

FRAXION® 4 HIGH FLUX LVS ADJUSTABLE

Very versatile, and highly configurable, these 4-inch downlights are the widest aperture we offer, ideal for overall illumination in residential and commercial spaces.

PROJECT NAME:	TYPE:
---------------	-------



ORDERING INFORMATION - DOWNLIGHT / HOUSING

SHAPE	TRIM	RATING	FLANGE FINISH	BAFFLE FINISH	LUMEN PACKAGE	CCT	OPTIC	INSTALL TYPE	CEILING THICKNESS	DRIVER	EFFECTS DEVICE
F4R Round	FAS Standard Flange MAS Microflange TAS Trimless	1 Dry/Damp 2 Wet* *(Requires provided suction cup to service or aim & focus)	WH White BK Black PR Primer AU Cashmere Gold AG Satin Silver BB Burnt Bronze 00 Trimless* CF Custom Finish* CF Custom Finish* CF Custom Finish*	WH White BK Black PR Primer AU Cashmere Gold AG Satin Silver BB Burnt Bronze CF Custom Finish* CF Custom Finish* CF Custom Finish*	HIGH FLUX STATIC WHITE 8.75" TALL HOUSING 80C30B 80+ CRI, Delivered Lumens - 2507 80C36B 80+ CRI, Delivered Lumens - 2950* 80C58B 80+ CRI, Delivered Lumens - 3723* 90C26B 90+ CRI, Delivered Lumens - 2071 90C30B 90+ CRI, Delivered Lumens - 2438* 90C50B 90+ CRI, Delivered Lumens - 3188* 97C23B 97+ CRI, Delivered Lumens - 1889 97C27B 97+ CRI, Delivered Lumens - 2223* 97C41B 97+ CRI, Delivered Lumens - 2634*	27 2700K 30 3000K 35 3500K* 40 40° 60 60° 85 85°* 40 4000K	15 15° 25 25° 40 40° 60 60° 85 85°* *(Requires -14 WDL effects device)	REMOTE DRIVER V IC, Remote W NIC, Remote D IC, Airtight, Remote* *(Chicago Plenum & Airtight compliant housing)	1 0.50" - 1.00" T Butterfly 0.50" - 1.00"* *(Includes adjustable housing height bracket. CUSTOMER SUPPLIED 1/2" CONDUIT, CHANNEL, OR FURRING CHANNEL FOR MOUNTING)	LVS Low Voltage System	STANDARD EFFECTS DEVICE 04 Soft Focus Lens NL No Lens* *(Not available for Wet Location, or Airtight Housings) ALTERNATE EFFECTS DEVICE 03 Clear Glass Lens* *(Not available for Warm Dim) 05 Frosted Glass Lens 08 Frosted Soft Focus Lens 14 Wide Distribution Lens* *(Required and only available for 85° beam spread) 26 Frosted Linear Spread Lens 28 Adjustable Honeycomb Louver and Soft Focus Lens* *(Not available with 60° optic, Wet location, or Airtight Housings)
F4S Square	FAS Standard Flange MAS Microflange TAS Trimless FAT Standard Flange Transitional Baffle MAT Microflange Transitional Baffle TAT Trimless Transitional Baffle				HIGH FLUX WARM DIM 8.75" TALL HOUSING 90W19E 90+ CRI, Delivered Lumens - 1158 Incandescent Profile 90W31F 90+ CRI, Delivered Lumens - 1865 Incandescent Profile* *(Not available for IC housing applications) *SEE PAGE 4 FOR DETAILED WARM DIM PROFILE COMPARISON. *ALL DELIVERED LUMEN OUTPUTS REFLECT 3000K PAIRED WITH 40° OPTIC AND SOFT FOCUS LENS.	WL 2700K - 1800K	25 25° 40 40° 60 60° 85 85°* *(Requires -14 WDL effects device)				



