




# FRAXION® 4 HIGH FLUX WALLWASH

Very versatile, and highly configurable, these 4-inch downlights are the widest aperture we offer, ideal for overall illumination in residential and commercial spaces.

PROJECT NAME:	TYPE:
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## ORDERING INFORMATION - DOWNLIGHT / HOUSING

SHAPE	TRIM	RATING	FLANGE FINISH	BAFFLE FINISH	CRI/WATTAGE PACKAGE	CCT	OPTIC (UGR)	INSTALL TYPE	CEILING THICKNESS	DRIVER
							<b>WW</b>			
F4R Round	FWW Standard Flange MWW Microflange TWW Trimless	1 Dry/Damp 2 Wet	WH White AG Satin Silver AU Cashmere Gold	WH White AG Satin Silver AU Cashmere Gold	 <b>STATIC WHITE</b> <b>4.38" TALL HOUSING</b> 80S53E 80+ CRI, 53W, Lumens Divd. - 3731 90S53E 90+ CRI, 53W, Lumens Divd. - 3324 97S53E 97+ CRI, 53W, Lumens Divd. - 2985	27 2700K 30 3000K 35 3500K 40 4000K	WW Wallwash Optic >19	INTEGRAL DRIVER NIC	1 0.50" - 1.00" T TG 0.50" - 1.00"* *(Includes adjustable housing height bracket)	<b>UNIVERSAL (120-277V)</b> LH1 Lutron, Hi-Lume 1% Ecosystem* *(Not available for 53W packages) AN4 Philips Xitanium 1% 0-10V, LOG* *(Not available for 53W packages) LN2 Philips Xitanium 1% 0-10V, LIN* *(Not available for 53W packages) EA2 eldoLED, SOLOdrive 0.1% 0-10V, LOG LA2 eldoLED, SOLOdrive 0.1% 0-10V, LIN ED1 eldoLED, SOLOdrive 0.1% DALI, LOG LD1 eldoLED, SOLOdrive 0.1% DALI, LIN AS1 / Athena Control ASR eldoLED, SOLOdrive 0.1%* *(Includes Athena Node. Extended lead time, consult factory. ASR includes shunt) CS1 / Casambi Control CSR eldoLED, SOLOdrive 0.1%* *(Includes Casambi Node. Extended lead time, consult factory. CSR includes shunt) <b>TUNABLE WHITE                      POWER SUPPLIES (120-277V)</b> DD1 eldoLED, DUALdrive 0.1% DALI-2, LOG DG1 eldoLED, DUALdrive 0.1% 0-10V, LOG DL1 eldoLED, DUALdrive 0.1% 0-10V, LIN AD1 / Athena Control ADR eldoLED, DUALdrive 0.1%* *(Includes Athena Node. Extended lead time, consult factory. ADR includes shunt) CD1 / Casambi Control CDR eldoLED, DUALdrive 0.1%* *(Includes Casambi Node. Extended lead time, consult factory. CDR includes shunt)
F4S Square	FWW Standard Flange MWW Microflange TWW Trimless		BB Burnt Bronze BK Black PR Primer OO Trimless* *(Required for trimless) CF Custom Finish* *(Consult Factory)	BB Burnt Bronze BK Black PR Primer CF Custom Finish* *(Consult Factory)	 <b>WARM DIM</b> <b>4.38" TALL HOUSING</b> 90W26B 90+ CRI, 26W, Lumens Divd. - 1318 Incandescent Profile 90W42E 90+ CRI, 42W, Lumens Divd. - 2085 Incandescent Profile SEE PAGE 4 FOR DETAILED WARM DIM PROFILE	WL 2700K - 1800K		REMOTE DRIVER NIC, Remote		
					 <b>TUNABLE WHITE</b> <b>4.38" TALL HOUSING</b> 90T30B 90+ CRI, 30W Cool Profile: 5000K - 2700K Lumens Divd. - 1684 Warm Profile: 4000K - 1800K Lumens Divd. - 1573	TH 5000K - 2700K TR 4000K - 1800K				



LUMEN DELIVERED OUTPUTS REFLECT 3000K.

