

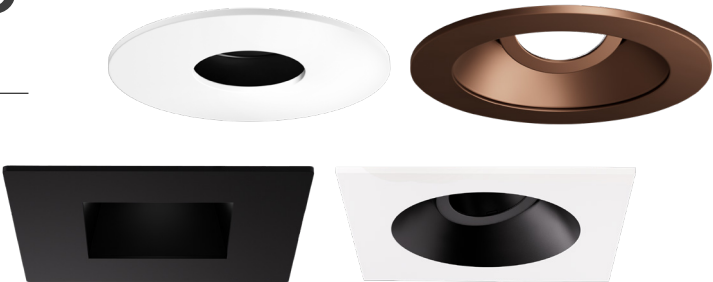
4" TUNABLE WHITE KOTO™

14W-18.3W, 1000 lm - 1250 lm, 120/277V AC/50-60Hz

THE TUNABLE WHITE KOTO™

SYSTEM

The high quality residential grade downlight with a 2" aperture with lumen output up to 1250 lumens.

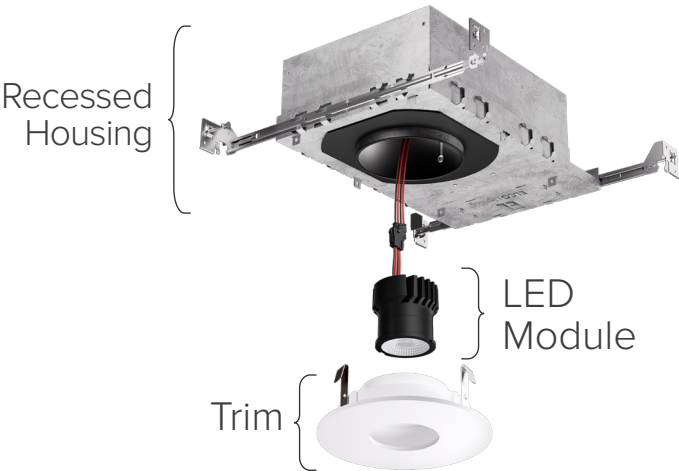


FEATURES

- 120/277V AC/50-60Hz universal input voltage
- Title 24 JA8-2022 E-Compliant
- ENERGY STAR Compliant
- Covered by U.S. PATENTS and Patents Pending

SET UP

1. Select a New Construction Housing
2. Select a Tunable White Koto™ LED Module.
3. Select a Trim.



SPECIFICATIONS

Lumens/Wattage	1000 lm (14W), 1250 lm (18.3W)
Voltage	120/277V AC
Color Temp.	1800K - 4000K, 2700K - 6500K
CRI	95+
Damp Location	Rated
Wet Location	Rated for wet location trims
Dimmable	Dual Channel 0-10V, eldoLED, Control Ready, Lutron, AmbienTech
Beam Angle	18°, 28°, 38°, 60° & 90°

Finishes



PRODUCT NUMBER BUILDER

STEP 1. Specify Housing part number (Select one)

Example: E45KT10ICAD

4" TUNABLE WHITE KOTO™ IC AIRTIGHT HOUSING

ITEM	LUMENS/HEIGHT	ICA	DRIVER
E45KT			
	10 ¹ 1000 (14W) - 4" Height	ICA IC Airtight	D Dual Channel 0-10V
	12 ¹ 1250 (18.3W) - 5 ½" Height		ED eldoLED
			C ² Control Ready
			L Lutron
			A AmbienTech
	¹ Built in collar for up to 1 ½" ceilings		² Requires control module

STEP 2. Specify Koto™ LED Module part number (Select one)

Example: ELK19TWD

ITEM	COLOR TEMPERATURE	BEAM ANGLE
ELK19		
ELK19	T41D 1800K - 4000K	(Blank) 38
	TWD 2700K - 6500K	-S 18°
		-N 25°
		-W 60°
		-E ¹ 90°
		¹ 90° Frosted Reflector

Field Changeable Secondary Module Optics											
L45 Black Hex Louver	L57 White Hex Louver	L46 Linear Lens	L47 Spread Lens	L49 Frosted Diffuser	L51 CCT Reducer	L52 Blue Color Shifter	L53 Pink Color Shifter	L54 Single Asymmetric	L55 Double Asymmetric	L50W White Snoot	L50B Black Snoot

Koto Modules - Lumen Value Multiplier			
CCT	Multiplier	Beam Angle	Multiplier
2700K	0.96	18°	0.84
3000K	1	25°	0.89
3500K	1.05	38°	1
4000K	1.085	60°	1.065
5000K	1.1	90°	0.95
SD	0.80		
HC	0.85		

PRODUCT NUMBER BUILDER

STEP 3. Specify Trim part number (Select one)

4" KOTO™ ROUND TRIMS



Style: **Adjustable Reflector with Clear Glass**

Item: **ELK4111W** (All White)
ELK4111BB (All Black)
ELK4111BZ (All Bronze)
ELK4111B (Black/White Ring)
ELK4111C (Chrome/White Ring)
ELK4111H (Haze/White Ring)



Style: **Adjustable Reflector with Frosted Glass**

Item: **ELK4112W** (All White)
ELK4112BB (All Black)
ELK4112BZ (All Bronze)
ELK4112B (Black/White Ring)
ELK4112C (Chrome/White Ring)
ELK4112H (Haze/White Ring)



Style: **Shallow Reflector**

Item: **ELK4116W** (All White)
ELK4116H (Haze/White Ring)



Style: **Fixed Deep Reflector**

Item: **ELK4118W** (All White)
ELK4118BB (All Black)
ELK4118BZ (All Bronze)
ELK4118B (Black/White Ring)
ELK4118C (Chrome/White Ring)
ELK4118H (Haze/White Ring)



Style: **Rotatable Slot Aperture**

Item: **ELK4120W** (Black Slot/White Ring)
Must be used with Maximum Adjustability Housings



Style: **Adjustable Reflector Wall Wash**

Item: **ELK4122W** (All White)
Must be used with Maximum Adjustability Housings



Style: **Adjustable Pinhole with Frosted Lens**

Item: **ELK4125W** (All White)
ELK4125BB (All Black)
ELK4125BZ (All Bronze)
ELK4125H (Haze/White Ring)



