

# Tunable White Koto™ LED Module

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



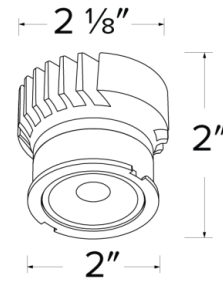
## Features

- Driver on housing extends lifespan and allows for more dimming options and applications
- Includes Standard 38° lens, with 28° and 60° lenses. Optional: 15° and 18° lens available
- Optional: Louver (L45), Linear Lens (L46), Spread Lens (L47), Clear Lens (L48), Frosted Lens (L49), White Koto Snoot (L50W), Black Koto Snoot (L50B), Color Shifter (L51), Blue Lens (L52), Pink Lens (L53), Single Asymmetric Lens (L54), Double Asymmetric Lens (L55)
- Works in 2", 3" and 4" ELCO Tunable White housings with Koto™ twist-On trims
- Excellent color rendering 95+ CRI throughout white tuning
- Title 24 JA8 2019 Registered
- Life span of 50,000 hours L70
- Covered by U.S. PATENTS and Patents Pending
- Damp location rated and wet location rated for wet location trims

## Specifications

<b>Color Temp.</b>	1800K - 4000K - 2700K - 6500K
<b>Lamp Type</b>	LED
<b>Beam Angle</b>	38°
<b>CRI</b>	95
<b>Wet Location</b>	Rated for wet location trims
<b>Damp Location</b>	Rated

## Dimensions



## Technical Details

**Optics:** PC lens diffuses light evenly throughout while reducing glare with LED COB technology.

**Construction:** Diecast aluminum body with heat fins allow for efficient cooling.

**Compatible Housings:** Koto™ Module is compatible with Tunable White Housings: 120/277V AC/50-60Hz universal input voltage.

**Installation:** Twist-On design for toolless trim installation, for use with Koto™ trims only. Can be used in 2", 3" & 4" Tunable White Koto™ Housings only.

**LED Technology:** Extremely accurate Color Rendering Index (CRI) 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. No LED pixelation.

**Dimmability:** Based on housing dimmer used.

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

## Product Numbers

Item	Lamp type	CCT	Beam Angle
ELK19TWD	LED	2700K - 5000K	38°
ELK19T41D	LED	1800K - 4000K	38°
ELK19T62D	LED	2700K - 6500K	38°

# Product Number Builder

Example: **ELK19TWD**

Tunable White Koto™ LED Module	Color Temperature	Beam Spread	Optional Accessory
<b>ELK19</b>	<b>TWD</b> 2700K - 5000K <b>T41D</b> 1800K - 4000K <b>T62D</b> 2700K - 6500K	38° lens <b>-S</b> 18° lens <b>-N</b> 25° lens <b>-W</b> 60° lens	<b>L45</b> Hex Louver <b>L46</b> Linear Lens <b>L47</b> Spread Lens <b>L49</b> Frosted Diffuser <b>L51</b> Color Shifter <b>L50W</b> White Snoot <b>L50B</b> Black Snoot

# Compatible Products

For use with Dedicated 3" & 4" Koto Tunable White Housings



## Control Modules Features

- Requires control ready housing
- Seamless device commissioning
- Rules setting and supervision
- Data gathering on usage, locations, users, time of day
- Automation based on users and sensors
- Firmware updates over the air
- Customizable and integration-ready APIs
- Control module required per housing

## Wireless Control Modules for Tunable White Koto™



ETW3SL

- iOS app and web portal interface options
- Energy usage monitoring
- Ecosystem with sensors, switches



ETW3WZ

- iOS app, Android app, and web portal interface options
- Predictive Maintenance
- Ecosystem with sensors and switches, lamps and luminaires

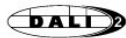


ETW3WS

- iOS app, Android app, and web portal interface options
- Energy usage monitoring
- Predictive Maintenance
- Ecosystem with sensors, switches, gateways

## Wired Control Protocol for Tunable White Koto™

*\*Wired control devices required*



ETW3DL

- DALI-2 DT8 certified
- Two-channel control of color temperature and intensity
- Commission and manage lighting fixtures via DALI2 DT8 certified controller



ETW310V

- 0-10V Control Module is compatible with industry standard 0-10V, 1-10V current sourcing or current sinking wired control devices. The Control Module provides for two-channel control of color temperature and intensity

