ELCO Lighting

Project name:

Fixture type:

Date:

# 4" Reflector LED Light Engine Trims

## Features

- USA Designed and Assembled.
- Frame sold separately (see Compatible Housings).
- 2 at the end of the item number denotes Generation 2. Please note Gen 2 and Gen 1 are not cross compatible.

## Specifications

| | |
|---|---|
| **Wattage** | 18W |
| **Lumens** | 1600 lm |
| **Color Temp.** | 3000K |
| **Dimmable** | 0-10V/Triac/ELV (1% Dimming) |
| **Lamp Type** | LED |
| **Beam Angle** | 60° |
| **CRI** | 93+ |
| **Wet Location** | Listed |

## Options

**All Haze(semi-specular)**

**White**

**Black**

**Chrome**

**Haze w/White Trim**

## Technical Details

**Optics**: Frosted polycarbonate lens diffuses light evenly throughout while reducing glare with LED technology.

**Reflector Construction**: Reflector is one piece, deep, self-flanged construction spun from .05” thick High Grade Aluminum. Reflector allows for minimal glare and a strong glare cut-off.

**Installation:** Must be installed on a Laurel System frame with compatible lumen rating. Frames are available for New Construction, Remodel and as a Retrofit Kit.

**Dimmability:** Depending on driver used. It can dim to 1% with 3-in-1 driver: Triac, ELV and 0-10V

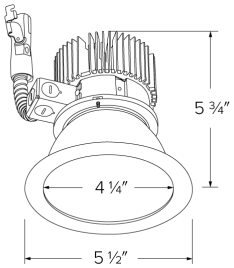
**LED Technology:**

- Extremely accurate Color Rendering Index of 93+ CRI.
- Efficacy of >90 lumens per watt.
- Lumen Maintenance of 50,000 hours L70 Life based on LM80 standardized test results.
- Superior Thermal Management by utilizing ELCO Red heat sink.
- Instant On to Full Brightness technology.
- No LED pixilation.

**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 3000K 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.

**Listings**: cULus Listed for Wet Location. RoHS Compliant.

## Dimensions





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

## Product Number Builder

Example: **E410L0827W2**

| ELCO 4" Reflector | Laurel | Lumens (Wattage) | Color Temp. | Finish | Generation | Beam Angle |
|---|---|---|---|---|---|---|
| **E410** | **L** | | | | | |
| | | **08** 850 lm (12.6W MAX.) | **27** 2700K [1] | **H** All Haze (Semi-Specular) | **2** Gen 2 | 60º |
| | | **12** 1250 lm (16.8W MAX.) | **30** 3000K | **W** All White | **1** Gen 1 | **-F** 38º [1] |
| | | **16** 1600 lm (21W MAX.) | **35** 3500K | **B** All Black | | **-N** 24º [1] |
| | | **20** 2000 lm (29.4W MAX.) | **40** 4000K | **C** All Chrome | | **-S** 15º [1] |
| | | **30** 3000 lm (44.1W MAX.) | **50** 5000K | **HW** Haze with White Trim | | |
| | | | **SD** Sunset [1, 2] | | | |

[1] Available for lumen packages up to 3000 lm only

[2] Sunset, Dim to Warm technology, automatically transitions from 3000K to 1800K when dimmed


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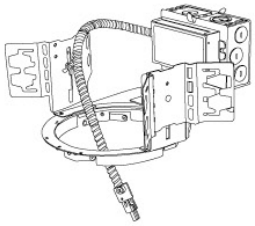
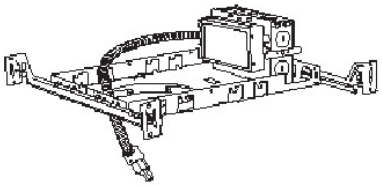
# Compatible Products

