



# VLO 12V LED Small Accent

## One light, three lumen levels.

Our VLO Accent fixture is equipped with the Lumen Effects System, which allows you to easily switch between three lumen outputs: 100, 200, or 300, with the use of the Magnetic Key. Its field configurable design allows for customization based on the needs of the application.

Variable Lumen Output (VLO) Adjustment		Lumens
Level 1	Flashes one time	100 lm
Level 2*	Flashes two times	200 lm
Level 3	Flashes three times	300 lm



\*Factory setting

### VLO 12V LED Small Accent with Lumen Effects System makes designing and modifying landscape lighting easier.



**Lumen Effects System** eliminates the need to mechanically adjust or open the fixture, supporting product longevity.



**Flexible Lumen Levels** allows you to set and adjust the lumen levels as the landscape needs change.



**Sealed and fully encapsulated** to safeguard from water ingress and the outdoor elements – helping to extend the life of the product.



**Versatile IP66 rated** design provides a dust and water tight housing that can protect against strong jets of water that can occur in coastal areas with strong storms or applications close to sprinklers.

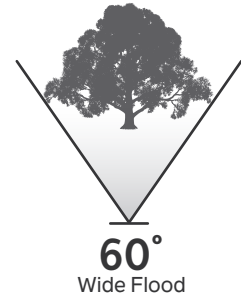


**6,000-volt system surge protection** protects against power surges and irregularities when paired with one of our transformers.










**PRODUCT ORDERING GUIDE**

Ordering Guide (product number breakdown)	<b>1 Item Number for Fixture &amp; Beam Angle:</b>	<b>2 Product Finish:</b>	<b>3 Color Temperature:</b>
Example: 16015 CBR 30	16015 = 15° Narrow Spot 16016 = 35° Flood 16017 = 60° Wide Flood  <b>1 6 0 1 5</b>	AZT = Textured Architectural Bronze BKT = Black CBR = Centennial Brass  <b>C B R</b>	27 = 2700K, Warm White 30 = 3000K, Pure White  <b>3 0</b>

**BEAM SPREAD**



**PHOTOMETRICS**

16015AZT27 16015BKT27 16015CBR27 15° Narrow Spot 2700K - Warm White	16015AZT30 16015BKT30 16015CBR30 15° Narrow Spot 3000K - Pure White	16016AZT27 16016BKT27 16016CBR27 35° Flood 2700K - Warm White	16016AZT30 16016BKT30 16016CBR30 35° Flood 3000K - Pure White	16017AZT27 16017BKT27 16017CBR27 60° Wide Flood 2700K - Warm White	16017AZT30 16017BKT30 16017CBR30 60° Wide Flood 3000K - Pure White							
<b>LEVEL 1 LUMENS</b>	<b>Item</b> 16015 (Low - 100 Im)				<b>Item</b> 16016 (Low - 100 Im)				<b>Item</b> 16017 (Low - 100 Im)			
	<b>Beam</b> 15° Narrow Spot				<b>Beam</b> 35° Flood				<b>Beam</b> 60° Wide Flood			
	<b>Candela</b> Max Candela: 2122				<b>Candela</b> Max Candela: 452				<b>Candela</b> Max Candela: 179			
	<b>Distance</b>	<b>Foot-candles</b>		<b>Beam Width</b>	<b>Distance</b>	<b>Foot-candles</b>		<b>Beam Width</b>	<b>Distance</b>	<b>Foot-candles</b>		<b>Beam Width</b>
	60'	<b>0.3</b>		13.7'	40'	<b>0.2</b>		24.5'	40'	<b>0.1</b>		46.2'
	48'	<b>0.5</b>		10.9'	32'	<b>0.3</b>		19.6'	32'	<b>0.1</b>		37'
	36'	<b>1</b>		8.2'	24'	<b>0.5</b>		14.7'	24'	<b>0.2</b>		27.7'
24'	<b>2.1</b>		5.5'	16'	<b>1</b>		9.8'	16'	<b>0.4</b>		18.5'	
12'	<b>8.6</b>		2.7'	8'	<b>4.1</b>		4.9'	8'	<b>1.7</b>		9.2'	
8'	<b>19.3</b>		1.8'	4'	<b>16.5</b>		2.5'	4'	<b>6.8</b>		4.6'	
<b>LEVEL 2 LUMENS</b>	<b>Item</b> 16015 (Mid - 200 Im)				<b>Item</b> 16016 (Mid - 200 Im)				<b>Item</b> 16017 (Mid - 200 Im)			
	<b>Beam</b> 15° Narrow Spot				<b>Beam</b> 35° Flood				<b>Beam</b> 60° Wide Flood			
	<b>Candela</b> Max Candela: 3827				<b>Candela</b> Max Candela: 789				<b>Candela</b> Max Candela: 311			
	<b>Distance</b>	<b>Foot-candles</b>		<b>Beam Width</b>	<b>Distance</b>	<b>Foot-candles</b>		<b>Beam Width</b>	<b>Distance</b>	<b>Foot-candles</b>		<b>Beam Width</b>
	60'	<b>0.6</b>		13.7'	40'	<b>0.3</b>		24.5'	40'	<b>0.1</b>		46.2'
	48'	<b>0.9</b>		10.9'	32'	<b>0.5</b>		19.6'	32'	<b>0.2</b>		37'
	36'	<b>1.6</b>		8.2'	24'	<b>0.9</b>		14.7'	24'	<b>0.3</b>		27.7'
24'	<b>3.6</b>		5.5'	16'	<b>1.9</b>		9.8'	16'	<b>0.8</b>		18.5'	
12'	<b>14.5</b>		2.7'	8'	<b>7.7</b>		4.9'	8'	<b>3.1</b>		9.2'	
8'	<b>32.6</b>		1.8'	4'	<b>30.9</b>		2.5'	4'	<b>12.3</b>		4.6'	
<b>LEVEL 3 LUMENS</b>	<b>Item</b> 16015 (High - 300 Im)				<b>Item</b> 16016 (High - 300 Im)				<b>Item</b> 16017 (High - 300 Im)			
	<b>Beam</b> 15° Narrow Spot				<b>Beam</b> 35° Flood				<b>Beam</b> 60° Wide Flood			
	<b>Candela</b> Max Candela: 5382				<b>Candela</b> Max Candela: 1118				<b>Candela</b> Max Candela: 438			
	<b>Distance</b>	<b>Foot-candles</b>		<b>Beam Width</b>	<b>Distance</b>	<b>Foot-candles</b>		<b>Beam Width</b>	<b>Distance</b>	<b>Foot-candles</b>		<b>Beam Width</b>
	60'	<b>0.8</b>		13.7'	40'	<b>0.5</b>		24.5'	40'	<b>0.2</b>		46.2'
	48'	<b>1.3</b>		10.9'	32'	<b>0.7</b>		19.6'	32'	<b>0.3</b>		37'
	36'	<b>2.3</b>		8.2'	24'	<b>1.2</b>		14.7'	24'	<b>0.5</b>		27.7'
24'	<b>5.2</b>		5.5'	16'	<b>2.8</b>		9.8'	16'	<b>1.1</b>		18.5'	
12'	<b>21</b>		2.7'	8'	<b>11.1</b>		4.9'	8'	<b>4.4</b>		9.2'	
8'	<b>47.2</b>		1.8'	4'	<b>44.5</b>		2.5'	4'	<b>17.6</b>		4.6'	

