VIPER S SERIES

SMALL VIPER LUMINAIRE

Cat.#

Job | Type

BEACON

Approvals

SPECIFICATIONS

Intended Use:
The Compact LED Viper luminaire is available in two sizes with a wide choice of different LED Wattage configurations and optical distributions designed to replace HID lighting up to 1000W MH or HPS. Luminaires are suitable for wet locations.

Construction:
- One-piece optical cartridge system consisting of an LED engine, LED lamps, optics, gasket and stainless steel bezel.
- Cartridge is held together with internal brass standoffs soldered to the board so that it can be field replaced as a one piece optical system.
- Two-piece silicone and micro-cellular polyurethane foam gasket ensures a weather-proof seal around each individual LED.

LED/Optics:
- LED driver accepts 100V through 277V, 50 Hz to 60 Hz (UNV), or a driver that accepts 347V or 480V input.
- Power factor is .92 at full load.
- All electrical components are rated at 50,000 hours at full load and 25°C ambient conditions per MIL- 217F Notice 2.
- Dimming drivers are standard with connections for external dimming equipment available upon request.
- Component-to-component wiring within the luminaire may carry no more than 80% of rated load and is listed by UL for use at 600VAC at 50°C or higher.
- Plug disconnects are listed by UL for use at 600 VAC, 15A or higher. 13A rating applies to primary (AC) side only.

Electrical:
- Fixture electrical compartment shall contain all LED driver components and shall be provided with a push-button terminal block for AC power connections.
- Optional 7-pin ANSI C136.41-2013 twist-lock photo control receptacle available. Compatible with ANSI C136.41 external wireless control devices.
- Surge protection - 20KA; shuts off at end of life.
- Lifeshield™ Circuit - protects luminaire from excessive temperature by interfacing with the 0-10V dimmable drivers to reduce drive current as necessary. The factory-preset temperature limits are designed to ensure maximum hours of operation to assure L70 rated lumen maintenance. The device shall activate at a specific, factory-preset temperature, and progressively reduce power over a finite temperature range. A luminaire equipped with the device may be reliably operated in any ambient temperature up to 50ºC (131ºF). The thermal circuit will allow higher maximum Wattages than would be permissible on an unregulated luminaire (if some variation in light output is permissible), without risk of premature LED failure or lumen depreciation. Operation shall be smooth and undetectable to the eye. Thermal circuit is designed to "fail on", allowing the luminaire to revert to full power in the event of an interruption of its power supply, or faulty wiring connection to the drivers.The device shall be able to co-exist with other 0-10V control devices (occupancy sensors, external dimmers, etc.). The device will effectively control the solder joint temperature as needed; otherwise it will allow the other control device(s) to function unimpeded.

Controls/Options:
- Available with an optional passive infrared (PIR) motion sensor capable of detecting motion 360° around the luminaire. When no motion is detected for the specified time, the Motion Response system reduces the Wattage to factory preset level, reducing the light level accordingly. When motion is detected by the PIR sensor, the luminaire returns to full Wattage and full light output. Please contact Beacon Products if project requirements vary from standard configuration.
- Available with Emergent for optional set dimming, timed dimming with simple delay, or timed dimming based on hours of operation or time of night (see www.beaconproducts.com/products/emergent).

Installation:
- Mounting options for horizontal arm, vertical tenon or traditional arm mounting available. Mounting hardware included.
- Product is suitable for applications requiring 3G testing prescribed by ANSI C136.31

Finish:
- Beacon 'V' polyester powder-coat electrostatically applied and thermocured.
- Beacon 'V' finish consists of a five stage pretreatment regimen with a polymer primer sealer and top coated with a thermoset super TGIC polyester powder coat finish.
- The finish meets the AAMA 605.2 performance specification which includes passing a 3000-hour salt spray test for corrosion resistance and resists cracking or loss of adhesion per ASTM D522 and resists surface impacts of up to 160 inch-pounds.

Listings:
The luminaire shall be NRTL certified to UL 1598 and 8750 standards for use in wet locations.

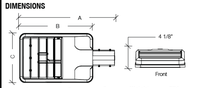
Warranty:
Five year limited warranty (for more information visit: http://www.hubbelloutdoor.com/resources/warranty).

