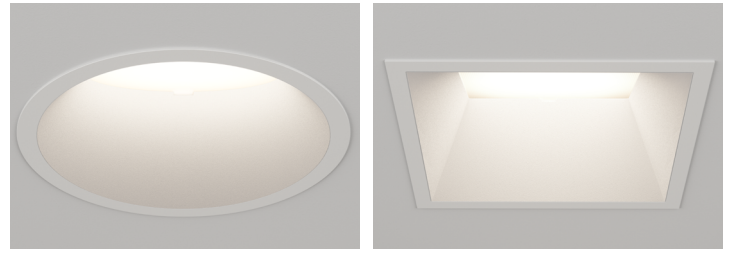





FRAXION[®]4 INTERNATIONAL WALLWASH

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

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



ORDERING INFORMATION - DOWNLIGHT FITTING

SHAPE	TRIM	RATING	FLANGE FINISH	BAFFLE FINISH	LUMEN PACKAGE	CCT	OPTIC (UGR)	INSTALL TYPE	CEILING THICKNESS	DRIVER
							WW	EX	1	
F4R Round	FWW Standard Flange	1 IP20 Dry/Damp 2 IP64 Wet * (Suction cup provided for Aim & Focus)	WH White	WH White	 STATIC WHITE 80S11A 80+ CRI, 11W, Lumens Dlvld. - 1023 80S15A 80+ CRI, 15W, Lumens Dlvld. - 1389 80S21A 80+ CRI, 21W, Lumens Dlvld. - 1857 80S30B 80+ CRI, 30W, Lumens Dlvld. - 2514	24 2400K* <small>*90+ CRI only. Not available for 30W packages)</small>	WW Wallwash Optic (>19)	EX Export	1 7mm - 32mm	UNIVERSAL (120-277V) AN3 eldoLED, ECOdrive 1.0% 0-10V, LOG LN1 eldoLED, ECOdrive 1.0% 0-10V, LIN EA1 eldoLED, SOLdrive 0.1% 0-10V, LOG LA1 eldoLED, SOLdrive 0.1% 0-10V, LIN ED1 eldoLED, SOLdrive 0.1% DALI-2, LOG LD1 eldoLED, SOLdrive 0.1% DALI-2, LIN EX1 eldoLED, POWERdrive 0.1% DMX, LOG
	MWW Microflange		AG Satin Silver	AG Satin Silver						
F4S Square	FWW Standard Flange		AU Cashmere Gold	AU Cashmere Gold	 WARM DIM 90W15A 90+ CRI, 15W Incandescent Profile: 2700K - 1800K Lumens Dlvld. - 848 Standard Profile: 3000K - 1800K Lumens Dlvld. - 860 SEE PAGE 4 FOR DETAILED WARM DIM PROFILE COMPARISON.	WL 2700K - 1800K WD 3000K - 1800K				TUNABLE WHITE POWER SUPPLIES (120-277V) DD1 eldoLED, DUALdrive 0.1% DALI-2, LOG
	MWW Microflange		BB Burnt Bronze	BB Burnt Bronze						
	TWW Trimless		BK Black	BK Black	 TUNABLE WHITE 90T13B 90+ CRI, 13W Cool Profile: 5000K - 2700K Lumens Dlvld. - 846 Warm Profile: 4000K - 1800K Lumens Dlvld. - 854 90T22B 90+ CRI, 22W Cool Profile: 5000K - 2700K Lumens Dlvld. - 1356 Warm Profile: 4000K - 1800K Lumens Dlvld. - 1368 LUMENS DELIVERED REFLECT 3000K.	TH 5000K - 2700K TR 4000K - 1800K				
			PR Primer	PR Primer						
			00 Trimless* *(Required for trimless)	CF Custom Finish* *(Consult Factory)						



PART NUMBER NOTES

- Fitting ships as e.g., F4SMWW1-WHWH-90S11A2-5E1-AN3
- Driver ships with fitting

FRAXION4 INTERNATIONAL WALLWASH

ACCESSORIES

REPLACEMENT BAFFLE ASSEMBLY (INCLUDES MEDIA)

ASSEMBLY	SHAPE	FITTING	RATING	FLANGE FINISH
RBA				1
REPLACEMENT BAFFLE ASSEMBLY	F4R Round	FWW Standard Flange MWW Microflange TWW Trimless	1 IP20 Dry/Damp 2 IP64 Wet	WH White BK Black PR Primer AU Cashmere Gold AG Satin Silver BB Burnt Bronze CF Custom Finish* *(Consult Factory)
	F4S Square	FWW Standard Flange MWW Microflange TWW Trimless		

REPLACEMENT OPTICS

Interchangeable optics accessible through fixture aperture.