Style: **Adjustable Pinhole**

Item: **ELK4127W** (All White)
ELK4127BB (All Black)
ELK4127BZ (All Bronze)
ELK4127B (Black/White Ring)
ELK4127H (Haze/White Ring)



Style: **Adjustable Reflector**

Item: **ELK4129W** (All White)
ELK4129BB (All Black)
ELK4129BZ (All Bronze)
ELK4129B (Black/White Ring)
ELK4129C (Chrome/White Ring)
ELK4129H (Haze/White Ring)



Style: **Slot Aperture**

Item: **ELK4130W** (All White)



Style: **Micro Flange Reflector**

Item: **ELK4163W** (All White)
ELK4163BB (All Black)



Style: **Curved Reflector**

Item: **ELK4172W** (All White)
ELK4172B (All Black)



Style: **Directional Gimbal**

Item: **ELK4179W** (All White)
ELK4179BB (All Black)
ELK4179B (Black/White Ring)
ELK4179H (Haze/White Ring)



Style: **Adjustable Spot**

Item: **ELK4188W** (All White)
ELK4188B (All Black)
ELK4188BZ (All Bronze)



Style: **Adjustable Baffle**

Item: **ELK4193W** (All White)
ELK4193BB (All Black)
ELK4193B (Black/White Ring)

PRODUCT NUMBER BUILDER

STEP 3. Specify Trim part number (Select one)

4" KOTO™ ROUND TRIMS



Style: **Adjustable Reflector**
Item: **ELK4710W** (All White)



Style: **Round Baffle**
Item: **ELK4713W** (All White)



Style: **Adjustable Deep Reflector**
Item: **ELK4717W** (All White)



Style: **Deep Baffle**
Item: **ELK4719W** (All White)



Style: **Adjustable Reflector**
Item: **ELK4721WW** (All White)
ELK4721BB (All Black)
ELK4721BZBZ (All Bronze)
ELK4721BW (Black/White Ring)



Style: **Adjustable Baffle**
Item: **ELK4723WW** (All White)
ELK4723BB (All Black)
ELK4723BZBZ (All Bronze)
ELK4723BW (Black/White Ring)

4" KOTO™ SQUARE TRIMS



Style: **Adjustable Pinhole with Frosted Lens**
Item: **ELK4212W** (All White)
ELK4212BB (All Black)
ELK4212BZ (All Bronze)
ELK4212B (Black/White Ring)
ELK4212H (Haze/White Ring)



Style: **Shallow Reflector**
Item: **ELK4216W** (All White)
ELK4216H (Haze/White Ring)



Style: **Fixed Deep Reflector**
Item: **ELK4218W** (All White)
ELK4218BB (All Black)
ELK4218BZ (All Bronze)
ELK4218B (Black/White Ring)
ELK4218C (Chrome/White Ring)
ELK4218H (Haze/White Ring)



Style: **Adjustable Slot Rotatable Aperture Trim**
Item: **ELK4220W** (Black/White Trim)



Style: **Adjustable Wall Wash**
Item: **ELK4222W** (All White)
Must be used with Maximum Adjustability Housings



Style: **Adjustable Pinhole**
Item: **ELK4227W** (All White)
ELK4227BB (All Black)
ELK4227BZ (All Bronze)
ELK4227B (Black/White Ring)
ELK4227H (Haze/White Ring)



Style: **Adjustable Pinhole**
Item: **ELK4229W** (All White)
ELK4229BB (All Black)
ELK4229BZ (All Bronze)
ELK4229B (Black/White Ring)
ELK4229H (Haze/White Ring)



Style: **Adjustable Reflector**
Item: **ELK4282W** (All White)



Style: **Adjustable Baffle**
Item: **ELK4284W** (All White)
ELK4284B (All Black)
ELK4284BZ (All Bronze)

PRODUCT NUMBER BUILDER

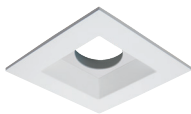
STEP 3. Specify Trim part number (Select one)

4" KOTO™ SQUARE TRIMS



Style: **Square Adjustable Phenolic Baffle**

Item: **ELK4293W** (All White)
ELK4293BB (All Black)
ELK4293B (Black/White Trim)



Style: **Fixed Reflector**

Item: **ELK4714W** (All White)
Must be used with New Construction Housings



Style: **Square Baffle**

Item: **ELK4716W** (All White)



Style: **Square Reflector**

Item: **ELK4741WW** (All White)
ELK4741BB (All Black)
ELK4741BZBZ (All Bronze)
ELK4741BW (Black/White Ring)
ELK4741HW (Haze/White Ring)
Must be used with New Construction Housings



Style: **Square Baffle**

Item: **ELK4743WW** (All White)
ELK4743BB (All Black)
ELK4743BZBZ (All Bronze)
ELK4743BW (Black/White Ring)
Must be used with New Construction Housings



Style: **Adjustable Reflector**

Item: **ELK4759WW** (All White)
ELK4759BB (All Black)
ELK4759B (Black/White Ring)
ELK4759H (Haze/White Ring)
Must be used with New Construction Housings

4" KOTO™ ROUND TRIMLESS



Style: **Round Flush Mount Trim Adapter**

Item: **EL4FMR**



Style: **Non-Adjustable Smooth Reflector**

Item: **ELK408W** (All White)
ELK408B (All Black)
ELK408BZ (All Bronze)
ELK408H (All Haze)
Requires EL4SFR or EL4WCARD
(Sold separately)



Style: **Adjustable Smooth Reflector**

Item: **ELK430W** (All White)
ELK430B (All Black)
ELK430BZ (All Bronze)
ELK430H (All Haze)



Style: **Adjustable Baffle**

Item: **ELK434W** (All White)
ELK434B (All Black)
ELK434BZ (All Bronze)

PRODUCT NUMBER BUILDER

STEP 3. Specify Trim part number (Select one)