PART NUMBER NOTES




- Housing and trim ship as e.g., F4RMAS1-WHWH-90C30B-3V1-LVS

FRAXION4 HIGH FLUX LVS ADJUSTABLE

APPLICATION NOTES

- Customers must ensure voltage range of the proposed POE node encompasses the fixtures complete Vf range, both maximum and minimum, and can be set to the required mA drive current. If assistance is required contact LLC rep or factory.
- Customers are responsible for ensuring POE node drive current is set to correct values shown below.
- Lucifer Lighting will not supply a fixture with a POE node or power supply inside the fixture. This allows for easier site install with nodes of 2 or more outputs.
- Consult node manufacturer for maximum remote wiring distances.
- Housing and Fixture feature 18 Gauge wiring.
- Wiring connections are made in the splicing compartment using customer supplied connectors, ex. wire nuts, push-in connectors, or terminal blocks.
- Confirm node compatibility with factory if it is not listed.

NODE COMPATIBILITY

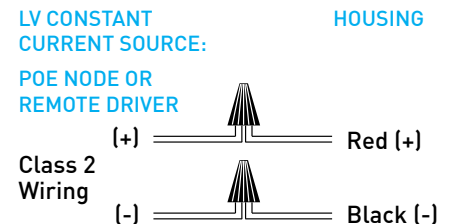
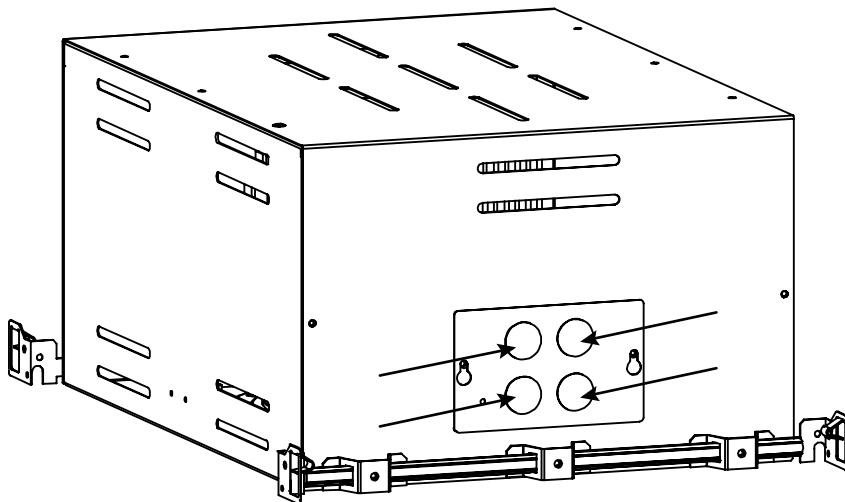
Manufacturer	Model Number
 Igor Enabling Smart Buildings™	NP50-60-C-F-5
 molex	180996-1001* 180996-1002* 180996-2001* 180996-2002*
 PLATFORMATICS	1 Channel Node, POE-LN2-1U-E 2 Channel Node, POE-LN2-2U-E 4 Channel Node, POE-LN2-4U-E

*SEE APPLICATION NOTE 1

DRIVE CURRENT SPECIFICS

	90C			90C			97C			90W	
	30B	36B	58B	26B	30B	50B	23A	27A	41B	19E	31F
Minimum Vf	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5
Maximum Vf	39	39	39	39	39	39	39	39	39	39	39
Current mA	700	850	1250	700	850	1250	700	850	1250	600	950
Wattage W	25.4	29.1	43.6	25.4	29.1	43.6	25.4	29.1	43.6	20.1	32.4

WIRING DIAGRAM AND HOUSING ENTRY/ EXIT POINTS



FRAXION4 HIGH FLUX LVS ADJUSTABLE

ACCESSORIES

ROUND ALTERNATE EFFECTS DEVICES

Dry/Damp location only.
Wet location requires alternate baffle.

