

# 1" Square Recessed Oak™ Downlight

Small aperture 12V AC Downlight delivers over 600 lumens. More than a traditional 50W MR16 Halogen Lamp. Requires 12V AC Transformer (daisy chain up to 6). Dimmable ELV, MLV or 0-10V depending on transformer used.



## Features

- Requires 12V AC transformer. Dimmable ELV, MLV or 0-10V depending on transformer used.
- IC Airtight for use with direct contact to insulation
- Height allows for use in ceilings with under 3" depth. Ceiling thickness can be reduced from fixture depth.
- Daisy chain up to 6 fixtures with E1LDRV60
- 38° Standard beam with optional 28° and 50°
- Remodel requires no frame. New construction E1LF1 frame available.
- Wet Location Rated for Indoor and Outdoor Use
- Meets JA8-2016-E requirements, UL Listed
- Life Span 50,000 Hours L70

## Specifications

<b>Wattage</b>	6.1W
<b>Lumens</b>	650 lm
<b>Voltage</b>	12V AC
<b>Color Temp.</b>	3500K
<b>Dimmable</b>	Yes
<b>Lamp Type</b>	LED
<b>Beam Angle</b>	28°

## Options



White



Black



Bronze



Haze



All Black

## Technical Details

**Optics:** PC Lens for even lumen distribution. Standard 38° lens. Optional 28° (EP713C) and 50° (EP715C) available.

**Construction:** Diecast construction for lasting quality and greater heat dissipation. High quality powder coat finish prevents rust and paint cracking.

**Installation:** Requires 12V AC transformer. Can be installed on E1LF1 new construction frame. Remodel requires no frame. Hole cutout size: 2" (50 mm). Height allows for use in ceilings with under 3" depth. Ceiling thickness can be reduced from fixture depth.

**LED Technology:** Extremely accurate color rendering with 93+ CRI. Efficacy of up to 110 lumens per watt. Lumen Maintenance of 50,000 hours L70 based on LM80. Superior Thermal Management by utilizing diecast aluminum body as heat sink.

**Electrical:** Requires 12V AC transformer. Can be daisy chained up to 6 fixtures with E1LDRV60 or can be wired 1 fixture per transformer.

### Delivered Lumens:

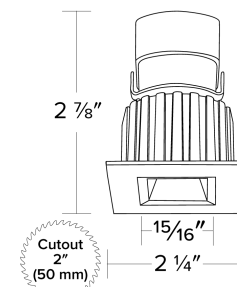
**E1L12F27** 600 lm/2700K **E1L12F30** 625 lm/3000K **E1L12F35** 650 lm/3500K **E1L12F40** 675 lm/4000K  
**E1L12FSD** 450 lm/Sunset

**Dimming:** Dims with MLV dimmers when powered by dimmable magnetic 12V AC transformer. Works with ELV dimmers when powered by dimmable electronic 12V AC transformer. Dims with 0-10V systems with 0-10V dimmable 12V AC transformer. Check transformer and dimmer compatibility before installation.

**Listings:** cUL Listed. UL Listed for WET Location. UL Listed for direct contact with insulation. Airtight per ASTM E-283. Meets California Title 24 (JA8-2016-E) standards.

**Warranty:** ELCO Products are built to last with a 5-year Limited warranty.

## Dimensions



## Product Number

Item	Lamp type	Lumens	CCT	Watts	Voltage	Dimming	Beam Angle	Finish
<b>E1L12NF35BZ</b>	LED	650 lm	3500K	6.1W	12V AC	Yes	28°	Bronze

# Product Number Builder Example: E1L12F27W

1" Oak™ Downlight	Style	Beam Angle	Color Temperature	Finish
<b>E1L</b>				
	12 Square	<b>F</b> 38° <b>NF</b> 28° <b>WF</b> 50°	<b>27</b> 2700K <b>30</b> 3000K <b>35</b> 3500K <b>40</b> 4000K <b>SD</b> Sunset	<b>W</b> White <b>B</b> Black <b>BZ</b> Bronze <b>H</b> Haze <b>BB</b> All Black

Distance from Transformer to 1st Fixture	#12 Gauge						#14 Gauge						#18 Gauge					
	Number of Fixtures						Number of Fixtures						Number of Fixtures					
	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6
1'	12.0	11.9	11.6	11.5	11.1	10.8	12.0	11.9	11.6	11.5	10.9	10.7	11.9	11.8	11.3	11.1	9.9	9.6
2'	11.9	11.9	11.6	11.4	10.8	10.7	11.9	11.8	11.5	11.3	10.7	10.5	11.9	11.6	11.1	10.9	9.7	9.1
4'	11.9	11.8	11.5	11.3	10.6	10.4	11.9	11.8	11.4	11.2	10.2	10.2	11.8	11.5	11.0	10.8	9.5	8.7
6'	11.9	11.8	11.4	11.3	10.5	10.3	11.9	11.7	11.3	11.2	10.3	10.0	11.7	11.3	10.8	10.5	9.3	8.2
8'	11.8	11.7	11.3	11.1	10.3	9.9	11.7	11.6	11.5	10.9	9.8	9.5	11.5	11.2	10.4	9.8	8.6	7.4
10'	11.7	11.6	11.2	10.9	10.1	9.4	11.7	11.6	11.1	10.9	9.7	9.2	11.4	11.0	10.4	9.3	8.1	6.9
16'	11.7	11.7	11.3	10.7	9.9	8.9	11.5	11.4	10.9	10.2	9.0	8.2	11.3	10.9	10.1	8.8	7.6	6.6
20'	11.4	11.3	10.9	10.1	9.2	8.2	11.5	11.3	10.8	9.9	8.6	7.6	10.8	10.0	8.5	7.1	5.9	4.4

Notes:

1. Max 6 fixtures.
2. For this analysis, 3' of wire was used between fixtures.
3. There will be an additional drop of ~1V if a dimmer is used.
4. Recommended maximum voltage drop is to 10.5V.

