

# 8" LED Downlight LC8SL

1000/1400/1800 Lumens  
120V-277V, 347V  
0-10V Dimming

### APPLICATIONS:

LiteFrame Commercial LC8SL is a 8" commercial grade LED downlight with available outputs between 1000-1800 lumens. This is suitable to replace most CFL downlighting applications, while realizing substantial energy and maintenance savings. Rated for a minimum of 50,000 hours life (70% lumen maintenance) with ambient plenum temperatures up to 35°C. Free Air Flow around the fixture is required for optimal life performance. This product is not recommended for use with 3rd party "FIREHAT" or insulation barriers.

### 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 and can be upgraded to accommodate technology improvements. Approved 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 LC8SL uses mid power Nichia LEDs, specifically mixed to provide a minimum of 80 CRI with 3 SDCM color consistency. The use of multiple mid power LEDs allows for optimal thermal management by effectively spreading the heat over a larger area and eliminating hot spots on the LEDs. A diffuse, yet highly transmissive lens obscures the view of the LEDs and creates a smooth, even look from below. The light engine is available in multiple Kelvin temperatures and the system is designed to provide optimal life and lumen maintenance (50,000 hours at 70% lumen maintenance). The reflector/light engine assembly is mechanically retained to the housing.

### LED DRIVER:

The LC8SL utilizes a constant current LED driver. This same driver is capable of running all three different lumen outputs, resulting in a reduction of housing skus and simplified specification. The driver is UL8750, Class II compliant and universal 120V-277V.

### DIMMING:

Comes standard with flicker-free 0-10V dimming to 10%. 0-10V to 1% dimming option is also available. See list of compatible dimmers on page 3. For the sizing of the control circuit, the dimming circuit may require up to 2mA of sink current.

### INSTALLATION:

Light commercial 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 (EM and EMR damp location). ENERGY STAR Qualified.

This product qualifies as a "designated country construction material" per FAR 52.225-11 Buy American-Construction. Materials under Trade Agreements effective 6/10/2020. See [Buy American Solutions](#).

### WARRANTY:

5 year warranty. See [www.prescolite.com](http://www.prescolite.com) for details.

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

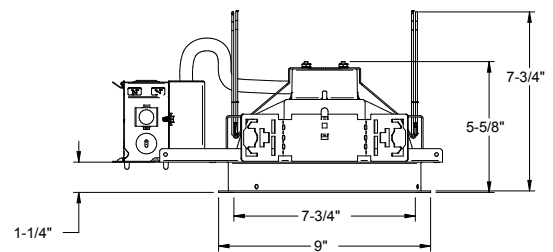
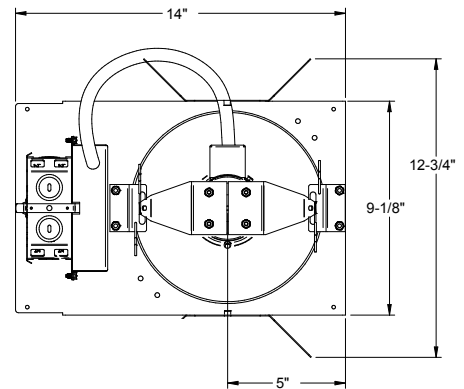
FIRM NAME: \_\_\_\_\_

