

Project Name:	
Fixture Type:	
Date:	

# 6" CANLESS KOTO™ DOWNLIGHTING SYSTEM

10.5W, 2700K-4000K, Sunset, or Human Centric, Up to 950 lm, 120V or 120/277V

# THE CANLESS KOTO™ SYSTEM

The high quality residential grade downlight engineered to be shallow, taking less space than a regular recessed housing. With a lumen output up to 950 lumen, the module offers maximum flexibility, providing designers and architects with the necessary choices when laying out a project.



#### **FEATURES**

- IC rated for direct contact with insulation
- Driver on frame: 120V, Triac/ELV dimming to 5% or 120-277V, 0-10V/Triac/ELV dimming to 1%
- 18°, 25°, 38°, 60°, and 90° beam angle options
- Excellent color rendering 95+ CRI
- Works with ceiling thickness up to 1.25"
- Title 24 JA8-2022 E-Compliant. ENERGY STAR Certified
- · Covered by U.S. PATENTS and Patents Pending

# **SET UP**

- 1. Select a Frame or Remodel/Retrofit power pack.
- 2. Select a Canless Koto™ Module.
- 3. Select a Trim.



SPECIFICATIONS	
Wattage	10.5W
Lumens	950 lm
Voltage	120V or 120/277V
Color Temp.	2700K, 3000K, 3500K, 4000K, Sunset, or Human Centric
CRI	95+
Damp Location	UL Listed Adjustable Trims
Wet Location	UL Listed Fixed Trims
Dimming	Triac/ELV (5%) or 0-10V/Triac/ELV (1%)
Beam Angle	18°, 25°, 38°, 60° & 90°
Finishes	White

Finishes

White

Black

Bronze

Black/ White

Haze/ White

# PRODUCT NUMBER BUILDER

# **STEP 1.** Specify Housing part number (Select one)

S	SIZE/STYLE		VOLTAGE/DIMMING		EM OPTIONAL
E6KCL10IC	6" New Construction <sup>1</sup>	(Blank)	120V, Triac/ELV (5%)	(Blank)	No EM
EKCL10RIC	Remodel/Retrofit	DX	120-277V, 0-10V/Triac/ELV (1%)	-EM1	25W, 90 min battery backup
<sup>1</sup> Easy-to-	remove driver on frame				

Example: E6KCL10ICDX-EM1

# STEP 2. Specify Canless Koto™ LED Module part number (Select one) Example: EKCL2130D

ITEM		COLOR TEMPERATURE	BEAM ANGLE	
EKCL21				
EKCL211	24D	2400K	(Blank)	38°4
	27D	2700K	-S	18°
	30D	3000K	-N	25°
	35D	3500K	-W	60°
	40D	4000K	-E	90°5
	SDD	Sunset <sup>2</sup>		
	HCD	Human Centric <sup>3</sup>		
<sup>1</sup> IC rated for direct contact with insulation	fr <sup>3</sup> Human Ce			n module with 25° & 60° included in the box vailable with frosted reflector only

#### **PRODUCT NUMBER BUILDER**

# STEP 3. Specify Trim part number (Select one)

# 6" KOTO™ CANLESS ROUND TRIMS









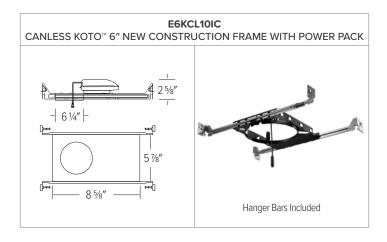
Style: Adjustable Slot Aperture
Item: EKCL6420W (All White)

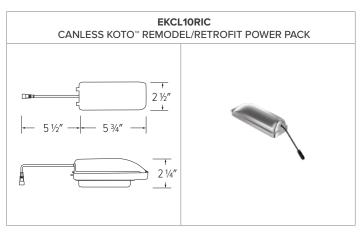
# 6" KOTO™ CANLESS SQUARE TRIMS



# **PRODUCT DIMENSIONS**

# CANLESS KOTO™ FRAMES AND REMODEL/RETROFIT POWER PACK





# **CANLESS KOTO™ LED MODULE**



#### **PRODUCT DIMENSIONS**

# KOTO™ CANLESS ROUND TRIMS









# KOTO™ CANLESS SQUARE TRIMS



#### **ACCESSORIES**

#### LENS & OPTICS (field changeable)





#### **FIRE RATED PRODUCTS**



# **EMERGENCY BATTERY BACKUP**



90 minutes of emergency operation. Input: 100-277VAC, 50/60Hz., 25W Max Output: 170VDC, 25W Charging time: 36 hours

cUL listed - Suitable for damp location

## PLASTER FRAME FOR POWER PACK



#### E6LKF1

Optional 6" new construction plaster frame with hanger bars for remodel power packs (sold separately).

