FRAXION®4 SLIM

ADJUSTABLE

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

PROJECT NAME:	TYPE:





ORDERING INFORMATION - DOWNLIGHT / HOUSING

JA8-2019 INDICATED BY SHADING

SHAPE	TRIM	RATING	FLANGE FINISH	BAFFLE FINISH	LUMEN PACKAGE	ССТ	OPTIC	INSTALL TYPE	CEILING THICKNESS	DRIVER	EFFECTS DEVICE
F4R Rour		e 1 Dry/Damp 2 Wet* * (Requires provided suction c cup to service or aim & focus)	FLANGE FINISH WH White BK Black PR Primer AU Cashmere Gold AG Satin Silver BB Burnt Bronze 00 Trimless* * (Required for trimless) CF Custom Finish* * (Consult Factor)	WH White BK Black PR Primer AU Cashmere Gold AG Satin Silver BB Burnt Bronze CF Custom Finish* * (Consult Factory)	LOW FLUX STATIC WHITE 3.20" TALL HOUSING 80C12A 80+ CRI, Delivered Lumens - 872	22 2200K* *(Only available with 90+ CRI) 27 2700K 30 3000K	OPTIC 10 10°* * [Only available with 80C12A, 90C10A and 97C10A. Not available with 2200K] 15 15° 25° 40 40° 60 60° 85 85°* * [Requires -14 WDL effects device]	INTEGRAL DRIVER X IC Y NIC C IC, Airtight* * (Chicago Plenum, Airtight & Title 24 compliant housing) REMOTE DRIVED		DOMESTIC (120V) TR2 Philips, 2% Leading/ Trailing/Triac* *(Not available for 80C12A, 90C10A, and 97C10A unless 10° degree optic is specified) L23 Lutron, Hi-Lume 1% 2-Wire UNIVERSAL (120-277V) LH1 Lutron, Hi-Lume 1% Ecosystem LP1 Lutron, Premier	STANDARD EFFECTS DEVICE 04 Soft Focus Lens NL No Lens * *(Standard with 10° optic.) Not available for Wet Location, or Airtight Housings) ALTERNATE EFFECTS DEVICE 03 Clear Glass Lens* *(Not available for
	TAT Trimless Transitional Baffle				97C17A 97+ CRI, Delivered Lumens - 1238 LOW FLUX WARM DIM 3.20" TALL HOUSING 90W11A 90+ CRI, Delivered Lumens - 795 Incandescent Profile 90W13A 90+ CRI, Delivered Lumens - 837 Halogen Profile *SEE PAGE 3 FOR DETAILED WARM DIM PROFILE COMPARISON.	WL 2700K - 1800K WD 3200K - 1800K	25 25° 40 40° 60 60° 85 85°* * (Requires -14 WDL effects device)	W NIC, Remote D IC, Airtight, Remote* *(Chicago Plenum, Airtight & Title 24 comptiant housing)		Lutto, Premer O.1% Ecosystem AN4 Philips Xitanium 1% 0-10V, LOG LN2 Philips Xitanium 1% 0-10V, LIN EA2 eldol.ED, SOLOdrive O.1% 0-10V, LIN ED1 eldol.ED, SOLOdrive O.1% DALI, LOG LD1 eldol.ED, SOLOdrive O.1% DALI, LOG	Warm Dim) 05 Frosted Glass Lens 08 Frosted Soft Focus Lens 14 Wide Distribution Lens* * (Required and only available for 85° beam spread) 26 Frosted Linear Spread Lens 28 Adjustable Honeycomb Louver and Soft Focus Lens * * (Not available with 60° ootic. Wet location, or
					LOW FLUX TUNABLE WHITE 3.20" TALL HOUSING 90T10B 90+ CRI, Delivered Lumens - 672 90T14B 90+ CRI, Delivered Lumens - 917 *ALL DELIVERED LUMEN OUTPUTS AND T24 COMPLIANCE REFLECT 3000K PAIRED WITH 40° OPTIC AND SOFT FOCUS LENS.	TW 5000K - 2700K	15 15° 25 25° 40 40° 60 60° 85 85°* * (Requires -14 WDL effects device)			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	Airtight Housings)

(WH)

White

Powder Coat

(BK) Black Powder Coat (AU)

Cashmere Gold Powder Coat Powder Coat

(AG) Satin Silver

(BB) Burnt Bronze Powder Coat

PART NUMBER NOTES

- Housing and trim ship as e.g., F4RMAS1-WHWH-90C14A2-3X1-AN4
- Remote driver ships with fixture as e.g., PSF4-RMT-90C-14A-1L23

ACCESSORIES

ROUND ALTERNATE EFFECTS DEVICES

Dry/Damp location only.

