

# XSP Series

XSPR™ LED Street/Area Luminaire – Version A

## Product Description

In addition to a low initial cost, the XSPR™ LED Street luminaire maintains the familiar look of the traditional cobrahead design and delivers substantial energy savings while reducing maintenance time and costs. The hassle-free design of the XSPR™ luminaire includes tool-less entry and +/- 5° fixture leveling for easy installation. Our NanoOptic® Precision Delivery Grid™ optic achieves better optical control than traditional street lighting fixtures and efficiently delivers white uniform light for safer-feeling communities.

**Applications:** Roadway, parking lots, walkways and general area spaces

## Performance Summary

NanoOptic® Precision Delivery Grid™ optic

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

**CRI:** Minimum 70 CRI

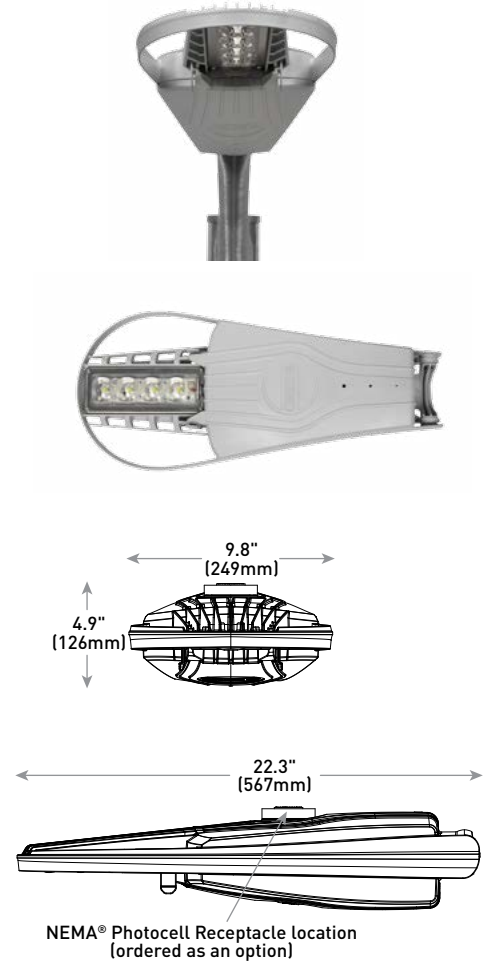
**CCT:** 4000K (+/- 300K); 5700K (+/- 500K)

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

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

## Accessories

Field-Installed
<b>Backlight Control Shield</b> XA-SPRBL5 - Provides 1/2 mounting height cutoff



Weight
13.9 lbs. (6.3kg)

## Ordering Information

Example: BXSPR-A-0-1-F-C-U-S

BXSPR	A	0				U	S	
Product	Version	Mounting	Optic	CCT	Input Power Designator	Voltage	Color Options	Options
BXSPR	A	0 Horizontal Tenon	1* Type II Long 2* Type II Medium 3* Type III Medium	F 4000K M 5700K	C 42W G 25W	U Universal 120-277V	S Silver	<b>N Utility Label and NEMA® Photocell Receptacle</b> - External wattage label per ANSI C136.15 - 7-pin receptacle per ANSI C136.41 - Factory connected 0-10V dim leads - Photocell and shorting cap by others <b>R NEMA® 7-Pin Photocell Receptacle</b> - 7-pin receptacle per ANSI C136.41 - Factory connected 0-10V dim leads - Photocell and shorting cap by others <b>UTL Utility Label</b> - Includes exterior wattage label per ANSI C136.15 that indicates the maximum available wattage of the luminaire

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



Rev. Date: V5 10/19/2017



US: [lighting.cree.com](http://lighting.cree.com)

T (800) 236-6800 F (262) 504-5415

Canada: [www.cree.com/canada](http://www.cree.com/canada)

T (800) 473-1234 F (800) 890-7507

**Product Specifications**

**CONSTRUCTION & MATERIALS**

- Die cast aluminum housing w/UV stabilized polymeric door for long weathering and reliability
- Tool-less entry
- 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
- Luminaire secures with two mounting bolts
- Exclusive Colorfast DeltaGuard® finish features an E-Coat epoxy primer with an ultra-durable silver powder topcoat, providing excellent resistance to corrosion, ultraviolet degradation and abrasion
- **Weight:** 13.9 lbs. (6.3kg)

