

# Koto™ LED Module

Works with 2", 3", 4", 5" & 6" Recessed Housings and Koto™ Trims



## Features

- Integrated 120V Dimmable Driver Triac/ELV
- Excellent color rendering 95+ CRI
- Sunset Module ELK09SD & ELK11SD starts from 3000K and dims to 1800K
- Human Centric Module ELK11HC starts from 4000K and dims to 2200K
- Works in 2", 3", 4" and 6" ELCO housings with Koto™ twist-on
- Energy Star Certified
- Title 24 JA8-2019 Compliant
- Standard 38° Lens installed, 25° and 60° lens included with each module - Optional Lens: 18° (EP731C), 90° (EP739C)
- Optional: Louver (L45), Linear Lens (L46), Spread Lens (L47), Clear Lens (L48), Frosted Lens (L49), Snoot (L50), Color Shifter (L51), Blue Lens (L52), Pink Lens (L53), Single Asymmetric Lens (L54), Double Asymmetric Lens (L55)
- Covered by U.S. PATENTS and Patents Pending

## Specifications

|               |                                |
|---------------|--------------------------------|
| Wattage       | 12.5W                          |
| Lumens        | 1300 lm                        |
| Voltage       | 120V                           |
| Color Temp.   | 3000K                          |
| Dimmable      | Triac/ELV                      |
| Lamp Type     | LED                            |
| Beam Angle    | 60°                            |
| CRI           | 95                             |
| Wet Location  | cUL Listed w/Wet Location Trim |
| Damp Location | cUL Listed                     |

## Dimensions



## Technical Details

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

**Construction:** Integrated driver and light engine with quick connect. Diecast aluminum body with heat fins allow for efficient cooling.

**Installation:** Twist & Lock design for toolless trim installation, for use with Koto™ trims only. Can be use in 2", 3", 4", 5" and 6" housings with quick connect base.

**Electrical:** Module connects to 120 power supply. High efficiency driver with a power factor >0.9. Start time of less than 0.75 seconds.

**Operating Temperature:** 0°F - 200°F of operating temperature.

**Delivered Lumens:** ELK0724 730 lm/2400K/10.5W   ELK0727 770 lm/2700K/10.5W   ELK0730 800 lm/3000K/10.5W   ELK0735 830 lm/3500K/10.5W   ELK0740 860 lm/4000K/10.5W

ELK0924 900 lm/2400K/10.5W   ELK0927 940 lm/2700K/10.5W   ELK0930 990 lm/3000K/10.5W   ELK0935 1040 lm/3500K/10.5W   ELK0940 1100 lm/4000K/10.5W   ELK09SD 940 lm/Sunset/10.5W

ELK1124 1060 lm/2400K/12.5W   ELK1127 1100 lm/2700K/12.5W   ELK1130 1150 lm/3000K/12.5W   ELK1135 1200 lm/3500K/12.5W   ELK1140 1260 lm/4000K/12.5W   ELK11SD 1050 lm/Sunset/12.5W   ELK11HC 1050 lm/Human Centric/12.5W

**ELK1327** 1250 lm/2700K/12.5W **ELK1330** 1300 lm/3000K/12.5W **ELK1335** 1350 lm/3500K/12.5W **ELK1340** 1400 lm/4000K/12.5W

**LED Technology:** Extremely accurate Color Rendering Index of 95+. Lumen Maintenance of 50,000 hours L70 Life based on LM80 standardized test results. Superior Thermal Management by utilizing integrated 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.

**Dimmability:** Works with 120V Triac and ELV type dimmers. Dims down to 5%. For full list of dimmers, refer to the Dimmer Compatibility List. Industry leading dimming that dims smoothly with no hot spots or flickering.

**Listings:** cUL Listed for Damp Locations. cUL Listed for Wet Location with Wet location trims. RoHS Compliant. Meets Energy Star & California Title 24 JA8-2019 standards.

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

## Product Number Builder

Example: **ELK0724**

| Koto™ LED Module | Lumens                    | Color Temp.                             | Beam Angle                 |
|------------------|---------------------------|-----------------------------------------|----------------------------|
| <b>ELK</b>       |                           |                                         |                            |
|                  | <b>07</b> 750 lm (10.5W)  | <b>24</b> 2400K                         | 38° <sup>5</sup>           |
|                  | <b>09</b> 950 lm (10.5W)  | <b>27</b> 2700K                         | <b>-S</b> 18°              |
|                  | <b>11</b> 1150 lm (12.5W) | <b>30</b> 3000K                         | <b>-N</b> 25°              |
|                  | <b>13</b> 1350 lm (12.5W) | <b>35</b> 3500K                         | <b>-W</b> 60°              |
|                  |                           | <b>40</b> 4000K                         | <b>-E</b> 90° <sup>6</sup> |
|                  |                           | <b>SD</b> Sunset <sup>1, 2</sup>        |                            |
|                  |                           | <b>HC</b> Human Centric <sup>3, 4</sup> |                            |

<sup>1</sup> Available with ELK09 and ELK11 lumen outputs only

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

<sup>3</sup> Available with ELK11 lumen outputs only

<sup>4</sup> Human Centric, Dim to Warm technology, automatically transitions from 4000K to 2200K when dimmed

<sup>5</sup> 38° lens installed. Includes 25° and 60° lens with module.

