

# XSP2™ — BXSPA02/G

Cree® LED Street/Area Light – Double Module – Horizontal Tenon Mount – Type II and Type II w/Backlight Control

## Product Description

Designed from the ground up as totally optimized LED street and area lighting system, the XSP Series delivers incredible efficiency without sacrificing application performance. Beyond substantial energy savings and reduced maintenance, Cree achieves better optical control with our NanoOptic® Precision Delivery Grid™ optic than a traditional cobra head luminaire. The Cree® XSP Series LED luminaires are the better alternative for traditional street and area lighting with better payback and better performance.

## Performance Summary

Utilizes BetaLED® Technology

NanoOptic® Precision Delivery Grid™ optic

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

CRI: Minimum 70 CRI

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

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

## Accessories

| Field Installed Accessories                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                       |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>XA-SP2BLS</b><br>Backlight Control Shield<br>- Provides 1/2 Mounting Height Cutoff<br><b>XA-SP2RDSBK</b><br>Bird Spikes                                                                                                                                                                                | <b>XA-XSP4PTMNT</b><br>Four Point Mounting Kit<br>- Includes Large Bracket for mounting to 2" (51mm) IP, 2.375" (60mm) O.D., Small Bracket for mounting to 1.25" (32mm) IP, 1.66" (42mm) O.D. tenon, and mounting bolts                                                                                                                                                                                               |
| Tenons (must specify color)                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Square Internal Mount Tenons</b><br>- Mounts to 4" (102mm) square aluminum or steel poles<br><b>PD-1H4</b> – Single<br><b>PD-2H4(90)</b> – 90° Twin<br><b>PD-2H4(180)</b> – 180° Twin<br><b>PD-3H4(90)</b> – 90° Triple<br><b>PD-4H4(90)</b> – 90° Quad<br><br><b>Wall Mount Tenon</b><br><b>WM-2L</b> | <b>Round External Mount Tenons</b><br>- Mounts to 2-3/8 – 3" (60 – 76mm) round aluminum or steel poles or tenons<br><b>PT-1H</b> – Single<br><b>PT-2H(90)</b> – 90° Twin<br><b>PT-2H(180)</b> – 180° Twin<br><b>PT-3H(90)</b> – 90° Triple<br><b>PT-4H(90)</b> – 90° Quad<br><br><b>Direct Arm Pole Adaptor Bracket</b><br>- Mounts to 3 – 6" (76 – 152mm) round or square aluminum or steel poles<br><b>XA-TMDA8</b> |

