

FLUXWERX®

# SPECIFICATION DATA

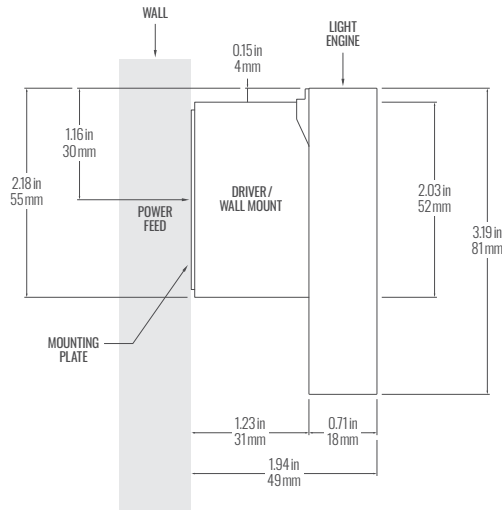
## LINES ONWALL 4|6|8 FT (LW1-WS48)

### CATALOG #

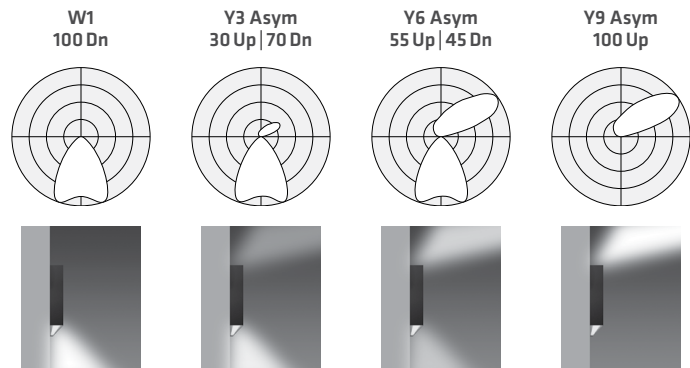
### PROJECT

### NOTES

### CROSS SECTION



### DISTRIBUTIONS



### PERFORMANCE FOCUS

#### ASYM 30 Up | 70 Dn, 80 CRI 4000 K (LW1-W-Y3840)

	Energy (W/4ft)	Light (lm/4ft)	Efficacy (lm/W)
<b>B (100 Dn)</b>	<b>13 W</b>	1450	124
<b>C</b>	<b>16 W</b>	1850	125
<b>D</b>	<b>20 W</b>	2350	126
<b>E</b>	<b>25 W</b>	3000	127
<b>F</b>	<b>30 W</b>	3700	126
<b>G</b>	<b>37 W</b>	4600	125
Color Matching (SDCM)	Lumen Maintenance (hr)		
	L90 per TM21	L80 per TM21	
< 2	> 59,000	> 102,000	

Preliminary nominal values, refer to back pages for full performance data.

### FEATURES

- High performance, ultra-slim (0.7") linear, perimeter mounted luminaire, matching Lines, Hyphen & Portal families.
- Advanced optics shape the light distribution for exceptional cut-off and comfort. An upper wide throw, asymmetric light distribution provides ceiling uniformity and room fill.
- 1ft, 2ft, 4ft, 6ft and 8ft lengths support a variety of spaces.
- Complementary endcap styles to choose from – Capsule or Flat.
- 4 up/down lighting distributions enable a range of lighting effects – 100 Dn, 100 Up, 30 Up | 70 Dn & 55 Up | 45 Dn.
- Hidden wall mounting system and power source for minimal install coordination.
- Light outputs from 800 lm (1ft) to over 7000 lm (8 ft) with efficacies exceeding 125 lm/W.

Declare.



# SPECIFICATION DATA

## LINES ONWALL 4|6|8 FT (LW1-WS48)

### ORDER GUIDE

1	2	3	4	5	6	7	8	9	10	11	12	OPTIONS	CONTROLS
<b>LW1 – W</b>													

1	FAMILY	2	VERSION	3	SIZE	4	APPLICATION	5	ENDCAP
LW1	Lines Wall	–	W Onwall	S4	4 ft	D	Drywall	FF	Flat
				S6	6 ft	R	Remote Driver	PP	Capsule
				S8	8 ft				

