

VIPER S+L SERIES

LUMINAIRE POLE COMBO

Cat.#

Job

Type

Approvals



LUMINAIRE AND POLE

SPECIFICATIONS

Intended Use:

The Beacon 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).
- 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.
- 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.
- 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 55°C (131°F). 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 point temperature as needed; otherwise it will allow the other control device(s) to function unimpeded.

- Dimming Drivers are standard and dimming leads are extended out of the luminaire unless control options require connection to the dimming leads. Must specify if wiring leads are to be greater than the 6" standard.

Installation:

- Mounting options for horizontal arm. Mounting hardware included.
- Product is suitable for applications requiring 3G testing prescribed by ANSI C136.31

Finish:

- Dark Bronze (textured) Beacote V polyester powder-coat electro-statically 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:

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.hubbelllighting.com/resources/warranty>).

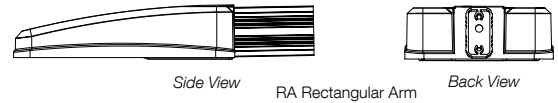
*SSS-B pole specifications continued on page 2.

PRODUCT IMAGE(S)

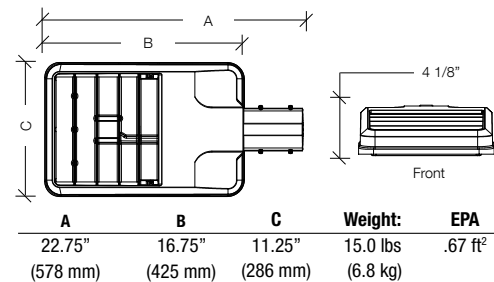


rectangular arm

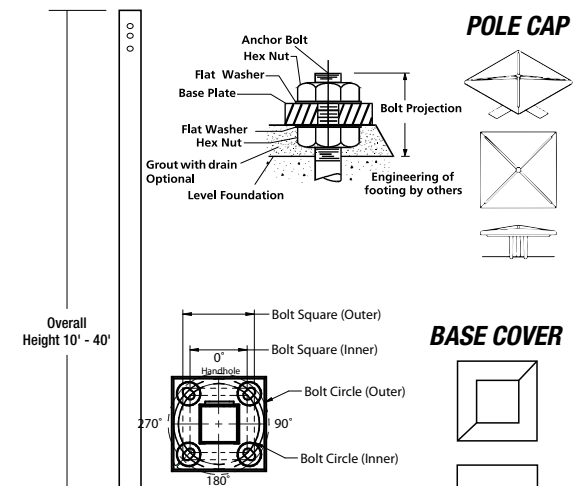
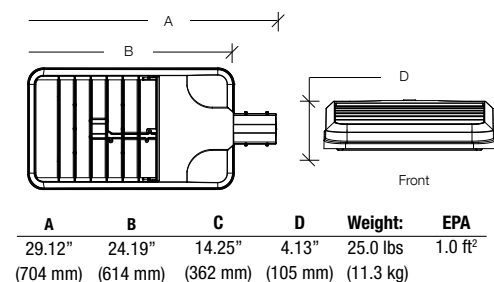
MOUNTING



DIMENSIONS - SMALL



DIMENSIONS - LARGE



CERTIFICATIONS/LISTINGS



Small Single Head Viper Configurations paired with 25' poles include

VM2 - VIBRATION DAMPER 2ND MODE

Factory installed, internal damper designed to alter pole resonance to reduce movement and material fatigue caused by 2nd mode vibration.



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Due to our continued efforts to improve our products, product specifications are subject to change without notice.

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SPECIFICATIONS continued

SSS-B POLE

APPLICATIONS

- Lighting installations for side mounting of luminaires with effective projected area (EPA) not exceeding maximum allowable loading of the specified pole in its installed geographic location

CONSTRUCTION

- SHAFT:** One-piece straight steel with square cross section, flat sides and minimum 0.238" radius on all corners; Minimum yield of 46,000 psi (ASTM-A500, Grade B); Longitudinal weld seam to appear flush with shaft side wall; Steel base plate with axial bolt circle slots welded flush to pole shaft having minimum yield of 36,000 psi (ASTM A36)
- BASE COVER:** Two-piece square aluminum base cover included standard
- POLE CAP:** Pole shaft supplied with removable cover when applicable; Tenon and post-top configurations also available
- HAND HOLE:** Rectangular 3x5 steel hand hole frame (2.38" x 4.38" opening); Mounting provisions for grounding lug located behind gasketed cover
- ANCHOR BOLTS:** Four galvanized anchor bolts provided per pole with minimum yield of 55,000 psi (ASTM F1554). Galvanized hardware with two washers and two nuts per bolt for leveling

