

FLUXWERX®

SPECIFICATION DATA

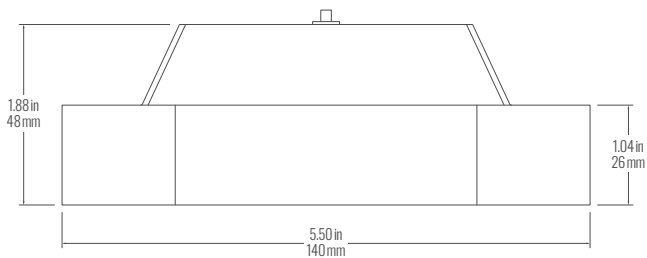
LOOP SUSPENDED (LS1|LS3)

CATALOG

PROJECT

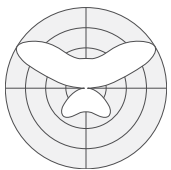
NOTES

CROSS SECTION

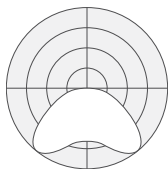


DISTRIBUTIONS

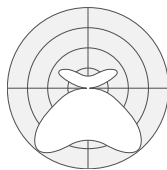
65 Up | 35 Dn (LS1xA)



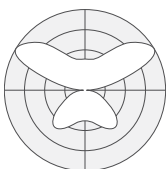
100 Dn (LS1xB)



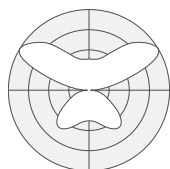
20 Up | 80 Dn (LS1xD)



55 Up | 45 Dn (LS1xE)



Indep. Up | Dn (LS3xB)
(Full: 55 Up | 45 Dn)



PERFORMANCE FOCUS

55 Up | 45 Dn, 80 CRI 4000 K (LS1xE40)

	Energy (W/4ft)	Light (lm/4ft)	Efficacy (lm/W)
A	19 W	2500	136
B	23 W	3000	133
C	29 W	3700	131
D	38 W	4900	129

Color Matching (SDCM)	Lumen Maintenance (hr)	
	L90 per TM21	L70 Estimate
< 2	> 60,000	> 200,000

Nominal values, refer to back pages for full performance data.

FEATURES

- Highly efficacious radial Anidolic optics deliver an axially symmetric batwing distribution for wide row spacing with outstanding ceiling and workplane uniformity.
- Multiple high performance direct & direct/indirect general area lighting versions and an independently controlled Up | Dn switching option.
- Precision machined, clear anodized extruded aluminum and 3 standard powdercoat finishes.
- To minimize installation time and ensure precision fit and finish, all fixtures arrive with machined endcaps, joints and power drop cords factory preinstalled.
- Companion Loop Recessed family with 6" and 1' wide versions available, as well as 2x2 and 2x4 sizes.

Declare.



SPECIFICATION DATA
LOOP SUSPENDED (LS1|LS3)

ORDER GUIDE

1	2	3	4	5	6	7	8	9	10	11	OPTIONS	CONTROLS

1	FAMILY	2	ENDCAP	3	DISTRIBUTION	4	ENERGY ¹	5	CRI-CCT	6	FINISH ²
LS1	Loop Suspended	R Radius S Square		A	65 Up 35 Dn	A	19 W	30	80 CRI 3000 K	A	Clear Anodized
				B	100 Dn	B	23 W	35	80 CRI 3500 K	B	Black Powdercoat
				D	20 Up 80 Dn	C	29 W	40	80 CRI 4000 K	S	Metallic Silver Powdercoat
				E	55 Up 45 Dn	D	38 W	93	90 CRI 3000 K	W	White Powdercoat
LS3	Loop Independent Up Dn			B	Independent Up Dn Control (Full: 55 Up 45 Dn)	D	38 W	90	90 CRI 3500 K	C	Custom Color (RAL)
								94	90 CRI 4000 K		
							¹ Nominal input power /4 ft. Add 4 W for Battery Pack or 347 V.				² Fixture finish only. Canopies are standard white.

