

Date:		
Fixture type:		
Project name:		

# 2" Koto Sylo™ Direct Mount

Works with Koto™ Standard LED Module



#### **Features**

- Modern Die-Cast aluminum fixture for easy maintenance and upgrades
- Includes Standard 38º lens, with 28º and 60º lenses. Optional: 15º and 18º lenses available
- Directly mounts into ceiling (Up to 1.5" ceiling thickness)
- Optional mounting plate (E1LF1)
- Sunset option dims from 3000K to 1800K
- Human Centric option dims from 4000K to 2700K
- Title 24 JA8-2019 & Energy Star Compliant
- Life span of 50,000 hours L70
- 120V Triac/ELV with standard module options (-03, -07, -08, -09, -10 -11 series)

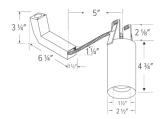
## **Specifications**

Wattage	5W - 12.5W	
Lumens	350 lm - 1150 lm	
Voltage	120V	
Color Temp.	2700K - SunsetK	
Dimmable	Triac/ELV	
Lamp Type	LED	
Beam Angle	38°	
CRI	95	
Damp Location UL Listed		

## **Options**



### **Dimensions**



### **Technical Details**

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

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

**Installation:** Twist-lock design for toolless trim installation, for use with Koto Sylo™ products only. Optional E1LF1 Mounting Plate.

**Electrical:** Module connects to 120 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 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 pixelation.

**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. HUMAN CENTRIC start at 4000K and go as low as 2700K when dimmed.

**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**: UL Listed for Damp Locations. 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: E23DMFW-0727

Sylo™ Direct Mount	Style	Finish	Koto™ Module	Color Temperature	Beam Angle
E23DM					
	<b>F</b> Surface Mount	<b>W</b> All White	<b>-03</b> 350 lm <sup>1, 2</sup>	<b>27</b> 2700K	38° lens <sup>9</sup>
		<b>B</b> All Black	<b>-07</b> 750 lm	<b>30</b> 3000K	<b>-S</b> 18° lens
		<b>S</b> Silver	<b>-09</b> 950 lm	<b>35</b> 3500K	-N 28° lens
			<b>-11</b> 1150 lm	<b>40</b> 4000K	<b>-W</b> 60° lens
			<b>-08</b> 825 lm (CT5 Option Only) 1, 3	SD Sunset (-09 and -11 only) 4,5	<b>-T</b> 10° lens <sup>1, 10</sup>
			-10 1000 lm (CT5 Option Only) 1,3	<b>HC</b> Human Centric (-11 only) <sup>1, 6, 7</sup>	
				<b>CT5</b> 2700K - 5000K <sup>1, 8</sup>	

<sup>&</sup>lt;sup>1</sup> Available as 120V, Triac/ELV only

<sup>&</sup>lt;sup>2</sup> Available with 2700 and 3000 Color Temperature Only

<sup>&</sup>lt;sup>3</sup> Available with CT5 color temperature only

<sup>&</sup>lt;sup>4</sup> Available with -09 and -11 lumen outputs only

<sup>&</sup>lt;sup>5</sup> Sunset, Dim to Warm technology, automatically transitions from 3000K to 1800K when dimmed

<sup>&</sup>lt;sup>6</sup> Available with -11 lumen outputs only

<sup>&</sup>lt;sup>7</sup> Human Centric, Dim to Warm technology, automatically transitions from 4000K to 2700K when dimmed

<sup>&</sup>lt;sup>8</sup> Available with -08 and -10 lumen outputs only

<sup>&</sup>lt;sup>9</sup> Includes 28° and 60° lens in the box

<sup>&</sup>lt;sup>10</sup> Available with 350 and 750 lumen, 2700K and 3000K options only

# **Compatible** Products



For use with Dedicated 2" Koto Sylo™ Fixtures

# 2" Optional Mounting Plate



**New Construction Frame** 

CAT NO. SPECIFICATIONS
E1LF1 2" Cutout

# 2" Accessories



### **Emergency Battery Backup**

CAT NO. SPECIFICATIONS

KEM-ERT 25W MAX., 120/277V

## Koto™LED Module Accessories



#### Lens

EP731C 18° Lens EP732C 25° Lens EP733C 38° Lens EP734C 60° Lens 6

#### Reflectors

EP735C 15° EP736C 25° EP737C 38° EP738C 60°





L45

L46

L47

L49

L51

L55



**Secondary Optics** 

Hex Louver

Linear Louver

Spread Louver

Frosted Lens

Color Shifter Single Herculux Lens

Double Herculux Lens





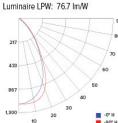
L50W L50B White Black

# Photometric Report

## Koto™ LED Module

#### PHOTOMETRIC REPORT

Product #: ELK0730 Wattage / Lumens: 10.6W / 813.8 lm



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**

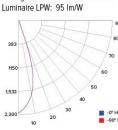
Distance to Target Plane	Center Beam Footcandles	Beam Diameter	
4'	102.6	3.2'	_
6′	36.0	4.8'	Т
8′	18.5	6.4'	_
10′	12.5	8.0'	

#### ZONAL LUMEN SUMMARY

	Zone	Lumens	%Luminaire
_	0-30°	580.1	71.3
10	0-40°	714.6	87.8
	0-60°	797.0	98
(C)	0-90°	813.5	100

#### PHOTOMETRIC REPORT

Product #: ELK0735 Wattage / Lumens: 10W / 947.4 Im



#### **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**

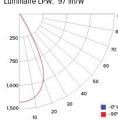
Distance to Target Plane	Center Beam Footcandles	Beam Diameter
4'	194.5	2.5′
6′	68.4	3.8'
8′	35.1	5.2'
10'	23.6	6.4'

#### **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	U	
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**

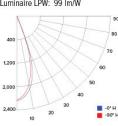
Distance to Target Plane	Center Beam Footcandles	Beam Diameter	
4'	125.9	3.1′	_
6'	44.3	4.7'	_
8′	22.7	6.3'	Т
10′	15.3	7.8'	

#### 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'	198.3	2.5′	_
6′	69.8	3.8'	
8′	35.9	5.2'	_
10′	24.1	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	971



# **Dimmer Compatibility Chart**

# Standard Koto™ LED Modules

For ELK07, ELK08CT5, ELK09, ELK10CT5, & ELK11 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  RadioRA®3, 120V, 250W LED/CFL or 500W Incandescent/Halogen, Single Pole, Multi-Location	RRD-6CL	10% - 95%
		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%

## \*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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