## PART NUMBER NOTES

- Housing and trim ship as e.g., F4RMWW1-WHWH-90S53E2-5X1-EA2

# FRAXION4 HIGH FLUX WALLWASH

## ACCESSORIES

### REPLACEMENT BAFFLE ASSEMBLY (INCLUDES EFFECTS DEVICE)

ASSEMBLY	SHAPE	TRIM	RATING	FLANGE FINISH
<b>RBA</b>				
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 BB Burnt Bronze CF Custom Finish* *(Consult Factory)
	F4S Square	FWW Standard Flange MWW Microflange TWW Trimless		

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### REPLACEMENT OPTICS

Interchangeable optics accessible through fixture aperture.

#### STATIC WHITE

**RO-70-WW-S** Wallwash optic

#### WARM DIM

**RO-70-WW-W** Wallwash optic

#### TUNABLE WHITE

**RO-70-WW-T** Wallwash optic

### 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

### EMERGENCY LIGHTING - REMOTE MOUNT ONLY

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

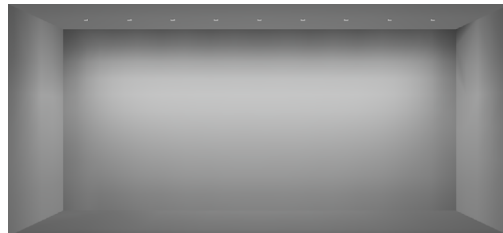
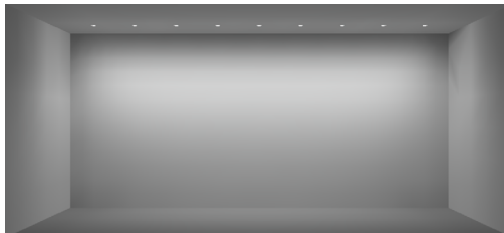
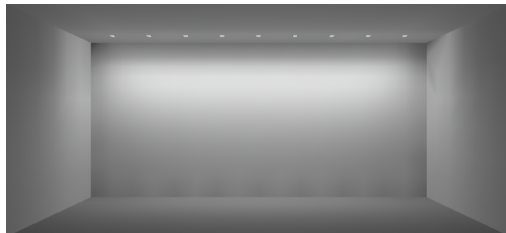
- EMB-S-100-120-LEDX** 100 watt max capacity, 120 VAC 60Hz, 0-10V Dimmable
- EMB-S-100-277-LEDX** 100 watt max capacity, 277 VAC 60Hz, 0-10V Dimmable
- EMB-S-250-120/277-LEDX** 250 watt max capacity, 120 or 277 VAC 60Hz, 0-10V Dimmable

**\*SHUNT REQUIRED FOR USE WITH ATHENA AND CASAMBI CONTROLS, CONSULT FACTORY FOR DETAILS.**

# FRAXION4 HIGH FLUX WALLWASH

## WALLWASH DESIGN GUIDE

### ROUND



#### RECOMMENDED

#### 30" SETBACK / 30" ON CENTER SPACING

- AVERAGE FC: 41.56
- MIN / MAX: 5.70
- 12FT CEILING SHOWN / 10-14FT IDEAL
- 9 FIXTURES / 25FT WALL SHOWN

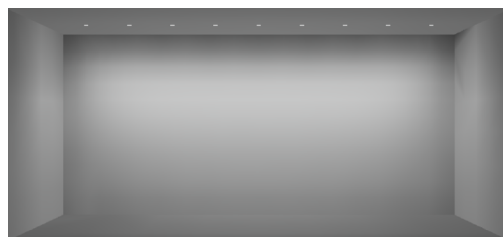
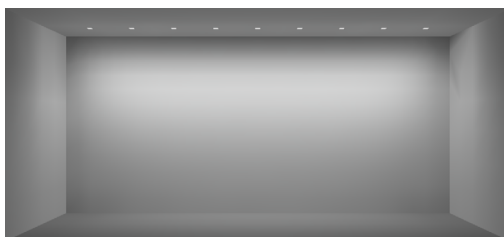
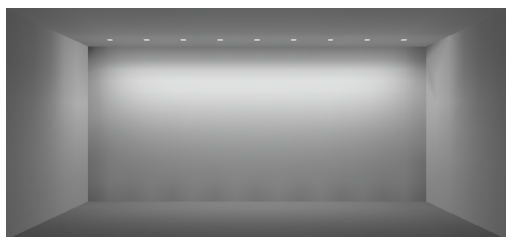
#### 36" SETBACK / 36" ON CENTER SPACING