<sup>6</sup> 90° Frosted Reflector

# Compatible Products



For use with **Koto™ LED Module**

## 2" Koto™ Dedicated LED ICA Housings



2" ICA Maximum Adjustability Housing  
**New Construction**

| CAT NO.  | SPECIFICATIONS        |
|----------|-----------------------|
| EL276ICA | Maximum Adjustability |

## 2" Pex™ Twist-On Trims



**Round Deep Reflector**

**ELK2818**  
Finishes:  
(W, B, H, BB, BZ)



**Round Adjustable Reflector**

**ELK2829**  
Finishes:  
(W, B, H, BB, BZ)



**Round Adjustable Pinhole**

**ELK2827**  
Finishes:  
(W, B, BB, BZ)



**Round Curved Reflector**

**ELK2872**  
Finishes:  
(W, B\*)



**Square Deep Reflector**

**ELK2518**  
Finishes:  
(W, B, BB)



**Square Adjustable Reflector**

**ELK2529**  
Finishes:  
(W, B, BB)



**Square Reflector**

**ELK2541**  
Finishes:  
(W, B, BB)



**Square Adjustable Pinhole**

**ELK2527**  
Finishes:  
(W, B, BB)



**Round Gimbal**

**ELK2888**  
Finishes:  
(W, B\*, BZ)



**Square Gimbal**

**ELK2588**  
Finishes:  
(W, B\*, BZ)



**Round Adj. Trimless Reflector**

**ELK215**  
Finishes:  
(W, B\*)



**Trimless Spackle Frame**

**EL2SFR**  
For use with ELK215

Finishes: **W** - All White, **BB** - All Black, **BZ** - All Bronze, **B** - Black w/White Ring, **C** - Chrome w/White Ring, **H** - Haze w/White Ring, **B\*** - All Black (For ELK2872, ELK2888, ELK2588, & ELK215)

# Compatible Products

For use with **Koto™ LED Module**



## 3" Koto™ Dedicated LED ICA Housings



2-Hour Fire Rated 3" ICA Housing  
**New Construction**

| CAT NO.  | SPECIFICATIONS              |
|----------|-----------------------------|
| EL39FICA | 7 1/2" Height - Sound Rated |



3" ICA Maximum Adjustability Housing  
**New Construction**

| CAT NO.  | SPECIFICATIONS        |
|----------|-----------------------|
| EL386ICA | Maximum Adjustability |



3" ICA Housing  
**New Construction**

| CAT NO.      | SPECIFICATIONS                         |
|--------------|----------------------------------------|
| EL390ICA     |                                        |
| EL390ICA-EM5 | Emergency Battery Back-up (90 minutes) |



3" ICA Housing  
**Remodel**

| CAT NO.  | SPECIFICATIONS |
|----------|----------------|
| EL390ICA |                |

## 3" Pex™ Twist-On Trims



**Round Deep Reflector**

**ELK3618**

Finishes:

(W, BB, BZ, B, C, H)



**Round Adjustable Gimbal**

**ELK3629**

Finishes:

(W, BB, BZ, B, C, H)



**Round Adjustable Pinhole**

**ELK3627**

Finishes:

(B, BB, BZ, B, H)



**Round Adj. Slot Aperture**

**ELK3620**

Finishes:

(W)



**Round Adj. Wall Wash**

**ELK3622**

Finishes:

(W)



**Round Regressed Eyeball**

**ELK3653**

Finishes:

(W, BB, B)



**Round Curved Reflector**

**ELK3672**

Finishes:

(W, B)



**Round Directional Gimbal**

**ELK3679**

Finishes:

(W, BB, B, H)



**Round Adjustable Baffle**

**ELK3693**

Finishes:

(W)

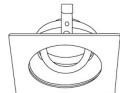


**Square Deep Reflector**

**ELK3318**

Finishes:

(W, BB, BZ, B, C, H)



**Square Adjustable Reflector**

**ELK3329**

Finishes:

(W, BB, BZ, B, C, H)



**Square Adj. Wall Wash**

**ELK3322**

Finishes:

(W)

\*Finishes: **W** - All White, **BB** - All Black, **BZ** - All Bronze, **B** - Black Reflector w/White Ring, **C** - Chrome Reflector w/White Ring, **H** - Haze Reflector w/White Ring

# Compatible Products

For use with **Koto™ LED Module**



## 3" Pex™ Twist-On Trims



**Square Adjustable Pinhole**  
**ELK3327**  
Finishes:  
(W, BB, BZ, B, H)

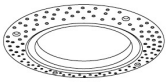


**Square Reflector**  
**ELK3341**  
Finishes:  
(W, BB, BZ, B)



**Square Adjustable Baffle**  
**ELK3393**  
Finishes:  
(W)

## 3" Pex™ Flush Mount Trim Adaptors



**Round Flush Mount Trim Adaptor**  
**EL3FMR**  
Compatible 3" Pex™ Round trims:  
ELK3618, ELK3629, ELK3627, ELK3693,  
ELK3620, ELK3622 Series



**Square Flush Mount Trim Adaptor**  
**EL3FMS**  
Compatible 3" Pex™ Square trims:  
ELK3318, ELK3329, ELK3322, ELK3327,  
ELK3341, ELK3393 Series