- CGL-F4R** Clear Glass Lens*
*(Not available for Warm Dim)
- FGL-F4R** Frosted Glass Lens
- SFL-F4R** Soft Focus Lens
- FSFL-F4R** Frosted Soft Focus Lens
- WDL-F4R** Wide Distribution Lens*
*(Required and only available for 85° beam spread)
- FLSL-F4R** Frosted Linear Spread Lens

SQUARE ALTERNATE EFFECTS DEVICES

Dry/Damp location only.
Wet location requires alternate baffle.

- CGL-F4S** Clear Glass Lens*
*(Not available for Warm Dim)
- FGL-F4S** Frosted Glass Lens
- SFL-F4S** Soft Focus Lens
- FSFL-F4S** Frosted Soft Focus Lens
- WDL-F4S** Wide Distribution Lens*
*(Required and only available for 85° beam spread)
- FLSL-F4S** Frosted Linear Spread Lens

ADJUSTABLE HCL ASSEMBLY

Dry / Damp location only.

- OLR-F4RS1-SFL-HCL** Adjustable Honeycomb Louver and Soft Focus Lens*
*(Not available for 60° optic, or Airtight housings)

REPLACEMENT BAFFLE ASSEMBLY (INCLUDES EFFECTS DEVICE)

ASSEMBLY	SHAPE	TRIM	RATING	FLANGE FINISH	EFFECTS DEVICE
RBA				1	
REPLACEMENT BAFFLE ASSEMBLY	F4R Round	FAS Standard Flange MAS Microflange TAS Trimless	1 Dry / Damp 2 Wet	WH White BK Black PR Primer AU Cashmere Gold AG Satin Silver BB Burnt Bronze CF Custom Finish * *(Consult Factory)	Leave blank for standard Soft Focus Lens
	F4S Square	FAS Standard Flange MAS Microflange TAS Trimless FAT Standard Flange Transitional Baffle MAT Microflange Transitional Baffle TAT Trimless Transitional Baffle			CGL Clear Glass Lens * *(Not available for Warm Dim) FGL Frosted Glass Lens FSFL Frosted Soft Focus Lens WDL Wide Distribution Lens* *(Required and only available for 85° beam spread) FLSL Frosted Linear Spread Lens

REPLACEMENT OPTICS

Interchangeable optics accessible through fixture aperture.

- RO-70-15-2** 15° optic
- RO-70-25-2** 25° optic
- RO-70-40-2** 40° optic
- RO-70-60-2** 60° optic

REPLACEMENT SUCTION TOOL

One included with every six fixtures designated Wet location.

- F4-TOOL-SUCTION** Allows for removal of baffle with Wet location

BUTTERFLY BRACKET ASSEMBLY

Supplied with ceiling thickness "T" and recommended for installations in T-Grid and furring channel up to 1.5" tall. Available for ceiling thicknesses from 0.50" - 1.00". Requires customer supplied 1/2" conduit, channel, or furring channel for mounting.

- DHA-BFLY-KIT**

HANGER BAR EXTENDER KIT

Extends hanger bars from 24.0" to 46.0" maximum.

- FRX-HBE-46** Extender, Hanger Bar

FRAXION4 HIGH FLUX LVS ADJUSTABLE

PERFORMANCE - 3000K

LUMEN PACKAGE	WATTAGE	15° OPTIC SOFT FOCUS LENS		25° OPTIC SOFT FOCUS LENS		40° OPTIC SOFT FOCUS LENS		60° OPTIC SOFT FOCUS LENS		85° OPTIC WIDE DISTRIBUTION LENS	
		DELIVERED	LPW	DELIVERED	LPW	DELIVERED	LPW	DELIVERED	LPW	DELIVERED	LPW
80C30B	30	2472	82	2280	76	2507	84	2612	87	2041	68
80C36B	35	2909	83	2684	77	2950	84	3073	88	2401	69
80C58B	53	3670	69	3386	64	3723	70	3878	73	3029	57
90C26B	30	2043	68	1884	63	2071	69	2158	72	1686	56
90C30B	35	2404	69	2218	63	2438	70	2540	73	1985	57
90C50B	53	3142	59	2900	55	3188	60	3320	63	2594	49
97C23B	30	1863	62	1719	57	1889	63	1969	66	1538	51
97C27B	35	2192	63	2022	58	2223	64	2316	66	1809	52
97C41B	53	2596	49	2395	45	2634	50	2744	52	1923	36
90W19E	23	-	-	987	43	1085	47	1129	49	883	38
90W31F	27	-	-	1598	59	1757	65	1830	68	1429	53

