

| Project name: | | |
|---------------|--|--|
| Fixture type: | | |
| Date: | | |

Koto™ LED Module

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



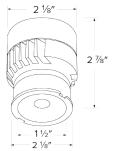
Features

- 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 (<u>L45</u>), Linear Lens (<u>L46</u>), Spread Lens (<u>L47</u>), Clear Lens (<u>L48</u>), Frosted Lens (<u>L49</u>), Snoot (<u>L50</u>), Color Shifter (<u>L51</u>), Blue Lens (<u>L52</u>), Pink Lens (<u>L53</u>), Single Asymmetric Lens (<u>L54</u>), Double Asymmetric Lens (<u>L55</u>)
- Covered by U.S. PATENTS and Patents Pending

Specifications

| Wattage | 10.5W |
|--------------------------|-----------------------------------|
| Lumens | 860 lm |
| Voltage | 120V |
| Color Temp. | 4000K |
| Dimmable | Triac/ELV |
| Lamp Type | LED |
| Beam Angle | 38° |
| 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 **ELK095D** 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 |
|------------------|---------------------------|---|----------------------------|
| ELK | | | |
| | 07 750 lm (10.5W) | 24 2400K | 38° ⁵ |
| | 09 950 lm (10.5W) | 27 2700K | -S 18° |
| | 11 1150 lm (12.5W) | 30 3000K | -N 25° |
| | 13 1350 lm (12.5W) | 35 3500K | -W 60° |
| | | 40 4000K | -E 90° ⁶ |
| | | SD Sunset ^{1, 2} | |
| | | HC Human Centric ^{3, 4} | |

¹ Available with ELK09 and ELK11 lumen outputs only

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

³ Available with ELK11 lumen outputs only

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

⁵ 38° lens installed. Includes 25° and 60° lens with module.

⁶ 90° Frosted Reflector



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)



Square Deep Reflector

ELK2518 Finishes:

(W, B, BB)



Finishes:

(W, B*, BZ)



Round Adjustable Reflector

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



Square Adjustable Reflector

ELK2529 Finishes:

(W, B, BB)



Square Gimbal ELK2588 Finishes: (W, B*, BZ)



Round Adjustable Pinhole

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



Square Reflector

ELK2541 Finishes: (W, B, BB)



Round Curved Reflector



Square Adjustable Pinhole

ELK2527 Finishes: (W, B, BB)



Round Adj. Trimless Reflector

ELK215 Finishes: (W, 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 ELK2872, ELK2888, ELK2588, & ELK215)



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 ½" Height - Sound Rated |



3" ICA Housing
New Construction

| CAT NO. | SPECIFICATIONS |
|---------------|---------------------|
| EL390ICA | |
| EL 2001CA EME | Emorgone / Potton / |

Emergency Battery Back-up (90 minutes)



3" ICA Maximum Adjustability Housing

New Construction

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



3" ICA Housing Remodel

| CAT NO. | SPECIFICATIONS |
|-----------|----------------|
| EL390RICA | |

3" Pex™ Twist-On Trims





Round Deep Reflector

ELK3618 Finishes: (W, BB, BZ, B, C, H)



Round Adj. Wall Wash

ELK3622 Finishes: (W)



Round Adjustable Baffle

ELK3693 Finishes: (W)



Round Adjustable Gimbal

ELK3629 Finishes: (W, BB, BZ, B, C, H)



Round Regressed Eyeball

ELK3653 Finishes: (W, BB, B)



Square Deep Reflector

ELK3318 Finishes: (W, BB, BZ, B, C, H)



Round Adjustable Pinhole

ELK3627 Finishes: (B, BB, BZ, B, H)



Round Curved Reflector

ELK3672 Finishes: (W, B)



Square Adjustable Reflector

ELK3329 Finishes: (W, BB, BZ, B, C, H)





Round Adj. Slot Aperture

ELK3620 Finishes: (W)



Round Directional Gimbal

ELK3679 Finishes: (W, BB, B, 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



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



Recommended to be used with Maximum Adjustability Housing



Round Trimless Reflector

ELK308 Finishes: (W, B, H)



Square Trimless Reflector ELK370

Finishes: (W, B, H)



Round Adjustable Trimless Reflector

ELK315 Finishes: (W, B, H)



Square Adjustable Trimless Reflector ELK381

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



Round Trimless Spackle Frame EL3SFR

For use with ELK315



Square Trimless Spackle Frame EL03SFS

For use with ELK370 & ELK381



Round Knife Edge Wood Ceiling Trim w/Mounting Clips

EL3WCR Finishes: (W, 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 ELK315, ELK370, & ELK381)



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 Remodel

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



4" ICA Housing **New Construction**

| CAT NO. | SPECIFICATIONS |
|--------------|-------------------|
| EL490ICA | 14W, 120/277V |
| EL490ICA-EM5 | Emergency Battery |



Back-up (90 minutes)

