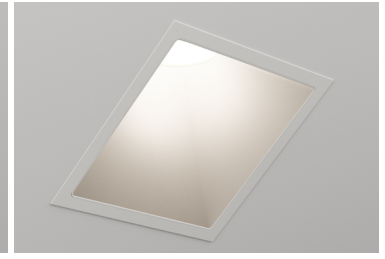


FRAXION® SLOPED

FIXED DOWNLIGHT

One of our most versatile and flexible fixtures is now available for sloped ceilings, allowing designers to use a single style of fixture across a wider array of spaces.

PROJECT NAME:	TYPE:
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ORDERING INFORMATION - DOWNLIGHT / HOUSING



JA8-2019 INDICATED BY SHADING

SLOPE RANGE	SHAPE	TRIM	RATING	FLANGE FINISH	BAFFLE FINISH	LUMEN PACKAGE	CCT	OPTIC	INSTALL TYPE	CEILING THICKNESS	DRIVER	EFFECTS DEVICE
FS1 15° - 30° (3/12 - 7/12) Slope 1	R Round	M Microflange	1 Dry/Damp	WH White	WH White	STATIC WHITE 80C12A 80+ CRI, Delivered Lumens - 876 80C16A 80+ CRI, Delivered Lumens - 1196 80C23A 80+ CRI, Delivered Lumens - 1650 90C10A 90+ CRI, Delivered Lumens - 750 90C14A 90+ CRI, Delivered Lumens - 1026 90C19A 90+ CRI, Delivered Lumens - 1414 97C10A 97+ CRI, Delivered Lumens - 672 97C12A 97+ CRI, Delivered Lumens - 917 97C17A 97+ CRI, Delivered Lumens - 1356	22 2200K*	15 15°	INTEGRAL DRIVER X IC / Non-IC C IC Airtight* *(Chicago Plenum, Airtight & Title 24 compliant housing)	1 0.5" - 1.375" 2 1.375" - 2.0" 3 2.0" - 2.25"	PH ELV / Triac, 2%, 120V* *(Not available for 80C12A, 90C10A, and 97C10A) L2 Lutron, Hi-Lume 1% 2-Wire, 120V SG 0-10V Analog, LOG 1%, 120 or 277V SN 0-10V Analog, LOG 1%, 120 or 277V LP Lutron, Hi-Lume Premier Ecosystem 0.1% Fade to Black, 120 or 277V EG eldoLED, SOLOdrive 0.1% 0-10V, LOG, 120 - 277V EN eldoLED, SOLOdrive 0.1% 0-10V, LIN, 120 - 277V ED eldoLED, SOLOdrive 0.1% DALI, LOG, 120 - 277V	STANDARD EFFECTS DEVICE 04 Soft Focus Lens 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 Lower and Soft Focus Lens*
	S Square	T Trimless	2 Wet	BK Black BK Black PR Primer PR Primer AU Cashmere Gold AU Cashmere Gold AG Satin Silver AG Satin Silver BB Burnt Bronze BB Burnt Bronze 00 Trimless* *(Required for trimless) CF Custom Finish* *(Consult Factory)	27 2700K 30 3000K 35 3500K 40 4000K		40 40° 60 60° 85 85°* *(Requires -14 WDL effects device)	REMOTE DRIVER V IC / Non-IC Remote D IC Airtight, Remote* *(Chicago Plenum, Airtight & Title 24 compliant housing)				
FS2 30° - 45° (7/12 - 12/12) Slope 2		W Trimless Wood* *(Not available for Wet location)										
						WARM DIM 90W11A 90+ CRI, Delivered Lumens - 854 Incandescent Profile 90W13A 90+ CRI, Delivered Lumens - 901 Halogen Profile *SEE PAGE 3 FOR DETAILED WARM DIM PROFILE COMPARISON.						
						TUNABLE WHITE 90T10A 90+ CRI, Delivered Lumens - 805 TW 5000K - 2700K 40 40° 60 60° 85 85°* *(Requires -14 WDL effects device)						
						*ALL DELIVERED LUMEN OUTPUTS AND T24 COMPLIANCE REFLECT 3000K, 40° OPTIC, SOFT FOCUS LENS, AND 5/12 CEILING PITCH. REFERENCE PAGE 3 FOR ADDITIONAL T24 COMPLIANT CONFIGURATIONS.						



