VIPER L SERIES

ENHANCED LARGE VIPER LUMINAIRE

Cat.#

Job

Type

BEACON design . performance . technology

Approvals

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:

- Manufactured with die cast aluminum.
- Coated with a polyester finish that meets ASTM B117 corrosion test requirements and ASTM D522 cracking and loss of adhesion test requirements.
- External hardware is corrosion resistant.
- 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.

Electrical:

- Luminaire accepts 100V through 277V, 50 Hz to 60 Hz (UNV) 347V or 480V input.
- Power factor is ≥ .90 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, but must contact factory to request wiring leads for purpose of external dimming controls.
- Component-to-component wiring within the luminaire may carry no more than 80% of rated load and is certified by UL for use at 600VAC at 90°C or higher.
- Plug disconnects are certified by UL for use at 600 VAC, 13A or higher. 13A rating applies to primary (AC) side only.
- Fixture electrical compartment shall contain all LED driver components and shall be provided with a push-button terminal block for AC power connections.
- Ambient operating temperature -40°C to 40°C
- 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.
- 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. 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 time of night (see www.beaconproducts.com/products/energeni).
- In addition, Viper can be specified with **SiteSync™** wireless control system for reduction in energy and maintenance cost while optimizing light quality 24/7. See ordering information or visit www.hubbelllighting.com/sitesync for more details.

Installation:

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

Finish:

- IFS polyester powder-coat electro-statically applied and thermocured.
- IFS 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:

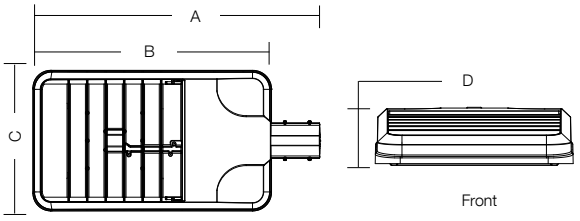
- DesignLights Consortium (DLC) qualified, consult DLC website for more details: http://www.designlights.org/QPL
- Listed to UL1598 and CSA22.2#250.0-24 for wet locations and 40°C ambient temperatures
- 3G rated for ANSI C136.31 high vibration applications with SF2 mounting
- IDA approved

Warranty:

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

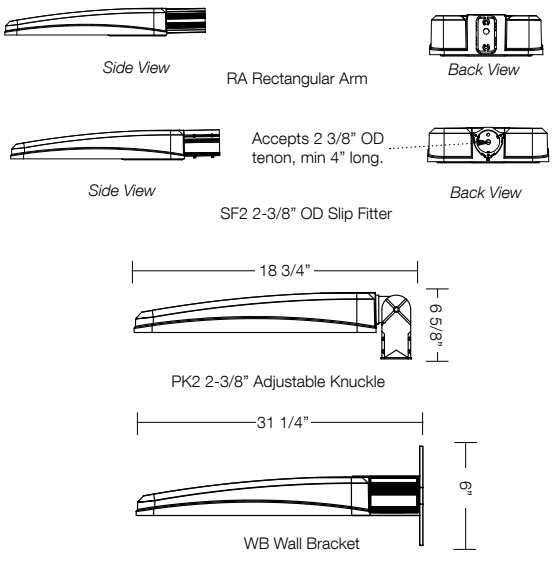
PRODUCT IMAGE(S)

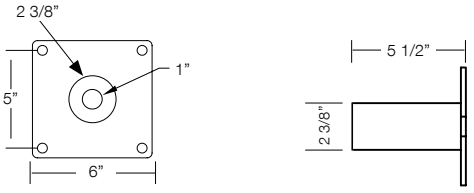
DIMENSIONS



A	B	C	D	Weight:	EPA
29.12" (704 mm)	24.19" (614 mm)	14.25" (362 mm)	4.13" (105 mm)	25.0 lbs (11.3 kg)	1.0 ft²

