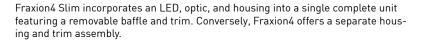
# FRAXION®4 SLIM LVS

# **ADJUSTABLE**



PROJECT NAME:	TYPE:





#### ORDERING INFORMATION - DOWNLIGHT / HOUSING

SHAPE	TRIM	RATING	FLANGE FINISH	BAFFLE FINISH	CRI/WATTAGE PACKAGE	ССТ	OPTIC (UGR)	INSTALL TYPE	CEILING THICKNESS	DRIVER	MEDIA
										LVS	
	FAS Standard F MAS Microflan TAS Trimless  FAS Standard F MAS Microflan TAS Trimless FAT Standard F Transition Baffle  TAT Trimless Transition Baffle  TAT Trimless Transition Baffle	* (Suction cup provided for aim and focus)	AG Satin Silver AU Cashmere Gold BB Burnt Bronze BK Black PR Primer	BK Black PR Primer CF Custom Finish* *(Consult Factory)	80S15A 80+ CRI, 15W, Lumens Dlvd 1681	24 2400K* **990+CRI only) 27 2700K 30 3000K 35 3500K 40 4000K  WL 2700K - 1800K  WD 3000K - 1800K	10	Remote	1 0.50" - 1.00" T TG 0.50" - 1.00"* * (Includes adjustable housing height bracket)	LVS Low Voltage System	STANDARD MEDIA  04 Soft Focus Lens  NL No Lens*  *(Standard with 10° optic. Not available for Wet Location, or Airtight Housings)  ALTERNATE MEDIA  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)

(WH) White Powder Coat











### **PART NUMBER NOTES**

reserves the right to change or withdraw specifications without prior notice.

Housing and trim ship as e.g., F4RMAS1-WHWH-90S15A2-3V1-LVS





### **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.

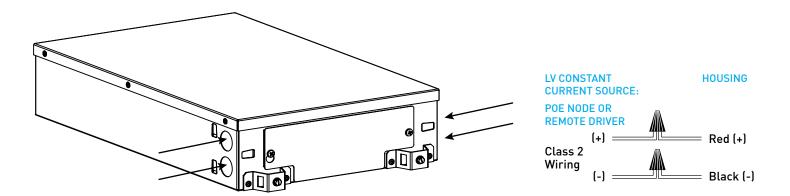
#### NODE COMPATIBILITY

Manufacturer	Model Number
<b>I O O C</b> ® Enabling Smart Buildings ™	NP50-60-C-F-5
molex	180996-5107 180996-5101 180996-5102
PLATFORMATICS	1 Channel Node, POE-LN2-1U-E 2 Channel Node, POE-LN2-2U-E 4 Channel Node, POE-LN2-4U-E

#### **DRIVE CURRENT SPECIFICS**

	80S				905		97S			90W
	11A	15A	21A	11A	15A	21A	11A	15A	21A	15A
Minimum Vf	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
Current mA	250	350	500	250	350	500	250	350	500	350
Wattage W	8.2	11.8	17.4	8.2	11.8	17.4	8.2	11.8	17.4	11.8

#### WIRING DIAGRAM AND HOUSING ENTRY/ EXIT POINTS



#### **ACCESSORIES**

#### **ROUND ALTERNATE MEDIA**

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 MEDIA**

Dry/Damp location only.

Wet location requires alternate baffle.

☐ CGL-F4S Clear Glass Lens\* \*(Not available for Warm Dim)

Frosted Glass Lens ☐ FGL-F4S ☐ 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

housing)

#### REPLACEMENT BAFFLE ASSEMBLY (INCLUDES MEDIA)

ASSEMBLY		SHAPE	TRIM	RATING		FLANGE FINISH				MEDIA
RBA	-				-		-	1	-	
REPLACEMENT BAFFLE ASSEMBLY		F4R Round	FAS Standard Flange MAS Microflange TAS Trimless	1 Dry / Damp 2 Wet* *(Requires provided suction		WH White BK Black PR Primer AU Cashmere Gold AG Satin Silver				Leave blank for standard Soft Focus Lens  CGL Clear Glass Lens* *(Not available for Warm Dim)
		F4S Square	FAS Standard Flange MAS Microflange TAS Trimless FAT Standard Flange Transitional Baffle MAT Microflange Transitional Baffle TAT Trimless Transitional Baffle	cup to service or aim & focus)		BB Burnt Bronze CF Custom Finish* *(Consult Factory)				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.

STATIC WHIT	ΓΕ	WARM DIM				
□ RO-70-15-S 15	ō° optic	□ R0-70-20-W	20° optic			
□ <b>RO-70-20-S</b> 20	O° optic	☐ R0-70-25-W	25° optic			
□ R0-70-25-S 25	5° optic	☐ R0-70-40-W	40° optic			
□ R0-70-40-S 40	O° optic	☐ R0-70-60-W	60° optic			
□ R0-70-60-S 60	O° optic					

#### REPLACEMENT SUCTION TOOL

One included with every six fixtures designated Wet location.