CERTIFICATIONS/LISTINGS

*3000K and warmer CCTs only.

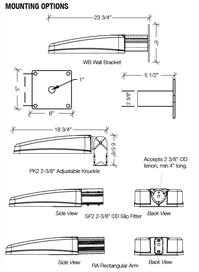
PRODUCT IMAGE(S)

DIMENSIONS



A	B	C	Weight:	EPA
22.75" (578 mm)	16.75" (425 mm)	11.25" (286 mm)	15.0 lbs (6.8 kg)	.67 ft²

MOUNTING OPTIONS



SHIPPING INFORMATION

Catalog Number	A/B/Sq/Y CTS	Carton Dimensions			Carton Qty. per Master Pack
		Length Inch (cm)	Width Inch (cm)	Height Inch (cm)	
LNC-5LU	9.6 (4.36)	14.5 (37)	9.6 (24.5)	6.8 (17.5)	2
LNC-7LU	9.6 (4.36)	14.5 (37)	9.6 (24.5)	6.8 (17.5)	2
LNC-9LU	9.6 (4.36)	14.5 (37)	9.6 (24.5)	6.8 (17.5)	2

ORDERING INFORMATION

ORDERING EXAMPLE: LNC-9LU-5K-3-1-PC1

LNC - [ ] - [ ] - [ ] - [ ] - [ ]

SERIES	NUMBER OF LEDS/SOURCE/VOLTAGE	CCT	IES DISTRIBUTION	FINISH	OPTIONS
LNC zero uplight	5LU[1] 5 LEDs, Universal voltage 120-277V	3K 3000K nominal, 73 CRI	2 Type II	1 Bronze	PC(X)[2] Button photocontrol, replace X with voltage, specify 1-120V, 2-208V, 3-240V, 4-277V
	7LU[1] 7 LEDs, Universal voltage 120-277V	4K 4000K nominal, 70 CRI	3[3] Type III	2 Black	
	9LU[1] 9 LEDs, Universal voltage 120-277V	5K[1] 5000K nominal	4[3] Type IV	3 Gray	
		AM[2] Amber 590 µm available for "Turtle-Friendly"/observatory applications, 350 mA (consult factory)		4 White	
				5 Platinum	

1 When PC is ordered, input must match PC voltage
2 Amber LEDs only available on 7LU and 9LU configurations, 350 mA only
3 DesignLights Consortium (DLC) qualified 5/7/9 models 5K only: LNC-9LU-5K-4, LNC-9LU-5K-3, LNC-7LU-5K-4, LNC-7LU-5K-3, LNC-5LU-5K

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HUBBELL Lighting

4 POLE MOUNTED LIGHTS (TYPE A) WITH HOUSE SIDE SHIELD

SCALE: NO SCALE

TEMPE SERIES

Cat.#

Job | Type

SPAULDING LIGHTING

Approvals

INTENDED USE:
- Tempe series bollards are designed to illuminate walkways and courtyards

CONSTRUCTION:
- Extruded aluminum square or round housing, with tamper resistant hardware; Single screw access for top relamping Decorative Southwest series cast top with single access screw for maintenance
- Sealed one-piece, clear acrylic lens; Specular, anodized aluminum optical systems; dual reflector, tube optics, or internal louvers (HID or CFL)
- Concealed, galvanized steel anchor base; Four 1/2" x 10" anchor bolts
- Durable Lektrocote® TGIC thermoset polyester powder coat paint finish assures long life and maintenance-free service

ELECTRICAL:

HID
- HPF ballast, starting rated at -20°F (-40°F for HPS); Pulse Start Metal Halide is CWA or Super CWA type HPS is CWA, HR, or Reactor type
- Medium: porcelain socket, pulse rated, with spring-loaded, nickel-plated center contact and reinforced lamp-grip screw shell

FLUORESCENT
- Programmed Start electronic ballast with end of life protection and universal voltage: 26/32/42w
- One Lamp – GR7R/GX24d-1 – Triple Tube 4-Pin

