FRAXION®4 LVS

WALLWASH

PROJECT NAME: TYPE:





Versatile, high-performance, and retrofittable downlights, in a precise, 4-inch profile, the most diminutive in the industry.

ORDERING INFORMATION - DOWNLIGHT / HOUSING

Quick Ship Product. All rough in components ship within 10 days up to quantities of 100.

SHAPE	TRIM	RATING	FLANGE FINISH	BAFFLE FINISH	LUMEN PACKAGE	CCT	OPTIC (UGR)	INSTALL TYPE	CEILING THICKNESS	DRIVER
							ww			LVS
	FWW Standard Flange MWW Microflange TWW Trimless FWW Standard Flange MWW Microflange TWW Trimless	Dry/Damp 2 IP64 Wet* * (Suction cup provided for Aim & Focus)	AU Cashmere Gold BB Burnt Bronze BK Black	WH White AG Satin Silver AU Cashmere Gold BB Burnt Bronze BK Black PR Primer CF Custom Finish* *(Consult Factory)	STATIC WHITE 80S11A 80+ CRI, 11W, Lumens Dlvd 1023 80S15A 80+ CRI, 21W, Lumens Dlvd 1389 80S21A 80+ CRI, 21W, Lumens Dlvd 1857 80S30B 80+ CRI, 30W, Lumens Dlvd 2514* *Not available for It housing applications] 90S11A 90+ CRI, 11W, Lumens Dlvd 879 90S15A 90+ CRI, 15W, Lumens Dlvd 1193 90S21A 90+ CRI, 21W, Lumens Dlvd 1595 90S30B 90+ CRI, 21W, Lumens Dlvd 2160* *Not available for It housing applications] 97S11A 97+ CRI, 11W, Lumens Dlvd 772 97S15A 97+ CRI, 15W, Lumens Dlvd 1047 97S21A 97+ CRI, 21W, Lumens Dlvd 1400 97S30B 97+ CRI, 30W, Lumens Dlvd 1896* *Not available for It housing applications]	24 2400K* *190+ CRI only, Not available for 30W packages 27 2700K 30 3000K 35 3500K 40 4000K	[>19]	REMOTE IR IC, ① Remote NR NIC, ① Remote AR IC, ④ Arright, *(CCEA & Arright compliant housing) REMODEL RR Remote, Remodel	*(Housing)	LVS Low Voltage System
					WARM DIM 90W15A 90+ CRI, 15W Incandescent Profile: 2700K - 1800K Lumens Dlvd 848 Standard Profile: 3000K - 1800K Lumens Dlvd 860 SEE PAGE 4 FOR DETAILED WARM DIM PROFILE COMPARISON. LUMENS DELIVERED REFLECT 3000K.	WL 2700K - 1800K WD 3000K - 1800K		IC HOUSING: 6.5" TALL NIC HOUSING: 4.5" TALL		

(WH)	(AG)	(AU)	(BB)	(BK)
White	Satin Silver	Cashmere Gold	Burnt Bronze	Black
Powder Coat	Powder Coat	Powder Coat	Powder Coat	Powder Coat

PART NUMBER NOTES

- Trim ships as e.g., F4SMWW1-WHWH-90C10A2-5S1-LVS
- Housing ships as e.g., ICT-F4R-01-LVS

APPLICATION NOTES

- 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
- Housing and Fixture feature 18 Gauge wiring.
- Wiring connections are made in the splicing compartment or on the fixture using customer supplied connectors, ex. wire nuts, push-in connectors, or terminal blocks.
- Confirm node compatibility with factory if it is not listed. Customers are responsible for ensuring POE node drive current is set to correct values shown below.
- Customers must ensure voltage range of the proposed POE node encompasses the fixtures complete Vf range, both maximum and minimum. If assistance is required contact LLC rep or factory.