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

#### T-GRID ACCESSORY KIT

Supplied with ceiling thickness "T" and recommended for installations in T-Grid up to 1.5" tall. Available for ceiling thicknesses from 0.5" - 1.0".

☐ DHA-TG-KIT

#### **FURRING CHANNEL ACCESSORY KIT**

Recommended for installations in furring channel. Available for ceiling thicknesses from 0.5" - 1.0".

☐ DHA-FC-KIT

#### HANGER BAR EXTENDER KIT

Extends hanger bars from 24.0" to 46.0" maximum.

□ FRX-HBE-46 Extender, Hanger Bar

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## PERFORMANCE - 3000K

LUMEN	WATTS	10° OPTIC NO LENS		15° C SOFT FOO	OPTIC CUS LENS		PTIC CUS LENS	25° C SOFT FOO	PTIC CUS LENS	40° OPTIC SOFT FOCUS LENS		60° OPTIC SOFT FOCUS LENS			PTIC RIBUTION
PACKAGE	WALLS	DLVD.	LPW	DLVD.	LPW	DLVD.	LPW	DLVD.	LPW	DLVD.	LPW	DLVD.	LPW	DLVD.	LPW
80S11A	11	-	-	1194	109	1255	114	1351	123	1246	113	1122	102	961	87
80S15A	15	1389	126	1609	107	1689	113	1681	112	1612	107	1495	100	1296	86
80S21A	21	-	-	2228	106	2264	108	2271	108	2179	104	2020	96	1762	84
90S11A	11	-	-	1026	93	1078	98	1161	106	1070	97	964	88	826	75
90S15A	15	1197	109	1382	92	1451	97	1444	96	1385	92	1284	86	1113	74
90S21A	21	-	-	1914	91	1945	93	1951	93	1872	89	1735	83	1514	72
97S11A	11	-	-	901	82	946	86	1019	93	939	85	846	77	725	66
97S15A	15	1033	94	1213	81	1274	85	1268	85	1216	81	1127	75	977	65
97S21A	21	-	-	1680	80	1708	81	1713	82	1644	78	1523	73	1329	63
90W15A (WL 27K-18K)	15	-	-	-	-	1055	70	1022	68	1001	67	949	63	851	57
90W15A (WD 30K-18K)	15	-	-	-	-	1056	70	1023	68	1007	67	957	64	858	57

#### OUTPUT MULTIPLIER

ССТ	CCT SCALE
2400K	0.85
2700K	0.97
3000K	1.00
3500K	1.03
4000K	1.08

#### MEDIA LIGHT LOSS FACTOR

MEDIA	LIGHT LOSS FACTOR
NO LENS	1.06
CGL	1.00
SFL	1.00
FGL	0.89
FSFL	0.81
FLSL	0.82
HCL	0.73

#### UNIFIED GLARE RATING

10° OPTIC	15° OPTIC	20° OPTIC	25° OPTIC	40° OPTIC	60° OPTIC	85° OPTIC
NO LENS	SOFT FOCUS LENS	SOFT FOCUS LENS	SOFT FOCUS LENS	SOFT FOCUS LENS	SOFT FOCUS LENS	WIDE DISTRIBUTION
<13	<16	<13	<13	<13	<13	>19

### WARM DIM PERFORMANCE - 25° OPTIC - SOFT FOCUS LENS

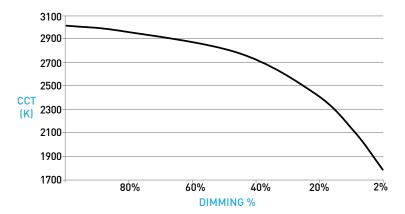
#### WARM DIM TO MIRROR INCANDESCENT DIMMING PROFILE

WL 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)	1022	817	715	511	204	102	20
Power (W)	15	12	10.5	7.5	3	1.5	.3
Efficacy (LPW)	68	68	68	68	68	68	68

## 2800 2600 2400 (K) 2000 1800 1600 80% 60% 40% 20% 2% DIMMING %

#### HALOGEN WARM DIM PROFILE

WD 3000K - 1800K	Full on 100%	Dimmed to 80%	Dimmed to 70%	Dimmed to 50%	Dimmed to 20%	Dimmed to 10%	Dimmed to 2%
CCT (K)	3000	2950	2920	2775	2375	2000	1800
Light Output (Lm)	1023	818	716	511	204	102	20
Power (W)	15	12	10.5	7.5	3	1.5	.3
Efficacy (LPW)	68	68	68	68	68	68	68



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#### **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 (A) for section view).

(B) LED

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

**OPTIC** 

Robust light engine with optimized optic pairing integrates Reflection, Refraction and TIR offering 10°, 15°, 20°, 25°, 40° & 60° beams.

