

# 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

|                     |                              |
|---------------------|------------------------------|
| <b>Wattage</b>      | 31W                          |
| <b>Lumens</b>       | 3000 lm                      |
| <b>Color Temp.</b>  | 5000K                        |
| <b>Dimmable</b>     | 0-10V/Triac/ELV (1% Dimming) |
| <b>Lamp Type</b>    | LED                          |
| <b>Beam Angle</b>   | 60°                          |
| <b>CRI</b>          | 93+                          |
| <b>Wet Location</b> | Listed                       |

## 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

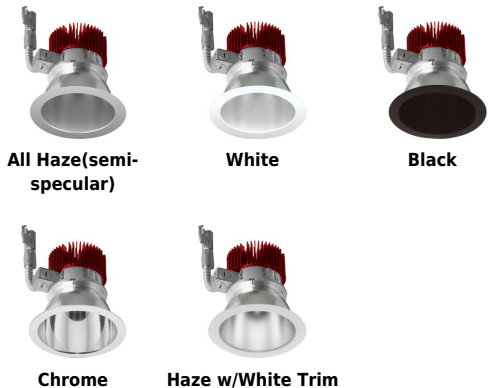
### LED Technology:

- 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.

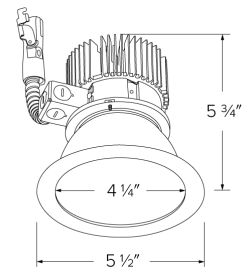
**Sunset:** Sunset color temperature is our dim-to-warm LED technology that allows the color temperature to become warmer as the product is dimmed. Our SUNSET items start at 3000K and go as low as 1800K when dimmed. For Sunset dim technology be sure to order an item with "Sunset" in the Color Temperature (CCT) attribute.

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

## Options



## Dimensions



**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 <sup>1</sup>     | H All Haze (Semi-Specular) | 2 Gen 2    | 60°                 |
|                   |        | 12 1250 lm (16.8W MAX.) | 30 3000K                  | W All White                | 1 Gen 1    | -F 38° <sup>1</sup> |
|                   |        | 16 1600 lm (21W MAX.)   | 35 3500K                  | B All Black                |            | -N 24° <sup>1</sup> |
|                   |        | 20 2000 lm (29.4W MAX.) | 40 4000K                  | C All Chrome               |            | -S 15° <sup>1</sup> |
|                   |        | 20 2000 lm (29.4W MAX.) | 50 5000K                  | HW Haze with White Trim    |            |                     |
|                   |        | 30 3000 lm (44.1W MAX.) | SD Sunset <sup>1, 2</sup> |                            |            |                     |

<sup>1</sup> Available for lumen packages up to 3000 lm only

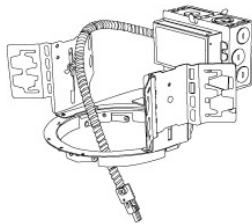
<sup>2</sup> Sunset, Dim to Warm technology, automatically transitions from 3000K to 1800K when dimmed

# Compatible Products

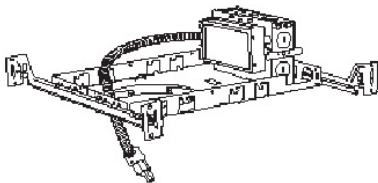
For use with 4" Laurel™ Light Engines



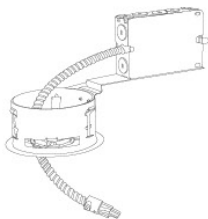
## 4" Laurel™ Commercial LED Frames



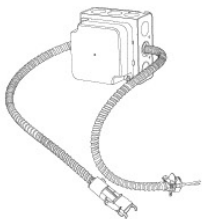
4" Architectural Frame  
E4LH



4" Plaster Frame  
E4LF



4" Remodel Frame  
E4LR



4" Retrofit Kit  
E4LT

### PRODUCT NUMBER BUILDER

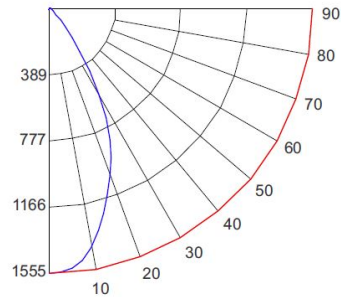
| Frame Type           |               | Voltage              | Lumen                |         | Dimming              | Optional             |                                       | Generation           |       |
|----------------------|---------------|----------------------|----------------------|---------|----------------------|----------------------|---------------------------------------|----------------------|-------|
| <input type="text"/> |               | <input type="text"/> | <input type="text"/> |         | <input type="text"/> | <input type="text"/> |                                       | <input type="text"/> |       |
| 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 |                      |                      |                                       |                      |       |

## 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

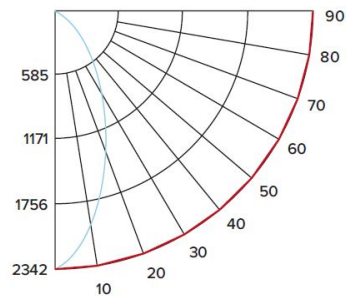
| Zone  | Lumens  | % Luminaire |
|-------|---------|-------------|
| 0-30° | 868.78  | 77.30       |
| 0-40° | 1072.36 | 95.40       |
| 0-60° | 1122.45 | 99.90       |
| 0-90° | 1123.58 | 100.00      |

## 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

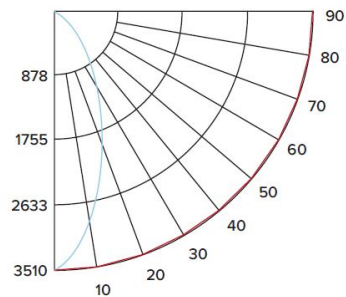
| Zone  | Lumens  | % Luminaire |
|-------|---------|-------------|
| 0-30° | 1308.44 | 77.30       |
| 0-40° | 1615.05 | 95.40       |
| 0-60° | 1690.49 | 99.90       |
| 0-90° | 1692.19 | 100.00      |

## 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

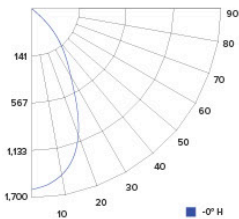
| Zone  | Lumens  | % Luminaire |
|-------|---------|-------------|
| 0-30° | 1961.57 | 77.30       |
| 0-40° | 2421.21 | 95.40       |
| 0-60° | 2534.32 | 99.90       |
| 0-90° | 2536.86 | 100.00      |

# 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        |