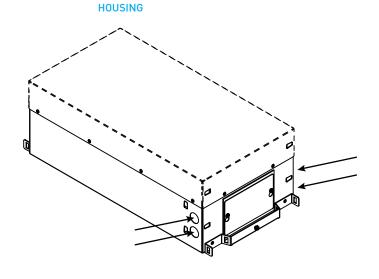
NODE COMPATIBILITY

Manufacturer	Model Number
I © © € 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

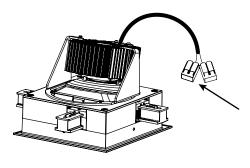
DRIVE CURRENT SPECIFICS

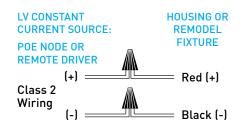
		80S				90S			97S				90W
	11A	11A 15A 21A 30B				15A	21A	30B	11A	15A	21A	30B	15A
Minimum Vf	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5
Maximum Vf	39	39	39	39	39	39	39	39	39	39	39	39	39
Current mA	250	350	500	700	250	350	500	700	250	350	500	700	350
Wattage W	8.2	11.8	17.4	25.4	8.2	11.8	17.4	25.4	8.2	11.8	17.4	25.4	11.8

WIRING DIAGRAM AND HOUSING/REMODEL ENTRY/ EXIT POINTS









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

pg. 2

ACCESSORIES

REPLACEMENT BAFFLE ASSEMBLY (INCLUDES MEDIA)

ASSEMBLY		SHAPE	TRIM	RATING		FLANGE FINISH			
RBA	_				-		-	1	
REPLACEMENT BAFFLE ASSEMBLY		F4R Round	FWW Standard Flange MWW Microflange TWW Trimless	1 Dry / Damp 2 Wet		WH White BK Black PR Primer AU Cashmere Gold AG Satin Silver			
		F4S Square	FWW Standard Flange MWW Microflange TWW Trimless			BB Burnt Bronze CF Custom Finish* *(Consult Factory)			

REPLACEMENT OPTICS

Interchangeable optics accessible through fixture aperture.

STATIC WHITE

WARM DIM □ R0-70-WW-W2 Wallwash optic

T-GRID ACCESSORY KIT

□ **R0-70-WW-S** Wallwash optic

Supplied with ceiling thickness "T" and recommended for installations in T-Grid up to 1.5" tall. Available for ceiling thicknesses from 0.125" - 1.25".

☐ DHA-TG-KIT

FURRING CHANNEL ACCESSORY KIT

Recommended for installations in furring channel. Available for ceiling thicknesses from 0.125" - 1.25".

☐ DHA-FC-KIT

HANGER BAR EXTENDER KIT

Extends hanger bars from 24.0" to 46.0" maximum.

□ FRX-HBE-46 Extender, Hanger Bar

WALLWASH DESIGN GUIDE



30" SETBACK / 30" ON CENTER SPACING

- AVERAGE FC: 23.81
- MIN / MAX: 4.23
- 10FT CEILING SHOWN / 8-12FT IDEAL
- 9 FIXTURES / 25FT WALL SHOWN

ROUND



RECOMMENDED 36" SETBACK / 36" ON CENTER SPACING

- AVERAGE FC: 18.27
- MIN / MAX: 4.43
- 10FT CEILING SHOWN / 8-12FT IDEAL
- 9 FIXTURES / 30FT WALL SHOWN



42" SETBACK / 42" SPACING ON CENTER

- AVERAGE FC: 14.44
- MIN / MAX: 5.51
- 10FT CEILING SHOWN / 8-12FT IDEAL
- 9 FIXTURES / 35FT WALL SHOWN

SQUARE



30" SETBACK / 30" ON CENTER SPACING

- AVERAGE FC: 25.23
- MIN / MAX: 4.12
- 10FT CEILING SHOWN / 8-12FT IDEAL
- 9 FIXTURES / 25FT WALL SHOWN



RECOMMENDED
36" SETBACK / 36" ON CENTER SPACING

- AVERAGE FC: 19.43
- MIN / MAX: 4.19
- 10FT CEILING SHOWN / 8-12FT IDEAL
- 9 FIXTURES / 30FT WALL SHOWN



42" SETBACK / 42" SPACING ON CENTER

- AVERAGE FC: 15.32
- MIN / MAX: 5.18
- 10FT CEILING SHOWN / 8-12FT IDEAL
- 9 FIXTURES / 35FT WALL SHOWN

ADDITIONAL SPACINGS AND SETBACKS

	ROUND										
ON CENTER SPACING	SETBACK										
	30"	36"	42"								
30"	SHOWN	AVERAGE FC: 21.62	AVERAGE FC: 19.42								
	ABOVE	MIN / MAX: 4.38	MIN / MAX: 4.72								
36"	AVERAGE FC: 16.38	SHOWN	AVERAGE FC: 16.53								
	MIN / MAX: 4.53	ABOVE	MIN / MAX: 4.73								
42"	AVERAGE FC: 17.28	AVERAGE FC: 15.79	SHOWN								
	MIN / MAX: 5.40	MIN / MAX: 5.41	ABOVE								