PART NUMBER NOTES

- Housing and trim ship as e.g., FS1RM1-WHBK-90C14A2-3X1-PH*04
- Remote driver ships with fixture as e.g., PSF4-RMT-90C-14A-1L23

FRAXION SLOPED FIXED DOWNLIGHT

ACCESSORIES

ALTERNATE EFFECTS DEVICES

Dry / Damp location only.

- CGL-F3R** Clear Glass Lens*
*(Not available for Warm Dim)
- FGL-F3R** Frosted Glass Lens
- SFL-F3R** Soft Focus Lens
- FSFL-F3R** Frosted Soft Focus Lens
- WDL-F3R** Wide Distribution Lens*
*(Only available for 85° beam spread)
- FLSL-F3R** Frosted Linear Spread Lens

ADJUSTABLE HCL ASSEMBLY

Dry / Damp location only.

- OLR-F3RS1-SFL-HCL** Adjustable Honeycomb Louver and Soft Focus Lens*
*(Not available for Wet location or Airtight housings)

REPLACEMENT OPTICS

Interchangeable optics accessible through fixture aperture.

- RO-50-15-2** 15° optic
- RO-50-22-2** 22° optic
- RO-50-40-2** 40° optic
- RO-50-60-2** 60° optic

TUNABLE WHITE REPLACEMENT OPTICS

Interchangeable optics accessible through fixture aperture.

- RO-50-22-3** 22° optic
- RO-50-40-3** 40° optic
- RO-50-60-3** 60° optic

HANGER BAR EXTENDER KIT

Extends hanger bars from 24.0" to 46.0" maximum.

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

EMERGENCY LIGHTING - REMOTE MOUNT ONLY

During disruption of main power, emergency battery inverter provides temporary 120V or 277V to fixture.

- EMB-S-20/25-120/277-LEDX** 20/25 watt max capacity, 120 or 277 VAC 60Hz, Non-Dimmable
- EMB-S-100-120-LEDX** 100 watt max capacity, 120 VAC 60Hz, Dimmable
- EMB-S-100-277-LEDX** 100 watt max capacity, 277 VAC 60Hz, Dimmable
- EMB-S-250-120/277-LEDX** 250 watt max capacity, 120 or 277 VAC 60Hz, Dimmable

FRAXION SLOPED FIXED DOWNLIGHT

PERFORMANCE - 3000K

LUMEN PACKAGE	WATTAGE	15° OPTIC SOFT FOCUS LENS		22° 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
80C12A	10	899	90	744	74	876	88	866	87	675	67
80C16A	14	1228	86	1016	71	1196	84	1182	83	922	66
80C23A	21	1694	81	1402	67	1650	79	1631	78	1272	61
90C10A	10	770	77	638	64	750	75	742	74	579	58
90C14A	14	1053	74	871	61	1026	72	1014	71	791	56
90C19A	21	1452	69	1201	57	1414	67	1398	67	1090	52
97C10A	10	690	69	571	57	672	67	664	66	518	52
97C12A	14	942	66	779	55	917	64	907	64	707	50
97C17A	21	1392	66	1152	55	1356	65	1340	64	1045	50
90W11A	14	650	46	511	36	854	61	831	59	648	46
90W13A	14	685	48	539	38	901	63	877	62	684	49
90T10B	14	-	-	684	48	805	57	796	56	621	44

OUTPUT MULTIPLIER	
CCT	CCT SCALE
2200K (Consult factory for JA8 details)	0.800
2700K	0.957
3000K	1.000
3500K	1.019
4000K	1.030

LIGHT LOSS FACTOR MULTIPLIER	
CGI	CGI SCALE
CGL	1.05
SFL	1.00
FGL	0.90
FSFL	0.87
FLSL	0.83
WDL	0.78

*Performance reflects 5/12 ceiling pitch and 0.5" ceiling thickness. Consult factory for additional performance information.

