

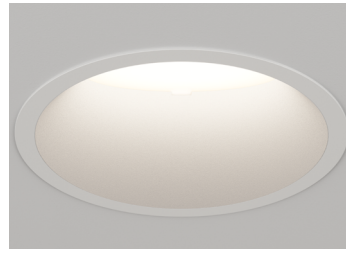
FRAXION®4

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 / HOUSING



Quick Ship Product. All rough in components ship within 10 days up to quantities of 100.



JA8-2019 INDICATED BY SHADING

SHAPE	TRIM	RATING	FLANGE FINISH	BAFFLE FINISH	LUMEN PACKAGE	CCT	OPTIC	INSTALL TYPE	CEILING THICKNESS	DRIVER
F4R Round	FWW Standard Flange MWW Microflange TWW Trimless	1 Dry/Damp 2 Wet* *(Requires provided suction cup to service or aim & focus)	WH White BK Black PR Primer AU Cashmere Gold AG Satin Silver BB Burnt Bronze 00 Trimless* CF Custom Finish* *(Consult Factory)	WH White BK Black PR Primer AU Cashmere Gold AG Satin Silver BB Burnt Bronze CF Custom Finish* *(Consult Factory)	LOW FLUX STATIC WHITE 80C12A 80+ CRI, Delivered Lumens - 599 80C16A 80+ CRI, Delivered Lumens - 819 80C23A 80+ CRI, Delivered Lumens - 1129 90C10A 90+ CRI, Delivered Lumens - 495 90C14A 90+ CRI, Delivered Lumens - 677 90C19A 90+ CRI, Delivered Lumens - 933 97C10A 97+ CRI, Delivered Lumens - 452 97C12A 97+ CRI, Delivered Lumens - 617 97C17A 97+ CRI, Delivered Lumens - 851 HIGH FLUX STATIC WHITE 80C30B 80+ CRI, Delivered Lumens - 1724* *(Not available for IC housing applications) 90C26B 90+ CRI, Delivered Lumens - 1424* *(Not available for IC housing applications) 97C23B 97+ CRI, Delivered Lumens - 1298* *(Not available for IC housing applications) WARM DIM 90W11A 90+ CRI, Delivered Lumens - 625 Incandescent Profile 90W13A 90+ CRI, Delivered Lumens - 658 Halogen Profile *SEE PAGE 3 FOR DETAILED WARM DIM PROFILE COMPARISON. TUNABLE WHITE 90T10B 90+ CRI, Delivered Lumens - 590* *(Not available for Remodel applications) 90T14B 90+ CRI, Delivered Lumens - 807* *(Not available for Remodel applications) *ALL DELIVERED LUMEN OUTPUTS AND T24 COMPLIANCE REFLECT 3000K PAIRED WITH SOFT FOCUS LENS. REFERENCE PAGE 3 FOR ADDITIONAL T24 COMPLIANT CONFIGURATIONS.	22 2200K* *(Only available with 90+ CRI) 27 2700K 30 3000K 35 3500K 40 4000K 27 2700K 30 3000K 35 3500K* *(Not available for 97+ CRI) 40 4000K WL 2700K - 1800K WD 3200K - 1800K TW 5000K - 2700K	WW Wallwash Optic IC IC NC NIC AT IC, Airtight* *(Chicago Plenum, Airtight & Title 24 compliant housing) HOUSING REMOTE DRIVER IR IC, Remote NR NIC, Remote AR IC, Airtight, Remote* *(Chicago Plenum, Airtight & Title 24 compliant housing) REMODEL RM Remodel RR Remote, Remodel	HOUSING INTEGRAL DRIVER IC IC NC NIC AT IC, Airtight* *(Chicago Plenum, Airtight & Title 24 compliant housing) HOUSING REMOTE DRIVER IR IC, Remote NR NIC, Remote AR IC, Airtight, Remote* *(Chicago Plenum, Airtight & Title 24 compliant housing) REMODEL RM Remodel RR Remote, Remodel	1 0.125" - 1.25"* *(Housing) 0.25" - 1.25"* *(Remodel) 0.50" - 1.25"* *(All Trimless) T 0.125" - 1.25"* *(Includes adjustable housing height bracket)	DOMESTIC (120V) TR2 Philips, 2% Leading/Trailing/Triac* *(Not available for 80C12A, 90C10A, or 97C10A unless 10° degree optic is specified. Not available for 80C30B, 90C26B, or 97C23B) L23 Lutron, Hi-Lume 1% 2-Wire UNIVERSAL (120-277V) LH1 Lutron, Hi-Lume 1% Ecosystem AN4 Philips Xitanium 1% 0-10V, LOG LN2 Philips Xitanium 1% 0-10V, LIN 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 TUNABLE WHITE POWER SUPPLIES (120-277V) DD1 eldoLED, DUALdrive 0.1% DALI, LOG DG1 eldoLED, DUALdrive 0.1% 0-10V, LOG DL1 eldoLED, DUALdrive 0.1% 0-10V, LIN