LED
- Universal voltage (120-277V) drivers with +/- 10% tolerance, starting temperature rated at -20°F
- Optional continuous dimming to 10% (0-10V)
- Rotatable LED assembly adjustment for ideal placement and aiming of asymmetric light pattern
- 24 high brightness LEDs at 500 mA deliver symmetric distribution at 46w
- 12 high brightness LEDs at 700 mA deliver asymmetric distribution at 31w
- Available in two color correlated temperatures (3500K and 5000K)
- Long life 50,000 hour L70 rated at 25°C

LISTINGS:
- Listed to UL1598 for use in wet locations

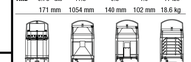
WARRANTY:
- 5 year limited warranty on LED system

CERTIFICATIONS/LISTINGS

PRODUCT IMAGE(S)

DIMENSIONS

	A	B	C	D	Weight
TMR	7" dia. 178 mm	41.5" 1054 mm	5.5" 140 mm	4.0" 102 mm	41 lbs 18.6 kg
TMS	6.75" dia 171 mm	41.5" 1054 mm	5.5" 140 mm	4.0" 102 mm	41 lbs 18.6 kg



ORDERING INFORMATION

ORDERING EXAMPLES: TMR-P50-DO-Q-DB-L, TMS-12LU-5K-U-DB

[ ] - [ ] - [ ] - [ ] - [ ] - [ ]

SERIES	SOURCE/WATTAGE/LED	OPTICS	VOLTAGE	COLOR	OPTIONS
TMR Tempe Round	PULSE START METAL HALIDE	DO[1] Dual reflector with cone (standard)	Q[1] Quad-Tap® 120/208/240/277V	DB Dark Bronze	F(X) Fusing (replace X with voltage: 1-120V, 2-208V, 3-240V, 4-277V
TMS Tempe Square	P50 50w (ED-17)	T0[1,7] Tube optics	T[1,4] Tri-Tap® 120/277/347V (CSA)	BL Black	FS[1,7] Fusing 480V
	P70 70w (ED-17)	IL[7] Internal horizontal louvers	UF Universal 120 - 277V, 50/60 Hz	WH White	FH[1,7] Fusing 347V
	P10 100w (ED-17)		1 120V	GR Gray	P(X) Photo button (replace X with voltage: 1-120V, 2-208V, 3-240V, 4-277V
	HIGH PRESSURE SODIUM		5[F,7] 480V	PS Platinum Silver	PI[F,7] Photo button - 347V
	S35[2] 35w (ED-17)			RD Red (premium color)	24 24" luminaire height
	S50 50w (ED-17)			FG Forest Green (premium color)	30 30" luminaire height
	S70 70w (ED-17)			CC Custom Color (consult factory)	36 36" luminaire height
	S10 100w (ED-17)				HS90[1] Internal shield - 90° (TMS Only)
	FLUORESCENT				HS160[1] Internal shield - 160°
	F26 26w CFL (624q Base)				HS180[1] Internal shield - 180° (TMR only)
	F32 32w CFL (624q Base)				L[1] Lamp
	F42 42w CFL (624q Base)				CDI[1] Continuous dimming
	LED				
	12LU-3K 12 LEDs, 31w, asymmetric distribution, 3500K, 120-277V, 50/60 Hz				
	12LU-5K 12 LEDs, 31w, asymmetric distribution, 5000K, 120-277V, 50/60 Hz				
	24LU-3K 24 LEDs, 46w, symmetric distribution, 3500K, 120-277V, 50/60 Hz				
	24LU-5K 24 LEDs, 46w, symmetric distribution, 5000K, 120-277V, 50/60 Hz				

1 Factory wired for highest voltage unless specified, HID only
2 120V only
3 Upper reflector with no lower cone
4 70 W 100w system only
5 CFL or LED only
6 Not available with CFL
7 Not available with LED units
8 LED only

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HUBBELL Lighting

5 BOLLARD LIGHT (TYPE B)

SCALE: NO SCALE

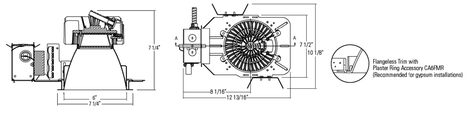
C6L1520DL(M)