	S	QUARE						
ON CENTER	SETBACK							
SPACING	30"	36"	42"					
30"	SHOWN ABOVE	AVERAGE FC: 23.05 MIN / MAX: 4.17	AVERAGE FC: 20.74 MIN / MAX: 4.15					
36"	AVERAGE FC: 17.03 MIN / MAX: 4.26	SHOWN ABOVE	AVERAGE FC: 17.62 MIN / MAX: 4.51					
42"	AVERAGE FC: 18.34 MIN / MAX: 5.00	AVERAGE FC: 16.79 MIN / MAX: 5.02	SHOWN ABOVE					

*ALL DATA REFLECTS 90C19A LUMEN PACKAGE

PERFORMANCE - 3000K

LUMEN		WW OPTIC				
PACKAGE	WATTS	DLVD.	LPW			
80S11A	11	1023	93			
80S15A	15	1389	93			
80S21A	21	1857	88			
80S30B	30	2514	84			
90S11A	11	879	80			
90S15A	15	1193	80			
90S21A	21	1595	76			
90S30B	30	2160	72			
97S11A	11	879	80			
97S15A	15	1193	80			
97S21A	21	1595	76			
97S30B	30	2160	72			
90W15A (WL 27K-18K)	15	860	57			
90W15A (WL 30K-18K)	15	848	57			

OUTPUT MULTIPLIER

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

UNIFIED GLARE RATING

WALLWASH OPTIC	
>19	

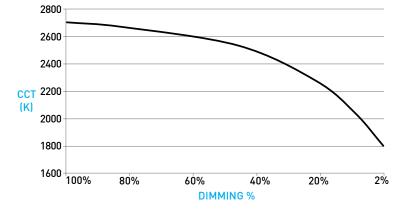
WARM DIM PERFORMANCE

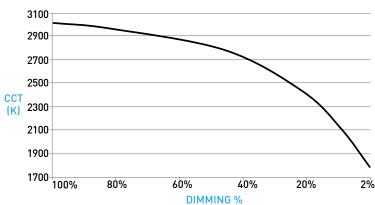
WARM DIM TO MIRROR INCANDESCENT DIMMING PROFILE

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)	860	688	602	430	172	86	17
Power (W)	15	12	10.5	7.5	3	1.5	.3
Efficacy (LPW)	57	57	57	57	57	57	57

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)	848	678	593	424	169	84	16
Power (W)	15	12	10.5	7.5	3	1.5	.3
Efficacy (LPW)	57	57	57	57	57	57	57

HALOGEN WARM DIM PROFILE





DOWNLIGHT

A BAFFLE

ROUND / SQUARE

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

TRANSITIONAL BAFFLE

Die-cast removable 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.

B RETENTION

Integrated metal arm clamps located within fixture body allow discreet flange design, while accommodating varying ceiling thicknesses from 0.125" to 1.25". Snap-on spacer clips (3X) supplied for ceiling thickness below 0.50" only.

61 STANDARD FLANGE PROFILE

Provides 0.86" total contractor (goof) allowance with 0.50" flange. Thickness measures 0.06". Wet location features integral silicone gasket.

MICROFLANGE PROFILE

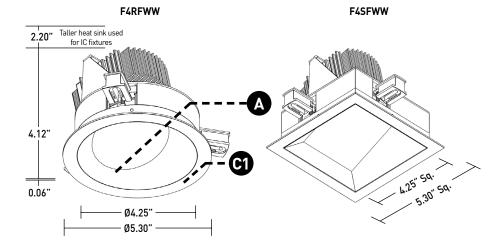
Provides industry standard 0.42" total contractor (goof) allowance with 0.28" flange. Thickness measures 0.06". Wet location features integral silicone gasket.

TRIMLESS PROFILE

Installs totally flush with the ceiling with no visible trim. Features integrated appliqué for plaster floating directly to the baffle, thickness measures 0.15" including 0.06" plaster stop. Not recommended for stucco applications.

DIMENSIONS / DRAWINGS

F4RMWW



2.20" Taller heat sink used for IC fixtures 4.12" 0.06" 0.06" 0.4.25" 0.4.80" 0.4.80"

4.20"

Taller heat sink used for IC fixtures

4.20"

4.25" Sq. —

Ø8.00"

F4RTWW

F4SMWW

F4SWW

DOWNLIGHT / HOUSING

OPTIC

Proprietary wallwash optic design integrates Reflection, Refraction and TIR principles.