**ELECTRICAL SYSTEM**

- **Input Voltage:** 120-277V, 50/60Hz
- **Power Factor:** > 0.9 at full load
- **Total Harmonic Distortion:** < 20% at full load
- Class 2 driver
- Integral 10kV surge suppression protection standard
- When code dictates fusing, a slow blow fuse or type C/D breaker should be used to address inrush current
- Designed with 0-10V dimming capabilities. Controls by others
- **10V Source Current:** 0.15mA

**REGULATORY & VOLUNTARY QUALIFICATIONS**

- cULus Listed
- Suitable for wet locations
- 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
- Meets FCC Part 15, Subpart B, Class A standards for conducted and radiated emissions
- 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
- DLC qualified. Some exceptions apply. Please refer to <https://www.designlights.org/search/> for most current information
- RoHS compliant. Consult factory for additional details

Electrical Data*					
Input Power Designator	System Watts 120-277V	Total Current (A)			
		120V	208V	240V	277V
C	42	0.34	0.20	0.18	0.16
G	25	0.21	0.12	0.10	0.10

\* Electrical data at 25°C (77°F). Actual wattage may differ by +/- 10% when operating between 120-277V +/- 10%

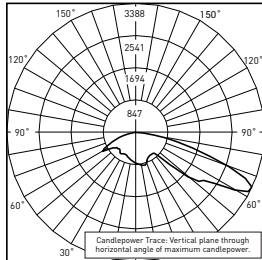
XSPR Version A Series Ambient Adjusted Lumen Maintenance <sup>1</sup>						
Ambient	Optics	Initial LMF	25K hr Projected <sup>2</sup> LMF	50K hr Projected <sup>2</sup> LMF	75K hr Projected <sup>2</sup> LMF	100K hr Calculated <sup>3</sup> LMF
5°C (41°F)	2ME, 2LG, 3ME	1.04	1.02	1.01	1.01	1.00
10°C (50°F)	2ME, 2LG, 3ME	1.03	1.01	1.00	1.00	0.99
15°C (59°F)	2ME, 2LG, 3ME	1.02	1.00	0.99	0.98	0.98
20°C (68°F)	2ME, 2LG, 3ME	1.01	0.99	0.98	0.97	0.97
25°C (77°F)	2ME, 2LG, 3ME	1.00	0.98	0.97	0.96	0.96

<sup>1</sup>Lumen maintenance values at 25°C (77°F) are calculated per TM-21 based on LM-80 data and in-situ luminaire testing. Luminaire ambient temperature factors (LATF) have been applied to all lumen maintenance factors  
<sup>2</sup>In accordance with IESNA TM-21-11, Projected Values represent interpolated value based on time durations that are within six times (6X) the IESNA LM-80-08 total test duration (in hours) for the device under testing (DUT) i.e. the packaged LED chip  
<sup>3</sup>In accordance with IESNA TM-21-11, Calculated Values represent time durations that exceed six times (6X) the IESNA LM-80-08 total test duration (in hours) for the device under testing (DUT) i.e. the packaged LED chip

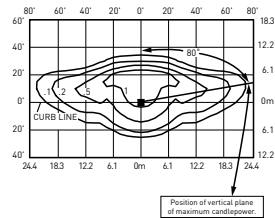
**Photometry**

All published luminaire photometric testing performed to IESNA LM-79-08 standards by a NVLAP accredited laboratory. To obtain an IES file specific to your project consult: <http://lighting.cree.com/products/outdoor/street-and-roadway/xsp-series-1>

1



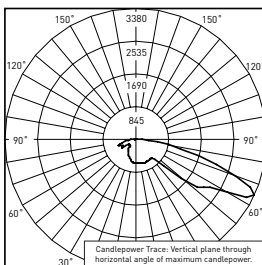
**CESTL Test Report #:** 2013-0152  
**BXSPR-A\*-1-F-C-U**  
**Initial Delivered Lumens:** 3,579