Calculite LED 6", Downlight, Medium Beam

Page 1 of 2

Project: | Catalog No: | Mfg:
Location: | Fixture Type: | Qty:

Complete product = light engine + frame-in kit



Ordering guide: Light engine

example: C6L1520DL35KMCCLWEM9VA

Light engine	CCT	Beam spread	Reflector finish	Flange	Options	CRI
C6L1520DL Calculite LED 6", 1500/2000 Lumen, Downlights	27K 2700K 30K 3000K 35K 3500K 40K 4000K	M (medium beam, 0.8 s.c)	CL Clear CCL Comfort clear CCD Comfort clear diffuse CCZ Champagne bronze WH Painted white	W Painted white P Aperture-matching/ polished FT Flush-mount/flangeless[1]	EM Integral emergency test switch[2]	VA 3000K - 4000K (+80) 2700K (79)

Ordering guide: Frame-in kits

example: C6L15NTZ10VEM

Frame-in kit series	Installation options	Input voltage	Driver	Options
C6L15 Calculite LED 6", 1500 lumen C6L20 Calculite LED 6", 2000 lumen	N New construction	1 120V 2 277V	Z10V 0-10V dimming LD Lutron driver[3] (1000 lumen only)	EM Emergency (new construction w/1000 lumen only)

1. Accessory CA4PHK required for gypsum applications. Reflector flange is 1/4". New construction frame-in kits only.
2. See LED-EM for details and restrictions.
3. For use with HiLume® and Ecosystem® controls.

Features

Aperture: 6" (152 mm) I.D., 7 1/4" (184mm) O.D.
Input Wattage: 27W (1500 Lumens), 39W (2000 Lumens).
Reflector Cone: Aluminum. Provides 50° cutoff to source & source image. Self-flanged.
Depth (including Frame-in kit): 7 1/4" (184mm)
Power Connection: Attaches to frame-in kit via push-in connector (on frame). Removable cover provides access.

Technology

LED board: Array of high brightness royal blue LED's.
Remote Phosphor Technology: Remote phosphor technology provides increased efficiency and color consistency. Phosphor lens assembly positioned in front of LED array converts blue light co white. Color shift will not exceed +/- 100K over life.
Optical Mixing Chamber: Lightolier-specific mixing chamber redirects back-reflected light through aperture resulting in 20% increase in efficiency.
Thermal Management: Heat sink and thermal design along with clean room assembly ensures specified performance.
Rated Life: Based on IESNA LM-80-2008
1500 Lumen – 60,000 hours at 70% lumen maintenance.
2000 Lumen – 57,000 hours at 70% lumen maintenance.
Photometric Performance: Tested in accordance to IESNA LM-79-2008

Options

Dimming capability: 0-10V. See LED-DIM spec sheet.
Emergency capability (integral): Add "EM" suffix. See LED-EM spec sheet.
Emergency capability (inverter): See LED-LMI spec sheet.

Labels

UL (suitable for wet locations), cUL, I.B.E.W.
5 year warranty.

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C6L1520DL(M) 04/13

PHILIPS LIGHTOLIER

2 EXTERIOR CANOPY MOUNTED (TYPE D)

SCALE: NO SCALE

LNC SERIES

Cat.#

Job | Type

HUBBELL Outdoor Lighting

Approvals

SPECIFICATIONS

Intended Use:
The compact LED LNC is designed for entry/perimeter illumination for safety, security and identity. Typical mounting height is up to 12 feet with 40ft fixture spacing (without acrylic diffuser) and 30ft spacing with acrylic diffuser installed. Photocontrol option is available to provide dusk-to-dawn control for additional energy savings.

Construction:
Decorative die-cast aluminum housing and door. Rugged design protects internal components and provides excellent thermal management for long life – 60,000 hours minimum LED life at L96 rating per IESNA TM-21-11. Powder paint finishes provide lasting appearance in outdoor environments.