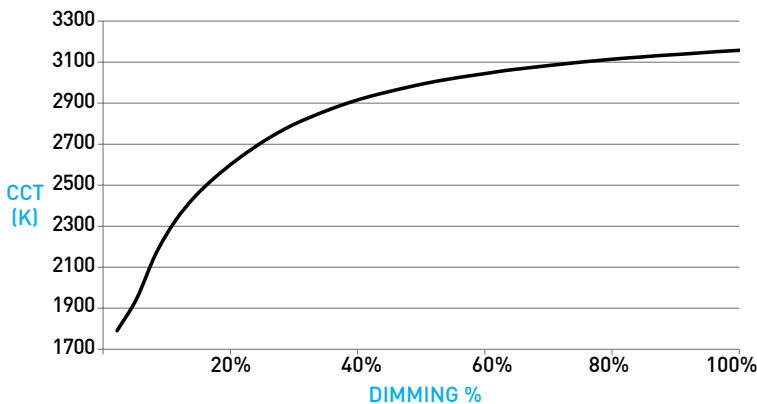


JA8-2019 INDICATED BY SHADING

WARM DIM PERFORMANCE - 40° OPTIC - SOFT FOCUS LENS

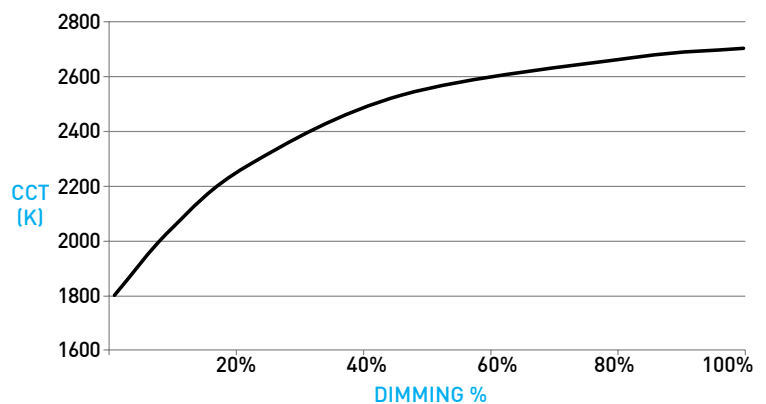
WARM DIM TO MIRROR HALOGEN DIMMING PROFILE

90W13A 3200K - 1800K	Full on 100%	Dimmed to 80%	Dimmed to 70%	Dimmed to 50%	Dimmed to 20%	Dimmed to 10%	Dimmed to 2%
CCT (K)	3200	3150	3100	3000	2700	2200	1800
Light Output (Lm)	901	721	631	451	180	90	18
Power (W)	14	11	10	7	3	1.5	0.3
Efficacy (LPW)	63	63	63	63	63	63	63



WARM DIM TO MIRROR INCANDESCENT DIMMING PROFILE

90W11A 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)	854	683	598	427	171	85	17
Power (W)	14	11	10	7	3	1.5	0.3
Efficacy (LPW)	61	61	61	61	61	61	61



