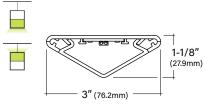
Type



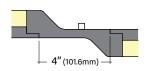




VERBENA V3AJ

3" Direct and Indirect Linear with **Alternating Joint**





Specification Features

V3AJ

HOUSING

V3AJ - Verbena 3 Alternating Joint

- 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 1/2" 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

SHIELDING

A - Satine Lens

Milled X, T, Y, 90°, 120°, 135° connectors, and a direct-to-indirect alternating joint











Example Part #: V3AJ-A-830HO-26'-CAC48JB-U-FSD-1-0-W

LENGTH OR PATTERN² - Individual Fixture - Continuous Row

V3AJ	_	_	_	_	_	_	_	_	_
HOUSING	SHIELDING	CRI, CCT &	LENGTH OR	MOUNTING	VOLTAGE	DRIVER	CIRCUITING	BATTERY &	FINISH
		OUTPUT	PATTERN					EMERGENCY	

CRI, CCT & OUTPUT¹

27_ - 2700K

Housing pg. 2 For straight runs, specify overall nominal length. Use page 7 to draw out the straight run and include all alternating joints while indicating light directionality and shielding.	WS - Widespread Lens Shielding pg. 2		Horitudus Row S - Square H - Hexagon O - Octagon R x - Rectangle L x - L-Shape U x x - U-Shape Y - 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 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 - eldoLED Optotronic (1%, 0-10v) OL4 - eldoLED Optotronic 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 2 - Dual Circuit E - Emergency (entire fixture) N - Night Light (entire fixture) Circuiting pg. 4

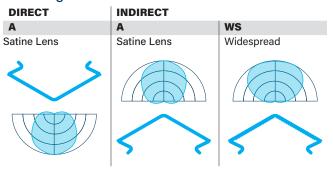
BATTERY & EMERGENCY ⁴	FINISH	CONTROLS
O - None _FSB - Factory Select Battery _FSG - Factory Select ALCR _GI - lota ETS DR _GB - Bodine GTD _ILL - lota 10W _PLL - Bodine 10W _E - Emergency Section _N - Night Light Section _Battery and Emergency pg. 5	W - White S - Metallic Silver BL - Textured Black BR - 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.

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. 2Continuous row comes in 1' increments starting at 2'. For straight runs specifiq overall nominal length and use last page to draw out how the length should be broken down into directions. For patients specified length will be fixture length. Patterns will be longer than specified length. For Mod layouts consult factory. 3 Specify CAC length standard CAC is 48". Specify grid: G1=15/16", G9=9/16", GS=Screw Slot. Example: CAC48G1 "Enter quantity for Battery and Emergency, Example 1PLL.

VERBENA V3A | Suspended Linear



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

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

Total Max lumens: A Lens- 2.044, WS Lens- 2,312. 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		Shieldin	g		
			per foot	A		WS	
				Satine Le	ns	Widespread	
				LPW	Watts/ft	LPW	Watts/ft
830LO	3000K	Low	500	142	3.5	161	3.1
830MO	3000K	Medium	750	141	5.3	160	4.7
830HO	3000K	High	1000	141	7.1	158	6.3
835LO	3500K	Low	500	146	3.4	164	3.0
835MO	3500K	Medium	750	145	5.2	164	4.6
835HO	3500K	High	1000	145	6.9	163	6.1
840LO	4000K	Low	500	148	3.4	167	3.0
840MO	4000K	Medium	750	147	5.1	167	4.5
840HO	4000K	High	1000	146	6.9	166	6.0

90 CRI

927LO	2700K	Low	500	115	4.3	131	3.8
927MO	2700K	Medium	750	114	6.6	130	5.8
927HO	2700K	High	1000	113	8.8	129	7.8
930LO	3000K	Low	500	119	4.2	136	3.7
930MO	3000K	Medium	750	118	6.4	134	5.6
930HO	3000K	High	1000	117	8.5	134	7.5
935LO	3500K	Low	500	121	4.1	138	3.6
935MO	3500K	Medium	750	120	6.3	136	5.5
935HO	3500K	High	1000	119	8.4	136	7.3
940LO	4000K	Low	500	125	4.0	142	3.5
940MO	4000K	Medium	750	123	6.1	140	5.3
940HO	4000K	High	1000	122	8.2	140	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 mounting distance
- For patterns, refer to Pattern section on next page

2	3	4	5	6	7	8	-
Indiv. Fixture	Cont. Run						
24" (609.6mm)							Specify nominal overall row length
	36" (914.4mm)						to the 1'
		48" (1219.2mm)					
			60" (1524mm)				
				72" (1828.8mm)			
					84" (2133.6mm)		
						96" (2438.4mm)	

(2436,411111)