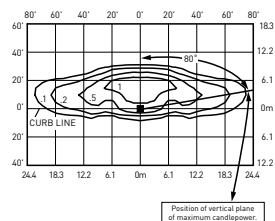
**BXSPR-A\*-1-F-C-U**  
**Mounting Height:** 25' (7.6m) A.F.G.  
**Initial Delivered Lumens:** 3,648  
 Initial FC at grade

Type II Long Distribution				
Input Power Designator	4000K		5700K	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11
C	3,648	B1 U0 G1	3,925	B1 U0 G1
G	2,416	B1 U0 G1	2,600	B1 U0 G1

\* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens  
 \*\* For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: <https://www.ies.org/wp-content/uploads/2017/03/TM-15-11BUGRatingsAddendum.pdf>



**RECTL Test Report #:** PL03995-001  
**BXSPR-A\*-1-M-C-U w/XA-SPRBLs**  
**Initial Delivered Lumens:** 2,857

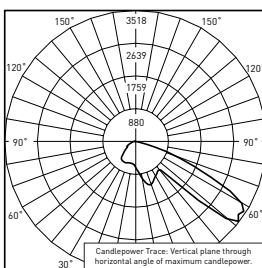


**BXSPR-A\*-1-M-C-U w/XA-SPRBLs**  
**Mounting Height:** 25' (7.6m) A.F.G.  
**Initial Delivered Lumens:** 2,855  
 Initial FC at grade

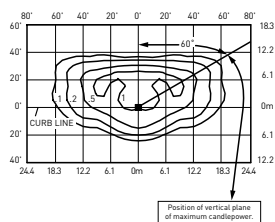
Type II Long w/BLS Distribution				
Input Power Designator	4000K		5700K	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11
C	2,655	B0 U1 G1	2,857	B0 U1 G1
G	1,759	B0 U1 G1	1,893	B0 U1 G1

\* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens  
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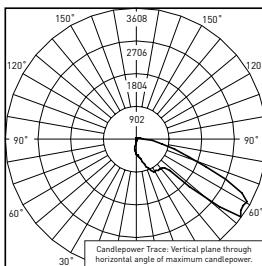
**CESTL Test Report #:** 2013-0151  
**BXSPR-A\*-2-F-C-U**  
**Initial Delivered Lumens:** 3,759



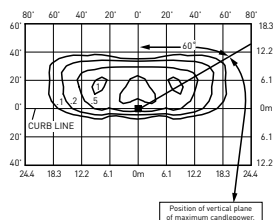
**BXSPR-A\*-2-F-C-U**  
**Mounting Height:** 25' (7.6m) A.F.G.  
**Initial Delivered Lumens:** 3,819  
 Initial FC at grade

Type II Medium Distribution				
Input Power Designator	4000K		5700K	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11
C	3,819	B1 U0 G1	4,109	B1 U0 G1
G	2,529	B1 U0 G1	2,722	B1 U0 G1

\* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens  
 \*\* For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: <https://www.ies.org/wp-content/uploads/2017/03/TM-15-11BUGRatingsAddendum.pdf>



**RECTL Test Report #:** PL03993-001  
**BXSPR-A\*-2-M-C-U w/XA-SPRBLs**  
**Initial Delivered Lumens:** 3,097



**BXSPR-A\*-2-M-C-U w/XA-SPRBLs**  
**Mounting Height:** 25' (7.6m) A.F.G.  
**Initial Delivered Lumens:** 2,878  
 Initial FC at grade

Type II Medium w/BLS Distribution				
Input Power Designator	4000K		5700K	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11
C	2,878	B0 U1 G1	3,097	B0 U1 G1
G	1,906	B0 U1 G0	2,052	B0 U1 G1

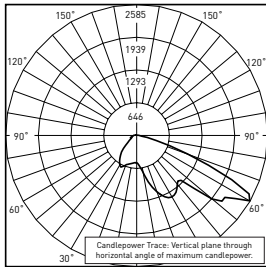
\* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens  
 \*\* For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: <https://www.ies.org/wp-content/uploads/2017/03/TM-15-11BUGRatingsAddendum.pdf>



