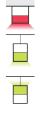
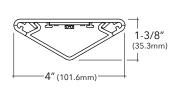
ate _____ Type ____









VERBENA V4

4" Suspended Direct or Indirect Linear



Specification Features

- Triangular lens form factor with 145LPW direct or 165LPW indirect widespread illumination
- Enhanced lighting pattern with 6% contribution past nadir
- Minimalistic profile with overall height less than 1 ½" with triangular lens
- Integral suspension and power cable with singular adjustment mechanism
- Triangular lens form factor with up to 2000lm/ft or 2300lm/ft indirect widespread illumination
- Milled X, T, Y, 90°, 120°, 135° connectors, and a direct-to-indirect alternating joint











Example Part #: V4D-A-830HO-26'-CAC48JB-U-FSD-1-0-W

/4_ ·		-		-	-				-
OUSING	SHIELDING	CRI, CCT & OUTPUT	LENGTH OR PATTERN	MOUNTING	VOLTAGE	DRIVER	CIRCUITING	BATTERY & EMERGENCY	FINISH

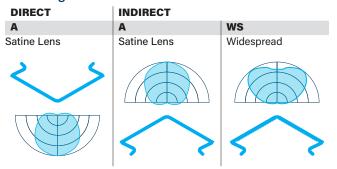
V4 _			
HOUSING	SHIELDING	CRI, CCT & OUTPUT ¹	LENGTH OR PATTERN ²
V4D - Verbena 4 Direct V4I - Verbena 4 Indirect Housing pg. 2 Use page 7 to draw out the pattern.	A - Satine Lens WS - Widespread Lens Shielding pg. 2	_27 2700K _30 3000K _35 3500K _40 4000K CL Custom Lumens CW Custom Watts Lumen Output pg. 2	Individual Fixture Continuous Row S Square H Hexagon O Octagon R_ x Rectangle L_ x L-Shape U_ x_ x U-Shape Y_ x_ x Y-Shape T_ x_ x T-Shape X_ x_ x_ x X-Shape Length and Pattern pg. 2-3

	_		_
MOUNTING ³	VOLTAGE	REMOTE DRIVER	CIRCUITING
CACG Conductive AC to Grid CACJB - Conductive AC to J Box WA - Wall Mount (Direct only) S - Surface Mount (Direct only) Mounting pg. 3	U - Universal (120 thru 277V) 1 - 120V 2 - 277V 3 - 347V Voltage pg. 4	FSD - Factory Select Driver (1%, 0-10v) PL2 - Advance Xitanium (1%, 0-10v) OL2 - Osram (1%, 0-10v) OL4 - Osram 347v (1%, 0-10v) EE1 - eldoLED ECOdrive (1%, 0-10v) ES1 - eldoLED SOLOdrive (0.1%, 0-10v) LH1 - Lutron Hi-lume (1%, EcoSystem) Driver pg. 4	1 - Single Circuit E - Emergency (entire fixture) N - Night Light (entire fixture) Circuiting pg. 4

FINISH	CONTROLS
W - White S - Metallic Silver BL - Textured Black BR - Bronze GR - Graphite CC - Custom Color Finish pg. 5	Pinnacle is able to accommodate different control solutions from different manufacturers. Consult Factory for more information.
	W - White S - Metallic Silver BL - Textured Black BR - Bronze GR - Graphite CC - Custom Color

When specifying CRI, CCT & OUTPUT the first _ is for specifying either **8** - 80CRI or **9** - 90CRI. The ending _ are for specifying output, example **HO** - High Output. See output charts for more information. ²Individual fixtures come in 1, 2, 3, 4, 5, 6, 7, & 8' lengths. Continuous row comes in 1' increments. When specifying patterns specified length will be fixture length. Patterns will be longer then specified length. ³ Specify CAC length standard CAC is 48''. Example: CAC48JB. Specify grid: G1=15/16'', G9=9/16'', GS=Screw Slot. Example: CAC48G1. Connectors are not available with **S** - Surface mount, or **WA** - Wall mount options. ⁴Enter quantity for Battery and Emergency, Example 1PLL.

