

Project name:	
Fixture type:	
Date:	

# 1" Square Recessed Oak™ Pull Down

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 for use with direct contact to insulation
- Height allows for use in ceilings with under 4" depth.
   Ceiling thickness can be reduced from fixture depth.
- Daisy chain up to 6 fixtures with E1LDRV60
- 28°, 38° and 50° beam options, not recommended for in field changes.
- Remodel requires no frame. New construction E1LF2 frame available.
- UL Damp Location Rated
- UL Listed, Meets California Title 24 JA8-2016-E and Energy Star standards.
- Life Span 50,000 Hours L70

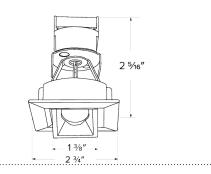
### **Specifications**

Wattage	6.1W
Lumens	650 lm
Voltage	12V AC
Color Temp.	3000K
Dimmable	Yes
Lamp Type	LED
Beam Angle	38°

## **Options**



#### **Dimensions**



### **Technical Details**

 $\textbf{Optics:} \ PC \ Lens \ for \ even \ lumen \ distribution. \ 28^\circ, 38^\circ \ and 50^\circ \ beam \ options, \ not \ reccomended \ for \ in \ field \ changes.$ 

**Adjustability**: 360° rotation with 30° gimbal adjustability. Gimbal can be locked into place by tightening locking screw.

**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 E1LF2 new construction frame. Remodel requires no frame. Hole cutout size: 2 3/8" (61 mm). Height allows for use in ceilings with under 4" 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: E1L22F27 625 lm/2700K E1L22F30 650 lm/3000K E1L22F35 675 lm/3500K E1L22F40 700 lm/4000K

**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 DAMP Location. UL Listed for direct contact with inuslation. Meets California

# Product Number Builder Example: E1L22F27W

Trim	Style		Beam Angle		Color Temperature		Finish
E1L							
	22 Square	F	38°	27	2700K	W	All White
		NF	28°	30	3000K	ΒZ	All Bronze
		WF	50°	40	4000K	В	All Black

Distance from Transformer to 1st Fixture		#12 Gauge  Number of Fixtures						Nur	#14 G		ıres				#18 Ga		es	
13t Tixture	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™ Adjustable 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
E1LF2	2 %" Cutout for E1L32 and E1I22	E1LF2-M2	2 Set for E1L32 and E1l22
		E1LF2-M3	3 Set for E1L32 and E1I22
		E1LF2-M4	4 Set for E1L32 and E1I22
		E1LF2-M5	5 Set for E1L32 and E1l22

<sup>\*</sup>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	
E1LF2ICAJ	2 %" Cutout for E1L32 and E1I22	

	PRODUCT NUMBER BUILDER							
	1" Oak™ IC Rated Housing		Dimming					
E1LF2ICAJ	R60 IC New Construction Housing	ng (bla	(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

CAT NO.	SPECIFICATIONS
E1LDRV60	ELV Dimmable



**Electronic Transformer** 

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



0-10V Dimmable Electronic Transformer

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



Magnetic Transformer

CAT NO.	SPECIFICATIONS
ETR12	50W, Daisy Chain 2-6
FTR12-20	20W Daisy Chain 1-3

# Photometric Report

## Oak™ LED Light Engine

#### PHOTOMETRIC REPORT **CANDLE POWER SUMMARY** Product #: E1L22F30 Degress Vertical Wattage / Lumens: 6.4W / 600 lm Luminaire LPW: 93.7 lm/W 1302 1259 15 869 25 368 35 108 45 39 55 13 65 6 75 3 85 0 90 0

ILLUMINANCE AT A DISTANCE							
Distance to Target Plane	Center Beam Footcandles	Beam Diameter					
4'	81.4	2.8'					
6′	36.2	4.2'					
8′	20.3	5.6'					
10′	13.0	7.0′					

#### **ZONAL LUMEN SUMMARY** %Luminaire Zone Lumens 88.3 0-30° 529.5 0-40° 608.0 91.7 0-60° 98.5 653.2 0-90° 663.2 100



# **Dimmer Compatibility Chart**

Oak™ System

With Electronic Low Voltage Transformers

### For Reference Only

Testing conducted by ELCO Lighting is not a substitute for and does not imply certification by an independent laboratory or any other standards certification. Refer to manufacturer specifications for more detailed information on product certifications and standards. Consult the dimmer manufacturer prior to installation to ensure compatibility.

Manufacturer	Product	Part Number	Dimmed Light Output Range
ELV Dimming			
Lutron	Diva® 300W Single-Pole Electronic Low Voltage Dimmer	DVELV-300P	10% - 100%
	Diva® 300W 3-Way Electronic Low Voltage Dimmer	DVELV-303P	10% - 100%
	Skylark® 300W Single-Pole Electronic Low Voltage Dimmer	SELV-300P	10% - 100%
	Skylark® 300W 3-Way Electronic Low Voltage Dimmer	SELV-303P	10% - 100%
	Maestro® 600W Single-Pole/Multi-Location Electronic Low Voltage Dimmer	MAELV-600	10% - 100%
Leviton	SureSlide® 300W 3-Way Electronic Low Voltage Dimmer	6615-P0	10% - 100%
	Decora® 450W Single-Pole/3-Way Electronic Low Voltage Dimmer	DSE06-10Z	10% - 100%
	IllumaTech® 300W Single-Pole/3-Way Electronic Low Voltage Dimmer	IPE04-1LZ	10% - 100%
	Vizia® RF + 600W Single-Pole/3-Way/Multi-Location Electronic Low Voltage Dimmer	VRE06-1LZ	10% - 100%
	Vizia® 600W Single-Pole/3-Way/Multi-Location Electronic Low Voltage Dimmer	VZE06-1LX	10% - 100%
	Decora® Digital Bluetooth 600W Single-Pole/3-Way/Multi-Location Electronic Low Voltage Dimmer	DDE06-BLZ	10% - 100%

### \*NOTE: Refer to dimmer manufacturer's documentation for installation instructions and circuit details

Disclaimer: Minimum and maximum loads for LEDs and CFLs are given in number of lamps and may vary depending on the lamp being used. Testing conducted by ELCO Lighting is not a substitute for and does not imply certification by an independent laboratory or any other standards certification. Refer to manufacturer specifications for more detailed information on product certifications and standards.

Integrating our lighting with your Smart Home System is a breeze. Simply check your Smart Home system for compatible smart switches and cross refrence that with our Dimming Compatibility Chart. Once the switches are integrated with your Smart Home system your lights will be ready to go.







INSTEON