For use with **4″ Laurel™ Light Engines**

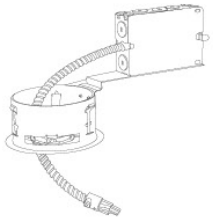
## 4″ Laurel™ Commercial LED Frames



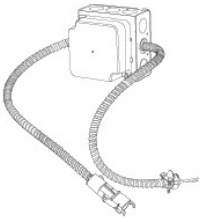
**4″ Architectural Frame**
**E4LH**



**4″ Plaster Frame**
**E4LF**



**4″ Remodel Frame**
**E4LR**



**4″ Retrofit Kit**
**E4LT**

**PRODUCT NUMBER BUILDER**

| Frame Type | Voltage | Lumen | Dimming | Optional | Generation |
|---|---|---|---|---|---|
| **E4LH** Architectural | **U** 120/277V | **08** 850 lm | **D** Triac/ELV/0-10V | **EM1** Emergency Backup up to 700 lm output | **(blank)** Gen 1 |
| **E4LF** Plaster | | **12** 1250 lm | **S** Sunset | **EM2** Emergency Backup up to 1100 lm output | **2** Gen 2 |
| **E4LR** Remodel | | **16** 1600 lm | **L** Lutron | | |
| **E4LT** Retrofit | | **20** 2000 lm | | | |
| | | **30** 3000 lm | | | |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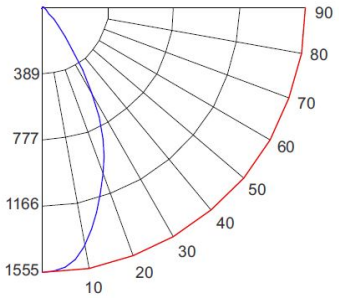
## LED Light Engine

Multiplier: 2700K (x 0.96), 3500K (x 1.04), 4000K (x 1.08)

### PHOTOMETRIC REPORT

Product #: E410L1230
Wattage/Lumens: 15.7W/ 1124 Lm
Luminaire LPW: 72 Lm/W




### CANDLE POWER SUMMARY

| Degrees Vertical | 0° |
|---|---|
| 0 | 1555 |
| 5 | 1530 |
| 15 | 1244 |
| 25 | 850 |
| 35 | 312 |
| 45 | 54 |
| 55 | 1 |
| 65 | 1 |
| 75 | 0 |
| 85 | 0 |
| 90 | 0 |

### ILLUMINANCE AT A DISTANCE

| Distance to Target Plane | Footcandles Beam Center | Beam Diameter |
|---|---|---|
| 4' | 97.2 | 4.0' |
| 6' | 43.2 | 6.0' |
| 8' | 24.3 | 8.0' |
| 10' | 15.5 | 10.0' |

### ZONAL LUMEN SUMMARY

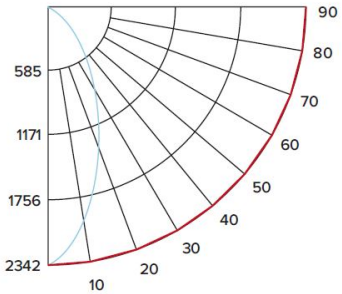
| Zone | Lumens | % Luminaire |
|---|---|---|
| 0-30° | 868.78 | 77.30 |
| 0-40° | 1072.36 | 95.40 |
| 0-60° | 1122.45 | 99.90 |
| 0-90° | 1123.58 | 100.00 |

## LED Light Engine

Multiplier: 3000K (x 1.04), 3500K (x 1.08), 4000K (x 1.12)

### PHOTOMETRIC REPORT

Product #: E410L2027H
Wattage/Lumens: 21.6W/ 1692 Lm
Luminaire LPW: 78 Lm/W




### CANDLE POWER SUMMARY

| Degrees Vertical | 0° |
|---|---|
| 0 | 2342 |
| 5 | 2304 |
| 15 | 1873 |
| 25 | 1281 |
| 35 | 469 |
| 45 | 81 |
| 55 | 2 |
| 65 | 1 |
| 75 | 0 |
| 85 | 0 |
| 90 | 0 |