FINISH

- Dark Bronze (textured) TGIC thermoset polyester powder coat paint finish with nominal 3.0 mil thickness
- Powder paint prime applied over "white metal" steel substrate cleaned via mechanical shot blast method
- Decorative finish coat available in seven standard colors; Custom colors available; RAL number preferable; Internal protective coating available

ORDERING INFORMATION

Ordering Logic* - All Configurations Dark Bronze Finish (textured)

PRODUCT SERIES	LUMENS	LED CCT	DISTRIBUTION	POLE	ANCHOR BOLTS
VS	9 9K Nominal (VPS-36L-80) 12 12K Nominal (VPS-48L-110) 15 15K Nominal (VPS-60L-136)	N 4000K C 5000K	3 Type 3 4 Type 4	S16 16' Square Straight Steel S20 20' Square Straight Steel S25 ¹ 25' Square Straight Steel	- With Anchor Bolts/Template LAB Less Anchor Bolts/Template
VL	20 20K Nominal (VPL-80L-180) 29 29K Nominal (VPL-96L-280)	SINGLE OR DOUBLE HEAD CONFIGURATION @180 DEG. - Single Head 2X Double Head @180 Deg.			

*25 piece max order size for 10-day shipment.



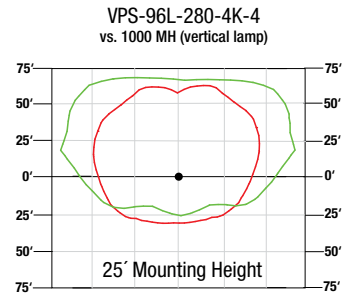
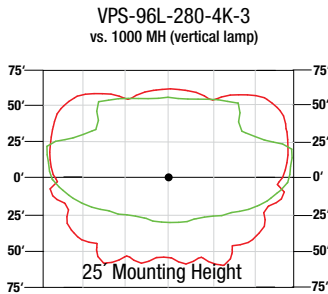
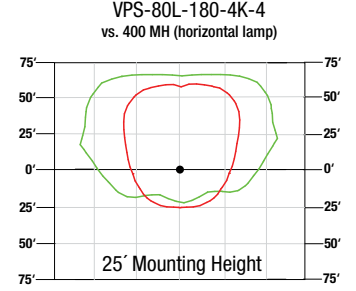
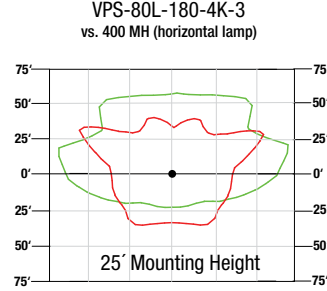
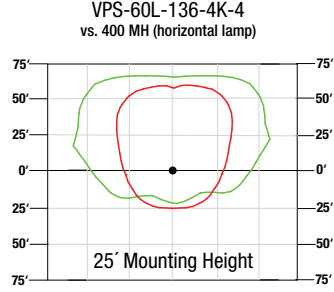
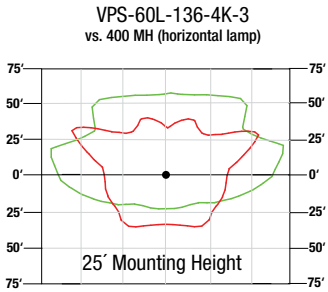
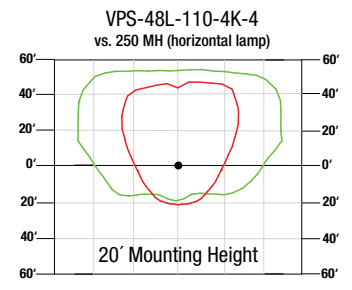
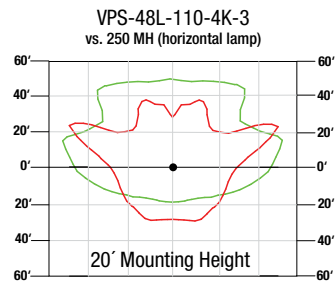
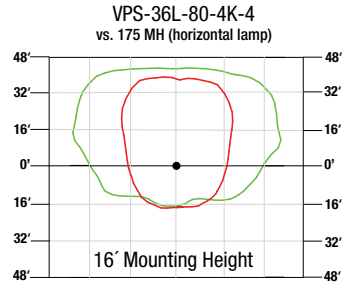
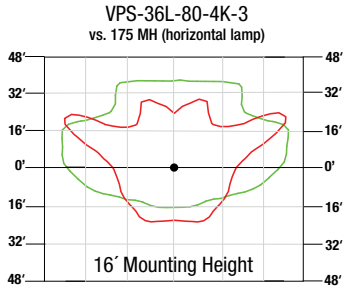
ACCESSORIES - Order Separately

Catalog Number	Description
TAB30M38	3/4" x 30" x 3" anchor bolt set (four individual bolts)
93062959	SSS-B Series pole anchor bolt template

¹ Select configurations include a vibration damper. Refer to the Pronto Combo wind loading table for details.