(WH) White Powder Coat	(BK) Black Powder Coat	(AU) Cashmere Gold Powder Coat	(AG) Satin Silver Powder Coat	(BB) Burnt Bronze Powder Coat

PART NUMBER NOTES

- Trim ships as e.g., F4SMWW1-WHWH-90C10A2-5I1-AN4
- Housing ships as e.g., ICT-F4R-01
- Driver ships with trim
- Remote driver ships with trim as e.g., PSF4-RMT-90C-10A-1L23

FRAXION4 WALLWASH

ACCESSORIES

REPLACEMENT BAFFLE ASSEMBLY (INCLUDES EFFECTS DEVICE)

ASSEMBLY	SHAPE	TRIM	RATING	FLANGE FINISH
RBA				1
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		

LOW FLUX AND WARM DIM REPLACEMENT OPTIC

Interchangeable optics accessible through fixture aperture.

☐ **RO-70-WW-1** Wallwash optic

HIGH FLUX AND TUNABLE WHITE REPLACEMENT OPTIC

Interchangeable optics accessible through fixture aperture.

☐ **RO-70-WW-2** Wallwash optic

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" - 1.00".

☐ **DHA-TG-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

FRAXION4 WALLWASH

PERFORMANCE - 3000K

LUMEN PACKAGE	WATTAGE	WALLWASH OPTIC	
		DELIVERED	LPW
80C12A	10	599	59
80C16A	17	819	57
80C23A	21	1129	53
80C30B	30	1724	57
90C10A	10	495	49
90C14A	17	677	47
90C19A	21	933	44
90C26B	30	1424	47
97C10A	10	452	45
97C12A	17	617	43
97C17A	21	851	40
97C23B	30	1298	43
90W11A	14	625	45
90W13A	14	658	47
90T10B	14	590	42
90T14B	22	807	36

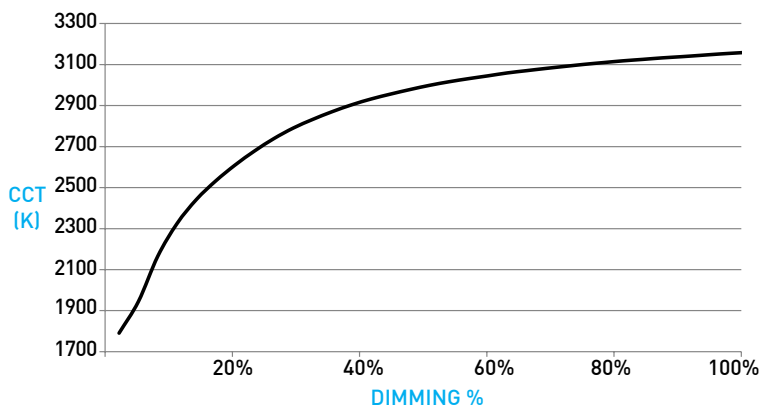
OUTPUT MULTIPLIER	
CCT	CCT SCALE
2200K (Consult factory for JA8 details)	0.800
2700K	0.957
3000K	1.000
3500K	1.019
4000K	1.030

