ELCO Lighting

Project name:

Fixture type:

Date:

1" Round 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
- JA8-2016-E & UL listed.
- Life Span 50,000 Hours L70

Specifications

Wattage	6.1W
Lumens	450 lm - 675 lm
Voltage	12V AC
Color Temp.	2700K - SunsetK
Dimmable	Yes
Lamp Type	LED
Beam Angle	28° - 50°
CRI	93+
Wet Location	UL Listed

Options

White

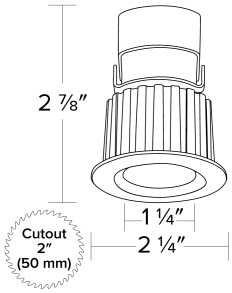
Black

Bronze

Haze

All Black

Dimensions



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.

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: UL Listed for WET Location. UL Listed for direct contact with inuslation. Airtight per ASTM E-283. California Title 24 (JA8-2016-E).

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

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Product Number Builder Example: **E1L02F27W**

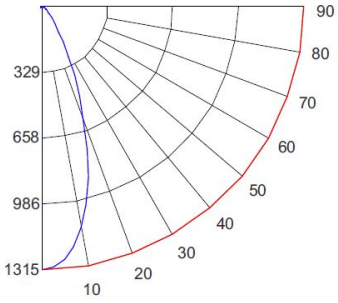
1" Oak™ Downlight	Style	Beam Angle	Color Temperature	Finish
E1L				
	02 Round	**F** 38° **NF** 28° **WF** 50°	**27** 2700K **30** 3000K **35** 3500K **40** 4000K **SD** Sunset	**W** All White **B** Black w/White Ring **BZ** All Bronze **H** Haze w/White Ring **BB** All Black

1” Round Recessed Downlight

Multiplier: 2700K (x 0.96), 4000K (x 1.08)

PHOTOMETRIC REPORT

Product #: E1L02F30
Wattage/Lumens: 6.2W/ 658 lm
Luminaire LPW: 106 Lm/W



CANDLE POWER SUMMARY

Degrees Vertical	0°
0	1315
5	1272
15	884
25	382
35	106
45	33
55	14
65	8
75	4
85	1
90	0

ILLUMINANCE AT A DISTANCE

Distance to Target Plane	Footcandles Beam Center	Beam Diameter
4’	82.2	2.8’
6’	36.5	4.2’
8’	20.5	5.6’
10’	13.2	6.9’

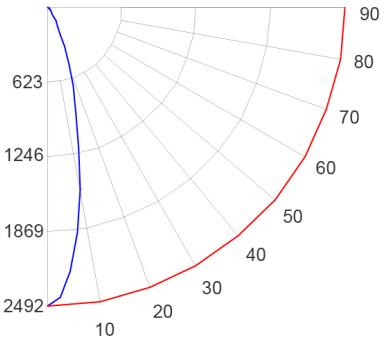
ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
0-30°	534.38	81.20
0-40°	605.19	91.90
0-60°	644.75	98.00
0-90°	658.20	100.00

1” Round Recessed Downlight

PHOTOMETRIC REPORT

Product #: E1L02NF30
Wattage/Lumens: 6.3W/ 642 lm
Luminaire LPW: 101 Lm/W



CANDLE POWER SUMMARY

Degrees Vertical	0°
0	2492
5	2207
15	922
25	257
35	62
45	19
55	7
65	4
75	2
85	0
90	0

ILLUMINANCE AT A DISTANCE

Distance to Target Plane	Footcandles Beam Center	Beam Diameter
4’	156	1.7’
6’	69.2	2.6’
8’	38.9	3.5’
10’	24.9	4.4’

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
0-30°	570.33	88.90
0-40°	612.62	95.50
0-60°	634.75	98.9
0-90°	641.58	100.00

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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.

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Compatible Products

For use with **1″ Oak™ Light Engines**

1″ Oak™ New Construction IC Frames

IC Rated Frame*
New Construction

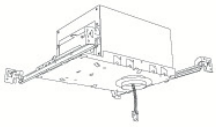
CAT NO.	SPECIFICATIONS
E1LF1	2″ Cutout for E1L02, E1L12, E111F

IC Rated Multiple Frame*
New Construction

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

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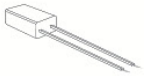
Compatible Products

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
ETR12-20	20W, Daisy Chain 1-3

1″ Oak™ Accessories

Downlight Trims For E1L02 & E1L12

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

Downlight Trims For E1L02 & E1L12

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

Optional Lenses for E1L02, E1L12, & E1L32

CAT NO.	SPECIFICATIONS
EP713C	28°
EP715C	50°

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