ELCO Lighting

Project name:

Fixture type:

Date:

1″ Square Recessed Architectural Oak™ Downlight

Small aperture downlight delivers up to 1000 lumens. More than a traditional 50W MR16 halogen lamp. Style options, beam options and color finish options offer maximum flexibility in design. Drivers and housings are specified separately for maximum flexibility per your project's needs. The patented engine offers auto-release clips that make installation a breeze.

Features

- IC Airtight for use with Direct Contact to insulation
- Works with compatible ceilings up to 1¼″
- Height allows for use in ceilings with under 2″ depth. Ceiling thickness can be reduced from fixture depth.
- Remodel requires no frame. New construction E1LDWN1 frame available
- 38° Standard beam with optional 28° and 50°
- Wet Location Rated for Indoor and Outdoor Use
- JA8-2022-E, UL Listed, and Energy Star Qualified
- Life Span 50,000 Hours L70

Specifications

Wattage	8W
Lumens	850 lm
Color Temp.	SunsetK
Lamp Type	LED
Beam Angle	38°
CRI	93+
Wet Location	Listed

Options

White

All Black

All Bronze

Black with White Trim

Haze with White Trim

Technical Details

Optics: PC Lens for even light 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: Hole cutout size: 2" (50 mm). Oak™ LED Light engines require driver. Can be utilized in new construction and remodel applications.

LED Technology: Extremely accurate color rendering with 93+ CRI. Efficacy of up to 104 lumens per watt. Lumen Maintenance of 50,000 hours L70 based on LM80. Superior Thermal Management by utilizing diecast aluminum body as heat sink.

Sunset: Sunset color temperature is our dim-to-warm LED technology that allows the color temperature to become warmer as the product is dimmed. Our SUNSET items start at 2700K and go as low as 1800K when dimmed. For Sunset dim technology be sure to order an item with "Sunset" in the Color Temperature (CCT) attribute.

Electrical: Requires driver. Driver and housing can be specified with voltage (120V or 120/277V) and dimming (ELV/Triac or 0-10V/Triac/ELV)

Compatible Housings/Delivered Lumens: Architectural Oak™ Light Engines are compatible with 120/277V 0-10V/Triac/ELV or 120V Triac/ELV Architectural Oak™ Housings.

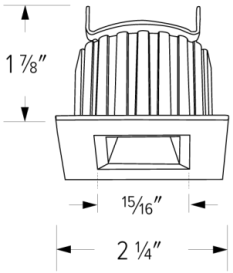
•*Delivered Lumens:* 2700K: 850 lm, 3000K: 900 lm, 3500K: 950 lm, 4000K: 1000 lm, Sunset: 850 lm

Dimming: See Oak™ Housings and drivers for specific dimming information.

Listings: cUL Listed. UL Listed for WET Location. UL Listed for direct contact with insulation. Airtight per ASTM E-283. ENERGY STAR® Qualitified. California Title 24 (JA8-2016-E).

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

Dimensions



Aperture Dimensions

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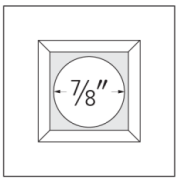

Product Number Builder Example: **E1AK12F27B**

1" Architectural Oak Downlight	Style	Beam Angle	Color Temperature	Finish
E1AK				
	12 Square	**F** 38°	**27** 2700K	**W** All White
		NF 28°	**30** 3000K	**BB** All Black
		WF 50°	**35** 3500K	**BZ** All Bronze
			40 4000K	**B** Black with White Trim
			SD Sunset [1]	**H** Haze with White Trim

[1] Sunset, Dim to Warm technology, automatically transitions from 2700K to 1800K when dimmed

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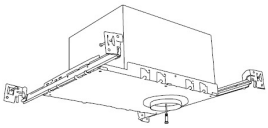
Compatible Products

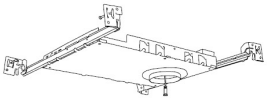
For use with **1″ Oak™ Architectural Recessed Downlights**