TITLE 24 JA8-2019 INDICATED BY SHADING

WARM DIM PERFORMANCE

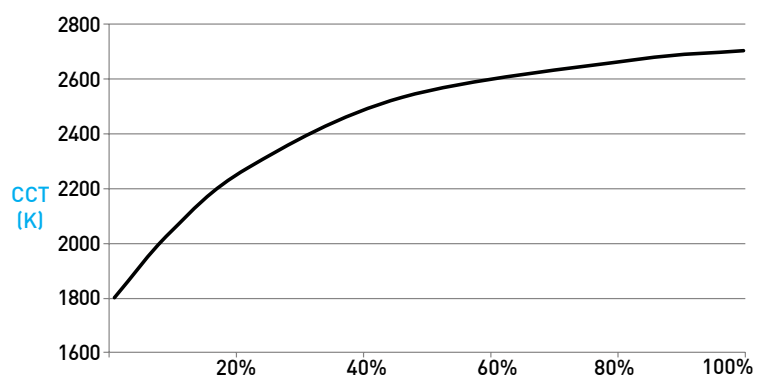
WARM DIM TO MIRROR HALOGEN DIMMING PROFILE

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)	658	526	461	329	132	65	13
Power (W)	14	11	10	7	3	1.5	0.3
Efficacy (LPW)	47	47	47	47	47	47	47



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)	625	500	437	312	125	62	12
Power (W)	14	11	10	7	3	1.5	0.5
Efficacy (LPW)	45	45	45	45	45	45	45



FRAXION4 WALLWASH

DOWNLIGHT

A BAFFLE

ROUND / SQUARE

Die-cast removable baffle provides easy access to tilting mechanism. 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 0.125" to 1.25". Snap-on spacer clips (3X) supplied for ceiling thickness below 0.50" only.

C1 STANDARD FLANGE PROFILE

Provides 0.86" total contractor (goof) allowance with 0.50" flange. Thickness measures 0.06". Wet location features integral silicone gasket.

C2 MICROFLANGE PROFILE

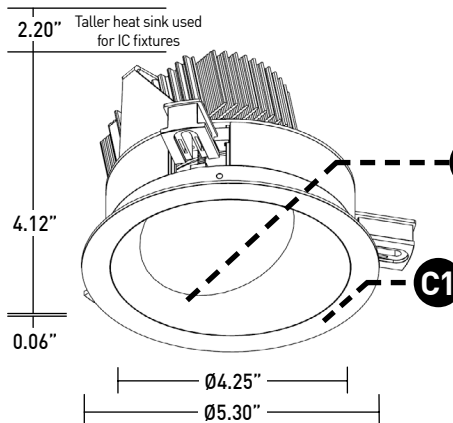
Provides industry standard 0.42" total contractor (goof) allowance with 0.28" flange. Thickness measures 0.06". Wet location features integral silicone gasket.

C3 TRIMLESS PROFILE

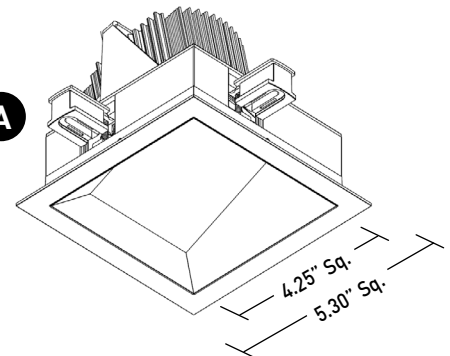
Installs totally flush with the ceiling with no visible trim. Features integrated appliqué for plaster floating directly to the baffle, thickness measures 0.15" including 0.06" plaster stop. Not recommended for stucco applications.

