





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
							WW			
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	 STATIC WHITE 4.38" TALL HOUSING 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)	DOMESTIC (120V) L23 Lutron, Hi-Lume 1% 2-Wire* *(Not available for 53W packages)
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)	 WARM DIM 4.38" TALL HOUSING 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		UNIVERSAL (120-277V) 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, SOLdrive 0.1% 0-10V, LOG LA2 eldoLED, SOLdrive 0.1% 0-10V, LIN ED1 eldoLED, SOLdrive 0.1% DALI, LOG LD1 eldoLED, SOLdrive 0.1% DALI, LIN AS1 / Athena Control ASR eldoLED, SOLdrive 0.1%* *(Includes Athena Node. Extended lead time, consult factory. ASR includes shunt) CS1 / Casambi Control CSR eldoLED, SOLdrive 0.1%* *(Includes Casambi Node. Extended lead time, consult factory. CSR includes shunt)
					 TUNABLE WHITE 4.38" TALL HOUSING 90T30B 90+ CRI, 30W Cool Profile: 5000K - 2700K Lumens Divd. - 1684 Warm Profile: 4000K - 1800K Lumens Divd. - 1573	TH 5000K - 2700K TR 4000K - 1800K				TUNABLE WHITE POWER SUPPLIES (120-277V) 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)
					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
RBA				
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.

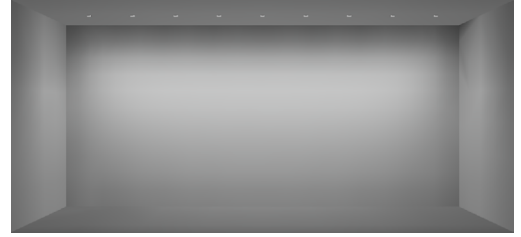
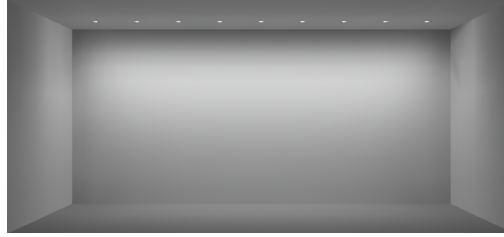
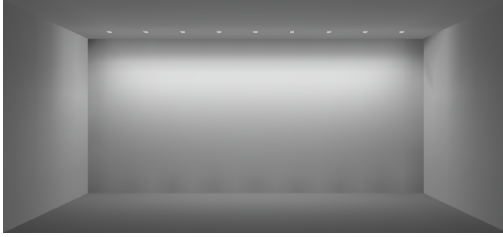
- EMB-S-100-120-LEDX** 100 watt max capacity, 120 VAC 60Hz, 0-10V Dimmable
- EMB-S-100-277-LEDX** 100 watt max capacity, 277 VAC 60Hz, 0-10V Dimmable
- EMB-S-250-120/277-LEDX** 250 watt max capacity, 120 or 277 VAC 60Hz, 0-10V Dimmable