Shielding



Output

- Specify either 80 or 90 CRI Longer lead-time may apply for 90 CRI. Consult factory.

90 CRI = R9≥50

Custom Output - Lumens OR Wattage

Specify CRI, CCT and desired lumens (i.e. CL835500) __ Specify CRI, CCT and desired wattage (i.e. CW9407)

Total Max lumens: A Lens- 2,012, WS Lens- 2,330. Max lumens dependant on color temp. Consult factory for more information

Total Max watts: 14.8. Consult factory for more information

80 CRI

	Color	Output	Lumens	Shielding			
			per foot	Α		WS	
				Satine Le	ns	Widespread	
				LPW	Watts/ft	LPW	Watts/ft
830LO	3000K	Low	500	142	3.5	162	3.1
830MO	3000K	Medium	750	141	5.3	161	4.7
830HO	3000K	High	1000	141	7.1	159	6.3
835LO	3500K	Low	500	146	3.4	166	3.0
835MO	3500K	Medium	750	145	5.2	165	4.5
835HO	3500K	High	1000	145	6.9	164	6.1
840LO	4000K	Low	500	148	3.4	168	3.0
840MO	4000K	Medium	750	147	5.1	168	4.5
840HO	4000K	High	1000	146	6.9	167	6.0

90 CRI

927LO	2700K	Low	500	114	4.4	132	3.8
927MO	2700K	Medium	750	112	6.7	131	5.7
927HO	2700K	High	1000	111	9.0	131	7.7
930LO	3000K	Low	500	117	4.3	137	3.7
930MO	3000K	Medium	750	116	6.5	135	5.5
930HO	3000K	High	1000	115	8.7	135	7.4
935LO	3500K	Low	500	119	4.2	139	3.6
935MO	3500K	Medium	750	118	6.4	137	5.5
935HO	3500K	High	1000	117	8.5	137	7.3
940LO	4000K	Low	500	123	4.1	143	3.5
940MO	4000K	Medium	750	121	6.2	141	5.3
940HO	4000K	High	1000	120	8.3	141	7.1

Length

- All individual units cannot be joined, end plates are factory installed and cannot be removed
- End caps add 2-1/2" (1-1/4" per end) to the overall length of the fixture/row, end caps do not add to the mounting distance
- For patterns, refer to Pattern section on next page

1	2	3	4	5	6	7	8	_
Indiv. Fixture	Cont. Run							
12" (304.8mm)								Specify nominal overall row length
	24" (609.6mm)							to the 1'
		36" (914.4mm)						
			48" (1219.2mm)					
				60" (1524mm)				
					72" (1828.8mm)			
						84" (2133.6mm)		

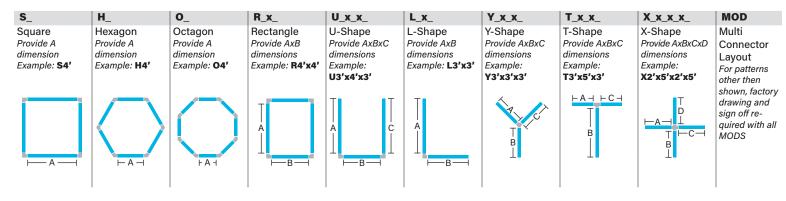
96" (2438.4mm)

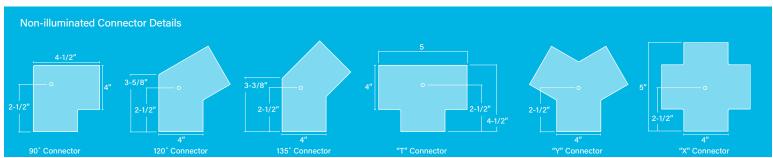
Specify to the 1'

Patterns

- Specify pattern shape and requested fixture length
- Length spcified will not reflect overall pattern dimensions
- Angles and shapes not shown require Mod Pattern; consult factory
- All connectors are NON ILLUMINATED
- Minimum length for any single part of a pattern is 2'
- All lengths are TO THE FOOT ONLY

- Driver/Battery Count dictated by product configuration
- Our in house milling capabilities enable the design and development of any non-standard connector.
- Example part number: V4D-A-835HO-Y8x6x8-CAC48JB-U-FSD-1-0-GR see resource guide for more information
- Patterns not available with WA or S mounting





Mounting

- Specify cable length in ordering code (CAC48JB)
- Standard adjustable cable. Specify 48", 120", 240", or 350'
- End plates attached at factory
- Canopies and mounts match fixture finish. See Finish section for additional details.

