

XSP Series

XSP2™ & XSP2L™ LED Street/Area Light – Double Module – Version B

Product Description

Designed from the ground up as a 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 greater optical control with our NanoOptic® Precision Delivery Grid™ optic when compared to traditional cobra head luminaires. The XSP Series is the better alternative for traditional street and area lighting with quick payback and improved performance.

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

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)

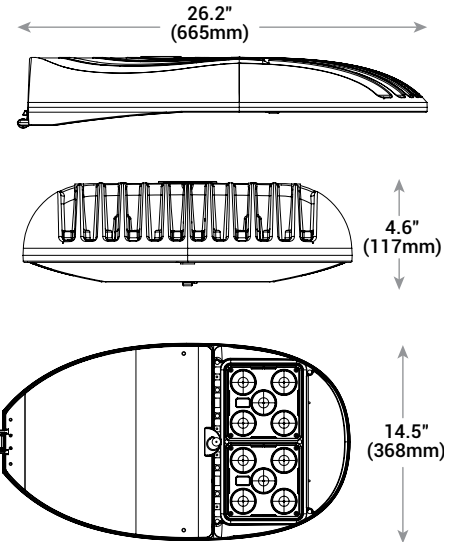
Limited Warranty*: 10 years on luminaire/10 years on Colorfast DeltaGuard® finish

Accessories

Field-Installed	
Backlight Control Shield XA-SP2BLS - Provides 1/2 mounting height cutoff Bird Spikes XA-SP2BRDSPK	Four Point Mounting Kit XA-XSP4PTMNT - 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



Shown with PT-1H Tenon



Shown with Type 5ME Optics

Ordering Information

Example: BXSP B HT 2ME B 40K-UL SV

Product	Version	Mounting	Optic	Input Power Designator	CCT	Voltage	Color Options	Options
BXSP	B	HT Horizontal Tenon	2ME+ Type II Medium 2LG+ Type II Long 3ME+ Type III Medium 4ME+ Type IV Medium 5ME Type V Medium 5SH Type V Short	B 101W D 153W - 5ME & 5SH Optics - Available with UL voltage only	40K 4000K 57K 5700K	UL Universal 120-277V UH** 347-480V	SV Silver BK Black BZ Bronze PB Platinum Bronze WH White	F Fuse - When code dictates fusing, use time delay fuse - Not available with UH voltage G Small Four Point Mounting - Mounts to 1.25" (32mm) IP, 1.66" (42mm) O.D. horizontal tenon J Large Four Point Mounting - Mounts to 2" (51mm) IP, 2.375" (60mm) O.D. horizontal tenon ML Multi-Level - Refer to ML spec sheet for details - High: 100%, Low: 26% N Utility Label and NEMA® Photocell Receptacle - Includes Q9 option - Refer to Field Adjustable Output spec sheet for details Q9 Field Adjustable Output - Refer to Field Adjustable Output spec sheet for details R NEMA® Photocell Receptacle - Photocell by others UTL Utility - Label per ANSI C136.15 - Includes exterior wattage label that indicates the maximum available wattage of the luminaire - Includes Q9 option - Refer to Field Adjustable Output spec sheet for details

* See www.cree.com/lighting/products/warranty for warranty terms
 • Available with Backlight Shield when ordered with field-installed accessory (see table above)
 ** 347-480V utilizes magnetic step-down transformer. For input power for 347-480V, refer to the Electrical Data table



Rev. Date: V1 09/11/2014



US: www.cree.com/lighting

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

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
- Input Power Designator B designed with 0-10V dimming capabilities. Controls by others
- Input Power Designator D includes Field Adjustable Output
- 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
- **Weight:** 120-277V: 26 lbs. (12kg); 347-480V: 29 lbs. (13.2kg)

ELECTRICAL SYSTEM

- **Input Voltage:** 120-277V or 347-480V, 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
- Compatible with control systems; consult factory for details

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
- 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 when ordered with 2ME, 3ME, 5ME and 5SH optics. Some exceptions apply. Please refer to www.designlights.org/QPL for most current information

Electrical Data*								
Input Power Designator	System Watts 120-277V	System Watts 347-480V	Total Current					
			120V	208V	240V	277V	347V	480V
B	101	106	0.86	0.49	0.43	0.38	0.30	0.23
D	153	N/A	1.34	0.79	0.68	0.63	N/A	N/A

* Electrical data at 25°C (77°F)