DIMENSIONS / DRAWINGS

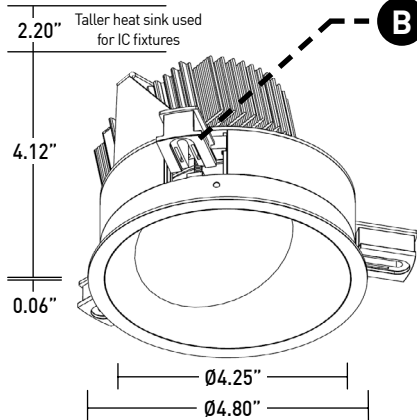
F4RFWW



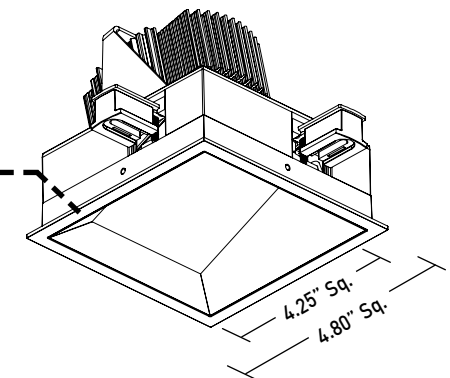
F4SFWW



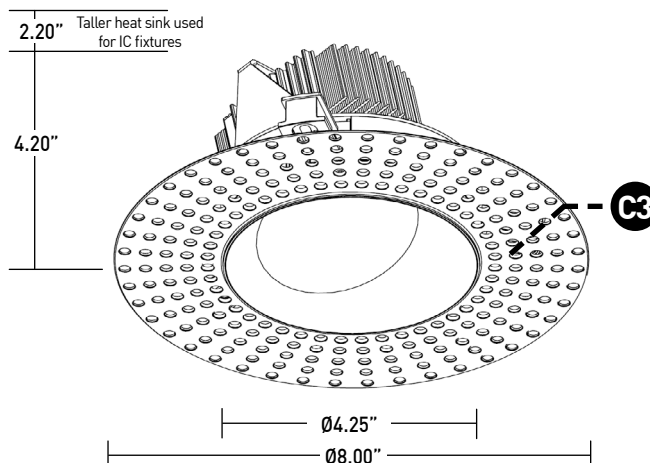
F4RMWW



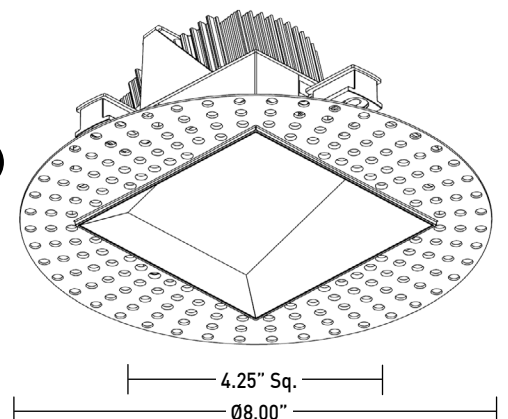
F4SMWW



F4RTWW



F4SWW



FRAXION4 WALLWASH

DOWNLIGHT / HOUSING

- D OPTIC**
Proprietary wallwash optic design integrates Reflection, Refraction and TIR principles.

- E EFFECTS DEVICES**
Asymmetrical spread lens, included and sealed in place, combined with angled optic and wide aperture enhance uniformity.

HOUSING / MOUNTING

- F ICT (IC) HOUSING - TALL**
- For IC ceilings.
 - Chicago Plenum, Airtight and Title 24 (JA8) listed.
 - Accommodates max 1711 delivered lumens.
 - No setback from polycell spray foam insulation having max R-Value of 60 on all sides and top of housing.

- G NCM (NIC) HOUSING - MEDIUM**
- 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.

