

# 6" LED Downlight LC6SL

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

### APPLICATIONS:

LiteFrame Commercial LC6SL is a 6" 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 LC6SL 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 LC6SL 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 (4). For the sizing of the control circuit, the dimming circuit may require 12-3/4" up to 2mA of sink current.

### INSTALLATION:

Light commercial bar hangers included (not with WWCP option). 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). Wall wash orientation may be field adjusted in 90° increments to housing.

### CERTIFICATIONS:

CSA certified to US and Canadian safety standards. Suitable for wet locations (EM, EMR and WW 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.

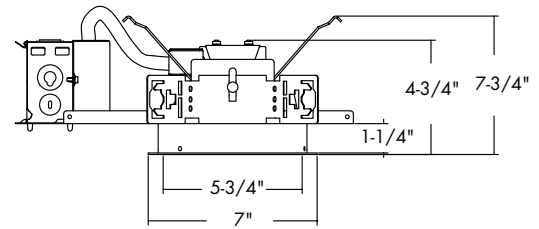
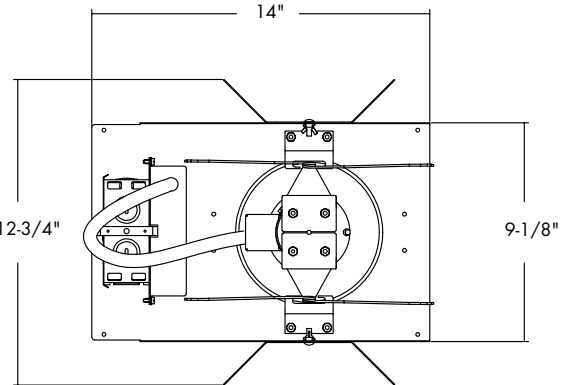
DATE: \_\_\_\_\_ TYPE: \_\_\_\_\_

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

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



Ceiling Cutout: 6 1/4"  
Maximum Ceiling Thickness 1 1/4"  
For conversion to millimeters,  
multiply inches by 25.4  
Not to Scale



### LC6SL 10L & 14L

- \*See page 4 for LC6SL 18L line art
- \*See page 4 for LC6SL EM line art
- \*See page 4 for LC6SL CP line art
- \*See page 4 for LC6SL WWCP line art

Order housing, reflector, and accessories separately

### CATALOG NUMBER:

EXAMPLE: LC6SL-6LCSL14L35K9WT

HOUSING	DRIVER OPTIONS	VOLTAGE	HOUSING OPTIONS	TRIM APERTURE	OUTPUT	KELVIN	CRI	REF. FINISH/ COLOR OPTION	REFLECTOR OPTIONS	ACCESSORIES
<input type="checkbox"/> <b>LC6SL</b> Standard Lumen 0-10V Dimming to 10% 120V-277V	<input type="checkbox"/> Standard 0-10V 10% Dimming <input type="checkbox"/> <b>DM1</b> 0-10V 1% Dimming	<input type="checkbox"/> Standard 120V-277V <input type="checkbox"/> <b>347<sup>3,7,10</sup></b> 347V	<input type="checkbox"/> <b>EM<sup>2,4,8</sup></b> Integral Battery Pack <input type="checkbox"/> <b>EMR<sup>4</sup></b> Remote Battery Pack <input type="checkbox"/> <b>CP<sup>3,6,8</sup></b> Chicago Plenum <input type="checkbox"/> <b>WWCP<sup>3,9</sup></b> Wall Wash Chicago Plenum Housing	<input type="checkbox"/> <b>6LCSL</b> Standard 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	<input type="checkbox"/> 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>WW<sup>4,5,7</sup></b> Wall Wash <input type="checkbox"/> <b>EM<sup>2,4,8</sup></b> Integral Battery Pack <input type="checkbox"/> <b>CP<sup>3,6</sup></b> Chicago Plenum <input type="checkbox"/> <b>IP65<sup>11</sup></b> Flush Lens, IP65/66 rated <input type="checkbox"/> <b>VR<sup>11</sup></b> Vandal Resistant Flush Lens, IP65/66 rated	<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>SCA6D</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 4.  
<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  
<sup>8</sup> Not available with WW option  
<sup>9</sup> WW must be selected on trim  
<sup>10</sup> Not compatible with WWCP  
<sup>11</sup> IP65 and VR cannot be chosen together, not compatible with WT, WF, or EM



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-041

# PHOTOMETRIC DATA

# LiteFrame - 6" LC6SL Downlight

DRIVER DATA	6LCSL10Lxxx	6LCSL14Lxxx	6LCSL18Lxxx
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	13.4W	17.8W	22.2W
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.

