



# 8" LED Downlight LF8SL 120V-277V 0-10V Dimming

### APPLICATIONS:

LiteFrame LF8SL is a 8" specification grade LED open downlight that utilizes high efficiency LEDs to obtain color consistency, energy savings, and low maintenance costs. 50,000 hours minimum life up to 35°C (95°F) in open plenum applications.

### HOUSING:

One-piece 22 gauge non-corrosive steel platform. Pre-wired j-box with snap-on cover for easy access. Snap-in connection from driver compartment allows easy installation of light engine/trim assembly without tools above or below the ceiling and can be upgraded to accommodate technology improvements. Approve for 8 (4 in/4 out) No. 12 AWG conductors rated for 90°C through wiring.

### REFLECTOR:

High purity aluminum, Alzak, iridescence suppressed, semi-diffuse reflector. Self-trim standard. Painted white self-trim (WT) available as option.

### LED LIGHT ENGINE:

The LF8SL uses the Philips Fortimo DLM LED Module. This module provides controlled color consistency (3 SDCM) from fixture to fixture. The system is designed for optional life and lumen maintenance (>50,000 hours at 70% lumen maintenance). Both reflector and light engine assembly are mechanically retained to housing.

### LED DRIVER:

The LF8SL utilizes the Philips Fortimo LED Driver specifically designed to optimize efficiency of the Fortimo DLM Module.

Driver is designed to match the 50,000 hour minimum life expectancy of the system. Meets UL Class 2, inherent short circuit protection, self limited, overload protected. If critical temperatures are reached on driver or LED module, integrated thermal feedback loop will gradually reduce current to protect system life. Driver is universal 120V-277V. Optional Lutron Series A driver is also available.

### DIMMING:

Comes standard with 0-10V dimming capability. Flicker-free dimming to 10%. 0-10V control may consume up to 1mA. 0-10V, Lutron 2 wire and EcoSystem dimming available to 1% and DMX with RDM (remote device management) dimming to less than 0.1%.

### INSTALLATION:

Adjustable Bar hangers included. Universal adjustable mounting brackets also accept 1/2" EMT conduit or 1 1/2" or 3/4" lathing channel (by others) or Prescolite 24" bar hangers (B24 or B6).

### CERTIFICATIONS:

CSA certified to US and Canadian safety standards. Suitable for wet locations. Approved for through wiring. Non-IC rated. EM and EMR are damp rated use only. ENERGY STAR qualified with open clear Alzak reflector. UL approved for NSF2 splash zone applications.

### WARRANTY:

5 year warranty. See www.prescolite.com for details.

DATE: \_\_\_\_\_ TYPE: \_\_\_\_\_

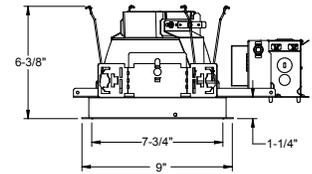
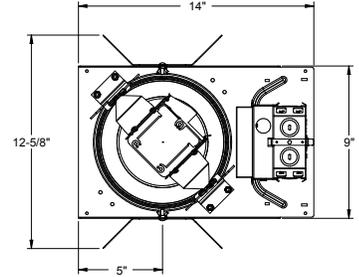
FIRM NAME: \_\_\_\_\_

PROJECT: \_\_\_\_\_

# LiteFrame®



Ceiling Cutout: 8 1/4"  
Maximum Ceiling Thickness 1 1/4"  
For conversion to millimeters,  
multiply inches by 25.4  
Not to Scale



See page 5 for EM/EMR, LV(E) and NX(W)E line art

CATALOG NUMBER:

EXAMPLE: LF8SL-8LFSL15L40K8

Order housing, reflector, and accessories separately

STANDARD 0-10V DIMMING

ALTERNATIVE DIMMING TO 1% & 0.1%

HOUSING	DRIVER OPTION	HOUSING OPTIONS	TRIM APERTURE	OUTPUT	KELVIN	CRI	REF. COLOR OPTIONS	REFLECTOR OPTIONS	ACCESSORIES	
<input type="checkbox"/> <b>LF8SL</b> Standard Lumen 0-10V 10% dimming 120-277V	Standard 0-10V 10% Dimming <input type="checkbox"/> <b>DM1</b> 0-10V dimming at 1% <input type="checkbox"/> <b>DMT<sup>10,11</sup></b> SpectraSync™ Tunable White <input type="checkbox"/> <b>DMTW<sup>12</sup></b> SpectraSync™ Tunable Dim to Warm <b>VOLTAGE OPTION</b> Standard 120V-277V <input type="checkbox"/> <b>347</b> 347V	<input type="checkbox"/> <b>EM<sup>2,3</sup></b> Emergency Battery Pack with integral test switch and indicator light <input type="checkbox"/> <b>EMR<sup>2</sup></b> Emergency Battery Pack with remote test switch and indicator light <input type="checkbox"/> <b>LV<sup>9</sup></b> Lutron Vive Enabled, 0-10V, 120-277V <input type="checkbox"/> <b>NXWE<sup>5,14</sup></b> NX Wireless Enabled <input type="checkbox"/> <b>NXE<sup>5,14</sup></b> NX Enabled, Dual SmartPorts	<input type="checkbox"/> <b>8LFSL</b> Semi-Diffuse Clear Alzak	<input type="checkbox"/> <b>11L</b> 1100 Lumen Module <input type="checkbox"/> <b>15L</b> 1500 Lumen Module <input type="checkbox"/> <b>20L<sup>13</sup></b> 2000 Lumen Module	<input type="checkbox"/> <b>27K</b> 2700 Kelvin <input type="checkbox"/> <b>30K</b> 3000 Kelvin <input type="checkbox"/> <b>35K</b> 3500 Kelvin <input type="checkbox"/> <b>40K</b> 4000 Kelvin <input type="checkbox"/> <b>50K</b> 5000 Kelvin <input type="checkbox"/> <b>2230TD<sup>7</sup></b> 2200K-3000K SpectraSync™ Dim to Warm <input type="checkbox"/> <b>2750T<sup>7</sup></b> 2700K-5000K SpectraSync™ Tunable White <input type="checkbox"/> <b>2765T<sup>7</sup></b> 2700K-6500K SpectraSync™	<input type="checkbox"/> <b>8</b> 80+ CRI <input type="checkbox"/> <b>9</b> 90+ CRI <b>REF. FINISH OPTIONS</b> Standard Semi-Diffuse <input type="checkbox"/> <b>SP</b> Specular <input type="checkbox"/> <b>SS</b> Semi-Specular <input type="checkbox"/> <b>MFC</b> American Matte™ <input type="checkbox"/> <b>V</b> Kurt Versen Specular <input type="checkbox"/> <b>VS</b> Kurt Versen Softglow® <input type="checkbox"/> <b>VSS</b> Kurt Versen SoftSheen™	Standard Clear Alzak <input type="checkbox"/> <b>CG</b> Champagne Gold Alzak <input type="checkbox"/> <b>GD</b> Gold Alzak <input type="checkbox"/> <b>BL</b> Black Alzak <input type="checkbox"/> <b>WE</b> Wheat Alzak <input type="checkbox"/> <b>LW</b> Light Wheat Alzak <input type="checkbox"/> <b>PW</b> Pewter Alzak <input type="checkbox"/> <b>WH</b> Painted Matte White Reflector and Flange <input type="checkbox"/> <b>BC</b> Painted Black Reflector and Flange	<input type="checkbox"/> <b>EM<sup>2,3</sup></b> Pre-punched reflector for integral switch <input type="checkbox"/> <b>AM<sup>4,6</sup></b> Antimicrobial coating on clear Alzak reflector only <b>TRIM OPTIONS</b> <input type="checkbox"/> <b>WT</b> Painted White Flange Only <input type="checkbox"/> <b>TRG</b> Trim Ring Gasket	<input type="checkbox"/> <b>B24</b> Set of two 24" bar hangers for T-bar ceilings <input type="checkbox"/> <b>B6</b> Set of two (2) bar hangers for ceiling joist up to 24" centers <input type="checkbox"/> <b>LF5C8</b> 8" Reflector screw cover <input type="checkbox"/> <b>SCA8D</b> Sloped ceiling adapter (see note on back page) <input type="checkbox"/> <b>Signos8</b> Architectural glass elements. Refer to specification sheets ARCH-SIG-005 and -007 <input type="checkbox"/> <b>LiteGear<sup>8</sup></b> Inverter, single phase central lighting, 125VA-250VA <input type="checkbox"/> <b>LPS Series<sup>8</sup></b> LitePower micro-inverter, 20VA-55VA	
<b>Use with EDM/2DM/DMX dimming option: Match Housing to Trim Output</b>										
<input type="checkbox"/> <b>LF8SL11L</b> <input type="checkbox"/> <b>LF8SL15L</b> <input type="checkbox"/> <b>LF8SL20L</b>	<input type="checkbox"/> <b>EDM<sup>1</sup></b> Hi-Lume 1% EcoSystem LED Driver <input type="checkbox"/> <b>2DM<sup>1</sup></b> Hi-Lume 1% 2-wire LED Driver (120V only) <input type="checkbox"/> <b>DMX<sup>1</sup></b> DMX with RDM dimming to <0.1%	<input type="checkbox"/> <b>120</b> 120V <input type="checkbox"/> <b>277</b> 277V	<input type="checkbox"/> <b>LVE (EDM Only)</b> Lutron Vive Enabled, EcoSystem *EDM, 2DM & DMX also available with EMR and VVV							