MOUNTING OPTIONS





CERTIFICATIONS/LISTINGS

IK05

*3000K and warmer CCTs only

HUBBELL® Lighting

ORDERING INFORMATION ORDERING EXAMPLE: VPL/96NB-280/5K/T4/UNV/PCR-TL/GENIXX/BLC/RA/BBT

VPL | | | | | | | | | | | | |

SERIES
- **VPL** viper-large

ENGINE-WATTS
- **64NB-135** 135W, LED array
- **80NB-180** 180W, LED array
- **80NB-235** 235W, LED array
- **96NB-220** 220W, LED array
- **96NB-280** 280W, LED array
- **96NB-395** 395W, LED array

LED COLOR
- **3K** 3000K
- **4K** 4000K
- **5K** 5000K

VOLTAGE
- **UNV** 120-277V
- **347V** 347V
- **480V** 480V

ELECTRICAL OPTIONS
- **PCR-TL** 7 pin twist lock receptacle with photo control
- **PCR-SC** 7 pin twist lock receptacle with shorting cap
- **2PF**[7] dual power feed
- **PCRU** 7 pin twist lock receptacle

HOUSE SIDE SHIELD OPTIONS
- **HSS-90** house side shield 90°
- **HSS-180** house side shield 180°
- **BLC**[3] backlight control

SENSOR OPTIONS
- **MDD**[2,5] motion dimming detector

FINISH
- **BBT** basic black textured
- **BMT** black matte textured
- **WHT** white textured
- **MBT** metallic bronze textured
- **BZT** bronze textured
- **DBT** dark bronze textured
- **GYS** gray smooth
- **DPS** dark platinum smooth
- **GNT** green textured
- **MST** metallic silver textured
- **MTT** metallic titanium textured
- **OWI** old world iron
- **RAL** _____

OPTICS[4]
- **T1** type I
- **T2** type II
- **T3** type III
- **T4** type IV
- **T5R** type V, rectangular
- **T5QM** type V, square medium
- **T5W** type V, round wide
- **FR** front row auto optic

LEFT RIGHT OPTICS[4]
- **T1L** type 1 left
- **T1R** type 1 right
- **T2L** type 2 left
- **T2R** type 2 right
- **T3L** type 3 left
- **T3R** type 3 right
- **T4L** type 4 left
- **T4R** type 4 right
- **FRL** front row left
- **FRR** front row right

CONTROL OPTIONS
- **GENI-XX**[6] energeni
- **SWP**[1,5] SiteSync Wireless Pre-Commission
- **SWPM**[2,5] SiteSync Wireless Pre-Commission w/ Motion Detection

BIRD DETERRENT
- **BSP** bird spike

MOUNTING OPTIONS
- **RA** rectangular arm for round or square pole mount. Round Pole Adapter included.
- **SF2** 2 3/8" OD slip-fitter
- **PK2** 2 3/8" adjustable knuckle
- **WB** wall bracket (use with SF2 or PK2), SF2 standard

PRECOMMISSIONED SITESYNC ORDERING INFORMATION: When ordering a fixture with the SiteSync lighting control option, additional information will be required to complete the order. The SiteSync Commissioning Form or alternate schedule information must be completed. This form includes Project location, Group information, and Operating schedules. For more detailed information please visit www.HubbellLighting.com/sitesync or contact Hubbell Lighting tech support at (800) 345-4928.

SiteSync fixtures with Motion control (SWPM) require the mounting height of the fixture for selection of the lens.

Examples: VP-L/80NB-235/5K/T3/UNV/SWP/RA/DBT — SiteSync only
VP-L/80NB-235/5K/T3/UNV/SWPM-20F/RA/DBT — SiteSync with Motion Control

MDD ORDERING INFORMATION: When ordering a fixture with the motion detection option (MDD), please specify the appropriate information. These settings are specified in the ordering as shown in the example below.

VP-L/80NB-235/5K/T3/UNV/MDD - 1 to 30 min. - 33% or 50% - ?? / RA/DBT

High to Dim Delay | Low Level | Mounting Height (ft.)