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

| CAT NO. | SPECIFICATIONS |
|-----------|---------------------------|
| EL 48EICA | 7 1/2" Height Sound Pated |



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

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



used with Maximum Adjustability Housing

Adjustable Reflector with Frosted Lens

ELK4112

Finishes:

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

Slot Aperture

ELK4130

Finishes:

(W)

Pex[™] Twist-On Trims



Shallow Reflector ELK4116 Finishes:

(W, H)



Slot Aperture ELK4120 Finishes: (W)



Adjustable Spot ELK4188 Finishes:

(W, B, BZ)



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



Adjustable Wáll Wash ELK4122 Finishes: (W)



Regressed Eyeball ELK4153 Finishes:

(W, BB, B)



Reflector ELK4129 Finishes:

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



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



Curved Reflector ELK4172

Finishes: (W, B)



Adjustable Reflector with Clear Glass ELK4111

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



Adjustable Pinhole with Frosted Glass ELK4125

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



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)



For use with Koto™ LED Module

4" Pex™ Twist-On Trims





Shallow Reflector

ELK4216 Finishes: (W, H)



Adjustable Pinhole ELK4227

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



Deep Reflector

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



Adjustable Reflector

ELK4282 Finishes: (W, BZ)



Adjustable Gimbal

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



Adjustable Baffle

ELK4284 Finishes: (W, B, BZ)



Adjustable Slot Rotatable Aperture

ELK4220 Finishes: (W)



Adjustable Wall Wash ELK4222

Finishes: (W)



Adj. Phenolic Baffle

ELK4293 Finishes: (W, BB, B)

4" Pex™ Flush Mount Trim Adaptors



Round Flush Mount Trim Adaptor

FL4FMR

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



Square Flush Mount Trim Adaptor

EL4FM

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

4" Pex™ Trimless



Round Trimless Reflector

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



Baffle ELK434 Finishes:

(W, B, BZ)



Round Adj. Trimless Reflector

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



Square Trimless Reflector

ELK445 Finishes: (W, B, H)



Round Trimless Spackle Frame

EL4SFRFor use with ELK408 & ELK415



Square Trimless Adj. Reflector

ELK459 Finishes: (W, B, H)



used with Maximum Adjustability Housing

Smooth Reflector

ELK430 Finishes: (W, B, BZ)



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, ELK459, ELK459)



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 Adj. Deep Baffle

ELK4719 Finishes: (W)



Round Adjustable Baffle

ELK4713 Finishes: (W, BZ)



Square Reflector

ELK4714
Finishes:
(W, B, BZ)
*Not for Remodel Housing



Round Wall Wash

ELK4715 Finishes: (W, BZ)



Square Baffle

ELK4716
Finishes:
(W, BZ)
*Not for Remodel Housing



Round Adj. Deep Reflector

ELK4717 Finishes: (W, BZ)

*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



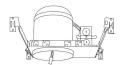
For use with Koto™ LED Module

6" Koto™ Dedicated LED ICA Housings



2-Hour Fire Rated 6" ICA Housing New Construction

| CAT NO. | SPECIFICATIONS |
|----------|----------------|
| EL76FICA | 7 ¾" Height |



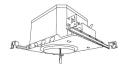
6" Standard ICA Housing New Construction

| CAT NO. | SPECIFICATIONS |
|----------|----------------|
| EL770ICA | 7½" Height |



6" Standard ICA Housing Remodel

| CAT NO. | SPECIFICATIONS | |
|-----------|----------------|--|
| EL770RICA | 7 ½" 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 ½" Height | |



6" Shallow ICA Housing Remodel

| CAT NO. | SPECIFICATIONS |
|-----------|----------------|
| EL760RICA | 5 ½" Height |

5" & 6" Pex™ Twist-On Trims



5" Round Reflector

ELK5421 Finishes: (W)



6" Round Adj. Slot Aperture ELK6420W

ELK6420W Finishes: (W)



5" Round Baffle

ELK5493 Finishes: (W)



6" Round Adj. Pinhole Reflector

ELK6427 Finishes: (W, B, H)



6" Round Reflector

ELK6418 Finishes: (W, BB, BZ, H)



6" Square Adj. Reflector

ELK6829 Finishes: (W, BB, H)



6" Round Adj. Reflector

ELK6429 Finishes: (W, BB, BZ, 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



For use with Koto™ LED Module

6" Flexa™ Twist-On Trims



6" Round Reflector

ELK610 Finishes: (WW, BB, BZBZ, CC, BW, CW, HW)



6" Round Adjustable Reflector 6" Round Adjustable Baffle

ELK629 Finishes: (WW, BB, BZBZ, BW, CW, HW)



6 Round Adjustable Barrie

ELK693 Finishes: (WW, BB, BZBZ, BW)

6" Unique™ Twist-On Trims



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)