CAC _ G_	Conductive AC to Grid (specify grid type: G1, G9, GS)				
CACJB	Conductive AC to Junction Box				
WA	Wall Mount (Direct Only, ADA compliant)				
9	Surface Mount (Direct Only)				

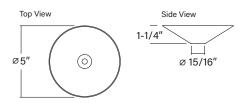
CAC Canopy Details

CAC is an integrated power and suspension cable that is smaller in diameter than a traditional SJT cable. CAC is 2 conductive cables and suspension, standard power cable (SJT) is 5 conductive cables and no suspension.

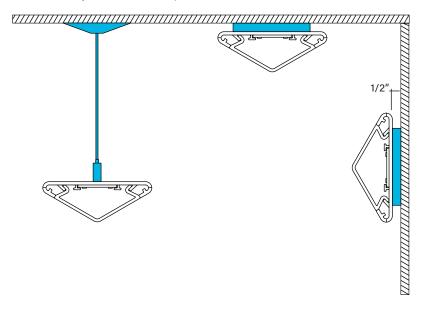


CAC = 3/16" SJT = 3/8"

A larger power side canopy allows for adjustability of the CAC cable inside of the canopy.



- Approved for dry/damp location unless otherwise noted
- Refer to installation instructions during installation at the job site
- Maximum fixture weight is 10 lbs for a standard 4' fixture
- Driver/Battery Count dictated by product configuration
- Connectors only available with CAC options.



Voltage

 Some VERBENA configurations will not accommodate all voltage options; consult with factory

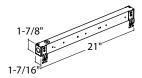
U	Universal
1	120 volt
2	277 volt
3	347 volt

Remote Driver

- Driver/Battery Count dictated by product configuration
- Standard Driver Option = FSD
- Driver Lifetime: 50,000 hours at 25°C ambient operating conditions
- For more driver options, see Pinnacle Resource Guide
- Some VERBENA configurations will not accommodate all driver options; consult with factory
- All configurations with no PLL, ILL or Emergency Control Device options will use Slim Remote Box

0-10V Drivers	
FSD	Factory Select Driver (1%, 0-10v)
PL2	Signify Advance Xitanium 1%, 0-10v
OL2	Osram Optotronic, 1%, 0-10v
OL4	Osram Optotronic 347v, 1% 0-10v, requires 347v option
EE1	eldoLED ECOdrive 1%, 0-10v Logarithmic
EE2	eldoLED ECOdrive 1%, 0-10v Linear
ES1	eldoLED SOLOdrive 0-10v, 0.1% Logarithmic
ES2	eldoLED SOLOdrive 0-10v, 0% Linear
DALI Drivers	
EE3	eldoLED ECOdrive .1%, DALI (logarithmic)
ES3	eldoLED SOLOdrive .1%, DALI (logarithmic)
Lutron Driver	s
LH1	Lutron Hi-lume Soft-on, Fade-to-black 1%, EcoSystem, LDE1
LH4	Lutron Hi-Lume 1%, 2-wire, Lutron-LTEA2W, 120v only

Slim Remote Box



How to specify Circuiting, Battery and Emergency



- Select fixture circuiting from options below
- Some VERBENA configurations will not accommodate all circuiting options, consult with factory

Circuiting

1	Single Circuit
E	Emergency Circuit only
N	Night Light Circuit only

Specifications and dimensions subject to change without notice. Specification sheets that appear on pinnacle-ltg.com are the most recent version and supersede all other previously printed or electronic versions.

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- Battery and emergency section options are available in addition to fixture circuit
- Select battery and emergency section options below; factory shop drawing required
- Some VERBENA configurations will not accommodate all circuiting options, consult with factory Configurations with PLL or ILL or any Emergency control device will require standard remote box.