4" KOTO™ SQUARE TRIMLESS



Style: **Flush Mount Trim Adapter**
Item: **EL4FMS**



Style: **Square Spackle Frame**
Item: **EL4SFS**



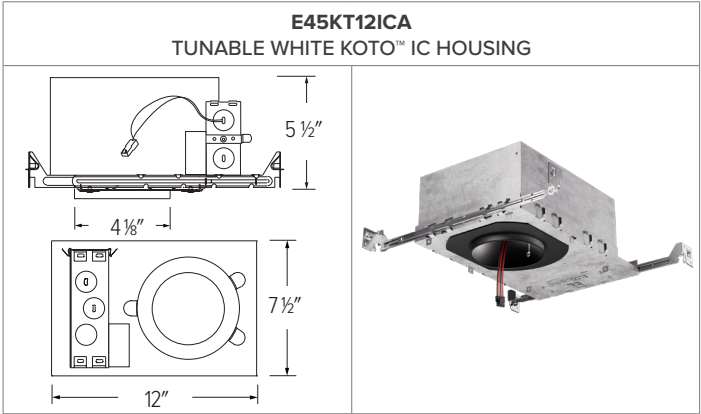
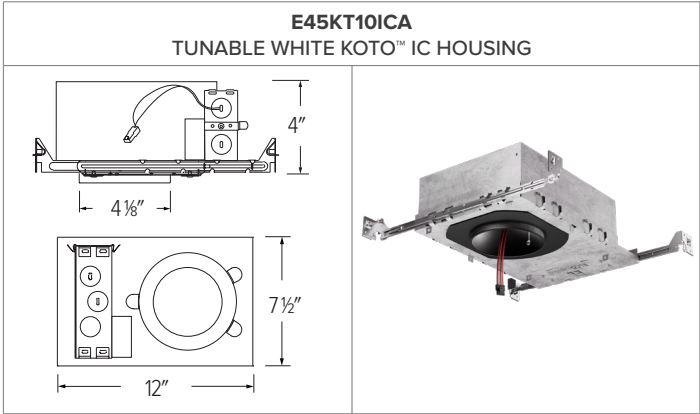
Style: **Smooth Reflector**
Item: **ELK445W** (All White)
ELK445H (All Haze)
ELK445B (All Black)
Requires EL4SFS (Sold separately)



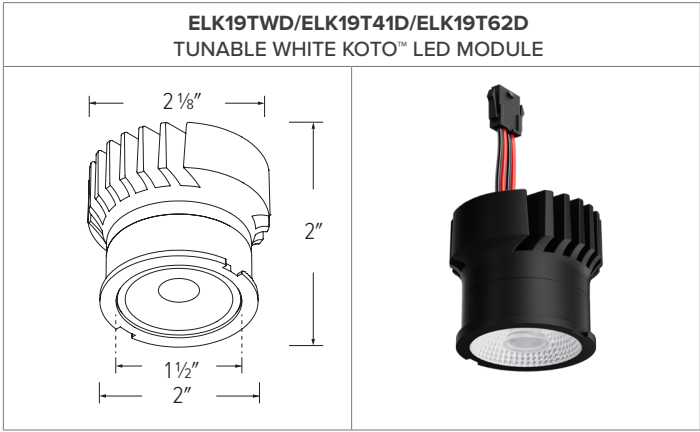
Style: **Adjustable Trimless Reflector**
Item: **ELK459W** (All White)
ELK459B (All Black)
ELK459H (All Haze)
Requires EL4SFS (Sold separately)

PRODUCT DIMENSIONS

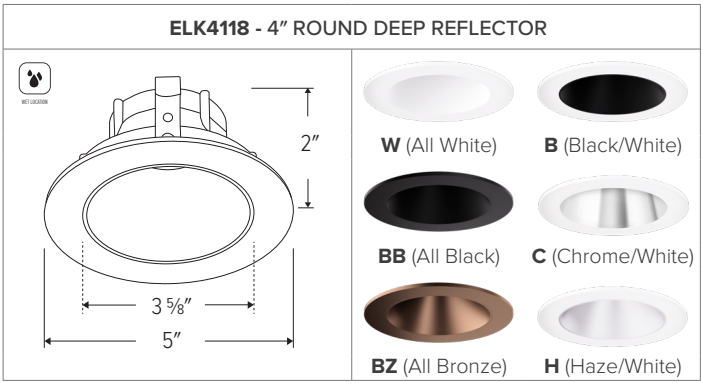
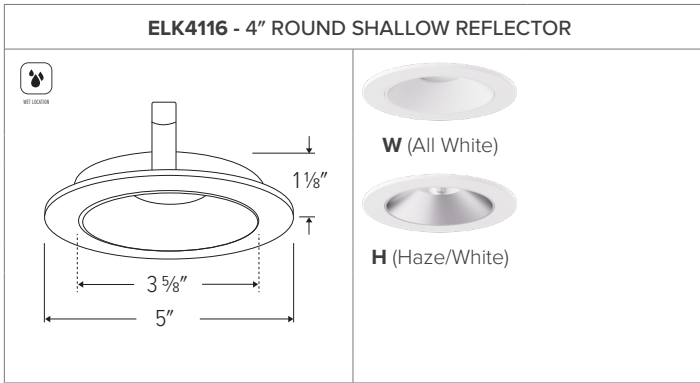
TUNABLE WHITE KOTO™ IC AIRTIGHT HOUSING