For use with Koto™ LED Module

2" Koto Sylo™ Build-Your-Own



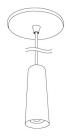
2" Koto Sylo Housing Surface Mount

| 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

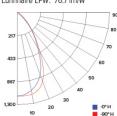
| CAT NO. | SPECIFICATIONS |
|----------|----------------|
| EKS25TRW | White Finish |
| EKS25TRB | Black Finish |
| EKS25TRS | Silver Finish |

Photometric Report

Koto[™] LED Module

PHOTOMETRIC REPORT

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



| 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 |

CANDLE POWER SUMMARY

ILLUMINANCE AT A DISTANCE

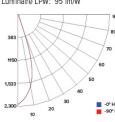
| Distance to Target Plane | Center Beam Footcandles | Beam Diameter |
|--------------------------|-------------------------|---------------|
| 4' | 74.1 | 3.2' |
| 6′ | 32.9 | 4.8' |
| 8′ | 18.5 | 6.4' |
| 10′ | 11.9 | 8.0' |

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

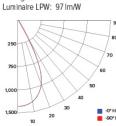
| Distance to Target Plane | Center Beam Footcandles | Beam Diameter |
|--------------------------|-------------------------|---------------|
| 4' | 141 | 2.6′ |
| 6′ | 62.5 | 3.9' |
| 8′ | 35.1 | 5.2' |
| 10' | 22.5 | 6.5' |

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



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 |
| 00 | 1 |

ILLUMINANCE AT A DISTANCE

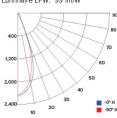
| Distance to Target Plane | Center Beam Footcandles | Beam Diameter |
|--------------------------|-------------------------|---------------|
| 4′ | 90.9 | 3.1′ |
| 6′ | 40.4 | 4.7' |
| 8′ | 22.7 | 6.3' |
| 10′ | 14.5 | 7.8′ |

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

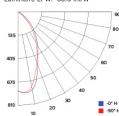
| Zone | Lumens | %Luminaire |
|-------|--------|------------|
| 0-30° | 826.6 | 83.5 |
| 0-40° | 890.6 | 89.9 |
| 0-60° | 937.1 | 94.6 |
| 0-90° | 962 | 97.1 |

Photometric Report

Koto™ LED Module

PHOTOMETRIC REPORT

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



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

CANDLE POWER SUMMARY

ILLUMINANCE AT A DISTANCE

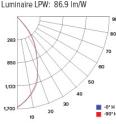
| Distance to Target Plane | Center Beam Footcandles | Beam Diameter | |
|--------------------------|-------------------------|---------------|--|
| 4' | 45.7 | 3.1′ | |
| 6′ | 20.3 | 4.7′ | |
| 8′ | 11.4 | 6.2' | |
| 10′ | 7.31 | 7.8′ | |

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

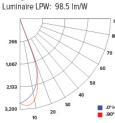
| | Distance to Target Plane | Center Beam Footcandles | Beam Diameter | |
|---|--------------------------|-------------------------|---------------|--|
| Ξ | 4' | 100 | 3.2' | |
| Ξ | 6′ | 44.6 | 4.8' | |
| | 8′ | 25.1 | 6.4' | |
| | 10′ | 16.1 | 79' | |

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° | 1.0661 | 994 |

PHOTOMETRIC REPORT

Product #: ELK1130 Wattage / Lumens: 11.8W / 1162.5 lm



| Degress Vertical | 0° | |
|------------------|------|---|
| 0 | 3043 | _ |
| 5 | 2807 | |
| 15 | 1766 | |
| 25 | 520 | |
| 35 | 98 | |
| 45 | 46 | |
| 55 | 34 | |
| 65 | 22 | |
| 75 | 12 | _ |
| 85 | 8 | |
| 00 | 6 | |

ILLUMINANCE AT A DISTANCE

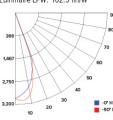
| Distance to Target Plane | Center Beam Footcandles | Beam Diameter | |
|--------------------------|-------------------------|---------------|--|
| 4' | 190 | 2.4' | |
| 6′ | 84.5 | 3.6' | |
| 8′ | 47.5 | 4.8' | |
| 10′ | 30.4 | 6.0' | |

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 | Π |
| 0-90° | 1161.6 | 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

| Dist | ance 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

| Lumens | %Luminaire |
|---------|-------------------------------|
| 1,037.8 | 85.9 |
| 1,107.3 | 91.6 |
| 1,170.3 | 96.9 |
| 1,208.1 | 100 |
| | 1,037.8 1,107.3 1,170.3 |

Photometric Report

Koto™ LED Module

PHOTOMETRIC REPORT **CANDLE POWER SUMMARY** Degress Vertical Wattage / Lumens: 11.8W / 1312.2 lm Luminaire LPW: 111.2 lm/W

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 | |



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/ 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) HQRA-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 refrence 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% |
| *MLV each transformer must be loaded to at least 50% of its maximum load | 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% |

*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.

Integrating our lighting with your Smart Home System is a breeze. Simply check your Smart Home system for compatible smart switches and cross refrence 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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