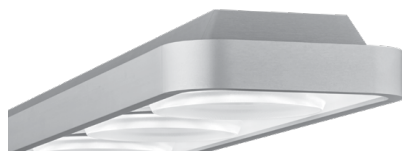
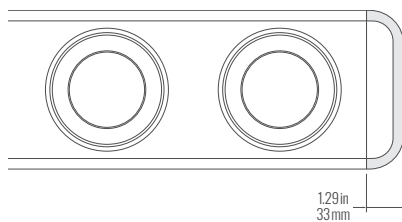
7	LENGTH	8	CEILING TYPE ⁴	9	DRIVER	10	VOLTAGE	11	SUSPENSION
04	4 ft	D	Drywall	F1	Non-Dim	M	120-277 V	03	≤ 3 ft
06	6 ft	G	Grid	F2	0-10 V Dim 3%	1	120 V ⁵	06	≤ 6 ft
08	8 ft	S	Structure	F4	Line Voltage Dim (Fwd/Rev) 3% 120 V	2	277 V ⁵	12	≤ 12 ft
XX	x ft ³	R	Remote	E1	eldoLED ECO 0-10 V Dim 1%	3	347 V ⁶	25	≤ 25 ft
				E2	eldoLED SOLO 0-10 V Dim 0.1%				
				E3	eldoLED ECO DALI-2 DT6 Dim 1%				
				E4	eldoLED SOLO DALI-2 DT6 Dim 0.1%				
				L1	Lutron Hi-Lume 1% EcoSystem (LDE1)				
³ Specify run length in 2' nominal increments. Important: Row lengths cannot be modified on site (factory installed endcaps & joiners).		⁴ Integrated driver with mounting, power feed, suspension + canopy, except for remote.				⁵ Fixed voltage only for (F4) Line Dim Driver or nLight controls. ⁶ 347 V transformer, not with Up Dn Control or Drywall ceiling.			

OPTIONS		CONTROLS	
WIRING & EMERGENCY ⁷		ROW LAYOUT	TYPE & LOCATION ¹⁰
A#	Alternate Wiring Module Qty ⁸ (2nd circuit in 8 ft modules for EM/NL or presentation switching)	C Chicago CCEA	R Remote Sensor / Controller on Ceiling
B#	Battery Pack Qty	F 4 ft End Module	S Sensor / Controller on Canopy
H#	Emergency Switch Qty (GTD or Controller)	G 6 ft Modules ⁹	V Controller on Driver / Plenum Side
		N Non-Power End	Y Controller on Canopy / Room side
⁷ BP & GTD available for 120-277 V in Grid (G), Structure (S) and Remote (R) ceilings. GTD not compatible with (F4) Line Dim driver. ⁸ Alt. Wiring: not with Up Dn Control.		⁹ For 12 ft & 18 ft rows.	¹⁰ Controls selection may be limited by version, protocol or other features – see Controls page.
			N1 Acuity nLight Wired ¹¹ N2 Acuity nLight Air r10 ¹¹ N3 Acuity nLight Air RPP20 ¹¹ E1 Enlighted Smart Sensor ¹² L1 Lutron Athena Wireless M1 Legrand Wattstopper PLUS V1 Leviton Intellect Wireless
			¹¹ Controller (V,Y) only. ¹² Sensor/Controller (R,S) only.

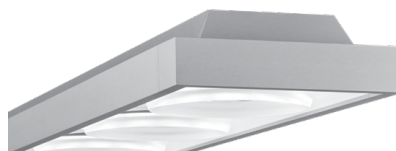
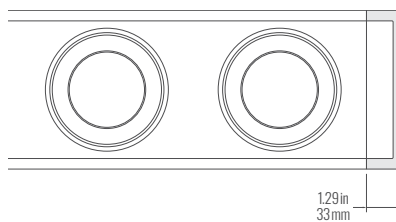
SPECIFICATION DATA
LOOP SUSPENDED (LS1 | LS3)

ENDCAPS

(R) RADIUS

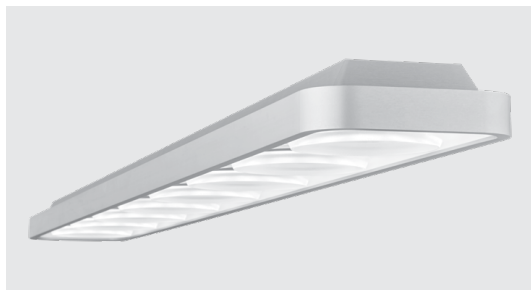


(S) SQUARE

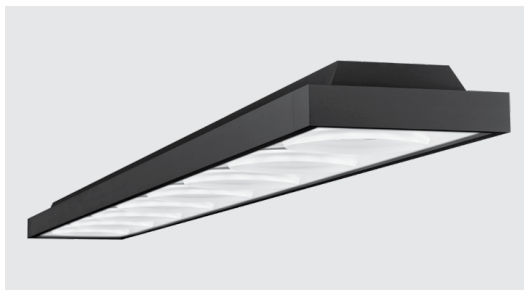


FINISHES

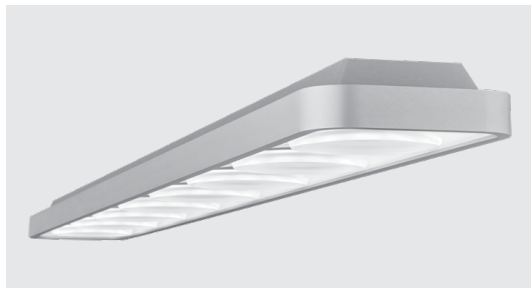
All finishes high temperature powder coated.



