

# 12V AC Retrofit Koto™ LED Module

Works with 3" and 4" ELCO 12V AC Housings with 3" and 4" Koto™ Trims as a retrofit option



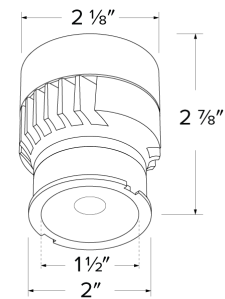
## Features

- 9W, 800 lm, 3000K
- Integrated 12V AC Dimmable Driver
- Works with Electronic and Magnetic 12V AC transformers
- Works in 3" and 4" ELCO Low Voltage Housings with GU5.3 Base.
- Excellent color rendering 93+ CRI
- Standard 38° Lens installed, 25° and 60° lens included with each module - Optional Lens: 18° (EP731C).
- Optional: Louver (L45), Linear Lens (L46), Spread Lens (L47), Clear Lens (L48), Frosted Lens (L49), Color Shifter (L50)
- Title 24 JA8-2019 Compliant
- Meets Energy Star Requirements
- Covered by U.S. PATENTS and Patents Pending

## Specifications

<b>Wattage</b>	9W
<b>Lumens</b>	800 lm
<b>Voltage</b>	12V AC
<b>Color Temp.</b>	2700K - SunsetK
<b>Lamp Type</b>	LED
<b>Beam Angle</b>	25°, 38°, 60°
<b>CRI</b>	90

## Dimensions



## Technical Details

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

**Construction:** Integrated 12V AC driver and light engine. Diecast aluminum body with heat fins allow for efficient cooling.

**Installation:** Twist-lock design for toolless trim installation. Works in 3" and 4" ELCO Low Voltage Housings with GU5.3 Base using 3" and 4" Koto™ Trims.

**Electrical:** Module connects to 12V AC power supply. High efficiency driver with a power factor >0.9. Start time of less than 0.75 seconds.

**LED Technology:** Extremely accurate Color Rendering Index of 90+. 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:** Dims down to 10%. For full list of dimmers, refer to the Dimmer Compatibility List. Industry leading dimming.

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

## Product Numbers

Item	Lamp type	Lumens	CCT	Watts	Voltage	Beam Angle
<b>ELK0827-12</b>	LED	800 lm	2700K	9W	12V AC	25°, 38°, 60°
<b>ELK0830-12</b>	LED	800 lm	3000K	9W	12V AC	25°, 38°, 60°
<b>ELK085D-12</b>	LED	800 lm	SunsetK	9W	12V AC	25°, 38°, 60°

**Product Number Builder** Example: **ELK0827-12**

12V AC Retrofit Koto™ LED Module

Lumens

Color Temp.

Voltage

**ELK**

**08** 800

**27** 2700K  
**30** 3000K  
**SD** Sunset<sup>1</sup>

**-12** 12V AC

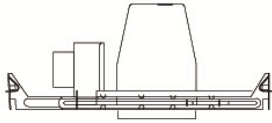
<sup>1</sup> Sunset, Dim to Warm technology, automatically transitions from 3000K to 1800K when dimmed

# Compatible Products

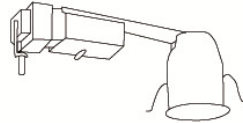


For use with Koto™ 12V AC Retrofit LED Light Engine

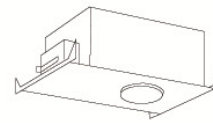
## For Retrofitting 3" Bi-Pin 12V AC GU5.3 Housings



3" Low Voltage Housing  
New Construction



3" Low Voltage Housing  
Remodel



3" Low Voltage Housing  
New Construction

CAT NO.	SPECIFICATIONS	CAT NO.	SPECIFICATIONS	CAT NO.	SPECIFICATIONS
EL2699LDICA	Magnetic Transformer	EL2699LDRICA	Magnetic Transformer	EL2699ICA	Magnetic Transformer, 50W Max.
EL2699LDICEA	Electronic Transformer	EL2699LDRICEA	Electronic Transformer	EL2699ICEA	Electronic Transformer, 50W Max.
EL2699A	120V Magnetic Transformer	EL2699RA	120V Magnetic Transformer		
EL2699-277A	277V Magnetic Transformer	EL2699R-277A	277V Magnetic Transformer		
EL2699EA	120V Electronic Transformer	EL2699REA	120V Electronic Transformer		

## 3" Pex™ Twist-&-Lock Trims



Round Deep Reflector

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



Round Adjustable Gimbal

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



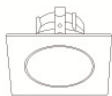
Round Adjustable Pinhole

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



Round Adjustable Baffle

**ELK3693**  
Finishes:  
(W)



Square Deep Reflector

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



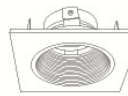
Square Adjustable Gimbal

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



Square Adjustable Pinhole

**ELK3327**  
Finishes:  
(B, BB, BZ)



Square Adjustable Baffle

**ELK3393**  
Finishes:  
(W)

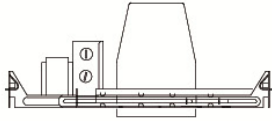
\*Finishes: **W** - All White, **BB** - All Black, **BZ** - All Bronze, **B** - Black Reflector w/White Ring, **C** - Chrome Reflector w/White Ring, **H** - Haze Reflector w/White Ring