Accessories and Services (Ordered Separately)

Catalog Number	Description
SWUSB*	SiteSync loaded on USB flash drive (Windows based only)
SWTAB*	SiteSync Windows Tablet
SWBRG+	SiteSync Wireless Bridge Node

*When ordering with SiteSync, one of the following interface options must be chosen and ordered separately. Each option contains the SiteSync License, GUI and Bridge Node.

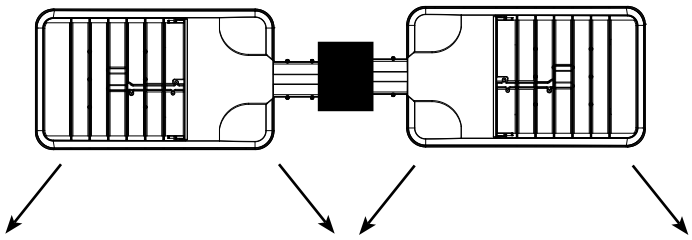
+ If needed, an additional Bridge Node can be ordered.

[1] Must specify group and zone information at time of order. See www.hubbelllighting.com/sitesync for further details
[2] Specify time delay; dimming level and mounting height.
[3] T4 optic only.
[4] To rotate optics Left or right 90 degrees, specify L or R after the optical distribution example T4L.
[5] Not available with other control or sensor options.
[6] When ordering Energeni, specifiy the routine setting code (example GENI-04). See Energeni brochure and instructions for setting table and options. Not available with sensor options.
[7] Not available for 347V or 480V input.

DesignLights Consortium qualified.
Consult DLC website for more details:
http://www.designlights.org/QPL

SiteSync Lighting Control is available from our most popular brands in a broad range of award-winning product families.