STATIC WHITE

RO-70-WW-S Wallwash optic

WARM DIM

RO-70-WW-W2 Wallwash optic

TUNABLE WHITE

RO-70-WW-T Wallwash optic

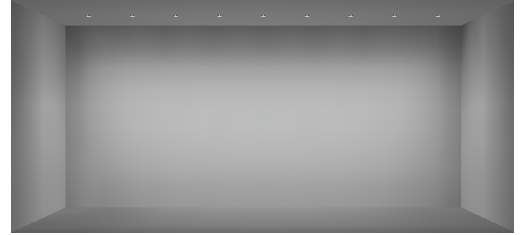
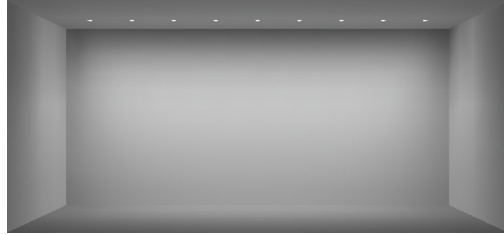
DRIVE CURRENT SPECIFICS

	80S				90S				97S				90W
	11A	15A	21A	30B	11A	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

FRACTION4 INTERNATIONAL WALLWASH

WALLWASH DESIGN GUIDE

ROUND



RECOMMENDED

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

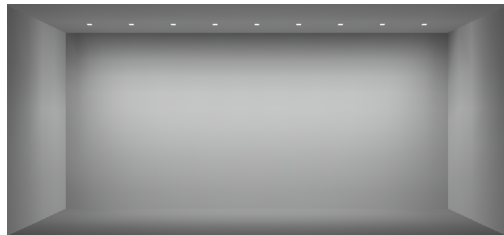
36" SETBACK / 36" ON CENTER SPACING

- 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



RECOMMENDED

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

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 ABOVE	AVERAGE FC: 21.62 MIN / MAX: 4.38	AVERAGE FC: 19.42 MIN / MAX: 4.72
36"	AVERAGE FC: 16.38 MIN / MAX: 4.53	SHOWN ABOVE	AVERAGE FC: 16.53 MIN / MAX: 4.73
42"	AVERAGE FC: 17.28 MIN / MAX: 5.40	AVERAGE FC: 15.79 MIN / MAX: 5.41	SHOWN ABOVE

SQUARE			
ON CENTER SPACING	SETBACK		
	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**

FRACTION4 INTERNATIONAL WALLWASH

PERFORMANCE - 3000K

LUMEN PACKAGE	WATTS	WW OPTIC	
		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
90T13B (40K-18K)	13	854	66
90T13B (50K-27K)	13	846	65
90T22B (40K-18K)	22	1368	62
90T22B (50K-27K)	22	1356	62

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

TUNABLE WHITE MULTIPLIER		
CCT	5000K-2700K	4000K-1800K
5000K	1.16	-
4000K	1.08	1.14
3500K	1.04	1.07
3000K	1.00	1.00
2700K	0.96	0.92
2400K	-	0.84
1800K	-	0.69

UNIFIED GLARE RATING	
WALLWASH OPTIC	
>19	

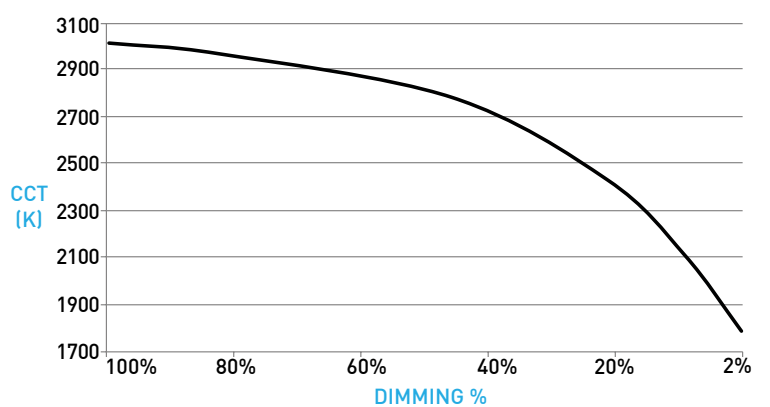
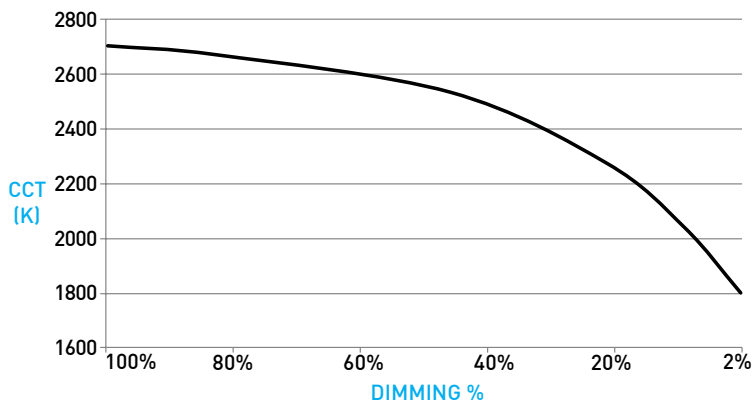
WARM DIM PERFORMANCE

