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** | 1000 lm |
| **Color Temp.** | 4000K |
| **Lamp Type** | LED |
| **Beam Angle** | 50° |
| **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.

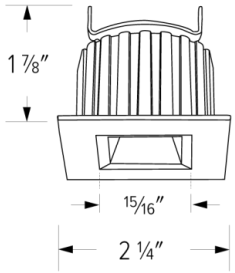
•*Delivered Lumens:* 2700K: 850 lm, 3000K: 900 lm, 3500K: 950 lm, 4000K: 1000 lm, Sunset: 850 lm

**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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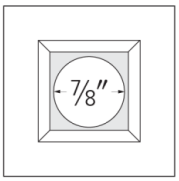


## Product Number Builder Example: **E1AK12F27B**

| 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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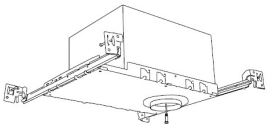
# Compatible Products

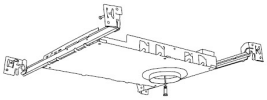
For use with **1″ Oak™ Architectural Recessed Downlights**

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



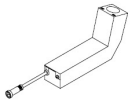
R-60 IC Airtight Housing
- Driver Included -
New Construction

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



IC Rated Frame
- Driver Included -
New Construction

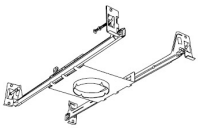
| CAT NO. | SPECIFICATIONS |
|---|---|
| E1DWN08IC | 120V, Triac/ELV |
| E1DWN08ICDX | 120/277V, 0-10V/Triac/ELV |



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

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

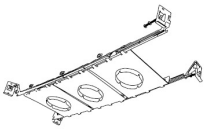
## Accessories for Remodel IC Power Pack



Single Downlight Frames
New Construction

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

*Requires Power Pack (not included)

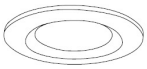


Multiple Downlight Frames
New Construction

| 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 |

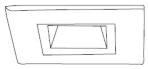
*Requires Power Pack (not included)

## 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 |

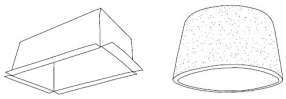


Downlight Square Trims

| 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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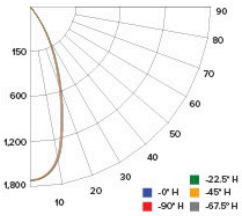
# Photometric Report

## 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

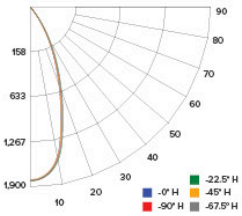
| Distance to Target Plane | Center Beam Footcandles | Beam Diameter |
|---|---|---|
| 4′ | 107 | 2.7′ |
| 6′ | 47.4 | 4.0′ |
| 8′ | 26.7 | 5.4′ |
| 10′ | 17.1 | 6.7′ |

### 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

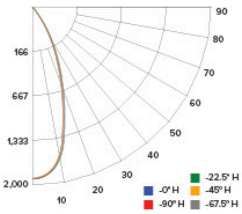
| Distance to Target Plane | Center Beam Footcandles | Beam Diameter |
|---|---|---|
| 4′ | 113 | 2.7′ |
| 6′ | 50.4 | 4.0′ |
| 8′ | 28.3 | 5.4′ |
| 10′ | 18.1 | 6.7′ |

### 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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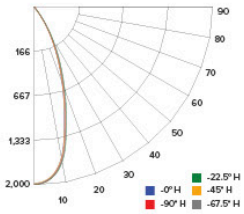
# Photometric Report

## 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

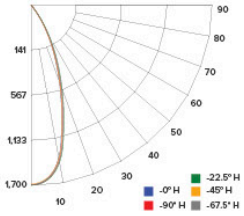
| Distance to Target Plane | Center Beam Footcandles | Beam Diameter |
|---|---|---|
| 4′ | 125 | 2.7′ |
| 6′ | 55.4 | 4.0′ |
| 8′ | 31.2 | 5.4′ |
| 10′ | 19.9 | 6.7′ |

### 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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