TUNABLE WHITE KOTO™ LED MODULE



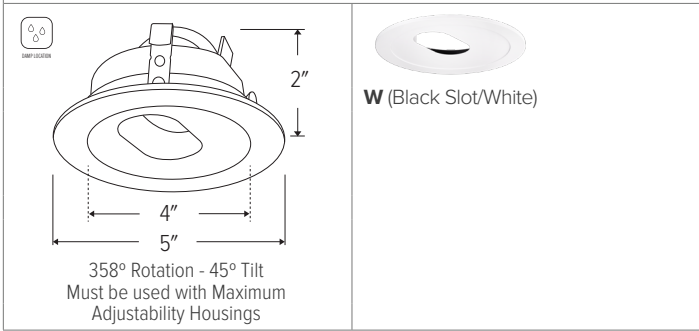
KOTO™ TRIMS



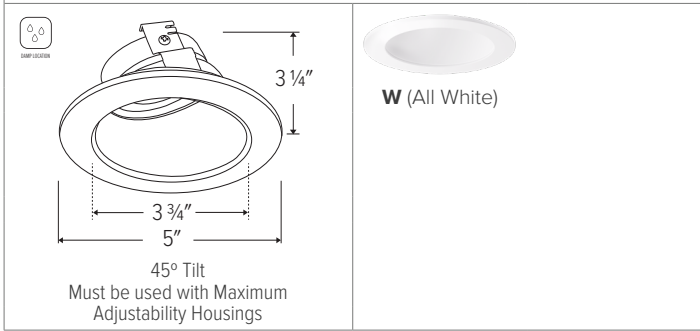
PRODUCT DIMENSIONS

KOTO™ TRIMS

ELK4120 - 4" ROUND ROTATABLE SLOT APERTURE

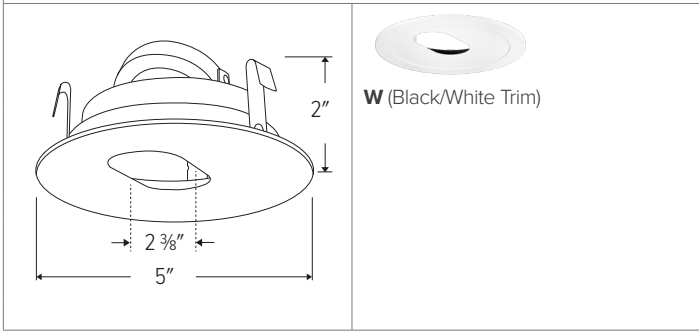


ELK4122 - 4" ROUND ADJUSTABLE REFLECTOR WALL WASH

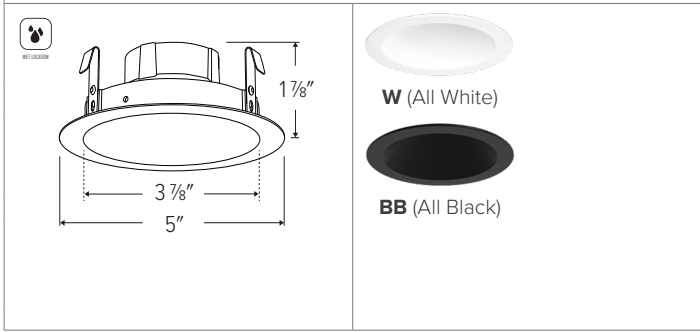


358° Rotation 25° tilt (for EL490 Series) 35° tilt (For EL485ICA)	ELK4127 - 4" ROUND ADJUSTABLE PINHOLE		ELK4125 - 4" ROUND ADJ. PINHOLE WITH FROSTED LENS	
	W (All White)	B (Black/White)	W (All White)	H (Haze/White)
	BB (All Black)		BB (All Black)	
	BZ (All Bronze)		BZ (All Bronze)	

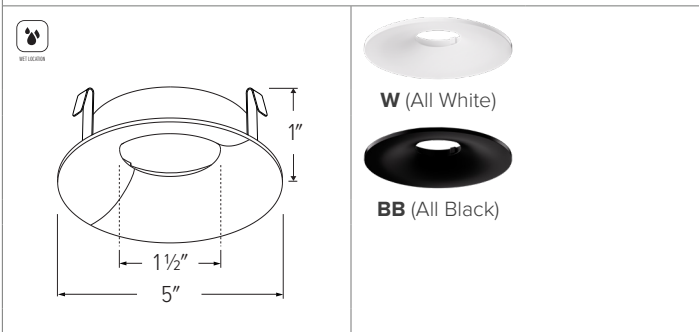
ELK4130 - 4" ROUND SLOT APERTURE



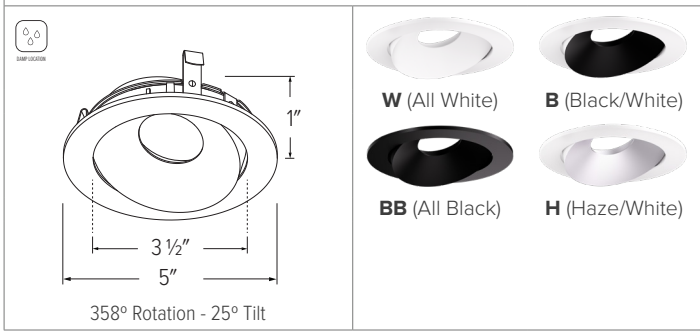
ELK4163 - 4" ROUND MICRO FLANGE REFLECTOR



ELK4172 - 4" ROUND CURVED REFLECTOR



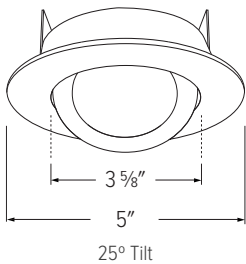
ELK4179 - 4" ROUND DIRECTIONAL GIMBAL



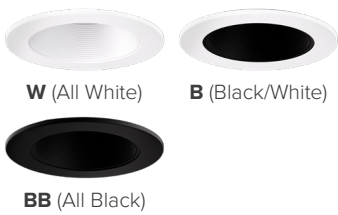
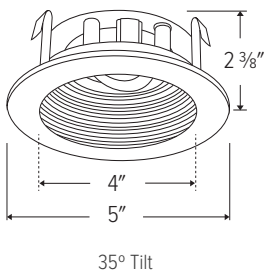
PRODUCT DIMENSIONS