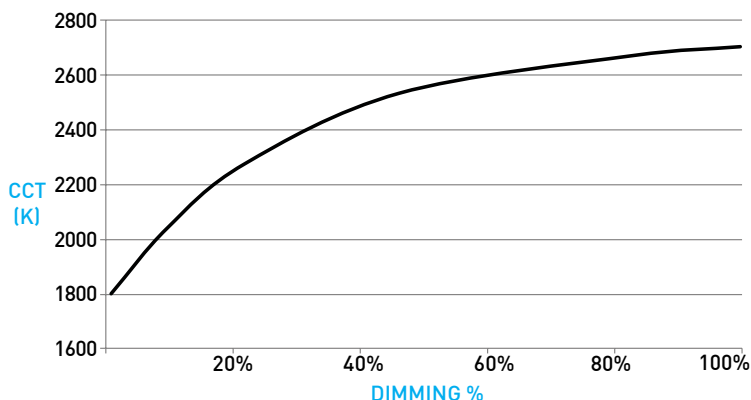
OUTPUT MULTIPLIER	
CCT	CCT SCALE
2700K	0.957
3000K	1.000
3500K	1.019
4000K	1.030

LIGHT LOSS FACTOR MULTIPLIER	
NO LENS	
CGL	1.05
SFL	1.00
FGL	0.90
FSFL	0.87
FLSL	0.83
WDL	0.78

WARM DIM PERFORMANCE

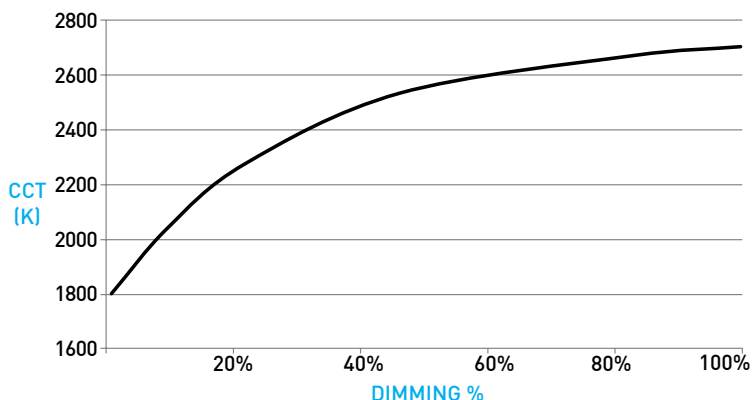
WARM DIM TO MIRROR INCANDESCENT DIMMING PROFILE

90W19E 2700K - 1800K	Full on 100%	Dimmed to 80%	Dimmed to 70%	Dimmed to 50%	Dimmed to 20%	Dimmed to 10%	Dimmed to 2%
CCT (K)	2700	2650	2620	2520	2180	1950	1800
Light Output (Lm)	1085	868	760	543	436	109	22
Power (W)	23	18	16	11	4	2	.5
Efficacy (LPW)	47	47	47	47	47	47	47



WARM DIM TO MIRROR INCANDESCENT DIMMING PROFILE

90W31F 2700K - 1800K	Full on 100%	Dimmed to 80%	Dimmed to 70%	Dimmed to 50%	Dimmed to 20%	Dimmed to 10%	Dimmed to 2%
CCT (K)	2700	2650	2620	2520	2180	1950	1800
Light Output (Lm)	1757	1406	1230	879	351	176	35
Power (W)	27	21	19	13	5	3	.5
Efficacy (LPW)	65	65	65	65	65	65	65



