SINCE 1945 KEYSTONE LIGHT MADE EASY | CIRCA | POWER SELECT | COLOR SELECT

KT-WDLED23PS-8X-9CSF-VDIM

8" LED WAFER DOWNLIGHT

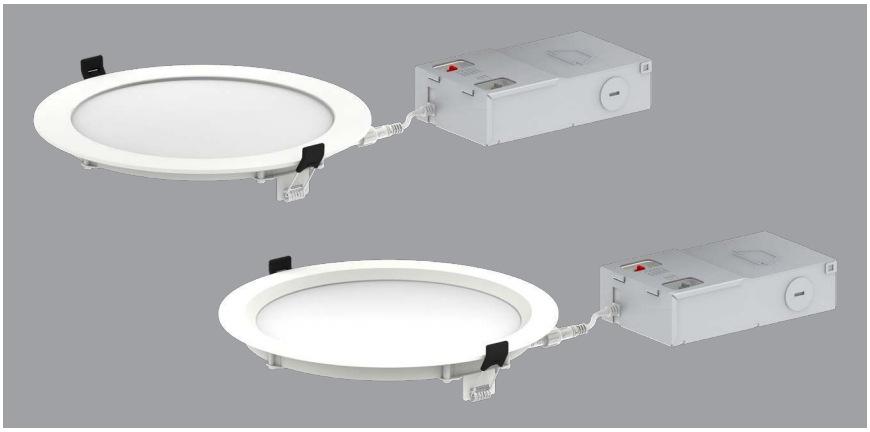
DESCRIPTION

8" LED Wafer Downlight | Power Select Technology | Color Select Technology | Remote Driver with Built-in Junction Box

APPLICATION

Ideal for residential, hospitality, retail, office, and other retrofit and new construction applications

UL CERTIFIED | ENERGY STAR | TITLE 24 JA8 COMPLIANT | RoHS Compliant | TRUSTED NLB WARRANTY | 5 YEAR WARRANTY



PRODUCT FEATURES

- Keystone Power Select and Color Select technologies offer SKU reduction and allow for easy, on-the-job adjustments
- Utilizes a remote driver with built-in junction box and quick disconnect; Eliminates the need for a traditional, multi-piece fixture setup
- CEC Compliant Flicker Rate (CEC JA10 std.)
- Ideal for new construction, remodel, and retrofit applications
- Flat body allows fit for shallow ceilings
- Edge-lit LED technology provides even illumination
- Interchangeable trims available in matte black, brushed nickel, and bronze
- Powered by Keystone 0–10V dimming LED driver; 10–100% dimming
- Ambient operating temperature: –30°C/–22°F to 40°C/104°F
- Suitable for use in wet locations
- Airtight and Type IC-rated
- Power factor: >0.90
- THD: <20%
- LED chip lifetime: L70 >80,000 hrs @ 25°C/77°F ambient fixture temp
- FCC Part 15, Subpart B, Class A

PERFORMANCE SPECIFICATIONS

Catalog Number	Input Voltage	Wattage (Selectable)	CCT (Selectable)*	Lumen Output	Efficacy	CRI	Power Factor	Beam Angle	Lifetime
KT-WDLED23PS-8A-9CSF-VDIM	120–277V	23W	2700K	1,873	84 lm/W	>90	>0.9	110°	50,000 hrs
			3000K	1,943	88 lm/W				
			3500K	2,087	97 lm/W				
			4000K	2,121	98 lm/W				
			5000K	2,078	93 lm/W				
		18W	2700K	1,504	89 lm/W				
			3000K	1,544	92 lm/W				
			3500K	1,626	98 lm/W				
			4000K	1,646	99 lm/W				
			5000K	1,635	97 lm/W				
		14W	2700K	1,165	88 lm/W				
			3000K	1,186	90 lm/W				
			3500K	1,215	94 lm/W				
			4000K	1,224	94 lm/W				
			5000K	1,187	90 lm/W				

**Preset to highest CCT: 5000K*
Color Uniformity: CCT (Correlated Color Temperature) range as per guidelines outlined in ANSI C78.377-2017

KT-WDLED23PS-8X-9CSF-VDIM

8" LED WAFER DOWNLIGHT

PERFORMANCE SPECIFICATIONS (CONTINUED)

