

# XSP Series LED Street Lights





# WHY CREE?

# BREAKTHROUGH TECHNOLOGY. INCREASED PERFORMANCE.

# BetaLED® Technology

Powered by BetaLED $^{\circ}$  Technology and designed for long L $_{70}$  lifetime over 100,000 hours, the XSP Series street lights deliver incredible efficacy and up to double the lumens per dollar of previous generations of LED street lights. A Total Systems Approach combines the most advanced LED sources, driver technologies, optics and form into each product to offer our most optimized solution yet.

Utilizing exclusive NanoOptic® Technology — a level of optical control that only an LED light source can provide — the XSP Series uses a NanoOptic Precision Delivery Grid™ optic to efficiently deliver light where it matters, cutting energy consumption up to nearly 50%. Years of maintenance-free performance are possible through a state-of-the-art thermal management design that uses an innovative flow through heat sink to draw heat away from LEDs, maximizing performance and longevity. It all adds up to a faster return on investment while delivering clean, white light to help make your community appear beautiful and safe.









### The Result:

# The Best Alternative to 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

#### PATENTED NANOOPTIC\* TECHNOLOGY

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

# OCCUPANCY SENSOR OPTION

 Reduced light levels and energy costs when the coverage area is vacant

.........

- · Ambient and occupancy control
- Field adjustable

#### NEMA RECEPTACLE

Designed with 0-10V

dimming capabilities

· Control by others

· Added light level flexibility

- Code compliant control
- · For use with field-installed photocontrol

# EXCLUSIVE COLORFAST DELTAGUARD® FINISH

Resistant to corrosion, ultraviolet
degradation and abrasion

\_\_\_\_\_

\_\_\_\_\_\_

· Industry-leading 10-year limited warranty

# Additional Options

# **BACKLIGHT SHIELD**

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.

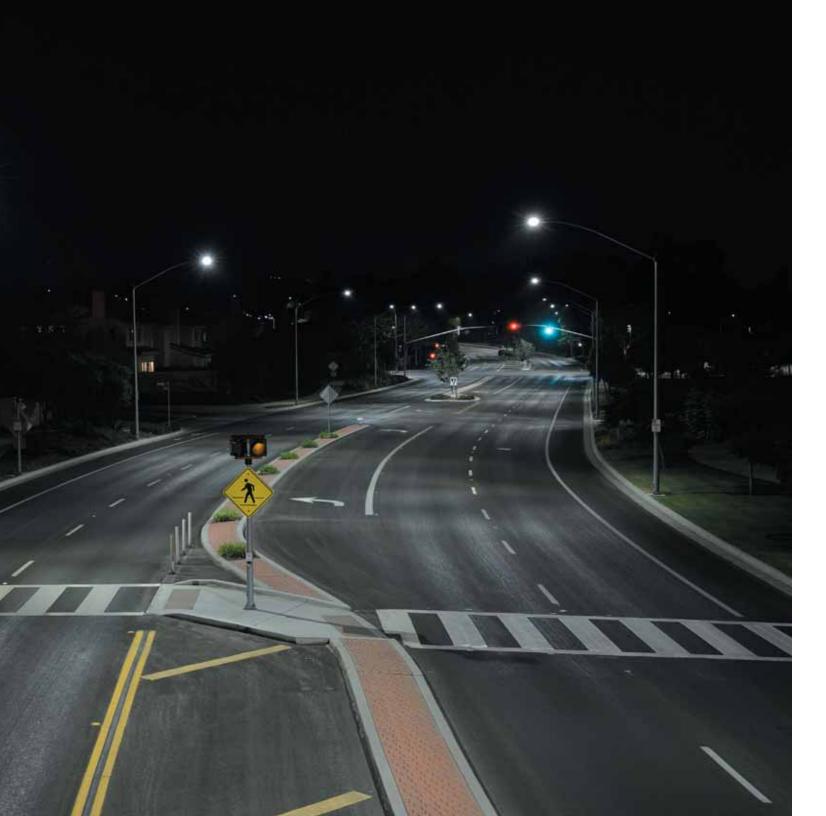
#### FIELD ADJUSTABLE OUTPUT

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.

Some product configurations are not available.
Please consult spec sheets for specific product information



# Pays for Itself, Then Pays You!

Designed from the bottom up as a totally optimized LED street light system, the XSP Series delivers incredible efficacy of up to 100 lumens per watt and up to 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.

Better payback. Better performance. Better price. While other communities are still paying for costly re-lamping of their legacy systems, the Cree XSP Series will have returned your investment in lower operating expenses. The best alternative to traditional street lighting that pays for itself, then starts paying you.

# PERFORMANCE SUMMARY

Utilizes BetaLED® Technology

NanoOptic® Precision Delivery Grid™ optic

CRI: Minimum 70 CRI

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

Limited Warranty:

10 years on luminaire/10 years on finish

**EPA and Fixture Weight:** 

Reference EPA and Weight spec sheet

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

Products specifications subject to change at any time. Visit www.cree.com/lighting/xspseries to find the most up to date information.