FRAXION4 HIGH FLUX LVS ADJUSTABLE

DOWNLIGHT / HOUSING

A ADJUSTABILITY

Aiming mechanism is integral to the housing, providing hot-aim tilt up to 40° and 365° rotation. Sliding pivot point optimizes center beam, ensuring unclipped beam of 15° at 40° tilt and 25° at 30° tilt. 1° tilt increments with 5° indicators, tilt guide included (see **A1** for section view).

B LED

Integral LED module design enables field service / replacement through housing aperture.

C OPTIC

Proprietary optic integrates Reflection, Refraction and TIR offering 10°, 15°, 25°, 40° & 60° beams.

D1 STANDARD FLANGE PROFILE

Installed after ceiling is complete. Requires 4.625" diameter cutout. Provides 0.86" total contractor (goof) allowance with 0.50" flange. Thickness measures 0.06". Wet location features integral silicone gasket.

D2 MICROFLANGE PROFILE

Installed after ceiling is complete. Requires 4.625" diameter cutout. Provides 0.42" total contractor (goof) allowance with 0.28" flange. Thickness measures 0.06". Wet location features integral silicone gasket.

D3 TRIMLESS PROFILE

Installs totally flush with the ceiling with no visible trim. Appliqué includes screws for mounting and has 0.06" plaster stop. Not recommended for stucco applications.

E EFFECTS DEVICES

Soft focus lens included and sealed in Wet location option. Fixture is limited to 1 lens. Suction tool provided for removal of wet location baffles.

E1 ADJUSTABLE HCL ASSEMBLY

Honeycomb Louver and Soft Focus Lens attach directly to optic with clip-on lens retainer and adjusts with fixture. Only compatible with no lens baffle. Dry/Damp locations only.

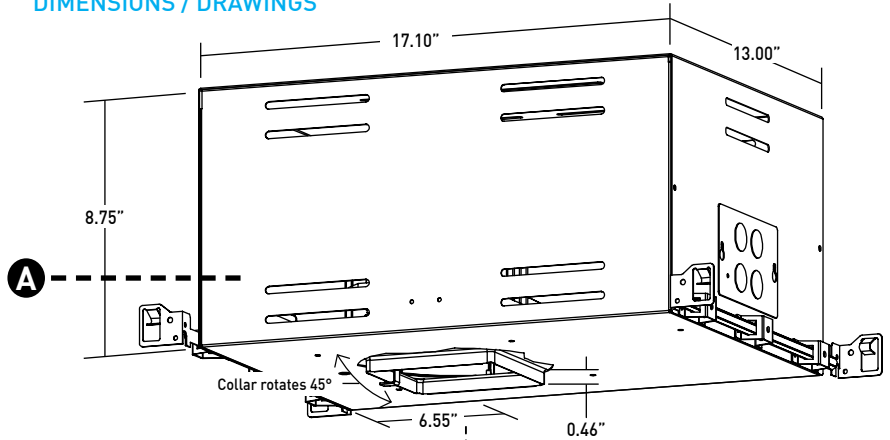
F1 ROUND BAFFLE

Die-cast removable baffle provides easy access to tilting mechanism and features 72° glare cutoff. Minimizes aperture glare and conceals view into housing; includes silicone gasket.