## Ordering Information

Example: BXSPA02HA-US

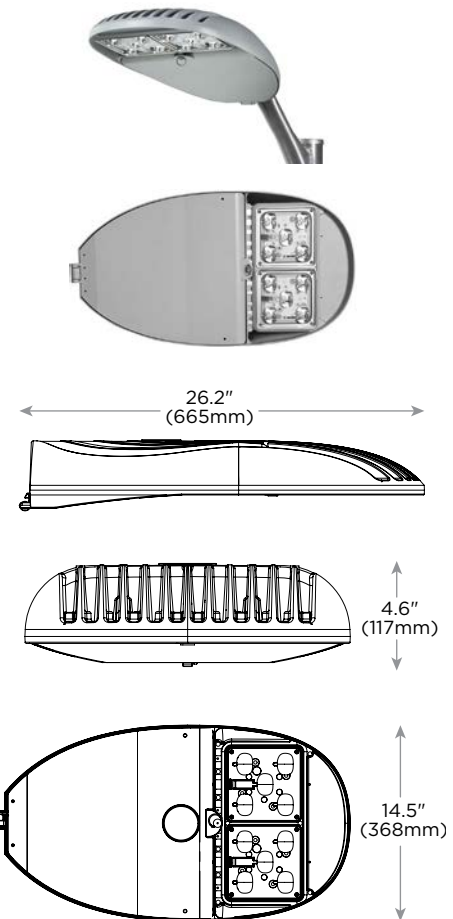
| BXSP    | A       | O                     |                                    |                          | A                      | - |                                              |                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|---------|---------|-----------------------|------------------------------------|--------------------------|------------------------|---|----------------------------------------------|--------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product | Version | Mounting              | Optic                              | Modules                  | Input Power Designator | - | Voltage                                      | Color Options                                                                  | Options                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| BXSP    | A       | O<br>Horizontal Tenon | 2<br>Type II<br>G<br>Type II w/BLS | H<br>4000K<br>P<br>5700K | A<br>101W              | - | U<br>Universal<br>120-277V<br>V<br>347-480V* | S<br>Silver<br>T<br>Black<br>Z<br>Bronze<br>B<br>Platinum Bronze<br>W<br>White | F Fuse<br>- When code dictates fusing, use time delay fuse<br>- Not available with V voltage<br>G Small Four Point Mounting<br>- Mounts to 1.25" (32mm) IP, 1.66" (42mm) O.D. horizontal tenon<br>J Large Four Point Mounting<br>- Mounts to 2" (51mm) IP, 2.375" (60mm) O.D. horizontal tenon<br>K Occupancy Control<br>- Refer to Occupancy Control spec sheet for details<br>N Utility Label and NEMA Photocell Receptacle<br>- Includes Q option<br>- Refer to Field Adjustable Output spec sheet for details<br>Q Field Adjustable Output<br>- Refer to Field Adjustable Output spec sheet for details<br>R NEMA Photocell Receptacle<br>- Photocell by others<br>U Utility<br>- Label per ANSI C136.15<br>- Includes exterior wattage label that indicates the maximum available wattage of the luminaire<br>- Includes Q option<br>- Refer to Field Adjustable Output spec sheet for details |

\* See [www.cree.com/lighting/products/warranty](http://www.cree.com/lighting/products/warranty) for warranty terms

\* 347-480V utilizes magnetic step-down transformer. For input power for 347-480V, refer to the Lumen Output, Electrical, and Lumen Maintenance data table



Rev. Date: 02/19/14



## Product Specifications

### CONSTRUCTION & MATERIALS

- Die cast aluminum housing
- Tool-less entry
- Mounts on 1.25" (32mm) IP, 1.66" (42mm) O.D. or 2" (51mm) IP, 2.375" (60mm) O.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 secured with two mounting bolts standard; optional four point mounting available
- Designed with 0-10V dimming capabilities. Controls by others
- 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. Silver, black, bronze, platinum bronze and white are available

### ELECTRICAL SYSTEM

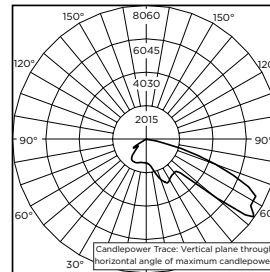
- **Input Voltage:** 120-277V or 347-480V, 50/60Hz
- Class 2 output
- **Power Factor:** > 0.9 at full load
- **Total Harmonic Distortion:** < 20% at full load
- Integral 10kV surge suppression protection standard
- To address inrush current, slow blow fuse or type C/D breaker should be used
- Compatible with control systems; consult factory for details

### REGULATORY & VOLUNTARY QUALIFICATIONS

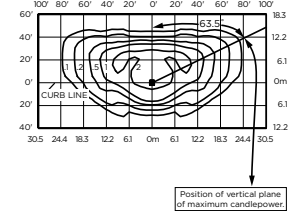
- cULus Listed
- Suitable for wet locations
- Product qualified on the DesignLights Consortium ("DLC") Qualified Products List ("QPL") when ordered with 2, G, 3 or H optics. Exceptions apply when N, U, or Q options are ordered - see Field Adjustable Output spec sheet for details
- Certified to ANSI C136.31-2001, 3G bridge and overpass vibration standards
- Meets CALTrans 611 Vibration testing
- 10kV surge suppression protection tested in accordance with IEEE/ANSI C62.41.2
- Luminaire and finish endurance tested to withstand 5,000 hours of elevated ambient salt fog conditions as defined in ASTM Standard B 117
- Meets Buy American requirements within ARRA
- Dark Sky Friendly, IDA Approved when ordered with the Type II and Type III optics

