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

16018-16020

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: 15°, 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	400	600	835
Input voltage	9-15	9-15	9-15
Power (VA) @ 15VAC	8.5	12.5	17
Power (W) @ 15VDC	5.25	8.5	12
Efficacy (Lm/W @DC)	76	70	69

SPECIFICATIONS

Fixture

Light Source	Integrated LED
Number of LEDs	1 High Output COB
Color Temperature	2700K, 3000K
Color Rendering Index	80+
Beam Angles	15°, 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	2.55A Max @ 9VAC
Inrush Current	9A Max
Efficiency	> 70L/W @ 12VDC
Power Factor	> 0.7 @ 15V

Output

Lumen Level 3 (max)	835
Lumen Level 2 (mid)	600
Lumen Level 1 (standard)	400 (factory setting)

Environmental

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

Mechanical & Housing Specification

Length	6" / 154 mm
Width	2.7" / 69 mm
Height	4.2" / 106 mm
Housing Material	Aluminum, Brass
Housing Color & Surface	AZT, BKT, CBR, WHT
Weight	Alum 24 oz/ 0.7Kg, Brass 48oz/ 1.4Kg

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

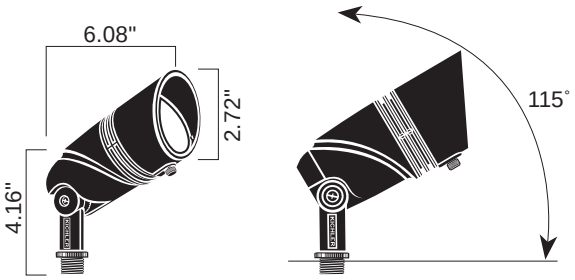
Optics

Polycarbonate TIR lens provides superior fixture beam angle. Available in 15°, 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)

KICHLER

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

16018-16020

INSTALLATION INFORMATION

Type Supply	Voltage Level	Dimming Level		
		1	2	3
AC Voltage (VA)	9V	8	12	17
	12V	9	13	17.5
	15V	9	13	18
DC Voltage (W)	9V	6	9	12.5
	12V	5.5	8	12
	15V	5.5	8	12

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: 16018 CBR 30

1 Item Number for Fixture Size & Beam Angle:

16018 = Small 15° Spot
16019 = Small 35° Flood
16020 = Small 60° Wide Flood

1 6 0 1 8

2 Product Finish:

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

C B R

3 Color Temperature:

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

3 0

LOW LUMENS

Item Number	16018 (low)		16019 (low)		16020 (low)	
Beam Angle	15° Spot		35° Flood		60° Wide Flood	
Max Candela	3521		948		396	
Ft. Away	Foot-candles	Beam Width	Ft.	Foot-candles	Beam Width	Ft.	Foot-candles	Beam Width
8'	40.2	2.1	4'	37.3	2.5	4'	17.1	4.9
12'	17.9	3.2	8'	9.3	4.9	8'	4.3	9.8
24'	4.5	6.3	16'	2.3	9.8	16'	1.1	19.6
36'	2	9.5	24'	1	14.7	24'	.5	29.4
48'	1.1	12.6	32'	.6	19.6	32'	.3	39.2
60'	.7	15.8	40'	.4	24.5	40'	.2	49

MID LUMENS

Item Number	16018 (mid)		16019 (mid)		16020 (mid)	
Beam Angle	15° Spot		35° Flood		60° Wide Flood	
Max Candela	4925		1315		560	
Ft. Away	Foot-candles	Beam Width	Ft.	Foot-candles	Beam Width	Ft.	Foot-candles	Beam Width
8'	74.7	2.1	4'	65.6	2.5	4'	29.1	4.9
12'	33.2	3.2	8'	16.4	4.9	8'	7.3	9.8
24'	8.3	6.3	16'	4.1	9.8	16'	1.8	19.6
36'	3.7	9.5	24'	1.8	14.7	24'	.8	29.4
48'	2.1	12.6	32'	1	19.6	32'	.5	39.2
60'	1.3	15.8	40'	.7	24.5	40'	.3	49

HIGH LUMENS

Item Number	16018 (high)		16019 (high)		16020 (high)	
Beam Angle	15° Spot		35° Flood		60° Wide Flood	
Max Candela	6576		1816		750	
Ft. Away	Foot-candles	Beam Width	Ft.	Foot-candles	Beam Width	Ft.	Foot-candles	Beam Width
8'	100.8	2.1	4'	86	2.5	4'	40.8	4.9
12'	44.8	3.2	8'	21.5	4.9	8'	10.2	9.8
24'	11.2	6.3	16'	5.4	9.8	16'	2.6	19.6
36'	5	9.5	24'	2.4	14.7	24'	1.1	29.4
48'	2.8	12.6	32'	1.3	19.6	32'	.6	39.2
60'	1.8	15.8	40'	.9	24.5	40'	.4	49

KICHLER

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**

© 2020 Kichler Lighting LLC. All Rights Reserved.

KICHLER