### DIMENSIONS



### FINISH OPTIONS



**AZT** - Textured Architectural Bronze



**BKT** - Textured Black



**CBR** - Centennial Brass

### PERFORMANCE

Output Position	Level 1	Level 2	Level 3
Lumen Output	100 lm	200 lm	300 lm
Input Voltage	9V-15V	9V-15V	9V-15V
Power (VA) @ 15V AC	3.5VA	5.5VA	8VA
Power (W) @ 15V DC	2W	3.5W	5.5W
Efficacy (lm/W @ DC)	50 lm/W	57 lm/W	55 lm/W
Halogen Equivalents	10W	20W	30-35W

### SPECIFICATIONS

#### Fixture

Light Source	Integrated LED
Number of LEDs	1 High Output LED
Color Temperature	2700K, 3000K
Color Rendering Index	80
Beam Angle	10°, 35°, 60°
Binning	3 Step

*Fixture can be used in up or down position.*

#### Input

Input Voltage Range	9 – 15V AC or DC with no loss in light output
Input Frequency	47 - 63Hz
Input Current	877mA max@15VAC
Inrush Current	9A Max
Efficiency	> 57L/W @ 12VDC
Power Factor	> 0.7 @ 15V

### Environmental

Environmental Protection Rating	Wet, IP 66
Operation Ambient Temperature	-25°C - +40°C
Lumen Maintenance (L70)	50K Hours

### Mechanical & Housing Specification

Diameter/Height	4.5" L x 2.0" W x 3.75" H
Housing Material	Cast Aluminum, Cast Brass
Housing Color & Surface	AZT, BKT or CBR
Weight	13 oz (Aluminum), 30 oz (Brass)

### Lens Material

Tempered, shock resistance glass with high tolerance for thermal expansion and stress.

### Wire

18 AWG, 105°C, 300V 48" of usable #18-2 SPT-1W leads.

### Optics

Custom reflector provides superior fixture beam angle. Available in 10°, 35° and 60°.

### FIXTURE ATTRIBUTES

#### Included Accessories

8" Slotted In-ground Stake, 2 Gel-Filled Wire Nuts, Locknut, and Magnetic Key.