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



### LC8SL 10L & 14L

\*See page 4 for LC8SL 18L line art

\*See page 4 for LC8SLEM line art

\*See page 4 for LC8SLCP line art

Order housing, reflector, and accessories separately

### CATALOG NUMBER:

EXAMPLE: LC8SL-8LCSL14L35K9WT

HOUSING	DRIVER OPTIONS	VOLTAGE	HOUSING OPTION	TRIM APERTURE	OUTPUT	KELVIN	CRI	REF. FINISH/ COLOR OPTION	REFLECTOR OPTIONS	ACCESSORIES
<input type="checkbox"/> <b>LC8SL</b> Standard Lumen 0-10V Dimming to 10% 120V-277V	Standard 0-10V 10% Dimming <input type="checkbox"/> <b>DM1</b> 0-10V 1% Dimming	Standard 120V-277V <input type="checkbox"/> <b>347<sup>4,7</sup></b> 347V	<input type="checkbox"/> <b>EM<sup>2,4</sup></b> Integral Battery Pack <input type="checkbox"/> <b>EMR<sup>4</sup></b> Remote Battery Pack <input type="checkbox"/> <b>CP<sup>3,6</sup></b> Chicago Plenum	<input type="checkbox"/> <b>8LCSL</b> Standard Lumen Clear Alzak Reflector	<input type="checkbox"/> <b>10L</b> 1000 Lumen <input type="checkbox"/> <b>14L</b> 1400 Lumen <input type="checkbox"/> <b>18L</b> 1800 Lumen	<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>8</b> 80+ CRI <input type="checkbox"/> <b>9</b> 90+ CRI	Standard, Semi-Diffuse Clear Alzak <input type="checkbox"/> <b>WH</b> Painted Matte White Reflector and Flange	<input type="checkbox"/> <b>WT</b> Painted White Flange only <input type="checkbox"/> <b>WF</b> Wide Flange <input type="checkbox"/> <b>EM<sup>2,4</sup></b> Integral Battery Pack <input type="checkbox"/> <b>CP<sup>3,6</sup></b> Chicago Plenum	<input type="checkbox"/> <b>B24</b> Set of two(2) 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>SCA8D</b> Sloped ceiling adapter (see note on page 4) <input type="checkbox"/> <b>LiteGear<sup>1</sup></b> Inverter, single phase central lighting, 125VA-250VA <input type="checkbox"/> <b>LPS Series<sup>1</sup></b> LitePower micro-inverter, 20VA- 55VA

<sup>1</sup> See Central Inverter compatibility note and web links on page 3.  
<sup>2</sup> EM must be selected on both the housing and the trim.  
<sup>3</sup> Not compatible with EM or EMR  
<sup>4</sup> Damp location only  
<sup>5</sup> Compatible with EMR only  
<sup>6</sup> CP must be selected on both the housing and the trim  
<sup>7</sup> Not compatible with CP



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

LFR-LED-042

# PHOTOMETRIC DATA

# LiteFrame - 8" LC8SL Downlight

DRIVER DATA	8LCSL10Lxxx	8LCSL14Lxxx	8LCSL18Lxxx
Input Voltage	120-277V	120-277V	120-277V
Input Frequency	50/60 Hz	50/60 Hz	50/60 Hz
Input Current	0.111 (120v) 0.048 (277v)	0.148 (120v) 0.064 (277v)	0.185 (120v) 0.080 (277v)
Input Power	13.3W	17.7W	22.0W
Constant Current Output	700mA	700mA	700mA
Power Factor	≥0.90	≥0.90	≥0.90
THD	<25%	<20%	<20%
EMI Filtering	FCC 47CFR Part 15, Class A	FCC 47CFR Part 15, Class A	FCC 47CFR Part 15, Class A
Operating Temperature	-30°C to +35°C	-30°C to +28°C	-30°C to +25°C
Dimming	0-10V	0-10V	0-10V

Over-voltage, over-current, short-circuit protected

When operating in EM mode, the fixture will deliver approximately 30% of the published full lumen output.

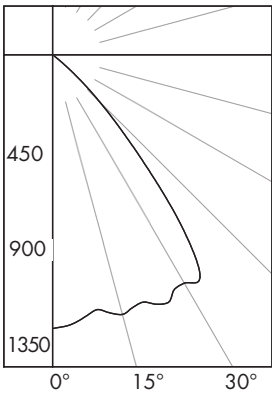
### Lumen Multiplier Table

Photometrics for the LC8SL are published below at a nominal 3500 Kelvin temperature. This table may be used to approximate the lumen values at different Kelvin temperatures. Power consumption would stay the same.

5000 Kelvin	1.09
4000 Kelvin	1.00
3500 Kelvin	1.00
3000 Kelvin	0.99
2700 Kelvin	0.96

### LC8SL 8LCSL18L35K8

LED Light Engine: 3500K, 80+ CRI  
System Wattage: 22.1W  
Fixture Delivered Lumens: 1973  
Fixture Efficacy: 89.3  
Spacing Criteria: 1.2