KOTO™ TRIMS

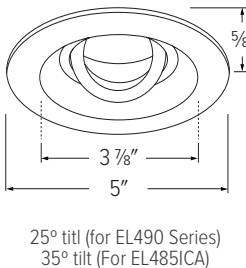
ELK4188 - 4" ROUND ADJUSTABLE SPOT



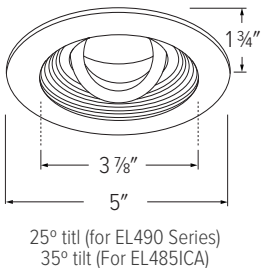
ELK4193 - 4" ROUND ADJUSTABLE BAFFLE



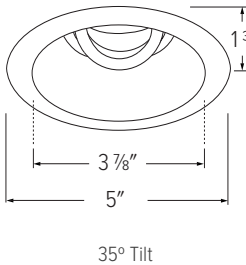
ELK4710 - 4" ROUND ADJUSTABLE REFLECTOR



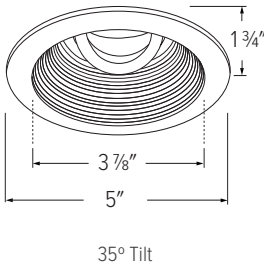
ELK4713 - 4" ROUND ADJUSTABLE BAFFLE



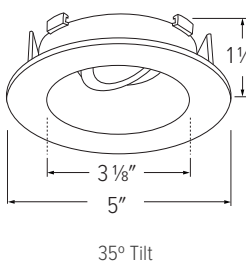
ELK4717 - 4" ROUND ADJUSTABLE DEEP REFLECTOR



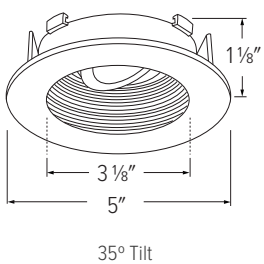
ELK4719 - 4" ROUND DEEP BAFFLE



ELK4721 - 4" ROUND ADJUSTABLE REFLECTOR

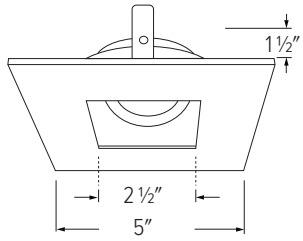


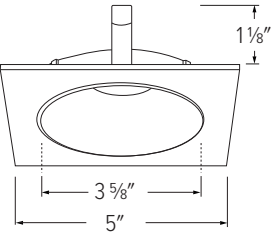
ELK4723 - 4" ROUND ADJUSTABLE BAFFLE

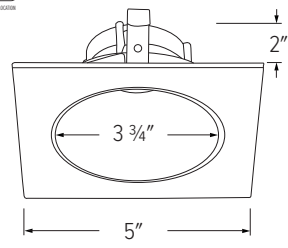


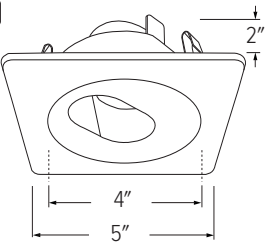
PRODUCT DIMENSIONS

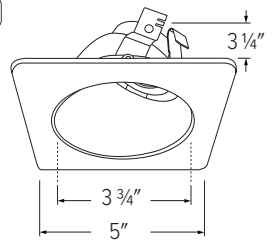
KOTO™ TRIMS

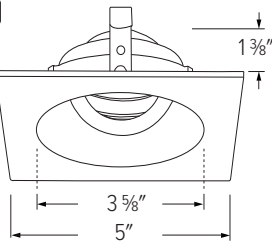
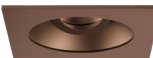
 25° tilt (for EL490 Series) 35° tilt (For EL485ICA)	ELK4227 - 4" SQUARE ADJUSTABLE PINHOLE 		ELK4212 - 4" SQUARE ADJ. PINHOLE WITH FROSTED LENS 	
				
				
				
	W (All White)	B (Black/White)	W (All White)	H (Haze/White)
BB (All Black)	H (Haze/White)	BB (All Black)	H (Haze/White)	
BZ (All Bronze)		BZ (All Bronze)		

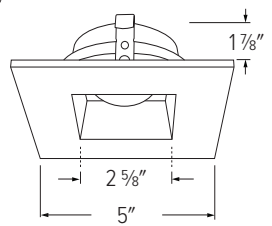
ELK4216 - 4" SQUARE SHALLOW REFLECTOR	
	 W (All White)  H (Haze/White)

ELK4218 - 4" SQUARE DEEP REFLECTOR	
	 W (All White) B (Black/White)  BB (All Black) C (Chrome/White)  BZ (All Bronze) H (Haze/White)

ELK4220 - 4" SQUARE ADJUSTABLE SLOT ROTATABLE APERTURE	
 45° Tilt Must be used with Maximum Adjustability Housings	 W (Black/White Trim)

ELK4222 - 4" SQUARE ADJUSTABLE WALL WASH	
 45° Tilt Must be used with Maximum Adjustability Housings	 W (All White)

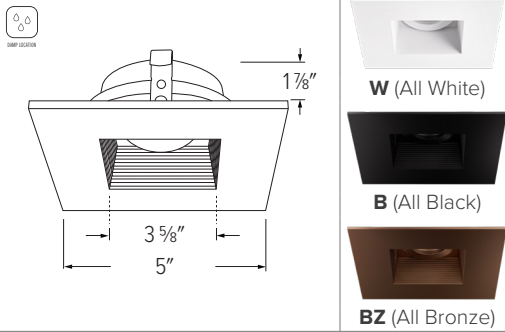
ELK4229 - 4" SQUARE ADJUSTABLE REFLECTOR				
 35° tilt (for EL485ICA), 25° tilt (for EL490 Series), 30° tilt (for E3LK Series)				
				
				
	W (All White)	BB (All Black)		
	BZ (All Bronze)	B (Black/White Trim)		

ELK4282 - 4" SQUARE ADJUSTABLE REFLECTOR	
 358° Rotation - 35° Tilt	 W (All White)  BZ (All Bronze)