#### **TECHNICAL DETAILS**

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

Construction (Light Engine): Diecast aluminum body with heat fins allow for efficient cooling.

Installation (Light Engine): Twist-on design for toolless trim installation, for use with Canless Koto™ trims only. Can be use with New Construction Frames or Remodel IC Power Packs.

**Hanger Bars:** Pre-installed hanger bars with True Nail easy installation in regular lumber, engineered lumber, and laminated beams. Integral T-bar slots for easy installation in T-bars. Spans up 24" and can be repositioned 90°. Score lines allow for tool-free hanger bar size reduction. Integral leveling flange allows for single-person installation while easily aligning the housings with the joists.

**LED Technology:** Extremely accurate Color Rendering Index (CRI) of 95+. Lumen Maintaince 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 pixilation.

Electrical: Drivers are rated for 120V or 120/277V input. High Efficiency driver with a power factor >0.95.

Dimming: Triac/ELV dimming (5%) or Triac/ELV/0-10V dimming (1%)

**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 (SDD)" in the Color Temperature (CCT) attribute.

**Human Centric:** Our HUMAN CENTRIC items start at 4000K and go as low as 2200K when dimmed. For Human Centric dim technology be sure to order an item with "Human Centric (HCD)" in the Color Temperature (CCT) attribute.

Emergency Battery Pack: Optional 25W MAX. 90 minute battery backup 2", 3", 4" & 6" accessible from below.

**Listings:** cUL Listed for Damp Location with Damp Location trims and Wet Location with Wet Location trims. IC Rated for direct contact with insulation. RoHS Compliant. Title 24 JA8-2022 E-Compliant.

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

#### **DIMMER COMPATIBILITY CHART**

#### 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
20V - Triac/ELV Di	mmers for E2KCL10IC, E3KCL10IC, E4KCL10IC, E6KCL10IC, and EKCL10RIC Se	ries	
	120V AC, Decora SureSlide® Single Pole with Slide -to-Off	6672	15% - 100%
Leviton	120V AC, Leviton Dimmer	1K35O2	5% - 100%
	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 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%
	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%
Lutron	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%
	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%
	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%

<sup>\*</sup>NOTE: Refer to dimmer manufacturer's documentation for installation instructions and circuit details

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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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#### **DIMMER COMPATIBILITY CHART**