6	FINISH	7	DISTRIBUTION	8	CRI	9	CCT	10	ENERGY / 4 FT <sup>1</sup>
<b>BB</b>	Black Powdercoat	<b>W1</b>	100 Dn	<b>8</b>	80 CRI	<b>27</b>	2700 K	<b>B</b>	13 W
<b>SS</b>	Metallic Silver Powdercoat	<b>Y3</b>	Asym 30 Up   70 Dn	<b>9</b>	90 CRI	<b>30</b>	3000 K	<b>C</b>	16 W
<b>WW</b>	White Powdercoat	<b>Y6</b>	Asym 55 Up   45 Dn			<b>35</b>	3500 K	<b>D</b>	20 W
<b>CC</b>	Custom Color (RAL)	<b>Y9</b>	Asym 100 Up			<b>40</b>	4000 K	<b>E</b>	25 W
								<b>F</b>	30 W
								<b>G</b>	37 W <sup>2</sup>
									<sup>1</sup> Nominal input power. Add 4 W for Battery Pack or 347V. <sup>2</sup> 100 Dn (W1) max F.

11	DRIVER	12	VOLTAGE	OPTIONS	CONTROLS	
<b>F1</b>	Non-Dim	<b>M</b>	120–277 V	<b>B</b> Battery Pack <sup>7</sup>	TYPE & LOCATION <sup>10</sup>	BRAND & PROTOCOL <sup>10</sup>
<b>F2</b>	0–10 V Dim 3%	<b>1</b>	120 V <sup>5</sup>	<b>C</b> Chicago CCEA <sup>9</sup>	<b>R</b> Remote Sensor / Controller on Ceiling <b>V</b> Controller on Remote Enclosure <b>Y</b> Controller on Fixture / Room side	<b>N1</b> Acuity nLight Wired <sup>11</sup>
<b>F4</b>	Line Voltage Dim (Fwd/Rev) 3% 120 V	<b>2</b>	277 V <sup>5</sup>	<b>H</b> Emergency Switch <sup>7,8</sup> (GTD or Controller)		<b>N2</b> Acuity nLight Air r10 <sup>11</sup>
<b>E1</b>	eldoLED ECO 0–10 V Dim 1%	<b>3</b>	347 V <sup>6</sup>			<b>N3</b> Acuity nLight Air RPP20 <sup>11</sup>
<b>E2</b>	eldoLED SOLO 0–10 V Dim 0.1%					<b>E1</b> Enlighted Smart Sensor <sup>12</sup>
<b>E3</b>	eldoLED ECO DALI-2 DT6 Dim 1%					<b>L1</b> Lutron Athena Wireless
<b>E4</b>	eldoLED SOLO DALI-2 DT6 Dim 0.1%					<b>M1</b> LeGrand Encelium X / SensiLum
<b>L1</b>	Lutron Hi-Lume 1% EcoSystem (LDE1) <sup>3</sup>					<b>V1</b> Leviton Intellect Wireless
<sup>3</sup> Lutron L1: Min Energy A (10 W).		<sup>5</sup> Fixed voltage only for (F4) Line Dim Driver or nLight controls. <sup>6</sup> 347 V: Remote with transformer except F1/F2.		<sup>7</sup> Remote mounted BP & GTD. <sup>8</sup> GTD not compatible with (F4) Line Dim driver. <sup>9</sup> For Remote driver.	<sup>10</sup> Controls selection may be limited by version, protocol or other features – see Controls page.	
					<sup>11</sup> nLight: Controller (V,Y) only. <sup>12</sup> Enlighted: Sensor/Controller (R) only.	

ENDCAP OPTIONS

FLAT (FF)

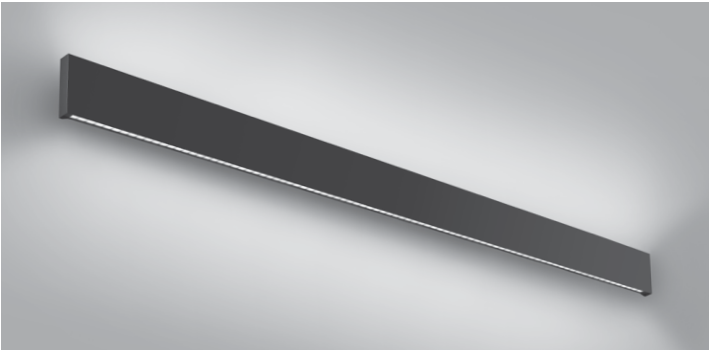


CAPSULE (PP)