FRAXION SLOPED FIXED DOWNLIGHT

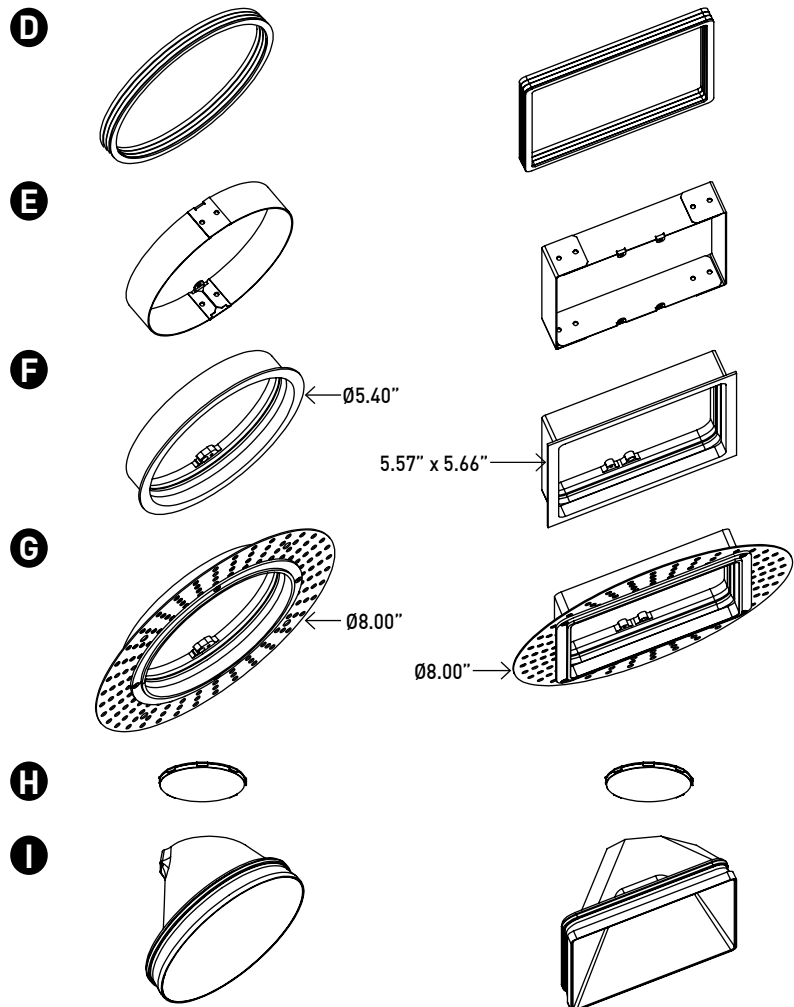
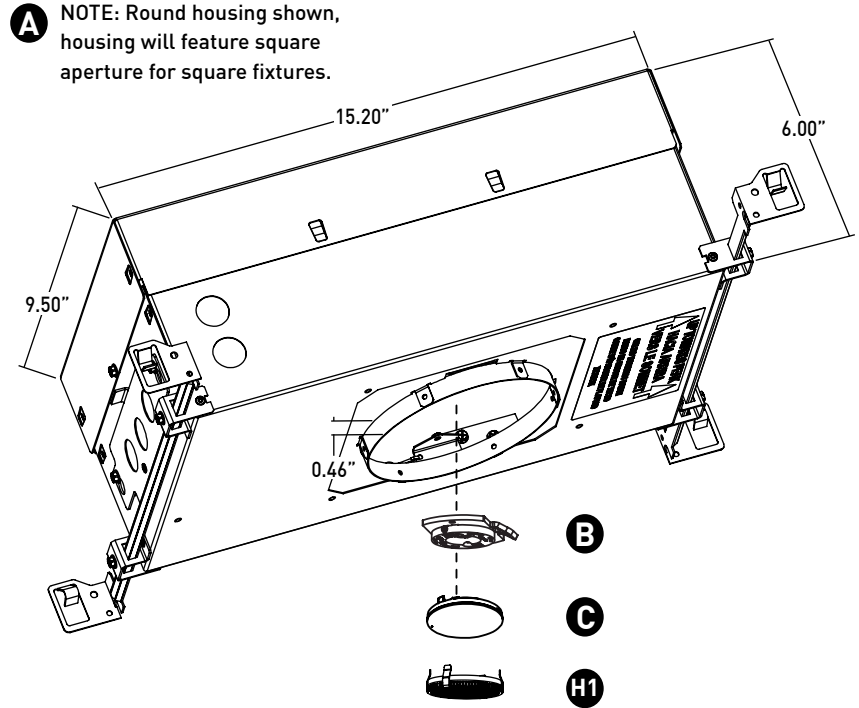
DOWNLIGHT / HOUSING