# Compatible Products



For use with 1" Oak™ Light Engines

## 1" Oak™ New Construction IC Frames



IC Rated Frame\*  
New Construction



IC Rated Multiple Frame\*  
New Construction

CAT NO.	SPECIFICATIONS
E1LF1	2" Cutout for E1L02, E1L12, E111F

CAT NO.	SPECIFICATIONS
E1LF1-M2	2 Set for E1L02, E1L12, E111F
E1LF1-M3	3 Set for E1L02, E1L12, E111F
E1LF1-M4	4 Set for E1L02, E1L12, E111F
E1LF1-M5	5 Set for E1L02, E1L12, E111F

\*Requires 12V AC transformer (not included)

## 1" Oak™ New Construction IC Rated



Specialty R-60  
1" IC Housing - Includes transformer  
New Construction

CAT NO.	SPECIFICATIONS
E1LF1ICAJ	2" Cutout for E1L02, E1L12, E111F

### PRODUCT NUMBER BUILDER

1" Oak™ IC Rated Housing

E1LF1ICAJ R60 IC New Construction Housing

Dimming

- (blank) 120V Input, ELV Dimmable
- 7 277V Input, Non-Dimmable
- DX 120V Input, 0-10V Dimmable
- DX-7 277V Input, 0-10V Dimmable

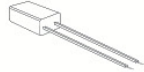
# Compatible Products

For use with 1" Oak™ Light Engines

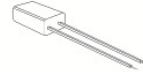
## 1" Oak™ 12V AC Transformers



**Enclosed Electronic Transformer**



**Electronic Transformer**



**0-10V Dimmable Electronic Transformer**



**Magnetic Transformer**

CAT NO.	SPECIFICATIONS
E1LDRV60	ELV Dimmable

CAT NO.	SPECIFICATIONS
LET-60	120V Input
LET-60H	120V Input, Hatch
LET-60-277	277V Input

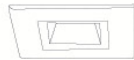
CAT NO.	SPECIFICATIONS
LET-60DX	120V Input
LET-60DX-277	277V Input

CAT NO.	SPECIFICATIONS
ETR12	50W, Daisy Chain 2-6
ETR12-20	20W, Daisy Chain 1-3

## 1" Oak™ Accessories



**Downlight Trims For E1L02 & E1L12**



**Downlight Trims For E1L02 & E1L12**



**Optional Lenses for E1L02, E1L12, & E1L32**

CAT NO.	SPECIFICATIONS
RM1W	All White
RM1B	Black w/ White Ring
RM1BZ	All Bronze
RM1H	Haze w/ White Ring
RM1BB	All Black

CAT NO.	SPECIFICATIONS
RM11W	All White
RM11B	Black w/ White Ring
RM11BZ	All Bronze
RM11H	Haze w/ White Ring
RM11BB	All Black

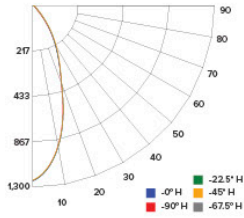
CAT NO.	SPECIFICATIONS
EP713C	28°
EP715C	50°

# Photometric Report

## Oak™ LED Light Engine

### PHOTOMETRIC REPORT

Product #: E1L12F30  
 Wattage / Lumens: 6W / 600 lm  
 Luminaire LPW: 100 lm/W



### CANDLE POWER SUMMARY

Degree Vertical	0°
0	1269
5	1235
15	846
25	322
35	93
45	31
55	18
65	10
75	5
85	0
90	0

### ILLUMINANCE AT A DISTANCE

Distance to Target Plane	Center Beam Footcandles	Beam Diameter
4'	79.3	2.7'
6'	35.3	4.0'
8'	19.8	5.3'
10'	12.7	6.7'

### ZONAL LUMEN SUMMARY

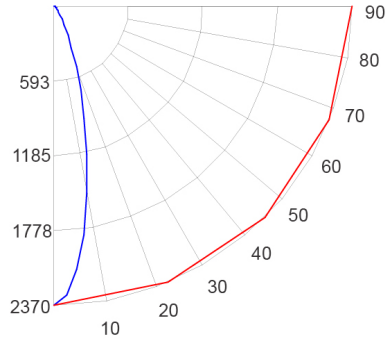
Zone	Lumens	%Luminaire
0-30°	504.7	79.8
0-40°	570.7	90.3
0-60°	615.6	97.3
0-90°	632.4	100

# 1" Square Recessed Downlight

Multiplier: 4000K (x 1.08)

## PHOTOMETRIC REPORT

Product #: E1L12NF30  
 Wattage/Lumens: 6.3W/ 639 lm  
 Luminaire LPW: 101 Lm/W



## CANDLE POWER SUMMARY

Degrees Vertical	0°
0	2370
5	2099
15	926
25	257
35	62
45	17
55	9
65	5
75	3
85	0
90	0

## ILLUMINANCE AT A DISTANCE

Distance to Target Plane	Footcandles Beam Center	Beam Diameter
4'	148	1.8'
6'	65.8	2.7'
8'	37.0	3.6'
10'	23.7	4.5'

## ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
0-30°	563.92	88.30
0-40°	606.28	94.90
0-60°	630.29	98.70
0-90°	638.89	100.00