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MANUFACTURER	PRODUCT	PART NUMBER	DIMMED LIGH
Triac/ELV Type Din	nmers - 120V Only for E2KCL10ICDX, E3KCL10ICDX, E4KCL10ICDX, E6KCL10IC	CDX, and EKCL10RI	CDX Series
	120V AC, 150W LED/CFL or 600W Incandescent/Halogen, Single Pole, 3-Way	RRD-6CL	1% - 100%
	120V AC 60Hz, 150W LED/CFL/Incandescent/Halogen, Single Pole, 3-Way,	DVCL-153P	1% - 100%
	120V 60Hz, 150W LED/CFL or 600W Incandescent/Halogen, Single Pole, 3-Way	TGCL-153P	1% - 100%
	120V AC 60Hz, 300W Electronic Low Voltage, 3-Way, Commercial/Residential Application	DVELV-303P	1% - 100%
	120V, 600W Incandescent/Halogen, Single Pole, Residential Indoor Application	TG-600P	1% - 100%
	120V, 1000W Incandescent or 600W Magnetic Low Voltage, Single Pole, 3-Way	CT103P	1% - 100%
Lutron	120V AC 60Hz, 600W Electronic Low Voltage, Single Pole/Multi-Location	MAELV600	1% - 100%
	120V AC 60Hz, 500W Electronic Low Voltage, Single Pole/Multi-Location	FAELV500	1% - 100%
	120V AC 60Hz, 600W Incandescent/Halogen, Single Pole, Slide-to-Off Dimmer	S-600P	1% - 100%
	120V AC 60Hz, 150W LED/CFL or 600W Incandescent/Halogen, Single Pole, 3-Way	SCL-153P	1% - 100%
	Caséta® Wireless Dimmer	PD-6WCL	1% - 100%
	120V AC 60Hz, Low Voltage Load Type, 150W Single Pole	DVLV-600P	5% - 100%
	120V AC, 60Hz, 600W Incandescent/Halogen, Single Pole, 3-Way, Residential and Commercial Application	DV-603P	1% - 100%
	120V AC, 50/60Hz, 150W LED/CFL, 600W Incandescent/Halogen, Single Pole, 3-Way, Indoor Application	MA-PRO	1% - 100%
	120V AC 60Hz, 150W LED/CFL or 600W Incandescent/Halogen, Single Pole, 3-Way	MACL-153M	1% - 100%
	120V AC 60Hz, 300W Electronic Low Voltage, 400 Volt Amp, Single Pole, 3-Way	IPE04	1% - 100%
	120V AC 60Hz, 300W CFL or 600W Incandescent, 400 Volt Amp, Single Pole, 3-Way	6673-10W	1% - 100%
Leviton	120V AC, 600W Incandescent with LED Locator, Single Pole, 3-Way	VP106	1% - 100%
	120V AC 60Hz, 500W Incandescent with LED Level Indicator, Single Pole, 3-Way	6161	1% - 100%
	120V AC, 150W LED/CFL or 600W Incandescent, Single Pole, 3-Way	6674	1% - 100%
Eaton	120V AC, 300W LED/CFL or 600W Incandescent/MLV/Halogen, Single Pole, 3-Way	TAL06P1-C1	1% - 100%
	120V AC 60Hz, 300W LED/CFL or 600W Incandescent/Halogen, Single Pole, 3-Way	SLC03P / DAL06P	1% - 100%
Cooper	120V AC 60Hz, 300W LED/CFL or 600W Incandescent, Single Pole, 3-Way, Residential	DLC03P	1% - 100%
	120V AC 60Hz, 600W Incandescent/Halogen, Single Pole, 3-Way	RI061-VW-K2	1% - 100%
	120V AC 60Hz, 300W LED/CFL/ Incandescent/Halogen, Single Pole, 3-Way	AAL06A-C2	1% - 100%
Lightolier	120V, 260W Incandescent/Halogen, Single Pole, 3-Way,	ZP260QEW	1% - 100%

0-10V Type Dimr	-10V Type Dimmers - 120/277V for E2KCL10ICDX, E3KCL10ICDX, E4KCL10ICDX, E6KCL10ICDX, and EKCL10RICDX Series					
Lutron	120/277V AC, 0-10V LED/CFL Ballast, Single Pole, 3-Way	NFTV	1% - 100%			
	120/277V AC, 0-10V, Single Pole, 3-Way, Commercial and Residential, Indoor Application	DVSTV	1% - 100%			
	120/277V AC 50/60Hz, 0-10V LED/CFL Ballast, Single Pole, 3-Way, Indoor Application	DVTV	1% - 100%			
Leviton	120/277V AC 60Hz, 0-10V LED/CFL Ballast, Single Pole, 3-Way	IP710-DL	1% - 100%			

<sup>\*</sup>NOTE: Refer to dimmer manufacturer's documentation for installation instructions and circuit details

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# **CANLESS KOTO™ LED MODULE**

