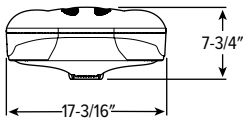
VA1 LED
Voltaire Architectural Area Light



Front view

CATALOG #:

TYPE:

PROJECT:

BUY AMERICAN ACT COMPLIANT | DARKSKY APPROVED | IP65 Rated | TITLE 24

FEATURES

- Complement architecture with the low-profile, contoured design
- Shorten installation time with the hinged two-piece enclosure
- Engineered to sustain greater wind loads than traditional fixtures
- Six mounting configurations and four distributions provide versatility
- Made Right Here® in the USA

SPECIFICATIONS

- HOUSING – Heavy-duty, two-piece die-cast aluminum clamshell enclosure, rated IP65. Removable lower enclosure and electrical compartment, secured with locking hinge mechanism.
- THERMAL MANAGEMENT – Integral die-cast aluminum heatsink, concealed venting, and LED module seamlessly provide passive thermal management. Rated -30°C to 40°C (L83 configuration >50) ambient operating temperature.
- OPTICAL SYSTEM – Precision, injection-molded, refractive acrylic lenses produce standard IES distributions. Factory-set orientations in 90° increments. Tempered glass standard.
- LED MODULE – Circuit board design incorporates TVS diodes to protect against ESD events. ANSI 3000K, 4000K, and 5000K CCT, minimum 70 CRI LEDs.
- LED DRIVER – 0-10V dimming driver standard.
- ELECTRICAL – 120-277, 347, and 480 VAC input range; 50-60Hz; power factor >.90; THD <20% at full load. FCC Class A compliant. 10kA/10kV surge protection standard. Quick-disconnect wiring provided. L70 >60,000 hours per IES TM-21.
- FINISH – Super durable polyester powder coat bonded to phosphate-free, multi-stage pretreated metal, meets and exceeds AAMA 2604 specifications for outdoor durability.
- MOUNTING – Direct mounts to minimum 4" square pole. Optional round pole adapter, wall mount or post top tenon mount accessories available.
- LISTINGS –
  - cCSAus listed to STD22.2 No 250.0 certified as luminaire Suitable for wet locations.
  - IDA Dark-Sky approved.
  - IP65 rated.
  - Meets the American National Standard for Roadway Lighting Equipment–Luminaire Vibration (ANSI C136.31-2001), direct mount to square pole applications only.
  - RoHS compliant.
  - Title 24 compliant with OCCWS FSP-311 and OCCWS FSP-211 options.
  - Complies with the Buy American Act and other federal regulations. Request certification at hew.com/baa.
- WARRANTY – 5-year limited warranty, see hew.com/warranty.

ORDERING EXAMPLE: VA1 - L220/750 - T5 - F - S - DBZ - OPTIONS - DIM - UNV

ORDERING INFO

SERIES	LUMENS [1]	CRI	CCT	DISTRIBUTION	ORIENTATION
VA1	**L83** 8,300lm	**7** 70	**30** 3000K	**T2** Type II	**F** Forward
	L110 11,000lm	**8** 80 [2]	**40** 4000K	**T3** Type III	**L** Left
	L160 16,000lm		**50** 5000K	**T4** Type IV	**R** Right
	L220 22,000lm			**T5** Type V	

MOUNTING CONFIGURATION

S	Single
D90	Double @ 90°
D180	Double @ 180°
T90	Triple @ 90°
T120	Triple @ 120° [4]
Q90	Quad @ 90°

FINISH OPTIONS [3]

BLK	Black (RAL #9004)
DBZ	Dark bronze
DBR	Medium bronze
GRAY	Standard gray
GRN	Green (RAL #6005)
SLV	Satin aluminum (RAL #9006)
WHT	White (RAL #9003)

OPTIONS [5]

See page 4 for ADDITIONAL CONTROL OPTIONS.