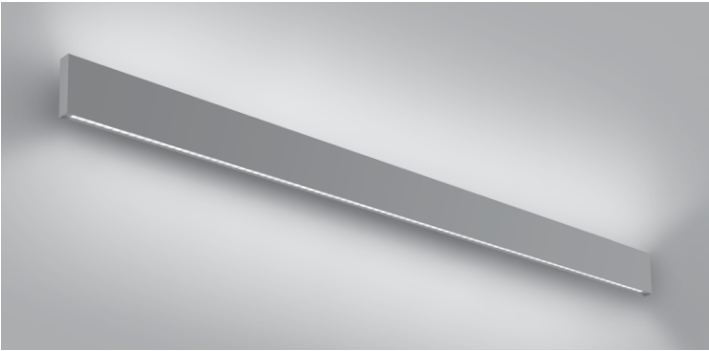


FINISHES

All finishes high temperature powder coated.



(B) BLACK



(S) SILVER

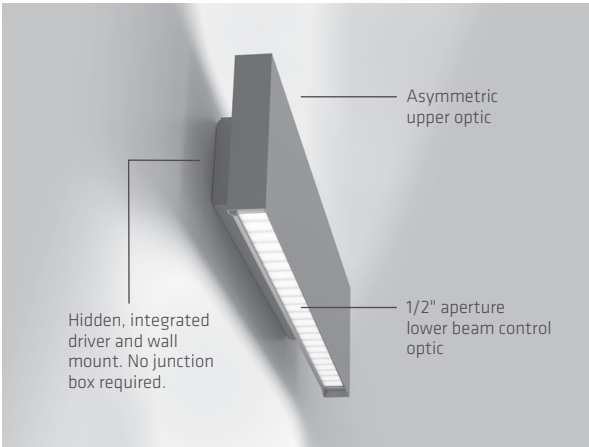


(W) WHITE



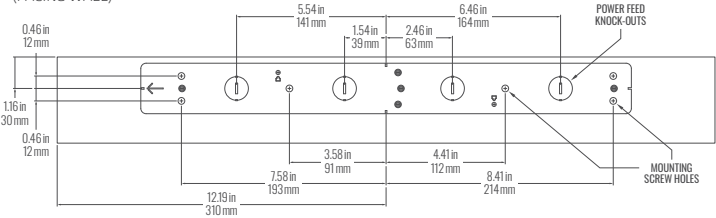
CUSTOM

PRODUCT DETAILS

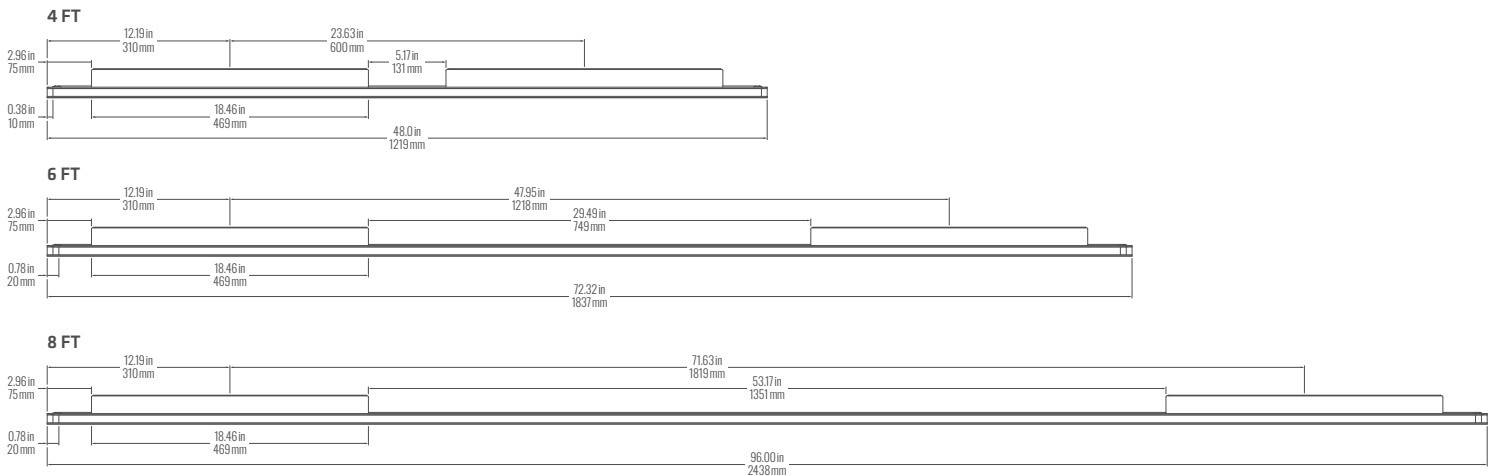


DIMENSIONS

MOUNTING PLATES  
(FACING WALL)