Battery and/or Emergency If Required

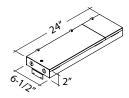
No battery or specific emergency section required

Battery

- Select battery section type if required, indicate total QTY. Example 2PLL
- 90 minute battery runtime; test button is remote to fixture and requires an additional drop
- Entire direct fixture housing is on battery for individual fixtures
- For more battery options available, see Pinnacle Resource Guide

0	No Battery					
_FSB	Factory Select Battery (10w option)					
_FSBST	Factory Select Battery (10w, Self Testing)					
_ILL	ota 10w Integral Lithium, Self Testing					
_IRC	lota 10w Remote					
_IRH	lota 20w Remote					
_PRL	Bodine 7w Remote					
_PRS	Bodine 7w Remote, Self Testing					
_PRH	Bodine 20w Remote					
_PLL	Bodine 10w Integral Lithium, Self Testing					
_PRD	Bodine 10w Remote, Dual Flex					

Standard Remote Box



For Approximate Battery Lumen Output

- Multiply battery wattage X fixture LPW shown on Lumen Table
- 92.3 (LPW) x 10 (watts) = 923 battery lumen output

Emergency

- Select emergency section type if required, indicate total QTY. Example 1E
- Combine battery and emergency section ordering codes if both options are selected
- Emergency circuiting sections are for use when specifying emergency options on continious runs

_FSG	Factory Select Automatic Load Control Relay (ALCR), UNV						
_GI	mergency Transfer Switch (ETS) DR Emergency Control Device, UNV						
_GB	Bodine GTD, Generator Transfer Device, 120v or 277v						
_E	Emergency circuit						
_N	Night Light circuit						
_L	Life Safety circuit section NO THROUGH WIRE						

Battery OR Emergency Ordering Examples

- Single circuit, 10w Battery
- Emergency only, 10w Battery
- Single circuit, GTD required

Ordering Code: 1-1PLL Ordering Code: E-1PLL Ordering Code: 1-1G

Combination Section Ordering Examples

- Single circuit, (1) 10w battery, (1) emergency section Ordering Code: M-2PLL2E
- Multi circuit, (2) 10w battery, (2) emergency sections
- Single circuit, (1) night light section

Ordering Code: 1-1PL1E

Ordering Code: 1-1N

Finish

- Standard powder-coat textured white, metallic silver, textured black, graphite or bronze painted finish; consult factory for chip of standard paint finishes
- Selecting a fixture finish other than white may impact lumen output; consult factory for more information

W	White (white cord/white canopy)
S	Metallic Silver (grey cord/silver canopy)
BL	Textured Black (black cord/black canopy)
BR	Bronze (white cord/bronze canopy)
GR	Graphite (white cord/graphite canopy)
CC	Custom Color (white cord/CC canopy to match fixture)

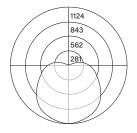
Controls

· Pinnacle is able to accommodate different control solutions from different manufacturers. Consult Factory for more information.

Photometrics

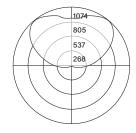
Satine Lens

Test # KPL2015-4 V4D-A-N-40-4 Catalog # 3854 Lm Lumens Watts 27.9 W Efficacy 138 LPW



Widespread Lens

KPL2015-3 Test # V4I-N-WS-40-4 Catalog # 3856 Lm Lumens Watts 23.9 W Efficacy 161 LPW