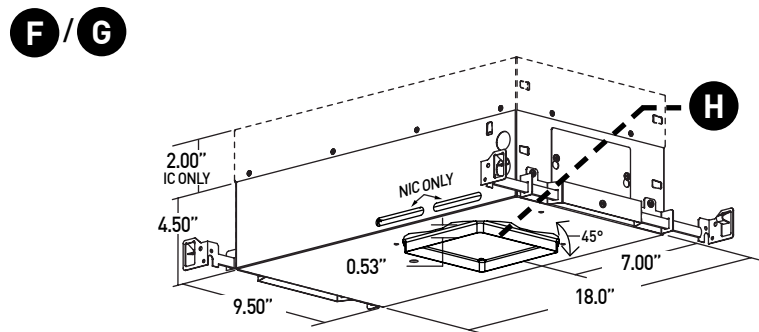
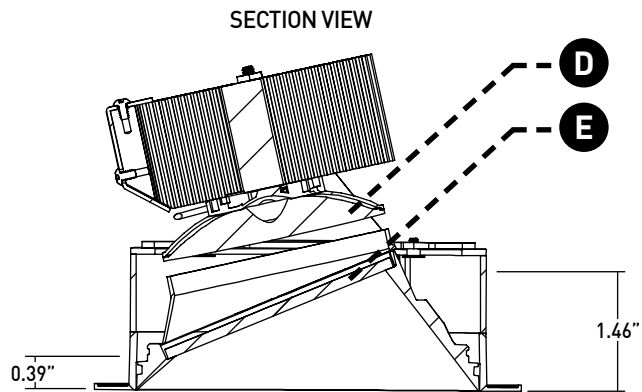
- H HOUSING COLLAR**
- Requires 4.625" cutout.
 - Fixed round aperture or square aperture with 45 degree rotation that locks from below providing easy alignment of square aperture housings.
 - Accommodates varying ceiling thicknesses.

- I ADJUSTABLE HANGER BAR HEIGHT ACCESSORY**
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.

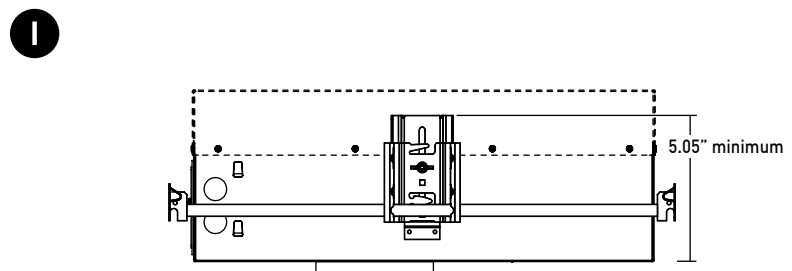
HOUSING / MOUNTING NOTES

- 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, and long side of Low Flux housings; 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.
- Driver assembly ships with trim, not housing. Housing and trim feature mating quick-connect plugs for ease of installation.

DIMENSIONS / DRAWINGS



NOTE: Square housing shown, housing will feature round aperture for round fixtures.



FRAXION4 WALLWASH

REMOTE POWER SUPPLY

- J** Provided with install types "IR", "NR" and "AR". 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.

REMODEL POWER SUPPLY

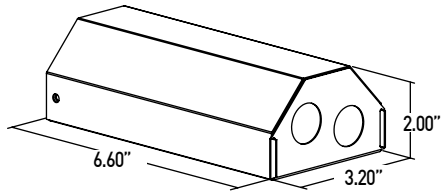
- K** REMODEL WITH NON-IC TETHERED POWER SUPPLY
- Requires 4.42" cutout.
 - Installs without conventional housing using integral mounting clamps.
 - Tethered power supply / junction box with metal conduit protected wiring and quick-connect plug between fixture and power supply.
 - Minimum 0.75" clearance from top of trim.
 - Minimum setback from combustible and non-combustible materials of 6.63" radius from fixture centerline; minimum 3.00" from surfaces of power supply / junction box if not situated within above noted radius from fixture centerline.
 - Minimum additional 3.00" setback from insulation material with max R-Value 30 from any surface of downlight fixture assembly.
 - Minimum additional 6.00" setback from polycell spray foam insulation with max R-Value 60 from any surface of downlight fixture assembly.