- A PITCH ADJUSTMENT**
Tilting mechanism is integral to the housing, provides lockable tilt for 3/12 (15°) - 12/12 (45°) slope ranges. Ships in 12/12 (45°) position (see **J** tilt guide).
- B LED**
Integral LED module design enables field service / replacement through housing aperture.
- C OPTIC**
Proprietary optic integrates Reflection, Refraction and TIR offering 15°, 22°, 40° & 60° beams.
- D TRIMLESS WOOD SPACERS**
Provided for Trimless Wood installations; includes (1) 1/16" spacer and (5) 1/8" spacers.
- E TRIM EXTENSIONS**
Provided for -2 and -3 ceiling thickness; accommodate 2.25" max ceiling thickness.
- F MICROFLANGE PROFILE**
Features 0.30" flange. Thickness measures 0.06". Installed after ceiling is complete. Round requires 5.4" diameter cutout, and square requires 5.57" x 5.66" cutout. Wet location features integral silicone gasket.
- G TRIMLESS DRYWALL PROFILE**
Installs totally flush with the ceiling with no visible trim. Appliqué has 0.07" plaster stop. Not recommended for stucco applications.
- H EFFECTS DEVICES / LENS RETAINER**
Fixture is limited to 1 effects device, Soft Focus Lens standard. Lens retainer allows effects devices to be changed in Dry /Damp and Wet locations.
- H1 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. Specified as -28 Effects Device.
- I ROUND BAFFLE**
Removable baffle provides easy access to tilting mechanism. Minimizes aperture glare and conceals view into housing; includes gasket. Available in two slope ranges 3/12 - 7/12 (15° - 30°) **K** and 7/12 - 12/12 (30° - 45°) **M**.

SQUARE TRANSITIONAL BAFFLE

Removable baffle provides easy access to tilting mechanism. Transitions from square aperture at ceiling plane to round aperture at light source. Minimizes aperture glare and conceals view into housing; includes gasket. Available in two slope ranges 3/12 - 7/12 (15° - 30°) **L** and 7/12 - 12/12 (30° - 45°) **N**.

DIMENSIONS / DRAWINGS



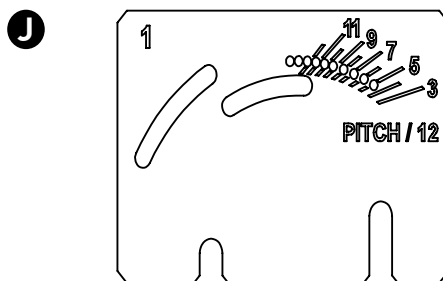
FRAXION SLOPED FIXED DOWNLIGHT

TILT / BAFFLE

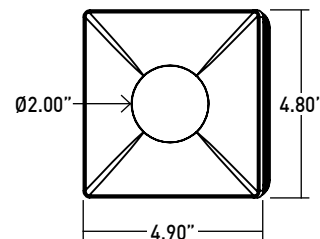
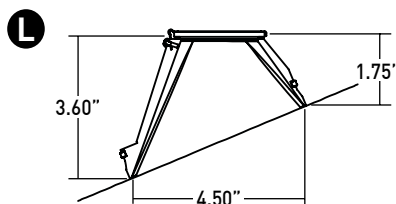
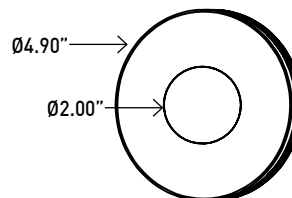
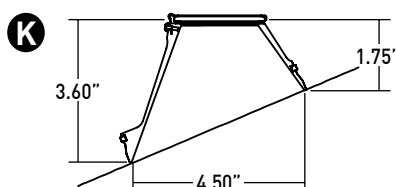
TILT GUIDE

Displays tilt indicators to adjust trim to ceiling pitch.