- AVERAGE FC: 33.08
- MIN / MAX: 4.79
- 12FT CEILING SHOWN / 10-14FT IDEAL
- 9 FIXTURES / 30FT WALL SHOWN

#### 42" SETBACK / 42" SPACING ON CENTER

- AVERAGE FC: 26.75
- MIN / MAX: 6.17
- 12FT CEILING SHOWN / 10-14FT IDEAL
- 9 FIXTURES / 35FT WALL SHOWN

### SQUARE



#### RECOMMENDED

#### 30" SETBACK / 30" ON CENTER SPACING

- AVERAGE FC: 43.81
- MIN / MAX: 5.84
- 12FT CEILING SHOWN / 10-14FT IDEAL
- 9 FIXTURES / 25FT WALL SHOWN

#### 36" SETBACK / 36" ON CENTER SPACING

- AVERAGE FC: 35.06
- MIN / MAX: 4.40
- 12FT CEILING SHOWN / 10-14FT IDEAL
- 9 FIXTURES / 30FT WALL SHOWN

#### 42" SETBACK / 42" SPACING ON CENTER

- AVERAGE FC: 28.39
- MIN / MAX: 5.86
- 12FT CEILING SHOWN / 10-14FT IDEAL
- 9 FIXTURES / 35FT WALL SHOWN

### ADDITIONAL SPACINGS AND SETBACKS

ROUND			
ON CENTER SPACING	SETBACK		
	30"	36"	42"
30"	SHOWN ABOVE	AVERAGE FC: 38.91 MIN / MAX: 5.35	AVERAGE FC: 36.21 MIN / MAX: 5.68
36"	AVERAGE FC: 35.45 MIN / MAX: 5.44	SHOWN ABOVE	AVERAGE FC: 30.89 MIN / MAX: 5.14
42"	AVERAGE FC: 30.25 MIN / MAX: 6.80	AVERAGE FC: 28.54 MIN / MAX: 6.38	SHOWN ABOVE

SQUARE			
ON CENTER SPACING	SETBACK		
	30"	36"	42"
30"	SHOWN ABOVE	AVERAGE FC: 41.17 MIN / MAX: 4.83	AVERAGE FC: 38.39 MIN / MAX: 5.05
36"	AVERAGE FC: 37.53 MIN / MAX: 5.76	SHOWN ABOVE	AVERAGE FC: 32.75 MIN / MAX: 4.59
42"	AVERAGE FC: 32.02 MIN / MAX: 6.04	AVERAGE FC: 30.24 MIN / MAX: 5.74	SHOWN ABOVE

**\*ALL DATA REFLECTS 90C50B LUMEN PACKAGE**

# FRACTION4 HIGH FLUX WALLWASH

## PERFORMANCE - 3000K

LUMEN PACKAGE	WATTAGE	WW OPTIC	
		DLVD.	LPW
80S53E	53	2654	70
90S53E	53	2265	63
97S53E	53	2985	56
90W26B	26	1318	51
90W42E	42	2085	50
90T30B (40K-18K)	30	1573	52
90T30B (50K-27K)	30	1684	56

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

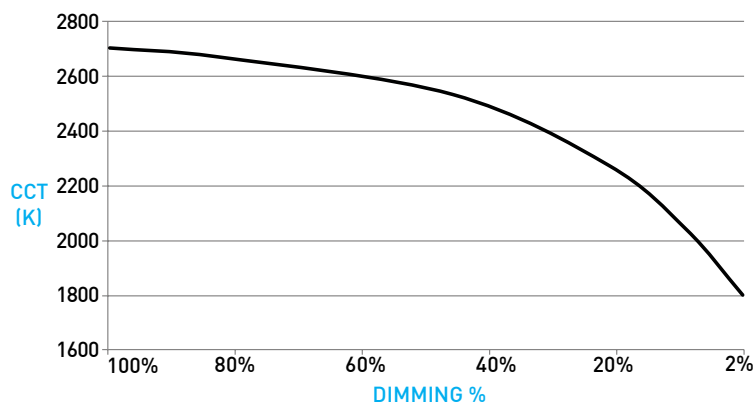
TUNABLE WHITE MULTIPLIER		
CCT	5000K-2700K	4000K-1800K
5000K	1.16	-
4000K	1.08	1.14
3500K	1.04	1.07
3000K	1.00	1.00
2700K	0.96	0.92
2400K	-	0.84
1800K	-	0.69