PHOTOMETRICS



HID 0.5 Foot-candles
LED 0.5 Foot-candles

PERFORMANCE DATA

VIPER SMALL CONFIGURATIONS

# LED'S	DRIVE CURRENT (MILLIAMPS)	SYSTEM WATTS	DISTRIBUTION TYPE	5K (5000K nominal, 70 CRI)					4K (4000K nominal, 70 CRI)				
				LUMENS	LPW ¹	B	U	G	LUMENS	LPW ¹	B	U	G
36	700 mA	80W	T3	9022	111	1	0	2	9206	114	1	0	2
			T4	8871	110	1	0	2	9052	112	1	0	2
48	700 mA	110W	T3	12029	111	2	0	2	11275	114	2	0	2
			T4	11828	110	1	0	3	12069	112	1	0	3
60	625 mA	136W	T3	15037	111	2	0	3	15344	113	2	0	3
			T4	14784	109	1	0	3	15086	111	1	0	3

VIPER LARGE CONFIGURATIONS

# LED'S	DRIVE CURRENT (MILLIAMPS)	SYSTEM WATTS	DISTRIBUTION TYPE	5K (5000K nominal, 70 CRI)					4K (4000K nominal, 70 CRI)				
				LUMENS	LPW ¹	B	U	G	LUMENS	LPW ¹	B	U	G
80	700 mA	180W	T3	22003	121	2	0	4	22683	125	3	0	4
			T4	21502	119	2	0	4	22167	122	2	0	4
96	875 mA	280W	T3	31654	114	3	0	5	32633	118	3	0	5
			T4	30933	112	2	0	5	31889	115	2	0	5

¹Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown. Actual performance may differ as a result of end-user environment and application.

ELECTRICAL DATA - SMALL VIPER LUMINAIRE

# OF LEDS	NUMBER OF DRIVERS	DRIVE CURRENT (mA)	INPUT VOLTAGE (V)	SYSTEM POWER (w)	CURRENT (Amps)
36	1	875 mA	120	90	0.8
			277		0.3
			347		0.3
			480		0.2
48	1	700 mA	120	110	0.9
			277		0.4
			347		0.3
			480		0.2

ELECTRICAL DATA - LARGE VIPER LUMINAIRE

# OF LEDS	NUMBER OF DRIVERS	DRIVE CURRENT (mA)	INPUT VOLTAGE (V)	SYSTEM POWER (w)	CURRENT (Amps)
60	1	700	120	136	1.1
			277		0.5
			347		0.4
			480		0.3
96	2	875	120	280	2.3
			277		1.0
			347		0.8
			480		0.6

PROJECTED LUMEN MAINTENANCE

AMBIENT TEMP.	0	25,000	50,000	TM-21-11 60,000	100,000	Calculated L70 (HOURS)
25°C / 77°F	1.00	0.97	0.95	0.95	0.92	>470,000

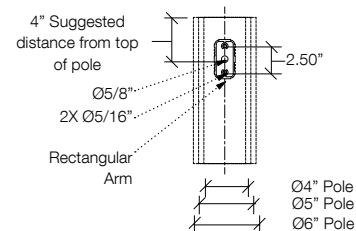
¹ Projected per IESNA TM-21-11

Data references the extrapolated performance projections for the base model in a 40°C ambient, based on 10,000 hours of LED testing per IESNA LM-80-08.

AMBIENT TEMPERATURE		LUMEN MULTIPLIER
0°C	32°F	1.02
10°C	50°F	1.01
20°C	68°F	1.00
25°C	77°F	1.00
30°C	86°F	0.98
40°C	104°F	0.98

Use these factors to determine relative lumen output for average ambient temperatures from 0-40°C (32-104°F).