***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

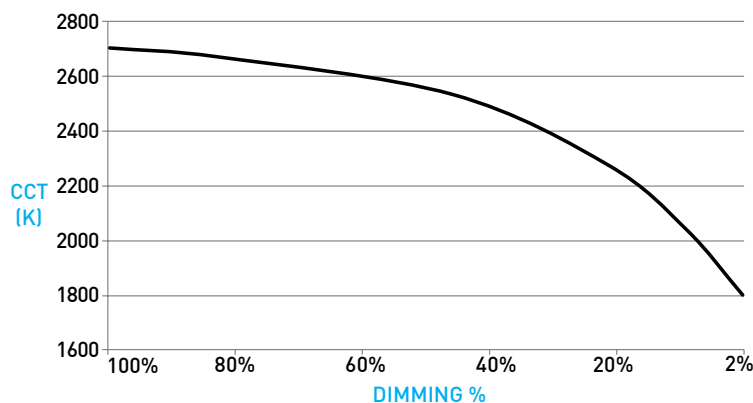
UNIFIED GLARE RATING	
WALLWASH OPTIC	
>19	

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

WARM DIM PERFORMANCE

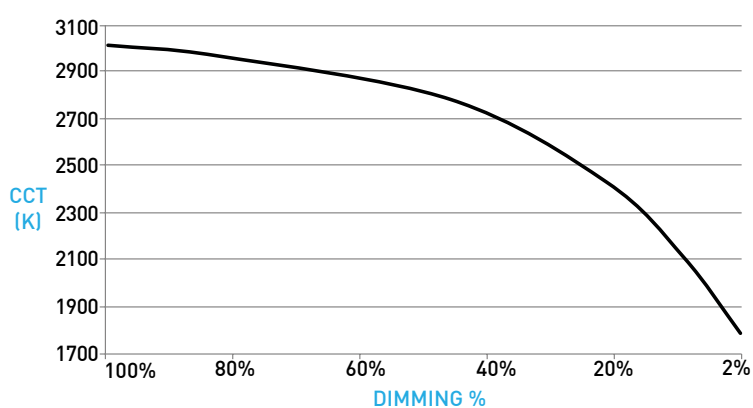
WARM DIM TO MIRROR INCANDESCENT DIMMING PROFILE

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

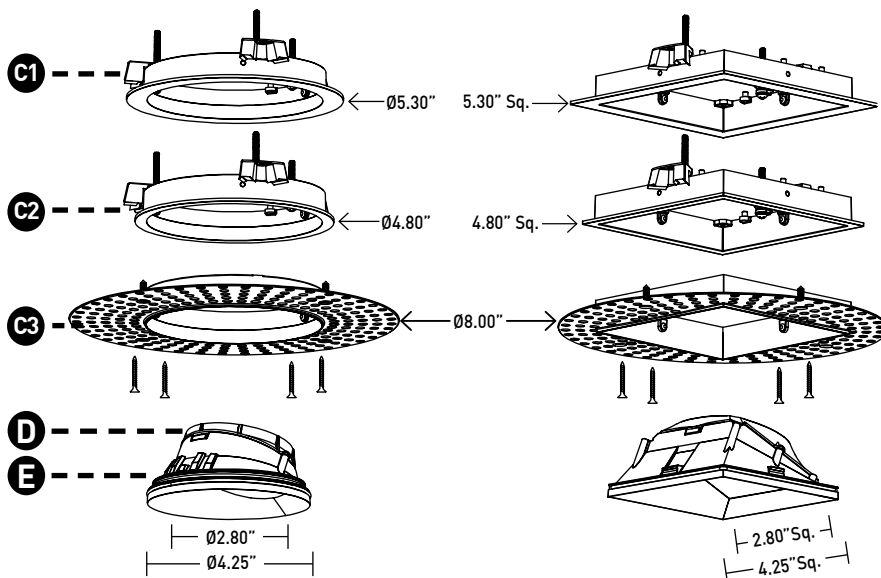
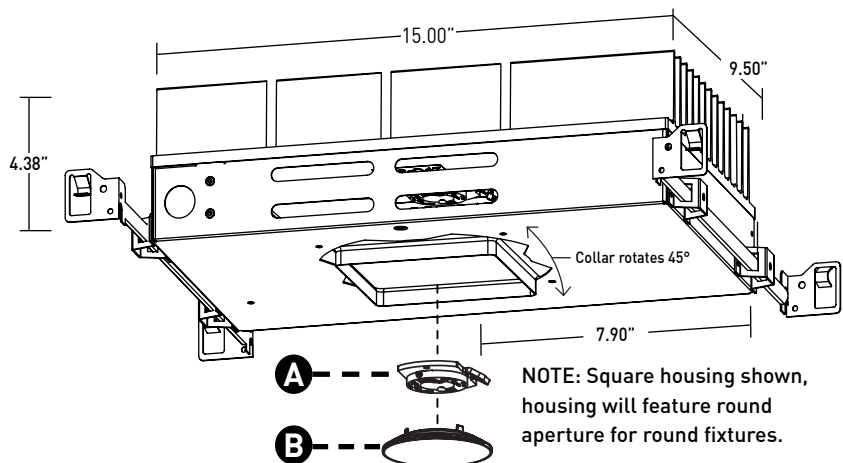


FRACTION4 HIGH FLUX WALLWASH

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.

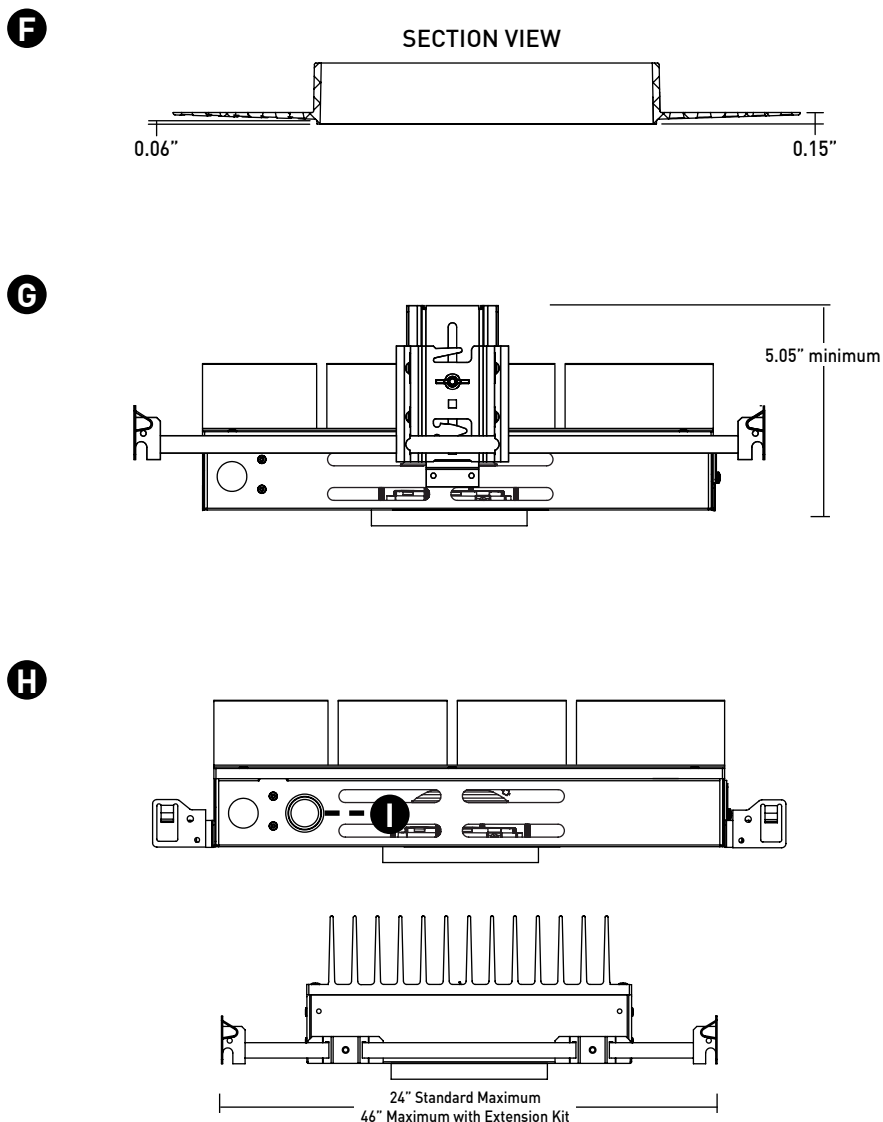
Athena Model Numbers: A-WN-D01-RF-BL & DFC-OEM-DBI