UNIFIED GLARE RATING	
WALLWASH OPTIC	
>19	

## WARM DIM PERFORMANCE

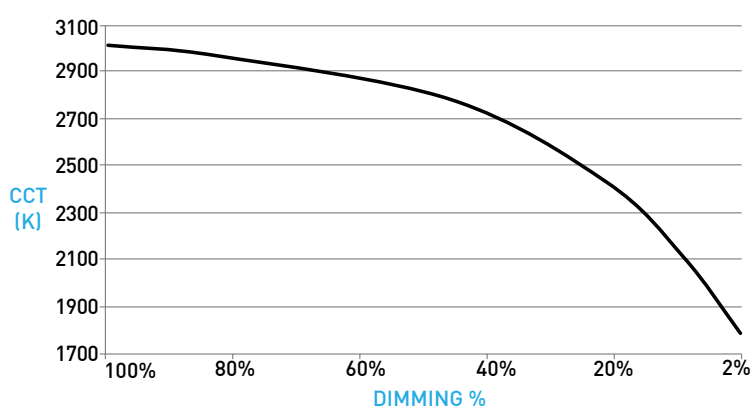
WARM DIM TO MIRROR INCANDESCENT DIMMING PROFILE

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)	1318	1054	922	659	263	131	26
Power (W)	26	21	18	13	5	3	.5
Efficacy (LPW)	51	51	51	51	51	51	51



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)	2700	2650	2620	2520	2180	1950	1800
Light Output (Lm)	2085	1668	1459	1042	417	208	41
Power (W)	42	33	29	21	8	4	.8
Efficacy (LPW)	50	50	50	50	50	50	50

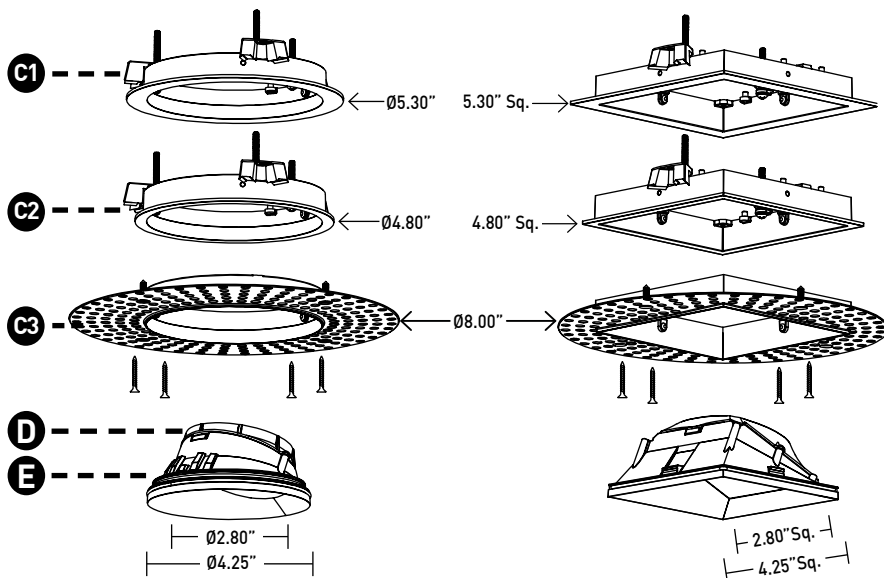
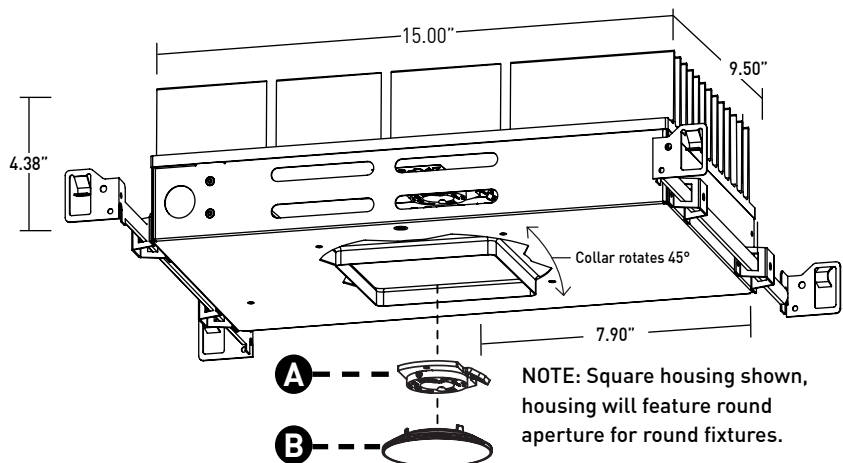