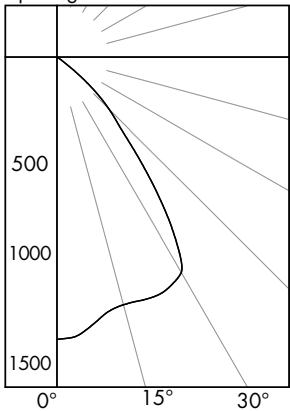
### Lumen Multiplier Table

Photometrics for the LC6SL 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

### LC6SL 6LCSL18L35K8

LED Light Engine: 3500K, 80+ CRI  
System Wattage: 22.3W  
Fixture Delivered Lumens: 1941  
Fixture Efficacy: 87.0  
Spacing Criteria: 1.1



### CANDELA DISTRIBUTION

DEG	CANDELA
0	1368
5	1345
15	1243
25	1247
35	923
45	357
55	27
65	5
75	1
85	0
90	0

Test No. 16.03178

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

### ZONAL LUMEN SUMMARY

ZONE	LUMENS	%LUMINAIRE
0-60	1935	99.7
0-90	1941	100.0
90-180	0	0.0
0-180	1941	100.0

### LUMINANCE DATA IN CANDELA/SQ. METER

Angle in Vertical	Average
45°	27667
55°	2580
65°	648
75°	212
85°	0

### COEFFICIENTS OF UTILIZATION Zonal Cavity Method

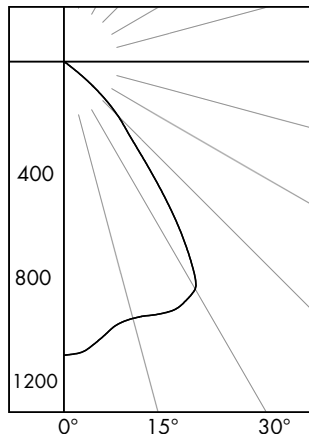
Room Cavity Ratio	% Effective Ceiling Cavity Reflectance																
	80%		70%		50%		30%		10%								
	70	50	30	10	70	50	30	10	50	30	10	50	30	10			
% 20% Effective Floor Cavity Reflectance																	
% Wall Reflectance																	
1	113	110	107	105	110	108	105	103	104	102	100	100	98	97	96	95	94
2	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	89	79	73	68	87	78	72	67	76	71	67	74	70	66	73	69	66
6	83	73	66	62	82	72	66	61	71	65	61	69	64	60	68	63	60
7	78	68	61	56	77	67	61	56	66	60	56	64	59	55	63	59	55
8	74	63	56	52	72	62	56	52	61	55	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	54	48	44	53	47	44	52	47	44

LC6SL 6LCSL18L35K8

Test No. 16.03178

### LC6SL 6LCSL14L35K8

LED Light Engine: 3500K, 80+ CRI  
System Wattage: 17.9W  
Fixture Delivered Lumens: 1520  
Fixture Efficacy: 84.9  
Spacing Criteria: 1.1



### CANDELA DISTRIBUTION

DEG	CANDELA
0	1072
5	1050
15	971
25	990
35	721
45	277
55	20
65	4
75	1
85	0
90	0

Test No. 16.03177

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

### ZONAL LUMEN SUMMARY

ZONE	LUMENS	%LUMINAIRE
0-60	1515	99.7
0-90	1520	100.0
90-180	0	0.0
0-180	1520	100.0

### LUMINANCE DATA IN CANDELA/SQ. METER

Angle in Vertical	Average
45°	21467
55°	1911
65°	519
75°	212
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	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	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	80	75	92	85	79	74	82	77	73	80	76	73	78	75	72
5	89	79	73	68	87	78	72	67	76	71	67	74	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	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	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	54	48	44	53	47	44	52	47	44

LC6SL 6LCSL14L35K8

Test No. 16.03177

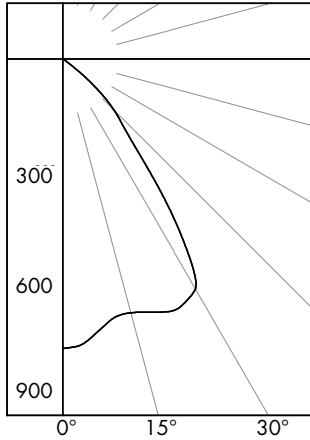


# PHOTOMETRIC DATA

## LiteFrame - 6" LC6SL Downlight

### LC6SL 6LCSL10L35K8

LED Light Engine: 3500K, 80+ CRI  
 System Wattage: 13.5W  
 Fixture Delivered Lumens: 1106  
 Fixture Efficacy: 81.9  
 Spacing Criteria: 1.1