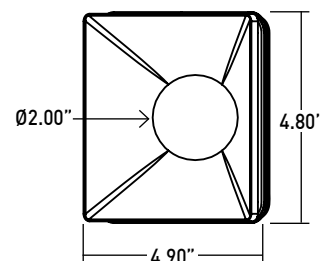
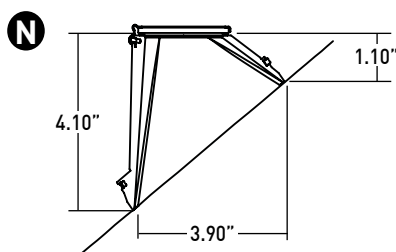
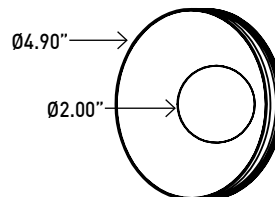
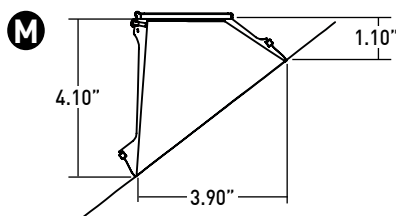
DIMENSIONS / DRAWINGS



SLOPE 1 BAFFLE: 15° - 30° (3/12 - 7/12) SLOPE RANGES



SLOPE 2 BAFFLE: 30° - 45° (7/12 - 12/12) SLOPE RANGES



FRAZION SLOPED FIXED DOWNLIGHT

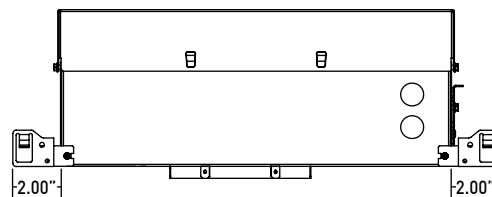
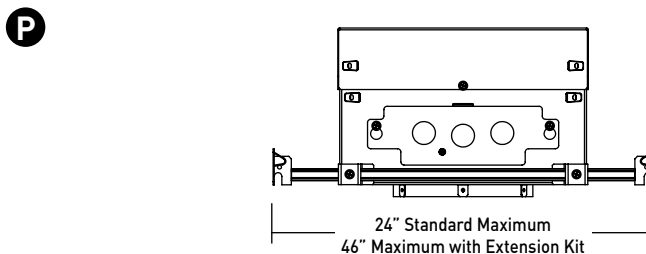
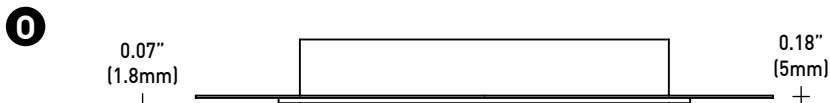
DOWNLIGHT / HOUSING

- Q** **TRIMLESS APPLIQUÉ DETAIL**
Integrated appliqué for plaster floating directly to baffle.
- P** **IC / NON-IC HOUSING**
 - For IC or Non-IC ceilings.
 - Chicago Plenum, Airtight and Title 24 [JA8] listed.
 - Accommodates max 1650 delivered lumens.
 - No setback from polycell spray foam insulation having max R-Value of 60 on all sides and top of housing.
- Q** **REMOTE POWER SUPPLY**
Provided with install Types "V" and "D". Remote power supply provides additional driver options. Consult installation guide for maximum allowable secondary run lengths between PSF4-RMT and fixture. Must be installed in an accessible location.