## 3" Pex™ Trimless



**Round Trimless Reflector**  
**ELK308**  
Finishes:  
(W, B, H)



**Round Adjustable Trimless Reflector**  
**ELK315**  
Finishes:  
(W, B, H)



**Round Trimless Spackle Frame**  
**EL3SFR**  
For use with ELK315



**Round Knife Edge Wood Ceiling Trim w/Mounting Clips**  
**EL3WCR**  
Finishes:  
(W, B)



**Square Trimless Reflector**  
**ELK370**  
Finishes:  
(W, B, H)



**Square Adjustable Trimless Reflector**  
**ELK381**  
Finishes:  
(W, B, H)



**Square Trimless Spackle Frame**  
**EL03SFS**  
For use with ELK370 & ELK381

Finishes: **W** - All White, **BB** - All Black, **BZ** - All Bronze, **B** - Black w/White Ring, **C** - Chrome w/White Ring, **H** - Haze w/White Ring, **B\*** - All Black (For ELK315, ELK370, & ELK381)

# Compatible Products



For use with **Koto™ LED Module**

## 4" Koto™ Dedicated LED ICA Housings



4" ICA Maximum Adjustability Housing  
**New Construction**

| CAT NO.  | SPECIFICATIONS        |
|----------|-----------------------|
| EL485ICA | Maximum Adjustability |



4" ICA Housing  
**New Construction**

| CAT NO.      | SPECIFICATIONS                         |
|--------------|----------------------------------------|
| EL490ICA     | 14W, 120/277V                          |
| EL490ICA-EM5 | Emergency Battery Back-up (90 minutes) |



4" R-60 Spray Foam Insulation Housing  
**New Construction**

| CAT NO.    | SPECIFICATIONS                                                       |
|------------|----------------------------------------------------------------------|
| EL490AJICA | Maximum Adjustability, For use in R60 or Chicago plenum applications |



4" ICA Housing  
**Remodel**

| CAT NO.   | SPECIFICATIONS |
|-----------|----------------|
| EL490RICA | 14W, 120V      |



2-Hour Fire Rated 4" ICA Housing  
**New Construction**

| CAT NO.  | SPECIFICATIONS             |
|----------|----------------------------|
| EL48FICA | 7 1/2" Height, Sound Rated |

## 4" Pex™ Twist-On Trims



**Shallow Reflector**  
**ELK4116**  
Finishes:  
(W, H)



**Deep Reflector**  
**ELK4118**  
Finishes:  
(W, BB, BZ, B, C, H)



**Adjustable Reflector**  
**ELK4129**  
Finishes:  
(W, BB, BZ, B, C, H)



**Adjustable Reflector with Clear Glass**  
**ELK4111**  
Finishes:  
(W, BB, BZ, B, C, H)



**Adjustable Reflector with Frosted Lens**  
**ELK4112**  
Finishes:  
(W, BB, BZ, B, C, H)



**Rotatable Slot Aperture**  
**ELK4120**  
Finishes:  
(W)



**Adjustable Wall Wash**  
**ELK4122**  
Finishes:  
(W)



**Adjustable Pinhole**  
**ELK4127**  
Finishes:  
(W, BB, BZ, B, H)



**Adjustable Pinhole with Frosted Glass**  
**ELK4125**  
Finishes:  
(W, BB, BZ, B, H)



**Slot Aperture**  
**ELK4130**  
Finishes:  
(W)



**Adjustable Spot**  
**ELK4188**  
Finishes:  
(W, B, BZ)



**Regressed Eyeball**  
**ELK4153**  
Finishes:  
(W, BB, B)



**Curved Reflector**  
**ELK4172**  
Finishes:  
(W, B)



**Directional Gimbal**  
**ELK4179**  
Finishes:  
(W, BB, B, H)



**Adjustable Baffle**  
**ELK4193**  
Finishes:  
(W, BB, B)

Finishes: **W** - All White, **BB** - All Black, **BZ** - All Bronze, **B** - Black w/White Ring, **C** - Chrome w/White Ring, **H** - Haze w/White Ring, **B\*** - All Black (For ELK4188, ELK4172, & ELK4284)

# Compatible Products

For use with **Koto™ LED Module**

## 4" Pex™ Twist-On Trims



**Shallow Reflector**

**ELK4216**  
Finishes:  
(W, H)



**Deep Reflector**

**ELK4218**  
Finishes:  
(W, BB, BZ, B, C, H)



**Adjustable Gimbal**

**ELK4229**  
Finishes:  
(W, BB, BZ, B, C, H)



**Adjustable Slot  
Rotatable Aperture**

**ELK4220**  
Finishes:  
(W)



**Adjustable  
Wall Wash**

**ELK4222**  
Finishes:  
(W)



**Adjustable Pinhole**

**ELK4227**  
Finishes:  
(W, BB, BZ, B, C, H)



**Adjustable Reflector**

**ELK4282**  
Finishes:  
(W, BZ)



**Adjustable Baffle**

**ELK4284**  
Finishes:  
(W, B, BZ)



**Adj. Phenolic Baffle**

**ELK4293**  
Finishes:  
(W, BB, B)

## 4" Pex™ Flush Mount Trim Adaptors



**Round Flush Mount Trim Adaptor**

**EL4FMR**  
Compatible 3" Pex™ Round trims:  
ELK4116, ELK4118, ELK4127, ELK4129,  
ELK4710, ELK4713, ELK4715 Series



**Square Flush Mount Trim Adaptor**

**EL4FMS**  
Compatible 3" Pex™ Square trims:  
ELK4216, ELK4218, ELK4227,  
ELK4229 Series

## 4" Pex™ Trimless



**Round Trimless Reflector**

**ELK408**  
Finishes:  
(W, B, H, BZ)



**Round Adj. Trimless Reflector**

**ELK415**  
Finishes:  
(W, B, H, BZ)



**Round Trimless Spackle Frame**

**EL4SFR**  
For use with ELK408 & ELK415



**Smooth Reflector**

**ELK430**  
Finishes:  
(W, B, BZ)



**Baffle**

**ELK434**  
Finishes:  
(W, B, BZ)



**Square Trimless Reflector**

**ELK445**  
Finishes:  
(W, B, H)



**Square Trimless Adj. Reflector**

**ELK459**  
Finishes:  
(W, B, H)



**Square Trimless Spackle Frame**

**EL4SFS**  
For use with ELK445 & ELK459

Finishes: **W** - All White, **BB** - All Black, **BZ** - All Bronze, **B** - Black w/White Ring, **C** - Chrome w/White Ring, **H** - Haze w/White Ring, **B\*** - All Black (For ELK408, ELK415, ELK434, ELK445, ELK459)

