

12V Integrated LED All-Purpose Recessed Light

More options than ever.

Use the Kichler 12V Integrated LED All-Purpose Recessed Light practically anywhere to create a dynamic lighting effect. Versatile and functional, this landscape light can be embedded in concrete to mark a path, installed over a patio to deliver ambient light, or in the ground to uplight trees or walls for beauty and safety. Add on one of our accessory tops for more application possibilities and to create various lighting effects.



16142SS, CBR Cowl



16143CBR, SS Side Fire Sconce



16148SS, CBR Single Opening



16144CBR, SS 2-Way Opening



16145SS, CBR 4-Way Opening



16146CBR, SS Louver



16149SS, CBR Honeycomb



16147CBR, SS Square Trim

12V Integrated LED All-Purpose Recessed Light offers versatile and functional landscape lighting



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



2,000-volt fixture surge protection protects against power surges and irregularities.



Versatile IP68 rated design provides a dusttight housing that can protect against water submersion. **Dynamic lighting options** for illuminating walkways, driveways or patios, step lights and much more. Fits any standard 1.5" Schedule 40 or 80 PVC and comes with an installation sleeve and spring retention clips.



Ordering Guide (product number breakdown)

Example: 16140 CBR 30

1 Item Number for Wattage/VA, Delivered Lumens & Efficacy:

16140 = 2W/3.5VA, 100 lm, 50 lm/W **16141** = 3.5W/5.5VA, 200 lm, 57 lm/W

16140

Product Finish:

CBR = Centennial Brass **SS** = Stainless Steel

CBR

Color Temperature:

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

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16140CBR27 16140SS27 16141CBR27 16141SS27

20° Narrow Spot 2700K -Warm White 16140CBR30 16140SS30 16141CBR30 16141SS30

20° Narrow Spot 3000K -Pure White 16140CBR27 16140SS27 16141CBR27 16141SS27

40° Flood 2700K - Warm White 16140CBR30 16140SS30 16141CBR30 16141SS30

40° Flood 3000K - Pure White 16140CBR27 16140SS27 16141CBR27 16141SS27

75° Wide Flood 2700K - Warm White 16140CBR30 16140SS30 16141CBR30 16141SS30

75° Wide Flood 3000K - Pure White

BEAM SPREAD







PHOTOMETRICS

Item		16140	
Beam	20	0° Narrow Spo	t
Candela	Max	x Candela: 358	.52
Distance	Foot- candles	100 lm	Beam Width
20'	0.9		8.95'
18'	1.1		8.05'
16'	1.4		7.16'
14'	1.8		6.26'
12'	2.5		5.37'
10'	3.6		4.47'
8'	5.6		3.58'
6'	10		2.68'
4'	22.4		1.79'
2'	89.6	V	0.89'

Item		16140	
Beam	40° Flood		
Candela		Max Candela: 170.8	5
Distance	Foot- candles	100 lm	Beam Width
20'	0.4		16.62'
18'	0.5		14.96'
16'	0.7		13.3'
14'	0.9		11.64'
12'	1.2		9.97'
10'	1.7		8.31'
8'	2.7		6.65'
6'	4.7		4.99'
4'	10.6		3.32'
2'	42.6	<u> </u>	1.66'

Item		16140	
Beam		75° Wide Flood	
Candela		Max Candela: 67.58	
Distance	Foot- candles	100 lm	Beam Width
20'	0.2		34.36'
18'	0.2		30.92'
16'	0.3		27.49'
14'	0.3		24.05'
12'	0.5		20.62'
10'	0.7		17.18'
8'	1.1		13.74'
6'	1.9		10.31'
4'	4.2		6.87'
2'	16.8		3.44'

Item		16141	
Beam	2	0° Narrow Spo	t
Candela	Max	x Candela: 358	.52
Distance	Foot- candles	200 lm	Beam Width
20'	1.5		9.92'
18'	1.8		8.93'
16'	2.3		7.94'
14'	3		6.94'
12'	4.1		5.95'
10'	5.9		4.96'
8'	9.3		3.97'
6'	16.5		2.98'
4'	37.1		1.98'
2'	148.6	V	0.99'