Optics/Electrical
LED:
Drivers are 120-277V, 50/60Hz Type II, III and Type IV lenses provide wide lateral spread.
0-10V dimming 120-277V only.
- LNC5L – 5 LEDs, Types II, III or IV available, see page 2 for electrical details
- LNC7L – 7 LEDs, Type II, III or IV available, see page 2 for electrical details
- LNC9L – 9 LEDs, Types II, III or IV available, see page 2 for electrical details
- 3000K – 80 CRI, 4000K - 70 CRI, and 5000K - 70 CRI, CCT nominal
- Minimum operating temperature is -40°C/-40°F
- Drivers have greater than .90 power factor and less than 20% Total Harmonic Distortion

Lenses:
Full cut-off distribution; Ambient diffuser included, use for applications near enterances or locations where reduced brightness is desired.

Installation:
Quick mount adapter provides quick installation, designed for recessed box 4" square junction box.

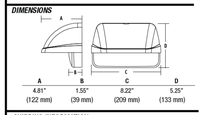
Listings:
Listed and labeled to UL 1598 for wet locations, 25° C ambient environments. Some models meet DesignLights Consortium (DLC) qualifications, consult DLC website for more details: http://www.designlights.org/QPL

- **IES Progress Award Winner - 2012**

Warranty:
Five year limited warranty (for more information visit: http://www.hubbelloutdoor.com/resources/warranty/

PRODUCT IMAGE(S)

DIMENSIONS



SHIPPING INFORMATION

Catalog Number	A/B/Sq/Y CTS	Carton Dimensions			Carton Qty. per Master Pack
		Length Inch (cm)	Width Inch (cm)	Height Inch (cm)	
LNC-5LU	9.6 (4.36)	14.5 (37)	9.6 (24.5)	6.8 (17.5)	2
LNC-7LU	9.6 (4.36)	14.5 (37)	9.6 (24.5)	6.8 (17.5)	2
LNC-9LU	9.6 (4.36)	14.5 (37)	9.6 (24.5)	6.8 (17.5)	2

*3000K and warmer CCTs only.

CERTIFICATIONS/LISTINGS

ORDERING INFORMATION

ORDERING EXAMPLE: LNC-9LU-5K-3-1-PC1

LNC - [ ] - [ ] - [ ] - [ ] - [ ]

SERIES	NUMBER OF LEDS/SOURCE/VOLTAGE	CCT	IES DISTRIBUTION	FINISH	OPTIONS
LNC zero uplight	5LU[1] 5 LEDs, Universal voltage 120-277V	3K 3000K nominal, 73 CRI	2 Type II	1 Bronze	PC(X)[2] Button photocontrol, replace X with voltage, specify 1-120V, 2-208V, 3-240V, 4-277V
	7LU[1] 7 LEDs, Universal voltage 120-277V	4K 4000K nominal, 70 CRI	3[3] Type III	2 Black	
	9LU[1] 9 LEDs, Universal voltage 120-277V	5K[1] 5000K nominal	4[3] Type IV	3 Gray	
		AM[2] Amber 590 µm available for "Turtle-Friendly"/observatory applications, 350 mA (consult factory)		4 White	
				5 Platinum	

1 When PC is ordered, input must match PC voltage
2 Amber LEDs only available on 7LU and 9LU configurations, 350 mA only
3 DesignLights Consortium (DLC) qualified 5/7/9 models 5K only: LNC-9LU-5K-4, LNC-9LU-5K-3, LNC-7LU-5K-4, LNC-7LU-5K-3, LNC-5LU-5K