Catalog Number	Input Voltage	Wattage (Selectable)	CCT (Selectable)*	Lumen Output	Efficacy	CRI	Power Factor	Beam Angle	Lifetime
KT-WDLED23PS-8B-9CSF-VDIM	120–277V	23W	2700K	1,873	84 lm/W	>90	>0.9	110°	50,000 hrs
			3000K	1,943	88 lm/W				
			3500K	2,087	97 lm/W				
			4000K	2,121	98 lm/W				
			5000K	2,081	93 lm/W				
		18W	2700K	1,504	89 lm/W				
			3000K	1,544	92 lm/W				
			3500K	1,626	98 lm/W				
			4000K	1,646	99 lm/W				
			5000K	1,635	97 lm/W				
		14W	2700K	1,165	88 lm/W				
			3000K	1,186	90 lm/W				
			3500K	1,215	94 lm/W				
			4000K	1,224	94 lm/W				
			5000K	1,187	90 lm/W				

**Preset to highest CCT: 5000K*
Color Uniformity: CCT (Correlated Color Temperature) range as per guidelines outlined in ANSI C78.377-2017

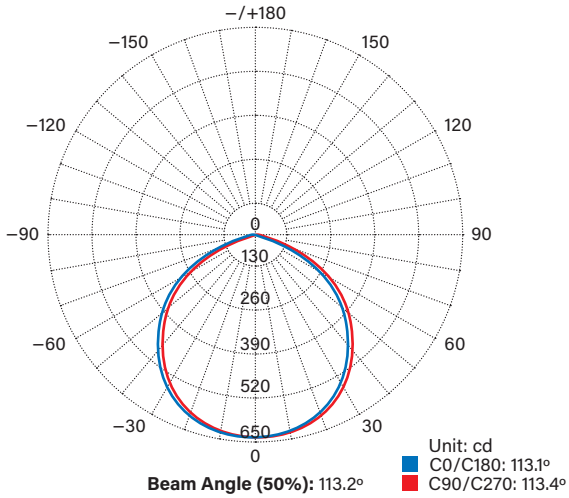
KT-WDLED23PS-8X-9CSF-VDIM

8" LED WAFER DOWNLIGHT

PHOTOMETRIC SPECIFICATIONS

KT-WDLED23PS-8A-9CSF-VDIM

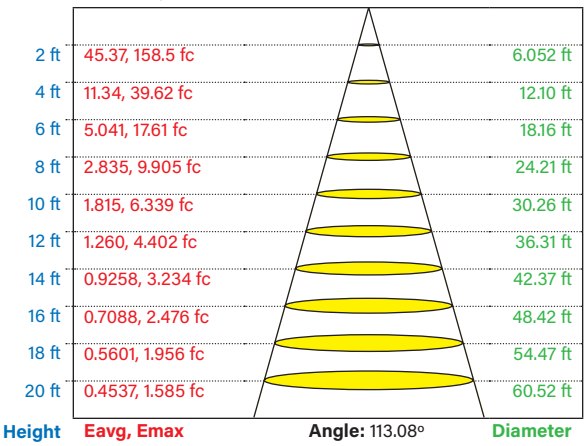
POLAR CANDELA DISTRIBUTION



Beam Angle (50%): 113.2°

LUX DISTANCE CURVE

Flux Out: 1,352.0 lm



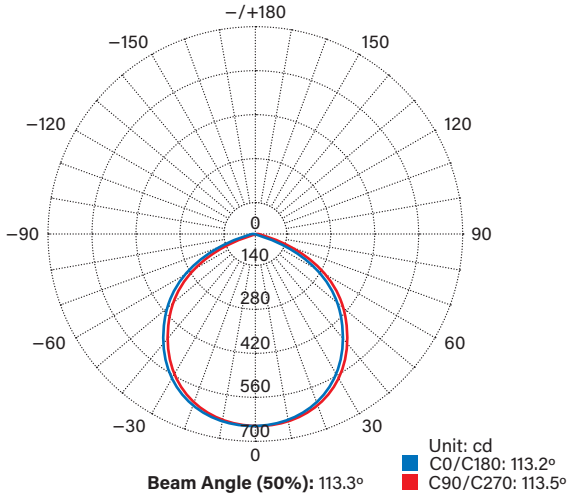
Height	Eavg, Emax	Diameter
2 ft	45.37, 158.5 fc	6.052 ft
4 ft	11.34, 39.62 fc	12.10 ft
6 ft	5.041, 17.61 fc	18.16 ft
8 ft	2.835, 9.905 fc	24.21 ft
10 ft	1.815, 6.339 fc	30.26 ft
12 ft	1.260, 4.402 fc	36.31 ft
14 ft	0.9258, 3.234 fc	42.37 ft
16 ft	0.7088, 2.476 fc	48.42 ft
18 ft	0.5601, 1.956 fc	54.47 ft
20 ft	0.4537, 1.585 fc	60.52 ft

Angle: 113.08°

Curves show illuminated area and average illumination when lamp is at various distances.

