

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

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

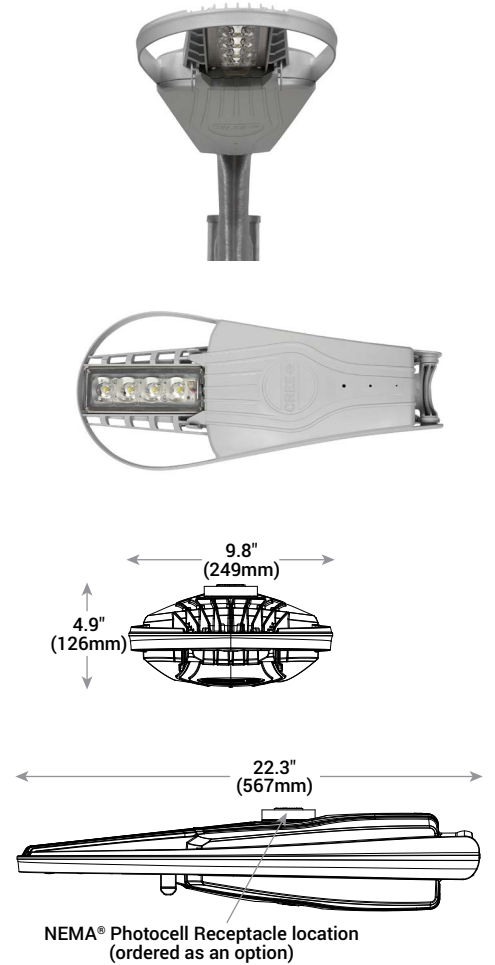
CRI: Minimum 70 CRI

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

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

Accessories

Field-Installed
Backlight Control Shield 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	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

* Available with Backlight Shield when ordered with field-installed accessory (see table above)
 NOTE: Price adder may apply depending on configuration



Rev. Date: V3 11/17/2015



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
- Designed with 0-10V dimming capabilities. Controls by others
- 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
- To address inrush current, slow blow fuse or type C/D breaker should be used
- **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 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. Please refer to www.designlights.org/QPL for most current information
- RoHS compliant. Consult factory for additional details

Electrical Data*					
Input Power Designator	System Watts 120-277V	Total Current			
		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%

Recommended XSPR Version A Series Lumen Maintenance Factors (LMF) ¹						
Ambient	Input Power Designator	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)	C	1.04	1.02	1.01	1.00	1.00
	G					
10°C (50°F)	C	1.03	1.01	1.00	0.99	0.99
	G					
15°C (59°F)	C	1.02	1.00	0.99	0.98	0.98
	G					
20°C (68°F)	C	1.01	0.99	0.98	0.97	0.97
	G					
25°C (77°F)	C	1.00	0.98	0.97	0.96	0.96
	G					

¹ Lumen maintenance values at 25°C (77°F) are calculated per TM-21 based on LM-80 data and in-situ luminaire testing

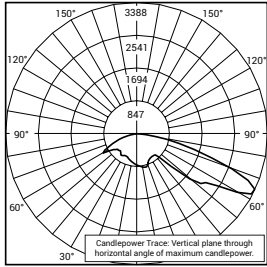
² In accordance with IESNA TM-21-11, Projected Values represent interpolated value based on time durations that are within six times (6X) the IESNA LM-80-08 total test duration (in hours) for the device under testing (DUT) i.e. the packaged LED chip

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

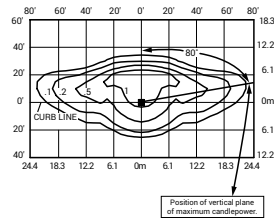
Photometry

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: www.cree.com/Lighting/Products/Outdoor/Streetlights/XSP-Series-Streetlight

1



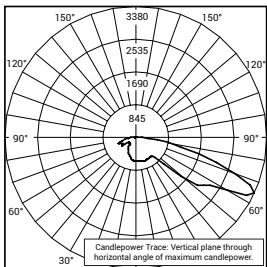
CESTL Test Report #: 2013-0152
BXSPR-A*-1-F-C-U
Initial Delivered Lumens: 3,579



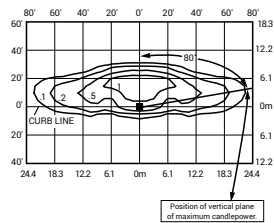
BXSPR-A*-1-F-C-U
Mounting Height: 25' (7.6m) A.F.G.
Initial Delivered Lumens: 3,648
Initial FC at grade

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: www.ies.org/PDF/Erratas/TM-15-11BugRatingsAddendum.pdf. Valid with no tilt