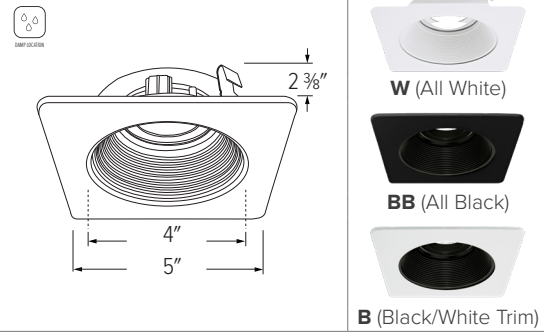
PRODUCT DIMENSIONS

KOTO™ TRIMS

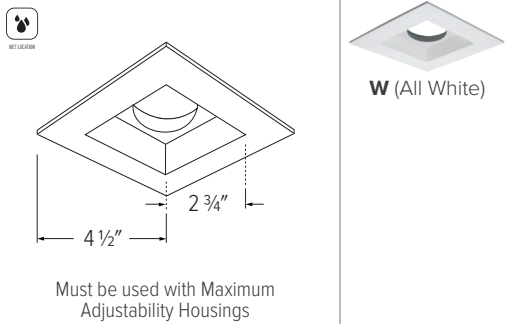
ELK4284 - 4" SQUARE ADJUSTABLE BAFFLE



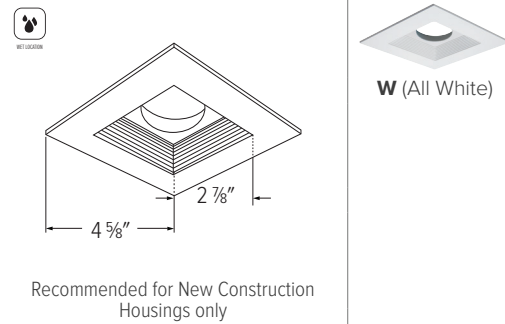
ELK4293 - 4" SQUARE PHENOLIC BAFFLE



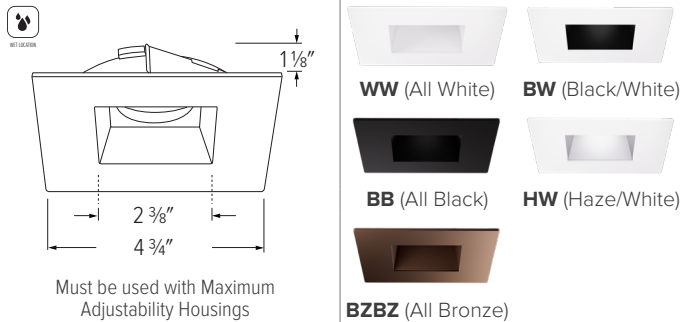
ELK4714 - 4" SQUARE REFLECTOR



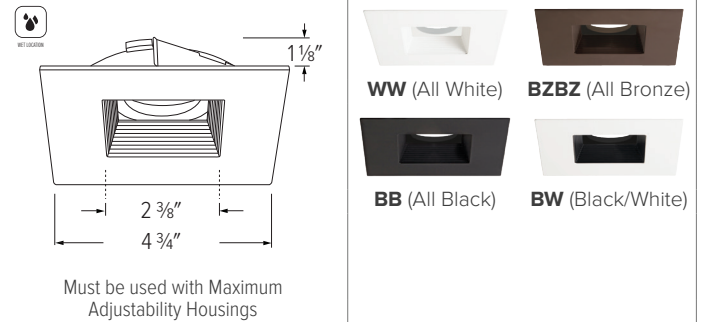
ELK4716 - 4" SQUARE BAFFLE



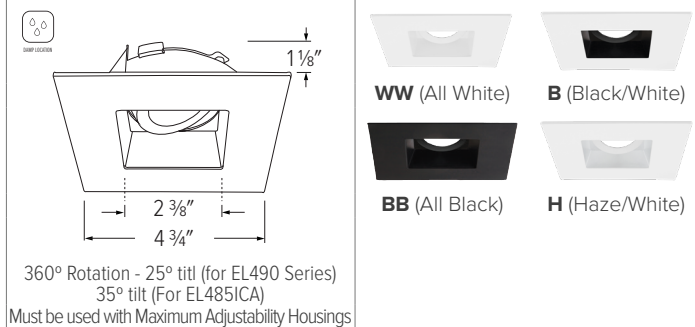
ELK4741 - 4" SQUARE REFLECTOR



ELK4743 - 4" SQUARE BAFFLE



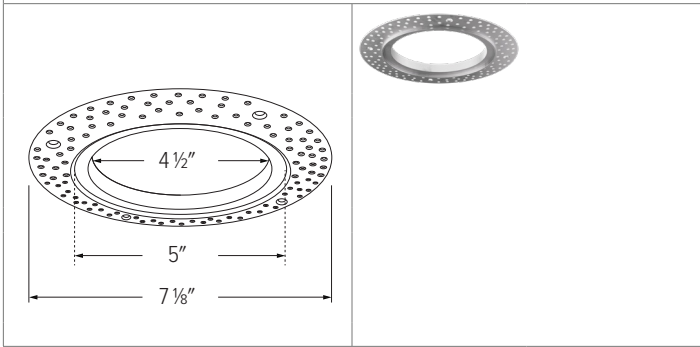
ELK4759 - 4" SQUARE ADJUSTABLE REFLECTOR



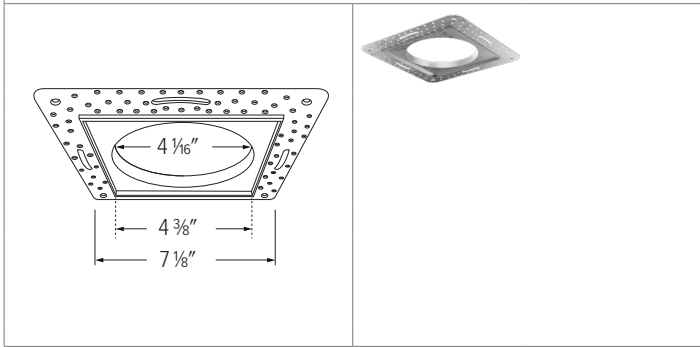
PRODUCT DIMENSIONS

KOTO™ TRIMLESS

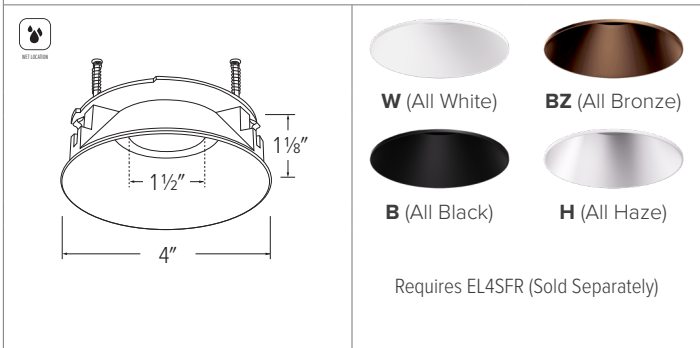
EL4FMR - 4" ROUND FLUSH MOUNT TRIM ADAPTER



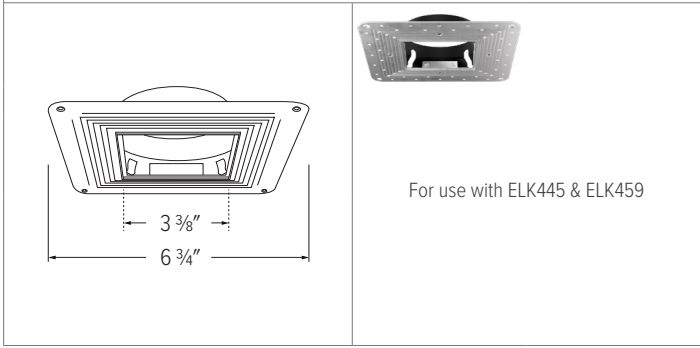
EL4FMS - 4" SQUARE FLUSH MOUNT SPACKLE FRAME



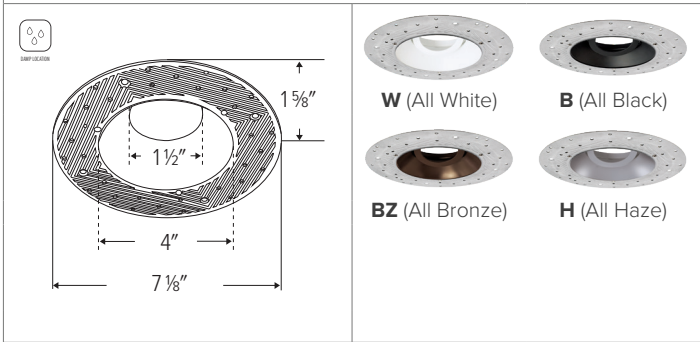
ELK408 - 4" ROUND TRIMLESS REFLECTOR



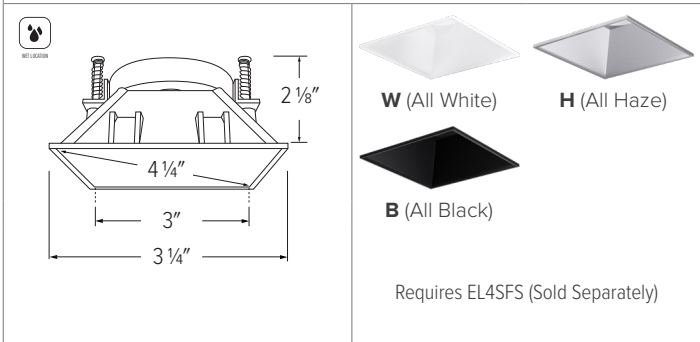
EL4SFS - 4" SQUARE TRIMLESS SPACKLE FRAME



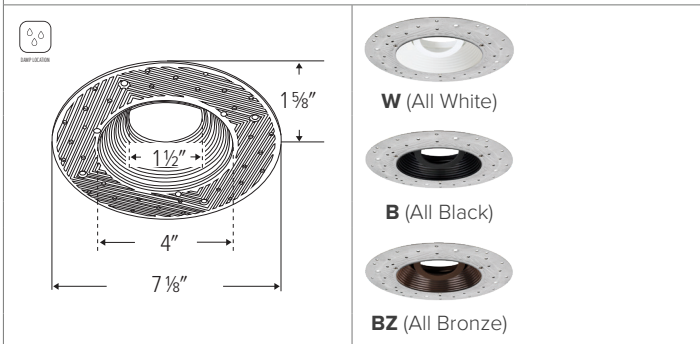
ELK430 - 4" ROUND TRIMLESS ADJUSTABLE SMOOTH REFLECTOR



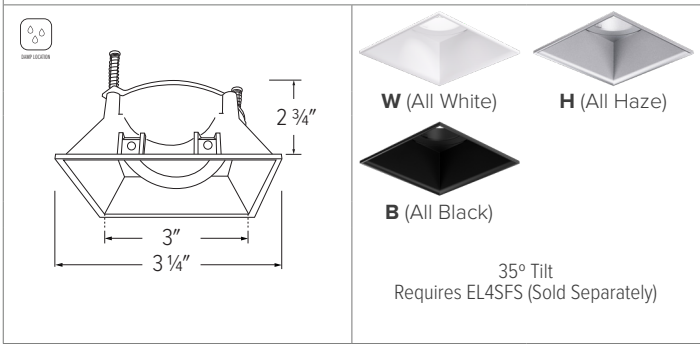
ELK445 - 4" SQUARE TRIMLESS REFLECTOR



ELK434 - 4" ROUND TRIMLESS ADJUSTABLE BAFFLE



ELK459 - 4" SQUARE ADJUSTABLE TRIMLESS REFLECTOR



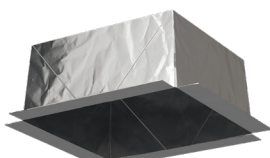
ACCESSORIES

LENS & OPTICS (field changeable)

FIELD CHANGEABLE LENS		HEX LOUVER	LINEAR LENS	SPREAD LENS
				