KT-WDLED23PS-8B-9CSF-VDIM

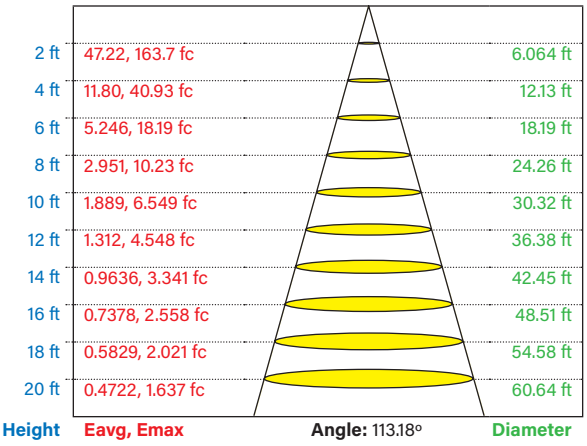
POLAR CANDELA DISTRIBUTION



Beam Angle (50%): 113.3°

LUX DISTANCE CURVE

Flux Out: 1,407 lm



Height	Eavg, Emax	Diameter
2 ft	47.22, 163.7 fc	6.064 ft
4 ft	11.80, 40.93 fc	12.13 ft
6 ft	5.246, 18.19 fc	18.19 ft
8 ft	2.951, 10.23 fc	24.26 ft
10 ft	1.889, 6.549 fc	30.32 ft
12 ft	1.312, 4.548 fc	36.38 ft
14 ft	0.9636, 3.341 fc	42.45 ft
16 ft	0.7378, 2.558 fc	48.51 ft
18 ft	0.5829, 2.021 fc	54.58 ft
20 ft	0.4722, 1.637 fc	60.64 ft

Angle: 113.18°

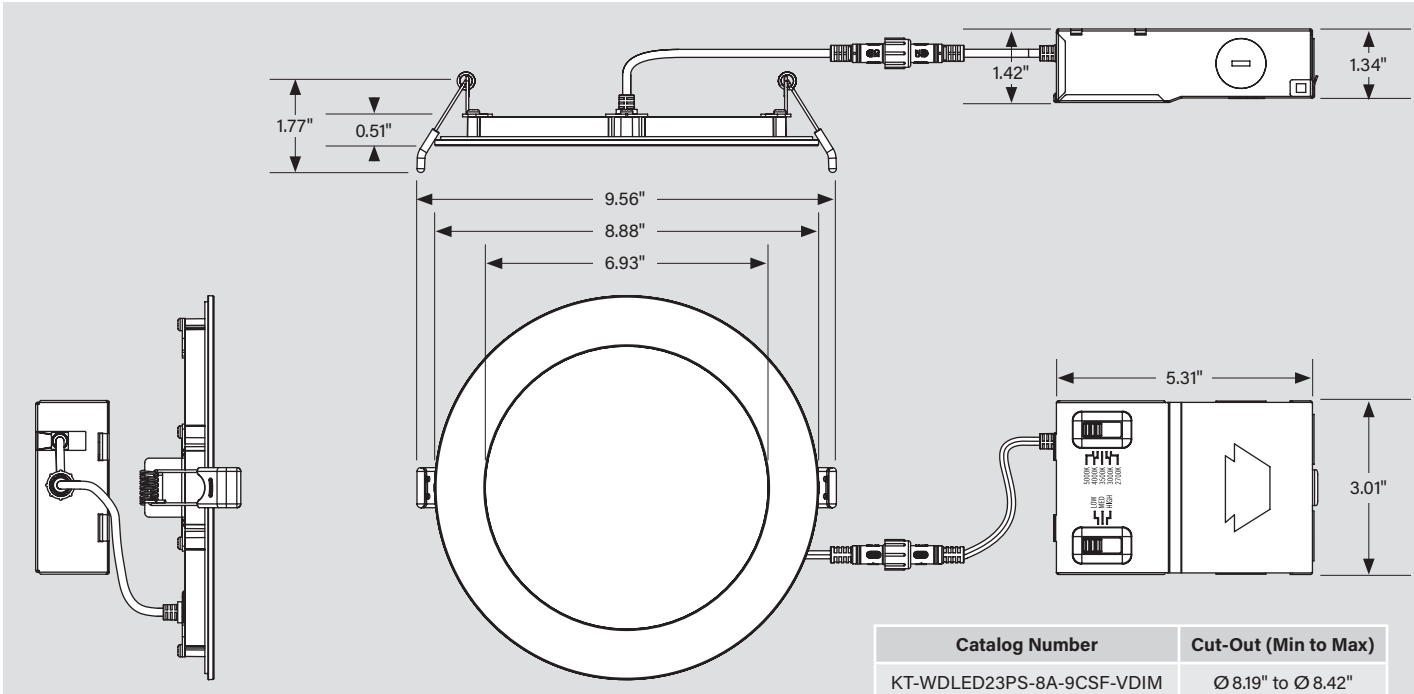
Curves show illuminated area and average illumination when lamp is at various distances.

