

FRAXION® 3 SLIM

FIXED

Lots of light in an under-the-radar profile, with multiple design and installation options, ideal for corporate offices and retail settings.

PROJECT NAME:	TYPE:
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ORDERING INFORMATION - DOWNLIGHT / HOUSING

TITLE 24 COMPLIANT JA8-2019 INDICATED BY SHADING

SHAPE	TRIM	RATING	TYPE	FLANGE FINISH	BAFFLE FINISH	LUMEN PACKAGE	CCT	OPTIC	INSTALL TYPE	CEILING THICKNESS	DRIVER	EFFECTS DEVICE
F3R Round	M Microflange	1 Dry/Damp	F Fixed	WH White	WH White	STATIC WHITE	22 2200K*	10 10°*	INTEGRAL DRIVER	1 0.50" - 1.375"	INTEGRAL	STANDARD EFFECTS DEVICE
F3S Square	T Trimless Drywall	2 Wet*		AG Satin Silver	AG Satin Silver	80C12A 80+ CRI Divd. Lumens - 795	22 2200K* *(Only available with 90C10A and 90C14A)	15 15°	X IC	2 1.375" - 2.125"	PH ELV/Triac, 2% 120V*	04 Soft Focus Lens
	W Trimless Millwork	*(Requires provided suction cup to service or aim & focus)		AU Cashmere Gold	AU Cashmere Gold	80C16A 80+ CRI Divd. Lumens - 1095	27 2700K	22 22°	Y NIC	T 0.50" - 1.375"	*(Not available for 80C12A, 90C10A, or 97C10A unless 10° degree optic is specified)	NL No Lens*
				BB Burnt Bronze	BB Burnt Bronze	80C23A 80+ CRI Divd. Lumens - 1506	30 3000K	40 40°	C IC, Airtight*	*(Includes adjustable housing height bracket, recommended for any T-Grid or Furring Channel applications)	SG 0-10V Analog, LOG 1% 120 or 277V	*(Standard with 10° optic. Not available for Wet location, Warm Dim or Airtight Housings)
				BK Black	BK Black	90C10A 90+ CRI Divd. Lumens - 683	35 3500K	60 60°	* (Chicago Plenum, Airtight & Title 24 compliant housing)		SN 0-10V Analog, LIN 1% 120 or 277V	ALTERNATE EFFECTS DEVICE
				PR Primer	PR Primer	90C14A 90+ CRI Divd. Lumens - 936	40 4000K	85 85°*	V IC, Remote		EN eldoLED, SOLOdrive 0.1% 0-10V, LOG*	02 Honeycomb Louver*
				00 Trimless*	CF Custom Finish*	90C19A 90+ CRI Divd. Lumens - 1291		*(Uses 60° optic and optional configuration 14 (WDL) to achieve 85° beam spread)	W NIC, Remote		*(Not available for 80C23A, 90C19A, or 97C17A in all IC install types)	*(Not available for Wet location, Warm Dim or Airtight Housings)
				CF Custom Finish*	*(Consult Factory)	97C10A 97+ CRI Divd. Lumens - 608			D IC, Airtight, Remote*		EN eldoLED, SOLOdrive 0.1% 0-10V, LIN*	03 Clear Glass Lens*
						97C12A 97+ CRI Divd. Lumens - 833			* (Chicago Plenum, Airtight & Title 24 compliant housing)		*(Not available for 80C23A, 90C19A, or 97C17A in all IC install types)	*(Not available for Warm Dim)
						97C17A 97+ CRI Divd. Lumens - 1151*					ED eldoLED, SOLOdrive 0.1% DALI-2, LOG*	05 Frosted Glass Lens
											*(Not available for 80C23A, 90C19A, or 97C17A in all IC install types)	08 Frosted Soft Focus Lens
						WARM DIM					LP Lutron, Hi-Lume Premier Ecosystem 0.1% Fade to Black, 120 or 277V*	14 Wide Distribution Lens*
						90W11A 90+ CRI Divd. Lumens - 856 Incandescent Profile	WL 2700K - 1800K				*(Required and only available for 85° beam spread)	26 Frosted Linear Spread Lens
						90W12A 90+ CRI Divd. Lumens - 962 Standard Profile	WD 3000K - 1800K					
						*SEE PAGE 3 FOR DETAILED WARM DIM PROFILE COMPARISON.						
						TUNABLE WHITE					REMOTE (120V)	
						90T12A 90+ CRI Divd. Lumens - 950*	TW 5000K - 2700K				L2 Lutron, Hi-Lume 1% 2-wire	
						*(Only available for remote housings)					REMOTE (120-277V)	
											EG eldoLED, SOLOdrive 0.1% 0-10V, LOG	
											EN eldoLED, SOLOdrive 0.1% 0-10V, LIN	
											ED eldoLED, SOLOdrive 0.1% DALI, LOG	
											TUNABLE WHITE REMOTE (120-277V)	
											DG eldoLED, DUALdrive 0.1% 0-10V, LOG	
											DN eldoLED, DUALdrive 0.1% 0-10V, LIN	
											DD eldoLED, DUALdrive 0.1% DALI, LOG	