1″ Oak™ New Construction Housings, Frames & Power Packs



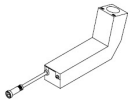
R-60 IC Airtight Housing
- Driver Included -
New Construction

CAT NO.	SPECIFICATIONS
E1DWN08AJIC	120V, Triac/ELV
E1DWN08AJICDX	120/277V, 0-10V/Triac/ELV



IC Rated Frame
- Driver Included -
New Construction

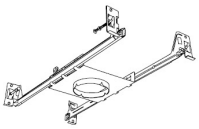
CAT NO.	SPECIFICATIONS
E1DWN08IC	120V, Triac/ELV
E1DWN08ICDX	120/277V, 0-10V/Triac/ELV



IC Rated Power Pack
- Fits through 2″ hole -
Remodel

CAT NO.	SPECIFICATIONS
E1RLA08IC	120V, Triac/ELV
E1RLA08ICDX	120/277V, 0-10V/Triac/ELV

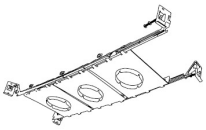
Accessories for Remodel IC Power Pack



Single Downlight Frames
New Construction

CAT NO.	SPECIFICATIONS
E1LF1	2″ Cutout, 4 ⅝″ Sq. frame

*Requires Power Pack (not included)

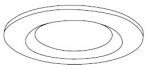


Multiple Downlight Frames
New Construction

CAT NO.	SPECIFICATIONS
E1LF1-M2	2-Set, 8 ¾″ total length of frame
E1LF1-M3	3-Set, 13″ total length of frame
E1LF1-M4	4-Set, 17 ½″ total length of frame
E1LF1-M5	5-Set, 21 ¾″ total length of frame

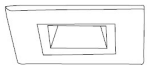
*Requires Power Pack (not included)

1″ Oak™ Accessories



Downlight Round Trims

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

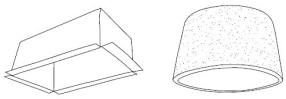


Downlight Square Trims

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

Lens & Optics

CAT NO.	SPECIFICATIONS
EP713C	28° Lens
EP714C	38° Lens
EP715C	50° Lens
L60	Frosted Diffuser
L61	Hex Louver



Fire Rated Products

CAT NO.	SPECIFICATIONS
FIREENCL	Standard - 9″ H x 20 ⅜″ L x 14 ⅜″ W
FIREENCL-S	Shallow - 7 ¼″ H x 16″ L x 14 ⅜″ W
	1-Hr Fire Enclosure for Recessed Fixtures
FIRECVR	9 ¾″ H x 17″ O.D. x 13″ I.D.
	2-Hr Fire Cover for Recessed Fixtures

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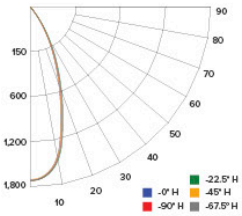
Photometric Report

1" Square Recessed Architectural Oak™ Downlight

PHOTOMETRIC REPORT

Product #: E1AK12F27
Wattage / Lumens: 8W / 853 lm
Luminaire LPW: 106.6 lm/W



CANDLE POWER SUMMARY

Degress Vertical	0°
0	1707
5	1661
15	1138
25	433
35	125
45	42
55	24
65	14
75	6
85	1
90	0

ILLUMINANCE AT A DISTANCE

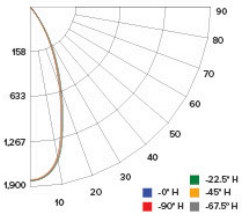
Distance to Target Plane	Center Beam Footcandles	Beam Diameter
4′	107	2.7′
6′	47.4	4.0′
8′	26.7	5.4′
10′	17.1	6.7′

ZONAL LUMEN SUMMARY

Zone	Lumens	%Luminaire
0-30°	678.5	79.8
0-40°	767.3	90.3
0-60°	827.6	97.3
0-90°	850.1	100