# FRAXION4 HIGH FLUX WALLWASH

## DOWNLIGHT / HOUSING

- A LED**  
Integral LED module design enables field service / replacement through housing aperture.
- B OPTIC**  
Robust light engine with optimized wallwash optic pairing integrates Reflection, Refraction and TIR.
- C1 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.
- C2 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.
- C3 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.
- D MEDIA**  
Asymmetrical spread lens, included and sealed in place, combined with angled optic and wide aperture enhance uniformity.
- E ROUND/SQUARE BAFFLE**  
Die-cast removable baffle minimizes aperture glare and conceals view into housing; includes silicone gasket.

## DIMENSIONS / DRAWINGS



# FRAXION4 HIGH FLUX WALLWASH

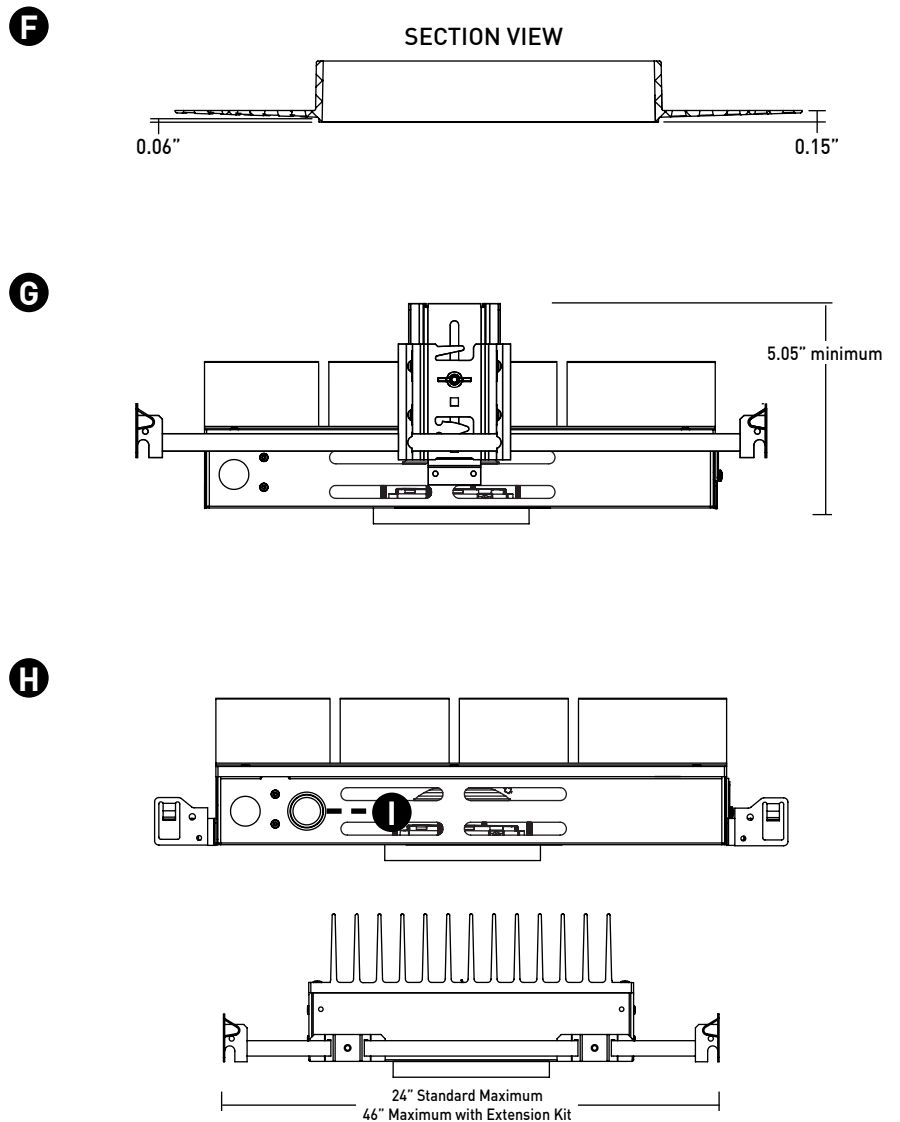
## DOWNLIGHT / HOUSING

- F TRIMLESS APPLIQUÉ DETAIL**  
Integrated appliqué for plaster floating directly to baffle.
- G 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.
- H 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.
- I ATHENA / CASAMBI CONTROL**  
Controls integrated into housing assembly. All equipment is serviceable.  
  
Athena Model Numbers: A-WN-D01-RF-BL & DFC-OEM-DBI  
  
Casambi Model Number: BT-S1E1-5400

## HOUSING NOTES

- Do not install in environments where ambient temperatures exceed 40°C (104°F) for 26W configurations.
- Do not install in environments where ambient temperatures exceed 35°C (95°F) for 42W and 53W configurations.
- 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 excluded from 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

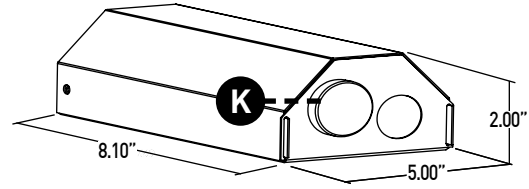