Item		16141	
Beam		40° Flood	
Candela		Max Candela: 170.8	5
Distance	Foot- candles	200 lm	Beam Width
20'	0.8		14.75'
18'	1		13.27'
16'	1.2		11.8'
14'	1.6		10.32'
12'	2.1		8.85'
10'	3.1		7.37'
8'	4.8		5.9'
6'	8.6		4.42'
4'	19.2		2.95'
2'	77	V	1.47'

Item		16141	
Beam		75° Wide Flood	
Candela		Max Candela: 67.58	
Distance	Foot- candles	200 lm	Beam Width
20'	0.3		29.3'
18'	0.4		26.37'
16'	0.5		23.44'
14'	0.7		20.51'
12'	1		17.58'
10'	1.4		14.65'
8'	2.2		11.72'
6'	3.9		8.79'
4'	8.7		5.86'
2'	34.8		2.93'



FINISH OPTIONS



CBR - Centennial Brass



SS - Stainless Steel

PERFORMANCE

	16140	16141
Lumen Output	100 lm	200 lm
Input Voltage	9V-15V	9V-15V
Power (VA) @ 15V AC	3.5VA	5.5VA
Power (W) @ 15V DC	2W	3.5W
Efficacy (Im/W@DC)	50 lm/W	57 lm/W
Halogen Equivalents	10W	20W

SPECIFICATIONS

Fixture

Light Source Integrated LED

Number of LEDs 1 High Output
Discrete LED

Color Temperature 2700K, 3000K

Color Rendering Index 80+

Beam Angles 20°, 40°, 75° Binning 3 Step

Fixture can be used UP or DOWN position

Drive Over Rated Yes

Input

Input Voltage Range 9-15V

AC or DC with no loss in light output

Input Frequency 47-63Hz

Input Current 1A (100 lm), 2A Max (200 lm) @ 9V AC

Inrush Current 3A Max

Efficiency > 50 lm/W @ 12 VAC

Power Factor > 0.7 @ 15V

Environmental

Environmental Protection Rating
Operation Ambient Temperature
Expected Life Time (L70)
Wet, IP68
-25°C - +40°C
50K Hours

Mechanical & Housing Specification

 Diameter (top)
 2.25"

 Height (fixture)
 2.25"

 Width (body)
 1.5"

 Height (body)
 1.75"

 Height (top)
 0.25"

Housing Material Stainless Steel

Housing Color & Surface CBR Brass, SS Stainless Steel

Weight .94 LBS

Lens Material

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

Body

304 Stainless Steel body, 304 Stainless Steel or Brass tops, 304 Stainless Steel Retention Clips

Wire

18AWG, SJT-W, 105°C, 300V, 72" usable length.

Optics

Polycarbonate T.I.R. lens. 3 field changeable beam spread optics included: 40° installed, 20° and 75° included as accessories.

Included Accessories

Includes 20°, 40°, and 75° optics, 2 gel-filled wire nuts, Locknut, PVC sleeve and spring expandable retention clip. Fits any standard 1.5" Schedule 40 or 80 PVC.



Optional Accessories

Cowl Side Fire	16142CBR, SS 16143CBR, SS	Louver Honeycomb Louver	16146CBR, SS 16149CBR SS
1-Way Top	16148CBR, SS	Square Trim	16147CBR, SS
2-Way Top	16144CBR, SS	Frosted Lens	16180FRO
4-Way Top	16145CBR, SS	Ground Stake	16182BK

LOAD CHART

Power	Wire Gauge / Length (ft/m) Load Chart			
(VA)	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	Consult Techr	ical Support		

TROUBLE SHOOTING

Fixture does not illuminate	Verify power connections. Review installation guide for installation problem. Ensure manual reset breaker has not been tripped.
Fixture turns off	Verify power connections. Review installation guide for installation problems. Ensure 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.

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 10 year limited warranty. Visit Kichler.com/Warranty for details.

DISCLOSURE

- 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.
- 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, reach out to us at 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.

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For in-ground lighting tips visit ${\bf Kichler.com/Landscape}$