(A) CLEAR ANODIZED



(B) BLACK



(S) SILVER



(W) WHITE

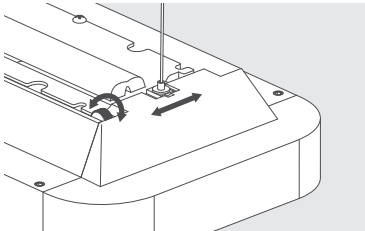


CUSTOM

PRODUCT DETAILS



Radial Anidolic Optic

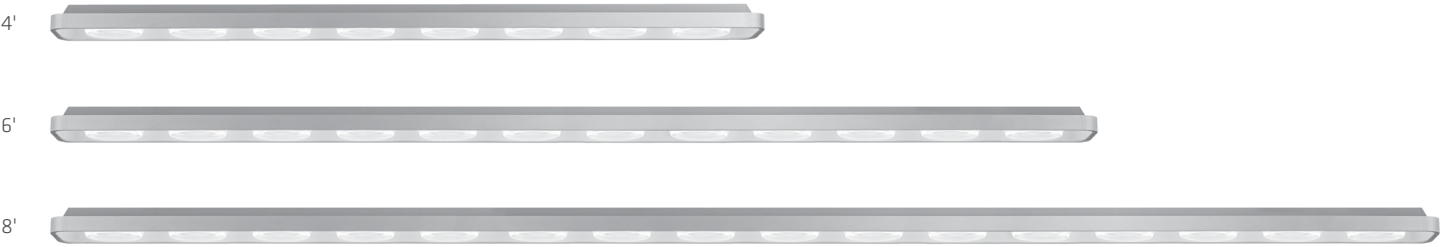


Thumbwheel for rapid, tool-less crosswise leveling.

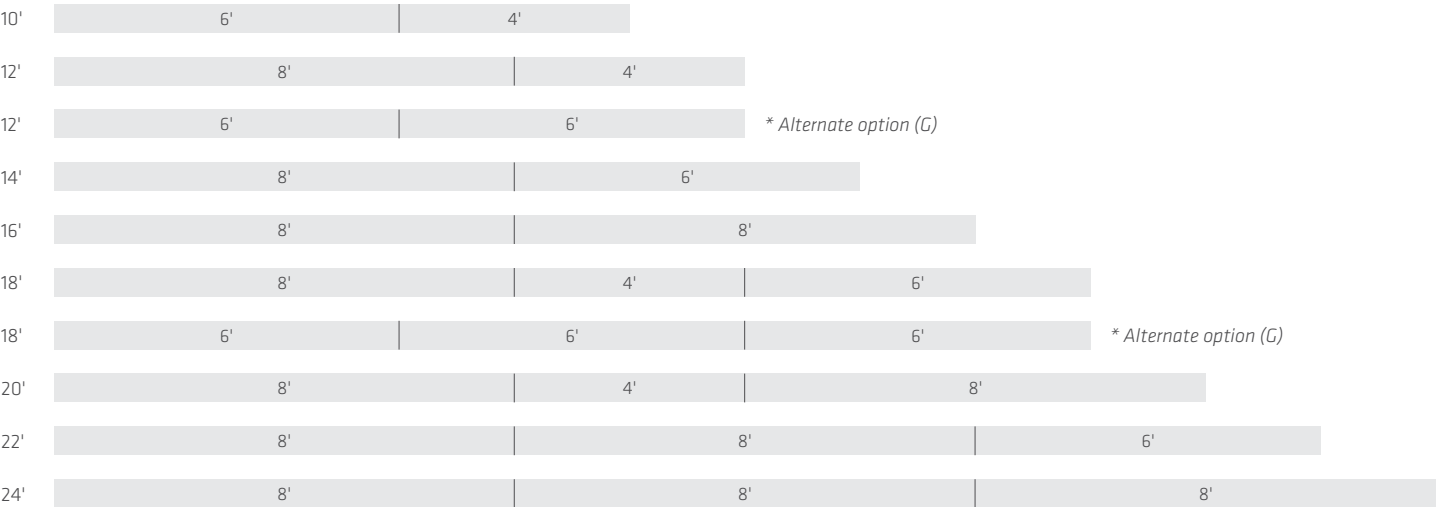
RUN LENGTHS

Standalone fixtures are available in 4', 6' + 8' nominal lengths.