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

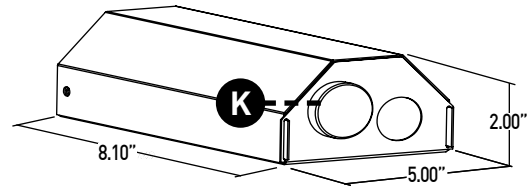


FRACTION4 HIGH FLUX WALLWASH

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).

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

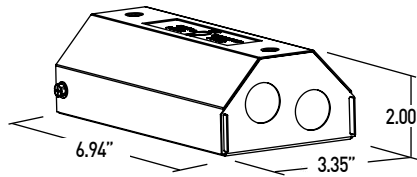
Athena Model Numbers: A-WN-D01-RF-BL & DFC-OEM-DBI

Casambi Model Number: BT-S1E1-5400

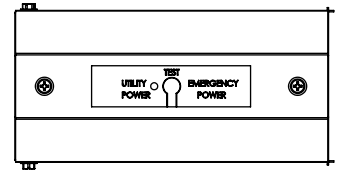
- L** **ATHENA / CASAMBI EM SHUNT**
- Included with drivers specified as ASR, ATR, CSR, or CTR. One required for each wireless EM fixture, requires class 2 control wiring between fixture and shunt. Features integrated test switch.

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	L23	LH1	LP1	AN4	LN2	EA2	LA2	ED1	LD1	AS	CS
Minimum °C	0 °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	40 °C
Dimming %	1.0%	1.0%	0.1%	1.0%	1.0%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%

Note: For L23, 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'
L23, 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.

FRAXION4 HIGH FLUX WALLWASH

DIMMING COMPATIBILITY

PHILIPS DRIVER COMPATIBILITY

Power supply AN4 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

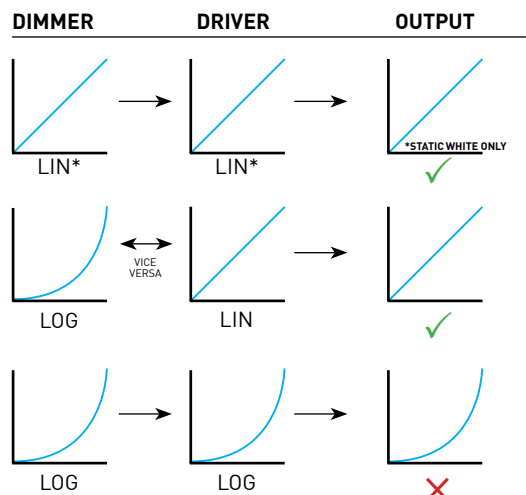
Power supply L23 Lutron Product Family	Part No.
Maestro WirelessR 600 W dimmer	MRF2-6ND-120-
Maestro WirelessR 1000 W dimmer	MRF2-10ND-120-
Caséta® Wireless Pro 1000 W dimmer	PD-10NXD-
GRAFIK T™ CL® dimmer	GT-250M-GTJ-250M-
HomeWorks® QS adaptive dimmer	HQRD-6NA-
HomeWorks® QS 600 W dimmer	HQRD-6ND-
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 LH1 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 EA2 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 LA2 Manufacturer	Family/Model #
Lutron Electronics	Nova T® - NTFTV
Lutron Electronics	Diva® - DVTV
Lutron Electronics	Nova® - NFTV
Lutron Electronics	GraxEye® GRX-TVI w GRX3503
Lutron Electronics	Energy Savr Node™ - QSN-4T16-S
Lutron Electronics	TVM2 Module
Sensor Switch	nI0 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