

Project name:

Fixture type:

Date:

# 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.
- Reight allows for use in centrigs with thitler 5 depth.
   Ceiling thickness can be reduced from fixture depth.
   Daisy chain up to 6 fixtures with E1LDRV60
- Daisy chain up to 6 fixtures with ELLDRV60
   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

### **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 inuslation. 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.

## Specifications

Wattage	6.1W
Lumens	600 lm
Voltage	12V AC
Color Temp.	2700К
Dimmable	Yes
Lamp Type	LED
Beam Angle	38°

### Options







White

Bronze



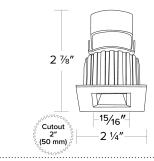
Haze



Black

All Black

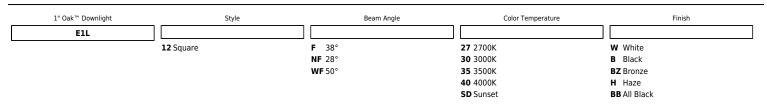
## Dimensions



### **Product Number**

Item	Lamp type	Lumens	сст	Watts	Voltage	Dimming	Beam Angle	Finish
E1L12F27B	LED	600 lm	2700K	6.1W	12V AC	Yes	38°	Black w/ White

# Product Number Builder Example: E1L12F27W



Distance from Transformer to 1st Fixture	to Number of Fixtures Number of Fixtures								#18 Gauge Number of Fixtures									
200 mixture	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	<b>11.3</b>	11.1	10.3	9.9	11.7	11.6	11.5	10.9	9.8	9.5	11.5	11.2	<u>10.4</u>	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	<b>1</b> 1.3	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	CAT NO.	SPECIFICATIONS
E1LF1	2" Cutout for E1L02, E1L12, E111F	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<sup>™</sup>New Construction IC Rated

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

CAT NO.SPECIFICATIONSE1LF1ICAJ2" Cutout for E1L02, E1L12, E111F

#### PRODUCT NUMBER BUILDER

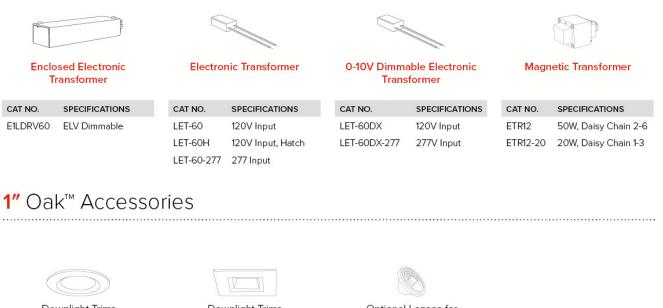
	1″ Oak™ IC Rated Housing		Dimming
E1LF1ICAJ	R60 IC New Construction Housing	(blank)	120V Input, ELV Dimmable
		-7	277V Input, Non-Dimmable
		DX	120V Input, 0-10V Dimmable
		DX-7	277V Input, 0-10V Dimmable

# **Compatible** Products

For use with 1" Oak™ Light Engines



# 1" Oak™ 12V AC Transformers



Downlight Trims For E1L02 & E1L12

Downlight Trims
For E1L02 & E1L12



Optional Lenses for E1L02, E1L12, & E1L32

CAT NO.	SPECIFICATIONS	CAT NO.
RM1W	All White	RM11W
RM1B	Black w/ White Ring	RM11B
RM1BZ	All Bronze	RM11BZ
RM1H	Haze w/ White Ring	RM11H
RM1BB	All Black	RM11BB

SPECIFICATIONS
All White
Black w/ White Ring
All Bronze
Haze w/ White Ring
All Black

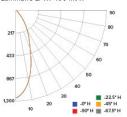
CAT NO.	SPECIFICATIONS
EP713C	28°
EP715C	50°

# Photometric Report

## Oak<sup>™</sup> LED Light Engine

### PHOTOMETRIC REPORT

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



### CANDLE POWER SUMMARY

### ILLUMINANCE AT A DISTANCE

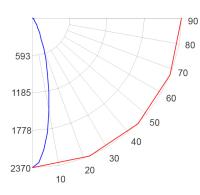
	Distance to Target Plane	Center Beam Footcandles	Beam Diameter
-	4'	79.3	2.7′
	6'	35.3	4.0'
0	8'	19.8	5.3'
	10′	12.7	6.7′

#### 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

### 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