### CANDELA DISTRIBUTION

DEG	CANDELA
0	1263
5	1239
15	1241
25	1262
35	1158
45	309
55	8
65	3
75	1
85	0
90	0

Test No. 16.03295

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

### ZONAL LUMEN SUMMARY

ZONE	LUMENS	%LUMINAIRE
0-30	1035	52.5
0-40	1702	86.3
0-60	1968	99.7
0-90	1973	100.0
90-180	0	0.0
0-180	1973	100.0

### LUMINANCE DATA IN CANDELA/SQ. METER

Angle in Vertical	Average
45°	13470
55°	430
65°	219
75°	119
85°	0

### COEFFICIENTS OF UTILIZATION Zonal Cavity Method

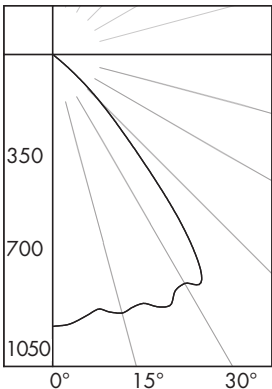
Room Cavity Ratio	% Effective Ceiling Cavity Reflectance																
	80%		70%		50%		30%		10%								
	70	50	30	10	70	50	30	10	50	30	10						
% 20% Effective Floor Cavity Reflectance																	
% Wall Reflectance																	
1	113	110	107	105	110	108	105	103	104	102	100	100	98	97	96	95	94
2	107	101	97	93	104	99	95	92	96	93	90	93	90	88	90	88	86
3	100	93	88	83	98	92	87	82	89	85	81	87	83	80	84	81	79
4	94	86	80	75	92	85	79	74	82	77	74	80	76	73	78	75	72
5	89	79	73	68	87	78	72	68	76	71	67	75	70	66	73	69	66
6	83	73	67	62	82	72	66	61	71	65	61	69	64	61	68	64	60
7	78	68	61	56	77	67	61	56	66	60	56	65	59	56	63	59	55
8	74	63	56	52	72	62	56	52	61	55	51	60	55	51	59	54	51
9	69	59	52	47	68	58	52	47	57	51	47	56	51	47	55	50	47
10	66	55	48	44	64	54	48	44	53	48	44	52	47	43	52	47	43

LC8SL 8LCSL18L35K8

Test No. 16.03295

### LC8SL 8LCSL14L35K8

LED Light Engine: 3500K, 80+ CRI  
System Wattage: 17.8W  
Fixture Delivered Lumens: 1547  
Fixture Efficacy: 86.9  
Spacing Criteria: 1.2



### CANDELA DISTRIBUTION

DEG	CANDELA
0	976
5	962
15	961
25	995
35	914
45	245
55	6
65	2
75	1
85	0
90	0

Test No. 16.03296

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

### ZONAL LUMEN SUMMARY

ZONE	LUMENS	%LUMINAIRE
0-30	809	52.3
0-40	1333	86.2
0-60	1544	99.8
0-90	1547	100.0
90-180	0	0.0
0-180	1547	100.0

### LUMINANCE DATA IN CANDELA/SQ. METER

Angle in Vertical	Average
45°	10680
55°	322
65°	146
75°	119
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	50	30	10						
% 20% Effective Floor Cavity Reflectance																	
% Wall Reflectance																	
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	88	83	98	92	87	82	89	85	81	87	83	80	84	81	79
4	94	86	80	75	92	85	79	74	82	77	74	80	76	73	78	75	72
5	89	79	73	68	87	78	72	67	76	71	67	75	70	66	73	69	66
6	83	73	66	62	82	72	66	61	71	65	61	69	64	61	68	64	60
7	78	68	61	56	77	67	61	56	66	60	56	64	59	56	63	59	55
8	74	63	56	52	72	62	56	51	61	55	51	60	55	51	59	54	51
9	69	59	52	47	68	58	52	47	57	51	47	56	51	47	55	50	47
10	66	55	48	44	64	54	48	44	53	47	43	52	47	43	52	47	43

LC8SL 8LCSL14L35K8

Test No. 16.03296

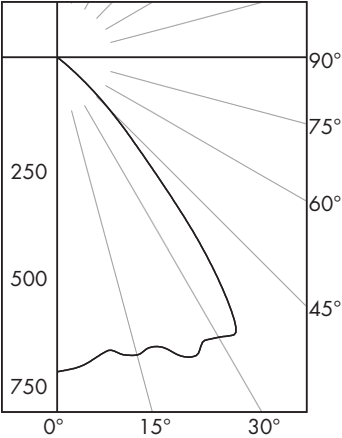


# PHOTOMETRIC DATA

# LiteFrame - 8" LC8SL Downlight

## LC8SL 8LCSL10L35K8

LED Light Engine: 3500K, 80+ CRI  
 System Wattage: 13.4W  
 Fixture Delivered Lumens: 1126  
 Fixture Efficacy: 84.0  
 Spacing Criteria: 1.2