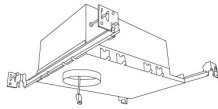
Requires Control Ready Housing Option. One Control module required per housing  
\*Control Modules Order Separately

# Compatible Products



For use with Tunable White Koto™ LED Module

## 2" Tunable White Koto™ Dedicated LED ICA Housings



2" Tunable White Koto™ IC Airtight Housing  
Shallow New Construction

CAT NO.	SPECIFICATIONS
E21KT10ICAD	1000 lm, 14W, 120/277V AC
E21KT12ICAD	1250 lm, 18.3W, 120/277V AC

## 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)



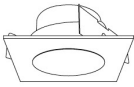
Round Adjustable Pinhole

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



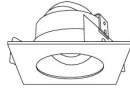
Round Curved Reflector

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



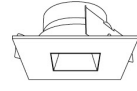
Square Deep Reflector

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



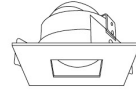
Square Adjustable Reflector

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



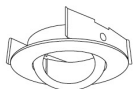
Square Reflector

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



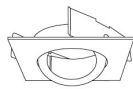
Square Adjustable Pinhole

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



Round Gimbal

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



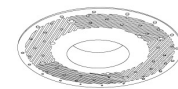
Square Gimbal

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



Round Adj. Trimless Reflector

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



Trimless Spackle Frame

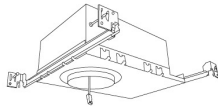
**EL2SFR**  
For use with ELK215

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 Tunable White Koto™ LED Module

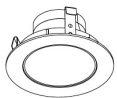
## 3" Tunable White Koto™ Dedicated LED ICA Housings



3" Tunable White Koto™ IC Airtight Housing  
New Construction

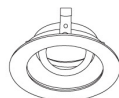
CAT NO.	SPECIFICATIONS
E35KT10ICAD	1000 lm, 14W, 120/277V AC
E35KT12ICAD	1250 lm, 18.3W, 120/277V AC

## 3" Pex™ Twist-On Trims



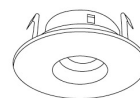
Round Deep Reflector

**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)



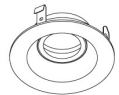
Round Adj. Slot Aperture

**ELK3620**  
Finishes:  
(W)



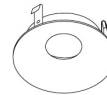
Round Adj. Wall Wash

**ELK3622**  
Finishes:  
(W)



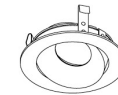
Round Regressed Eyeball

**ELK3653**  
Finishes:  
(W, BB, B)



Round Curved Reflector

**ELK3672**  
Finishes:  
(W, B)



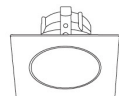
Round Directional Gimbal

**ELK3679**  
Finishes:  
(W, BB, B, H)



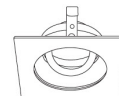
Round Adjustable Baffle

**ELK3693**  
Finishes:  
(W)



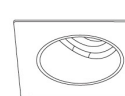
Square Deep Reflector

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



Square Adjustable Reflector

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



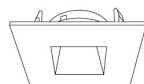
Square Adj. Wall Wash

**ELK3322**  
Finishes:  
(W)



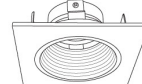
Square Adjustable Pinhole

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



Square Reflector

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



Square Adjustable Baffle

**ELK3393**  
Finishes:  
(W)

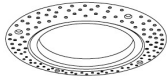
\*Finishes: **W** - All White, **BB** - All Black, **BZ** - All Bronze, **B** - Black Reflector w/White Ring, **C** - Chrome Reflector w/White Ring, **H** - Haze Reflector w/White Ring

# Compatible Products

For use with Tunable White Koto™ LED Module

## 3" Pex™ Flush Mount Trim Adaptors

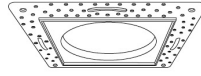
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**Round Flush Mount Trim Adaptor**

**EL3FMR**

Compatible 3" Pex™ Round trims:  
ELK3618, ELK3629, ELK3627, ELK3693,  
ELK3620, ELK3622 Series



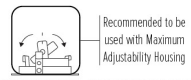
**Square Flush Mount Trim Adaptor**

**EL3FMS**

Compatible 3" Pex™ Square trims:  
ELK3318, ELK3329, ELK3322, ELK3327,  
ELK3341, ELK3393 Series

## 3" Pex™ Trimless

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**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**