# **XSP Series LED Street Lights**



LED Street Light - Residential Module

• 2,529 Lumens 26W at 4000K

• 2,722 Lumens 26W at 5700K • 3,819 Lumens 42W at 4000K

• 4,109 Lumens 42W at 5700K

**Dimensions:** L 22.3" x W 9.8" x H 4.9"



# XSP1™

**LED Street Light - Single Module** 

• 4,806 Lumens 53W at 4000K

• 5.340 Lumens 53W at 5700K

**Dimensions:** L 23.7" x W 9.3" x H 5.1"



**LED Street Light - Double Module** 

• 9,612 Lumens 101W at 4000K

• 10,680 Lumens 101W at 5700K

• 13,290 Lumens 168W at 4000K

• 13,620 Lumens 168W at 5700K

**Dimensions:** L 26.2" x W 14.5" x H 4.6"

# XSP1<sup>TM</sup>/XSP2<sup>TM</sup>/XSP2L<sup>TM</sup> IP66

LED Street Light - IP66 Rated

4,806 Lumens 53 Watts at 4000K

• 5,340 Lumens 53 Watts at 5700K

• 9,612 Lumens 101W at 4000K

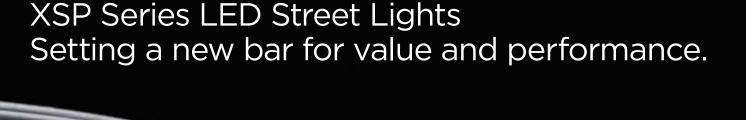
• 10,680 Lumens 101W at 5700K

• 13,130 Lumens 168W at 4000K • 14,160 Lumens 168W at 5700K

**Dimensions:** L 29.5" x W 11.9" x H 8.5" (Vertical Tenon)

**L** 33.4" x **W** 15.9" x **H** 3.9"

(Horizontal Tenon)





## **OUTSTANDING**

# Performance

Capable of reducing energy usage by 50% compared to traditional light source technologies, the XSP Series couples high efficiency with improved light quality to help make neighborhoods safer without wasting resources.

# UNBEATABLE

Value

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.

# **EXCEPTIONAL**

# Reliability

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.

# EASY Installation

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.







- Die cast aluminum housing.
- Mounts on 1.25" IP, 1.66" (42mm) O.D. or 2" IP, 2.375" (60mm) O.D. horizontal tenon (minimum 8" [203mm] in length) and is adjustable + /- 5° to allow for fixture leveling.
- 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.

#### **OPTICAL SYSTEM**

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

## **ELECTRICAL SYSTEM**

- High-efficiency driver and power supply offer robust performance with input power staying constant over the life of the fixture.
- Tool-less access door allows for easy wiring and fast installation.

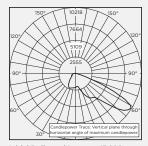
#### **FINISH COLOR**

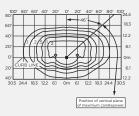


### **PHOTOMETRY**

#### BXSPA\*3HL-U

## Based on ITL Report Test #: 76046



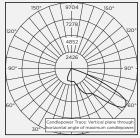


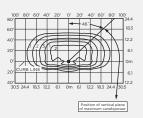
Initial Delivered Lumens: 13,296

Mounting Height: 25' (7.6m) A.F.G. Initial Delivered Lumens: 13,290 Initial FC at grade

#### BXSPA\*HHL-U

#### Based on ITL Report Test #: 76044





Initial Delivered Lumens: 10,974

Mounting Height: 25' (7.6m) A.F.G. Initial Delivered Lumens: 10,970 Initial FC at grade

For exact photometric data please reference our available spec sheets and IES test results at: www.cree.com/lighting/xspseries

# **LUMEN OUTPUT, ELECTRICAL AND LUMEN MAINTENANCE DATA**

XSP2L™ Street Lights										
Input Power Designator	4000K		5700K			TOTAL CURRENT				50K Hours
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	System Watts 120-277V	120V	208V	240V	277V	Calculated Lumen Maintenance Factor @ 15°C (59°F)***
Type III Distribution										
L	13,290	B2 U0 G2	13,620	B2 U0 G2	168	1.71	1.01	0.89	0.78	87%
Type III Distribution w / BLS										
L	10,970	B2 U0 G2	11,460	B2 U0 G2	168	1.71	1.01	0.89	0.78	87%

<sup>\*</sup>Actual production yield may vary between -4 and +10% of initial delivered lumens

<sup>\*\*</sup> For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit www.iesna.org/PDF/Erratas/TM-15-11BugRatingsAddendum.pdf

<sup>\*\*\*</sup> For recommended lumen maintenance factor data see TD-13. Calculated L<sub>70</sub> based on 6,000 hours LM-80-08 testing: > 100,000 hours







# America's Leading Innovator of LED Lighting

Built on innovative thinking and revolutionary technology, the XSP Series reflects America's pioneering spirit. How fitting, then, that it was designed and assembled right here in the U.S. by Cree, to illuminate streets everywhere— how many street lights can say that?

# Cree IS LED Lighting

Visit www.cree.com/lighting/xspseries or contact a Cree lighting representative to learn more.

© 2013 Cree, Inc. All rights reserved. For informational purposes only. Not a warranty or specification. See www.cree.com/lighting for warranty and specifications. Cree\*, the Cree logo, BetaLED\*, Colorfast DeltaGuard\*, NanoOptic\* and the BetaLED Technology logo are registered trademarks, and Precision Delivery Gridf\*, XSP1\*\*, XSP2\*\*, XSP2L\*\* and XSPR\*\* are trademarks of Cree, Inc. CAT/BRCH-C007 11/2013