## Photometry

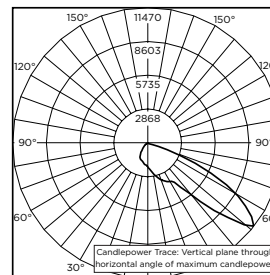
All published luminaire photometric testing performed to IESNA LM-79-08 standards by a NVLAP certified laboratory.



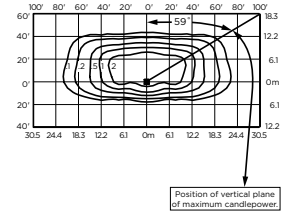
**ITL Test Report #: 76663**  
**BXSPA\*2HA-U**  
**Initial Delivered Lumens: 9,532**



**BXSPA\*2HA-U**  
**Mounting Height: 25' (7.6m)**  
**Initial Delivered Lumens: 9,612**  
**Initial FC at grade**



**ITL Test Report #: 76042**  
**BXSPA\*GHA-U**  
**Initial Delivered Lumens: 11,092**



**BXSPA\*GHA-U**  
**Mounting Height: 25' (7.6m) A.F.G.**  
**Initial Delivered Lumens: 8,417**  
**Initial FC at grade**

## EPA and Weight

| Weight<br>120-277V | Weight<br>347-480V   | EPA   |       |        |       |       |
|--------------------|----------------------|-------|-------|--------|-------|-------|
|                    |                      | 1@90° | 2@90° | 2@180° | 3@90° | 4@90° |
| 26.0 lbs<br>(12kg) | 29.0 lbs<br>(13.2kg) | 0.69  | 1.14  | 1.38   | 1.83  | 2.28  |

## Lumen Output, Electrical, and Lumen Maintenance Data

| XSP2™ Street/Area Lights   |                           |                            |                           |                            |                       |                       |               |      |      |      |      |      |                                                                   |
|----------------------------|---------------------------|----------------------------|---------------------------|----------------------------|-----------------------|-----------------------|---------------|------|------|------|------|------|-------------------------------------------------------------------|
| Input Power Designator     | 4000K                     |                            | 5700K                     |                            | System Watts 120~277V | System Watts 347~480V | Total Current |      |      |      |      |      | 50K Hours Projected Lumen Maintenance Factor @ 15 ° C (59 ° F)*** |
|                            | Initial Delivered Lumens* | BUG Ratings** Per TM-15-11 | Initial Delivered Lumens* | BUG Ratings** Per TM-15-11 |                       |                       | 120V          | 208V | 240V | 277V | 347V | 480V |                                                                   |
| Type II Distribution       |                           |                            |                           |                            |                       |                       |               |      |      |      |      |      |                                                                   |
| A                          | 9,612                     | B2 U0 G2                   | 10,680                    | B2 U0 G2                   | 101                   | 106                   | 0.86          | 0.49 | 0.43 | 0.38 | 0.30 | 0.23 | 99%                                                               |
| Type II Distribution w/BLS |                           |                            |                           |                            |                       |                       |               |      |      |      |      |      |                                                                   |
| A                          | 8,417                     | B1 U0 G1                   | 9,352                     | B1 U0 G1                   | 101                   | 106                   | 0.86          | 0.49 | 0.43 | 0.38 | 0.30 | 0.23 | 99%                                                               |

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

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

\*\*\* For recommended lumen maintenance factor data see TD-13. Projected  $L_{m}$  based on 11,088 hours LM-80-08 testing: > 150,000 hours