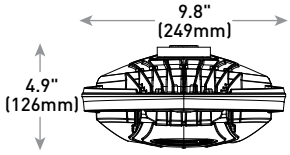
XSP Series

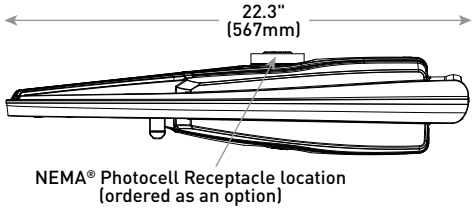
XSPR™ LED Street/Area Luminaire – Version A

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
Backlight Control Shield XA-SPRBLS - 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	**N** **Utility Label and NEMA® Photocell Receptacle** - 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 **R** **NEMA® 7-Pin Photocell Receptacle** - 7-pin receptacle per ANSI C136.41 - Factory connected 0-10V dim leads - Photocell and shorting cap by others **UTL** **Utility Label** - 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)

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
- **CA RESIDENTS WARNING:** Cancer and Reproductive Harm – www.p65warnings.ca.gov

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[1]

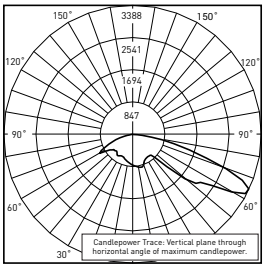
Ambient	Optics	Initial LMF	25K hr Projected[2] LMF	50K hr Projected[2] LMF	75K hr Projected[2] LMF	100K hr Calculated[3] LMF
5˚C (41˚F)	2ME, 2LG, 3ME	1.04	1.02	1.01	1.01	1.00
10˚C (50˚F)	2ME, 2LG, 3ME	1.03	1.01	1.00	1.00	0.99
15˚C (59˚F)	2ME, 2LG, 3ME	1.02	1.00	0.99	0.98	0.98
20˚C (68˚F)	2ME, 2LG, 3ME	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

[1] 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
[2] 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)
[3] 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)

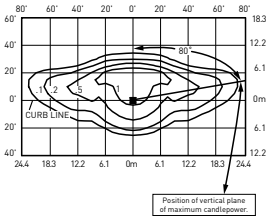
Photometry

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

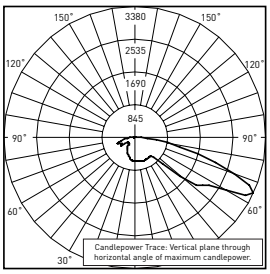


BXSPR-A-*-1-F-C-U
Mounting Height: 25' (7.6m) A.F.G.
Initial Delivered Lumens: 3,648
Initial FC at grade

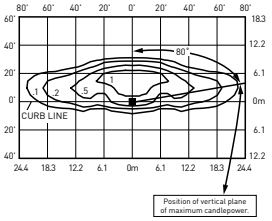
Type II Long Distribution

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



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



BXSPR-A-*-1-F-C-U w/ XA-SPRBLS
Mounting Height: 25' (7.6m) A.F.G.
Initial Delivered Lumens: 2,655
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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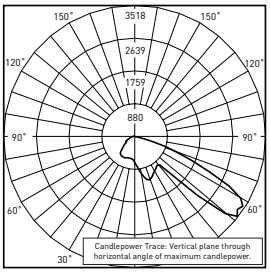
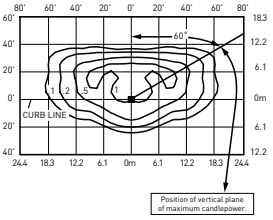


CESTL Test Report #: 2013-0151
BXSPR-A-*-2-F-C-U
Initial Delivered Lumens: 3,759



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
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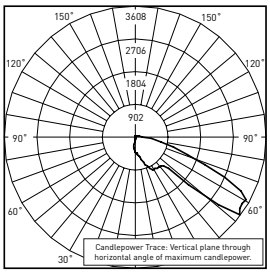
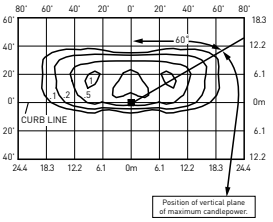


RESTL Test Report #: PL03993-001
BXSPR-A-*-2-M-C-U w/XA-SPRBLS
Initial Delivered Lumens: 3,097



BXSPR-A-*-2-F-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
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Photometry

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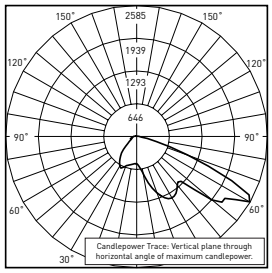
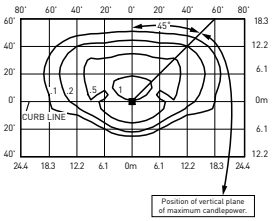
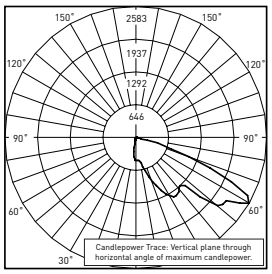
3



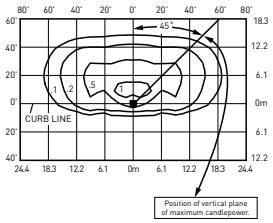
CESTL Test Report #: 2013-0150
BXSPR-A-*-3-F-C-U
Initial Delivered Lumens: 3,695



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



RESTL 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
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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)

Square Internal Mount Horizontal Tenons (Aluminum)
- Mounts to 4" (102mm) square aluminum or steel poles

PD-1H4 – Single
PD-2H4(90) – 90˚ Twin
PD-2H4(180) – 180˚ Twin
PD-3H4(90) – 90˚ Triple
PD-4H4(90) – 90˚ Quad

Wall Mount Brackets
- Mounts to wall or roof

WM-2L – Extended Horizontal

Round External Mount Horizontal Tenons (Aluminum)
- 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-2H(90) – 90˚ Twin
PT-2H(180) – 180˚ Twin
PT-3H(90) – 90˚ Triple
PT-4H(90) – 90˚ Quad

Direct Arm Pole Adaptor Bracket
- Mounts to 3-6" (76-152mm) round or square aluminum or steel poles

XA-TMDA8

‡ 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

US: lighting.cree.com T (800) 236-6800 F (262) 504-5415

Canada: www.cree.com/canada T (800) 473-1234 F (800) 890-7507