

# 12V Integrated LED Accent Light

16150-16158



|          |           |
|----------|-----------|
| PROJECT: | ORDERING: |
| TYPE:    | COMMENTS: |

## Kichler's 12V integrated LED accent light

has the durability you expect with an enhanced modern look, improved performance and superior light quality.

This updated LED accent uses almost 60% less energy and provides even more light output versus the prior design. Less energy consumption allows more fixtures to be placed on a run while providing the homeowner a system that costs less to operate.

## FEATURES

- High lumen output in small body
- Custom optics for superb center-to-the-edge uniformity
- Available beam angle: 10°, 35° & 60°
- Complete sealed system for improved reliability
- Advanced ESD protection
- IP66 rated

## PERFORMANCE

|                     | 200 Lumen | 300 Lumen | 500 Lumen |
|---------------------|-----------|-----------|-----------|
| Input Voltage       | 9-15V     | 9-15V     | 9-15V     |
| VA Total @ 15VAC    | 3.5       | 5.25      | 10        |
| Wattage             | 2.5       | 3.5       | 7         |
| Efficacy (Lm/W)     | 80        | 86        | 71        |
| Halogen Replacement | 20W       | 35W       | 50W       |

## SPECIFICATIONS

### Fixture

|                       |                |
|-----------------------|----------------|
| Light Source          | Integrated LED |
| Number of LEDs        | 3 or 6         |
| Kelvin Temperature    | 2700K, 3000K   |
| Color Rendering Index | 80+            |
| Beam Angles           | 10°, 35°, 60°  |

### Input

| Lumens | Input Current | Efficiency | Power Factor |
|--------|---------------|------------|--------------|
| 200    | .484A@9VAC    | 88.40%     | 0.653        |
| 300    | .578A@9VAC    | 86.03%     | 0.706        |
| 500    | 1.1A@9VAC     | 86.90%     | 0.738        |

### Output

| Output | Lumens |
|--------|--------|
| High   | 500    |
| Mid    | 300    |
| Low    | 200    |

### Environmental

|                                 |                         |
|---------------------------------|-------------------------|
| Environmental Protection Rating | Wet                     |
| Operation Ambient Temperature   | -25°C - +40°C           |
| Storage Temperature             | -40°C - +80°C           |
| Expected Life Time              | 50K Hours > 75°C Tc Max |

### Mechanical & Housing Specification

|                         |   |
|-------------------------|---|
| Length                  | 3.5" / 89 mm                              |
| Width                   | 3.25" / 83 mm                             |
| Height                  | 4.5" / 114 mm                             |
| Housing Material        | Aluminum, Brass                           |
| Housing Color & Surface | Black/Brown/CBR                           |
| Weight                  | Alum 1.05lb/ 0.5Kg,<br>Brass 2.3lb/ 1.1Kg |

## FIXTURE

### Glass Window

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" length

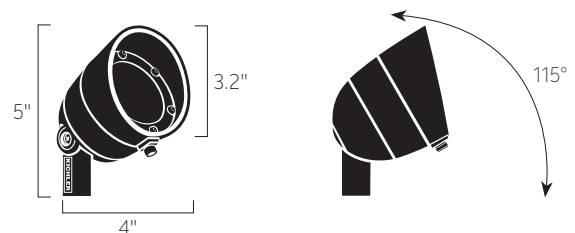
### Optics

Polycarbonate TIR lens provides superior fixture beam angle. Available in 10°, 35° and 60°.

### Accessories

Includes gel-filled wirenuts and stake

### Dimensions



## AVAILABLE FINISHES

|  |                                    |  |                     |  |                                |
|--|------------------------------------|--|---------------------|--|--------------------------------|
|  | <b>AZT</b><br>Architectural Bronze |  | <b>BKT</b><br>Black |  | <b>CBR</b><br>Centennial Brass |
|--|------------------------------------|--|---------------------|--|--------------------------------|

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## INSTALLATION INFORMATION

| Lumens | AC Voltage (VA) |      |      | DC Voltage (W) |      |      |
|--------|-----------------|------|------|----------------|------|------|
|        | 9V              | 12V  | 15V  | 9V             | 12V  | 15V  |
| 200    | 4.32            | 4.25 | 5.1  | 2.8            | 2.76 | 2.73 |
| 300    | 5.13            | 5.3  | 6.11 | 3.56           | 3.51 | 3.49 |
| 500    | 9.74            | 9.42 | 10.1 | 6.9            | 6.87 | 6.73 |

| 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)

