22. Site Lighting

Street Lighting

There is existing lighting along Vannah Avenue. The existing lighting concentrates at the intersection of Vannah and Forest Avenues and a street light is at the easterly boundary of the property.

Site Lighting

The parking lot will be illuminated with LED building mounted lights. The fixtures will be <u>Viper S Series by Beacon Lighting</u>. Building mounted lights will be Hubbell lights catalog # LNC-5LU-4K-3-X, Type S-2.See attached cut sheet of the lights and enclosed Photometric Plan.

Building Lighting

The building and entrances will be illuminated by LED recessed down lights built into the canopies or soffit. The lights will be <u>ID+ 3.5" by Focal Point</u>. See attached cut sheet of the lights and enclosed Photometric Plan.



VIPER S SERIES

Small Viper Luminaire

SPECIFICATIONS

Intended Use:

The Beacon Viper luminaire is available with a wide choice of different LED Wattage configurations and optical distributions designed to replace HID lighting up to 400W MH or HPS.

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:

- 100V through 277V, 50 Hz to 60 Hz (UNV), or 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, 13A 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.
- The housing is designed for an optional twist lock photo control receptacle.
- Ambient operating temperature -40°C to 40°C
 Surge protection 20KA; shuts off at end of life.
- Optional 7-pin ANSI C136.41-2013 twist-lock photo control receptacle available. Compatible with ANSI C136.41 external wireless control devices.
- Lifeshield™ Circuit protects luminaire from excessive temperature. 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 55°C (131°F). 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.).

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 Energeni 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/energeni).
- Also available with **Beacon**nect Wireless Control System (see **Beacon**nect product page for more details www.beaconproducts.com/products/beaconnect).

Installation:

 Mounting options for horizontal arm, vertical tenon or traditional arm mounting available.
 Mounting hardware included.

Finish:

- Beacote V polyester powder-coat electrostatically applied and thermocured.
- Beacote 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:

- DesignLights Consortium (DLC) qualified, consult DLC website for more details: http:// www.designlights.org/QPL
- Listed to UL1598 and CSA22.2#250.0-24 for wet locations and 40°C ambient temperatures
- 3G rated for ANSI C136.31 high vibration applications
- IDA approved

Warranty:

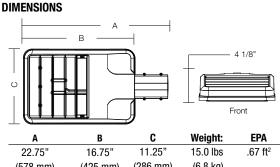
Five year limited warranty (for more information visit: www.hubbelllighting.com/resources/warranty).

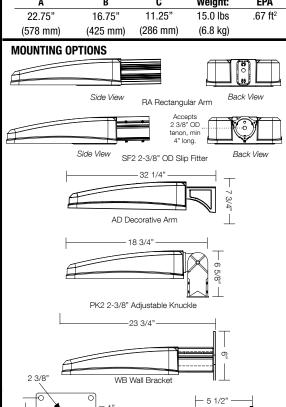
PRODUCT IMAGE(S)











CERTIFICATIONS/LISTINGS







*3000K and warmer CCTs only

Cat.# 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.

Job

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.

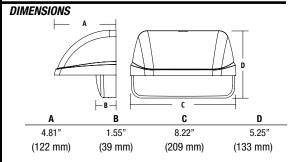
Listed and labeled to UL 1598 for wet locations, 25° C ambient environments. DesignLights Consortium® (DLC) qualified. Please refer to the DLC website for specific product qualifications at: http://www.designlights.org/

• IES Progress Award Winner - 2012

Warranty:

Five year limited warranty. For more information visit: http://www.hubbelloutdoor.com/resources/warranty/

PRODUCT IMAGE(S) PROGRESS LNC-5L LNC-7L LNC-9L With diffuser



SHIPPING INFORMATION

| Catalog Number | G.W(kg)/ CTN | Carton Dimensions | | | Carton Qty. |
|-------------------|-----------------|---------------------|--------------------|---------------------|--------------------|
| | | Length Inch (cm) | Width Inch (cm) | Height Inch (cm) | per Master Pack |
| 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 |

CERTIFICATIONS/LISTINGS







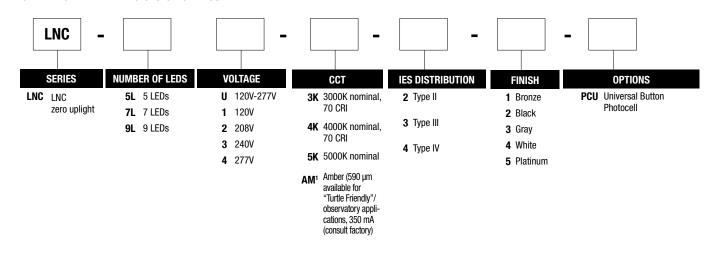




*3000K and warmer CCTs only

ORDERING INFORMATION

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



Amber LEDs only available on 7LU and 9LU configurations, 350 mA only