### Notes:

- For EDM, 2DM and DMX options, housing output must match trim output
- Not available with 347V
- EM options required on both housing and trim
- Clear Alzak standard. Consult factory for other colors
- Not available with EMR, DMX, LV or LVE
- Not available with EM
- Only available in 90+ CRI

<sup>8</sup> See Central Inverter =compatibility note and web links on page 3

<sup>9</sup> LV requires standard dimming or DM1

<sup>10</sup> Must select either 2750T or 2765T Kelvin with DMT driver option

<sup>11</sup> Not available with LV or LVE

<sup>12</sup> Must select 2230TD with DMTW driver option

<sup>13</sup> Not compatible with DMT or DMTW

<sup>14</sup> Not available with EDM, 2DM, or DMX



In a continuing effort to offer the best product possible we reserve the right to change, without notice, specifications or materials that in our opinion will not alter the function of the product.  
Web: [www.prescolite.com](http://www.prescolite.com) • Tech Support: (888) 777-4832

LF8-LED-023

# PHOTOMETRIC DATA

## LiteFrame - 8" LF8SL Downlight

DRIVER DATA	8LFSL20L	8LFSL15L	8LFSL11L	
Input Voltage	120-277V	120-277V	120-277V	
Input Frequency	50/60 Hz	50/60 Hz	50/60 Hz	
Input Current	0.105A (120V) 0.045A (277V)	0.133A (120V) 0.058A (277V)	0.184A (120V) 0.08A (277V)	
Input Power	22.1W	16.0W	12.5W	
Power Factor	≥0.90	≥0.90	≥0.90	
THD	<20%	<20%	<20%	
EMI Filtering	FCC 47CFR Part 15, Class A	FCC 47CFR Part 15, Class A	FCC 47CFR Part 15, Class A	
Operating Temperature	-20°C to 35°C	-20°C to 35°C	-20°C to 35°C	
Dimming	0-10V	0-10V	0-10V	
Over-voltage, over-current, short-circuit protected				
*Power consumption and photometric output may vary slightly with various driver and CRI options.				
When operating in EM mode, the fixture will deliver approximately 30% of the published full lumen output.				

### Lumen Multiplier Table

Photometrics published below are for the 3000K, 80 CRI. This table may be used to approximate the lumen values at different Kelvin temperatures and CRI.

4000 Kelvin	1.07
3500 Kelvin	1.00
3000 Kelvin	1.00
2700 Kelvin	0.95
80 CRI.....	1.00
90 CRI.....	0.91

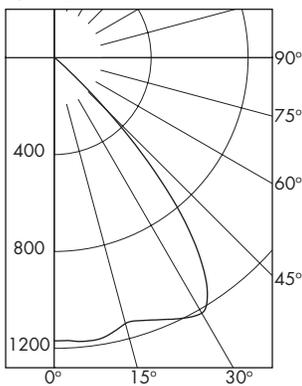
## Delivered Lumens

The table below shows the delivered lumens for the various lumen outputs.