*ALL DELIVERED LUMEN OUTPUTS AND T24 COMPLIANCE REFLECT 3000K PAIRED WITH 40° OPTIC AND SOFT FOCUS LENS.

PART NUMBER NOTES

- Housing and trim ship as e.g., F3R1F-WHWH-90C10A2-3X1-PH*
- Remote driver ships with fixture as e.g., PSF3-RMT-90C-10A-1L2*

FRAXION3SLIM FIXED

ACCESSORIES

ROUND ALTERNATE EFFECTS DEVICES

Dry / Damp location only

Wet location requires alternate baffle.

- HCL-F3R** Honeycomb Louver w/ Diffusion Lens*
*(Not available for Warm Dim, Wet locations, or Airtight Housings)
- 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*
*(For use with 60° optic only)
- FLSL-F3R** Frosted Linear Spread Lens

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

SQUARE ALTERNATE EFFECTS DEVICES

Dry / Damp location only

Wet location requires alternate baffle.

- HCL-F3S** Honeycomb Louver w/ Diffusion Lens*
*(Not available for Warm Dim, Wet locations, or Airtight Housings)
- CGL-F3S** Clear Glass Lens*
*(Not available for Warm Dim)
- FGL-F3S** Frosted Glass Lens
- SFL-F3S** Soft Focus Lens
- FSFL-F3S** Frosted Soft Focus Lens
- WDL-F3S** Wide Distribution Lens*
*(For use with 60° optic only)
- FLSL-F3S** Frosted Linear Spread Lens

REPLACEMENT TUNABLE WHITE 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

ALTERNATE BAFFLE ASSEMBLY (INCLUDES EFFECTS DEVICE)

ASSEMBLY	SHAPE	RATING	TYPE	BAFFLE FINISH	EFFECTS DEVICE
RBA			F		
REPLACEMENT BAFFLE ASSEMBLY	F3R Round F3S Square	1 Dry / Damp 2 Wet* *(Requires suction cup to service or aim & focus)	F Fixed	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 CGL Clear Glass Lens * *(Not available for Warm Dim) FGL Frosted Glass Lens FSFL Frosted Soft Focus Lens WDL Wide Distribution Lens * *(For use with 60° optic only) FLSL Frosted Linear Spread Lens

REPLACEMENT SUCTION TOOL

One included with every six fixtures designated Wet location.

- F4-TOOL-SUCTION** Allows for removal of Wet Location baffles

T-GRID ACCESSORY KIT

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" - 2.125".

- TG-FX3-KIT**

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

REPLACEMENT APPLIQUÉ

- DLA-APP-F3RT** Round
- DLA-APP-F3ST** Square

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PERFORMANCE - 3000K

LUMEN PACKAGE	WATTAGE	10° OPTIC NO SOFT FOCUS LENS		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	DELIVERED	LPW
80C12A	10	739	51 (14W)	872	86	729	72	795	79	784	78	623	62
80C16A	14	-	-	1191	82	1003	71	1095	78	1079	77	857	61
80C23A	21	-	-	1642	77	1381	65	1506	71	1486	70	1180	56
90C10A	10	627	44 (14W)	721	71	626	62	683	68	673	67	535	53
90C14A	14	-	-	984	68	858	61	936	66	923	65	733	52
90C19A	21	-	-	1357	63	1184	56	1291	61	1273	60	1011	48
97C10A	10	578	40 (14W)	657	65	557	55	608	60	599	59	476	47
97C12A	14	-	-	897	62	763	54	833	59	821	58	652	46
97C17A	21	-	-	1238	58	1055	50	1151	58	1135	54	901	42
90W11A	14	-	-	910	65	744	53	856	61	871	62	703	50
90W12A	14	-	-	1023	73	837	59	962	68	979	69	790	56
90T12A	16	-	-	-	-	852	53	950	59	949	59	838	52