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

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)	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



FRACTION4 INTERNATIONAL WALLWASH

DOWNLIGHT FITTING

A BAFFLE

ROUND / SQUARE

Die-cast removable baffle 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 7mm to 32mm. Snap-on spacer clips (3X) supplied for ceiling thickness below 13mm only.

C1 STANDARD FLANGE PROFILE

Provides 22mm total contractor (goof) allowance with 13mm flange. Thickness measures 1.5mm. IP64 Wet location features integral silicone gasket.

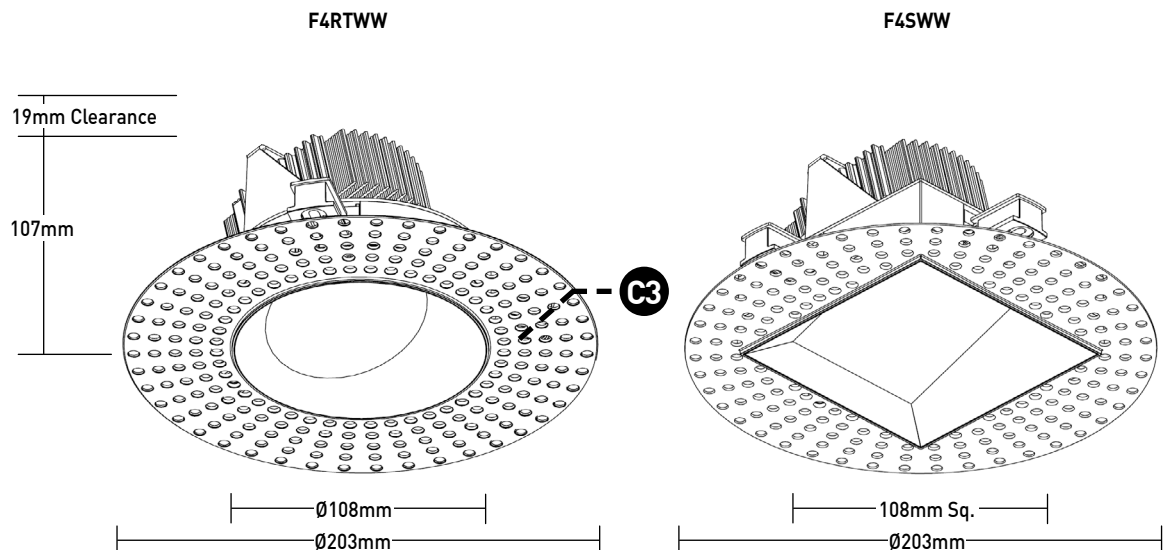
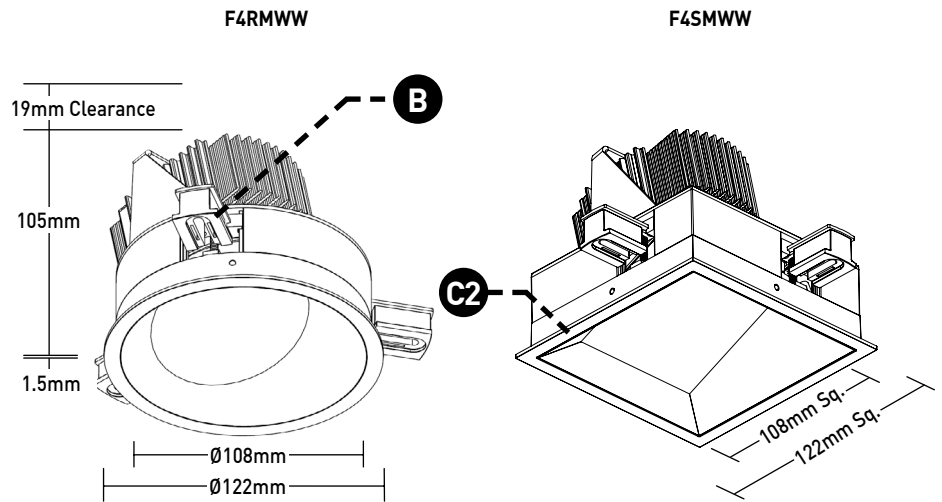
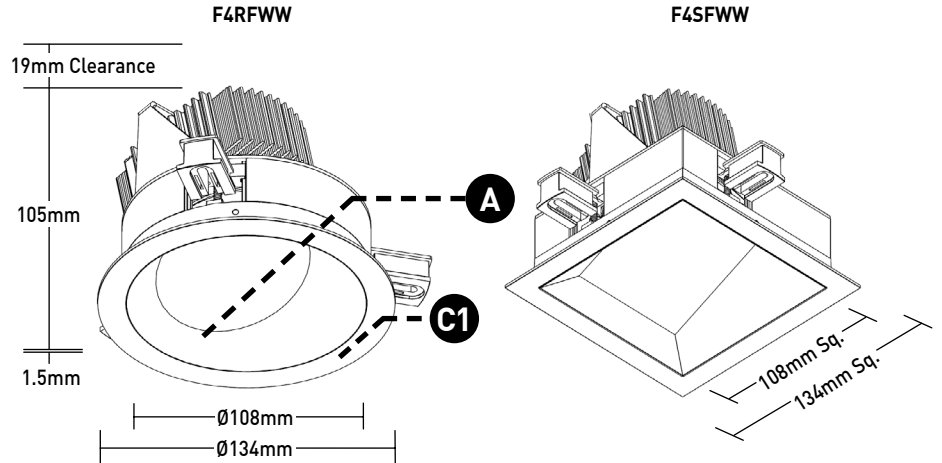
C2 MICROFLANGE PROFILE