PHOTOMETRIC REPORT

Product #: E1AK12F30
Wattage / Lumens: 8W / 906 lm
Luminaire LPW: 113.2 lm/W



CANDLE POWER SUMMARY

Degress Vertical	0°
0	1813
5	1765
15	1209
25	460
35	133
45	45
55	25
65	15
75	7
85	1
90	0

ILLUMINANCE AT A DISTANCE

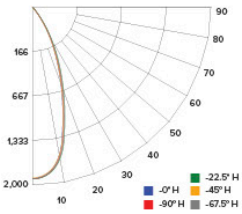
Distance to Target Plane	Center Beam Footcandles	Beam Diameter
4′	113	2.7′
6′	50.4	4.0′
8′	28.3	5.4′
10′	18.1	6.7′

ZONAL LUMEN SUMMARY

Zone	Lumens	%Luminaire
0-30°	720.9	79.8
0-40°	815.3	90.3
0-60°	879.3	97.3
0-90°	903.3	100

PHOTOMETRIC REPORT

Product #: E1AK12F35
Wattage / Lumens: 8W / 960 lm
Luminaire LPW: 120 lm/W



CANDLE POWER SUMMARY

Degress Vertical	0°
0	1920
5	1868
15	1280
25	487
35	140
45	48
55	27
65	15
75	7
85	1
90	0

ILLUMINANCE AT A DISTANCE

Distance to Target Plane	Center Beam Footcandles	Beam Diameter
4′	120	2.7′
6′	53.3	4.0′
8′	30.0	5.4′
10′	19.2	6.7′

ZONAL LUMEN SUMMARY

Zone	Lumens	%Luminaire
0-30°	763.3	79.8
0-40°	863.2	90.3
0-60°	931.0	97.3
0-90°	956.4	100

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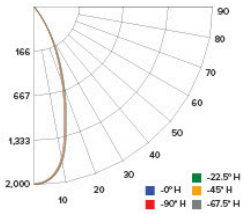
Photometric Report

1" Round Recessed Architectural Oak™ Downlight

PHOTOMETRIC REPORT

Product #: E1AK12F40
Wattage / Lumens: 8W / 1000 lm
Luminaire LPW: 125 lm/W



CANDLE POWER SUMMARY

Degress Vertical	0°
0	1995
5	1941
15	1330
25	506
35	146
45	49
55	28
65	16
75	7
85	1
90	0

ILLUMINANCE AT A DISTANCE

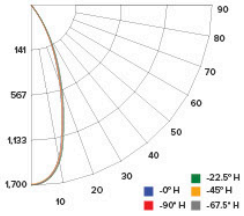
Distance to Target Plane	Center Beam Footcandles	Beam Diameter
4′	125	2.7′
6′	55.4	4.0′
8′	31.2	5.4′
10′	19.9	6.7′

ZONAL LUMEN SUMMARY

Zone	Lumens	%Luminaire
0-30°	792.9	79.8
0-40°	896.8	90.3
0-60°	967.2	97.3
0-90°	993.6	100

PHOTOMETRIC REPORT

Product #: E1AK12FSD
Wattage / Lumens: 8W / 850 lm
Luminaire LPW: 106.2 lm/W



CANDLE POWER SUMMARY

Degress Vertical	0°
0	1691
5	1645
15	1127
25	429
35	124
45	42
55	23
65	14
75	6
85	1
90	0

ILLUMINANCE AT A DISTANCE

Distance to Target Plane	Center Beam Footcandles	Beam Diameter
4′	106	2.7′
6′	47.0	4.0′
8′	26.4	5.4′
10′	16.9	6.7′

ZONAL LUMEN SUMMARY

Zone	Lumens	%Luminaire
0-30°	672.1	79.8
0-40°	760.1	90.3
0-60°	819.8	97.3
0-90°	842.2	100

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