# Compatible Products

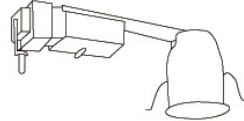


For use with Koto™ 12V AC Retrofit LED Light Engine

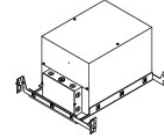
## For Retrofitting 4" Bi-Pin 12V AC GU5.3 Housings



4" Low Voltage Housing  
New Construction



4" Low Voltage Housing  
Remodel



4" Low Voltage Housing  
New Construction

CAT NO.	SPECIFICATIONS	CAT NO.	SPECIFICATIONS	CAT NO.	SPECIFICATIONS
EL1499LDICA	Magnetic Transformer	EL1499LDRICA	Magnetic Transformer	EL1499ICA	Magnetic Transformer, 50W
EL1499LDICEA	Electronic Transformer	E1499LDRICEA	Electronic Transformer	EL1499ICA-277	Magnetic Transformer, 50W
EL1499A	Magnetic Transformer, 50W	EL1499RA	Magnetic Transformer	EL1499ICA-L	Magnetic Transformer, 50W
EL1499-277A	Magnetic Transformer, 50W	EL1499REA	Electronic Transformer	EL1499ICEA	Electronic Transformer, 50W
EL1499EA	Electronic Transformer, 50W				

## 4" Twist-&-Lock Trims



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



**Pex™ Adjustable Gimbal**  
ELK4129  
Finishes:  
(W, BB, BZ, B, C, H)



**Pex™ Adjustable Pinhole**  
ELK4127  
Finishes:  
(B, BB, BZ)



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



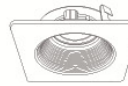
**Pex™ Reflector**  
ELK4218  
Finishes:  
(W, BB, BZ, B, C, H)



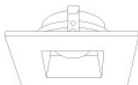
**Pex™ Adjustable Gimbal**  
ELK4229  
Finishes:  
(W, BB, BZ, B, C, H)



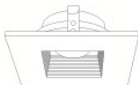
**Pex™ Adjustable Pinhole**  
ELK4227  
Finishes:  
(B, BB, BZ)



**Pex™ Adjustable Phenolic Baffle**  
ELK4293  
Finishes:  
(W, BB, B)



**Pex™ Adjustable Reflector**  
ELK4282  
Finishes:  
(W)



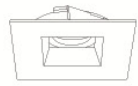
**Pex™ Adjustable Baffle**  
ELK4284  
Finishes:  
(W)



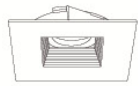
**Flexa™ Round Reflector**  
ELK4721  
Finishes:  
(WW, BB, BZBZ, BW, CC, CW, HW, CN)



**Flexa™ Round Baffle**  
ELK4723  
Finishes:  
(WW, BB, BZBZ, BW)



**Flexa™ Square Reflector**  
ELK4741  
Finishes:  
(WW, BB, BZBZ, BW, HW)



**Flexa™ Square Baffle**  
ELK4743  
Finishes:  
(WW, BB, BZBZ, BW)  
*\*Not for Remodel Housing*

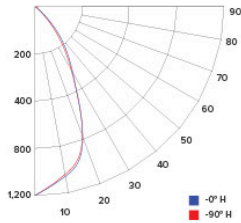
\*Finishes: **W** - All White, **WW** - All White, **B** - Black Reflector w/White Ring, **C** - Chrome Reflector w/White Ring, **H** - Haze Reflector w/White Ring, **BB** - All Black, **BZ** - All Bronze, **CC** - All Chrome, **BZBZ** - All Bronze, **BW** - Black Reflector w/White Ring, **CW** - Chrome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

# Photometric Report

## 12V AC Retrofit Koto™ LED Module

### PHOTOMETRIC REPORT

Product #: ELK0830-12  
 Wattage / Lumens: 10W / 971.7 lm  
 Luminaire LPW: 97 lm/W



### CANDLE POWER SUMMARY

Degree Vertical	0°
0	1199
5	1152
15	968
25	540
35	252
45	95
55	31
65	13
75	6
85	2
90	1

### ILLUMINANCE AT A DISTANCE

Distance to Target Plane	Center Beam Footcandles	Beam Diameter
4'	103.3	3.1'
6'	36.4	4.7'
8'	18.7	6.3'
10'	12.6	7.8'

### ZONAL LUMEN SUMMARY

Zone	Lumens	%Luminaire
0-30°	565.3	70.6
0-40°	697.3	87.1
0-60°	780.3	97.5
0-90°	796.0	99.4