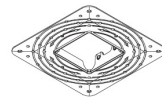
Finishes:  
**(W, B, H)**



**Square Adjustable Trimless Reflector**

**ELK381**

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



**Square Trimless Spackle Frame**

**EL03SFS**

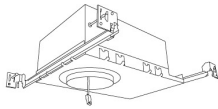
For use with ELK370 & ELK381

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 Tunable White Koto™ LED Module

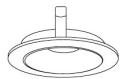
## 4" Koto™ Dedicated LED ICA Housings



4" Tunable White Koto™ IC Airtight Housing  
New Construction

CAT NO.	SPECIFICATIONS
E45KT10ICAD	1000 lm, 14W, 120/277V AC
E45KT12ICAD	1250 lm, 18.3W, 120/277V AC

## 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)



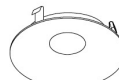
**Slot Aperture**  
**ELK4130**  
Finishes:  
(W)



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



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



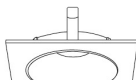
**Curved Reflector**  
**ELK4172**  
Finishes:  
(W, B)



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



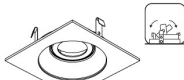
**Adjustable Baffle**  
**ELK4193**  
Finishes:  
(W, BB, B)



**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)

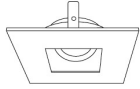
Finishes: **W** - All White, **BB** - All Black, **BZ** - All Bronze, **B** - Black w/White Ring, **C** - Chrome w/White Ring, **H** - Haze w/White Ring, **B\*** - All Black (For ELK4188, ELK4172, & ELK4284)



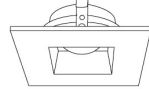
# Compatible Products

For use with Tunable White Koto™ LED Module

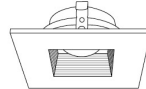
## 4" Pex™ Twist-On Trims



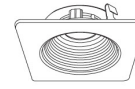
**Adjustable Pinhole**  
**ELK4227**  
 Finishes:  
 (W, BB, BZ, B, C, H)



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



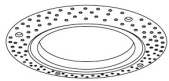
**Adjustable Baffle**  
**ELK4284**  
 Finishes:  
 (W, B, BZ)



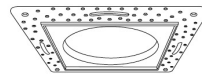
**Adj. Phenolic Baffle**  
**ELK4293**  
 Finishes:  
 (W, BB, B)

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)

## 4" Pex™ Flush Mount Trim Adaptors

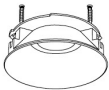


**Round Flush Mount Trim Adaptor**  
**EL4FMR**  
 Compatible 3" Pex™ Round trims:  
 ELK4116, ELK4118, ELK4127, ELK4129,  
 ELK4710, ELK4713, ELK4715 Series



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

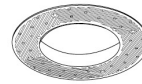
## 4" Pex™ Trimless



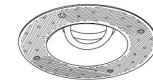
**Round Trimless Reflector**  
**ELK408**  
 Finishes:  
 (W, B, H, BZ)



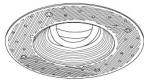
**Round Adj. Trimless Reflector**  
**ELK415**  
 Finishes:  
 (W, B, H, BZ)



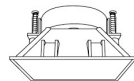
**Round Trimless Spackle Frame**  
**EL4SFR**  
 For use with ELK408 & ELK415



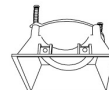
**Smooth Reflector**  
**ELK430**  
 Finishes:  
 (W, B, BZ)



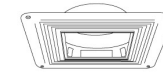
**Baffle**  
**ELK434**  
 Finishes:  
 (W, B, BZ)



**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

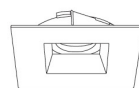
## 4" Flexa™ Twist-On Trims



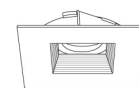
**Round Reflector**  
**ELK4721**  
 Finishes:  
 (WW, BB, BZBZ, BW, CW, HW)



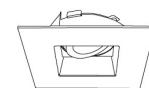
**Round Baffle**  
**ELK4723**  
 Finishes:  
 (WW, BB, BZBZ, BW)



**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*

\*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 Tunable White Koto™ LED Module

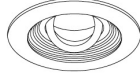
## 4" Unique™ Twist-On Trims

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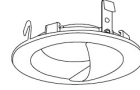
**Round Adjustable Reflector**

