

Fiscal Services
1800 Ignacio Blvd
Novato CA 94949
415-884-3162

PROJECT: KENTFIELD – SITE LIGHTING IMPROVEMENTS PROJECT #16-0516

ADDENDUM #1

Marin Community College District

June 1, 2016

REVISIONS/CLARIFICATIONS

1. These revisions/clarifications do not relieve the bidder from noted scope on drawings and elsewhere in the contract documents, unless specifically noted.

PROJECT MANUAL

1. 2.12 LIGHT FIXTURE SCHEDULE

Replace LIGHT FIXTURE SCHEDULE WITH REV. 6-1-16 (Attached)

Note: This revised schedule indicates fixture heads, poles and pole brackets that the District has available for contractor use on site. Contractor to furnish and install all bases and horizontal tenons for all fixtures as well as any parts needed to supplement District provided parts so that all fixtures identified in the contract documents become functional and connect to the existing building/energy management systems.

BID QUESTIONS

BQ #1 Please provide Pole Details and Foundation Details for both the Short Poles and the Tall Poles as well as a paint color.

BQ #1 Response: Bronze colored fixtures, Yellow Paint on tall Parking Lot pole bases. Please see the following attached sketches:

- SK-1 Pole Base (similar to existing pathway pole bases)
- SK-2 Tree Uplight Details
- SK-3 Pole Base at asphalt/Parking Lots
- SK-4 Pole Base at grade near Parking Lots
- SK-5 Pole Support at Existing Concrete Walls
- Kim Lighting Uplight cut-sheet (C Fixtures)
- Fixture Head XSP1_34 Watts (AS, AT & ATD Fixtures)
- Fixture Head XSP1_53 Watts (AS18 only)

2.12 LIGHT FIXTURE SCHEDULE (REV. 6-1-16)

Type	#	Sheet	Notes	Blg.	Contractor Furnish	Owner Furnish
AS	1	E1		PA	Horizontal Tenon, Conc. Base & bolts	XSP1_34 Watts Head, 10 foot bronze pole w/mounting bracket
AS	2	E1		PA	Horizontal Tenon, Conc. Base & bolts	XSP1_34 Watts Head, 10 foot bronze pole w/mounting bracket
AS	3	E1		PA	Horizontal Tenon, Conc. Base & bolts	XSP1_34 Watts Head, 10 foot bronze pole w/mounting bracket
AS	4	E1	Mount on backside of (E) conc. Wall. Structural Calcs Required	PA	XSP1_34 Watts Head, horizontal tenon and wall mount bracket assembly (See SK-5)	8 foot poles
AS	5	E1	Mount on backside of (E) conc. Wall. Structural Calcs Required	PA	XSP1_34 Watts Head, horizontal tenon and wall mount bracket assembly (See SK-5)	8 foot poles
AS	6	E1	Mount on backside of (E) conc. Wall. Structural Calcs Required	PA	XSP1_34 Watts Head, horizontal tenon and wall mount bracket assembly (See SK-5)	8 foot poles
AS	7	E1	Mount on backside of (E) conc. Wall. Structural Calcs Required	PA	XSP1_34 Watts Head, horizontal tenon and wall mount bracket assembly (See SK-5)	8 foot poles
AS	8	E1		FA	Horizontal Tenon, Conc. Base & bolts	XSP1_34 Watts Head, 10 foot bronze pole w/mounting bracket
AS	9	E1		FA	Horizontal Tenon, Conc. Base & bolts	XSP1_34 Watts Head, 10 foot bronze pole w/mounting bracket
AS	10	E1		FA	Horizontal Tenon, Conc. Base & bolts	XSP1_34 Watts Head, 10 foot bronze pole w/mounting bracket
AS	11	E2		PA		10 foot pole & base mounting bracket only
AS	12	E2		PA		10 foot pole & base mounting bracket only
AS	13	E2		PA		10 foot pole & base mounting bracket only
AS	14	E2		AC		10 foot pole & base mounting bracket only
AS	15	E2		AC		10 foot pole & base mounting bracket only
AS	16	E2		AC		10 foot pole & base mounting bracket only
AS	17	E2		SMN	Extension mount pole to head, Conc. Base	XSP1_34 Watts Head, 10 foot bronze pole w/mounting bracket
AS	18	E2		SMN	Extension mount pole to head, Conc. Base	XSP1_53 Watts Head, 10 foot bronze pole w/mounting bracket
AS	19	E3		SS	Everything	
AS	20	E3		SS	Everything	
AS	21	E3		SS	Everything	
AS	22	E3		SS	Everything	
AS	23	E3		SS	Everything	
					Everything	
ATD	1	E5	Tall 16' Double Sided in Parking Lot 10	PE	Everything	
ATD	2	E5	Tall 16' Double Sided in Parking Lot 10	PE	Everything	
ATD	3	E5	Tall 16' Double Sided in Parking Lot 10	PE	Everything	
ATD	4	E5	Tall 16' Double Sided in Parking Lot 10	PE	Everything	
ATD	5	E5	Tall 16' Double Sided in Parking Lot 10	PE	Everything	
ATD	6	E5	Tall 16' Double Sided in Parking Lot 10	PE	Everything	
AT	1	E6	Tall 16' Double Sided in Parking Lot 10	VS	Everything	
AT	1	E6	Tall 16' Double Sided in Parking Lot 10	VS	Everything	
AT	1	E6	Tall 16' Double Sided in Parking Lot 10	VS	Everything	
		E6	Single mount on Existing T.P. in Parking Lot 11	VS	Everything	
BS	23	E2	Repair/Replace (E) damaged pole	FA	Everything	
C	1	E2	Uplight on Scissor Sculpture	FA	Everything	
C	2	E2	Uplight on Scissor Sculpture	FA	Everything	
C	3	E2	Uplight on Donor Wall	SS	Everything	
C	4	E2	Uplight on Donor Wall	SS	Everything	
C	5	E2	Uplight on Iron Sculpture	SS	Everything	
C	6	E2	Uplight on Tree	AC	Everything	
C	191	E2	Connect (E) Uplight at Tree	AC		Yes
M	1	E2	Mushroom Bollard	FH	Conc. Base	Yes