Wet location requires alternate baffle.

☐ CGL-F4R Clear Glass Lens*

*(Not available for Warm Dim)

☐ FGL-F4R Frosted Glass Lens ☐ SFL-F4R Soft Focus Lens

☐ FSFL-F4R Frosted Soft Focus Lens

□ WDL-F4R Wide Distribution Lens*

*(Required and only available for 85° beam spread)

□ FLSL-F4R Frosted Linear Spread Lens

SQUARE ALTERNATE EFFECTS DEVICES

Dry/Damp location only.

Wet location requires alternate baffle.

☐ CGL-F4S Clear Glass Lens*

*(Not available for Warm Dim) Frosted Glass Lens

☐ FGL-F4S ☐ SFL-F4S Soft Focus Lens

☐ FSFL-F4S Frosted Soft Focus Lens □ WDL-F4S Wide Distribution Lens*

*(Required and only available for 85° beam spread)

☐ FLSL-F4S Frosted Linear Spread Lens

ADJUSTABLE HCL ASSEMBLY

Dry / Damp location only.

□ OLR-F4RS1-SFL-HCL Adjustable Honeycomb

Louver and Soft Focus Lens* *(Not available for 60° optic, or Airtight

housings)

REPLACEMENT BAFFLE ASSEMBLY (INCLUDES EFFECTS DEVICE)

ASSEMBLY		SHAPE	TRIM	RATING		FLANGE FINISH				EFFECTS DEVICE
RBA	-				-		-	1	-	
REPLACEMENT BAFFLE ASSEMBLY		F4S Square	FAS Slandard Flange MAS Microflange TAS Trimless FAS Slandard Flange MAS Microflange TAS Trimless TAS Trimless FAT Slandard Flange Transitional Baille TAT Trimless Transitional Baille	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)				Leave blank for standard Soft Focus Lens CGL Clear Glass Lens *

STATIC WHITE AND WARM DIM REPLACEMENT OPTICS

Interchangeable optics accessible through fixture aperture.

□ R0-70-15-1 15° optic *

*(Not available for Warm Dim) □ R0-70-25-1 25° optic

☐ **RO-70-40-1** 40° optic

□ **RO-70-60-1** 60° optic

TUNABLE WHITE REPLACEMENT OPTICS

Interchangeable optics accessible through fixture aperture.

□ **RO-70-15-2** 15° optic

☐ **RO-70-25-2** 25° optic □ **RO-70-40-2** 40° optic

☐ **RO-70-60-2** 60° optic

REPLACEMENT SUCTION TOOL

One included with every six fixtures designated Wet location.

☐ **F4-T00L-SUCTION** Allows for removal of baffle with Wet location

TG BRACKET ASSEMBLY

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



PERFORMANCE - 3000K

LUMEN	WATTAGE	10° 0 No soft fo		15° 0 SOFT FOC		25° 0 SOFT FOO			40° OPTIC SOFT FOCUS LENS		PTIC SUS LENS	85° OPTIC WIDE DISTRIBUTION LENS		
PACKAGE		DELIVERED	LPW	DELIVERED	LPW	DELIVERED	LPW	DELIVERED	LPW	DELIVERED	LPW	DELIVERED	LPW	
80C12A	10	946	66 (14W)	860	85	793	78	872	86	908	90	710	70	
80C16A	14	-	-	1174	81	1083	77	1191	82	1241	86	969	67	
80C23A	21	-	-	1620	76	1494	70	1642	77	1711	80	1337	62	
90C10A	10	801	56 (14W)	711	70	656	65	721	71	751	74	587	58	
90C14A	14	-	-	971	67	895	62	984	68	1025	71	801	55	
90C19A	21	-	-	1338	62	1235	58	1357	63	1414	66	1105	52	
97C10A	10	739	51 (14W)	648	78	598	59	657	65	685	68	535	53	
97C12A	14	-	-	885	75	816	56	897	62	935	65	730	51	
97C17A	21	-	-	1220	70	1126	53	1238	58	1289	60	1007	47	
90W11A	14	-	-	-	-	804	57	795	57	828	59	646	46	
90W13A	14	-	-	-	-	846	60	837	59	872	62	680	48	
007400	1/			697	49		47	672	/0	450	47	F00	0.77	
90T10B	14	-	-	697	49	661	47	6/2	48	670	47	523	37	
90T14B	22	-	-	924	42	917	41	917	41	904	41	706	32	