Output	Beam	Lens	Delivered Lumens	Input Watts	Lumens Per Watt	Full Catalog String
11L	80	Open	1085	12.5	87	LF8SL-8LFSL11L30K8
15L	80	Open	1454	16.0	91	LF8SL-8LFSL15L30K8
20L	80	Open	1916	22.1	87	LF8SL-8LFSL20L30K8
11L	90	Open	1038	14.1	74	LF8SL-8LFSL11L30K9
15L	90	Open	1406	19.4	72	LF8SL-8LFSL15L30K9
20L	90	Open	1853	25.5	73	LF8SL-8LFSL20L30K9

### LF8SL-8LFSL20L30K8

LED Light Engine: 3000K, 80 CRI  
System Wattage: 22.1W  
Fixture Delivered Lumens: 1916  
Fixture Efficacy: 86.7  
Spacing Criteria: 1.2



Test No. 18.00336

Tested at 25°C Ambient in accordance to IESNA LM-79-200

### ZONAL LUMEN SUMMARY

ZONE	LUMENS	%LUMINAIRE
0-30	988	51.6
0-40	1639	85.5
0-60	1913	99.9
0-90	1916	100.0
90-180	0	0.0
0-180	1916	100.0

### LUMINANCE DATA IN CANDELA/SQ. METER

Angle in Vertical	Average
45°	14359
55°	687
65°	155
75°	0
85°	0

### COEFFICIENTS OF UTILIZATION ZONAL CAVITY METHOD

Room Cavity Ratio	% Effective Ceiling Cavity Reflectance																
	80					70											
	10	20	30	40	50	10	20	30	40	50							
1	113	110	107	105	110	108	105	103	104	102	100	100	98	97	96	95	94
2	106	101	97	93	104	99	95	92	96	93	90	93	90	88	90	88	86
3	100	93	87	83	98	92	86	82	89	85	81	86	83	80	84	81	78
4	94	86	79	75	92	84	79	74	82	77	73	80	76	72	78	75	72
5	88	79	72	68	87	78	72	67	76	71	67	74	70	66	73	69	65
6	83	73	66	61	81	72	66	61	71	65	61	69	64	60	68	63	60
7	78	68	61	56	77	67	60	56	66	60	56	64	59	55	63	58	55
8	73	63	56	51	72	62	56	51	61	55	51	60	55	51	59	54	50
9	69	58	52	47	68	58	51	47	57	51	47	56	50	47	55	50	46
10	65	54	48	43	64	54	48	43	53	47	43	52	47	43	51	46	43

LF8SL-8LFSL20L30K8

Test No. 18.00336

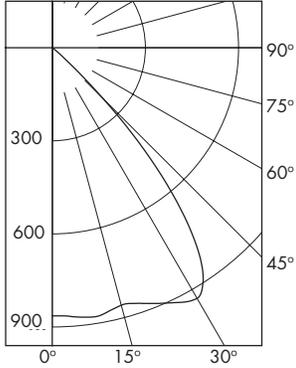


# PHOTOMETRIC DATA

## LiteFrame - 8" LF8SL Downlight

### LF8SL-8LFSL15L30K8

LED Light Engine: 3000K, 80 CRI  
 System Wattage: 16W  
 Fixture Delivered Lumens: 1454  
 Fixture Efficacy: 90.9  
 Spacing Criteria: 1.2