SF	Single fuse [6]
DF	Double fuse [7]
PCR	NEMA locking photo control receptacle [8]
PCR5	5 Position (3 power, 2 dimming/signal) locking photo control receptacle per NEMA C136.41 [9]
PCR7	7 Position (3 power, 4 dimming/signal) locking photo control receptacle per NEMA C136.41 [10]
RSD___	Round straight pole mount adapter. [11] Example: 3.5" Pole top diameter = RSD**350**
(L__)	Additional lower lumen packages available. [12] Example: 12,000 nominal lumens = VA1-L160/740-T5-F-S-**(L120)**.
VATMR-___	Pole top tenon mount and round pole adaptor [13]
VAWM-___	Wall mount accessory [14]
BG__	Roosting prevention spikes [15]

DRIVER

DIM	Dimming driver prewired for 0-10V low voltage applications
DALI	DALI dimming driver
DIM/NDP__	Programmable driver with nighttime dimming profile. [16] Example: DIM/NDP**425/64836**

DRIVER OPTIONS:

_____/CLO	Constant lumen output. Suffix, used in conjunction with programmable drivers above. Example: **DIM/DALI**/CLO [17]

VOLTAGE

120	120V
208	208V
240	240V
277	277V
UNV	120-277V
347	347V
480	480V

NOTES

1. Lumen output based on 70 CRI/4000K CCT and T5 distribution. Actual performance may vary +/-5%, see page 2 for FIXTURE PERFORMANCE DATA. Additional lumen packages available, see Options.
2. Extended lead times may apply. Consult factory for availability.
3. See page 4 for FINISH OPTIONS.
4. Round pole only.
5. See page 3 for OPTION DETAILS.
6. 120V, 277V, or 347V only. Must specify voltage.
7. 208V, 240V, or 480V only. Must specify voltage.
8. Photocell by others. Shipped with shorting cap.
9. Photocell by others.
10. Photocell by others.
11. Specify pole top diameter, minimum 3.5" O.D. Do not specify when using VATMR tenon mount accessory.
12. Specify in increments of 1,000 nominal lumens. Option must be specified with next higher lumen package.
13. Must specify tenon size, mounting configuration and finish. See page 3 for ordering info.
14. Must specify finish. See page 3 for ordering info.
15. Must specify material. See page 3 for ordering info.
16. Specify dimming hours, lumen decrease, and installation location zip code using NDP table on page 3.
17. See page 3 for CLO LUMEN DERATING CHART.

VA1 LED
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FIXTURE PERFORMANCE DATA

	DISTRIBUTION	DELIVERED LUMENS	WATTAGE	EFFICACY (lm/W)	BUG RATING
L83	T2	8900	67	133	B1-U0-G1
	T3	8648		129	B2-U0-G2
	T4	8466		126	B1-U0-G1
	T5	8946		134	B3-U0-G2
L110	T2	11660	88	133	B2-U0-G2
	T3	11329		129	B3-U0-G3
	T4	11091		126	B2-U0-G2
	T5	11720		133	B3-U0-G2
L160	T2	17175	131	131	B2-U0-G2
	T3	16688		127	B3-U0-G3
	T4	16337		125	B3-U0-G3
	T5	17263		132	B4-U0-G2
L220	T2	23173	182	127	B3-U0-G3
	T3	22515		124	B3-U0-G3
	T4	22042		121	B3-U0-G3
	T5	23291		128	B4-U0-G2

LUMEN MAINTENANCE [1]

AMBIENT TEMPERATURE	LUMEN PACKAGE	REPORTED L70 HOURS (TM-21)
40° C	L83	>60,000
	L110/L160	
	L220	
50° C	L83 [2]	>60,000
	L110/L160 [2]	
	L220	

1 Predicted L70 hours calculated in accordance with IES TM-21 per Energy Star (R) TM-21 Calculator rev. 02.08.16.
2 347V and 480V only.

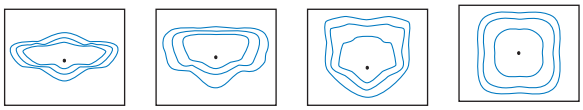
- Photometrics tested in accordance with IESNA LM-79. Results based on 70 CRI/4000K CCT, and 25°C ambient temperature. Actual performance may vary +/-5%.
- Use multiplier table to calculate additional options.

MULTIPLIER TABLE

	COLOR TEMPERATURE	
	CCT	CONVERSION FACTOR
70 CRI	3000K	0.95
	4000K	1.00
	5000K	1.03
80 CRI	3000K	0.86
	4000K	0.91
	5000K	0.94

DISTRIBUTION

T2 T3 T4 T5

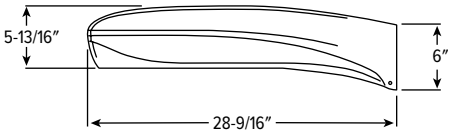


MODULE VIEWS

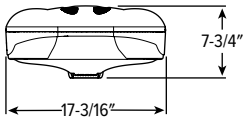
L83 L110 L160 L220

CROSS SECTIONS

SIDE VIEW EPA: 1.21/Weight: 39 lbs



FRONT VIEW



MOUNTING DETAILS

MOUNTING CONFIGURATION

S Single
EPA:1.21
Weight: 39 lbs.