OUTPUT MULTIPLIER							
ССТ	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	1.05						
SFL	1.00						
FGL	0.90						
FSFL	0.87						
FLSL	0.83						
WDL	0.78						

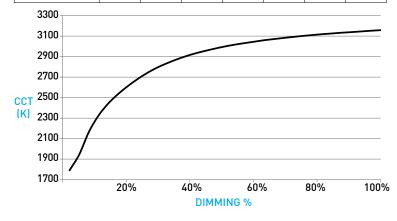


JA8-2019 INDICATED BY SHADING

WARM DIM PERFORMANCE

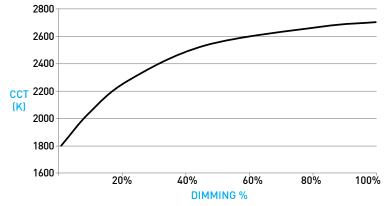
WARM DIM TO MIRROR HALOGEN DIMMING PROFILE

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)	837	670	586	418	167	84	17
Power (W)	14	11	10	7	3	1.5	0.3
Efficacy (LPW)	59	59	59	59	59	59	59



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%
сст (к)	2700	2650	2620	2520	2180	1950	1800
Light Output (Lm)	795	636	556	397	159	79	16
Power (W)	14	11	10	7	3	1.5	0.3
Efficacy (LPW)	57	57	57	57	57	57	57



reserves the right to change or withdraw specifications without prior notice.

DOWNLIGHT / HOUSING

A ADJUSTABILITY

Aiming mechanism is integral to the housing, providing hot-aim tilt up to 40° and 365° rotation. Sliding pivot point optimizes center beam, ensuring unclipped beam of 15° at 40° tilt and 25° at 30° tilt. 1° tilt increments with 5° indicators, tilt guide included (see (A) for section view).

🖪 LED

Integral LED module design enables field service / replacement through housing aperture.

OPTIC

Proprietary optic integrates Reflection, Refraction and TIR offering 10°, 15°, 25°, 40° & 60° beams.

11 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.

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.

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.

(3) EFFECTS DEVICES

Soft focus lens included and sealed in Wet location option. Fixture is limited to 1 lens. Suction tool provided for removal of wet location baffles.

adjustable HCL Assembly

Honeycomb Louver and Soft Focus Lens attach directly to optic with clip-on lens retainer and adjusts with fixture. Only compatible with no lens baffle. Dry/Damp locations only.

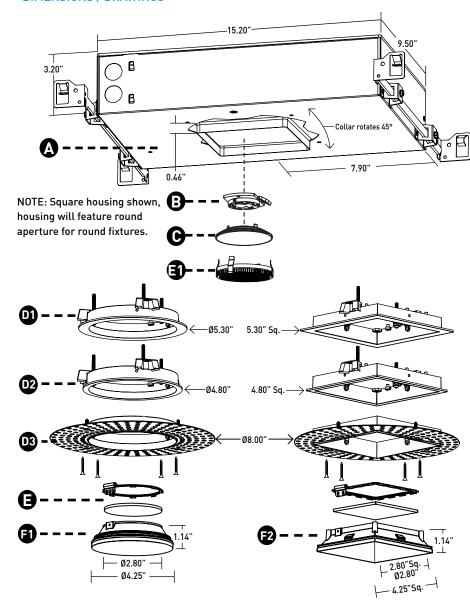
ROUND BAFFLE

Die-cast removable baffle provides easy access to tilting mechanism and features 72° glare cutoff. Minimizes aperture glare and conceals view into housing; includes silicone gasket.