see touch: 4 Scenes/URR/KL
 1 Gang US Backbox
 Scene 1 - 4
 New Room 1

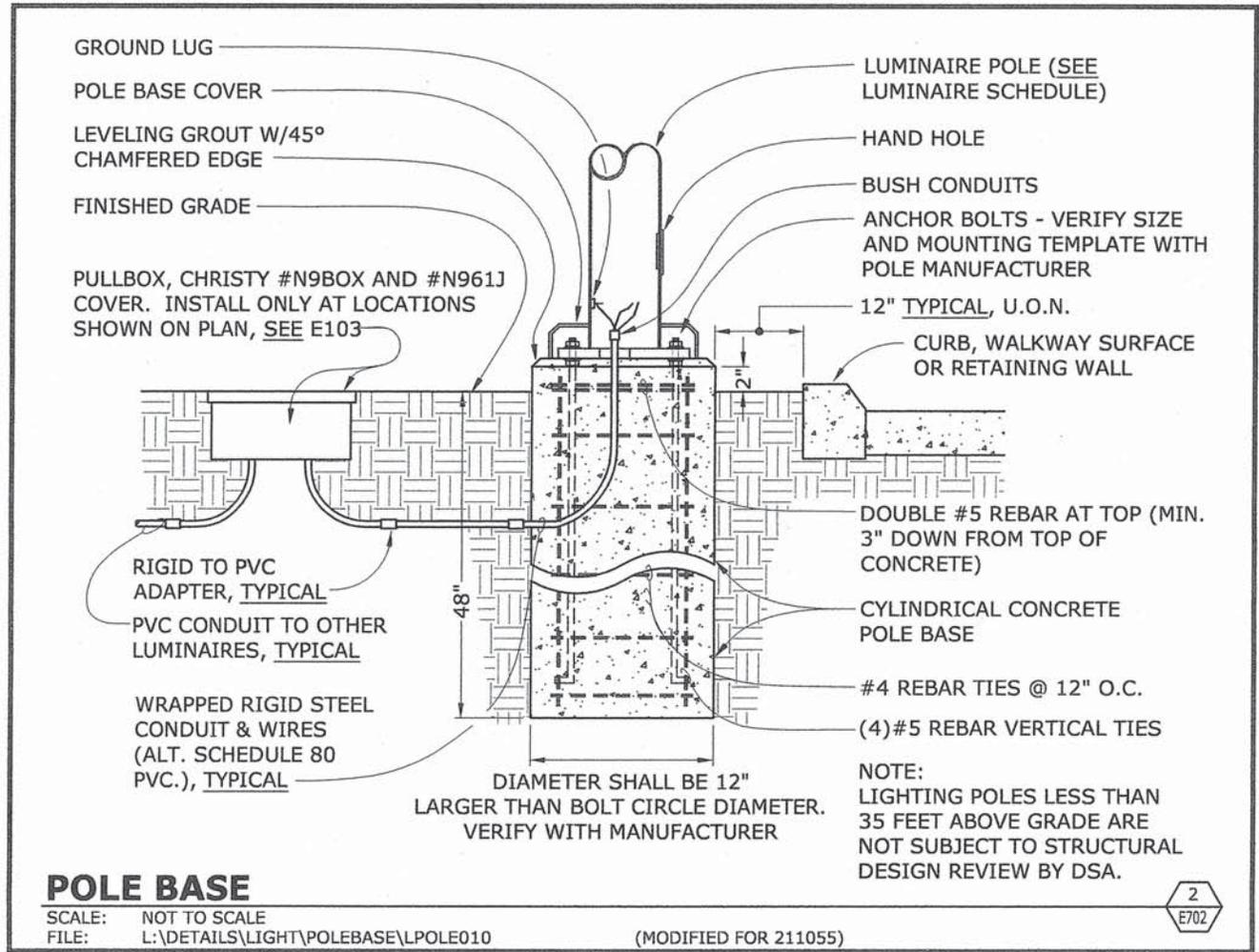
GRAM

4
 E7.02

Unit 1

1204ML-20

	Max. Load (W/VA)	BRKR Size	Phase
	2000	20A-1P	A
	2000	20A-1P	B
	2000	20A-1P	C
	2000	20A-1P	A
	2000	20A-1P	B
	2000	20A-1P	C