#### CANDELA DISTRIBUTION

DEG	CANDELA
0	780
5	762
15	708
25	740
35	518
45	196
55	15
65	3
75	1
85	0
90	0

Test No. 16.03179

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

#### ZONAL LUMEN SUMMARY

ZONE	LUMENS	%LUMINAIRE
0-60	1103	99.7
0-90	1106	100.0
90-180	0	0.0
0-180	1106	100.0

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

Angle in Vertical	Average
45°	15190
55°	1433
65°	389
75°	212
85°	0

#### COEFFICIENTS OF UTILIZATION

Zonal Cavity Method

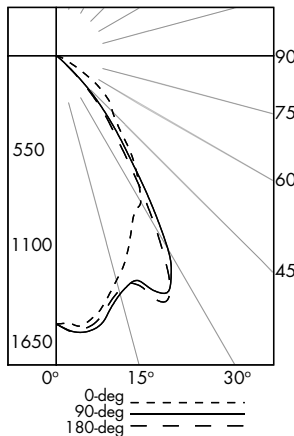
Room Cavity Ratio	% Effective Ceiling Cavity Reflectance																
	80%			70%			50%			30%			10%				
	70	50	30	70	50	30	70	50	30	70	50	30	70	50	30		
1	113	110	107	105	110	108	105	103	104	102	100	100	98	97	96	95	94
2	107	101	97	93	104	99	95	92	96	93	90	93	90	88	90	88	86
3	100	93	88	83	98	92	87	82	89	85	81	86	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	73	66	62	71	65	61	69	65	61	68	64	60
7	78	68	61	57	77	67	61	56	66	60	56	65	60	56	64	59	55
8	74	63	57	52	73	63	56	52	61	56	52	60	55	51	59	55	51
9	70	59	52	48	69	58	52	48	57	52	48	57	51	47	56	51	47
10	66	55	49	44	65	55	48	44	54	48	44	53	48	44	52	47	44

LC6SL 6LCSL10L35K8

Test No. 16.03179

### LC6SL 6LCSL18L35K8 WW

LED Light Engine: 3500K, 80+ CRI  
 System Wattage: 22.2W  
 Fixture Delivered Lumens: 1938  
 Fixture Efficacy: 87.3



#### CANDELA DISTRIBUTION

DEG	0	90	180
0	1527	1527	1527
5	1545	1581	1565
15	1324	1404	1383
25	1030	1489	1517
35	792	780	670
45	454	219	189
55	273	8	8
65	64	2	2
75	9	1	1
85	0	0	0
90	0	0	0

Test No. 16.03309

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

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

Angle in Vertical	0 DEG	90 DEG	180 DEG
45°	38311	18480	15949
55°	28400	832	832
65°	9036	282	282
75°	2075	231	231
85°	0	0	0

MULTIPLE UNITS											
1' 2' 3' 4'				UNITS ON 3' CENTER				UNITS ON 4' CENTER			

#### 2' DISTANCE FIXTURE MOUNTED OUT FROM WALLS FOOTCANDLE DISTRIBUTION ON WALL SURFACE (DIRECT ONLY)

DISTANCE FROM CEILING IN FEET	1'				2'				3'				4'			
	15	11	6	2	15	11	6	2	15	11	6	2	15	11	6	2
1	15	11	6	2	15	11	6	2	15	11	6	2	15	11	6	2
2	40	36	26	13	5	41	27	41	40	10	40	36	26	13	5	41
3	36	35	28	18	11	41	36	41	36	22	36	33	28	18	11	41
4	22	22	22	19	13	33	39	33	25	27	25	22	22	19	13	33
5	14	14	14	14	13	27	30	27	20	25	20	16	14	14	13	27
6	10	10	9	9	9	24	22	24	16	19	16	14	14	14	14	24
7	7	7	6	6	6	19	18	19	14	14	14	14	14	14	14	19
8	5	5	5	4	4	15	15	15	12	11	12	12	11	12	12	15
9	4	4	3	3	3	12	13	12	10	9	10	10	9	10	10	12

LC6SL 6LCSL18L35K8 WW

Test No. 16.03309



## 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)

### SCA6D

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.