- L** REMOTE APPLICATIONS
- Remote power supply and PSF4-RMT-AK accessory kit provided with install type "RR".

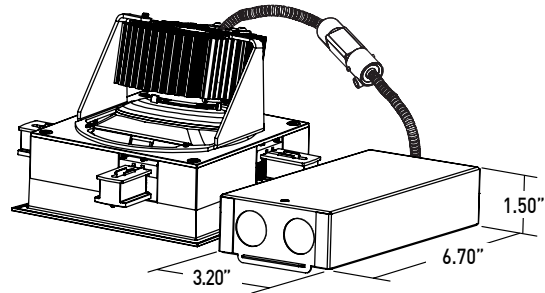
REMODEL NOTES

- Do not install in environments where ambient temperatures exceed 40°C (104°F).
- Power supply compartment and all splice connections serviceable from room side.
- Consult factory for spacing requirements for any installations exceeding R-Value 60.

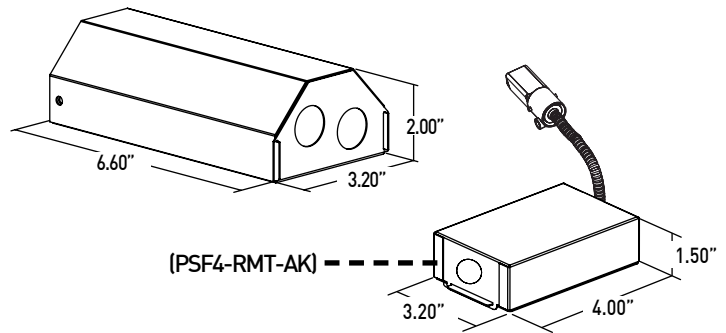
J



K



L



FRAXION4 WALLWASH

TECHNICAL

CONSTRUCTION

Downlight: 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 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

	ELV		ECO	0-10V						DALI		
Power Supply	TR2	L23	LH1	AN4	LN2	EA2	LA2	DL1	DG1	ED1	LD1	DD1
Minimum °C	-20 °C	0 °C	0 °C	-20 °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	40 °C	40 °C	40 °C	40 °C
Dimming %	2.0%	1.0%	1.0%	1.0%	1.0%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%

Note: For TR2, L23, LH1, LP1, AN4, EA2 and LA2 drivers consult chart on page 8 to confirm appropriate dimming curve for compatibility with selected control.

MAXIMUM ALLOWABLE REMOTE DRIVER WIRING DISTANCES

DRIVER	WIRE AWG				
	12	14	16	18	20
TR2, AN4, LN2	285'	180'	113'	71'	45'
L23, LH1	60'	40'	25'	15'	-
EA2, LA2, ED1, LD1, DG1, DL1, DD1	-	-	118'	72'	46'

SPACING

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

LISTING

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

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

U.S. Patent: 10,344,958

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

1.01/12/2021: ADDED 2200K, 2700K-1800K WARM DIM AND 10 DEGREE OPTIC OFFERINGS.

2.03/15/2021: UPDATED HIGH FLUX STATIC WHITE PHOTOMETRICS.

3.03/15/2021: REMOVED HIGH FLUX 97+ CRI 3500K OFFERING.

FRAXION4 WALLWASH

DIMMING COMPATIBILITY

PHILIPS DRIVER COMPATIBILITY

Power supply TR2 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
Power supply AN4 Manufacturer	Family/Model #
Lutron Electronics	DVTv plus PP-DV
Lutron Electronics	DVSCV 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	NFTV plus PP-DV
Lutron Electronics	NTSTV
Lutron Electronics	RMJ-5T
Lutron Electronics	RMJS-8T
Lutron Electronics	FCJS-010
Leviton	IlumaTch 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 / LP1 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 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	GrafixEye® 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