Provides industry standard 11mm total contractor (goof) allowance with 7mm flange. Thickness measures 1.5mm. IP64 Wet location features integral silicone gasket.

C3 TRIMLESS PROFILE

Installs totally flush with the ceiling with no visible trim. Features integrated appliqué for plaster floating directly to the baffle. Not recommended for stucco applications.

DIMENSIONS / DRAWINGS



FRACTION4 INTERNATIONAL WALLWASH

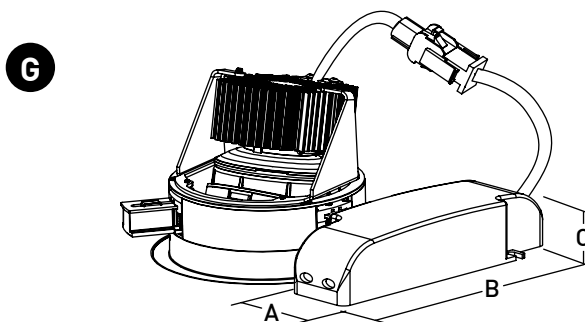
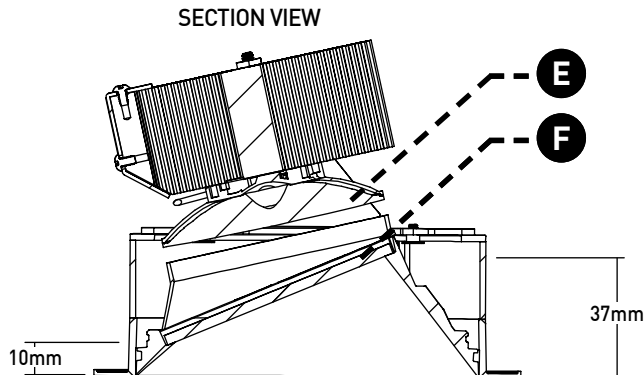
DOWNLIGHT FITTING

- E OPTIC**
Proprietary wallwash optic design integrates Reflection, Refraction and TIR principles.
- F MEDIA**
Asymmetrical spread lens, included and sealed in place, combined with angled optic and wide aperture enhance uniformity.