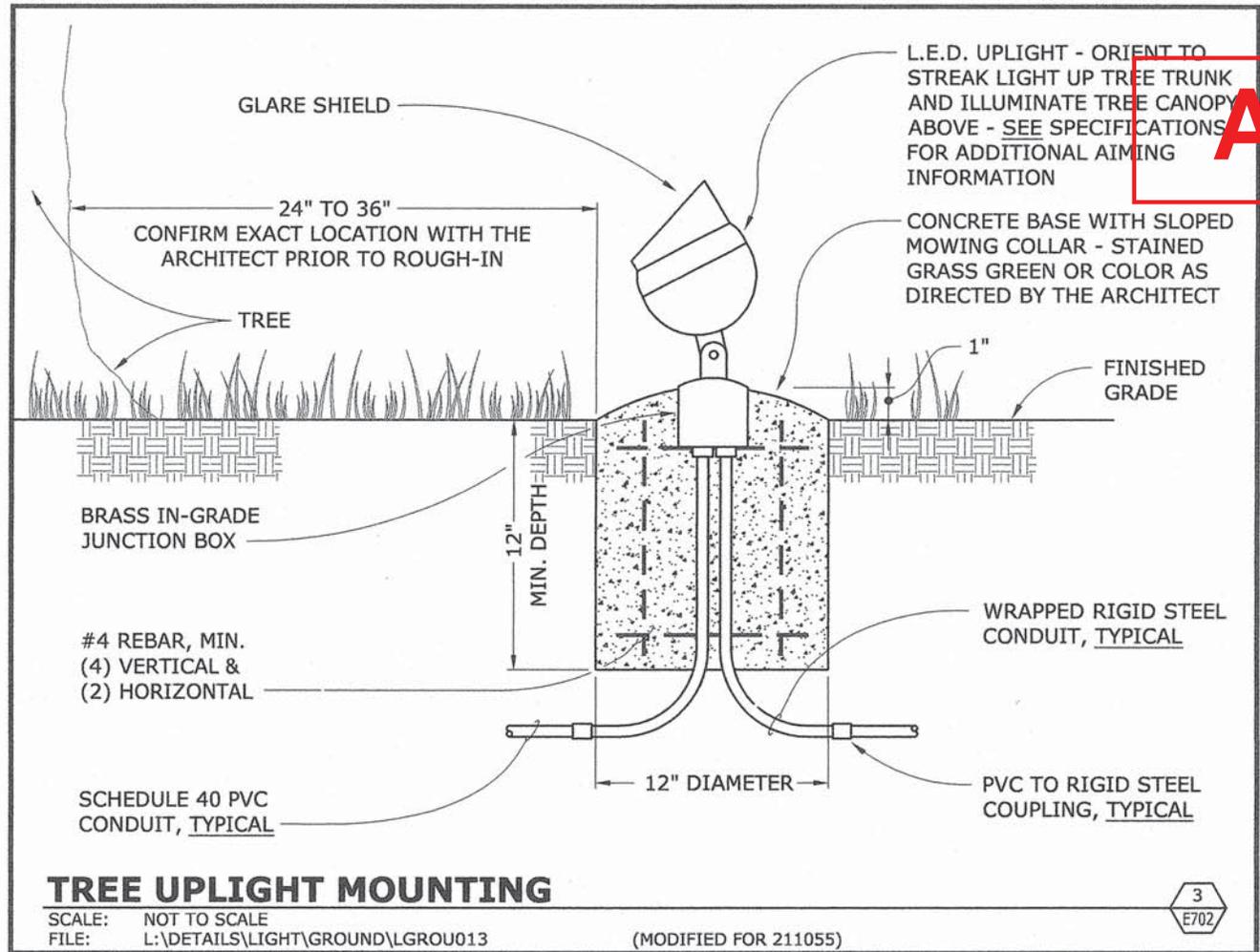
**SK-1
 POLE BASE**

2000	20A-1P	A
2000	20A-1P	
Phase A:	389 W/VA	
Phase B:	1017 W/VA	
Phase C:	329 W/VA	

Unit 2
1204M-20

Max. Load (W/VA)	BRKR Size	Phase
2000	20A-1P	A
2000	20A-1P	B
2000	20A-1P	

Phase A: 1314 W/VA
Phase B: 512 W/VA
Phase C: 0 W/VA



As-

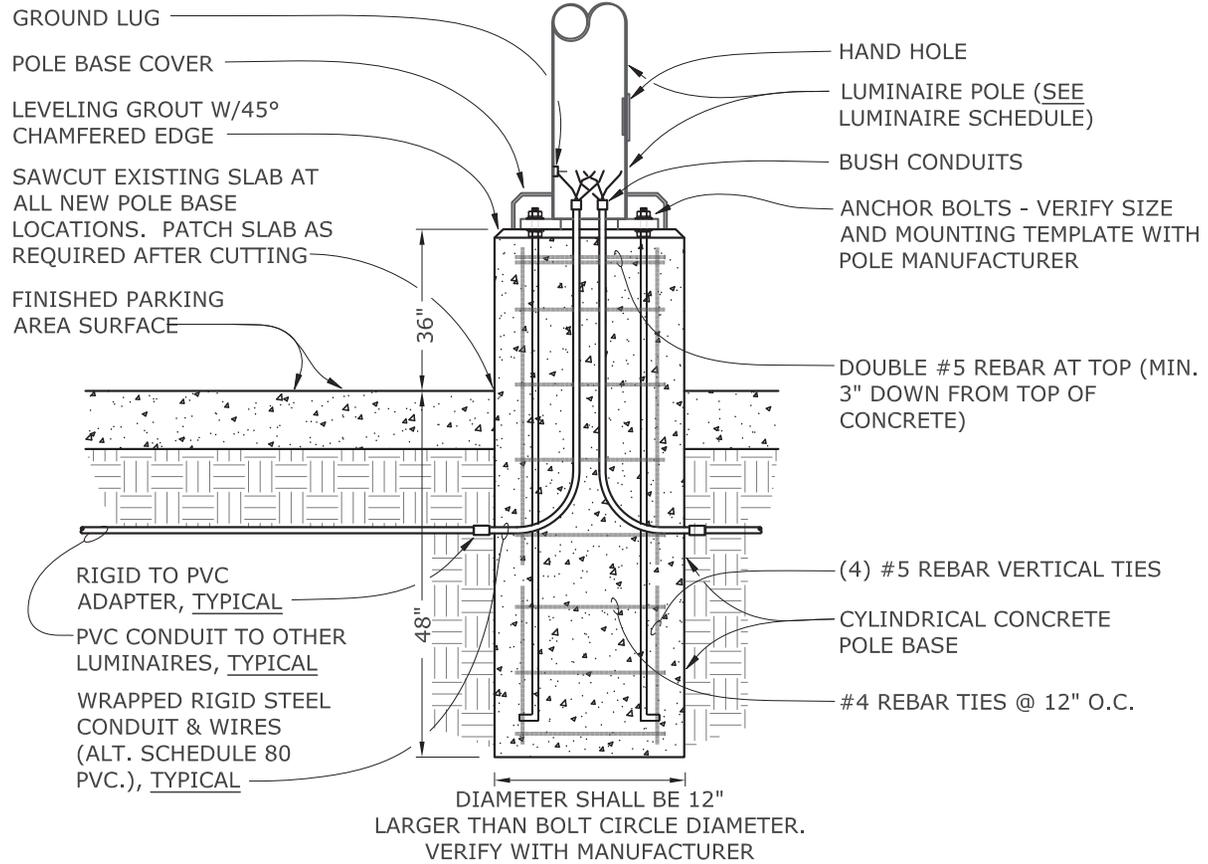
**SK-2
TREE
UPLIGHT**

PROHIBITED.

OPTIC
HEATH



9
E7.1



POLE BASE - RAISED AT SLAB

SCALE: NOT TO SCALE
FILE: L:\DETAILS\LIGHT\POLEBASE\LPOLE018 (MOD)