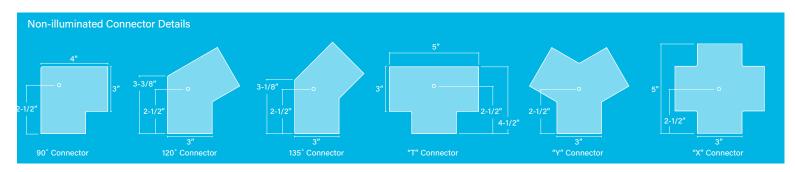
Specify to the 1'

$^{+}$

Patterns

- If using alternating joint with patterns use last page to draw out the pattern
- Direction of light must be the same on all sides of a connector, can only change direction of light in straight section
- Specify pattern shape and requested fixture length
- Length specified will not reflect overall pattern dimensions
- Some connectors require longer lead-times. Angles and Shapes not shown
- require Mod Pattern; Consult Factory.
- All connectors are NON ILLUMINATED
 Driver/Battery Count dictated by product configuration
- Minimum length for any single part of a pattern is 2'
- All lengths are TO THE FOOT ONLY

S _	H_	O _	R_x_	U_x_x_	L_x_	Y_x_x_	T_x_x_	X_x_x_x_	MOD
Square	Hexagon	Octagon	Rectangle	U-Shape	L-Shape	Y-Shape	T-Shape	X-Shape	Multi
Provide A	Provide A	Provide A	Provide AxB	Provide AxBxC	Provide AxB	Provide AxBxC	Provide AxBxC	Provide AxBxCxD	Connector
dimension Example: \$12'	dimension Example: H12'	dimension Example: 012'	dimensions Example:	dimensions Example:	dimensions Example:	dimensions Example:	dimensions Example:	dimensions Example:	Layout
Lxample. 312	Lxample. IIIL	Lxample. G12	R16'x12'	U12'x16'x12'	L12'x12'	Y12'x16'x12'	T12'x12'x12'	X12'x16'x12'x16'	For patterns other then
	✓ No Figure 1	FAI	A I I—B—I	A	A A I—B—I	T	HAH	T D L T I I I I I I I I I I I I I I I I I I	shown, factory drawing and sign off re- quired with all MODS



Mounting

- Driver/Battery Count dictated by product configuration
- 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

CAC _ G_	Conductive AC to Grid (specify grid type: G1, G9, GS)
CAC JB	Conductive AC to Junction Box

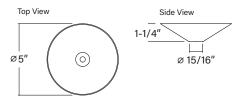
CAC Canopy Details

 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.

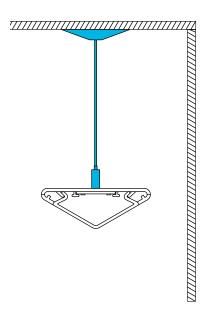


CAC = 3/16" SJT = 3/8"

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



- additional details.
- 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





Voltage

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

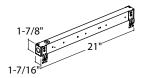
U	Universal
1	120 volt
2	277 volt
3	347 volt

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	eldoLED Optotronic, 1%, 0-10v
OL4	eldoLED 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
2	Dual 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 options are available in addition to fixture circuit
- Select battery and emergency 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 required

Battery

- Battery is REMOTE
- Select battery type if required, indicate total QTY. Example 2PLL
- 90 minute battery runtime; test button is remote to fixture
- Battery operates full length of housing up to 8' on individual fixtures or within continuous row
- For more battery options available, see Pinnacle Resource Guide

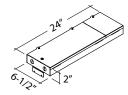
0	No battery
_FSB	Factory Select Battery (10w option, remote in box)
_FSBST	Factory Select Battery (Self Testing, remote in box)
_ILL	lota 10w (low profile, remote in box)
_IRC	Iota 10w (remote with conduit)
_ PLL	Philips Bodine 10w (low profile, remote in box)
_PRD	Philips Bodine 10w (remote with conduit)

Emergency

- Emergency Control Device REMOTE in driver box
- 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 continuous runs

_FSG	Factory Select ALCR Emergency Control Device, UNV					
_GI	lota ETS-DR, Emergency Control Device, UNV					
_GB	Bodine GTD, Emergency Control Device, 120v or 277v					
_E	Emergency circuit					
_N	Night Light circuit					
_L	Life Safety circuit section NO THROUGH WIRE					

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

Battery OR Emergency Ordering Examples

- Single circuit, 10w Integral Battery Ordering Code: 1-1PLL
- Emergency only, 10w Integral Battery Ordering Code: E-1PLL
- Single circuit, GTD required

Ordering Code: 1-1GB

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.