JA8-2019 INDICATED BY SHADING

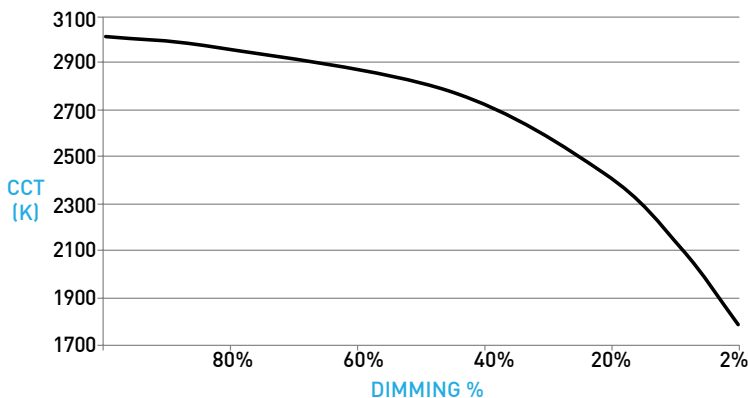
OUTPUT MULTIPLIER	
CCT	CCT SCALE
2200K (Consult factory for JA8 details)	0.800
2700K	0.957
3000K	1.000
3500K	1.019
4000K	1.030

LIGHT LOSS FACTOR MULTIPLIER	
NO LENS	1.05
CGL	1.00
SFL	1.00
FGL	0.90
FSFL	0.87
FLSL	0.83
WDL	0.78
HCL	0.65

WARM DIM PERFORMANCE - SOFT FOCUS LENS - 40° OPTIC

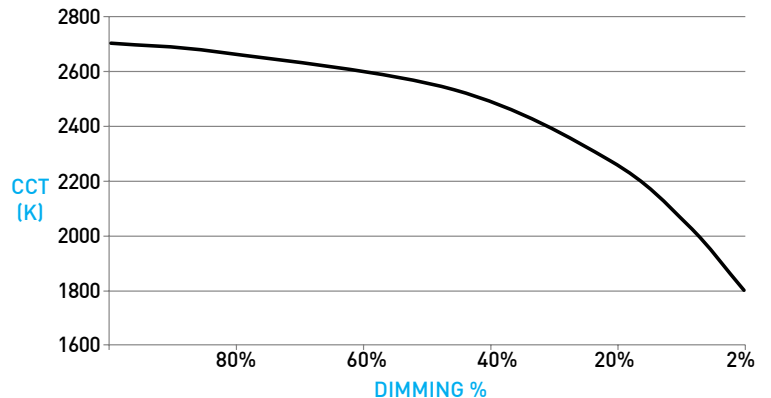
STANDARD WARM DIM PROFILE

90W12A 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)	962	769	673	481	192	96	19
Power (W)	14	11	10	7	3	1.5	0.3
Efficacy (LPW)	68	68	68	68	68	68	68



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)	856	684	599	428	171	85	17
Power (W)	14	11	10	7	3	1.5	0.5
Efficacy (LPW)	61	61	61	61	61	61	61