6
E7.1

EXISTING BUILDING
EXTERIOR WALL

EXISTING EXTERIOR
SLAB OR GRADE

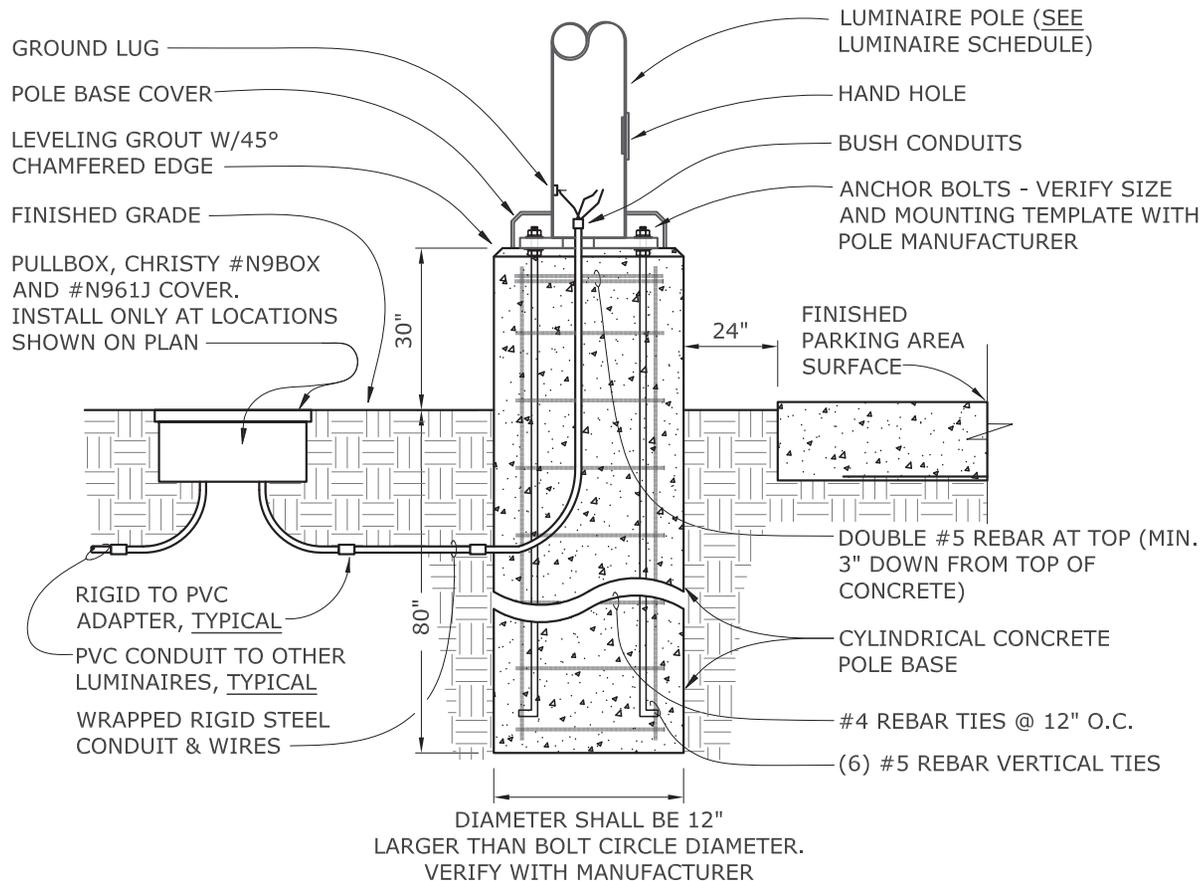
UNDERGROUND
CONDUIT

**SK-3
PARKING LOT
POLE BASE IN
ASPHALT**

NER DUCT
(CONDUITS ONLY)

BER OPTIC
RDUCT, CARLON
R, PROVIDE WITH
PE #RP141

8
E7.1



POLE BASE - RAISED AT GRADE

SCALE: NOT TO SCALE
FILE: L:\DETAILS\LIGHT\POLEBASE\LPOLE002 (MOD)

5
E7.1

FLEX CONDUIT - PROVIDE
MIN. LENGTH (FLEX CONDUIT
SHALL NOT RESTRICT MOVEMENT
OF TRANSFORMER ON VIBRATION
ISOLATORS)

SIDE MAKEUP

90 DEGREE FITTING

NEOPRENE MOUNT
ISOLATOR (TYP. OF 4, SIZE
TO PERMIT MIN. 1/2 INCH
STATIC DEFLECTION)

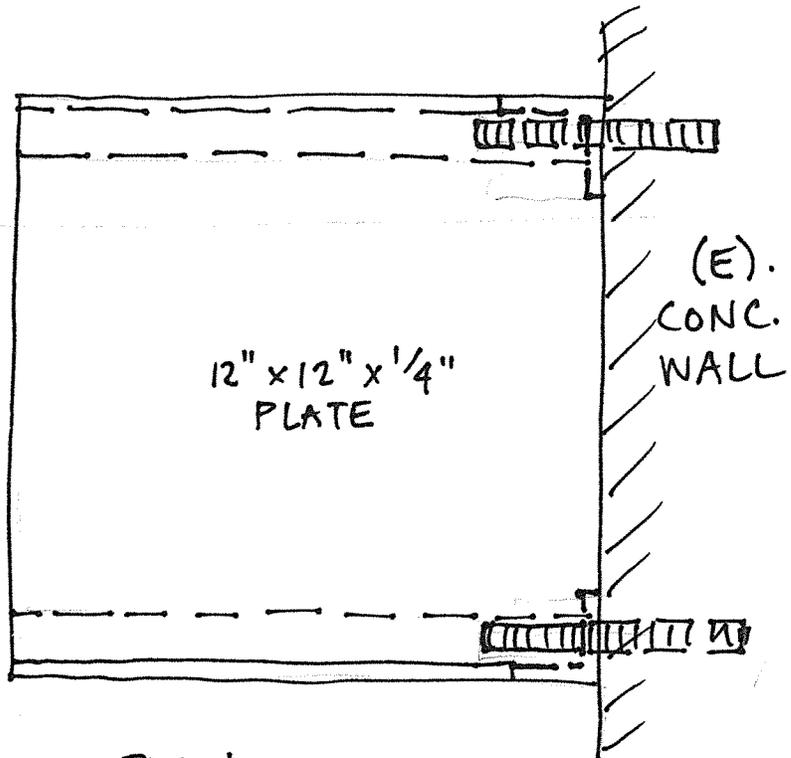
FINISHED FLOOR

BOLT TRANSFORMER
CHANNEL BASE TO
VIBRATION ISOLATOR
(TYP. OF 4 CORNERS)