LEFT ROTATED OPTIC **RIGHT ROTATED OPTIC**



HUBBELL® Lighting

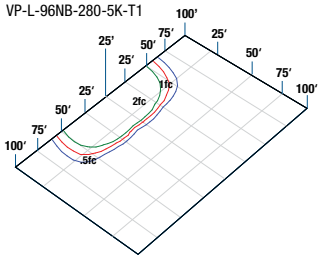
PERFORMANCE DATA

				5K (5000K nominal, 70 CRI)					4K (4000K nominal, 70 CRI)					3K (3000K nominal, 80 CRI)				
# LED'S	DRIVE CURRENT (MILLIAMPS)	SYSTEM WATTS	DISTRIBUTION TYPE	LUMENS	LPW[1]	B	U	G	LUMENS	LPW[1]	B	U	G	LUMENS	LPW[1]	B	U	G
64	625 mA	136W	FR/T1	15922	116	2	0	1	15762	115	2	0	1	13534	99	2	0	1
			T2	14274	104	3	0	3	14131	103	3	0	3	12133	89	3	0	3
			T3	14137	103	3	0	3	13996	102	3	0	3	12017	88	3	0	3
			T4	15511	113	2	0	4	15356	112	2	0	3	13184	96	2	0	3
			T5QM	15511	113	4	0	2	15356	112	4	0	2	13184	96	3	0	2
			T5R	15785	115	4	0	4	15627	114	4	0	4	13417	98	4	0	4
			T5W	15372	112	4	0	2	15217	111	4	0	2	13067	95	4	0	2
80	700 mA	180W	FR/T1	21132	117	2	0	2	20322	113	2	0	2	17447	97	2	0	2
			T2	18888	105	3	0	4	18699	104	3	0	4	16055	89	3	0	3
			T3	18700	104	3	0	3	18513	103	3	0	3	15895	88	3	0	3
			T4	20571	114	3	0	4	20365	113	3	0	4	17485	97	3	0	3
			T5QM	20571	114	4	0	2	20365	113	4	0	2	17485	97	4	0	2
			T5R	20944	116	4	0	4	20733	115	4	0	4	17803	99	4	0	4
			T5W	20290	113	5	0	3	20088	112	5	0	3	17065	95	4	0	2
80	875 mA	235 W	FR/T1	24866	106	2	0	2	24615	105	2	0	2	21136	90	2	0	2
			T2	23070	98	3	0	4	22839	97	3	0	4	19609	83	3	0	4
			T3	21947	93	3	0	3	21725	92	3	0	3	18655	79	3	0	3
			T4	24360	103	3	0	4	24028	102	3	0	5	20632	88	3	0	4
			T5QM	23138	98	4	0	2	22905	97	4	0	2	19667	84	4	0	2
			T5R	24779	105	5	0	5	24541	104	5	0	5	21070	90	4	0	4
			T5W	24175	103	5	0	3	23931	102	5	0	3	20548	87	5	0	3
96	700 mA	220 W	FR/T1	25358	113	2	0	2	25104	112	2	0	2	21554	96	2	0	2
			T2	22665	101	3	0	4	22438	100	3	0	4	19265	86	3	0	4
			T3	22440	100	3	0	4	22216	99	3	0	4	19134	86	3	0	3
			T4	24685	110	3	0	5	24438	109	3	0	5	20982	94	3	0	4
			T5QM	24685	110	4	0	2	24438	109	4	0	2	20982	94	4	0	2
			T5R	25133	112	5	0	5	24882	111	5	0	5	21363	96	4	0	4
			T5W	24349	109	5	0	3	24106	108	5	0	3	20803	93	5	0	3
96	875 mA	280 W	FR/T1	29839	106	3	0	2	29541	105	3	0	2	25363	90	2	0	2
			T2	27369	98	4	0	5	27096	97	4	0	5	23264	83	3	0	4
			T3	26336	93	3	0	4	26073	92	3	0	4	22365	79	3	0	4
			T4	29128	102	3	0	5	28837	103	3	0	5	24759	88	3	0	5
			T5QM	28889	103	5	0	3	28601	102	5	0	3	24556	88	4	0	2
			T5R	29184	105	5	0	5	28893	104	5	0	5	24809	89	5	0	5
			T5W	29010	102	5	0	4	28720	101	5	0	4	24263	86	5	0	3
96	1225mA	395 W	FR/T1	39653	101	3	0	2	39260	100	3	0	2	33371	85	3	0	2
			T2	35997	91	4	0	5	35641	90	4	0	5	30295	77	4	0	5
			T3	35840	91	4	0	5	35485	90	4	0	5	30162	77	3	0	4
			T4	35455	90	3	0	5	35104	89	3	0	5	29839	76	3	0	4
			T5QM	38388	97	5	0	3	38008	96	5	0	3	32306	82	5	0	2
			T5R	39117	99	5	0	5	38730	98	5	0	5	32921	83	5	0	5
			T5W	36984	93	5	0	4	36528	93	5	0	4	31049	79	5	0	4

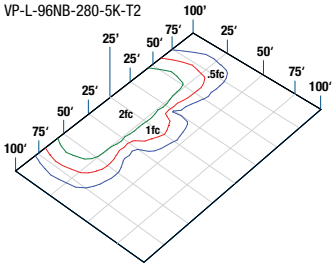
[1]Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown. Actual performance may differ as a result of end-user environment and application.