#### CANDELA DISTRIBUTION

DEG	CANDELA
0	864
5	871
15	859
25	907
35	833
45	230
55	7
65	1
75	0
85	0
90	0

Test No. 18.00335

Tested at 25°C Ambient in accordance to IESNA LM-79-2008

#### ZONAL LUMEN SUMMARY

ZONE	LUMENS	%LUMINAIRE
0-30	750	51.5
0-40	1249	85.9
0-60	1453	99.9
0-90	1454	100.0
90-180	0	0.0
0-180	1454	100.0

#### LUMINANCE DATA IN CANDELA/SQ. METER

Angle in Vertical	Average
45°	10688
55°	401
65°	788
75°	0
85°	0

#### COEFFICIENTS OF UTILIZATION ZONAL CAVITY METHOD

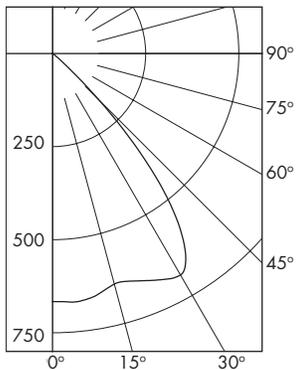
Room Cavity Ratio	% Effective Ceiling Cavity Reflectance																				
	80				70				50				30				10				
	70	50	30	10	70	50	30	10	70	50	30	10	70	50	30	10	70	50	30	10	
1	113	110	107	105	110	108	105	103	104	102	100	100	98	97	96	95	94				
2	107	101	97	93	104	99	95	92	96	93	90	93	90	88	90	88	86				
3	100	93	87	83	98	92	86	82	89	85	81	86	83	80	84	81	78				
4	94	86	79	75	92	85	79	74	82	77	73	80	76	72	78	75	72				
5	88	79	72	68	87	78	72	67	76	71	67	74	70	66	73	69	65				
6	83	73	66	61	81	72	66	61	71	65	61	69	64	60	68	63	60				
7	78	68	61	56	77	67	60	56	66	60	56	64	59	55	63	58	55				
8	73	63	56	51	72	62	56	51	61	55	51	60	55	51	59	54	50				
9	69	58	52	47	68	58	51	47	57	51	47	56	50	47	55	50	46				
10	65	54	48	43	64	54	48	43	53	47	43	52	47	43	51	46	43				

LF8SL-8LFSL15L30K8

Test No. 18.00335

### LF8SL-8LFSL11L30K8

LED Light Engine: 3000K, 80 CRI  
 System Wattage: 12.5W  
 Fixture Delivered Lumens: 11085  
 Fixture Efficacy: 86.8  
 Spacing Criteria: 1.2



#### CANDELA DISTRIBUTION

DEG	CANDELA
0	866
5	670
15	641
25	671
35	612
45	176
55	7
65	1
75	0
85	0
90	0

Test No. 18.00334

Tested at 25°C Ambient in accordance to IESNA LM-79-2008

#### ZONAL LUMEN SUMMARY

ZONE	LUMENS	%LUMINAIRE
0-30	558	51.4
0-40	926	85.4
0-60	1083	99.9
0-90	1085	100.0
90-180	0	0.0
0-180	1085	100.0

#### LUMINANCE DATA IN CANDELA/SQ. METER

Angle in Vertical	Average
45°	8178
55°	401
65°	78
75°	0
85°	0

#### COEFFICIENTS OF UTILIZATION ZONAL CAVITY METHOD

Room Cavity Ratio	% Effective Ceiling Cavity Reflectance																				
	80				70				50				30				10				
	70	50	30	10	70	50	30	10	70	50	30	10	70	50	30	10	70	50	30	10	
1	113	110	107	105	110	108	105	103	104	102	100	100	98	97	96	95	94				
2	106	101	97	93	104	99	95	92	96	93	90	93	90	88	90	88	86				
3	100	93	87	83	98	92	86	82	89	85	81	86	83	80	84	81	78				
4	94	86	79	75	92	84	79	74	82	77	73	80	76	72	78	75	72				
5	88	79	72	68	87	78	72	67	76	71	67	74	70	66	73	69	65				
6	83	73	66	61	81	72	66	61	71	65	61	69	64	60	68	63	60				
7	78	68	61	56	77	67	60	56	66	60	56	64	59	55	63	58	55				
8	73	63	56	51	72	62	56	51	61	55	51	60	54	51	59	54	50				
9	69	58	52	47	68	58	51	47	57	51	47	56	50	47	55	50	46				
10	65	54	48	43	64	54	47	43	53	47	43	52	47	43	51	46	43				

LF8SL-8LFSL11L30K8

Test No. 18.00334



## Dimming Compatibility Table

Dimming Ballast	Manufacturer	Web Link
DM/DM1	Lutron DTV	<a href="http://bit.ly/11jSvZg">http://bit.ly/11jSvZg</a>
DM/DM1	Leviton AWRMG-7xx, AWSMG-7xx, AWSMT-7xx	<a href="http://bit.ly/1BIn2R9">http://bit.ly/1BIn2R9</a>
EDM	Lutron	<a href="http://bit.ly/1vtjHAL">http://bit.ly/1vtjHAL</a>
2DM	Lutron	<a href="http://bit.ly/1S4WjXK">http://bit.ly/1S4WjXK</a>

### DMX

See instruction sheet on [www.prescolite.com](http://www.prescolite.com) for connection & installation information.

