Delivered Lumen tables for specific lumen values



Visit our website or contact a Cree lighting representative to learn more: lighting.cree.com/xsp-street

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