# FRACTION4 HIGH FLUX WALLWASH

## REMOTE POWER SUPPLY

- J** **REMOTE POWER SUPPLY**
- Provided with install Type "W".
  - Requires plenum rated Class 2 cable between fixture and remote driver. Cable supplied by others.
  - See page 6 for maximum allowable wiring distance.
  - Must be installed in an accessible location
  - Do not install in environments where ambient temperatures exceed 40°C (104°F).

**J**



- K** **ATHENA / CASAMBI CONTROL**
- Controls integrated into remote driver assembly. All equipment is serviceable.

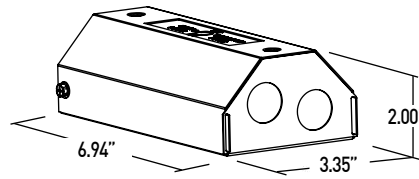
Athena Model Numbers: A-WN-D01-RF-BL & DFC-OEM-DBI

Casambi Model Number: BT-S1E1-5400

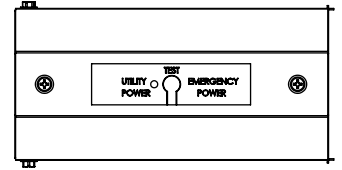
- L** **ATHENA / CASAMBI EM SHUNT**
- Included with drivers specified as ASR, ATR, CSR, or CTR. One required for each wireless EM fixture, requires class 2 control wiring between fixture and shunt. Features integrated test switch.

Model Number: PS-RMT-SHUNT

**L**



**ATHENA / CASAMBI  
EM SHUNT**



# FRAXION4 HIGH FLUX WALLWASH

## 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 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. 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

	ECO		0-10V				DALI-2		ATHENA	CASAMBI
Power Supply	LH1	LP1	AN4	LN2	EA2	LA2	ED1	LD1	AS	CS
Minimum °C	0 °C	0 °C	-20 °C	-20 °C	-20 °C	-20 °C	-20 °C	-20 °C	0 °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
Dimming %	1.0%	0.1%	1.0%	1.0%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%

Note: For LH1, AN4, EA2 and LA2 drivers consult chart on page 8 to confirm appropriate dimming curve for compatibility with selected control.

### SPACING

Recommended fixture spacing is 36" on center with 36" setback from wall plane.