IMPORTANT
Endcaps and joiners are integral luminaire



Run lengths are available in 2' nominal increments.



SPECIFICATION DATA
LOOP SUSPENDED (LS1|LS3)

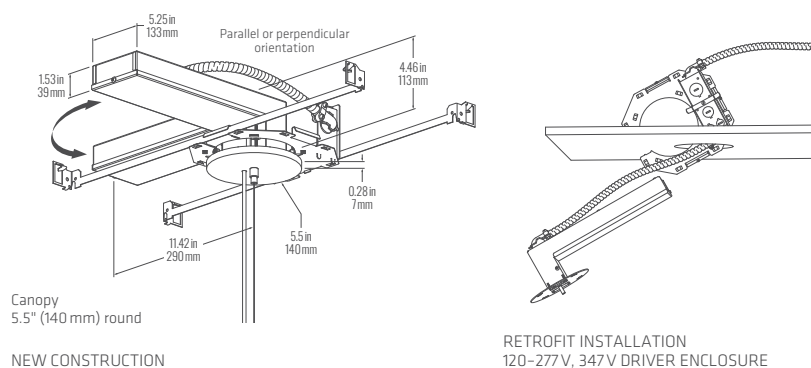
CEILING INTEGRATION

INTEGRATED DRIVER, MOUNTING, POWER FEED, SUSPENSION AND CANOPY

Refer to separate IDC (Integrated Driver Enclosure) datasheet for wiring and detailed dimensions of driver and mounting hardware.

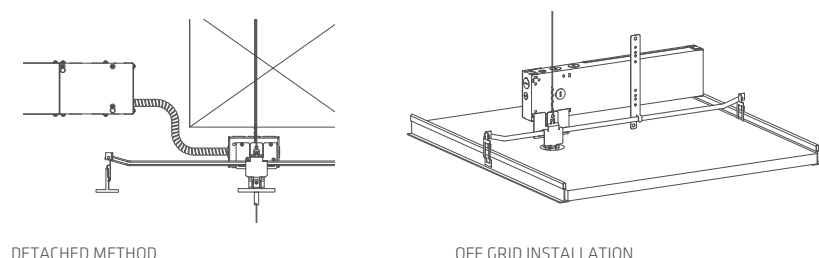
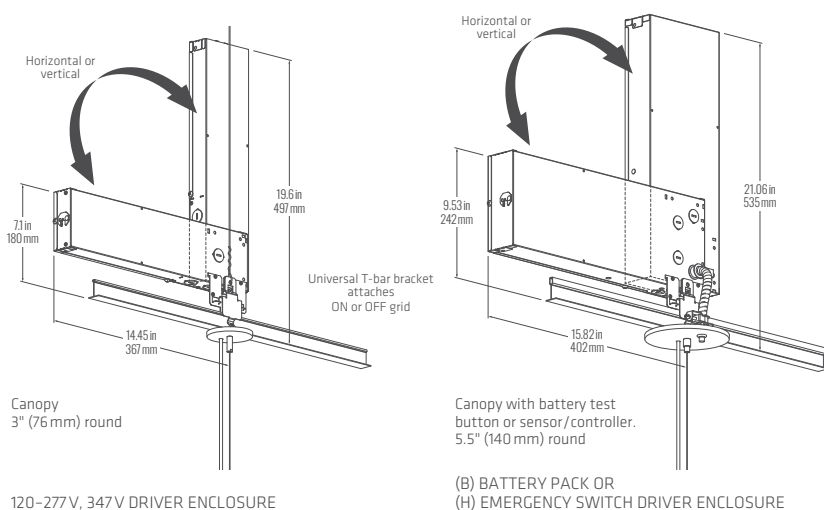
(D) DRYWALL

For GWB or panel ceiling < 0.875" (22 mm) thick.