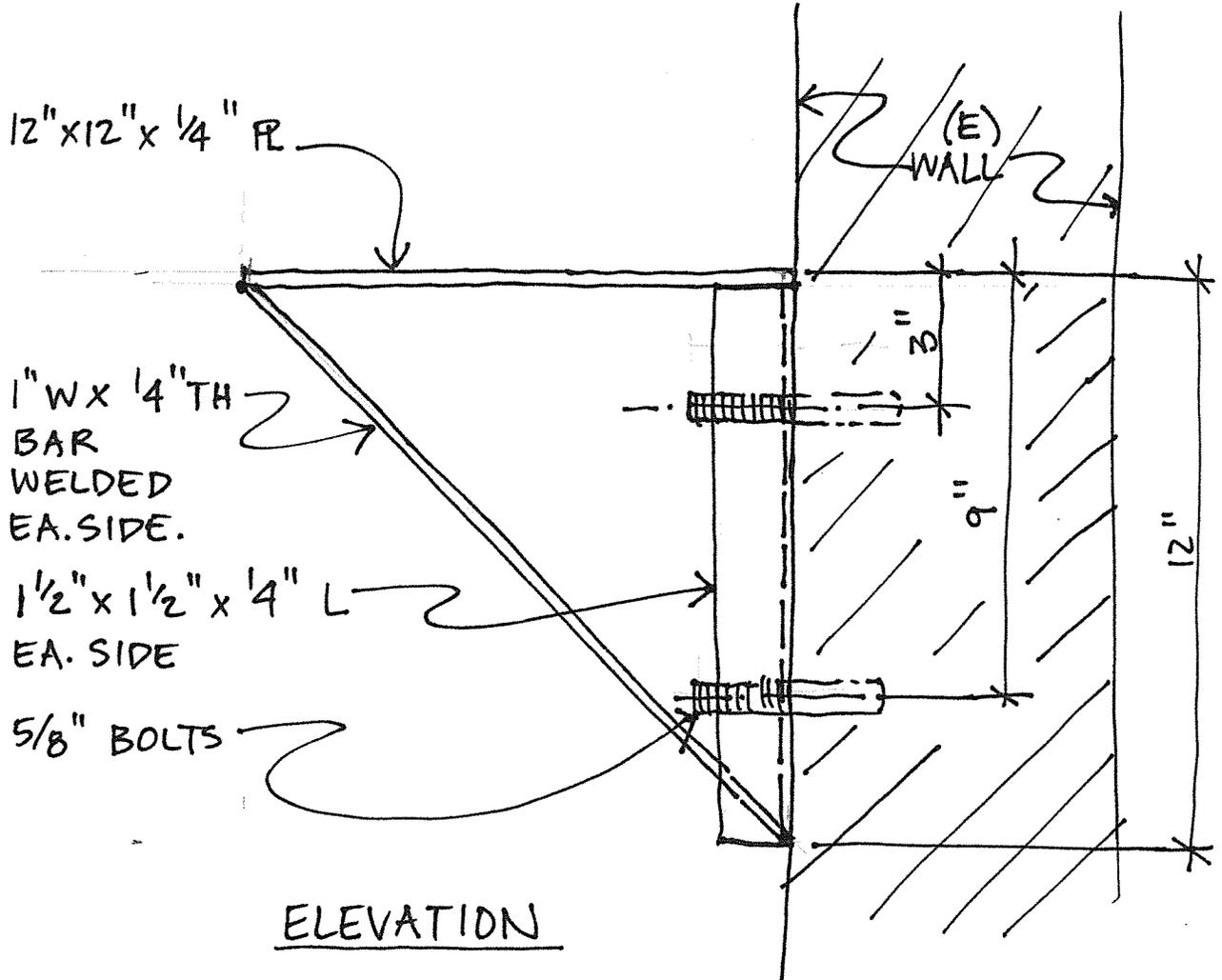
TRANSFORMER

SCALE: NONE
FILE: L:\DETAILS\POWER\TR

SK-4
PARKING LOT
POLE BASE IN
DIRT



PLAN



ELEVATION

Type:
Job:

Approvals:

Fixture Catalog number:

Fixture Options:

Fixture and Finish

Ordered separately from fixture, see page 3.
See 120 Volt Mounting Options Spec Sheet for mounting options

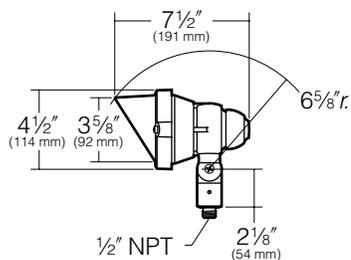
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Page: 1 of 4

Specifications

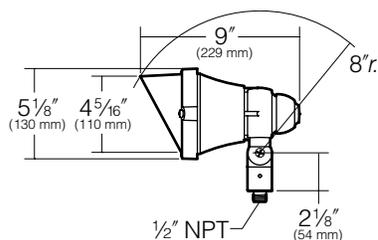
EL700/7L

7 Light Emitting Diodes



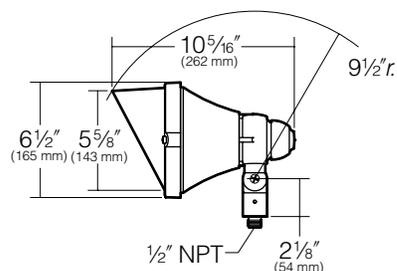
EL700/9L

9 Light Emitting Diodes



EL700/12L

12 Light Emitting Diodes



Housing: Die-cast aluminum body and lens frame.

Swivel: Die-cast aluminum with locking teeth and 1/2" solid brass NPT mount. Provides horizontal rotation independent of the threaded mount. Swivel locked by 1/4-20 stainless set screw. Clear anodized prior to powder coating for added corrosion resistance.

Gasketing: Silicone gaskets throughout.

Fasteners: Stainless steel.

Wiring: No. 18AWM rated 105°C.

Optical System: High performance acrylic optic securely attached to internal heat sink for maximum thermal dissipation.

Driver: Universal Voltage from 120 to 277V with a ±10% tolerance. -40°F. starting temperature. All drivers are Underwriters Laboratories recognized.

Finish: Each luminaire receives a fade and abrasion resistant, electrostatically applied, thermally cured, triglycidal isocyanurate (TGIC) polyester powdercoat finish. Standard colors include (BL) Black, (DB) Dark Bronze, (GR) Verde Green.

Listed to: UL 1598 Standard for Luminaires - UL 8750 Standard for Safety for Light Emitting Diode (LED) Equipment for use in Lighting Products and CAN/CSA C22.2 No. 250.0 -08 Luminaires. LEDs and drivers are RoHS compliant.

CAUTION: Fixtures must be grounded in accordance with national, state and/or local electrical codes, Failure to do so may result in serious personal injury.



U.S. PATENT D424,731

KIM LIGHTING RESERVES THE RIGHT TO CHANGE SPECIFICATIONS WITHOUT NOTICE.

Type:

Job:

Page: 2 of 4



Standard Features

Ordering Information	Fixture	Source
	<input type="checkbox"/> EL700S3/7L3KUV ¹	9W, 7 LEDs, 3000K
	<input type="checkbox"/> EL700S3/7L4KUV ¹	9W, 7 LEDs, 4200K
	<input type="checkbox"/> EL700S3/7L5KUV ¹	9W, 7 LEDs, 5100K
	<input type="checkbox"/> EL700F3/7L3KUV ¹	9W, 7 LEDs, 3000K
	<input type="checkbox"/> EL700F3/7L4KUV ¹	9W, 7 LEDs, 4200K
	<input type="checkbox"/> EL700F3/7L5KUV ¹	9W, 7 LEDs, 5100K
	<input type="checkbox"/> EL700S3/9L3KUV ¹	11W, 9 LEDs, 3000K
	<input type="checkbox"/> EL700S3/9L4KUV ¹	11W, 9 LEDs, 4200K
	<input type="checkbox"/> EL700S3/9L5KUV ¹	11W, 9 LEDs, 5100K
	<input type="checkbox"/> EL700F3/9L3KUV ¹	11W, 9 LEDs, 3000K
	<input type="checkbox"/> EL700F3/9L4KUV ¹	11W, 9 LEDs, 4200K
	<input type="checkbox"/> EL700F3/9L5KUV ¹	11W, 9 LEDs, 5100K
	<input type="checkbox"/> EL700S3/12L3KUV ¹	14W, 12 LEDs, 3000K
	<input type="checkbox"/> EL700S3/12L4KUV ¹	14W, 12 LEDs, 4200K
	<input type="checkbox"/> EL700S3/12L5KUV ¹	14W, 12 LEDs, 5100K
	<input type="checkbox"/> EL700F3/12L3KUV ¹	14W, 12 LEDs, 3000K
	<input type="checkbox"/> EL700F3/12L4KUV ¹	14W, 12 LEDs, 4200K
	<input type="checkbox"/> EL700F3/12L5KUV ¹	14W, 12 LEDs, 5100K
	¹ S = Spot, F = Narrow Flood, 3 = 350mA, UV = Universal Voltage from 120 to 277V with a ±10% tolerance.	
Finish TGIC powder coat.	Color: Black Dark Bronze Verde Green Cat. No.: <input type="checkbox"/> BL <input type="checkbox"/> DB <input type="checkbox"/> GR	