EFFECTS DEVICES

Asymmetrical spread lens, included and sealed in place, combined with angled optic and wide aperture enhance uniformity.

HOUSING / MOUNTING

F ICT (IC) HOUSING - TALL

- For IC ceilings.
- CCEA and Airtight listed.
- Accommodates max 2259 delivered lumens.
- No setback from polycell spray foam insulation having max R-Value of 60 on all sides and top of housing.

NCM (NIC) HOUSING - MEDIUM

- 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 COLLAR

- Requires 4.625" cutout.
- Fixed round aperture or square aperture with 45 degree rotation that locks from below providing easy alignment of square aperture housings.
- Accommodates varying ceiling thicknesses.

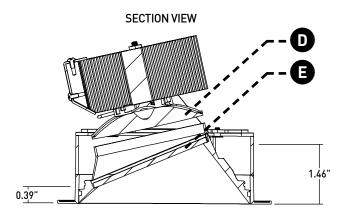
ADJUSTABLE HANGER BAR HEIGHT ACCESSORY Provided with ceiling thickness "T" and recommended for installations in T-Grid and with furring channel.

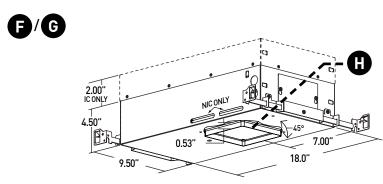
for installations in T-Grid and with furring channel.
Hanger bars are installed to adjustable bracket. Allows housing to be raised and lowered; ceiling thickness remains 0.5" to 1.0" max.

HOUSING / MOUNTING NOTES

- Do not install in environments where ambient temperatures exceed 40°C (104°F).
- Power supply compartment and 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, and long side of Low Flux housings; 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.
- Driver assembly ships with trim, not housing.
 Housing and trim feature mating quick-connect plugs for ease of installation.

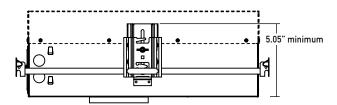
DIMENSIONS / DRAWINGS





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



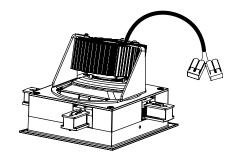


REMODEL

REMODEL

- Provided with RR install type.
- Requires 4.42" cutout.
- Installs without conventional housing using integral mounting clamps.
- Requires plenum rated Class 2 cable between fixture and remote driver. Cable supplied by others.
- Minimum 0.75" clearance from top of trim.
- Minimum setback from combustible and noncombustible materials of 6.63" radius from fixture
- Minimum additional 3.00" setback from insulation material with max R-Value 30 from any surface of downlight fixture assembly.
- Minimum additional 6.00" setback from polycell spray foam insulation with max R-Value 60 from any surface of downlight fixture assembly.
- Do not install in environments where ambient temperatures exceed 40°C (104°F).
- All splice connections serviceable from room side.
- Consult factory for spacing requirements for any installations exceeding R-Value 60.





TECHNICAL

CONSTRUCTION

Downlight: Aluminum and steel. Extruded aluminum heat-sink. Painted finishes are granulated powder coat.

Housing: 22 Gauge galvanized steel.

Appliqué: Zinc Alloy

STATIC WHITE LED

2-step MacAdam ellipse LED module available in 80+, 90+ and 97+ CRI configurations in color temperatures of 2700K, 3000K, 3500K and 4000K. 3-step MacAdam ellipse LED module available in 90+ CRI configuration in color temperature of 2400K. Average rated lamp life of 50,000 hours. LED and driver assemblies are field-replaceable.

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 and driver assemblies are field-replaceable.

Recommended fixture spacing is 36" (914mm) on center with 36" (914mm) setback from wall plane.

LISTING

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

U.S. Patent: 10,344,958

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.

CHANGE LOG

- 1.04/07/2022: REMOVED REMOTE REMODEL ACCESSORY KIT PSF4-RMT-AK.
- 2.10/17/2022: REMOVED 90W12A 3000K-1800K WARM DIM AND ADDED 90W12A 3000K-1800K WARM DIM.
- 3.08/08/2023: ADDED NEW LED AND OPTIC SYSTEM.
- 4.02/08/2024: ADDED 2400K.