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

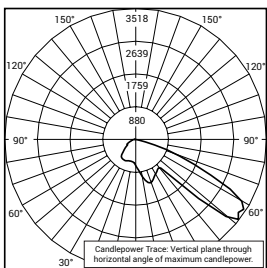


BXSPR-A*-1-F-C-U w/ XA-SPRBLS
Mounting Height: 25' (7.6m) A.F.G.
Initial Delivered Lumens: 2,655
Initial FC at grade

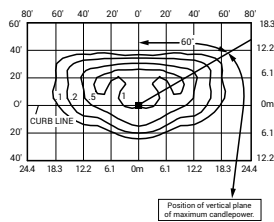
Type II Long w/BLS Distribution				
Input Power Designator	4000K		5700K	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11
C	2,655	B0 U1 G1	2,857	B0 U1 G1
G	1,759	B0 U1 G1	1,893	B0 U1 G1

* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens
 ** For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: www.ies.org/PDF/Erratas/TM-15-11BugRatingsAddendum.pdf. Valid with no tilt

2



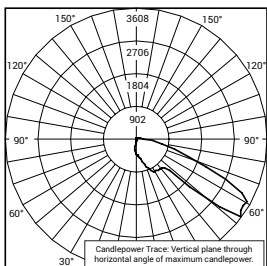
CESTL Test Report #: 2013-0151
BXSPR-A*-2-F-C-U
Initial Delivered Lumens: 3,759



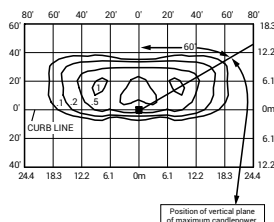
BXSPR-A*-2-F-C-U
Mounting Height: 25' (7.6m) A.F.G.
Initial Delivered Lumens: 3,819
Initial FC at grade

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: www.ies.org/PDF/Erratas/TM-15-11BugRatingsAddendum.pdf. Valid with no tilt



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

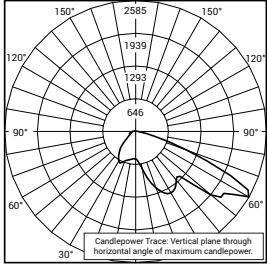
Type II Medium w/BLS Distribution				
Input Power Designator	4000K		5700K	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11
C	2,878	B0 U1 G1	3,097	B0 U1 G1
G	1,906	B0 U1 G0	2,052	B0 U1 G1

* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens
 ** For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: www.ies.org/PDF/Erratas/TM-15-11BugRatingsAddendum.pdf. Valid with no tilt

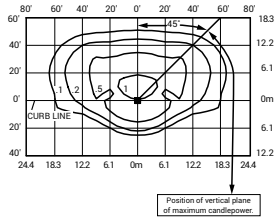
Photometry

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: www.cree.com/Lighting/Products/Outdoor/Streetlights/XSP-Series-Streetlight

3



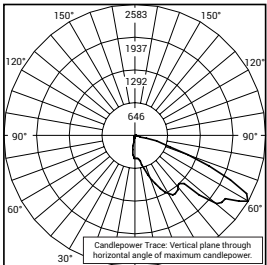
CESTL Test Report #: 2013-0150
BXSPR-A*-3-F-C-U
Initial Delivered Lumens: 3,695



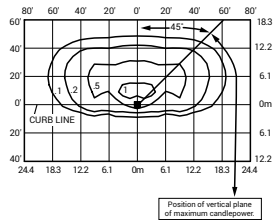
BXSPR-A*-3-F-C-U
Mounting Height: 25' (7.6m) A.F.G.
Initial Delivered Lumens: 3,819
 Initial FC at grade

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: www.ies.org/PDF/Erratas/TM-15-11BugRatingsAddendum.pdf. Valid with no tilt



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 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
 ** For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: www.ies.org/PDF/Erratas/TM-15-11BugRatingsAddendum.pdf. Valid with no tilt

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>Square Internal Mount Horizontal Tenons (Aluminum)</p> <ul style="list-style-type: none"> - 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 	<p>Round External Mount Horizontal Tenons (Aluminum)</p> <ul style="list-style-type: none"> - Mounts to 2.375"-3" (60-76mm) O.D. round aluminum or steel poles or tenons PT-1H – Single PT-2H(90) – 90° Twin PT-2H(180) – 180° Twin PT-3H(90) – 90° Triple PT-4H(90) – 90° Quad
<p>Wall Mount Brackets</p> <ul style="list-style-type: none"> - Mounts to wall or roof WM-2L – Extended Horizontal 	<p>Direct Arm Pole Adaptor Bracket</p> <ul style="list-style-type: none"> - 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