KT-WDLED23PS-8X-9CSF-VDIM

8" LED WAFER DOWNLIGHT

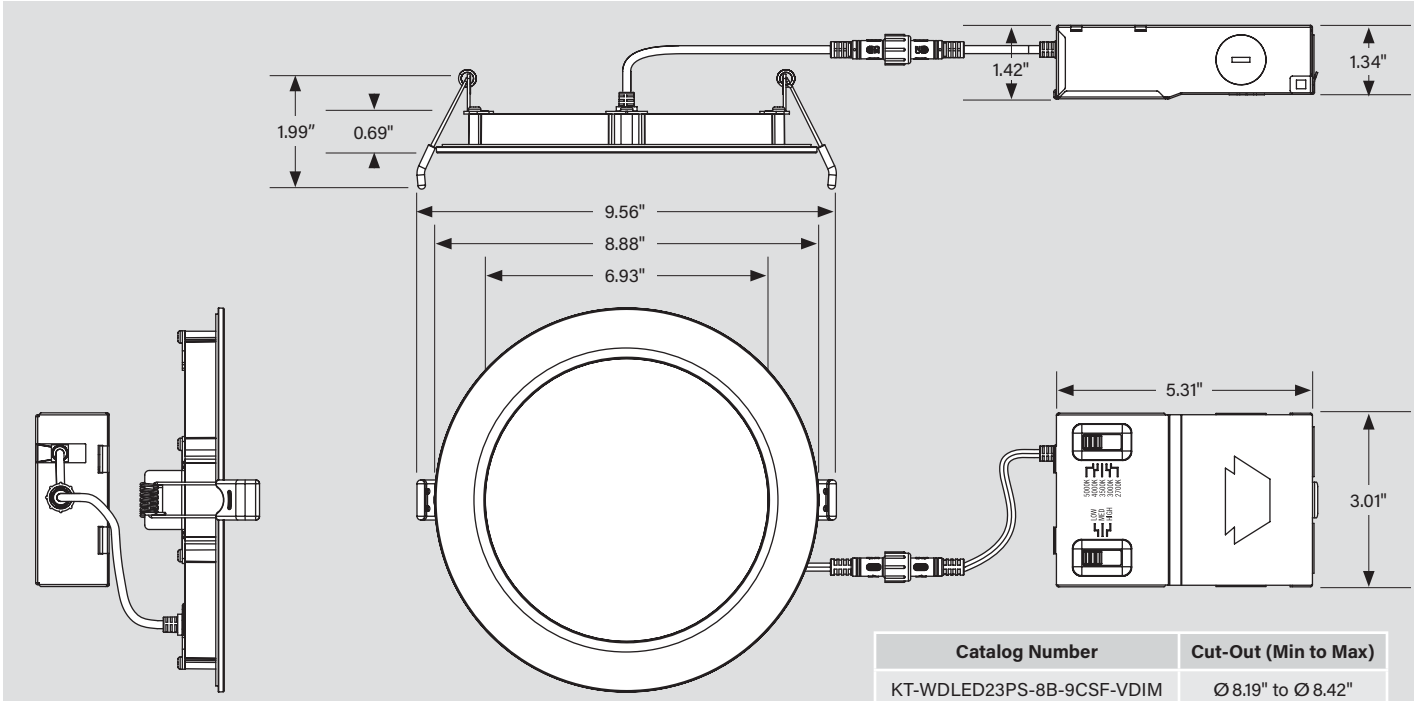
PHYSICAL SPECIFICATIONS

KT-WDLED23PS-8A-9CSF-VDIM



Catalog Number	Cut-Out (Min to Max)
KT-WDLED23PS-8A-9CSF-VDIM	Ø 8.19" to Ø 8.42"

KT-WDLED23PS-8B-9CSF-VDIM



Catalog Number	Cut-Out (Min to Max)
KT-WDLED23PS-8B-9CSF-VDIM	Ø 8.19" to Ø 8.42"

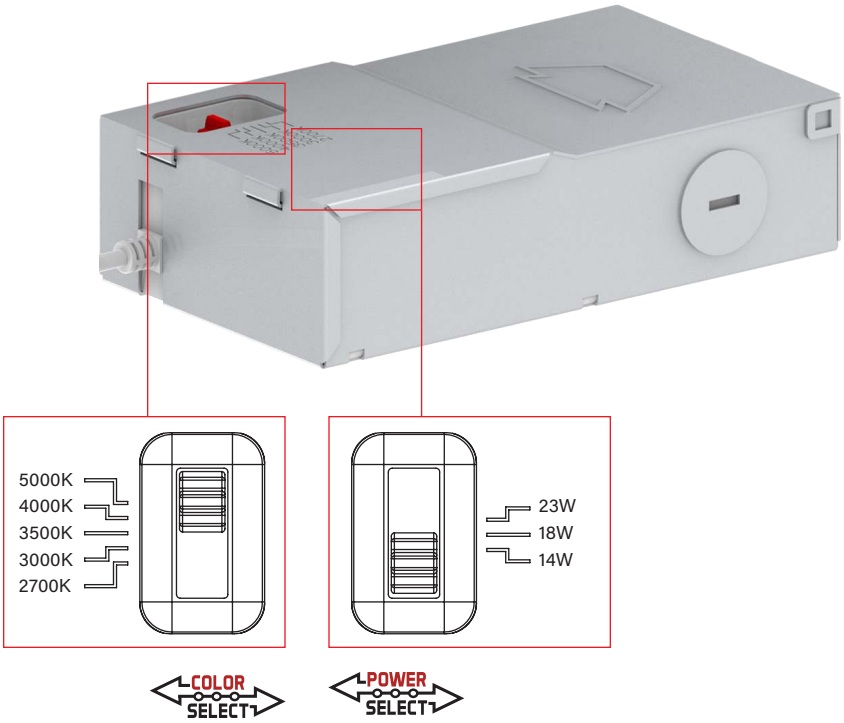
KT-WDLED23PS-8X-9CSF-VDIM

8" LED WAFER DOWNLIGHT

POWER SELECT (WATTAGE) AND COLOR SELECT (CCT) ADJUSTMENT

This fixture is equipped with field-adjustable Keystone Power Select and Color Select technology.

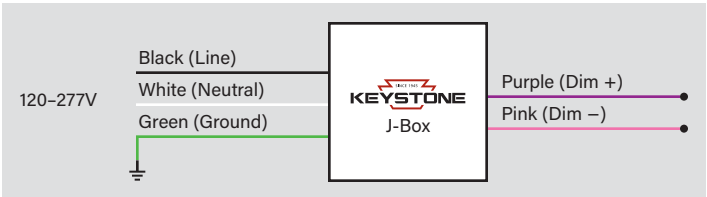
1. Ensure power is off to the fixture.
2. Adjust dip switches to desired settings.



COLOR SELECT ADJUSTMENT SWITCH
Set dip switch to adjust CCT between 2700K, 3000K, 3500K, 4000K, and 5000K.
Fixture comes preset at 5000K.

POWER SELECT ADJUSTMENT SWITCH
Set dip switch to adjust wattage between 10W, 12W, and 14W.
Fixture comes preset at 14W.