#### 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.

#### 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.

#### **13** 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.

#### MEDIA

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

### 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.

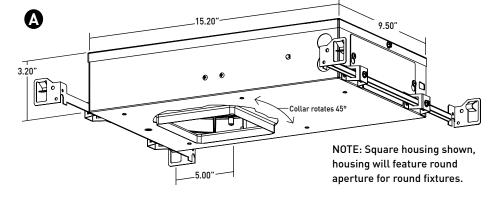
#### ROUND BAFFLE

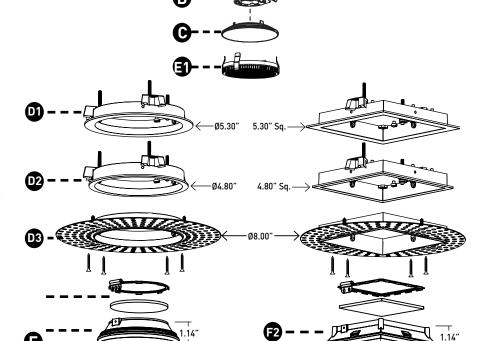
Die-cast removable baffle provides easy access to tilting mechanism. Minimizes aperture glare and conceals view into housing; includes silicone gasket.

### SQUARE / TRANSITIONAL BAFFLE

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

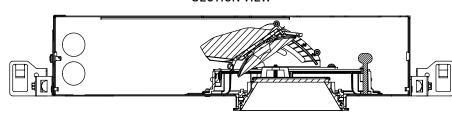
### **DIMENSIONS / DRAWINGS**







#### **SECTION VIEW**



4.25"Sq. -

Ø2.80"

Ø4.25"

### **DOWNLIGHT / HOUSING**

# G TRIMLESS APPLIQUÉ DETAIL Integrated appliqué for plaster floating directly to baffle.

#### TG BRACKET ASSEMBLY

Adjustable height bracket assembly provided with ceiling thickness "T" and recommended for installations in T-Grid and with furring channel. Hanger bars are installed to adjustable bracket. Allows housing to be raised and lowered; ceiling thickness remains 0.5" to 1.0" max.

#### IC HOUSING

- For IC ceilings.
- CCEA and Airtight listed.
- Accommodates max 2271 delivered lumens.
- No setback from polycell spray foam insulation having max R-Value of 60 on all sides and top of housing.

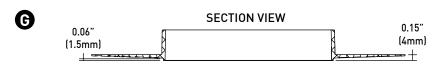
#### NIC HOUSING

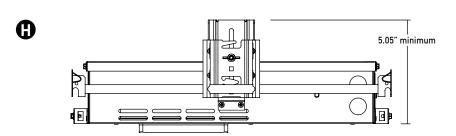
- Minimum 0.50" setback from combustible and non-combustible materials on all sides and top of housing.
- Minimum 3.00" setback from insulation material having max R-Value 30 on all sides and top of housing.
- Minimum 6.00" setback from polycell spray foam insulation having max R-Value 60.

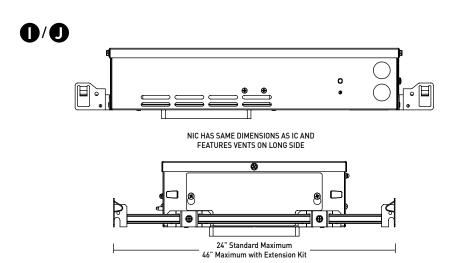
#### **HOUSING NOTES**

- Do not install in environments where ambient temperatures exceed 40°C (104°F) for NIC configurations, or 11W, 13W, and 15W IC configurations.
- Do not install in environments where ambient temperatures exceed 25°C (77°F) 21W and 23W IC configurations.
- 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".

### **DIMENSIONS / DRAWINGS**







### **TECHNICAL**

#### CONSTRUCTION

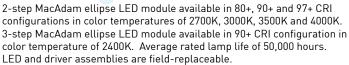
Downlight: Painted finishes are granulated powder coat.

Housing: Aluminum and 22 Gauge galvanized steel. Extruded aluminum

housing panel to act as heat-sink.

Appliqué: Zinc Alloy

#### STATIC WHITE LED



#### WARM DIM LED



3-step MacAdam ellipse warm dim LED module available in 90+ CRI configuration. 3000K or 2700K at full brightness, warming to 1800K at full dim. Average rated lamp life of 50,000 hours. LED assemblies are field-replaceable.

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

U.S. Patent: 10,317,066

Fixture - 8.2 lbs max

#### **DECLARE**

LBC Red List Approved.

#### LIMITED WARRANTY

Manufacturer's Limited 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.

- 1. 06/30/2022: UPDATED HOUSING APERTURE LOCATION.
- 2. 10/17/2022: REMOVED 90W13A 3200K-1800K WARM DIM AND ADDED 90W12A 3000K-1800K WARM DIM.
- 3. 04/26/2023: ADDED DECLARE LBC RED LIST APPROVED.
- 4. 08/08/2023: UPDATED WITH NEW LED AND OPTIC SYSTEM.
- 5. 02/08/2024: ADDED 2400K.