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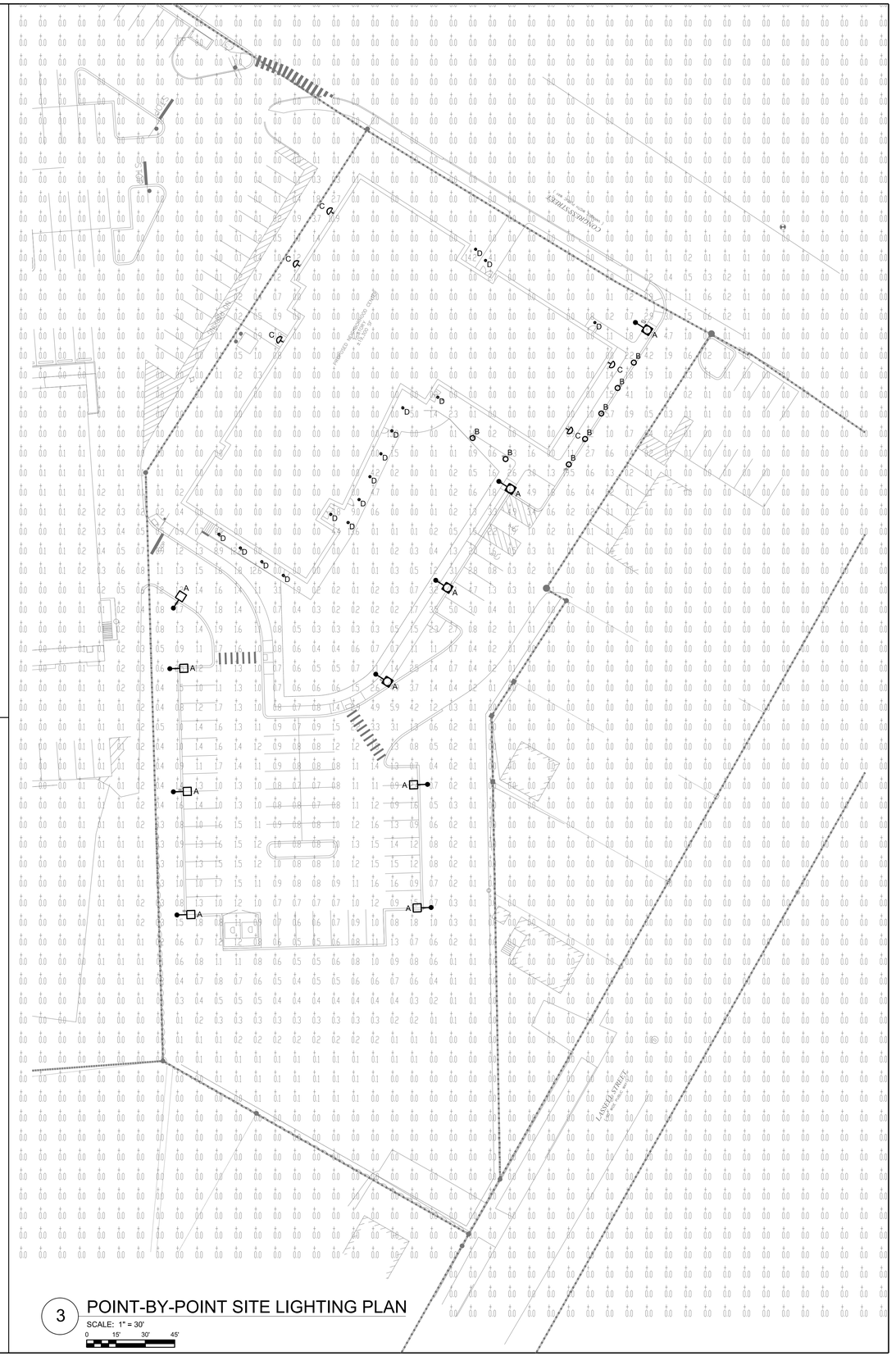
LARGDLNC-SPEC 3/16

1 EXTERIOR BUILDING MOUNTED (TYPE C)

SCALE: NO SCALE



3 POINT-BY-POINT SITE LIGHTING PLAN

SCALE: 1" = 30'

0 15' 30' 45'

HARRIMAN

AUBURN PORTLAND MANCHESTER

JEWISH COMMUNITY ALLIANCE OF SOUTHERN MAINE

Portland, Maine

Harriman Project No.	15309
Key Plan	Proj North

Issues and Revisions

Mark	Date	Description
--	06-24-15	PLANNING BOARD SUBMISSION
--	07-13-15	PROGRESS UPDATE
--	09-04-15	DESIGN DEVELOPMENT REVIEW
--	07-11-16	REVISED FOR PB SUBMISSION

PRELIMINARY NOT FOR CONSTRUCTION

Drawing Scales

PA / PE: JWT

Drawn By: JMB

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SITE LIGHTING PLAN

E80.1