WIRING DIAGRAM



KT-WDLED23PS-8X-9CSF-VDIM

8" LED WAFER DOWNLIGHT

INSTALLATION INSTRUCTIONS

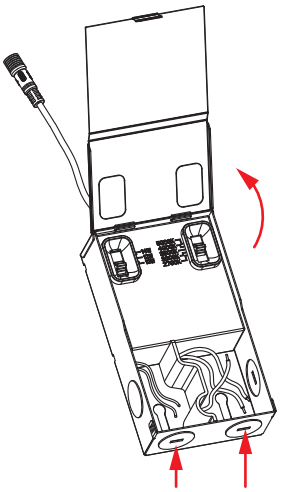
RETROFIT INSTALLATION

1. **Shut off power at the source of the fixture housing into which you are installing fixture.**
   Remove existing trim, CFL or incandescent bulb.
   Note: Follow all federal and local regulations when disposing of lamps and removed components.

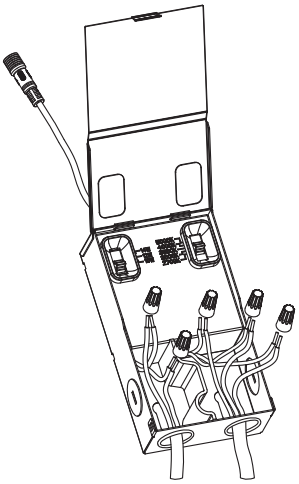
2. Measure ceiling opening to ensure that the edge of the luminaire will cover the entire opening and still sit firmly in the ceiling (see *Dimensions* on page 2).

3. Select desired Wattage and CCT using adjustment switches on fixture (see *Power Select (Wattage) and Color Select (CCT) Adjustment* on page 3).

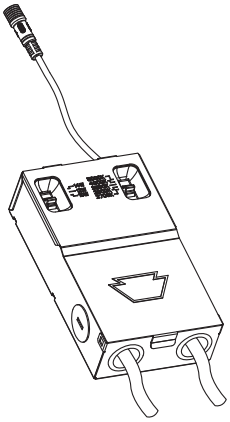
4. Open the driver box and remove the knockout(s) (KO).



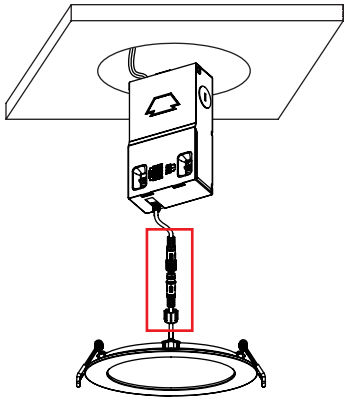
5. Insert the electrical supply cable through the KO; use appropriate bushing to prevent wire abrasion. Wire driver box (see *Wiring Diagram* on page 3 and illustration below).*



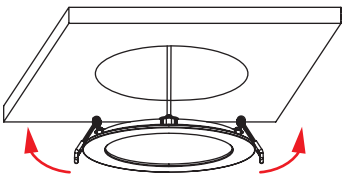
6. Place all wiring and connections back into the box and close the cover.



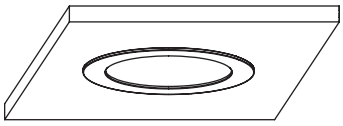
7. Insert driver box into ceiling in accordance with local/national codes and connect the male and female connectors. Screw threaded nut over connectors to secure.



8. Lifting both retention tabs upward, push the fixture into the hole until trim sits flush with ceiling.



9. Restore power when ready.



* *Keystone offers an optional cable accessory to assist with wiring to existing fixture J-box. See* KT-MC-NP-1-18/3, Optional Accessories (sold separately) *on page 6.*

(*Installation Instructions* continued on next page)

KT-WDLED23PS-8X-9CSF-VDIM

8" LED WAFER DOWNLIGHT

INSTALLATION INSTRUCTIONS (CONTINUED)

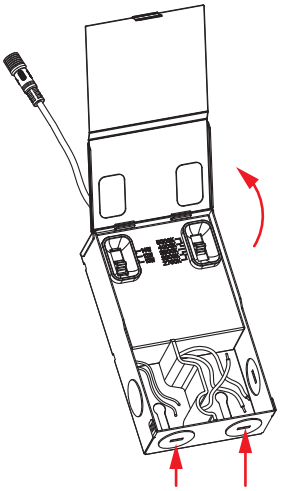
NEW-CONSTRUCTION INSTALLATION*

1. **Shut off power at the source of the fixture housing into which you are installing fixture.**