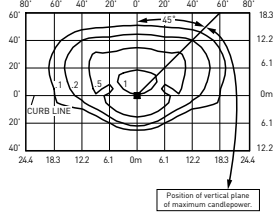
**Photometry**

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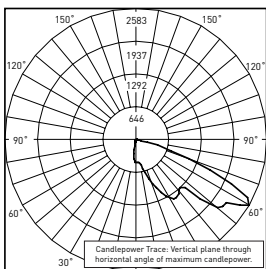
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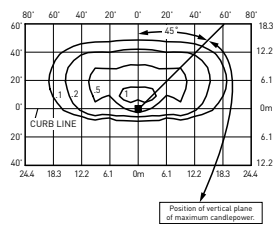
**CESTL Test Report #:** 2013-0150  
**BXSPR-A\*-3-F-C-U**  
**Initial Delivered Lumens:** 3,695



**BXSPR-A\*-3-F-C-U**  
**Mounting Height:** 25' (7.6m) A.F.G.  
**Initial Delivered Lumens:** 3,819  
 Initial FC at grade



**RECTL Test Report #:** PL03994-001  
**BXSPR-A\*-3-M-C-U w/ XA-SPRBLS**  
**Initial Delivered Lumens:** 2,946



**BXSPR-A\*-3-F-C-U w/ XA-SPRBLS**  
**Mounting Height:** 25' (7.6m) A.F.G.  
**Initial Delivered Lumens:** 2,738  
 Initial FC at grade

Type III Medium Distribution				
Input Power Designator	4000K		5700K	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11
C	3,819	B1 U0 G1	4,109	B1 U0 G1
G	2,529	B1 U0 G1	2,722	B1 U0 G1

\* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens






\*\* For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: <https://www.ies.org/wp-content/uploads/2017/03/TM-15-11BUGRatingsAddendum.pdf>

Type III Medium w/BLS Distribution				
Input Power Designator	4000K		5700K	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11
C	2,738	B0 U1 G1	2,946	B0 U1 G1
G	1,813	B0 U1 G1	1,952	B0 U1 G1

\* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens

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**Luminaire EPA**

Horizontal Tenon Mount – Weight: 13.9 lbs. (6.3kg)				
Single	2 @ 90°	2 @ 180°	3 @ 90°	4 @ 90°
Tenon Configuration If used with Cree tenons, please add tenon EPA with luminaire EPA				
				
PD-1H4; PT-1H	PD-2H4(90); PT-2H(90)	PD-2H4(180); PT-2H(180)	PD-3H4(90); PT-3H(90)	PD-4H4(90); PT-4H(90)
0.57	0.85	1.14	1.42	1.56

**Tenon EPA**

Part Number	EPA
PD Series Tenons	0.09
PT Series Tenons	0.10
WM-2L	0.13
XA-TMDA8	0.19

Tenons and Brackets* (must specify color)	
<p><b>Square Internal Mount Horizontal Tenons (Aluminum)</b>                      - Mounts to 4" (102mm) square aluminum or steel poles                      PD-1H4 – Single                      PD-3H4(90) – 90° Triple                      PD-2H4(90) – 90° Twin              PD-4H4(90) – 90° Quad                      PD-2H4(180) – 180° Twin</p> <p><b>Wall Mount Brackets</b>                      - Mounts to wall or roof                      WM-2L – Extended Horizontal</p>	<p><b>Round External Mount Horizontal Tenons (Aluminum)</b>                      - Mounts to 2.375"-3" (60-76mm) O.D. round aluminum or steel poles or tenons                      - Mounts to 3" (76mm), 5" (127mm), or 6" (152mm) square pole with PB-1A* tenon                      PT-1H – Single                              PT-3H(90) – 90° Triple                      PT-2H(90) – 90° Twin                      PT-4H(90) – 90° Quad                      PT-2H(180) – 180° Twin</p> <p><b>Direct Arm Pole Adaptor Bracket</b>                      - Mounts to 3-6" (76-152mm) round or square aluminum or steel poles                      XA-TMDA8</p>

‡ Refer to the [Bracket and Tenons spec sheet](#) for more details

\* Specify pole size: 3 (3"), 5 (5"), or 6 (6") for single, double or triple luminaire orientation or 5 (5") or 6 (6") for quad luminaire orientation