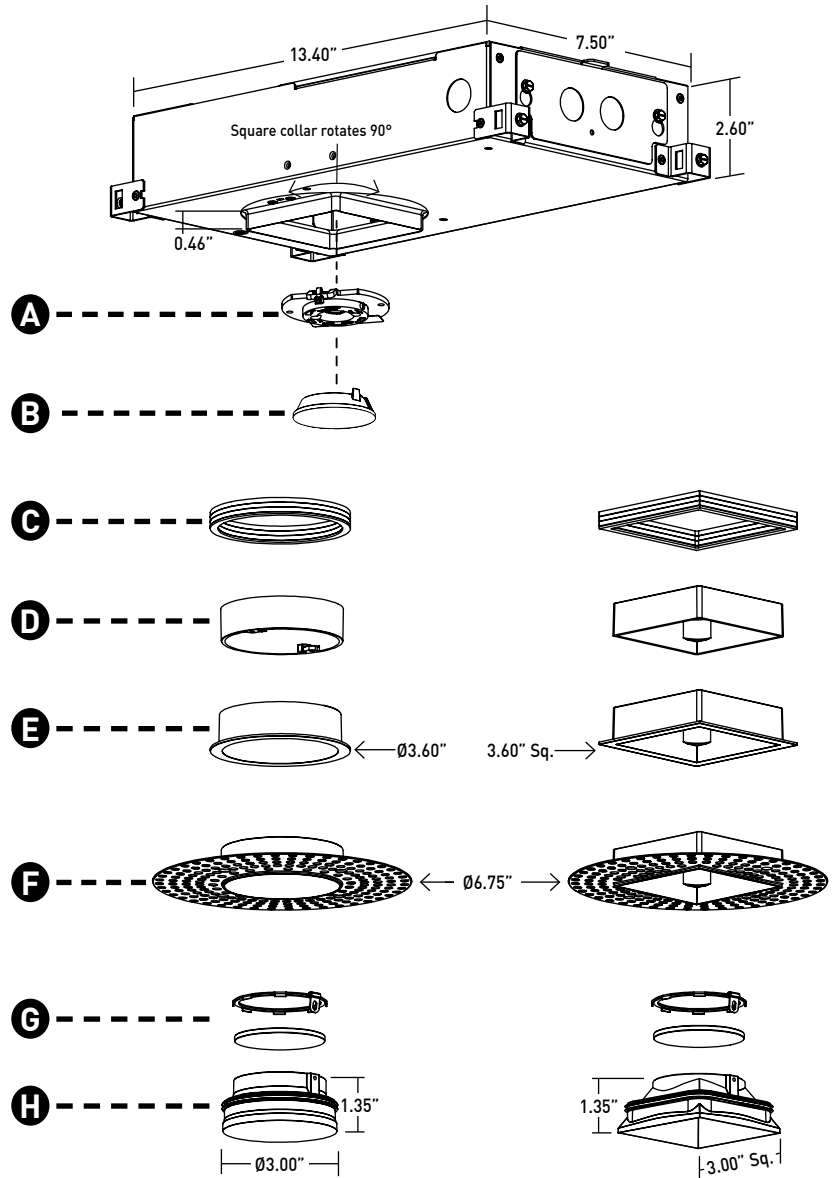


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DOWNLIGHT / HOUSING

- A LED**
Integral LED module design enables field service / replacement through housing aperture.
 - B OPTIC**
Proprietary optic integrates Reflection, Refraction and TIR offering 10°, 15°, 22°, 40° & 60° beams.
 - C TRIMLESS MILLWORK SPACERS**
Provided for Trimless Millwork installations; includes (1) 1/16" spacer and (5) 1/8" spacers.
 - D TRIM EXTENSION**
Provided for -2 ceiling thickness; accommodates 2.125" max ceiling thickness.
 - E MICROFLANGE PROFILE**
Features 0.30" flange. Thickness measures 0.06". Installed after ceiling is complete. Requires 3.375" diameter cutout. Wet location features integral silicone gasket.
 - F TRIMLESS DRYWALL 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.
 - G EFFECTS DEVICES / LENS RETAINER**
Fixture is limited to 1 effects device. Wet location effects device is sealed in place. Suction tool provided for removal of baffle with wet location. Lens retainer allows effects devices to be changed in Dry /Damp locations.
 - H ROUND BAFFLE**
Die-cast removable baffle provides easy access to tilting mechanism and features 62° glare cutoff. Minimizes aperture glare and conceals view into housing; includes gasket.
- SQUARE TRANSITIONAL BAFFLE**
Die-cast removable baffle provides easy access to tilting mechanism and features 62° glare cutoff. Transitions from square aperture at ceiling plane to round aperture at light source. Minimizes aperture glare and conceals view into housing; includes gasket.

DIMENSIONS / DRAWINGS



FRAXION3SLIM FIXED

DOWNLIGHT / HOUSING

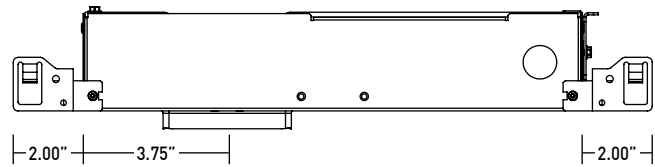
- I** **IC HOUSING**
 - For IC ceilings.
 - No setback from polycell spray foam insulation having max R-Value of 60 on all sides and top of housing.
- J** **NIC HOUSING**
 - Minimum 0.50" setback from combustible and non-combustible materials on all sides and top of housing.
 - Minimum 3.00" setback 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.
- K** **ADJUSTABLE HANGER BAR HEIGHT ACCESSORY**

Provided with ceiling thickness "T" and recommended for installations in T-Grid and furring channel up to 1.5" tall. Hanger bars are installed to adjustable bracket. Allows housing to be raised and lowered; ceiling thickness remains 0.5" to 1.375" max.
- L** **APPLIQUÉ DETAIL**

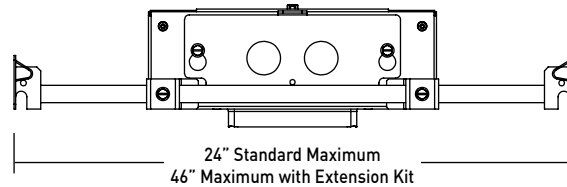
Appliqué for plaster floating directly to baffle.
- M** **REMOTE POWER SUPPLY**

Provided with install Types "V", "W" and "D". Remote power supply provides additional driver options. See page 6 for maximum allowable secondary run lengths between PSF3-RMT and fixture. Must be installed in an accessible location.