# Compatible Products



For use with **Koto™ LED Module**

## 4" Flexa™ Twist-On Trims



**Round Reflector**

**ELK4721**

Finishes:  
(WW, BB, BZBZ,  
BW, CW, HW)



**Round Baffle**

**ELK4723**

Finishes:  
(WW, BB, BZBZ, BW)



**Square Reflector**

**ELK4741**

Finishes:  
(WW, BB, BZBZ,  
BW, HW)  
*\*Not for Remodel Housing*



**Square Baffle**

**ELK4743**

Finishes:  
(WW, BB, BZBZ, BW)  
*\*Not for Remodel Housing*



**Square Adj. Reflector**

**ELK4759**

Finishes:  
(WW, BB, B, H)  
*\*Not for Remodel Housing*

## 4" Unique™ Twist-On Trims



**Round Adjustable Reflector**

**ELK4710**

Finishes:  
(W, B, BZ)



**Round Adjustable Baffle**

**ELK4713**

Finishes:  
(W, BZ)



**Round Wall Wash**

**ELK4715**

Finishes:  
(W, BZ)



**Round Adj. Deep Reflector**

**ELK4717**

Finishes:  
(W, BZ)



**Round Adj. Deep Baffle**

**ELK4719**

Finishes:  
(W)



**Square Reflector**

**ELK4714**

Finishes:  
(W, B, BZ)  
*\*Not for Remodel Housing*



**Square Baffle**

**ELK4716**

Finishes:  
(W, BZ)  
*\*Not for Remodel Housing*

\*Finishes: **W** - All White, **WW** - All White, **B** - Black Reflector w/White Ring, **C** - Chrome Reflector w/White Ring, **H** - Haze Reflector w/White Ring, **BB** - All Black, **BZ** - All Bronze, **CC** - All Chrome, **BZBZ** - All Bronze, **BW** - Black Reflector w/White Ring, **CW** - Chrome Reflector w/White Ring, **CN** - Chrome Reflector w/Nickel Ring, **HW** - Haze Reflector w/White Ring

# Compatible Products



For use with **Koto™ LED Module**

## 6" Koto™ Dedicated LED ICA Housings



2-Hour Fire Rated 6" ICA Housing  
**New Construction**

| CAT NO.  | SPECIFICATIONS |
|----------|----------------|
| EL76FICA | 7 3/4" Height  |



6" Standard ICA Housing  
**New Construction**

| CAT NO.  | SPECIFICATIONS |
|----------|----------------|
| EL770ICA | 7 1/2" Height  |



6" Standard ICA Housing  
**Remodel**

| CAT NO.   | SPECIFICATIONS |
|-----------|----------------|
| EL770RICA | 7 1/2" Height  |



2-Hour Shallow Fire Rated 6" ICA Housing  
**New Construction**

| CAT NO.   | SPECIFICATIONS |
|-----------|----------------|
| EL75FICAS | 6 3/16" Height |



6" Shallow ICA Housing  
**New Construction**

| CAT NO.  | SPECIFICATIONS |
|----------|----------------|
| EL760ICA | 5 1/2" Height  |



6" Shallow ICA Housing  
**Remodel**

| CAT NO.   | SPECIFICATIONS |
|-----------|----------------|
| EL760RICA | 5 1/2" Height  |

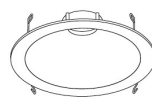
## 5" & 6" Pex™ Twist-On Trims



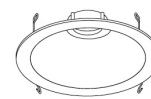
5" Round Reflector  
**ELK5421**  
Finishes:  
(W)



5" Round Baffle  
**ELK5493**  
Finishes:  
(W)



6" Round Reflector  
**ELK6418**  
Finishes:  
(W, BB, BZ, H)



6" Round Adj. Reflector  
**ELK6429**  
Finishes:  
(W, BB, BZ, H)



6" Round Adj. Slot Aperture  
**ELK6420W**  
Finishes:  
(W)



6" Round Adj. Pinhole Reflector  
**ELK6427**  
Finishes:  
(W, B, H)



6" Square Adj. Reflector  
**ELK6829**  
Finishes:  
(W, BB, H)

\*Finishes: **W** - All White, **BB** - All Black, **BZ** - All Bronze, **B** - Black Reflector w/White Ring, **C** - Chrome Reflector w/White Ring, **H** - Haze Reflector w/White Ring

# Compatible Products



For use with **Koto™ LED Module**

## 6" Flexa™ Twist-On Trims

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**6" Round Reflector**

**ELK610**

Finishes:

(WW, BB, BZBZ, CC, BW, CW, HW)



**6" Round Adjustable Reflector**

**ELK629**

Finishes:

(WW, BB, BZBZ, BW, CW, HW)