D90 Double 90°
EPA: 1.64
Weight: 78 lbs.

D180 Double 180°
EPA: 2.42
Weight: 78 lbs.

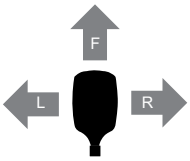
T90 Triple 90°
EPA: 2.53
Weight: 120 lbs.

T120 Triple 120°
EPA: 2.28
Weight: 120 lbs.
(Round pole only)

Q90 Quad 90°
EPA: 2.53
Weight: 156 lbs.

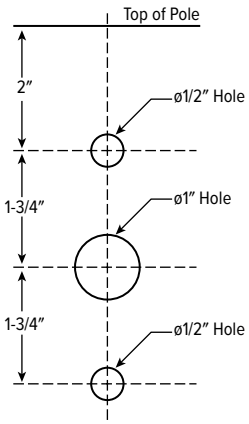
ORIENTATION

Factory-set optics are specified in 90° increments.



TOP VIEW
F Forward
L Left
R Right

POLE DRILLING DETAIL



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OPTION DETAILS

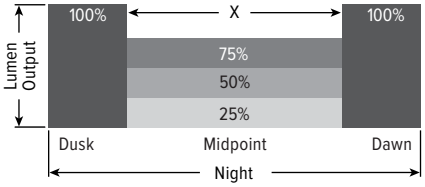
RSD__

EPA: 0.03
Weight: 1 Lb.

PCR

Shorting cap not shown.

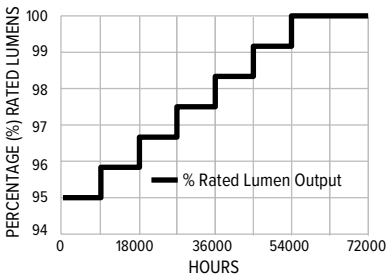
NDP



EXAMPLE: DIM/NDP**425/64836**			
PREFIX	**DIMMING HOURS (X)**	**LUMEN DECREASE**	**5-DIGIT ZIP CODE**
DIM/NDP	**4** 4 hours **6** 6 hours **8** 8 hours	**25** 25% dimming **50** 50% dimming **75** 75% dimming	*Zip code of installation location required*
DIM/NDPC	Custom dimming profile, consult factory		

- Reduce energy consumption by using a variety of preset or custom nighttime dimming profiles requiring no internal clock, additional wiring, or controls.
- Photocell recommended to achieve optimal dimming profiles and realize maximum energy savings.

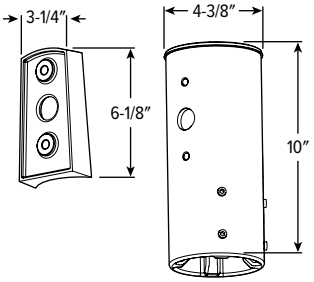
CLO LUMEN DERATING CHART



Deliver constant lumens throughout the life of the product using the constant lumen output (CLO) option.

VATM EPA: .33/Weight: 6 lbs.

EXAMPLE: VATMR-TM238-Q90-DBR				
SERIES	**STYLE**	**TENON SIZE**	**MOUNTING CONFIGURATION**	**FINISH**
VATM	**R** Round	**TM238** 2-3/8″ x 4″ **TM278** 2-7/8″ x 4″ **TM3** 3″ x 4″	**S** Single **D90** Double @ 90° **D180** Double @ 180° **T90** Triple @ 90° **T120** Triple @ 120° (round pole only) **Q90** Quad @ 90°	**BLK** Black (RAL #9004) **DBZ** Dark bronze **DBR** Medium bronze **GRAY** Standard gray **GRN** Green (RAL #6005) **SLV** Satin aluminum (RAL #9006) **WHT** White (RAL #9003)