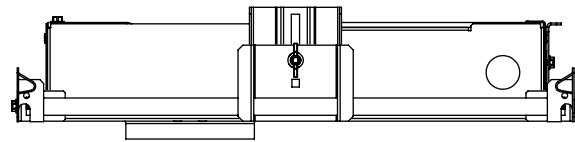
I / J



IC HOUSING FEATURES STRIP GASKETS



K

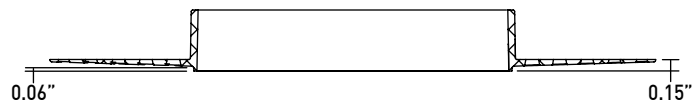


HOUSING NOTES

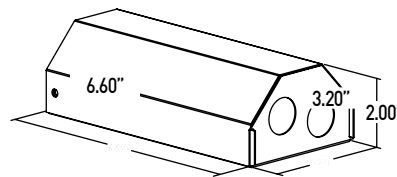
- Do not install NON-IC housings in environments where ambient temperatures exceed 40°C (104°F). See table below for IC housings.
- Power supply compartment and all splice connections may be serviced from room side.
- Consult factory for spacing requirements for any installations exceeding R-Value 60.
- Hanger bars fitted to short side of housing or long side when TG accessory is specified; 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" max to the overall dimension, but are exclusive of the setback requirements.
- Housings for round trims feature a round aperture housing collar. Housings for square trims feature a square housing collar that rotates up to 90 degrees for fixture alignment. Housing collars accommodate ceiling thicknesses between 0.50" and 2.125".

L

SECTION VIEW



M



IC HOUSING MAX AMBIENT TEMPERATURE	
LUMEN PACKAGE	TEMPERATURE
10W STATIC WHITE	40°C (104°F)
14W STATIC WHITE	35°C (95°F)
21W STATIC WHITE	25°C (77°F)
14W WARM DIM	30°C (86°F)
16W TUNABLE WHITE	30°C (86°F)

FRACTION3SLIM FIXED

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.

Remote Power Supply: 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 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. 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.

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	PH	SG	SN	LP	L2	EG	EN	ED	DG	DN	DD
Minimum °C	-20 °C	-10 °C	-10 °C	0 °C	0 °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%	1.0%	0.1%	1.0%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%

Note: For L2, LP, EG and EN drivers consult chart on page 7 to confirm appropriate dimming curve for compatibility with selected control.

MAXIMUM ALLOWABLE REMOTE DRIVER WIRING DISTANCES

DRIVER	WIRE AWG				
	12	14	16	18	20
PH, SG, SN	285'	180'	113'	71'	45'
LP, L2	60'	40'	25'	15'	-
EG, EN, ED, DG, DN, DD	-	-	118'	72'	46'

LISTING

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

CCEA, Airtight and Title 24 JA8-2019 Listed.

BUY AMERICAN ACT

All Fraxion3 Slim Fixed configurations are Buy American Act compliant.

DECLARE

LBC Red List Approved.

WEIGHT

Fixture - 2.4 lbs

Remote Driver - 1.4 lbs

LIMITED 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.](#)

CHANGE LOG

- 01/12/2021: ADDED 2200K, 2700K-1800K WARM DIM AND 10 DEGREE OPTIC OFFERINGS.
- 04/30/2021: REMOVED QUICK SHIP.
- 06/16/2021: ADDED BAA COMPLIANCE.
- 10/17/2022: REMOVED 90W13A 3200K-1800K WARM DIM AND ADDED 90W12A 3000K-1800K WARM DIM.
- 10/17/2022: UPDATED MAX AMBIENT TEMPERATURE TABLE.
- 02/14/2023: ADDED EG, EN, AND ED DRIVER OFFERINGS.
- 04/26/2023: ADDED DECLARE LBC RED LIST APPROVED.

FRAXION3SLIM FIXED

DIMMING COMPATIBILITY

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-EC032-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	Diva® - DVTV
Lutron Electronics	Nova® - NFTV
Merten	5729
Pass & Seymour	CD4FB-W
The Watt Stopper	DCLV1
Sensor Switch	nIO 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