**6" Round Adjustable Baffle**

**ELK693**

Finishes:

(WW, BB, BZBZ, BW)

## 6" Unique™ Twist-On Trims

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**6" Round Reflector**

**ELK6710**

Finishes:

(W, B, BZ)



**6" Round Baffle**

**ELK6713**

Finishes:

(W, BZ)



**6" Round Wall Wash**

**ELK6715**

Finishes:

(W, BZ)

Finishes: **W** - All White, **BB** - All Black, **BZ** - All Bronze, **B** - Black w/White Ring, **C** - Chrome w/White Ring, **H** - Haze w/White Ring, **B\*** - All Black (For ELK6710, ELK6713, ELK6715)

# Compatible Products

For use with **Koto™ LED Module**



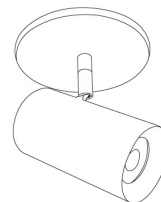
## 2" Koto Sylo™ Build-Your-Own

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2" Koto Sylo Housing  
**Surface Mount**

| CAT NO.  | SPECIFICATIONS |
|----------|----------------|
| EKS25SFW | White Finish   |
| EKS25SFB | Black Finish   |
| EKS25SFS | Silver Finish  |



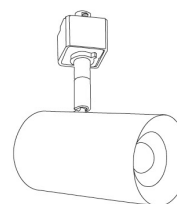
2" Koto Sylo Housing  
**Monopoint**

| CAT NO.  | SPECIFICATIONS |
|----------|----------------|
| EKS25MPW | White Finish   |
| EKS25MPB | Black Finish   |
| EKS25MPS | Silver Finish  |



2" Koto Sylo Housing  
**Pendant**

| CAT NO.  | SPECIFICATIONS |
|----------|----------------|
| EKS25PDW | White Finish   |
| EKS25PDB | Black Finish   |
| EKS25PDS | Silver Finish  |



2" Koto Sylo Housing  
**Surface Mount**

| CAT NO.  | SPECIFICATIONS |
|----------|----------------|
| EKS25TRW | White Finish   |
| EKS25TRB | Black Finish   |
| EKS25TRS | Silver Finish  |

# Photometric Report

## Koto™ LED Module

### PHOTOMETRIC REPORT

Product #: ELK0730  
Wattage / Lumens: 10.6W / 813.8 lm  
Luminaire LPW: 76.7 lm/W



### CANDLE POWER SUMMARY

| Degress Vertical | 0°   |
|------------------|------|
| 0                | 1186 |
| 5                | 1188 |
| 15               | 1004 |
| 25               | 536  |
| 35               | 254  |
| 45               | 93   |
| 55               | 27   |
| 65               | 12   |
| 75               | 6    |
| 85               | 3    |
| 90               | 1    |

### ILLUMINANCE AT A DISTANCE

| Distance to Target Plane | Center Beam Footcandles | Beam Diameter |
|--------------------------|-------------------------|---------------|
| 4'                       | 74.1                    | 3.2'          |
| 6'                       | 32.9                    | 4.8'          |
| 8'                       | 18.5                    | 6.4'          |
| 10'                      | 11.9                    | 8.0'          |

### ZONAL LUMEN SUMMARY

| Zone  | Lumens | %Luminaire |
|-------|--------|------------|
| 0-30° | 580.1  | 71.3       |
| 0-40° | 714.6  | 87.8       |
| 0-60° | 797.0  | 98         |
| 0-90° | 813.5  | 100        |

### PHOTOMETRIC REPORT

Product #: ELK0735  
Wattage / Lumens: 10W / 947.4 lm  
Luminaire LPW: 95 lm/W



### CANDLE POWER SUMMARY

| Degress Vertical | 0°   |
|------------------|------|
| 0                | 2249 |
| 5                | 2075 |
| 15               | 1257 |
| 25               | 388  |
| 35               | 72   |
| 45               | 31   |
| 55               | 21   |
| 65               | 11   |
| 75               | 5    |
| 85               | 0    |
| 90               | 0    |

### ILLUMINANCE AT A DISTANCE

| Distance to Target Plane | Center Beam Footcandles | Beam Diameter |
|--------------------------|-------------------------|---------------|
| 4'                       | 141                     | 2.6'          |
| 6'                       | 62.5                    | 3.9'          |
| 8'                       | 35.1                    | 5.2'          |
| 10'                      | 22.5                    | 6.5'          |

### ZONAL LUMEN SUMMARY

| Zone  | Lumens | %Luminaire |
|-------|--------|------------|
| 0-30° | 812.7  | 85.8       |
| 0-40° | 876.7  | 92.6       |
| 0-60° | 919.5  | 97.1       |
| 0-90° | 936.3  | 98.9       |

### PHOTOMETRIC REPORT

Product #: ELK0930  
Wattage / Lumens: 10W / 972 lm  
Luminaire LPW: 97 lm/W



### CANDLE POWER SUMMARY

| Degress Vertical | 0°   |
|------------------|------|
| 0                | 1455 |
| 5                | 1397 |
| 15               | 1175 |
| 25               | 655  |
| 35               | 306  |
| 45               | 116  |
| 55               | 38   |
| 65               | 16   |
| 75               | 7    |
| 85               | 2    |
| 90               | 1    |

### ILLUMINANCE AT A DISTANCE

| Distance to Target Plane | Center Beam Footcandles | Beam Diameter |
|--------------------------|-------------------------|---------------|
| 4'                       | 90.9                    | 3.1'          |
| 6'                       | 40.4                    | 4.7'          |
| 8'                       | 22.7                    | 6.3'          |
| 10'                      | 14.5                    | 7.8'          |