SQUARE / TRANSITIONAL BAFFLE

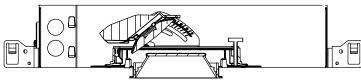
Die-cast removable baffle provides easy access to tilting mechanism and features 72° glare cutoff. Minimizes aperture glare and conceals view into housing; includes silicone gasket. Transitional baffle transitions from square aperture at ceiling plane to round aperture at light source.

DIMENSIONS / DRAWINGS





SECTION VIEW



DOWNLIGHT / HOUSING

TRIMLESS APPLIQUÉ DETAIL

Integrated appliqué for plaster floating directly to baffle.

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.

IC HOUSING

- For IC ceilinas.
- 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.

NIC HOUSING

- Minimum 0.50" setback from combustible and non-combustible materials on all sides and top of
- 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.

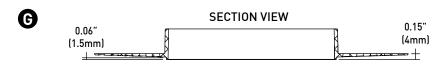
REMOTE POWER SUPPLY

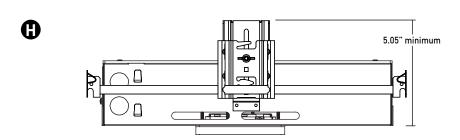
Provided with install Types "V", "W" and "D". Remote power supply provides additional driver options. Consult installation guide for maximum allowable secondary run lengths between PSF4-RMT and fixture. Must be installed in an accessible location. See page 6 for maximum allowable wiring distances.

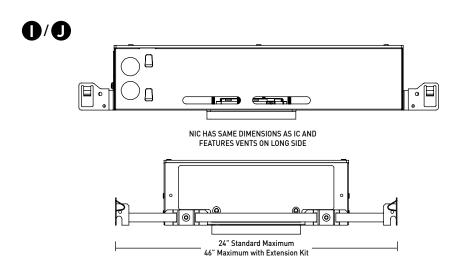
HOUSING NOTES

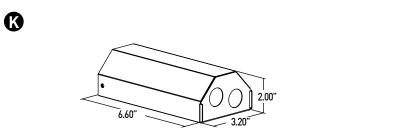
- Do not install in environments where ambient temperatures exceed 40°C (104°F).
- Power supply compartment and all splice connections may be serviced from room side.
- Consult factory for spacing requirements for any installations exceeding R-Value 60.
- Hanger bars fitted to short side of housing; 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.
- 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









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. 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 fieldreplaceable.

POWER SUPPLY PERFORMANCE AND DIMMING INFORMATION

	El	LV	EC	0		0-10V						DALI		
Power Supply	TR2	L23	LH1	LP1	AN4	LN2	EA2	LA2	DG1	DL1	ED1	LD1	DD1	
Minimum °C	-20 °C	0°C	0°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	40°C	40°C	
Dimming %	2.0%	1.0%	1.0%	0.1%	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 7 to confirm appropriate dimming curve for compatibility with selected control.

MAXIMUM ALLOWABLE REMOTE DRIVER WIRING DISTANCES

	WIRE AWG						
DRIVER	12	14	16	18	20		
TR2, AN4, LN2	285	180'	113′	71'	45'		
L23, LH1, LP1	60'	40'	25'	15'	-		
EA2, LA2, ED1, LD1, DG1, DL1, DD1	-	-	118'	72	46'		

LISTING

cTUVus listed to UL1598 standard for Dry / Damp and Wet locations. Chicago Plenum, Airtight and Title 24 JA8-2019 Listed.

U.S. Patent: 10.317.066

BUY AMERICAN ACT

All Fraxion4 Slim Adjustable configurations are Buy American Act compliant.

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. 04/30/2021: REMOVED QUICK SHIP.
- 3. 11/08/2021: ADDED LP1 DRIVER OFFERING AND DISCONTINUED 90T20B OFFERING.



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	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 Lutron Electronics	RMJ-5T
Lutron Electronics	RMJ-5T
Lutron Electronics Lutron Electronics	RMJ-5T RMJS-8T

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-2FC0-S
Homeworks QS control unit	
GRAFIK Eye QS control unit Homeworks QS control unit	QSGRJE (wireless) QSGRE
Quantum Hub	QP22C
Quantum Hub	QP24C
Quantum Hub	QP26C
Quantum Hub	QP28C
Homeworks QS power module myRoom Plus power module	LQSE-2ECO-D

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	nIO EZ
ABB	SD/S 2.16.1



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