#### Optional Accessories

3" Riser Stem	<b>15509CBR</b>
6" Riser Stem	<b>15645AZT, BKT, 15510CBR</b>
12" Riser Stem	<b>15656AZT, BKT, 15511CBR</b>
18" Riser Stem	<b>15657AZT, BKT, 15512CBR</b>
24" Riser Stem	<b>15658AZT, BKT, 15513CBR</b>
Adjustable Riser Stem	<b>15570AZT, BKT</b>
Stem Coupler	<b>15649AZT, BKT</b>
Mounting Base	<b>15493CBR</b>
Two Fixture "T"	<b>15515CBR</b>
Surface Flange	<b>15601AZT, BKT</b>
Bracket	<b>15607AZT, BKT, 15516CBR</b>
Tree Mount	<b>15609AZT, BKT, CBR</b>
Elbow	<b>15647AZT, 15514CBR</b>
Gutter Mount	<b>15489CBR</b>
Long Cowl	<b>16067AZT, BKT, CBR</b>
Amber Lens	<b>16071AMB</b>
Green Lens	<b>16071GRN</b>
Hexcell Louver	<b>16073BK</b>
Beam Expander	<b>16090FRO</b>
8" Stake	<b>15575BK</b>
14" Stake	<b>15576BK</b>
Power Post	<b>15276BK</b>

### LOAD CHART

Power (VA)	Wire Gauge / Length (ft/m) Load Chart			
	10 AWG	12 AWG	14 AWG	16 AWG
0-20 VA	1860'/567 m	1150'/351 m	730'/223 m	450'/137 m
40 VA	930'/283 m	580'/177 m	370'/113 m	230'/70 m
60 VA	620'/189 m	390'/119 m	240'/73 m	150'/46 m
80 VA	470'/143 m	290'/88 m	180'/55 m	110'/34 m
100 VA	370'/113 m	230'/70 m	140'/43 m	90'/27 m
>100 VA	<b>Consult Technical Support</b>			

**TROUBLE SHOOTING**

<b>Fixture does not illuminate</b>	Verify power connections. Review installation guide for installation problem. Ensure manual reset breaker has not been tripped.
<b>Fixture flashes</b>	Verify load calculations for the installation. Check voltage at affected fixture. Verify you are on 15V output tap.
<b>Fixture turns off</b>	Verify power connections. Review installation guide for installation problems. Ensure manual reset breaker has not been tripped. Check voltage drop at fixture.
<b>Fixture trips breaker</b>	Check installation for a possible short or overload state. Isolate the identified short and replace affected fixture or remove fixture(s) installed in overload.
<b>Fixture returns to original lumen output</b>	The fixture has to be powered on for 2 minutes after final adjust to exit programming mode.

**LISTING**

UL 1838 Listed. Low Voltage Landscape Lighting Systems.

CSA C22.2#250.7 Listed.

FCC Part 15, subpart B, Class B

**WARRANTY**

Backed by our 15 year limited warranty. Visit [Kichler.com/Warranty](https://www.kichler.com/Warranty) for details.

**DISCLOSURE**

1. Chip binning ranges: (2700K 80+ CRI: 3 step), (3000K 80+ CRI: 3 step). LED chip data measured in accordance to IES LM-80.
2. Fixture has a 90% confidence luminous flux range to stated 3000K CCT target. Photometric (flux and color) data has been measured in accordance to IES LM-79.
3. Actual efficacy value can be calculated as follows: Lumen value divided by average power consumption.
4. Do not extend beyond the recommended maximum run length.
5. Recommend product be installed with 10 or 12 gauge wire.
6. Recommend 80% load/20% overhead rule for fixture load planning in reference to the power source. Calculating fixture loading this way provides additional resource for fixture adjustment and loss due to voltage drop due to wire run lengths.
7. We reserve the right to modify and improve the design of our fixtures without prior notice. We cannot guarantee to match existing installed fixtures for subsequent orders or replacements in regards to product appearance, CCT, or lumen output.
8. Damage caused by misuse (including use for an unintended application) or improper or incorrect installation, maintenance or repair, including failure to follow the applicable care and cleaning instructions, is not covered by our warranty.

**ADVANCED PRODUCT SOLUTIONS (APS) & LAYOUT TEAM**

Have installation issues or a product and location inquiry? We have you covered. Our APS team can provide you with technical guidance and professionally designed landscape lighting layouts free of charge.

Visit [Kichler.com/APS](https://www.kichler.com/APS), reach out to us at [layouts@kichler.com](mailto:layouts@kichler.com), or by phone Monday - Friday, 8:00 am to 6:30 pm EST, at **844-KICHLER (844-542-4537)** to get started.

See the entire VLO product line at [Kichler.com/VLO](https://www.kichler.com/VLO)