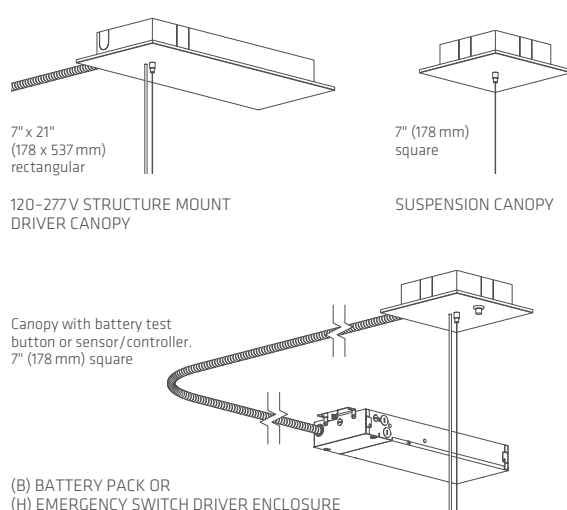
(C) GRID

For accessible ceiling grid (acoustic tile) < 1.75" (44 mm) tall.



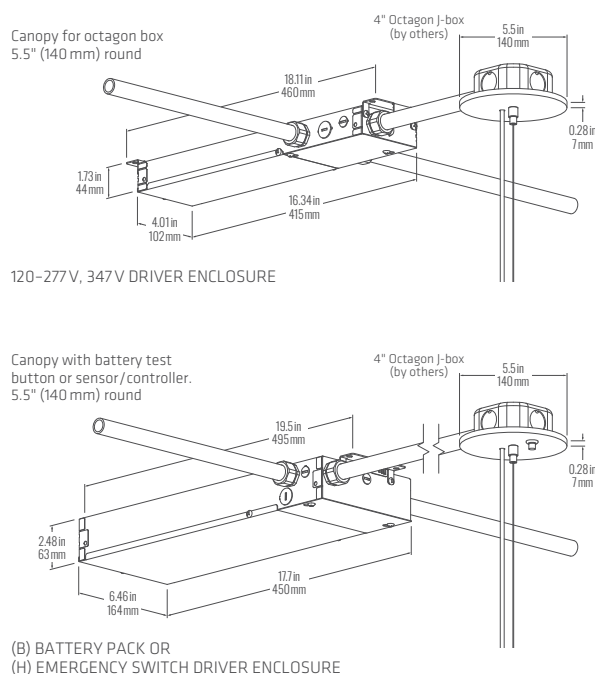
(S) STRUCTURE

For exposed ceiling with conduit or recessed junction box.



(R) REMOTE

External remote mounted driver for exposed ceiling with conduit or recessed junction box. See Notes for recommended wire gauge.



SPECIFICATION DATA
LOOP SUSPENDED (LS1|LS3)

CONTROLS & SENSORS

LUMINAIRE INTEGRATION



V
Controller,
Enclosure/Plenum Side



Y
Controller,
Canopy/Room Side



R
Sensor,
Remote/on Ceiling



S
Sensor,
on Canopy

Sensor/Controller preinstalled into suspension canopy or ceiling collar (for remote tile or J-box lid installation). Plenum rated cable whips and connectors for fast field activation.

INDEPENDENT UP|DOWN



Separate on/off and dimming control of uplight and downlight. Ideal for presentations and video conferencing.

PRODUCT VERSION

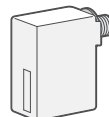
3 Independent Up|Dn*

* Some Controls unavailable with Independent Up/Down due to space constraints – contact Fluxwerx.

(N1) Acuity
nLight Wired



nLight wired, digital network.
Model: nPS-80-EZ or nPS-80-EZ-ER
(with **H** – Emergency Switching)

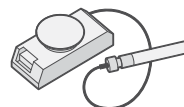


VN1 nLight Wired Controller, Enclosure/Plenum Side

(N2, N3) Acuity
nLight Air



Acuity nLight wireless network
interfaces.
Models: rIO, rPP20

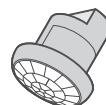


VN2 nLight rIO Controller, Enclosure/Plenum Side
YN2 nLight rIO Controller, Canopy/Room Side
VN3 nLight rPP20 Controller, Enclosure/Plenum Side

(E1) Siemens
Enlighted



Siemens Enlighted wireless smart
sensor-controllers.
Model: SU-5E-CL



RE1 Enlighted Smart Sensor, Remote/on Ceiling
SE1 Enlighted Smart Sensor, on Fixture/Canopy

Enlighted in Drywall ceiling requires (R) Remote driver.