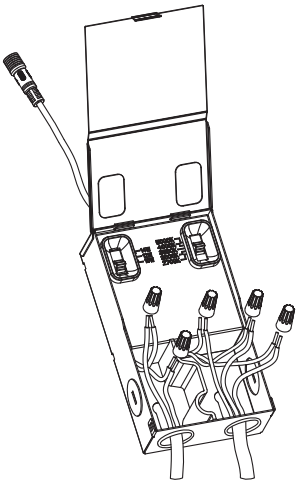
2. Using installation hole template, create ceiling opening to ensure that the edge of the luminaire will cover the entire opening and still sit firmly in the ceiling (see *Dimensions* on page 2).

3. Select desired Wattage and CCT using adjustment switches on fixture (see *Power Select (Wattage) and Color Select (CCT) Adjustment* on page 3).

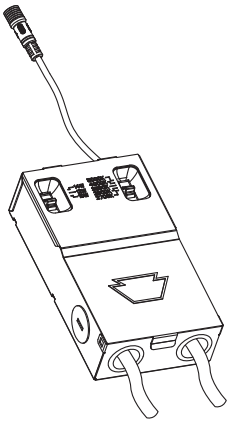
4. Open the driver box and remove the knockout(s) (KO).



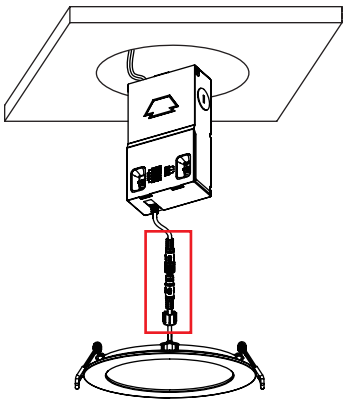
5. Insert the electrical supply cable through the KO; use appropriate bushing to prevent wire abrasion. Wire driver box (see *Wiring Diagram* on page 3 and illustration below).*



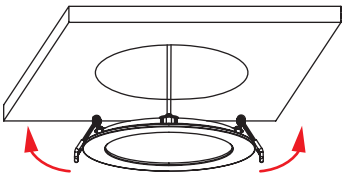
6. Place all wiring and connections back into the box and close the cover.



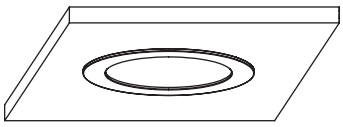
7. Insert driver box into ceiling in accordance with local/ national codes and connect the male and female connectors. Screw threaded nut over connectors to secure.



8. Lifting both retention tabs upward, push the fixture into the hole until trim sits flush with ceiling.



9. Restore power when ready.



* *Keystone offers an optional cable accessory to assist with wiring to existing fixture J-box. See* KT-MC-NP-1-18/3, Optional Accessories (sold separately) *on page 6.*

KT-WDLED23PS-8X-9CSF-VDIM

8" LED WAFER DOWNLIGHT

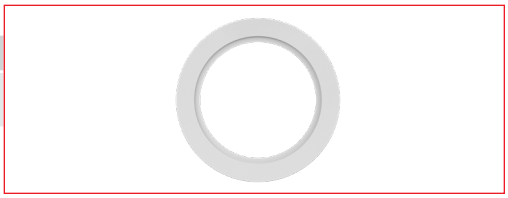
OPTIONAL ACCESSORIES (SOLD SEPARATELY)

INTERCHANGEABLE TRIM

Catalog Number	Description	UPC	Easy Code
KT-WDLED-8A-MB-TRIM	8" Interchangeable Trim for 8A LED Slim Wafer Downlight; Matte Black	843654139333	IKI-88
KT-WDLED-8A-BN-TRIM	8" Interchangeable Trim for 8A LED Slim Wafer Downlight; Brushed Nickel	843654139364	JIH-47
KT-WDLED-8A-BR-TRIM	8" Interchangeable Trim for 8A LED Slim Wafer Downlight; Bronze	843654139395	QUD-62
KT-WDLED-8B-MB-TRIM	8" Interchangeable Trim for 8B LED Recessed Wafer Downlight; Matte Black	843654139432	PBB-93
KT-WDLED-8B-BN-TRIM	8" Interchangeable Trim for 8B LED Recessed Wafer Downlight; Brushed Nickel	843654139463	JJN-04
KT-WDLED-8B-BR-TRIM	8" Interchangeable Trim for 8B LED Recessed Wafer Downlight; Bronze	843654139494	GXE-62