Type:

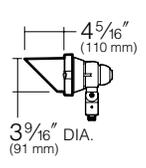
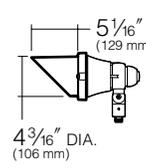
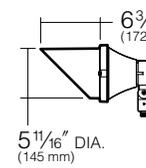
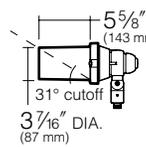
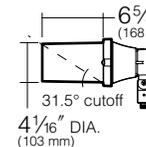
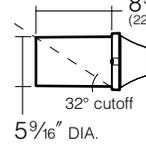
Job:

Page: 3 of 4



Fixture Options

Ordered Separately from Fixture

<p>Aluminum Adjustable Glare Shield</p>	<p>Spun aluminum shield with 45° cut and drain hole. Includes die-cast low copper alloy (< 0.6%) aluminum lens ring. The shield is rotatable 360°. Replaces standard lens ring/hood on fixture.</p>			
	 <p>4⁵/₁₆" (110 mm) 3⁹/₁₆" DIA. (91 mm)</p>	 <p>5¹/₁₆" (129 mm) 4³/₁₆" DIA. (106 mm)</p>	 <p>6³/₄" (172 mm) 5¹¹/₁₆" DIA. (145 mm)</p>	
<p>Finish</p>	<p>EL700/7L</p>	<p>EL700/9L</p>	<p>EL700/12L</p>	
<p>Black</p>	<p><input type="checkbox"/> AGS72BL</p>	<p><input type="checkbox"/> AGS73BL</p>	<p><input type="checkbox"/> AGS74BL</p>	<p><input type="checkbox"/> No Option</p>
<p>Dark Bronze</p>	<p><input type="checkbox"/> AGS72DB</p>	<p><input type="checkbox"/> AGS73DB</p>	<p><input type="checkbox"/> AGS74DB</p>	<p><input type="checkbox"/> No Option</p>
<p>Verde Green</p>	<p><input type="checkbox"/> AGS72GR</p>	<p><input type="checkbox"/> AGS73GR</p>	<p><input type="checkbox"/> AGS74GR</p>	<p><input type="checkbox"/> No Option</p>
<p>Aluminum Full Glare Shield</p>	<p>Spun aluminum shield with drain hole. Includes die-cast low copper aluminum lens ring. Replaces standard lens ring/hood on fixture.</p>			
	 <p>5⁵/₈" (143 mm) 31° cutoff 3⁷/₁₆" DIA. (87 mm)</p>	 <p>6⁵/₈" (168 mm) 31.5° cutoff 4¹/₁₆" DIA. (103 mm)</p>	 <p>8³/₄" (222 mm) 32° cutoff 5⁹/₁₆" DIA.</p>	
<p>Finish</p>	<p>EL700/7L</p>	<p>EL700/9L</p>	<p>EL700/12L</p>	
<p>Black</p>	<p><input type="checkbox"/> FGS72BL</p>	<p><input type="checkbox"/> FGS73BL</p>	<p><input type="checkbox"/> FGS74BL</p>	<p><input type="checkbox"/> No Option</p>
<p>Dark Bronze</p>	<p><input type="checkbox"/> FGS72DB</p>	<p><input type="checkbox"/> FGS73DB</p>	<p><input type="checkbox"/> FGS74DB</p>	<p><input type="checkbox"/> No Option</p>
<p>Verde Green</p>	<p><input type="checkbox"/> FGS72GR</p>	<p><input type="checkbox"/> FGS73GR</p>	<p><input type="checkbox"/> FGS74GR</p>	<p><input type="checkbox"/> No Option</p>
<p>Debris Screen</p>	<p>Stainless steel wire screen welded to flange, and held in place with spring clips. Screen inserts inside full glare shield only. All debris screens are black iridite colored.</p>			
				
<p>Finish</p>	<p>EL700/7L</p>	<p>EL700/9L</p>	<p>EL700/12L</p>	
<p>Black</p>	<p><input type="checkbox"/> DS72</p>	<p><input type="checkbox"/> DS73</p>	<p><input type="checkbox"/> DS74</p>	<p><input type="checkbox"/> No Option</p>
<p>Mounting</p>	<p>Refer to 120 Volt Mounting Options Spec Sheet http://www.kimlighting.com/content/products/specs/specs_files/kl_120vmounting_spec.pdf for individual mounting options.</p>			

Type:

Job:

Page: 4 of 4



Lumen Data

Spectroradiometric			
	3000K	4200K	5100K
Correlated Color Temp. CCT (K)	2800 to 3175K	3800 to 4600K	4600 to 5600K
Color Rendering Index (CRI)	≤80	≤80	≤70
Power Factor	>.90 @ 120V	>.90 @ 120V	>.90 @ 120V

Electrical Drive Current									
Current	EL700-7L			EL700-9L			EL700-12L		
	Volts -AC	Amps - AC	System Watts	Volts -AC	Amps - AC	System Watts	Volts -AC	Amps - AC	System Watts
350mA	120	0.08	9	120	0.09	11	120	0.13	14
	208	0.05	9	208	0.06	11	208	0.08	14
	240	0.04	9	240	0.05	11	240	0.07	14
	277	0.04	9	277	0.04	11	277	0.06	14

Absolute Lumens									
Current	EL700-7L			EL700-9L			EL700-12L		
	Temp.	Spot	Narrow Flood	Temp.	Spot	Narrow Flood	Temp.	Spot	Narrow Flood
350mA	3000K	806	502	3000K	1031	714	3000K	1334	918
	4200K	1047	661	4200K	1339	939	4200K	1778	1208
	5100K	1173	741	5100K	1500	1024	5100K	1938	1317

Main Beam Candela and Beam Angle															
Current	EL700-7L					EL700-9L					EL700-12L				
	Temp.	Spot	Beam°	Narrow Flood	Beam°	Temp.	Spot	Beam°	Narrow Flood	Beam°	Temp.	Spot	Beam°	Narrow Flood	Beam°
350mA	3000K	5553	15°	1170	35°	3000K	6499	15°	3134	35°	3000K	9528	15°	3782	35°
	4200K	7214	15°	1544	35°	4200K	8441	15°	4121	35°	4200K	12699	15°	4977	35°
	5100K	8082	15°	1730	35°	5100K	9456	15°	4494	35°	5100K	13842	15°	5426	35°

LED performance and lumen output continues to improve at a rapid pace. Log onto www.kimlighting.com to download the most current photometric files from Kim Lighting's IES File Library. For custom optics and color temperature configurations, contact factory.