(L1) Lutron
Athena



Lutron Athena wireless smart
controllers & sensors.
Models: A-WN-D01-RF, A-WN-D01-OCC
For YL1 and SL1:
Default Athena color to match fixture/canopy color
Canopy Athena
WH WH
SV BK
BK BK
For VL1 and RL1: default WH

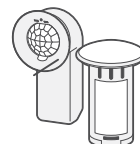


VL1 Athena Controller, Enclosure/Plenum Side
YL1 Athena Controller, Canopy/Room Side
RL1 Athena Sensor, Remote/on Ceiling
SL1 Athena Sensor, on Canopy

(M1) Legrand
Wattstopper
PLUS



Wattstopper PLUS wireless smart
controllers & sensors.
Models: ZBHA-CLM, EN-CLM-PIR

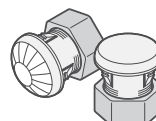


VM1 Wattstopper PLUS Control Module,
Enclosure/Plenum Side
YM1 Wattstopper PLUS Control Module,
Canopy/Room Side
RM1 SensiLUM Sensor, Remote/on Ceiling
SM1 SensiLUM Sensor, on Canopy

(V1) Leviton
Intellect



Leviton Intellect wireless smart
controllers & sensors.
Models: ZL0x0, ZL0x5



VV1 Intellect Controller, Enclosure/Plenum Side
YV1 Intellect Controller, Canopy/Room Side
RV1 Intellect Sensor, Remote/on Ceiling
SV1 Intellect Sensor, on Canopy

Ask us about...

Pass & Seymour®

EATON

DISTECH
CONTROLS

CRESTRON

CASAMBI

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Due to continuous product improvements, specifications and dimensions are subject to change without notice.
Certain options have limited compatibility with some other product selections. Consult www.fluxwerx.com for most current technical information.

Spec_Fluxwerx_Loop-Suspend_na-en | 2025-03

SPECIFICATION DATA
LOOP SUSPENDED (LS1|LS3)

NOTES

CONSTRUCTION

- Anodized, extruded + machined architectural grade aluminum
- Precision machined aluminum joints and endcaps are factory preinstalled for seamless fit
- Stainless steel fasteners
- 0.04" (1.0 mm) stainless steel aircraft cable suspensions
- Clear anodized surface finish or powdercoated in white, metallic silver or black, canopies in white as standard

OPTICAL

- Radial Anidolic optical structures with detailed light extraction elements for 360° symmetric downlight batwing distribution
- Precision molded high transmittance clear acrylic lenses
- Long life mid-flux LED system designed for typical TM21 lumen maintenance \geq L90 @ 60,000 h
- Available in 3000 K, 3500 K, 4000 K with CRI \geq 80 and R9 \geq 0, or CRI \geq 90 and R9 \geq 50, all with color accurate binning \leq 2 SDCM

ELECTRICAL

- No electrical connections are required at fixture level for installation; low voltage power cords factory preinstalled
- High efficiency multivolt drivers, integrated with suspension and mounting components, for 50–60 Hz 120–277 V and transformer for 347 V
- Power Factor > 0.90
- Total Harmonic Distortion $< 20\%$
- Dim level: Standard 3%, optional 1% or 0.1%
- Surge Protection: Meets ANSI C82.11 spec and ANSI/IEEE C62.41
- Inrush Current: Meets NEMA 410

EMERGENCY

- Optional Battery Pack delivers 10 W Class 2 rated output for 90 min. Use 12 W input energy to estimate emergency flux, typically 1150–1750 lm (@ 100–150 lm/W).
- Optional GTD (Generator Transfer Switch), 120–277 V, disables 0–10 V control during emergency for full light output

WIRE GAUGE

- Recommended low voltage wire gauge (AWG) for minimal losses over distance when REMOTE mounting:
30 ft | 18 ga
50 ft | 14 ga
80 ft | 12 ga

ENVIRONMENTAL & CARE

- Designed for use in dry or damp indoor locations with ambient temperatures of 0–30° C (32–86° F)
- The luminaire may be damaged by chemicals such as chlorine, solvents, ammonia, alcohol or sulfur in the area of operation or in cleaning products. Damage from contaminants is not covered under warranty.
- Not suitable for natatorium environments, e.g. swimming pools, hot tubs and saunas.
- Clean only by wiping with a slightly water-damp, soft, clean cloth.

WEIGHT

- Fixture only: ~ 2.9 lb/ft (4.3 kg/m)

WARRANTY

- 5 year limited warranty on all components and workmanship

INDEPENDENT TESTING



- IESNA LM79
- IESNA LM80 (LED @ 10,000 h)



APPROVALS

- UL Listed (USA + Canada)
- CCEA Chicago Plenum
- Living Building Challenge (LBC) Declared

Protected by one or more US patents: D877969;
EU patents: 005606795-0001, 005606795-0002, 005606795-0003, 005606795-0004.