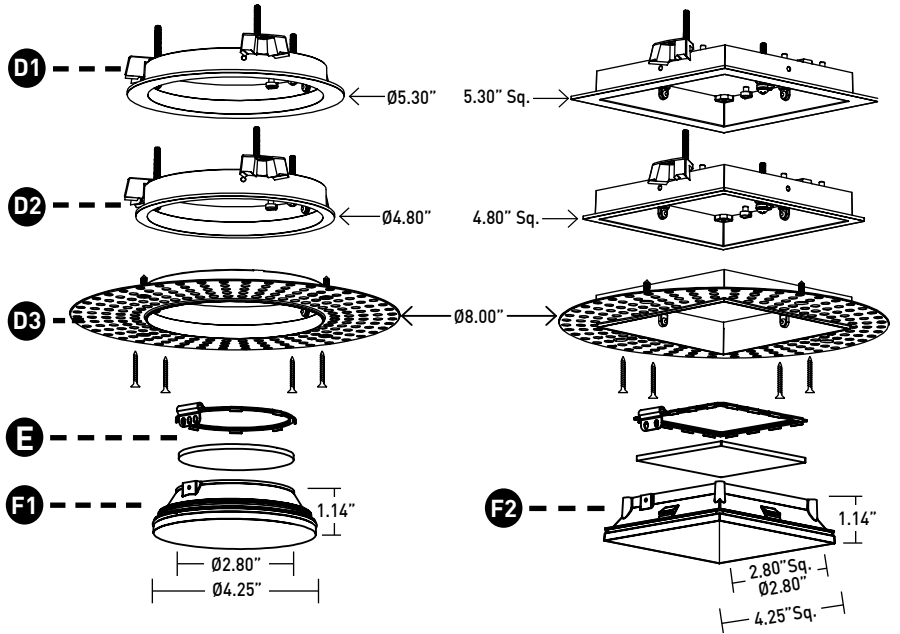
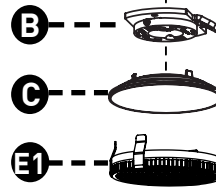
F2 SQUARE / TRANSITIONAL BAFFLE

Die-cast removable baffle provides easy access to tilting mechanism and features 72° glare cutoff. Minimizes aperture glare and conceals view into housing; includes silicone gasket. Transitional baffle transitions from square aperture at ceiling plane to round aperture at light source.

DIMENSIONS / DRAWINGS

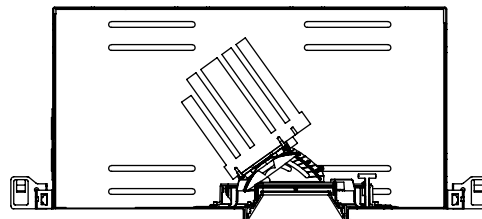


NOTE: Square housing shown, housing will feature round aperture for round fixtures.



A1

SECTION VIEW

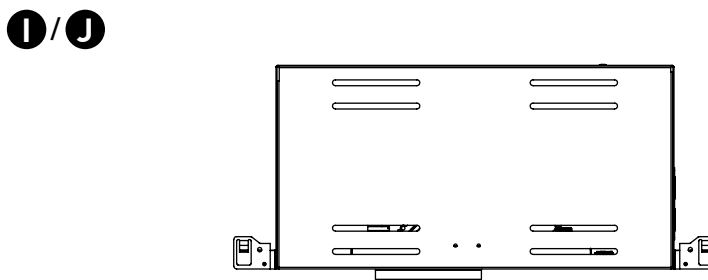
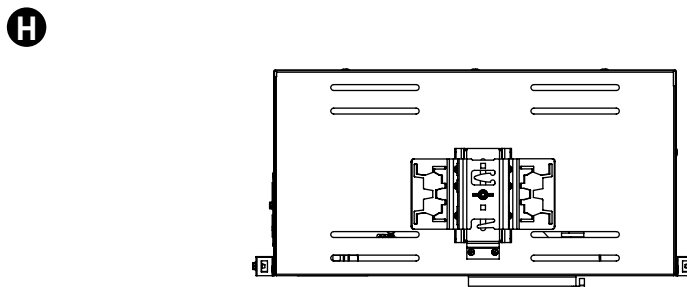
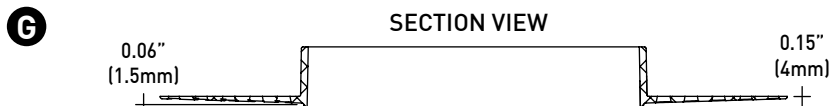