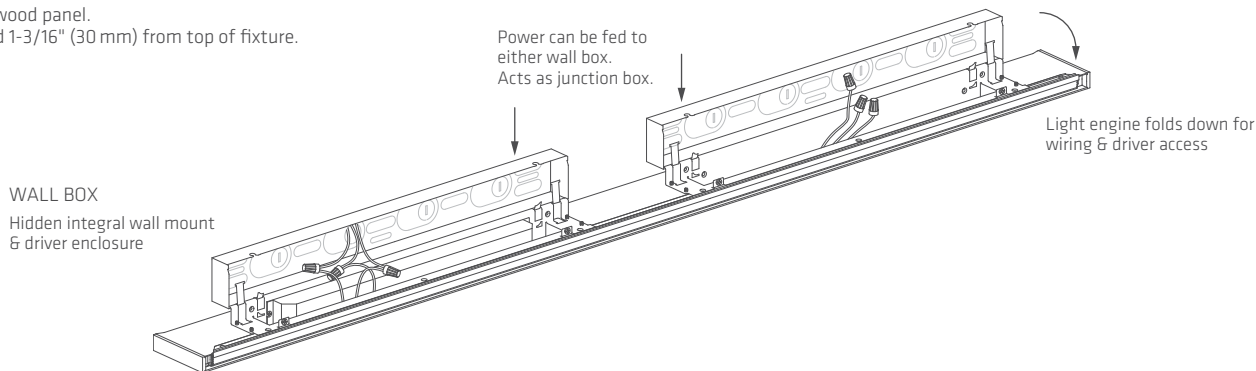
REFLECTED PLAN VIEW



## WALL INTEGRATION

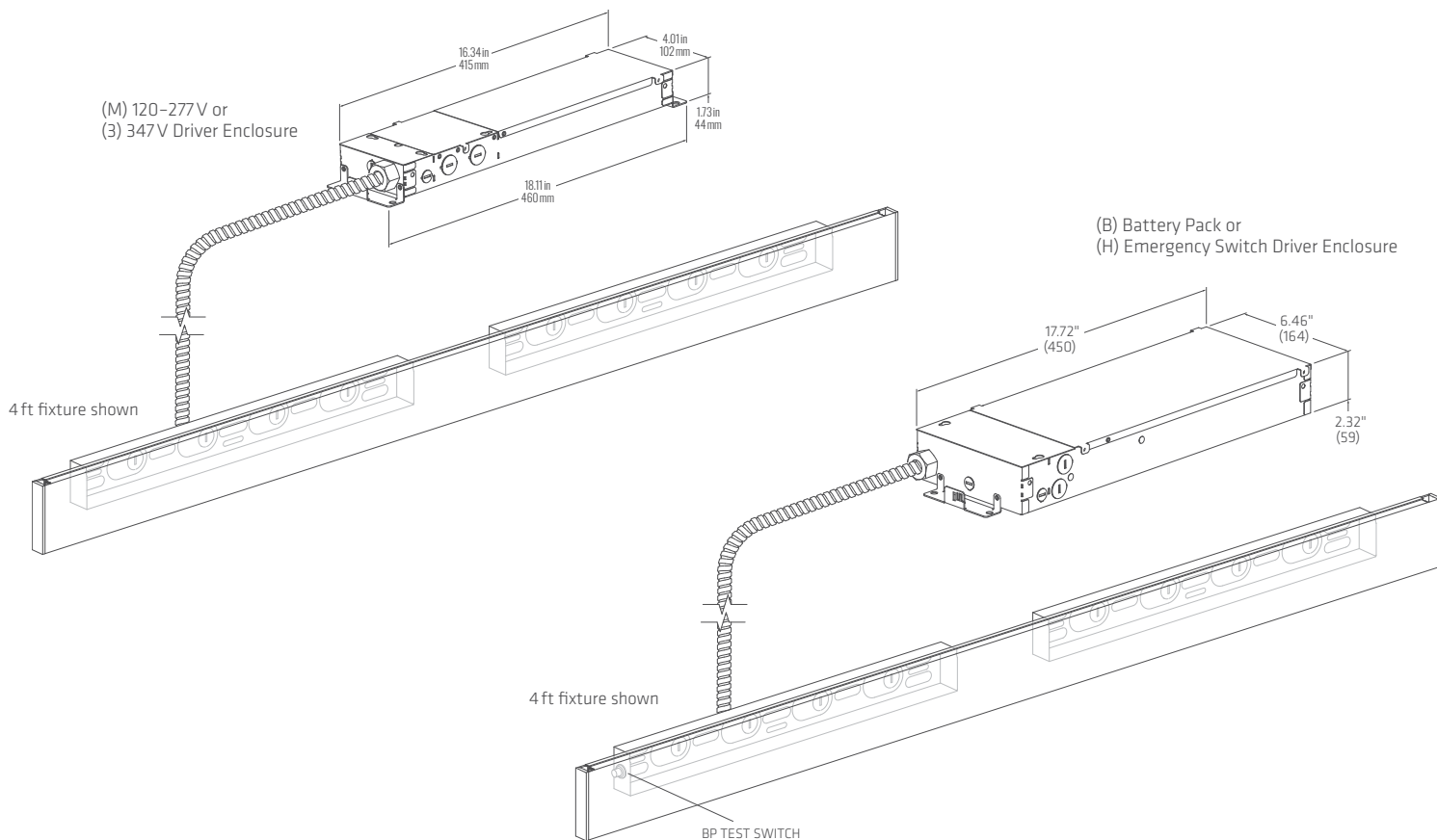
## (D) DRYWALL

For GWB, wood panel.  
Power feed 1-3/16" (30 mm) from top of fixture.



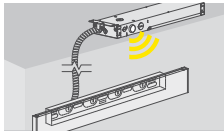
## (R) REMOTE DRIVER

External remote mounted driver, Battery Pack or GTD.  
See Notes for recommended wire gauge.

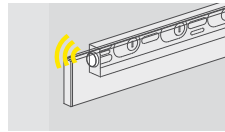


## CONTROLS &amp; SENSORS

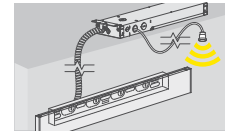
## LUMINAIRE INTEGRATION



**V**  
Controller,  
Remote Enclosure



**Y**  
Controller,  
Fixture/Room Side

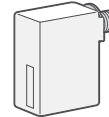


**R**  
Sensor,  
Remote/on Ceiling

**(N1)** Acuity  
nLight Wired



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

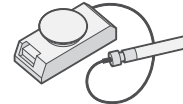


**VN1** nLight Wired Controller, Remote Enclosure

**(N2, N3)** Acuity  
nLight Air



Acuity nLight wireless network interfaces.  
Models: rIO, rPP20

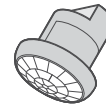