DRILL PATTERN



EPA

VIPER LARGE

Config.	EPA
1	1.0
2 @ 180°	1.36

VIPER SMALL

Config.	EPA
1	.67
2 @ 180°	1.34



Standard ASCE7-05 Wind Map																							
	85 MPH Zone			90 MPH Zone			100 MPH Zone			105 MPH Zone (HI)			110 MPH Zone			120 MPH Zone			145 MPH Zone (PR)				
Pole Height (4" Sq x 0.125" wall thickness)	16'	20'	25'	16'	20'	25'	16'	20'	25'	16'	20'	25'	16'	20'	25'	16'	20'	25'	16'	20'	25'		
Allowable EPAs (ft/sq)	19	12.7	7.3	16.7	10.9	5.9	13	7.9	3.8	11.5	6.9	2.9	7.9	4.2	0.8	7.9	4.2	0.8	4.1	1.3	NR		
Viper Sm - Single																						NR	
Viper Sm - DBL @ 180																			NR		NR	NR	
Viper Lg - Single																			NR			NR	
Viper Lg - DBL @ 180																			NR			NR	NR

Florida Region Wind Map (2010 Building Code)																								
	115 MPH Zone			120 MPH Zone			130 MPH Zone			140 MPH Zone			150 MPH Zone			160 MPH Zone			170 MPH Zone			180 MPH Zone		
Pole Height (4"Sq x 0.125" wall thickness)	16'	20'	25'	16'	20'	25'	16'	20'	25'	16'	20'	25'	16'	20'	25'	16'	20'	25'	16'	20'	25'	16'	20'	25'
Allowable EPAs (ft/sq)	20.8	13.6	7.4	18.7	11.9	6.2	15.2	9.2	4.1	12.3	7.1	2.5	10.1	5.3	1.1	8.2	3.9	NR	6.7	2.7	NR	5.4	1.7	NR
Viper Sm - Single																		NR			NR			NR
Viper Sm - DBL @ 180															NR			NR			NR			NR
Viper Lg - Single																		NR			NR			NR
Viper Lg - DBL @ 180															NR			NR			NR		NR	NR

Florida Building Code utilizes a different calculation method than ASCE, which results in different allowable EPAs. Consult your local authorities to determine which standard to use for your project

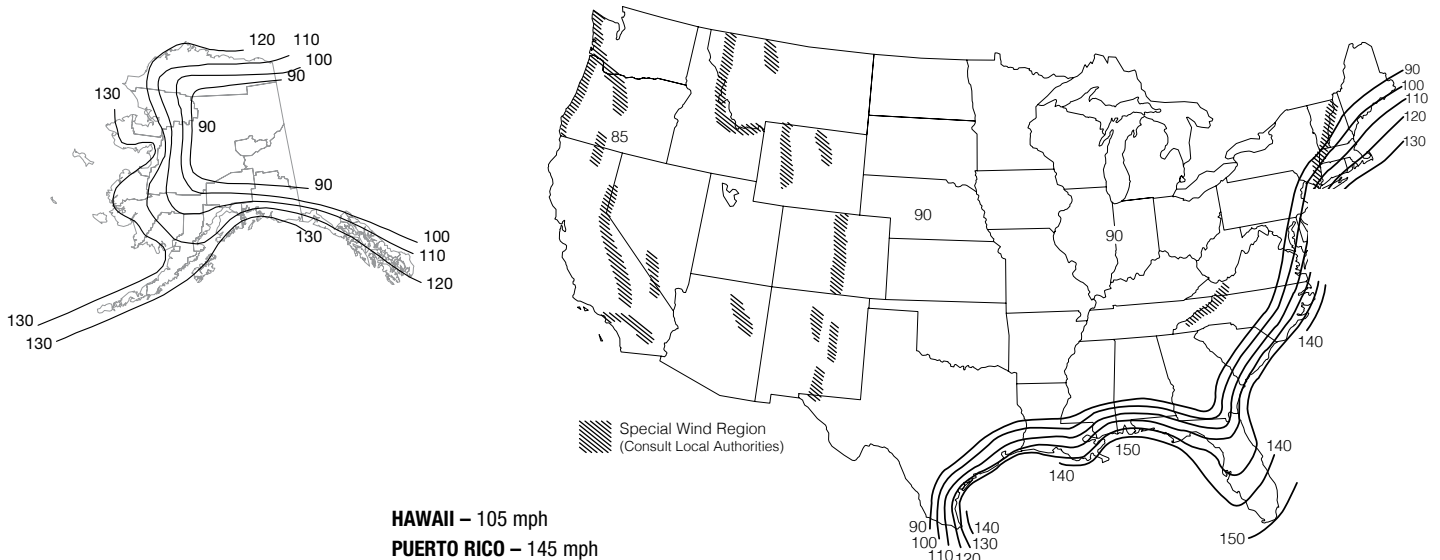
Acceptable

Includes Vibration Damper¹

Not Recommended

Notes: ¹ Pole used in program includes a vibration damper (VM2 style) due to low luminaire EPA and 25' mounting height.
*Consult the complete list of pole notes on the pole specification sheets located on the Hubbell Lighting web site.

ASCE7-05 WIND MAP



FLORIDA REGION WIND MAP (2010 FLORIDA BUILDING CODE)

- Florida region wind map above is based upon 3-second gust winds and the 2010 Florida Building Code