### ZONAL LUMEN SUMMARY

| Zone  | Lumens | %Luminaire |
|-------|--------|------------|
| 0-30° | 685.9  | 70.6       |
| 0-40° | 846.0  | 87.1       |
| 0-60° | 946.8  | 97.5       |
| 0-90° | 965.8  | 99.4       |

### PHOTOMETRIC REPORT

Product #: ELK0935  
Wattage / Lumens: 10W / 990.8 lm  
Luminaire LPW: 99 lm/W



### CANDLE POWER SUMMARY

| Degress Vertical | 0°   |
|------------------|------|
| 0                | 2295 |
| 5                | 2215 |
| 15               | 1501 |
| 25               | 569  |
| 35               | 104  |
| 45               | 37   |
| 55               | 25   |
| 65               | 15   |
| 75               | 9    |
| 85               | 6    |
| 90               | 6    |

### ILLUMINANCE AT A DISTANCE

| Distance to Target Plane | Center Beam Footcandles | Beam Diameter |
|--------------------------|-------------------------|---------------|
| 4'                       | 143                     | 2.6'          |
| 6'                       | 63.8                    | 3.9'          |
| 8'                       | 35.9                    | 5.2'          |
| 10'                      | 23.0                    | 6.4'          |

### ZONAL LUMEN SUMMARY

| Zone  | Lumens | %Luminaire |
|-------|--------|------------|
| 0-30° | 826.6  | 83.5       |
| 0-40° | 890.6  | 89.9       |
| 0-60° | 937.1  | 94.6       |
| 0-90° | 962    | 97.1       |

# Photometric Report

## Koto™ LED Module

### PHOTOMETRIC REPORT

Product #: ELK09SD  
Wattage / Lumens: 10.9W / 605.1 lm  
Luminaire LPW: 55.5 lm/W



### CANDLE POWER SUMMARY

| Degress Vertical | 0°  |
|------------------|-----|
| 0                | 731 |
| 5                | 751 |
| 15               | 640 |
| 25               | 337 |
| 35               | 175 |
| 45               | 79  |
| 55               | 23  |
| 65               | 10  |
| 75               | 4   |
| 85               | 1   |
| 90               | 0   |

### ILLUMINANCE AT A DISTANCE

| Distance to Target Plane | Center Beam Footcandles | Beam Diameter |
|--------------------------|-------------------------|---------------|
| 4'                       | 45.7                    | 3.1'          |
| 6'                       | 20.3                    | 4.7'          |
| 8'                       | 11.4                    | 6.2'          |
| 10'                      | 7.31                    | 7.8'          |

### ZONAL LUMEN SUMMARY

| Zone  | Lumens | %Luminaire |
|-------|--------|------------|
| 0-30° | 402.9  | 66.6       |
| 0-40° | 510.3  | 84.4       |
| 0-60° | 588.6  | 97.3       |
| 0-90° | 601.9  | 99.5       |

### PHOTOMETRIC REPORT

Product #: ELK1127  
Wattage / Lumens: 12.5W / 1086.2 lm  
Luminaire LPW: 86.9 lm/W



### CANDLE POWER SUMMARY

| Degress Vertical | 0°   |
|------------------|------|
| 0                | 1606 |
| 5                | 1542 |
| 15               | 1297 |
| 25               | 723  |
| 35               | 338  |
| 45               | 128  |
| 55               | 42   |
| 65               | 17   |
| 75               | 8    |
| 85               | 3    |
| 90               | 1    |

### ILLUMINANCE AT A DISTANCE

| Distance to Target Plane | Center Beam Footcandles | Beam Diameter |
|--------------------------|-------------------------|---------------|
| 4'                       | 100                     | 3.2'          |
| 6'                       | 44.6                    | 4.8'          |
| 8'                       | 25.1                    | 6.4'          |
| 10'                      | 16.1                    | 7.9'          |

### ZONAL LUMEN SUMMARY

| Zone  | Lumens  | %Luminaire |
|-------|---------|------------|
| 0-30° | 757.2   | 70.6       |
| 0-40° | 933.9   | 87.1       |
| 0-60° | 1,045.2 | 97.5       |
| 0-90° | 1,066.1 | 99.4       |

### PHOTOMETRIC REPORT

Product #: ELK1130  
Wattage / Lumens: 11.8W / 1162.5 lm  
Luminaire LPW: 98.5 lm/W



### CANDLE POWER SUMMARY

| Degress Vertical | 0°   |
|------------------|------|
| 0                | 3043 |
| 5                | 2807 |
| 15               | 1766 |
| 25               | 520  |
| 35               | 98   |
| 45               | 46   |
| 55               | 34   |
| 65               | 22   |
| 75               | 12   |
| 85               | 8    |
| 90               | 6    |

### ILLUMINANCE AT A DISTANCE

| Distance to Target Plane | Center Beam Footcandles | Beam Diameter |
|--------------------------|-------------------------|---------------|
| 4'                       | 190                     | 2.4'          |
| 6'                       | 84.5                    | 3.6'          |
| 8'                       | 47.5                    | 4.8'          |
| 10'                      | 30.4                    | 6.0'          |

### ZONAL LUMEN SUMMARY

| Zone  | Lumens  | %Luminaire |
|-------|---------|------------|
| 0-30° | 997.9   | 85.9       |
| 0-40° | 1,064.7 | 91.6       |
| 0-60° | 1,125.3 | 96.9       |
| 0-90° | 1,161.6 | 100        |