DRIVERS + EMERGENCY

STANDARD DRIVER OPTIONS	
OPTOTRONIC® ADVANCE 	F1 Non-Dim F2 0–10 V Dim 3% F4 Line Voltage Dim 3% (Forward/Reverse) 120 V
eldoLED®	E1 eldoLED ECO 0–10 V Dim 1% E2 eldoLED SOLO 0–10 V Dim 0.1% E3 eldoLED ECO DALI-2 DT6 Dim 1% E4 eldoLED SOLO DALI-2 DT6 Dim 0.1%
	L1 Lutron Hi-Lume 1% EcoSystem (LDE1)

EMERGENCY OPTIONS	
 	B Battery Pack Bodine BSL310 (10 W) H Emergency Switching Functional Devices ESRB Emergency Lighting Relay

Driver and emergency selection may be limited by product or version.
For further options, contact Fluxwerx.

SPECIFICATION DATA
LOOP SUSPENDED (LS1|LS3)

FAMILY PERFORMANCE

COLOR

80 CRI	4000 K	3500 K	3000 K
Color Rendering (CRI)	83	83	82
Red Index (R9)	4	4	2
Color Matching (SDCM)	< 2		

90 CRI	4000 K	3500 K	3000 K
Color Rendering (CRI)	92	92	92
Red Index (R9)	63	63	59
Color Matching (SDCM)	< 2		

Typical colorimetry values.

LUMEN MAINTENANCE

	A 19 W	B 23 W	C 29 W	D 38 W
L90 per TM-21 (hr)	> 60,000			
L70 Estimate (hr)	> 200,000			

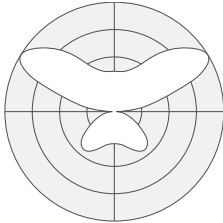
OUTPUT MULTIPLIERS

MULTIPLIER	Applies To	
90 CRI	0.80	All 80 CRI
Battery Pack	0.65	Energy A (19 W)

For 90 CRI, emergency BP or non-white fixtures, use multipliers to scale published Light (lm), Efficacy (lm/W), Intensity (Cd), Luminance (Cd/m²) and IES files.

VERSION PERFORMANCE

LS1xA – 65 Up|35 Dn, 80 CRI

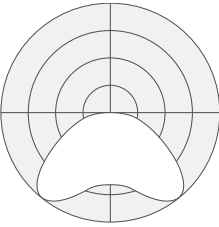
CONFIGURATION			LIGHT & POWER			VISUAL COMFORT		LIGHT DISTRIBUTION
CCT	ENERGY (NOM.)		LIGHT (lm/4ft)	POWER (W/4ft)	EFFICACY (lm/W)	MAX INTENSITY 45-90° (Cd)	MAX LUMINANCE 45-90° (Cd/m²)	
LS1xAx40 4000 K	A	19 W	2518	18.52	136.0	266	2,318	 Loop Suspended 61% Up 39% Dn
	B	23 W	3028	22.70	133.4	320	2,787	
	C	29 W	3733	28.57	130.7	395	3,436	
	D	38 W	4922	38.09	129.2	520	4,530	
LS1xAx35 3500 K	A	19 W	2487	18.52	134.3	263	2,289	
	B	23 W	2991	22.70	131.7	316	2,753	
	C	29 W	3687	28.57	129.0	390	3,393	
	D	38 W	4861	38.09	127.6	514	4,473	
LS1xAx30 3000 K	A	19 W	2456	18.52	132.6	260	2,260	
	B	23 W	2953	22.70	130.1	312	2,717	
	C	29 W	3640	28.57	127.4	385	3,350	
	D	38 W	4799	38.09	126.0	507	4,417	

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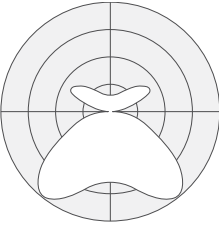
LOOP SUSPENDED (LS1|LS3)

VERSION PERFORMANCE

LS1xB – 100 Dn, 80 CRI

CONFIGURATION			LIGHT & POWER			VISUAL COMFORT		LIGHT DISTRIBUTION
CCT	ENERGY (NOM.)		LIGHT (lm/4ft)	POWER (W/4ft)	EFFICACY (lm/W)	MAX INTENSITY 45-90° (Cd)	MAX LUMINANCE 45-90° (Cd/m²)	
LS1xBx40 4000 K	A	19 W	2562	19.48	131.5	687	8,167	 <p>Loop Suspended 100% Dn</p>
	B	23 W	3057	24.01	127.3	819	9,744	
	C	29 W	3730	30.34	122.9	1,000	11,891	
	D	38 W	4789	41.78	114.6	1,283	15,267	
LS1xBx35 3500 K	A	19 W	2483	19.48	127.5	665	7,915	
	B	23 W	2973	24.01	123.8	797	9,477	
	C	29 W	3628	30.34	119.6	972	11,565	
	D	38 W	4658	41.78	111.5	1,248	14,845	
LS1xBx30 3000 K	A	19 W	2404	19.19	125.3	644	7,663	
	B	23 W	2889	24.01	120.3	774	9,211	
	C	29 W	3525	30.34	116.2	945	11,240	
	D	38 W	4526	41.00	110.4	1,213	14,423	