### 1 Item Number for Fixture Size & Beam Angle:

16150 = Small 10° Spot  
16151 = Small 35° Flood  
16152 = Small 60° Wide Flood

### 2 Product Finish:

AZT = Textured Architectural Bronze  
BKT = Black  
CBR = Centennial Brass

### 3 Color Temperature:

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

Example: 16150 CBR 30

1 6 1 5 0

C B R

3 0

| Item Number | 16150        |            | 16151     |              | 16152          |     |              |            |
|-------------|--------------|------------|-----------|--------------|----------------|-----|--------------|------------|
| Beam Angle  | 10° Spot     |            | 35° Flood |              | 60° Wide Flood |     |              |            |
| Max Candela | 3867         |            | 527       |              | 221            |     |              |            |
| Ft. Away    | Foot-candles | Beam Width | Ft.       | Foot-candles | Beam Width     | Ft. | Foot-candles | Beam Width |
| 8'          | 38.4         | 1.5        | 4'        | 21.7         | 2.5            | 4'  | 8.3          | 4.2        |
| 12'         | 17.1         | 2.2        | 8'        | 5.4          | 4.9            | 8'  | 2.1          | 8.3        |
| 24'         | 4.3          | 4.5        | 16'       | 1.4          | 9.8            | 16' | .5           | 16.7       |
| 36'         | 1.9          | 6.7        | 24'       | .6           | 14.7           | 24' | .2           | 25         |
| 48'         | 1.1          | 8.9        | 32'       | .3           | 19.6           | 32' | .1           | 33.3       |
| 60'         | 7            | 11.1       | 40'       | .2           | 24.5           | 40' | .1           | 41.7       |
| Item Number | 16153        |            | 16154     |              | 16155          |     |              |            |
| Beam Angle  | 10° Spot     |            | 35° Flood |              | 60° Wide Flood |     |              |            |
| Max Candela | 5213         |            | 738       |              | 282            |     |              |            |
| Ft. Away    | Foot-candles | Beam Width | Ft.       | Foot-candles | Beam Width     | Ft. | Foot-candles | Beam Width |
| 8'          | 66.2         | 1.5        | 4'        | 30.5         | 2.5            | 4'  | 10.7         | 4.3        |
| 12'         | 29.4         | 2.3        | 8'        | 7.6          | 5              | 8'  | 2.7          | 8.7        |
| 24'         | 7.4          | 4.6        | 16'       | 1.9          | 9.9            | 16' | .8           | 17.4       |
| 36'         | 3.3          | 6.9        | 24'       | .9           | 14.9           | 24' | .3           | 26.1       |
| 48'         | 1.8          | 9.2        | 32'       | .5           | 19.8           | 32' | .2           | 34.8       |
| 60'         | 1.2          | 11.5       | 40'       | .3           | 24.8           | 40' | .1           | 43.4       |
| Item Number | 16156        |            | 16157     |              | 16158          |     |              |            |
| Beam Angle  | 10° Spot     |            | 35° Flood |              | 60° Wide Flood |     |              |            |
| Max Candela | 9236         |            | 1298      |              | 514.4          |     |              |            |
| Ft. Away    | Foot-candles | Beam Width | Ft.       | Foot-candles | Beam Width     | Ft. | Foot-candles | Beam Width |
| 8'          | 111          | 1.5        | 4'        | 54           | 2.4            | 4'  | 19.2         | 4.2        |
| 12'         | 49.3         | 2.2        | 8'        | 13.5         | 4.8            | 8'  | 4.8          | 8.4        |
| 24'         | 12.3         | 4.4        | 16'       | 3.4          | 9.7            | 16' | 1.2          | 16.8       |
| 36'         | 5.5          | 6.6        | 24'       | 1.5          | 14.5           | 24' | .5           | 25.2       |
| 48'         | 3.1          | 8.7        | 32'       | .8           | 19.3           | 32' | .3           | 33.6       |
| 60'         | 2            | 10.9       | 40'       | .5           | 24.2           | 40' | .2           | 42         |

Visit [Kichler.com/Landscape](http://Kichler.com/Landscape)

## TROUBLESHOOTING

|                                    |  |
|------------------------------------|--|
| <b>Fixture does not illuminate</b> | Verify power connections. Review installation guide for installation problem. Insure manual reset breaker has not been tripped.                                  |
| <b>Fixture turns off</b>           | Verify power connections. Review installation guide for installation problems. Insure 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. |

## LISTING

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

Contact: [layouts@kichler.com](mailto:layouts@kichler.com)

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

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

10-year limited warranty

See [Kichler.com/Warranty](http://Kichler.com/Warranty) for warranty details.

Consult Kichler Advanced Product Solutions for additional product support and design layouts by visiting [Kichler.com/APS](http://Kichler.com/APS).



Visit [Kichler.com/Landscape](http://Kichler.com/Landscape)