### PHOTOMETRIC REPORT

Product #: ELK1135  
Wattage / Lumens: 11.8W / 1210 lm  
Luminaire LPW: 102.5 lm/W



### CANDLE POWER SUMMARY

| Degress Vertical | 0°   |
|------------------|------|
| 0                | 3160 |
| 5                | 2920 |
| 15               | 1836 |
| 25               | 540  |
| 35               | 102  |
| 45               | 47   |
| 55               | 35   |
| 65               | 23   |
| 75               | 13   |
| 85               | 8    |
| 90               | 7    |

### ILLUMINANCE AT A DISTANCE

| Distance to Target Plane | Center Beam Footcandles | Beam Diameter |
|--------------------------|-------------------------|---------------|
| 4'                       | 198                     | 2.4'          |
| 6'                       | 87.9                    | 3.6'          |
| 8'                       | 49.4                    | 4.8'          |
| 10'                      | 31.6                    | 6.0'          |

### ZONAL LUMEN SUMMARY

| Zone  | Lumens  | %Luminaire |
|-------|---------|------------|
| 0-30° | 1,037.8 | 85.9       |
| 0-40° | 1,107.3 | 91.6       |
| 0-60° | 1,170.3 | 96.9       |
| 0-90° | 1,208.1 | 100        |

# Photometric Report

## Koto™ LED Module

### PHOTOMETRIC REPORT

Product #: ELK1330  
Wattage / Lumens: 11.8W / 1312.2 lm  
Luminaire LPW: 111.2 lm/W



### CANDLE POWER SUMMARY

| Degress Vertical | 0°   |
|------------------|------|
| 0                | 1575 |
| 5                | 1497 |
| 15               | 1224 |
| 25               | 824  |
| 35               | 377  |
| 45               | 142  |
| 55               | 35   |
| 65               | 9    |
| 75               | 2    |
| 85               | 1    |
| 90               | 0    |

### ILLUMINANCE AT A DISTANCE

| Distance to Target Plane | Center Beam Footcandles | Beam Diameter |
|--------------------------|-------------------------|---------------|
| 4'                       | 98.4                    | 4.0'          |
| 6'                       | 43.8                    | 6.0'          |
| 8'                       | 24.6                    | 8.0'          |
| 10'                      | 15.8                    | 10.0'         |

### ZONAL LUMEN SUMMARY

| Zone  | Lumens  | %Luminaire |
|-------|---------|------------|
| 0-30° | 879.8   | 67.1       |
| 0-40° | 1,140.2 | 86.9       |
| 0-60° | 1,298.7 | 99         |
| 0-90° | 1,311.4 | 100        |



**ELCO Lighting**

# Dimmer Compatibility Chart

Standard Koto™ LED Modules

For ELK07, ELK08CT5, ELK09, ELK10CT5,

ELK11 & ELK13 Series

## For Reference Only

Testing conducted by ELCO Lighting is not a substitute for and does not imply certification by an independent laboratory or any other standards certification. Refer to manufacturer specifications for more detailed information on product certifications and standards. Consult the dimmer manufacturer prior to installation to ensure compatibility.

| Manufacturer | Product                                                                                                                               | Part Number                                   | Dimmed Light Output Range |
|--------------|---------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------|---------------------------|
| Leviton      | Decora SureSlide® Single Pole with Slide -to-Off                                                                                      | 6672                                          | 15% - 100%                |
|              | Leviton Dimmer                                                                                                                        | 1K3502                                        | 5% - 100%                 |
| Lutron       | Vive, 120V, 150W LED/CFL, 600W Incandescent/Halogen, FP, Single Pole/Multi-Location Dimmer, Commercial Application                    | MRF2S-6CL                                     | 12% - 91%                 |
|              | Panel Model, Commercial/Residential Application, FP                                                                                   | GP (Harrier) Card                             | 10% - 94%                 |
|              | Grafik QS/Mailbox Power Module, 120/220 to 240V AC, LED/Incandescent/Halogen Load Type, Commercial/Residential Indoor Application, FP | LQRJ-WPM-6P                                   | 10% - 95%                 |
|              | Grafik Eye 3000/HomeWorks, 120V, Incandescent/Fluorescent Load Type, Commercial/Residential Application, FP                           | HWI-WPM-6D-120                                | 10% - 95%                 |
|              | Panel Dimming Module, 120V, Commercial/Residential Application, FP                                                                    | HW/LP-RPM-4U-120                              | 10% - 95%                 |
|              | Panel Adaptive Dimming Module, 120V, Commercial/Residential Application, FP                                                           | HW/LP-RPM-4A-120                              | 9% - 95%                  |
|              | HomeWorks® QS for CFL/LED loads, 120V, RP, Commercial/Residential Application                                                         | LQSE-4A1-D/MQSE-4A1-D/<br>MQSE-3A1/MQSE-2A1-D | 8% - 95%                  |
|              | Energi Savr Node LED+ Phase Adaptive, Commercial Application, Reverse Phase, (Zone 1) (Zones 2-4)                                     | QSN-4A5-S                                     | 8% - 95%                  |
|              | Energi Savr Node LED+ Phase Adaptive, Commercial Application, Foward Phase, (Zone 1) (Zones 2-4)                                      | QSN-4A5-S                                     | 10% - 97%                 |
|              | RadioRA®2, 120V, 50/60-Hz, 150W LED or 600W Incandescent/Halogen, 3-Way & 4-Way, Residential Application                              | RRD-6CL                                       | 10% - 95%                 |
|              | RadioRA®3, 120V, 250W LED/CFL or 500W Incandescent/Halogen, Single Pole, Multi-Location                                               | RRST-PRO-N                                    | 10% - 95%                 |
|              | HomeWorks® QS, 120V, 60-Hz, 150W LED/CFL or 600W Incandescent/Halogen/MLV, Residential Application                                    | HQRD-6CL(H2)<br>HORA-6CL(H2)                  | 10% - 95%                 |
|              | Homeworks QS, Residential Application, Reverse Phase                                                                                  | LQSE-4A-120-D                                 | 8% - 89%                  |
|              | HomeWorks® for LED/Incandescent/Halogen loads, Reverse Phase, (Zone 1) (Zones 2-4)                                                    | LQSE-4A5-120-D                                | 8% - 89%                  |
|              | HomeWorks® for LED/Incandescent/Halogen loads, Foward Phase, (Zone 1) (Zones 2-4)                                                     | LQSE-4A5-120-D                                | 10% - 100%                |
|              | Ariadni® C-L Single Pole/3-Way, 150W LED/CFL or 600W Incandescent/Halogen                                                             | AYCL-153P                                     | 10% - 100%                |
|              | Skylark Contour® C-L, Single Pole/3-Way, 150W LED/CFL or 600W Incandescent/Halogen                                                    | CTCL-153P                                     | 10% - 100%                |
|              | Skylark® C-L Single Pole/3-Way, 150W LED/CFL or 600W Incandescent/Halogen                                                             | SCL-153P                                      | 10% - 100%                |