FRAXION4 HIGH FLUX LVS ADJUSTABLE

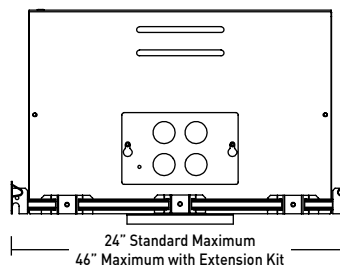
DOWNLIGHT / HOUSING

- G TRIMLESS APPLIQUÉ DETAIL**
Integrated appliqué for plaster floating directly to baffle.
- H BUTTERFLY BRACKET ASSEMBLY**
Adjustable height bracket assembly provided with ceiling thickness "T" and recommended for installations in T-Grid and with furring channel. Requires customer supplied 1/2" conduit, channel or furring channel for mounting. Allows housing to be raised and lowered; ceiling thickness remains 0.5" to 1.0" max.
- I IC HOUSING**
 - For IC ceilings.
 - Chicago Plenum and Airtight listed.
 - Accommodates max 2612 delivered lumens.
 - No setback from polycell spray foam insulation having max R-Value of 60 on all sides and top of housing.
- J NIC HOUSING**
 - Minimum 0.50" setback from combustible and non-combustible materials on all sides and top of housing.
 - Minimum 3.00" setback from insulation material having max R-Value 30 on all sides and top of housing.
 - Minimum 6.00" setback from polycell spray foam insulation having max R-Value 60.

DIMENSIONS / DRAWINGS



IC / NIC HAVE SAME DIMENSIONS AND NIC FEATURES VENTS



HOUSING NOTES

- 80C30B, 80C36B, 90C26B, 90C30B, 97C23B, 97C27B, and 90W19E: Do not install in environments where ambient temperatures exceed 40°C (104°F).
- 80C58B, 90C50B, 97C41B, and 90W31F: Do not install in environments where ambient temperatures exceed 35°C (95°F).
- All splice connections may be serviced from room side.
- Consult factory for spacing requirements for any installations exceeding R-Value 60.
- Hanger bars fitted to short side of housing; extend from 14.0" to 24.0", but may be field cut to accommodate narrow stud spacing. Can be extended up to 46" maximum with FRX-HBE-46 kit.
- Hanger bars and brackets add 4.00" to the overall dimension, but are exclusive of the setback requirements.
- Housings for round trims feature a round aperture housing collar, and for square trims, a square housing collar, accommodating ceiling thicknesses between 0.50" and 1.00".

FRAXION4 HIGH FLUX LVS ADJUSTABLE

TECHNICAL

CONSTRUCTION

Downlight: Painted finishes are granulated powder coat.

Housing: Aluminum and 22 Gauge galvanized steel. Extruded aluminum housing panel to act as heat-sink.

Appliqué: Zinc Alloy

STATIC WHITE LED

2-step MacAdam ellipse LED module available in 80+, 90+ and 97+ CRI configurations in color temperatures of 2200K, 2700K, 3000K, 3500K and 4000K. Average rated lamp life: 50,000 hours. LED assemblies are field-replaceable.

WARM DIM LED

3-step MacAdam ellipse warm dim LED module available in 90+ CRI configuration. 2700K at full brightness, warming to 1800K at full dim. Average rated lamp life of 50,000 hours. LED assemblies are field-replaceable.

LISTING

cTUVus listed to UL2108 standard for Dry / Damp and Wet locations.

Chicago Plenum and Airtight Listed.

U.S. Patent: 10,317,066

WARRANTY

Manufacturer's 1-year warranty guarantees product(s) listed to be free from defects in material and workmanship under normal use and service. 5-year warranty on LED to operate with 70% of the original flux and remain within a range of 3 duv. Warranty period begins from the date of shipment by Seller. [Consult website for full warranty terms and conditions.](#)