Other useful links: <http://www.eldoled.com/led-drivers/powerdrive/50-watt/ac-561s/>

### Central Inverters

For full fixture output in back-up mode, we recommend you visit [www.dual-lite.com](http://www.dual-lite.com) for your Central Lighting Inverter options. Please contact your local Hubbell representative for any assistance with proper sizing and loading of your inverter selection. Central lighting inverters must be ordered separately.

**LiteGear:** [www.dual-lite.com/products/litegear\\_lg\\_series](http://www.dual-lite.com/products/litegear_lg_series)

**LPS Series:** [www.dual-lite.com/products/lps](http://www.dual-lite.com/products/lps)

### SpectraSync™ Color Tuning Technology:

Control your space based on the needs of the application, specific activities throughout the day and preferences of the occupants with two distinct SpectraSync™ Color Tuning Technology.

**Dim to Warm:** Dim to Warm mimics the familiar warming effect that occurs with traditional incandescent sources as they are dimmed. (Available with 2200K-3000K).

**Tunable White:** Tunable White offers users the ability to tailor CCT to their personal preference, enhancing task visibility, material and colors or the aesthetics of the space. (Available with 2700K-5000K or 2700K-6500K).

See separate [SpectraSync™ Tech Sheet](#) for additional details.

### NX Distributed Intelligence:

Supports indoor and outdoor applications, wired, wireless and hybrid networked NX lighting control deployments and enables emerging applications such as Hubbell Lighting's SpectraSync™ color tuning technology.

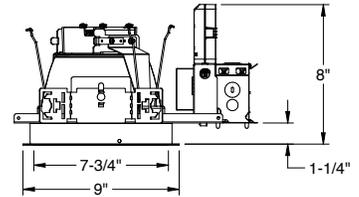
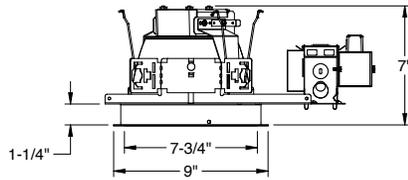
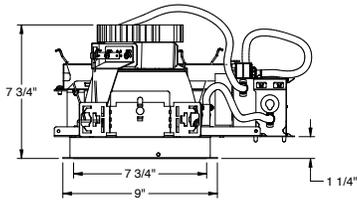
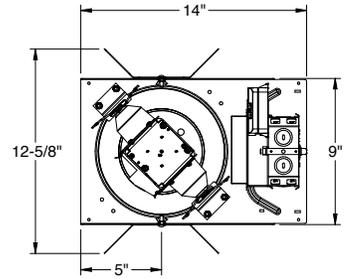
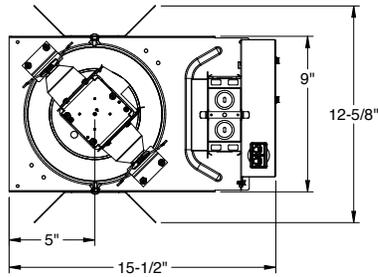
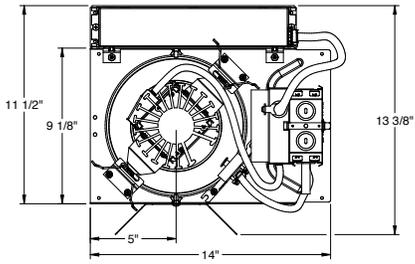
See separate [NX™ Solutions Guide](#) for additional details.

See Hubbell Controls Solution [NX Brochure](#).

### NOTES:

When ordering a sloped ceiling adapter, specify the degree of slope in 5° increments, max. of 35°. For a more precise degree or wet ceiling applications, please contact factory. Sloped ceiling adapter and housing must be installed at the same time.

# LiteFrame - 8" LF8SL Downlight



**LF8SL EM/EMR**

**LF8SL NX(W/E)**

**LF8SL LV(E)**