EP731C (18°) / EP732C (25°) EP733C (38°) / EP734C (60°)		L45 (Black) / L57 (White) For a better glare shield	L46 For a wide rectangular illumination pattern	L47 For a symmetrical broadening of light beams

FROSTED DIFFUSER	COLOR SHIFTERS	SINGLE ASYMMETRIC LENS	DOUBLE ASYMMETRIC LENS	SNOOTS
				
L49 For a softer light	L51 (Color temp. reducer) L52 (Blue) / L53 (Pink)	L54 For elliptical illumination pattern	L55 For elliptical illumination pattern	L50W (White) / L50B (Black) Reduces glare and light spill

FIRE RATED PRODUCTS

1-HOUR FIRE ENCLOSURE FOR RECESSED FIXTURES	MICA ADHESIVE FIRE TAPE FOR FIRE ENCLOSURE	2-HOUR FIRE COVER FOR RECESSED FIXTURES
		
FIREENCL Standard - 9" H x 20 3/8" L x 14 3/8" W FIREENCL-S Shallow (-S) - 7 1/4" H x 16" L x 14 3/8" W Provides fire barrier around recessed lights. ETL approved 1-hour fire rating. Meets UL 263, ASTM E119 Specifications. To be used with Mica Tape to seal the power feeding point. (FIRETAPE sold separately)	FIRETAPE 3/4" W x 16' L Fire proof mica adhesive tape helps seal the power feeding point on Fire Enclosure. Offers outstanding high temperature and flame resistance, and provides excellent electrical insulation.	FIRECVR 9 3/4" H x 17" O.D. x 13" I.D. Made of heat activated intumescent material. UL approved for most ceiling types: sheetrock drywall, gypsum & acoustical tiles. UL Rated enclosure stops flame spread and heat transmission for up to 2 hours.