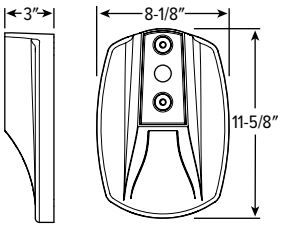


- CONSTRUCTION– Round die-cast aluminum. Fits 2-3/8″ to 3″ pole top tenon, must specify (minimum 4″ tenon height required). Accommodates up to four luminaires. Includes round pole adapter(s).
- LUMINAIRE MOUNTING–The luminaire mounts using two 3/8″-16 concealed bolts secured to mounting plate.
- POLE CAP– Durable glass-filled plastic pole cap.
- FINISH OPTIONS– Super durable polyester powder coat meets and exceeds AAMA 2604 specifications for outdoor durability.

"S" Mounting Configuration Shown
Round pole mount adapter(s) included. Quantity determined by mounting configuration.

VAWM EPA: .22/Weight: 5 lbs.

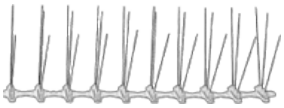
EXAMPLE: VAWM-DBR	
SERIES	**FINISH**
VAWM	**BLK** Black (RAL #9004) **DBZ** Dark bronze **DBR** Medium bronze **GRAY** Standard gray **GRN** Green (RAL #6005) **SLV** Satin aluminum (RAL #9006) **WHT** White (RAL #9003)



- CONSTRUCTION – Die-cast aluminum.
- LUMINAIRE MOUNTING – Luminaire mounts using two 3/8″-16 concealed bolts secured to mounting plate. Must be anchored to appropriate wall construction.
- FINISH OPTIONS – Super durable polyester powder coat meets and exceeds AAMA 2604 specifications for outdoor durability.

BG

EXAMPLE: BGSS	
SERIES	**MATERIALS**
BG	**P** 2′ plastic **SS** Premium 2′ stainless steel



VA1 LED
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FINISH OPTIONS

WHITE | BLACK | GREEN | MEDIUM BRONZE | DARK BRONZE | SATIN ALUMINUM GRAY

For custom color, please specify RAL code or a manufacturer code with description. All custom colors other than RAL require two sample swatches, minimum 1" square.

SENSOR PLACEMENT DETAILS

ADDITIONAL CONTROL OPTIONS

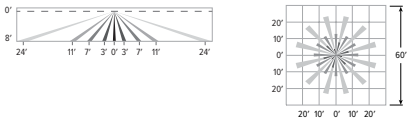
IP66 rated for wet locations.

OCCWS-FSP-311-L_-120/277 Wattstopper PIR motion and daylight sensor, 120/277. Must specify lens: L2, L3, or L7. Factory installed.
OCCWS-FSP-211-L_-120/277 Wattstopper PIR motion and daylight sensor, 120/277. Must specify lens: L2, L3, or L7. Factory installed.
FSIR-100 Remote controller for 211 sensor. Please specify quantity required per project. Ordered and shipped separately.

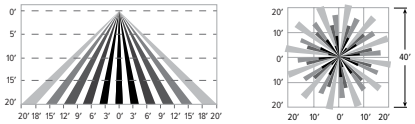
SPECIFICATIONS	
TYPE	PIR Motion + Daylight
MOUNTING HEIGHT	8′ – 40′
DETECTION ANGLE	360°
TEMPERATURE RANGE	-40° to 75°C
COMMISSIONING	311 Sensor: App (iOS or Android) 211 Sensor: FSIR-100 Remote