HOUSING NOTES

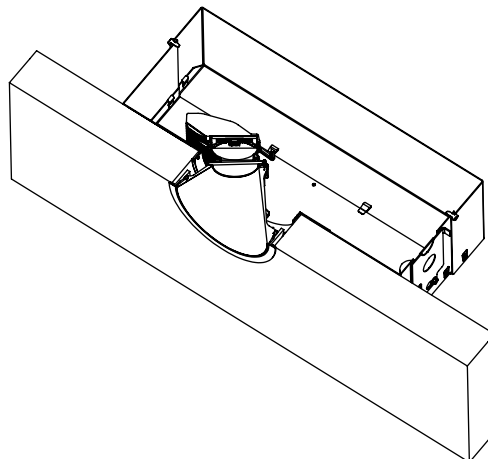
- Do not install in environments where ambient temperatures exceed 40°C (104°F).
- Power supply compartment and all splice connections may be serviced from room side.
- Consult factory for spacing requirements for any installations exceeding R-Value 60.
- Hanger bars fitted to short side of housing; 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 2.25".

DIMENSIONS / DRAWINGS

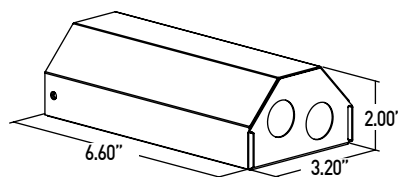


CEILING THICKNESS RANGES

- 1 0.5" - 1.375"
- 2 1.375" - 2.0"
- 3 2.0" - 2.25"



Q



FRAXION SLOPED FIXED DOWNLIGHT

TECHNICAL

CONSTRUCTION

Downlight: Painted finishes are granulated powder coat.

Housing: Aluminum and 22 Gauge galvanized steel.

Remote Power Supply: 22 Gauge galvanized steel.

Appliqué: Aluminum and 22 Gauge galvanized steel.

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 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. 3200K 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.

TUNABLE WHITE LED

5-step MacAdam ellipse tunable white LED module available in 90+ CRI configuration. Features tuning range of 2700K to 5000K. Average rated lamp life of 50,000 hours. LED and driver assemblies are field-replaceable.

POWER SUPPLY PERFORMANCE AND DIMMING INFORMATION

Power Supply	ELV			ECO		0-10V					DALI	
	PH	L2	LP	SG	SN	EG	EN	DG	DN	ED1	DD1	
Minimum °C	-20 °C	0 °C	0 °C	-10 °C	-10 °C	-20 °C	-20 °C	-20 °C	-20 °C	-20 °C	-20 °C	
Maximum °C	40 °C	40 °C	40 °C	40 °C	40 °C	40 °C	40 °C	40 °C	40 °C	40 °C	40 °C	
Dimming %	2.0%	1.0%	0.1%	1.0%	1.0%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	

Note: For PH, L2, LP, EG and EN drivers consult chart on page 8 to confirm appropriate dimming curve for compatibility with selected control.

LISTING

cTUVus listed to UL1598 standard for Dry / Damp and Wet locations.

Chicago Plenum, Airtight and Title 24 JA8-2019 Listed.

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 and power supply to operate with 70% of the original flux and remain within a range of 3 duv. 10-year Lutron Advantage limited warranty available on Lutron equipped systems. Warranty period begins from the date of shipment by Seller and conditional upon the use of manufacturer-supplied power supply. Consult [website](#) for full warranty terms and conditions.

FRAZION SLOPED FIXED DOWNLIGHT

DIMMING COMPATIBILITY

PHILIPS DRIVER COMPATIBILITY

Power supply PH Manufacturer	Family/Model #
Lutron Electronics	DV-600P
Lutron Electronics	DVELV-303P
Lutron Electronics	NTELV-600
Lutron Electronics	MAELV-600
Lutron Electronics	SELV-300P
Lutron Electronics	DVLV-600P
Lutron Electronics	NFTU-5A
Lutron Electronics	CTCL-153P
Lutron Electronics	GL-600H
Lutron Electronics	S-600P
Lutron Electronics	PHPM