Candela Distribution

Vert	Horizontal	Ang	le
Angle			

0	22.5	45	67.5	90
1115	1115	1115	1115	1115
1108	1111	1110	1107	1108
1093	1095	1096	1094	1095
1069	1072	1073	1072	1073
1035	1038	1041	1042	1042
992	995	1000	1002	1003
941	945	953	956	957
883	886	895	901	902
817	820	831	842	843
743	747	763	775	777
666	671	689	705	708
581	589	613	634	638
492	503	535	565	570
402	410	459	521	527
307	336	408	478	485
216	254	362	433	440
133	196	313	386	393
68	148	264	335	342
14	104	213	283	290
	1115 1108 1093 1069 1035 992 941 883 817 743 666 581 492 402 307 216 133 68	1115 1115 1108 1111 1093 1095 1069 1072 1035 1038 992 995 941 945 883 886 817 820 743 747 666 671 581 589 492 503 402 410 307 336 216 254 133 196 68 148	1115 1115 1115 1115 1108 1111 1110 1096 1096 1069 1072 1073 1035 1041 1992 995 1000 941 945 953 883 886 895 817 820 831 743 747 763 666 671 689 581 589 613 492 503 535 402 410 459 307 336 408 216 254 362 133 196 313 68 148 264	1115 1115 1115 1115 1115 1108 1111 1100 1007 1007 1007 1069 1072 1073 1072 1073 1072 1035 1038 1041 1042 992 995 1000 1002 941 945 953 956 883 886 895 901 817 820 831 842 743 775 666 671 689 705 581 589 613 634 492 503 535 565 402 410 459 521 307 336 408 478 216 254 336 433 386 68 133 386 68 148 264 335

Luminance Data (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	10392	8331	7968
55	9896	7475	7150
65	9110	6532	6835
75	7674	6250	6921
85	5963	6279	7174

Candela Distribution

Vert	Horizontal Angle					
Angle						
	0	22.5	45	67.5	90	
90	12	88	198	242	244	
95	40	131	265	313	316	
100	87	184	338	389	390	
105	145	242	412	473	475	
110	212	311	490	560	568	
115	285	387	573	646	650	
120	358	461	662	731	737	
125	428	536	746	824	830	
130	500	607	818	911	917	
135	573	674	877	981	990	
140	641	732	918	1029	1040	
145	703	782	942	1051	1062	
150	759	825	956	1048	1059	
155	811	861	961	1033	1041	
160	855	890	960	1011	1017	
165	889	910	954	984	989	
170	914	924	945	959	962	
175	930	934	938	940	942	
180	936	936	936	936	936	

For all available IES files, please visit our website at pinnacle-ltg.com. Photometry testing in accordance to IESNA-LM-79-08 at an NVLAP accredited testing laboratory, Testing conducted at 25°C ambient conditions

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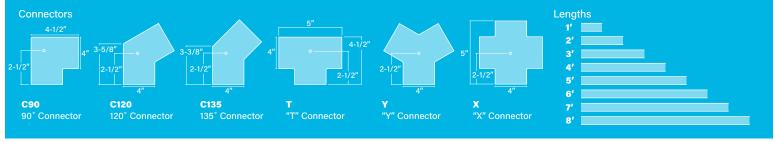


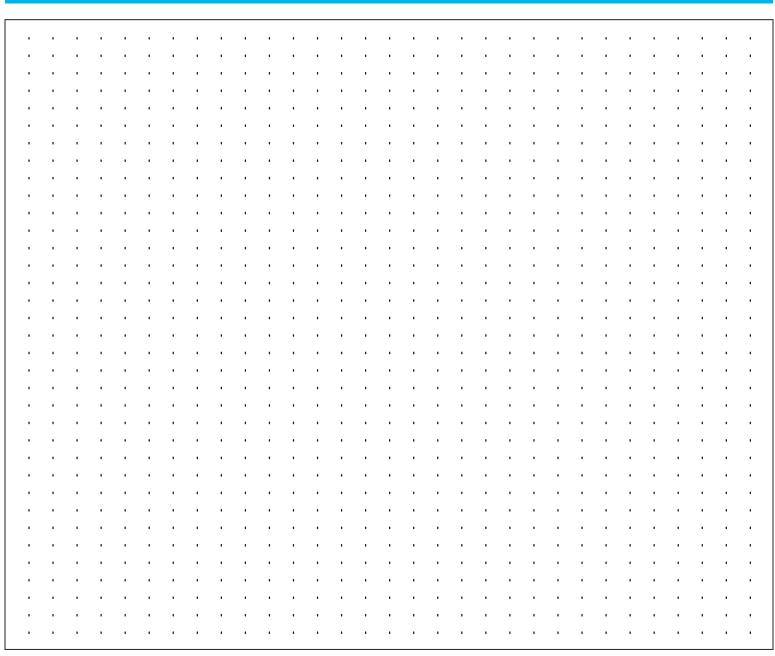


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Multi Connector Layout

- Use the below to sketch your desired pattern. Available fixture and connectors are listed in the legend. Label your pattern components according to legend to simplify specification.
- Label the linear sections with length, and lable the pattern with light direction, Direct (**D**) or Indirect (**I**) entire pattern will be either direct or indirect, to change direction of light in pattern see V4AJ spec sheet. Cannot use connector with another connector.
- All lengths are TO THE FOOT ONLY.