**ELK4710**  
Finishes:  
**(W, B, BZ)**



**Round Adjustable Baffle**

**ELK4713**  
Finishes:  
**(W, BZ)**



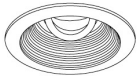
**Round Wall Wash**

**ELK4715**  
Finishes:  
**(W, BZ)**



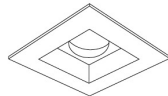
**Round Adj. Deep Reflector**

**ELK4717**  
Finishes:  
**(W, BZ)**



**Round Adj. Deep Baffle**

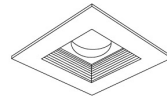
**ELK4719**  
Finishes:  
**(W)**



**Square Reflector**

**ELK4714**  
Finishes:  
**(W, B, BZ)**

*\*Not for Remodel Housing*



**Square Baffle**

**ELK4716**  
Finishes:  
**(W, BZ)**

*\*Not for Remodel Housing*

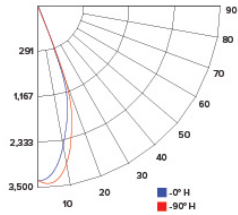
\*Finishes: **W** - All White, **BB** - All Black, **BZ** - All Bronze, **B** - Black Reflector w/White Ring, **C** - Chrome Reflector w/White Ring, **H** - Haze Reflector w/White Ring

# Photometric Report

## Tunable White Koto™ LED Module

### PHOTOMETRIC REPORT

Product #: ELK19TWD  
(E45KT12ICAD) @2700K  
Wattage / Lumens: 16.9 W / 1353.4 lm  
Luminaire LPW: 80 lm/W



### CANDLE POWER SUMMARY

Degress Vertical	0°
0	3401
5	3111
15	1814
25	543
35	122
45	58
55	34
65	18
75	9
85	0
90	0

### ILLUMINANCE AT A DISTANCE

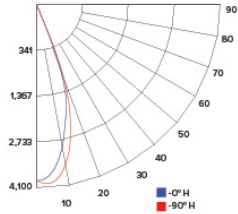
Distance to Target Plane	Center Beam Footcandles	Beam Diameter
5'	136	3.0'
7.5'	60.5	4.6'
10'	34.0	6.1'
12.5'	21.8	7.6'

### ZONAL LUMEN SUMMARY

Zone	Lumens	%Luminaire
0-30°	1,145.4	84.7
0-40°	1,244.7	92
0-60°	1,324.7	97.9
0-90°	1,352.7	100

### PHOTOMETRIC REPORT

Product #: ELK19TWD  
(E45KT12ICAD) @4000K  
Wattage / Lumens: 15.66 W / 1569.2 lm  
Luminaire LPW: 100.2 lm/W



### CANDLE POWER SUMMARY

Degress Vertical	0°
0	3946
5	3646
15	2195
25	691
35	160
45	79
55	45
65	24
75	10
85	0
90	0

### ILLUMINANCE AT A DISTANCE

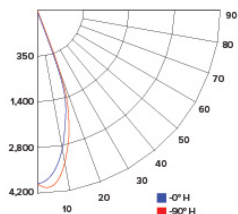
Distance to Target Plane	Center Beam Footcandles	Beam Diameter
5'	158	3.0'
7.5'	70.1	4.5'
10'	39.5	6.0'
12.5'	25.3	7.5'

### ZONAL LUMEN SUMMARY

Zone	Lumens	%Luminaire
0-30°	1,332.2	84.9
0-40°	1,447.6	92.3
0-60°	1,539.1	98.1
0-90°	1,568.3	100

### PHOTOMETRIC REPORT

Product #: ELK19TWD  
(E45KT12ICAD) @6500K  
Wattage / Lumens: 17.06 W / 1650.9 lm  
Luminaire LPW: 96.7 lm/W



### CANDLE POWER SUMMARY

Degress Vertical	0°
0	4080
5	3745
15	2229
25	703
35	150
45	73
55	45
65	25
75	13
85	6
90	5

### ILLUMINANCE AT A DISTANCE

Distance to Target Plane	Center Beam Footcandles	Beam Diameter
5'	163	3.0'
7.5'	72.5	4.6'
10'	40.8	6.1'
12.5'	26.1	7.6'

### ZONAL LUMEN SUMMARY

Zone	Lumens	%Luminaire
0-30°	1,386.3	84
0-40°	1,509.8	91.5
0-60°	1,610.3	97.6
0-90°	1,649.9	100