**VN2** nLight rIO Controller, Remote Enclosure  
**YN2** nLight rIO Controller, Fixture/Room Side  
**VN3** nLight rPP20 Controller, Remote Enclosure

**(E1)** Siemens  
Enlighted



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

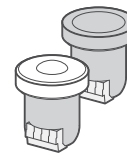


**RE1** Enlighted Smart Sensor, Remote/on Ceiling

**(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

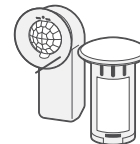


**VL1** Athena Controller, Remote Enclosure  
**YL1** Athena Controller, Fixture/Room Side  
**RL1** Athena Sensor, Remote/on Ceiling

**(M1)** Legrand  
Encelium X



Encelium X wireless smart controllers  
& sensors.  
Models: ZBHA-CLM, EN-CLM-PIR

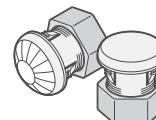


**VM1** X Control Module, Remote Enclosure  
**YM1** X Control Module, Fixture/Room Side  
**RM1** SensiLUM Sensor, Remote/on Ceiling

**(V1)** Leviton  
Intellect



Leviton Intellect wireless smart controllers  
& sensors.  
Models: ZL0x0, ZL0xS



**VV1** Intellect Controller, Remote Enclosure  
**YV1** Intellect Controller, Fixture/Room Side  
**RV1** Intellect Sensor, Remote/on Ceiling

Ask us about...