SENSOR COVERAGE PATTERNS

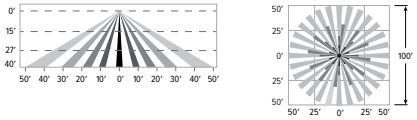
L2 8′ height: ø48′ coverage



L3 20′ height: ø40′ coverage



L7 40′ height: ø100′ coverage



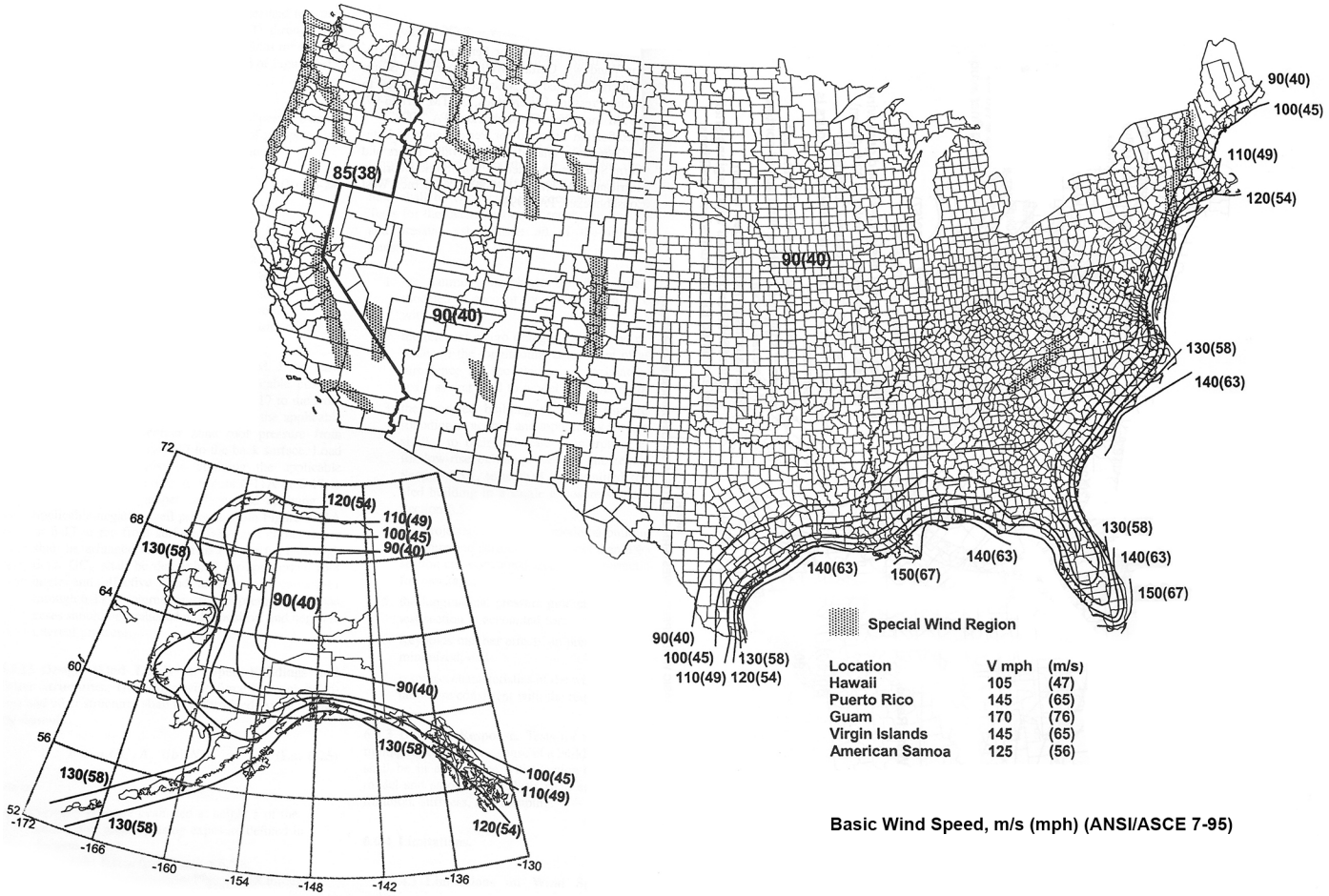
SENSOR DETAIL

Dimensions
L2/L3: ø2-3/8" | L7: ø3-1/4"

SEE NEXT PAGE FOR WIND MAP

VA1 LED
Voltaire Architectural Area Light

WIND MAP



Basic Wind Speed, m/s (mph) (ANSI/ASCE 7-95)

The Effective Projected Area (EPA) standards shown in the Load and Dimensional Data Tables on the specification sheets are designed to withstand dead loads and theoretical dynamic loads developed by variable wind speeds, as charted, with an appropriate wind gust factor under the following conditions:

- Values are nominal design 3-second gust wind speeds in miles per hour (m/s) at 33 ft (10 m) above ground for Exposure C category.
- Linear Interpolation between wind contours is permitted.
- Islands and coastal areas outside the last contour shall use the last wind speed contour of the coastal area.
- Mountainous terrain, gorges, ocean promontories, and special wind regions shall be examined for unusual wind conditions.
- This map is intended as a general guide. Check you local area for unique wind conditions.

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