### ILLUMINANCE AT A DISTANCE

| Distance to Target Plane | Footcandles Beam Center | Beam Diameter |
|---|---|---|
| 4' | 146 | 4.0' |
| 6' | 65.0 | 6.0' |
| 8' | 36.6 | 8.0' |
| 10' | 23.4 | 10.0' |

### ZONAL LUMEN SUMMARY

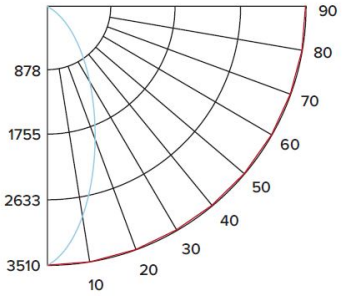
| Zone | Lumens | % Luminaire |
|---|---|---|
| 0-30° | 1308.44 | 77.30 |
| 0-40° | 1615.05 | 95.40 |
| 0-60° | 1690.49 | 99.90 |
| 0-90° | 1692.19 | 100.00 |

## LED Light Engine

Multiplier: 3000K (x 1.04), 3500K (x 1.08), 4000K (x 1.12)

### PHOTOMETRIC REPORT

Product #: E410L3027H
Wattage/Lumens: 31.5W/ 2537 Lm
Luminaire LPW: 81 Lm/W




### CANDLE POWER SUMMARY

| Degrees Vertical | 0° |
|---|---|
| 0 | 3510 |
| 5 | 3454 |
| 15 | 2808 |
| 25 | 1920 |
| 35 | 704 |
| 45 | 122 |
| 55 | 3 |
| 65 | 2 |
| 75 | 1 |
| 85 | 0 |
| 90 | 0 |

### ILLUMINANCE AT A DISTANCE

| Distance to Target Plane | Footcandles Beam Center | Beam Diameter |
|---|---|---|
| 4' | 219 | 4.0' |
| 6' | 97.5 | 6.0' |
| 8' | 54.8 | 8.0' |
| 10' | 35.1 | 10.0' |

### ZONAL LUMEN SUMMARY

| Zone | Lumens | % Luminaire |
|---|---|---|
| 0-30° | 1961.57 | 77.30 |
| 0-40° | 2421.21 | 95.40 |
| 0-60° | 2534.32 | 99.90 |
| 0-90° | 2536.86 | 100.00 |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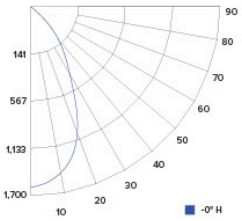
# Photometric Report

## 4″ Reflector LED Light Engine

### PHOTOMETRIC REPORT

Product #: E410L1235
Wattage / Lumens: 12.8W / 1166.6 lm
Luminaire LPW: 91.1 lm/W




### CANDLE POWER SUMMARY

| Degress Vertical | 0° |
|---|---|
| 0 | 1617 |
| 5 | 1591 |
| 15 | 1294 |
| 25 | 885 |
| 35 | 324 |
| 45 | 56 |
| 55 | 1 |
| 65 | 1 |
| 75 | 0 |
| 85 | 0 |
| 90 | 0 |

### ILLUMINANCE AT A DISTANCE

| Distance to Target Plane | Center Beam Footcandles | Beam Diameter |
|---|---|---|
| 4′ | 101 | 4.0′ |
| 6′ | 44.9 | 6.0′ |
| 8′ | 25.3 | 8.0′ |
| 10′ | 16.2 | 10.0′ |

### ZONAL LUMEN SUMMARY

| Zone | Lumens | %Luminaire |
|---|---|---|
| 0-30° | 902.2 | 77.3 |
| 0-40° | 1,113.4 | 95.4 |
| 0-60° | 1,165.4 | 99.9 |
| 0-90° | 1,166.6 | 100 |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