

Project name:	
Fixture type:	
Date:	

# Tunable White Koto™ LED Module

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



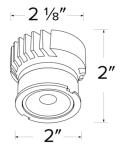
#### **Features**

- Driver on housing extends lifespan and allows for more dimming options and applications
- Includes Standard 38º lens, with 28º and 60º lenses.
   Optional: 15º, 18º, 90º lens available
- 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>), White Koto Snoot (<u>L50W</u>). Black Koto Snoot (<u>L50B</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>)
- 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**

Color Temp.	1800K - 4000K	
Lamp Type	LED	
Beam Angle	90°	
CRI	95	
Wet Location Rated for wet location trims		
Damp Location Rated		

#### **Dimensions**



#### **Product Number**

Item	Lamp type	ССТ	Beam Angle
ELK19T41D-E	LED	1800K - 4000K	90°

#### **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<sup>m</sup> trims only. Can be used in 2°, 3° & 4° Tunable White Koto<sup>m</sup> 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 Number Builder Example: ELK19TWD

Tunable White Koto™ LED Module	Color Temperature	Beam Spread		Optional Accessory
ELK19				
	TWD 2700K - 5000K	38º lens		Standard
7	<b>T41D</b> 1800K - 4000K	<b>-S</b> 18º lens	L45	Hex Louver
7	<b>T62D</b> 2700K - 6500K	<b>-N</b> 25º lens	L46	Linear Lens
		<b>-W</b> 60º lens	L47	Spread Lens
		<b>-E</b> 90º lens ¹	L49	Frosted Diffuser
			L51	Color Shifter
			L50W	White Snoot
			L50B	Black Snoot

<sup>&</sup>lt;sup>1</sup> 90° Frosted Reflector



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









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



ETW3WS

- iOS app, Android app, and web portal interface
- 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





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



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)



Square Deep Reflector

ELK2518 Finishes: (W, B, BB)



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



Round Adjustable Reflector

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



Square Adjustable Reflector

ELK2529

(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)



Square Adjustable Pinhole

ELK2527 Finishes: (W, B, BB)

Round Curved Reflector

ELK2872

Finishes:



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)



For use with **Tunable White Koto™ LED Module** 

# 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 Adi, Wall Wash

ELK3622 Finishes: (W)



#### Round Adjustable Baffle

ELK3693 Finishes: (W)



#### Square Adjustable Pinhole

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



#### 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)



#### **Square Reflector**

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



#### 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)



#### Square Adjustable Baffle

ELK3393 Finishes: (W)





#### Round Adj. Slot Aperture

ELK3620 Finishes: (W)



#### Round Directional Gimbal

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





Square Adj. Wall Wash

ELK3322 Finishes: (W)

<sup>\*</sup>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 **Tunable White Koto™ LED Module** 

# 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



#### Round Knife Edge Wood Ceiling Trim w/Mounting Clips

EL3WCR Finishes: (W, B)



#### 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)



For use with **Tunable White Koto™ LED Module** 

# 4" Koto™ Dedicated LED ICA Housings



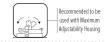
4" Tunable White Koto™ IC Airtight Housing

New Construction

CAT NO. SPECIFICATIONS

E45KT10ICAD 1000 lm, 14W, 120/277V AC E45KT12ICAD 1250 lm, 18.3W, 120/277V AC

## **4"** Pex<sup>™</sup> Twist-On Trims





Shallow Reflector ELK4116 Finishes: (W, H)



Rotatable Slot Aperture ELK4120 Finishes: (W)



Adjustable Spot

ELK4188 Finishes: (W, B, BZ)



**Shallow Reflector** 

ELK4216 Finishes: (W, H)



Deep Reflector ELK4118 Finishes:

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



Adjustable Wall Wash ELK4122

Finishes: (W)



Regressed Eyeball

ELK4153 Finishes: (W, BB, B)



Deep Reflector

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



Adjustable 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 Gimbal

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



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 Slot Rotatable Aperture ELK4220

Finishes: (W)



Adjustable Reflector with Frosted Lens

ELK4112 Finishes: (W, BB, BZ, B, C, H)



#### Slot Aperture

ELK4130 Finishes: (W)



## Adjustable Baffle

ELK4193 Finishes: (W, BB, B)



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)



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)

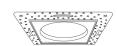
## 4" Pex™ Flush Mount Trim Adaptors



#### Round Flush Mount Trim Adaptor

#### **EL4FMR**

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



#### Square Flush Mount Trim Adaptor

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





Recommended to be Adjustability Housing



#### **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

EL4SFR For use with ELK408 & ELK415



#### Square Trimless Adj. Reflector

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



#### **Smooth Reflector**

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



#### 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)



#### 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

\*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/White R



For use with **Tunable White Koto™ LED Module** 

# 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

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, 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

# 

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	Λ.	

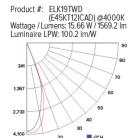
#### **ILLUMINANCE AT A DISTANCE**

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



#### 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

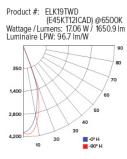
#### **ILLUMINANCE AT A DISTANCE**

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	75′

#### **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
n an°	1568.3	100

#### PHOTOMETRIC REPORT



#### 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'	261	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	