PHOTOMETRIC REPORT	CANDLE POWER S	ILLUMINANCE AT A DISTANCE			
Product #: EKCL2127D	Degress Vertical	0°	Distance to Target Plane	Center Beam Footcandles	Beam Diameter
Wattage / Lumens: 12.22W / 1169.3 lm Luminaire LPW: 95.69 lm/W	0	1829	4′	114	3.1
.uminaire LPW: 95.69 im/W	5	1737	6′	50.8	4.6
90	15	1353	8′	28.6	6.2
80	25	683	10′	18.3	7.7
159	35	328			
70	45	123	ZON	AL LUMEN SUMM	MARY
633	55	39	_		
50	65	17	Zone	Lumens	%Luminaire
1,267	75	8	0-30°	834.5	71.2
30	85	2	0-40°	1,022.9	87.3
1,900 20 -0° H	90	1	0-60°	1,140.0	97.3
-90 H			0-90°	1,164.3	99.4
PHOTOMETRIC REPORT	CANDLE POWER S	UMMARY	ILLUMI	NANCE AT A DIS	TANCE
Product #: EKCL2130D (1)	Degress Vertical	0°	Distance to Target Plane	Center Beam Footcandles	Beam Diameter
Vattage / Lumens: 12.22W / 1218 lm	0	1900	4'	119	3.1
uminaire LPW: 99.67 lm/W	5	1805	6′	52.8	4.6
90	15	1406	8′	29.7	6.2
80	25	710	10'	19.0	7.7
167	35	341			
770	45	127	ZON	AL LUMEN SUMM	MARY
667	55	41			
	65	17	Zone	Lumens	%Luminaire
1,333	75	9	0-30°	867.0	71.2
30	85	2	0-40°	1,062.8	87.3
2,000 ■ -0° H	90	1	0-60°	1,184.4	97.3
10 ■ -90° H			0-90°	1,209.7	99.4
PHOTOMETRIC REPORT	CANDLE POWER S	UMMARY	ILLUMINANCE AT A DISTANCE		
	Daniel Walland	00	Distance to	Center Beam	Beam
Product #: EKCL2135D Nattage / Lumens: 12.22W / 1271 lm	Degress Vertical	0°	Target Plane	Footcandles	Diameter
uminaire LPW: 104.01 lm/W	0	1976	4′	124	3.1
L   90	5	1877	6′	54.9	4.6
	15	1462	8′	30.9	6.2
167	25	738	10′	19.8	7.7
70	35	355	ZON	AL LUMEN SUMM	MARY
667	45	133			
60	55	43	Zone	Lumens	%Luminaire
1,333	65 75	18	0-30°	901.7	71.2
40	75 85	2	0-30°	1,105.3	87.3
2,000 30 ■ -0° H			0-40°	1,231.8	97.3
10 ■ -90° H	90	1	0-90°	1,258.1	99.4
PHOTOMETRIC REPORT	CANDLE POWER S	:I IMM A DV			
	CANDLL I OWLK S	Distance to Center Rean			Beam
Product #: EKCL21040D	Degress Vertical	0°	Target Plane	Center Beam Footcandles	Diameter
	0	2051	4′	128	3.1
Vattage / Lumens: 12.22W / 1322 lm		1948	6′	57.0	4.6
Vattage / Lumens: 12.22W / 1322 Im uminaire LPW: 108.18 lm/W	5			1	6.2
Vattage / Lumens: 12.22W / 1322 lm	5 15	1518	8′	32.1	6.2
Vattage / Lumens: 12.22W / 1322 Im .uminaire LPW: 108.18 Im/W	5 15 25	1518 766	8′ 10′	32.1 20.5	7.7
Vattage / Lumens: 12.22W / 1322 Im .uminaire LPW: 108.18 Im/W	5 15 25 35	1518 766 368	10′	20.5	7.7
Vattage / Lumens: 12.22W / 1322 Im .uminaire LPW: 108.18 Im/W	5 15 25 35 45	1518 766 368 138	10′		7.7
Vattage / Lumens: 12.22W / 1322 Im .uminaire LPW: 108.18 Im/W	5 15 25 35 45 55	1518 766 368 138 44	10′	20.5	7.7
Vattage / Lumens: 12.22W / 1322 Im .uminaire LPW: 108.18 Im/W	5 15 25 35 45 55	1518 766 368 138 44 19	ZON.	20.5 AL LUMEN SUMN Lumens	7.7  1ARY  %Luminaire
Wattage / Lumens: 12.22W / 1322 Im Luminaire LPW: 108.18 Im/W	5 15 25 35 45 55 65 75	1518 766 368 138 44 19	ZON.  Zone  0-30°	20.5  AL LUMEN SUMN  Lumens 935.9	7.7  //ARY  %Luminaire  71.2
Wattage / Lumens: 12.22W / 1322 Im Luminaire LPW: 108.18 Im/W	5 15 25 35 45 55	1518 766 368 138 44 19	ZON.	20.5 AL LUMEN SUMN Lumens	7.7  1ARY  %Luminaire