12V LED Accent Light with Variable Lumen Output (VLO)

16015-16017

PROJECT:	ORDERING:
TYPE:	COMMENTS:

OVERVIEW

The VLO Accent Light is unsurpassed in both style and performance. The VLO combines advanced LED, Driver & Optic technology with premium materials.
A single fixture provides the installer the option to select three different lumen outputs reducing installation complexity and increasing infield versatility.

FEATURES

- High lumens in small body
- Variable lumen output
- Advanced optics provide superb center to edge uniformity
- Available beam angle: 10°, 35° & 60°
- Complete sealed system for improved reliability
- Advanced ESD protection (6 kV)
- IP66 rated

PERFORMANCE

Output Position	Level 1	Level 2	Level 3
Lumen output	100	200	300
Input voltage	9-15	9-15	9-15
Power (VA) @ 15VAC	3.5	5.5	8
Power (W) @ 15VDC	2	3.5	5.5
Efficacy (Lm/W @DC)	50	57	55
Halogen Replacements	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 Angles	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

Output

Lumen Level 3 (max)	300
Lumen Level 2 (mid)	200 (factory setting)
Lumen Level 1 (low)	100

Environmental

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

Mechanical & Housing Specification

Length	4.5" / 114 mm
Width	2.0" / 50.5 mm
Height	3.7" / 94.5 mm
Housing Material	Aluminum, Brass
Housing Color & Surface	Black/AZT/ White/CBR Brass
Weight	Alum 13 oz/ 0.36Kg, Brass 30oz/ .9Kg

FIXTURE

Glass Lens

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

Body

A380 Aluminum, C360 Brass casting

Wire

18 AWG, SPT-1W, 105°C, 300V, 48" useable length

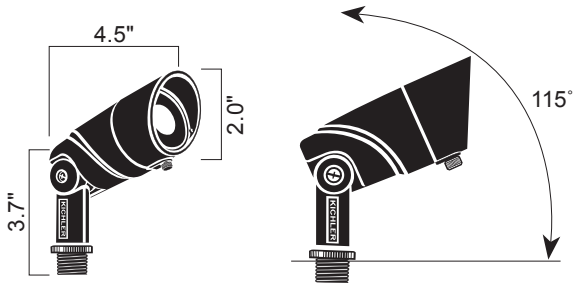
Optics

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

Included Accessories

Includes 8" slotted in-ground stake, 2 gel-filled wire nuts and lumen switching magnetic key.

Dimensions



AVAILABLE FINISHES

AZT Textured Architectural Bronze

BKT Textured Black

CBR Centennial Brass

WHT Textured White (35° only)

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INSTALLATION INFORMATION

Type Supply	Voltage Level	Dimming Level		
		1	2	3
AC Voltage (VA)	9V	3	5	7.5
	12V	3	5.5	8
	15V	3.5	5.5	8
DC Voltage (W)	9V	2	3.5	5.5
	12V	2	3.5	5.5
	15V	2	3.5	5.5

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

Ordering Guide (product number breakdown)

Example: 16017 CBR 30

1 Item Number for Fixture Size & Beam Angle:

16015 = Small 15° Spot
16016 = Small 35° Flood
16017 = Small 60° Wide Flood

16017

2 Product Finish:

AZT = Textured Architectural Bronze
BKT = Black
CBR = Centennial Brass
WHT = Textured White (only in 35°)

CBR

3 Color Temperature:

27 = 2700K, Warm White
30 = 3000K, Pure White

30

LOW LUMENS

Item Number	16015 (low)			16016 (low)			16017 (low)	
Beam Angle	15° Spot			35° Flood			60° Wide Flood	
Max Candela	2122			452			179	
Ft. Away	Foot-candles	Beam Width	Ft.	Foot-candles	Beam Width	Ft.	Foot-candles	Beam Width
8'	19.3	1.8	4'	16.5	2.5	4'	6.8	4.6
12'	8.6	2.7	8'	4.1	4.9	8'	1.7	9.2
24'	2.1	5.5	16'	1	9.8	16'	.4	18.5
36'	1	8.2	24'	.5	14.7	24'	.2	27.7
48'	.5	10.9	32'	.3	19.6	32'	.1	37
60'	.3	13.7	40'	.2	24.5	40'	.1	46.2

MID LUMENS

Item Number	16015 (mid)			16016 (mid)			16017 (mid)	
Beam Angle	15° Spot			35° Flood			60° Wide Flood	
Max Candela	3827			789			311	
Ft. Away	Foot-candles	Beam Width	Ft.	Foot-candles	Beam Width	Ft.	Foot-candles	Beam Width
8'	32.6	1.8	4'	30.9	2.5	4'	12.3	4.6
12'	14.5	2.7	8'	7.7	4.9	8'	3.1	9.2
24'	3.6	5.5	16'	1.9	9.8	16'	.8	18.5
36'	1.6	8.2	24'	.9	14.7	24'	.3	27.7
48'	.9	10.9	32'	.5	19.6	32'	.2	37
60'	.6	13.7	40'	.3	24.5	40'	.1	46.2

HIGH LUMENS

Item Number	16015 (high)			16016 (high)			16017 (high)	
Beam Angle	15° Spot			35° Flood			60° Wide Flood	
Max Candela	5382			1118			438	
Ft. Away	Foot-candles	Beam Width	Ft.	Foot-candles	Beam Width	Ft.	Foot-candles	Beam Width
8'	47.2	1.8	4'	44.5	2.5	4'	17.6	4.6
12'	21	2.7	8'	11.1	4.9	8'	4.4	9.2
24'	5.2	5.5	16'	2.8	9.8	16'	1.1	18.5
36'	2.3	8.2	24'	1.2	14.7	24'	.5	27.7
48'	1.3	10.9	32'	.7	19.6	32'	.3	37
60'	.8	13.7	40'	.5	24.5	40'	.2	46.2

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TROUBLESHOOTING

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

LISTING

UL 1838 Issued: 2003/01/13 Ed: 3 Rev: 2015/01/13
Low Voltage Landscape Lighting Systems.

CSA C22.2#250.7 Issued: 2007/11/01 (R2012)
Ed: 1 Extra-low-voltage landscape lighting systems –
General Instruction No. 1: 2008.

Contact: layouts@kichler.com

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. Do not modify product beyond instructions or warranty will be void.

WARRANTY

See Kichler.com/Warranty for warranty details.

Consult Kichler Advanced Product Solutions for additional product support and design layouts by visiting Kichler.com/APS.

Visit **Kichler.com/VLOaccent**

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