LS1xD – 20 Up | 80 Dn, 80 CRI

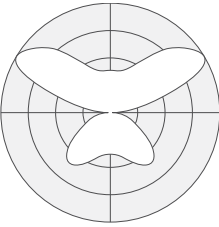
CONFIGURATION			LIGHT & POWER			VISUAL COMFORT		LIGHT DISTRIBUTION
CCT	ENERGY (NOM.)		LIGHT (lm/4ft)	POWER (W/4ft)	EFFICACY (lm/W)	MAX INTENSITY 45-90° (Cd)	MAX LUMINANCE 45-90° (Cd/m²)	
LS1xDx40 4000 K	A	19 W	2581	19.48	132.5	548	4,798	 <p>Loop Suspended 22% Up 78% Dn</p>
	B	23 W	3080	24.01	128.3	654	5,726	
	C	29 W	3758	30.34	123.9	797	6,986	
	D	38 W	4825	40.58	118.9	1,024	8,969	
LS1xDx35 3500 K	A	19 W	2510	19.48	128.9	533	4,667	
	B	23 W	2995	24.01	124.8	636	5,568	
	C	29 W	3655	30.34	120.5	776	6,794	
	D	38 W	4693	40.58	115.6	996	8,723	
LS1xDx30 3000 K	A	19 W	2440	19.48	125.2	518	4,535	
	B	23 W	2911	24.01	121.2	618	5,411	
	C	29 W	3552	30.34	117.1	754	6,602	
	D	38 W	4560	40.58	112.4	968	8,477	

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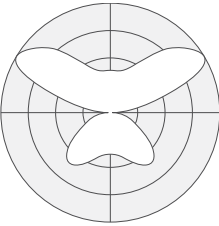
LOOP SUSPENDED (LS1|LS3)

VERSION PERFORMANCE

LS1xE – 55 Up|45 Dn, 80 CRI

CONFIGURATION			LIGHT & POWER			VISUAL COMFORT		LIGHT DISTRIBUTION
CCT	ENERGY (NOM.)		LIGHT (lm/4ft)	POWER (W/4ft)	EFFICACY (lm/W)	MAX INTENSITY 45-90° (Cd)	MAX LUMINANCE 45-90° (Cd/m²)	
LS1xE40 4000 K	A	19 W	2479	18.52	133.8	307	2,690	 <p>Loop Suspended 55% Up 45% Dn</p>
	B	23 W	2981	22.70	131.3	369	3,235	
	C	29 W	3675	28.57	128.6	455	3,988	
	D	38 W	4845	38.79	124.9	600	5,257	
LS1xE35 3500 K	A	19 W	2419	18.52	130.6	300	2,625	
	B	23 W	2944	22.70	129.7	365	3,194	
	C	29 W	3629	28.57	127.0	450	3,938	
	D	38 W	4785	38.79	123.3	593	5,192	
LS1xE30 3000 K	A	19 W	2358	18.30	128.8	292	2,559	
	B	23 W	2907	22.70	128.0	360	3,154	
	C	29 W	3583	28.57	125.4	444	3,889	
	D	38 W	4724	38.57	122.6	585	5,127	

LS3xB – Indep. Up|Dn, 80 CRI

CONFIGURATION			LIGHT & POWER			VISUAL COMFORT		LIGHT DISTRIBUTION
CCT	ENERGY (NOM.)		LIGHT (lm/4ft)	POWER (W/4ft)	EFFICACY (lm/W)	MAX INTENSITY 45-90° (Cd)	MAX LUMINANCE 45-90° (Cd/m²)	
LS3xB40 4000 K	D	38 W	4845	38.79	124.9	600	5,257	 <p>Loop Suspended 55% Up 45% Dn</p>
LS3xB35 3500 K	D	38 W	4785	38.79	123.3	593	5,192	
LS3xB30 3000 K	D	38 W	4724	38.57	122.5	585	5,127	

Photometry Reports: 12139695

Photometry baseline established with integrating sphere and goniophotometer results from an independent accredited testing laboratory per IES LM-79, ANSI C78.377. Remaining values scaled from baseline data per IES LM-63. Output and power may vary by up to 5%.