### MAXIMUM ALLOWABLE REMOTE DRIVER WIRING DISTANCES

DRIVER	WIRE AWG				
	12	14	16	18	20
AN4, LN2	285'	180'	113'	71'	45'
LH1	60'	40'	25'	15'	-
EA2, LA2, ED1, LD1, AS, CS	-	-	118'	72'	46'

### LISTING

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

NEMA 410 Compliant.

U.S. Patent: 10,317,066

### BUY AMERICAN ACT

All Fraxion4 High Flux Wallwash configurations are Buy American Act compliant.

### WEIGHT

Fixture - 11lbs max

Remote Driver - 1.4 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

1. 08/08/2023: UPDATED WITH NEW LED AND OPTIC SYSTEM.

2. 02/08/2024: ADDED ATHENA AND CASAMBI CONTROL OFFERING, 2400K, AND WARM PROFILE TUNABLE WHITE.

3. 07/24/2024: DISCONTINUED L23 LUTRON HI-LUME 1% 2-WIRE DRIVER OFFERING.



# FRAXION4 HIGH FLUX WALLWASH

## DIMMING COMPATIBILITY

### PHILIPS DRIVER COMPATIBILITY

Power supply <b>AN4</b> Manufacturer	Family/Model #
Lutron Electronics	DVTV plus PP-DV
Lutron Electronics	DVSCTV plus PP-DV
Lutron Electronics	DVSTV
Lutron Electronics	DVSCSTV
Lutron Electronics	QSGRJ-XP plus GRX-TVI
Lutron Electronics	QSGRJ-XE plus GRX-TVI
Lutron Electronics	QSGR-XE plus GRX-TVI
Lutron Electronics	NFTV plus PP-DV
Lutron Electronics	NTSTV
Lutron Electronics	RMJ-5T
Lutron Electronics	RMJS-8T
Lutron Electronics	FCJS-010
Leviton	IllumaTch IP7 series
Philips	Sunrise - SR1200ZTUNV

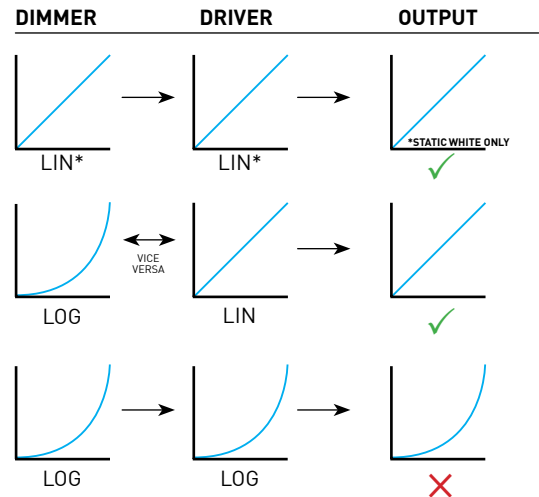
### LUTRON DRIVER COMPATIBILITY

Power supply <b>LH1</b> 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 Homeworks QS control unit	QSN-2ECO-S
GRAFIK Eye QS control unit Homeworks QS control unit	QSGRJ-_E (wireless) QSGR-_E
Quantum Hub	QP2-__2C
Quantum Hub	QP2-__6C
Quantum Hub	QP2-__8C
Homeworks QS power module myRoom Plus power module	LQSE-2ECO-D

### eldoLED DRIVER COMPATIBILITY

Power supply <b>EA2</b> Manufacturer	Family/Model #
Busch-Jaeger	2112U-101
Jung	240-10
Leviton Lighting Controls	IP710-DLX
Lightolier Controls	ZP600FAM120
Merten	5729
Pass & Seymour	CD4FB-W
The Watt Stopper	DCLV1
Synergy	ISD BC
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
Power supply <b>LA2</b> Manufacturer	Family/Model #
Lutron Electronics	Nova T® - NTFTV
Lutron Electronics	Diva® - DVTV
Lutron Electronics	Nova® - NFTV
Lutron Electronics	GraxiEye® GRX-TVI w GRX3503
Lutron Electronics	Energy Savr Node™ - QSN-4T16-S
Lutron Electronics	TVM2 Module
Sensor Switch	nIO EZ
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