Integrating our lighting with your Smart Home System is a breeze. Simply check your Smart Home system for compatible smart switches and cross reference that with our Dimming Compatibility Chart. Once the switches are integrated with your Smart Home system your lights will be ready to go.



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| Manufacturer | Product                                                                                                                                           | Part Number | Dimmed Light Output Range |
|--------------|---------------------------------------------------------------------------------------------------------------------------------------------------|-------------|---------------------------|
| Lutron       | Diva® Series 150W Single Pole/3-Way Dimmer                                                                                                        | DVCL-153P   | 10% - 100%                |
|              | Skylark Contour® Single Pole/3-Way 1000W Incandescent/Halogen                                                                                     | CT-103P     | 10% - 100%                |
|              | Skylark® Single Pole 300W ELV Preset Dimmer                                                                                                       | SELV-300P   | 5% - 100%                 |
|              | Skylark® Single Pole 600W Incandescent/Halogen, Slide-to-Off Dimmer                                                                               | S-600P      | 5% - 100%                 |
|              | Diva® 300W Single Pole/3-Way ELV Dimmer                                                                                                           | DVELV-303P  | 10% - 100%                |
|              | Diva® 600W Single Pole Incandescent/Halogen Preset Dimmer                                                                                         | DV-600P     | 5% - 100%                 |
|              | Ariadni® 600W Single Pole Magnetic Low Voltage Dimmer                                                                                             | AYLV-600P   | 5% - 100%                 |
|              | Ariadni® 600W Single Pole/3-Way Incandescent/Halogen Dimmer                                                                                       | AY-603P     | 5% - 100%                 |
|              | Maestro® 600W Single Pole/3-Way ELV Dimmer                                                                                                        | MAELV-600   | 5% - 100%                 |
|              | Maestro® C-L Single Pole/3-Way Dimmer. 150W Max for LED/CFL or 600W Max for Incandescent/Halogen                                                  | MACL-153M   | 10% - 100%                |
|              | Caséta® Wireless Dimmer                                                                                                                           | PD-6WCL     | 10% - 100%                |
| SnapOne™     | Control4® Centralized 8-Channel Adaptive Phase Dimmer, 120/277V AC, 50/60-Hz, 200W LED, 500W Fluorescent/CFL, 1000W Incandescent/Halogen/ELV/MLV* | C4-DIN-8APD | 5% - 100%                 |
|              | Control4® Centralized 8-Channel Forward Phase Dimmer, 100/120V AC, 50/60-Hz, 200W LED, 500W Fluorescent/CFL, 1000W Incandescent/Halogen/MLV*      | C4-DIN-8FPD | 25% - 100%                |
|              | Control4® Wireless Adaptive Phase Dimmer, 120V AC, 50/60-Hz, 120W LED, 300W Fluorescent/CFL, 600W Incandescent/Halogen                            | C4-APD120   | 23% - 100%                |
|              | Control4® Forward Phase Dimmer, 120V AC, 50/60-Hz, 200W LED, 500W Fluorescent/CFL, 1000W Incandescent/Halogen                                     | C4-FPD120   | 4% - 100%                 |
|              | Control4® Essential Forward Phase Dimmer, 120V AC, 60-Hz, 300W LED, 300W Fluorescent/CFL, 600W Incandescent/Halogen                               | C4-V-FPD120 | 1% - 100%                 |

\*MLV each transformer must be loaded to at least 50% of its maximum load

**\*NOTE: Refer to dimmer manufacturer's documentation for installation instructions and circuit details**

Disclaimer: Minimum and maximum loads for LEDs and CFLs are given in number of lamps and may vary depending on the lamp being used. Testing conducted by ELCO Lighting is not a substitute for and does not imply certification by an independent laboratory or any other standards certification. Refer to manufacturer specifications for more detailed information on product certifications and standards.

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