Projected Lumen Maintenance		
TM21-11*	100,000 hrs	Calculated (L70)
.97	.96	1,003,000 hrs

* 60,000 hrs, 350mA, Ts 46-51°C / 25°C ambient.

XSP1™

XSP Series LED Street Light – Horizontal Tenon – Type III

Product Description

Designed from the ground up as a totally optimized LED street light system, the XSP Series delivers incredible efficiency and is designed to provide L70 lifetime over 100,000 hours 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 Street Light is the best alternative for traditional street lighting with better payback and better performance.

Performance Summary

Utilizes BetaLED® Technology

NanoOptic Precision Delivery Grid optic

CRI: Minimum 70 CRI

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

Warranty: 5 years on luminaire / 10 years on Colorfast DeltaGuard® finish

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

Accessories

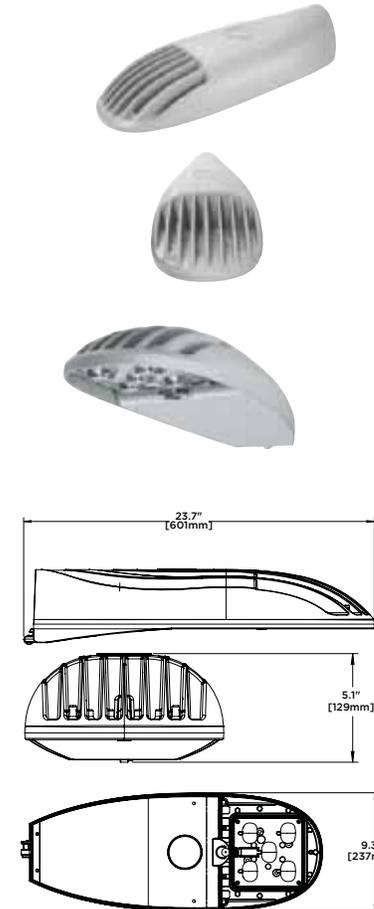
Field Installed Accessories

XA-SP1BLS

Backlight Control Shield
- Provides 1/2 Mounting Height Cutoff

XA-SP1BRDSPK

Bird Spikes



Ordering Information

Example: BXSPA031A-USF

BXSP	A	O			A	-	U		
Product	Version	Mounting	Optic	Modules	Input Power		Voltage	Color Options	Options
BXSP	A	O	3	1	A	-	U	S	A ROAM® Controls
		Horizontal Tenon	Type III	Standard 4000K	53W		Universal 120-277V	(Standard)	- Installation of ROAM dimming control module only. Services provided by others.
			H	A	E			T	- Not available with K option
			Type III w/ BLS	Standard 4000K	34 W			Z	- Includes R option
				G				Bronze	F Fuse
				High Efficacy 4000K*				B	- When code dictates fusing use time delay fuse
				N				Platinum	K Occupancy Control
				High Efficacy 5700K*				Bronze	- Consult factory for additional information
								White	- Not available with A option
									N Utility Label and NEMA Photocell Receptacle
									- Not available with Q option
									Q Field Adjustable Output
									- Not available with N or U options
									R NEMA Photocell Receptacle
									- Photocell by others
									U Utility
									- Includes exterior wattage label that reflects watts for the product selected. The ability to exceed selected input power will be disabled
									- Not available with Q option

* Available Q3 2012. Preliminary data shown.

XSP Series LED Street Light – Horizontal Tenon – Type III

Product Specifications

CONSTRUCTION & MATERIALS

- Die cast aluminum housing
- Tool-less entry
- Mounts on 1.25" IP (1.66" [42mm] O.D.) or 2" IP (2.375" [60mm] O.D.) horizontal tenon
- Adjustable +/-5° to allow for fixture leveling
- Includes two axis T-level to aid in leveling
- Designed with 0-10V dimming capabilities. Controls by others.
- Exclusive Colorfast DeltaGuard® finish features an E-Coat epoxy primer with an ultradurable powder topcoat, providing excellent resistance to corrosion, ultraviolet degradation and abrasion. Standard is silver. Black, bronze, platinum bronze and white are also available.

ELECTRICAL SYSTEM

- **Input Voltage:** 120-277V, 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

REGULATORY & VOLUNTARY QUALIFICATIONS

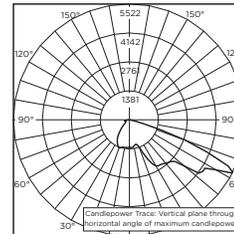
- cULus Listed
- Suitable for wet locations
- Certified to ANSI C136.31-2001 3G bridge and overpass vibration standards
- 10kV surge suppression protection tested in accordance with IEEE/ANSI C62.41.2.
- Luminaire and finish are endurance tested to withstand 5,000 hours of elevated ambient salt fog conditions as defined in ASTM Standard B 117.
- RoHS Compliant
- Meets Buy American requirements within ARRA

PATENTS

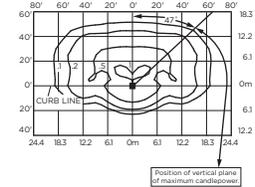
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All published luminaire photometric testing performed to IESNA LM-79-08 standards by Independent Testing Laboratories, a NVLAP certified laboratory.



ITL Test Report #: 72724
BXSPA*32A-U
Initial Delivered Lumens: 7,406



BXSPA*31A-U
Mounting Height: 25' (7.6m)
Initial Delivered Lumens: 3,500
Initial FC at grade.

Lumen Output, Electrical, and Lumen Maintenance Data

Type 3 Distribution											
Module	System Watts 120-277	Input Power Designator	4000K		5700K		Total Current				50K Hours 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	
Standard	53	A	3,500	B1 U0 G1	3,850	B1 U0 G1	0.44	0.26	0.23	0.20	91%
High Efficacy*	53	A	4,806	B1 U0 G1	5,340	B1 U0 G1	0.44	0.26	0.23	0.20	91%

Type 3 Distribution w- BLS											
Module	System Watts 120-277	Input Power Designator	4000K		5700K		Total Current				50K Hours 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	
Standard	53	A	3,065	TBD	3,371	TBD	0.44	0.26	0.23	0.20	91%
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* Available Q3 2012. Preliminary data shown.