CLEARANCE / POWER SUPPLY

- G FITTING WITH NON-IC TETHERED POWER SUPPLY**
 - Requires 113mm diameter cutout.
 - Tethered power supply protected wiring and quick-connect plug between fitting and power supply.
 - Minimum 19mm clearance from top of fitting.
 - Minimum setback from combustible and non-combustible materials of 168mm radius from fitting centerline; minimum 76mm from surfaces of power supply if not situated within above noted radius from fitting centerline.
 - Minimum additional 76mm setback from insulation material with max R-Value 30 from any surface of downlight fitting assembly.
 - Minimum additional 152mm setback from polycell spray foam insulation with max R-Value 60 from any surface of downlight fitting assembly.
 - Consult factory for spacing requirements for any installations exceeding R-Value 60.
 - Do not install in environments where ambient temperatures exceed 40°C (104°F).

DIMENSIONS / DRAWINGS



POWER SUPPLY DIMENSIONS			
Model	A	B	C
AN3	41mm	210mm	34mm
LN1			
EA1			
LA1			
ED1			
LD1	76mm	152mm	30mm
EX1			
DD1			

FRAZION4 INTERNATIONAL WALLWASH

TECHNICAL

CONSTRUCTION

Downlight Fitting: Aluminum and steel. Extruded aluminum heat-sink.

Painted finishes are granulated powder coat.

Housing: 22 Gauge galvanized steel.

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 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.

TUNABLE WHITE LED

3-step MacAdam ellipse tunable white LED module available in 90+ CRI configuration. Features tuning ranges of 1800K to 4000K and 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	0-10V				DALI-2			DMX
	AN3	LN1	EA1	LA1	ED1	LD1	DD1	EX1
Minimum °C	-20 °C	-20 °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
Dimming %	1.0%	1.0%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%

Note: For EA1 and LA1 drivers consult chart on page 8 to confirm appropriate dimming curve for compatibility with selected control.

SPACING

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

LISTING

CE listed for IP20 Dry / Damp and IP64 Wet locations.

NEMA 410 Compliant.

U.S. Patent: 10,344,958

WEIGHT

Fitting - 2.2 lbs max

Driver - 0.4 lbs

LIMITED WARRANTY

Manufacturer's Limited Warranty guarantees product(s) listed to be free from defects in material and workmanship under normal use and service for 1-year. LED and power supplies are warranted to operate with 70% of original flux and remain within a range of 3 duv for a period of 5-years. 10-year Lutron Advantage limited warranty available on Lutron equipped systems. Warranty period begins from the date of shipment by Seller.

[Consult website for full warranty terms and conditions.](#)

CHANGE LOG

- 03/15/2021: UPDATED HIGH FLUX STATIC WHITE PHOTOMETRICS.
- 03/15/2021: REMOVED HIGH FLUX 97+ CRI 3500K OFFERING.
- 10/17/2022: REMOVED 90W13A 3200K-1800K WARM DIM AND ADDED 90W12A 3000K-1800K WARM DIM.
- 08/08/2023: ADDED NEW OPTIC AND LED SYSTEM.
- 02/08/2024: ADDED 2400K, AND WARM PROFILE TUNABLE WHITE.

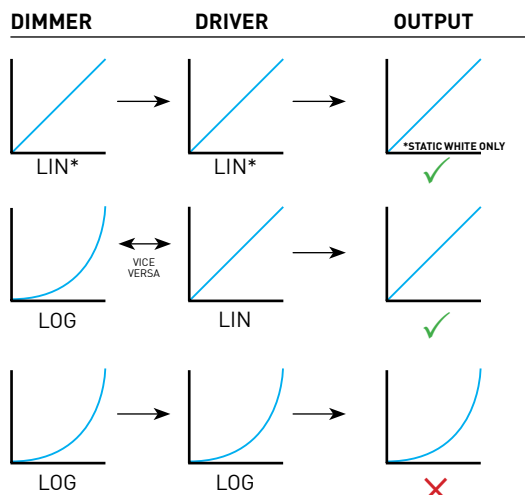
FRAZION4 INTERNATIONAL WALLWASH

DIMMING COMPATIBILITY

eldoLED DRIVER COMPATIBILITY

Power supply EA1 / LA1 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	nI0 EZ
Synergy	ISD BC
Power supply EA1 / LA1 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

ANALOG DRIVERS AND DIMMERS



LIN = LINEAR
 LOG = LOGARITHMIC
 *LIN-TO-LIN NOT COMPATIBLE FOR WARM-DIM OR TUNABLE WHITE