Wattstopper®

Pass & Seymour®

EATON

DISTECH  
CONTROLS

CRESTRON

CASAMBI

All integrated controls trademarks and logos are the property of their manufacturer and are used under license.

All rights reserved. © Fluxwerx Illumination 2024 604.549.9379 | fluxwerx.com  
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.

SPECIFICATION DATA  
LINES ONWALL 4|6|8 FT (LW1-WS48)

## NOTES

## CONSTRUCTION

- Architectural grade aluminum and 22 ga. steel housings
- Housing designed for new build or retrofit mounting onto a GWB cavity wall
- White, metallic silver or black textured powdercoat standard finishes

## OPTICAL

- Precision molded high transmittance clear acrylic lenses
- Long life LED system designed for typical TM21 lumen maintenance  $\geq$  L80 @ 102,000 h
- Available in 2700 K, 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

- Low voltage power cord, factory preinstalled
- Integral high efficiency drivers for 50–60 Hz, 120–277 V or 347 V
- Power Factor:
  - $> 0.90$  (Drivers F1, F2, F4, E1-4) except
  - $> 0.80$  (Energy A, B in 2 ft, 3 ft source)
  - $> 0.75$  (Driver L1)
- Total Harmonic Distortion:  $< 20\%$  (Drivers F1, F2, F4, E1-E4)
- 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. See Family Performance for estimated emergency output
- Optional GTD (Generator Transfer Switch), 120–277 V, disables 0–10 V or DALI 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 &amp; 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: 1 lb (0.45 kg) per ft
- Pivot: 0.4 lbs (0.18 kg)

## WARRANTY

- 5 year limited warranty on all components and workmanship



## INDEPENDENT TESTING


- IESNA LM79 (Pending)
- IESNA LM80 (LED @ 17,000 hr)

## APPROVALS

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

## DRIVERS + EMERGENCY

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

EMERGENCY OPTIONS	
	<b>B</b> Battery Pack Bodine BSL310 (10 W) <b>H</b> 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

LINES ONWALL 4|6|8 FT (LW1-WS48)

FAMILY PERFORMANCE

COLOR

80 CRI	4000 K	3500 K	3000 K
Color Rendering (CRI)	83	82	81
Red Index (R9)	4	1	1
Fidelity (TM-30 R <sub>f</sub> )	84	83	84
Gamut (TM-30 R <sub>g</sub> )	95	95	94
Color Matching (SDCM)	< 2		

90 CRI	4000 K	3500 K	3000 K
Color Rendering (CRI)	93	92	91
Red Index (R9)	55	53	53
Fidelity (TM-30 R <sub>f</sub> )	90	89	90
Gamut (TM-30 R <sub>g</sub> )	97	97	96
Color Matching (SDCM)	< 2		

Typical colorimetry values.

LUMEN MAINTENANCE

13 W (B) – 37 W (G)	
L90 per TM-21 (hr)	> 59,000
L80 per TM-21 (hr)	> 102,000

OUTPUT MULTIPLIERS

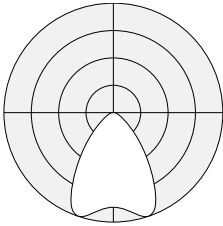
MULTIPLIER	Applies To			
90 CRI	0.84	All 80 CRI		
Battery Pack	1.00	Energy B (13 W)		

FINISH	100 Dn (W1)	30 70 (Y3)	55 45 (Y6)	100 Up (Y9)
Black	0.89	0.90	0.91	0.94
Metallic Silver	0.93	0.93	0.94	0.96