### CANDELA DISTRIBUTION

DEG	CANDELA
0	709
5	696
15	695
25	742
35	669
45	166
55	4
65	2
75	1
85	0
90	0

### ZONAL LUMEN SUMMARY

ZONE	LUMENS	%LUMINAIRE
0-30	597	53.0
0-40	982	87.2
0-60	1124	99.8
0-90	1126	100.0
90-180	0	0.0
0-180	1126	100.0

### LUMINANCE DATA IN CANDELA/SQ. METER

Angle in Vertical	Average
45°	7236
55°	215
65°	146
75°	119
85°	0

### COEFFICIENTS OF UTILIZATION

Zonal Cavity Method

Room Cavity Ratio	% Effective Ceiling Cavity Reflectance																
	80%			70%			50%			30%			10%				
	70	50	30	70	50	30	70	50	30	70	50	30	70	50	30		
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	88	83	98	92	87	83	89	85	81	87	83	80	84	81	79
4	94	86	80	75	92	85	79	75	83	78	74	80	76	73	79	75	72
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7	78	68	61	57	77	67	61	56	66	60	56	65	60	56	63	59	55
8	74	63	56	52	72	63	56	51	61	56	51	60	55	51	59	54	51
9	70	59	52	48	68	58	52	48	57	51	47	56	51	47	55	51	47
10	66	55	48	44	65	54	48	44	53	48	44	53	47	44	52	47	43

LC8SL 8LCSL10L35K8

Test No. 16.03297

Test No. 16.03297

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

### 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/1BJn2R9">http://bit.ly/1BJn2R9</a>

### 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)

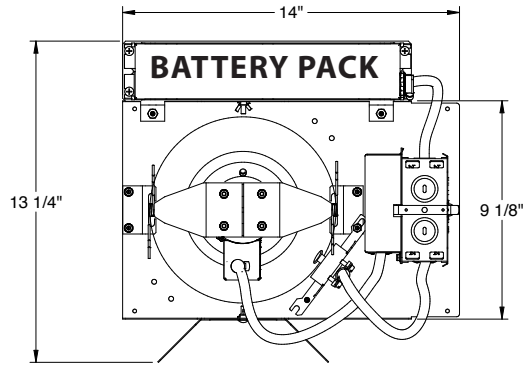
LPS Series: [www.dual-lite.com/products/lps](http://www.dual-lite.com/products/lps)

### SCA8D

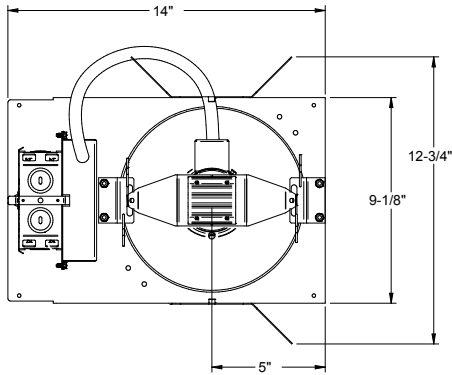
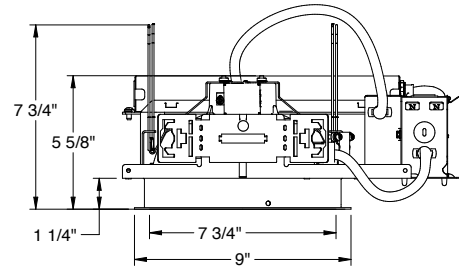
When ordering a sloped ceiling adapter, specify the degree of slope in 1° increments, maximum of 35°. For a more precise degree or wet ceiling applications, please contact factory. Sloped ceiling adapter and housing must be installed at the same time.



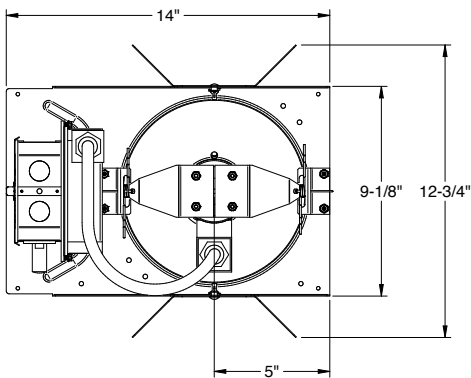
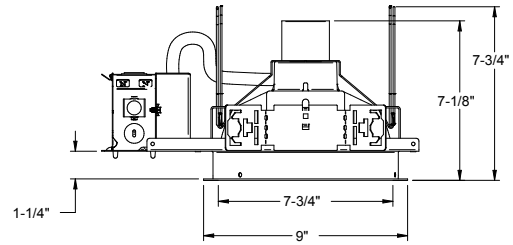
# LiteFrame - 8" LC8SL Downlight



LC8SL EM



LC8SL 18L



LC8SL CP