Recommended Cree® Outdoor Luminaire Lumen Maintenance Factors (LMF) ¹						
Ambient	Input Power Designator	Initial LMF	25K hr Projected ² LMF	50K hr Projected ² LMF	75K hr Projected/ Calculated ^{2,3} LMF	100K hr Calculated ³ LMF
5°C (41°F)	B	1.04	1.02	1.01	1.00	1.00
	D	1.04	0.98	0.92	0.85	0.80
10°C (50°F)	B	1.03	1.01	1.00	0.99	0.99
	D	1.03	0.97	0.91	0.84	0.79
15°C (59°F)	B	1.02	1.00	0.99	0.98	0.98
	D	1.02	0.96	0.90	0.84	0.79
20°C (68°F)	B	1.01	0.99	0.98	0.97	0.97
	D	1.01	0.95	0.89	0.83	0.78
25°C (77°F)	B	1.00	0.98	0.97	0.96	0.96
	D	1.00	0.94	0.88	0.82	0.77

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

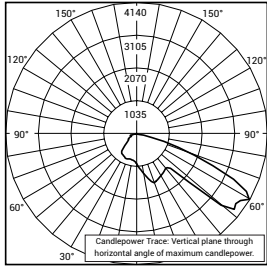
² In accordance with IESNA TM-21-11, Projected Values represent interpolated value based on time durations that are within six times (6X) the IESNA LM-80-08 total test duration (in hours) for the device under testing ((DUT) i.e. the packaged LED chip)

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)

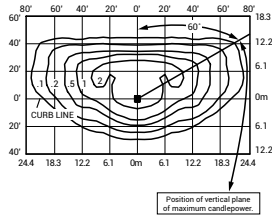
Photometry

All published luminaire photometric testing performed to IESNA LM-79-08 standards by a NVLAP certified laboratory. To obtain an IES file specific to your project consult: <http://www.cree.com/lighting>.

2ME



RESTL Test Report #: PL04168-001
 BXSPB**2MEA40K-UL
 Initial Delivered Lumens: 5,026



BXSPB**2MEB40K-UL
 Mounting Height: 25' (7.6m) A.F.G.
 Initial Delivered Lumens: 9,612
 Initial FC at grade

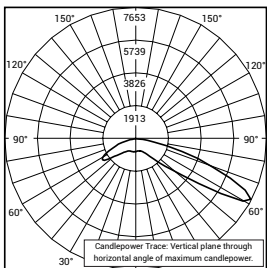
Type II Medium Distribution				
Input Power Designator	4000K		5700K	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11
B	9,612	B2 U0 G1	10,680	B2 U0 G2

* Initial delivered lumens at 25°C (77°F). 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. Valid with no tilt

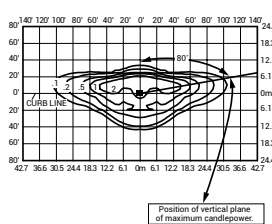
Type II Medium w/BLS Distribution				
Input Power Designator	4000K		5700K	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11
B	8,266	TBD	9,185	TBD

* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -4 and +10% of initial delivered lumens
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2LG



RESTL Test Report #: PL04169-001
 BXSPB**2LGA40K-UL
 Initial Delivered Lumens: 4,956



BXSPB**2LGB40K-UL
 Mounting Height: 25' (7.6m) A.F.G.
 Initial Delivered Lumens: 9,758
 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
B	9,758	B2 U0 G2	10,443	B2 U0 G2

* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -4 and +10% of initial delivered lumens
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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
B	7,416	TBD	7,937	TBD

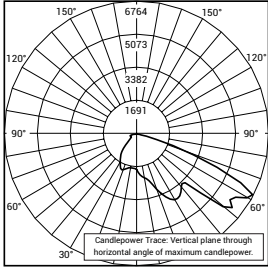
* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -4 and +10% of initial delivered lumens
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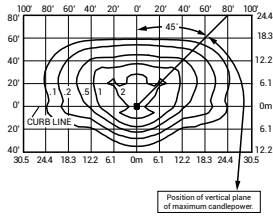
Photometry

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3ME



RESTL Test Report #: PL04173-001
 BXSPB**3MEB40K-UL
 Initial Delivered Lumens: 10,260



BXSPB**3MEB40K-UL
 Mounting Height: 25' (7.6m) A.F.G.
 Initial Delivered Lumens: 9,612
 Initial FC at grade

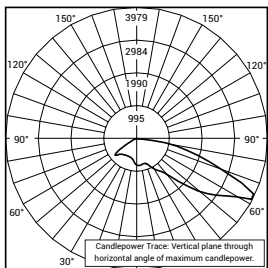
Type III Medium Distribution				
Input Power Designator	4000K		5700K	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11
B	9,612	B2 U0 G2	10,680	B2 U0 G2

* Initial delivered lumens at 25°C (77°F). 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. Valid with no tilt

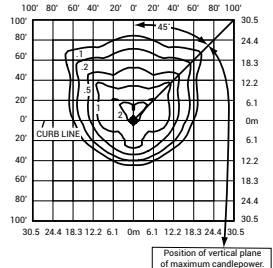
Type III Medium w/BLS Distribution				
Input Power Designator	4000K		5700K	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11
B	8,170	TBD	9,078	TBD

* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -4 and +10% of initial delivered lumens
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4ME



RESTL Test Report #: PL04171-001
 BXSPB**4MEA40K-UL
 Initial Delivered Lumens: 4,947



BXSPB**4MEB40K-UL
 Mounting Height: 25' (7.6m) A.F.G.
 Initial Delivered Lumens: 9,758
 Initial FC at grade

Type IV 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
B	9,758	B2 U0 G2	10,443	B2 U0 G2

* Initial delivered lumens at 25°C (77°F). 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. Valid with no tilt

Type IV 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
B	7,806	TBD	8,354	TBD

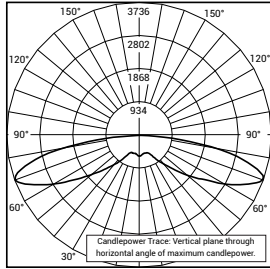
* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -4 and +10% of initial delivered lumens
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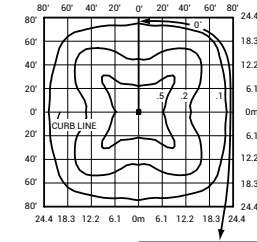
Photometry

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5ME



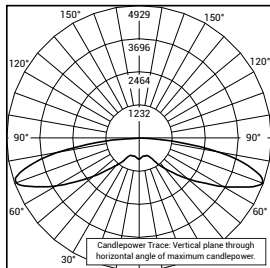
CESTL Test Report #: 2014-0009
BXSPB*5HA-U
Initial Delivered Lumens: 8,714



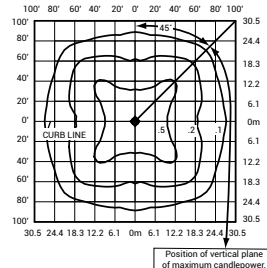
BXSPB5MEB40K-UL**
Mounting Height: 25' (7.6m) A.F.G.
Initial Delivered Lumens: 8,069
Initial FC at grade

Type V 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
B	8,069	B3 U1 G3	8,405	B3 U1 G3
D	11,700	B4 U1 G4	12,187	B4 U1 G4

* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -4 and +10% of initial delivered lumens
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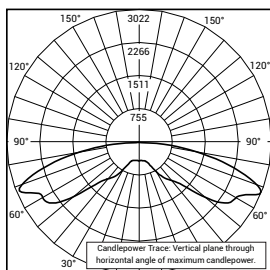


CESTL Test Report #: 2014-0025
BXSPB*5HL-U
Initial Delivered Lumens: 11,555

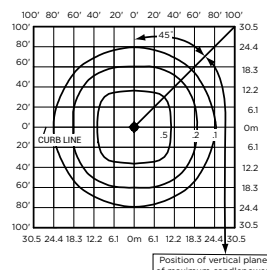


BXSPB5MED40K-UL**
Mounting Height: 25' (7.6m) A.F.G.
Initial Delivered Lumens: 11,700
Initial FC at grade

5SH



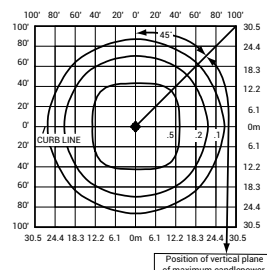
CESTL Test Report #: 2014-0010
BXSPB*6HA-U
Initial Delivered Lumens: 9,321



BXSPB5SHB40K-UL**
Mounting Height: 25' (7.6m) A.F.G.
Initial Delivered Lumens: 8,555
Initial FC at grade

Type V Short Distribution				
Input Power Designator	4000K		5700K	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11
B	8,555	B3 U0 G3	8,911	B3 U0 G3
D	12,405	B4 U0 G4	12,921	B4 U0 G4

* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -4 and +10% of initial delivered lumens
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



BXSPB5SHD40K-UL**
Mounting Height: 25' (7.6m) A.F.G.
Initial Delivered Lumens: 12,405
Initial FC at grade



XSP Series - Double Module - Version B

Luminaire EPA

Horizontal Tenon Mount - Weight: 120-277V: 26 lbs. (12kg); 347-480V: 29 lbs. (13.2kg)				
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)
0.69	1.14	1.38	1.83	2.28

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 Vertical Tenons (Steel) - 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>Round External Mount Horizontal Tenons (Aluminum) - Mounts to 2.375"-3" (60-76mm) O.D. round aluminum or steel poles or tenons 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>Wall Mount Brackets - Mounts to wall, roof or side of wood pole WM-2L - Extended Horizontal</p>	<p>Direct Arm Pole Adaptor Bracket - Mounts to 3-6" (76-152mm) round or square aluminum or steel poles XA-TMDA8</p>