LUTRON DRIVER COMPATIBILITY

Power supply L2 Lutron Product Family	Part No.
Maestro WirelessR 600 W dimmer	MRF2-6ND-120-
Maestro WirelessR 1000 W dimmer	MRF2-10ND-120-
Caséta® Wireless Pro 1000 W dimmer	PD-10NXD-
GRAFIK T™ CL® dimmer	GT-250M-GTJ-250M-
HomeWorks® QS adaptive dimmer	HQRD-6NA-
HomeWorks® QS 600 W dimmer	HQRD-6ND-
HomeWorks® QS 1000 W dimmer	HQRD-10ND-
RadioRA® 2 adaptive dimmer	RRD-6NA-
RadioRA® 2 1000 W dimmer	RRD-10ND
myRoom™ DIN power module	MQSE-4A1-D
HomeWorks® QS DIN power module	LQSE-4A1-D
HomeWorks® QS wallbox power module	HQRJ-WPM-6D-120
HomeWorks® wallbox power module	HWI-WPM-6D-120
GRAFIK Eye® QS control unit	QSGR-, QSGRJ-
GRAFIK Eye® 3000 control unit	GRX-3100-GRX-3500-
RPM-4U module (LCP, HomeWorks® QS, GRAFIK Systems™, Quantum®)	HW-RPM-4U-120 LP-RPM-4U-120
RPM-4A module (LCP, HomeWorks® QS, GRAFIK Systems™, Quantum®)	HW-RPM-4A-120 LP-RPM-4A-120
GP dimming panels	Various
Ariadni CL 250W dimmer	AYCL-253P-
Diva CL 250W dimmer	DVCL-253P-DCSCCL-253P-
Nova T CL 250W dimmer	NTCL-250-
Power supply LP Lutron Product Family	Part No.
PowPak Dimming Modules	RMJ-ECO32-DV-B
PowPak Dimming Modules	FCJ/FCJS-ECO
Energi Savr Nodes	QSN-1ECO-S
GRAFIK Eye QS control unit	QSN-2ECO-S
Homeworks QS control unit	QSGRJ- _E (wireless) QSGR- _E
Quantum Hub	QP2-__ 2C
Quantum Hub	QP2-__ 4C
Quantum Hub	QP2-__ 6C
Quantum Hub	QP2-__ 8C
Homeworks QS power module	LQSE-2ECO-D
myRoom Plus power module	

eldoLED DRIVER COMPATIBILITY

Power supply EG / EN Dimmer / Switch Control Manufacturer	Family/Model #
Busch-Jaeger	2112U-101
Jung	240-10
Leviton Lighting Controls	IP710-DLX
Lightolier Controls	ZP600FAM120
Lutron Electronics	Nova T® - NTFTV
Lutron Electronics	Div@® - DDTV
Lutron Electronics	Nova@® - NFTV
Merten	5729
Pass & Seymour	CD4FB-W
The Watt Stopper	DCLV1
Sensor Switch	nI0 EZ
Synergy	ISD BC
Power supply EG / EN Lighting Control System Manufacturer	Family/Model #
Lutron Electronics	GrafixEye® GRX-TVI w GRX3503
Lutron Electronics	Energy Savr Node™ - QSN-4T16-S
Lutron Electronics	TVM2 Module
Crestron®	GLX-DIMFLV8
Crestron®	GLXP-DIMFLV8
Crestron®	GLPAC-DIMFLV4-*
Crestron®	GLPAC-DIMFLV8-*
Crestron®	GLPP-DIMFLVEX-PM
Crestron®	GLPP-1DIMFLV2EX-PM
Crestron®	GLPP-1DIMFLV3EX-PM
Crestron®	DIN-A08
Crestron®	DIN-4DIMFLV4
Crestron®	CLS-EXP-DIMFLV
Crestron®	CLCI-1DIMFLV2EX
ABB	SD/S 2.16.1