EMERGENCY BATTERY BACKUP

EMERGENCY BATTERY BACKUP

KEM-ERT 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

HOUSING ACCESSORY

2" EXTENSION COLLAR

ELK2X-125 It allows the housing to install in ceiling thicknesses up to 1.25"

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.

Construction (Housing): Double Wall IC Rated for direct contact with insulation. For use in IC and Non-IC conditions. Up to 1100 lumens. Housing adjusts in the frame to accommodate up to 1 1/2" ceiling thickness. Airtight housing with gasket to restrict airflow in accordance with ASTM E-283 air-tight requirements.

Installation (Light Engine): Twist-on design for toolless trim installation. For use with standard Koto™ trims only.

Installation (Housing): Designed for ceiling plenums where 2x6 joists or taller are used. High-strength hanger bars can easily be nailed to joists. Suitable for T-grid and drop ceiling applications. See the installation sheet for detailed information. For use with ELCO Tunable White Koto™ LED Light Engines (ELK19TWD Series)

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 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 pixilation.

Electrical: Driver is rated for 120V and 277V input (120/277V). High-Efficiency driver with a power factor > 0.95.

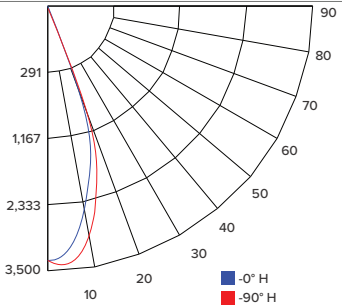
Dimming: 0-10V dimming in one driver. 0-10V dimming down to 5% with a compatible dimmer. Can be specified with Lutron drivers for 0.1% and 1% dimming. For a full list of dimmers refer to the Dimmer Compatibility List.

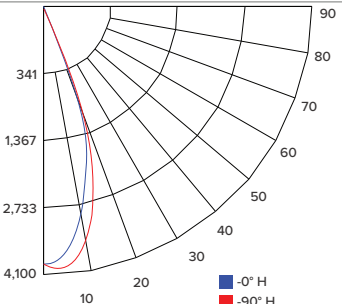
Emergency Battery Pack: Optional 25W MAX. 90 minute battery backup.

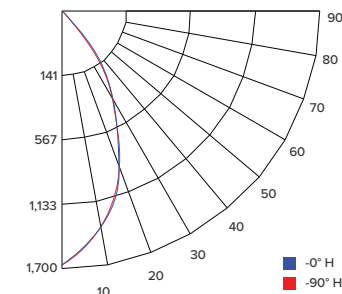
Listings: UL and cUL Listed for Damp Locations. UL and cUL Listed for Wet Location with Wet location trims. RoHS Compliant. Meets Energy Star & California Title 24 JA8-2022-E standards.

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

TUNABLE WHITE KOTO™ LED MODULE

PHOTOMETRIC REPORT	CANDLE POWER SUMMARY		ILLUMINANCE AT A DISTANCE		
Product #: ELK19TWD (E45KT12ICAD) @2700K Wattage / Lumens: 16.9 W / 1353.4 lm Luminaire LPW: 80 lm/W 	Degress Vertical	0°	Distance to Target Plane	Center Beam Footcandles	Beam Diameter
	0	3401	5'	136	3.0'
	5	3111	7.5'	60.5	4.6'
	15	1814	10'	34.0	6.1'
	25	543	12.5'	21.8	7.6'
	35	122	ZONAL LUMEN SUMMARY		
	45	58			
	55	34	Zone	Lumens	%Luminaire
	65	18	0-30°	1,145.4	84.7
	75	9	0-40°	1,244.7	92
	85	0	0-60°	1,324.7	97.9
	90	0	0-90°	1,352.7	100

PHOTOMETRIC REPORT	CANDLE POWER SUMMARY		ILLUMINANCE AT A DISTANCE		
Product #: ELK19TWD (E45KT12ICAD) @4000K Wattage / Lumens: 15.66 W / 1569.2 lm Luminaire LPW: 100.2 lm/W 	Degress Vertical	0°	Distance to Target Plane	Center Beam Footcandles	Beam Diameter
	0	3946	5'	158	3.0'
	5	3646	7.5'	70.1	4.5'
	15	2195	10'	39.5	6.0'
	25	691	12.5'	25.3	7.5'
	35	160	ZONAL LUMEN SUMMARY		
	45	79			
	55	45	Zone	Lumens	%Luminaire
	65	24	0-30°	1,332.2	84.9
	75	10	0-40°	1,447.6	92.3
	85	0	0-60°	1,539.1	98.1
	90	0	0-90°	1,568.3	100

PHOTOMETRIC REPORT	CANDLE POWER SUMMARY		ILLUMINANCE AT A DISTANCE		
Product #: ELK19TWD (E45KT12ICAD) @6500K Wattage / Lumens: 17.06 W / 1650.9 lm Luminaire LPW: 96.7 lm/W 	Degress Vertical	0°	Distance to Target Plane	Center Beam Footcandles	Beam Diameter
	0	4080	5'	163	3.0'
	5	3745	7.5'	72.5	4.6'
	15	2229	10'	40.8	6.1'
	25	703	12.5'	26.1	7.6'
	35	150	ZONAL LUMEN SUMMARY		
	45	73			
	55	45	Zone	Lumens	%Luminaire
	65	25	0-30°	1,386.3	84
	75	13	0-40°	1,509.8	91.5
	85	6	0-60°	1,610.3	97.6
	90	5	0-90°	1,649.9	100