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

W1 – 100 Dn, 80 CRI

CONFIGURATION			LIGHT & POWER				LIGHT DISTRIBUTION
CCT	ENERGY (NOM.)		LIGHT (lm/4ft)	POWER (W/4ft)	EFFICACY (lm/W)	MAX BEAM INTENSITY (Cd)	
LW1-WS4-W1840 4000 K	B	13 W	1558	11.89	131.0		 <p>Lines Onwall W1 100% Dn</p>
	C	16 W	1998	15.21	131.3		
	D	20 W	2526	19.18	131.7		
	E	25 W	3183	24.09	132.1		
	F	30 W	3911	30.25	129.3		
LW1-WS4-W1835 3500 K	B	13 W	1543	11.89	129.8		
	C	16 W	1979	15.21	130.1		
	D	20 W	2503	19.18	130.5		
	E	25 W	3153	24.09	130.9		
	F	30 W	3874	30.25	128.1		
LW1-WS4-W1830 3000 K	B	13 W	1507	11.89	126.8		
	C	16 W	1934	15.21	127.1		
	D	20 W	2445	19.18	127.5		
	E	25 W	3080	24.09	127.9		
	F	30 W	3785	30.25	125.1		
LW1-WS4-W1827 2700 K	B	13 W	1467	11.89	123.4		
	C	16 W	1882	15.21	123.7		
	D	20 W	2379	19.18	124.1		
	E	25 W	2997	24.09	124.4		
	F	30 W	3683	30.25	121.8		



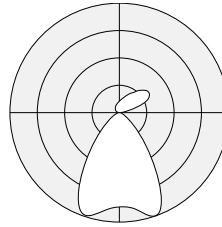
# **LINES ONWALL 4|6|8 FT (LW1-WS48)**

## **VERSION PERFORMANCE**

### **Y3 – Asymmetric 30 Up | 70 Dn, 80 CRI**

CONFIGURATION			LIGHT & POWER			
CCT	ENERGY (NOM.)		LIGHT (lm/4ft)	POWER (W/4ft)	EFFICACY (lm/W)	MAX BEAM INTENSITY (Cd)
<b>LW1-WS4-Y3840</b> <b>4000 K</b>	<b>B</b>	<b>13 W</b>	1457	11.77	123.8	
	<b>C</b>	<b>16 W</b>	1876	15.04	124.8	
	<b>D</b>	<b>20 W</b>	2383	18.93	125.9	
	<b>E</b>	<b>25 W</b>	3017	23.72	127.2	
	<b>F</b>	<b>30 W</b>	3728	29.71	125.5	
	<b>G</b>	<b>37 W</b>	4640	37.04	125.3	
<b>LW1-WS4-Y3835</b> <b>3500 K</b>	<b>B</b>	<b>13 W</b>	1443	11.77	122.6	
	<b>C</b>	<b>16 W</b>	1859	15.04	123.6	
	<b>D</b>	<b>20 W</b>	2360	18.93	124.7	
	<b>E</b>	<b>25 W</b>	2989	23.72	126.0	
	<b>F</b>	<b>30 W</b>	3693	29.71	124.3	
	<b>G</b>	<b>37 W</b>	4596	37.04	124.1	
<b>LW1-WS4-Y3830</b> <b>3000 K</b>	<b>B</b>	<b>13 W</b>	1410	11.77	119.8	
	<b>C</b>	<b>16 W</b>	1816	15.04	120.7	
	<b>D</b>	<b>20 W</b>	2306	18.93	121.8	
	<b>E</b>	<b>25 W</b>	2920	23.72	123.1	
	<b>F</b>	<b>30 W</b>	3608	29.71	121.4	
	<b>G</b>	<b>37 W</b>	4490	37.04	121.2	
<b>LW1-WS4-Y3827</b> <b>2700 K</b>	<b>B</b>	<b>13 W</b>	1372	11.77	116.6	
	<b>C</b>	<b>16 W</b>	1767	15.04	117.5	
	<b>D</b>	<b>20 W</b>	2244	18.93	118.5	
	<b>E</b>	<b>25 W</b>	2841	23.72	119.8	
	<b>F</b>	<b>30 W</b>	3511	29.71	118.2	
	<b>G</b>	<b>37 W</b>	4370	37.04	118.0	