PHOTOMETRICS

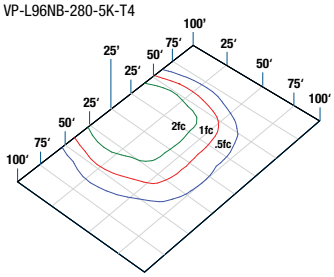
Type I
VP-L-96NB-280-5K-T1



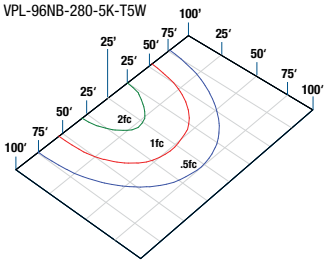
Type II
VP-L-96NB-280-5K-T2



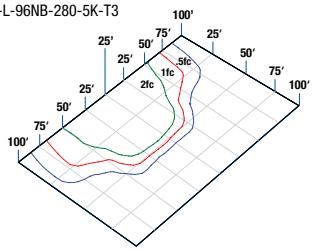
Type IV
VP-L96NB-280-5K-T4



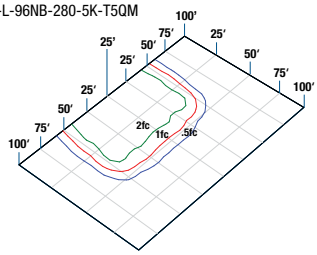
Type V Round Wide
VPL-96NB-280-5K-T5W



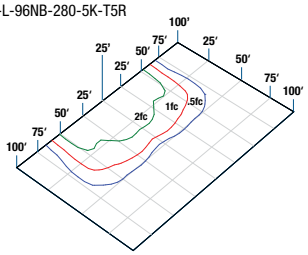
Type III
VP-L-96NB-280-5K-T3



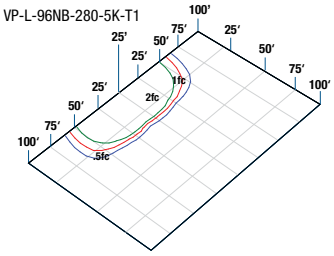
Type V Square Medium
VP-L-96NB-280-5K-T5QM



Type V Rectangular
VP-L-96NB-280-5K-T5R



Front Row Auto Optic / Type I
VP-L-96NB-280-5K-FR
VP-L-96NB-280-5K-T1



ELECTRICAL DATA

# OF LEDS	NUMBER OF DRIVERS	DRIVE CURRENT (mA)	INPUT VOLTAGE (V)	SYSTEM POWER (w)	CURRENT (Amps)
64	1	625	120	136	1.1
			277		0.5
			347		0.4
			480		0.3
80	2	700	120	180	1.5
			277		0.6
			347		0.5
			480		0.4
80	2	875	120	235	2.0
			277		0.8
			347		0.7
			480		0.5
96	2	700	120	220	1.8
			277		0.8
			347		0.6
			480		0.5
96	2	875	120	280	2.3
			277		1.0
			347		0.8
			480		0.6
96	2	1225	120	395	3.3
			277		1.4
			347		1.1
			480		0.8

PROJECTED LUMEN MAINTENANCE

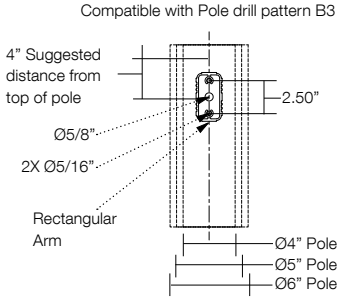
AMBIENT TEMP.	0	25,000	50,000	[1]TM-21-11 60,000	100,000	Calculated L70 (HOURS)
25°C / 77°C	1.00	0.95	0.93	0.93	0.89	>377,000

[1] Projected per IESNA TM-21-11
Data references the extrapolated performance projections for the 700mA base model in a 25°C ambient, based on 10,000 hours of LED testing per IESNA LM-80-08.

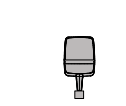
AMBIENT TEMPERATURE		LUMEN MULTIPLIER
0°C	32°F	1.02
10°C	50°F	1.01
20°C	68°F	1.00
25°C	77°F	1.00
40°C	86°F	.98
40°C	104°F	.98

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

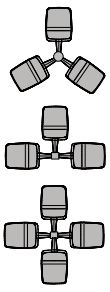
DRILL PATTERN



EPA



Config.	EPA
1	1
2 @ 90°	1.36
2 @ 180°	2



Config.	EPA
3 @ 120°	2
3 @ 90°	2.2
4 @ 90°	2.2

HUBBELL® Lighting