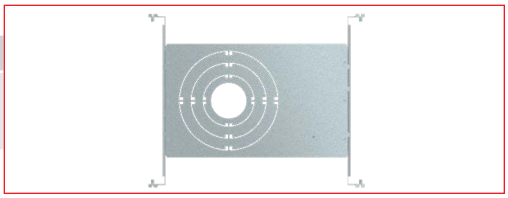
GOOF RING

Catalog Number	Description	UPC	Easy Code
KT-WDLED-8AB-GOOF	Goof Ring for 8A/8B LED Wafer Downlights; 10" outer diameter	843654139661	NTL-85



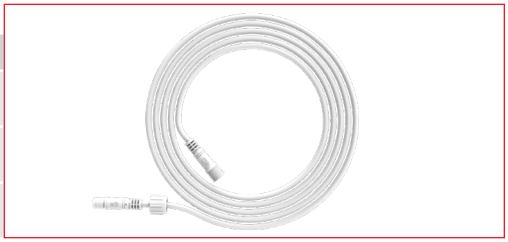
NEW-CONSTRUCTION PLATE

Catalog Number	Description	UPC	Easy Code
KT-WDLED-PLATE-2	New Construction Mounting Plate for all A and B LED Wafer Downlights for joist and T-grid installations	843654139791	FZT-71



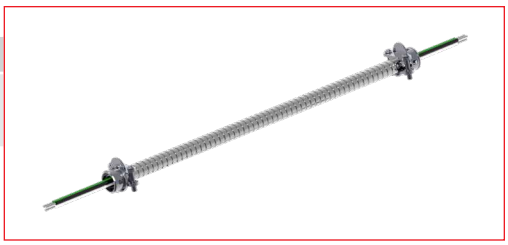
EXTENSION CABLES

Catalog Number	Description	UPC	Easy Code
KT-WDLED-EC-6	6' Extension Cord for LED Wafer Downlights	843654139739	GOK-14
KT-WDLED-EC-12	12' Extension Cord for LED Wafer Downlights	843654139746	ECE-88
KT-WDLED-EC-20	20' Extension Cord for LED Wafer Downlights	843654139753	JLM-06



METAL-CLAD CABLE

Catalog Number	Description	UPC	Easy Code
KT-MC-NP-1-18/3	Metal-Clad Cable for LED Recessed Downlights; No plug; UL 16AWG 18/3 wire (live, neutral, ground)	843654139777	AYT-71



(*Optional Accessories* continued on next page)

KT-WDLED23PS-8X-9CSF-VDIM

8" LED WAFER DOWNLIGHT

OPTIONAL ACCESSORIES (SOLD SEPARATELY) (CONTINUED)

EMERGENCY PACK

Catalog Number	Description	UPC	Easy Code
KT-EMRG-LED-12-1200-AC / DF	LED Emergency Backup, 12W - 1200 Lumen Constant Power Design. 120-277V Input. Dual Flex Cable Design. Installs on Primary Side of AC Powered LED load.	843654139890	MPM-43

ORDERING INFORMATION

Catalog Number	Pack Qty.	UPC	Easy Code
KT-WDLED23PS-8A-9CSF-VDIM	1	843654139203	TSP-41
KT-WDLED23PS-8B-9CSF-VDIM	1	843654139241	NYW-46

CATALOG NUMBER BREAKDOWN

KT-WDLED23PS-8X-9CSF-VDIM

1 2 3 4 5 6 7 8 9 10 11

1 **Keystone Technologies**
2 **Fixture Type**
3 **LED Technology**
4 **Maximum Wattage**
5 **Power Select Technology**
6 **Size**
7 **Style/Design Designation**
8 **CRI**
9 **Color Select Technology**
10 **Color Select Designation**
11 **Dimming**

2 Fixture Type

WD	Wafer Downlight

6 Size

8	8" Nominal

7 Style/Design Designation

A	Smooth
B	Recessed

8 CRI

9	90

10 Color Select Designation

F	2700K, 3000K, 3500K, 4000K, 5000K

11 Dimming

VDIM	0–10V Dimming