#### **LIGHT DISTRIBUTION**

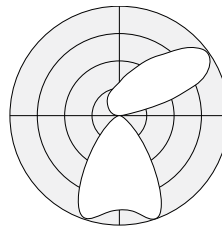


Lines Onwall  
Y3 Asymmetric  
28% Up | 72% Dn

### **Y6 – Asymmetric 55 Up | 45 Dn, 80 CRI**

CONFIGURATION			LIGHT & POWER			
CCT	ENERGY (NOM.)		LIGHT (lm/4ft)	POWER (W/4ft)	EFFICACY (lm/W)	MAX BEAM INTENSITY (Cd)
<b>LW1-WS4-Y6840</b> <b>4000 K</b>	<b>B</b>	<b>13 W</b>	1337	11.64	114.9	
	<b>C</b>	<b>16 W</b>	1732	14.83	116.8	
	<b>D</b>	<b>20 W</b>	2213	18.63	118.8	
	<b>E</b>	<b>25 W</b>	2821	23.28	121.1	
	<b>F</b>	<b>30 W</b>	3508	29.06	120.7	
	<b>G</b>	<b>37 W</b>	4400	36.15	121.7	
<b>LW1-WS4-Y6835</b> <b>3500 K</b>	<b>B</b>	<b>13 W</b>	1324	11.64	113.8	
	<b>C</b>	<b>16 W</b>	1716	14.83	115.7	
	<b>D</b>	<b>20 W</b>	2193	18.63	117.7	
	<b>E</b>	<b>25 W</b>	2794	23.28	120.0	
	<b>F</b>	<b>30 W</b>	3475	29.06	119.6	
	<b>G</b>	<b>37 W</b>	4359	36.15	120.6	
<b>LW1-WS4-Y6830</b> <b>3000 K</b>	<b>B</b>	<b>13 W</b>	1293	11.64	111.2	
	<b>C</b>	<b>16 W</b>	1677	14.83	113.0	
	<b>D</b>	<b>20 W</b>	2142	18.63	115.0	
	<b>E</b>	<b>25 W</b>	2729	23.28	117.2	
	<b>F</b>	<b>30 W</b>	3395	29.06	116.8	
	<b>G</b>	<b>37 W</b>	4258	36.15	117.8	
<b>LW1-WS4-Y6827</b> <b>2700 K</b>	<b>B</b>	<b>13 W</b>	1259	11.64	108.2	
	<b>C</b>	<b>16 W</b>	1632	14.83	110.0	
	<b>D</b>	<b>20 W</b>	2084	18.63	111.9	
	<b>E</b>	<b>25 W</b>	2656	23.28	114.1	
	<b>F</b>	<b>30 W</b>	3304	29.06	113.7	
	<b>G</b>	<b>37 W</b>	4144	36.15	114.7	

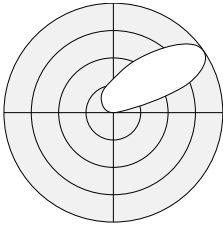
#### **LIGHT DISTRIBUTION**



Lines Onwall  
Y6 Asymmetric  
54% Up | 46% Dn

VERSION PERFORMANCE

Y9 – Asymmetric 100 Up, 80 CRI

CONFIGURATION			LIGHT & POWER				LIGHT DISTRIBUTION
CCT	ENERGY (NOM.)		LIGHT (lm/4ft)	POWER (W/4ft)	EFFICACY (lm/W)	MAX BEAM INTENSITY (Cd)	
LW1-WS4-Y9840 4000 K	B	13 W	1260	11.60	108.6		 <p>Lines Onwall Y9 Asymmetric 100% Up</p>
	C	16 W	1630	14.81	110.1		
	D	20 W	2084	18.61	111.9		
	E	25 W	2663	23.27	114.4		
	F	30 W	3291	29.15	112.9		
	G	37 W	4095	36.34	112.7		
LW1-WS4-Y9835 3500 K	B	13 W	1248	11.60	107.6		
	C	16 W	1615	14.81	109.1		
	D	20 W	2064	18.61	110.9		
	E	25 W	2638	23.27	113.3		
	F	30 W	3260	29.15	111.8		
	G	37 W	4057	36.34	111.6		
LW1-WS4-Y9830 3000 K	B	13 W	1219	11.60	105.1		
	C	16 W	1577	14.81	106.5		
	D	20 W	2016	18.61	108.3		
	E	25 W	2577	23.27	110.7		
	F	30 W	3185	29.15	109.2		
	G	37 W	3963	36.34	109.1		
LW1-WS4-Y9827 2700 K	B	13 W	1187	11.60	102.3		
	C	16 W	1535	14.81	103.7		
	D	20 W	1962	18.61	105.4		
	E	25 W	2508	23.27	107.8		
	F	30 W	3099	29.15	106.3		
	G	37 W	3857	36.34	106.1		

Photometry Reports: 14235146.01 to 14235146.03  
Photometry baseline established with integrating sphere and goniophotometer results from an independent accredited testing laboratory per IES LM-79, ANSI 78.377. Remaining values scaled from baseline data. Output and power may vary by up to 5%.