Applications & Certificates

Construction: 6063-T6 Extruded aluminum housing. Highly reflective die-formed white painted reflector.

Shielding: Diffuse snap-in acrylic lens with matte finish, removable for maintenance.

Mounting: Conductive Aircraft cable, wall and surface mount available. Power mount supplied with conductive aircraft cable and oval 6-1/2" H x 4-1/4" W canopy. Non-power supplied with aircraft cable and 2" (50.8mm) canopy. Refer to installation instructions for appropriate ceiling detail. Canopies are painted white unless otherwise specified. Maximum fixture weight is 10 lbs for a standard 4' fixture.

LED: 25°C test environment. Lumen output/wattage has a margin of +/- 5%; 2' or 3' lengths may have a greater wattage deviation. Luminaire configurations tested in accordance with IES LM-79. Diodes tested in accordance with IES LM-80. Lifetime calculated using IES TM-21. Minimum lifetime greater than 60,000 hours. L70 = 124,900 hours and L90 = 37,200 hours. MacAdam 3-Step Ellipses. Not all products are Lighting Facts listed. For all available IES files, please visit our website at pinnacle-ltg.com.

CRI, CCT & Output: Three lumen packages available. Low (LO), Medium (MO) and High (HO). Custom outputs are available. Specify custom lumens or watts between standard offering listed on CRI, CCT & Output page. 80 CRI is available for 3000K, 3500K, and 4000K. 90 CRI is available for 2700K, 3000K, 3500K, and 4000K. 90 CRI = R9≥50.

Voltage: Universal (U), 120 volt (1), 277 volt (2) and 347 volt (3) options available. Must specify OL4 in Driver section when 347 volt (3) is selected. Some VERBENA configurations will not accommodate all voltage options; consult with factory.

Driver: Standard Driver option is Factory Selected Driver 0-10V, 1% = FSD. Electronic driver, Power factor is >0.9 with a THD <20%. Driver Lifetime: 50,000 hours at 25°C ambient operating conditions. Ambient operating range: -20°F/-30°C to 107°F/42°C. For more driver options, see Pinnacle Resource Guide. Some VERBENA configurations will not accommodate all driver options.

Circuiting: Select from single circuit (1), Emergency circuit (E) or Night Light circuit (N).

Remote Mounting Guide

Distance limited by max input watts shown.

Max Distance	56' (.53A)	42' (.7A)	28' (1.05A)	20' (1.5A)	12' (2A)
4' Housing	4.0w/ft	5.4w/ft	8.1w/ft	11.6w/ft	17.2w/ft
8' Housing	N/A	2.6w/ft	4.0w/ft	5.8w/ft	7.8w/ft

For emergency circuiting situations that require no through wire or circuit separation, Life Safety Circuit should be selected. This will provide a separate power feed and only the Life Safety Circuit in that section. Some VERBENA configurations will not accommodate all circuiting options; consult with factory.

Battery & Emergency: Select battery or emergency options if required. If battery or emergency option is not required, enter 0. Battery duration is 90 minutes as standard. Test button is remote to fixture. For more Battery options, see Pinnacle Resource Guide.

Finish: Standard powder-coat textured white, metallic silver, textured black, graphite or bronze painted finish; consult factory for chip of standard paint finishes. Canopies painted white unless specified differently in the options section of the part number. Contact factory for additional custom color and finish options.

Controls: Consult factory.

Labels: UL and cUL 2108 Listed. Low, Medium and HO lumen packages are approved for dry/damp location unless otherwise noted.

Fixture Weight: Maximum fixture weight is 10 lbs for a standard 4' fixture.

Buy American Act Compliant

Warranty: VERBENA offered with a 5-year limited warranty. Covers LED, driver and fixture

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