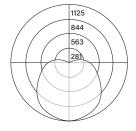


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Photometrics

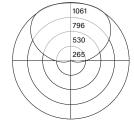
Satine Lens

Test # KPL2015-2
Catalog # V3D-A-N-40-4
Lumens 3868 Lm
Watts 27.5 W
Efficacy 141 LPW



Widespread Lens

Test # KPL2015-1 Catalog # V3I-N-WS-40-4 Lumens 3883 Lm Watts 24.2 W Efficacy 161 LPW



Candela Distribution

Vert	Horizontal Angle
ماممام	

70 884 889 892 897 905

75 818 822 828 837 843

80 818 822 828 837 843

85

747 750

747 750 757

raigic					
	0	22.5	45	67.5	90
0	1117	1117	1117	1117	1117
5	1110	1114	1109	1109	1113
10	1110	1114	1109	1109	1113
15	1095	1099	1095	1096	1100
20	1095	1099	1095	1096	1100
25	1071	1074	1072	1073	1077
30	1071	1074	1072	1073	1077
35	1036	1041	1039	1042	1047
40	1036	1041	1039	1042	1047
45	994	999	998	1002	1007
50	994	999	998	1002	1007
55	942	947	949	953	960
60	942	947	949	953	960
	1	1	1	1	1

757 770 778

770 778

Luminance Data (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	14199	11327	10779
55	13556	10171	9731
65	12502	8940	9357
75	10627	8679	9572
85	8488	8857	9984

Candela Distribution

Vert	Horizontal Angle					
Angle						
	0	22.5	45	67.5	90	
90	13	92	201	255	259	
95	48	130	260	320	324	
100	98	181	323	391	394	
105	162	234	388	466	472	
110	237	304	456	546	556	
115	315	382	526	624	631	
120	397	459	607	701	709	
125	474	539	687	781	789	
130	556	618	762	856	865	
135	637	693	826	919	929	
140	711	764	882	968	977	
145	784	829	926	1002	1011	
150	850	886	964	1024	1032	
155	909	935	993	1037	1043	
160	960	977	1015	1043	1048	
165	999	1010	1031	1046	1050	
170	1029	1032	1043	1048	1051	
175	1046	1048	1050	1049	1051	
180	1052	1052	1052	1052	1052	

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

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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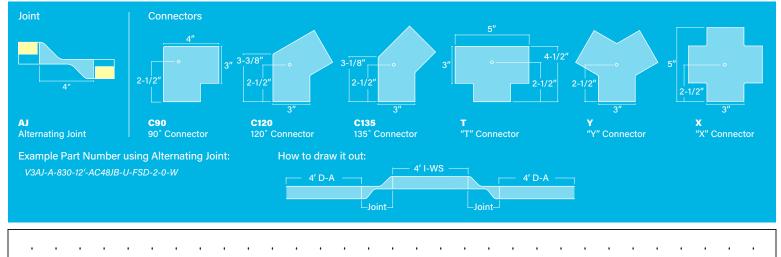
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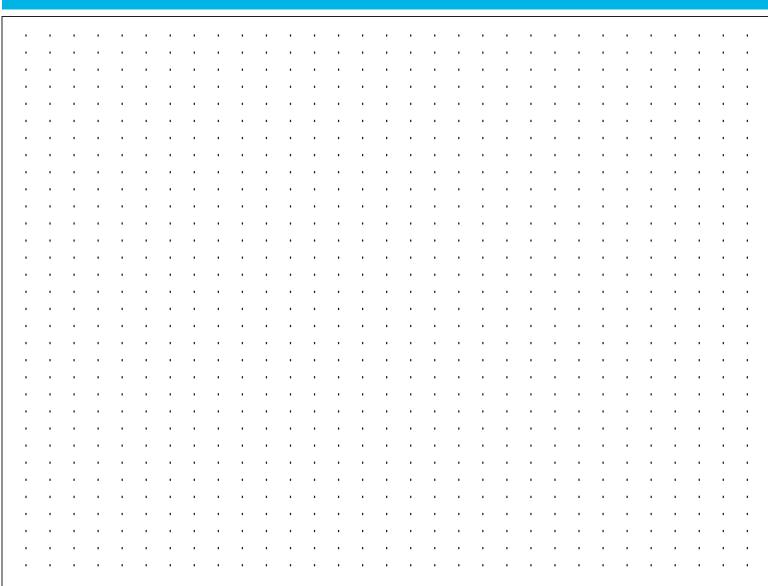


VERBENA V3AJ Suspended Linear

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 light direction Direct (D) or Indirect (I), and shielding - Satine (A) or Widespread (WS); example 4D-A would be 4' Direct with Satine Lens.
- Cannot use connector with another connector.
- Fixtures available in 2', 3', 4', 5', 6', 7', and 8' lengths. All lengths are TO THE FOOT ONLY.
 CAN BE DONE: Alternating inbetween connectors ie. connector-8D-4I-8D-connector
- CANNOT BE DONE: Alternating at connectors ie. connector-8D-connector-8I









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	8.2w/ft	11.9w/ft	16.1w/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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