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

*** Projected L₈₀(6K) Hours: >36,000. For recommended lumen maintenance factor data see TD-13

EPA and Weight

Input Power Designator	Weight	EPA				
		1@90	2@90	2@180	3@90	4@90
A	18lbs (8kg)	0.714	1.021	1.428	1.735	2.041

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Field Adjustable Output

XSP1™ / XSP2™ / XSP2L™ LED Street Lights

Description:

The Field Adjustable Output option for the Cree® XSP Series LED street light enables the output of the luminaire to be tuned to the exact needs of a particular application. With nine (XSP1™ or XSP2™ luminaires) or seven (XSP2L™ luminaires) levels of adjustment, the XSP Series offers maximum flexibility to best meet a variety of applications using a single luminaire. When N or U options are ordered, the luminaires will have the field adjustable option as well as a wattage label that indicates the maximum available wattage of the luminaire.

XSP1™ and XSP2™ Luminaires

Input Power Designator	Input Power Multiplier	Lumen Multiplier	50K Hours Calculated Lumen Maintenance Factor @ 15°C (59°F)*
A	1.00	1.00	91%
B	0.90	0.91	91%
C	0.82	0.86	92%
D	0.72	0.77	93%
→ E	0.64	0.70	93%
F	0.55	0.61	93%
G**	0.46	0.52	94%
H**	0.37	0.40	94%
I**	0.28	0.29	95%

XSP2L™ Luminaires

Input Power Designator	Input Power Multiplier	Lumen Multiplier	50K Hours Calculated Lumen Maintenance Factor @ 15°C (59°F)*
L**	1.00	1.00	86%
L**	1.00	1.00	86%
L**	1.00	1.00	86%
M**	0.90	0.91	86%
N**	0.80	0.85	87%
O**	0.68	0.75	88%
P**	0.58	0.64	89%
Q**	0.46	0.51	89%
R**	0.35	0.37	91%

*Projected L_{70} (6K) Hours: > 36,000. For recommended lumen maintenance factor data see TD-13.

** Product does not qualify for Design Lights Consortium ("DLC") Qualified Products List ("QPL") when Input Power Designator is set at G, H, or I. Input Power Designators L-R currently do not qualify.

XSP1™

XSP Series LED Street Light – Horizontal Tenon – Type III

Product Description

Designed from the ground up as a totally optimized LED street light system, the XSP Series delivers incredible efficiency and is designed to provide L70 lifetime over 100,000 hours 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 Street Light is the best alternative for traditional street lighting with better payback and better performance.

Performance Summary

Utilizes BetaLED® Technology

NanoOptic Precision Delivery Grid optic

CRI: Minimum 70 CRI

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

Warranty: 5 years on luminaire / 10 years on Colorfast DeltaGuard® finish

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

Accessories

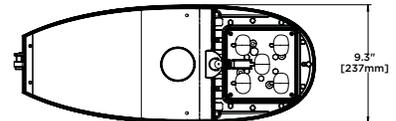
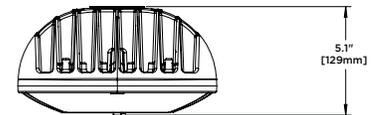
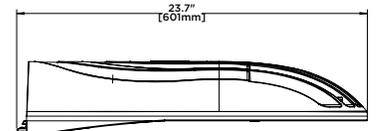
Field Installed Accessories

XA-SP1BLS

Backlight Control Shield
- Provides 1/2 Mounting Height Cutoff

XA-SP1BRDSPK

Bird Spikes



Ordering Information

Example: BXSPA031A-USF

BXSP	A	O			A	-	U		
Product	Version	Mounting	Optic	Modules	Input Power		Voltage	Color Options	Options
BXSP	A	O	3	1	A	-	U	S	A ROAM® Controls
		Horizontal Tenon	Type III	Standard 4000K	53W		Universal 120-277V	(Standard)	- Installation of ROAM dimming control module only. Services provided by others.
			H	A				T	- Not available with K option
			Type III w/ BLS	Standard 5000K				Z	- Includes R option
				G				Bronze	F Fuse
				High Efficacy 4000K*				B	- When code dictates fusing use time delay fuse
				N				Platinum	K Occupancy Control
				High Efficacy 5700K*				Bronze	- Consult factory for additional information
								W	- Not available with A option
								White	N Utility Label and NEMA Photocell Receptacle
									- Not available with Q option
									Q Field Adjustable Output
									- Not available with N or U options
									R NEMA Photocell Receptacle
									- Photocell by others
									U Utility
									- Includes exterior wattage label that reflects watts for the product selected. The ability to exceed selected input power will be disabled
									- Not available with Q option

* Available Q3 2012. Preliminary data shown.



XSP Series LED Street Light – Horizontal Tenon – Type III
Product Specifications
CONSTRUCTION & MATERIALS

- Die cast aluminum housing
- Tool-less entry
- Mounts on 1.25" IP (1.66" [42mm] O.D.) or 2" IP (2.375" [60mm] O.D.) horizontal tenon
- Adjustable +/-5° to allow for fixture leveling
- Includes two axis T-level to aid in leveling
- Designed with 0-10V dimming capabilities. Controls by others.
- Exclusive Colorfast DeltaGuard® finish features an E-Coat epoxy primer with an ultradurable powder topcoat, providing excellent resistance to corrosion, ultraviolet degradation and abrasion. Standard is silver. Black, bronze, platinum bronze and white are also available.

ELECTRICAL SYSTEM

- **Input Voltage:** 120-277V, 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

REGULATORY & VOLUNTARY QUALIFICATIONS

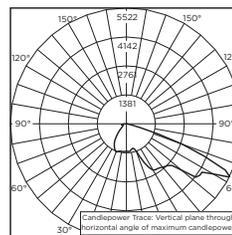
- cULus Listed
- Suitable for wet locations
- Certified to ANSI C136.31-2001 3G bridge and overpass vibration standards
- 10kV surge suppression protection tested in accordance with IEEE/ANSI C62.41.2.
- Luminaire and finish are endurance tested to withstand 5,000 hours of elevated ambient salt fog conditions as defined in ASTM Standard B 117.
- RoHS Compliant
- Meets Buy American requirements within ARRA

PATENTS

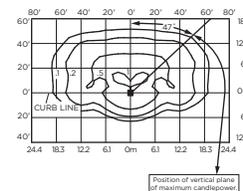
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END OF ADDENDUM #1