



8" High Lumen LED Downlight **LC8HL** 4500 & 6000 Lumen 120V-277V, 347V 0-10V Dimming

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

APPLICATIONS:

LiteFrame Commercial LC8HL is a 8" commercial grade high lumen LED downlight with two available outputs of 4500 and 6000 lumens. This is suitable to replace many HID 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 25°C. Free Air Flow around fixture is required for optimal life performance. This product is not recommended for outdoor use or 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 LC8HL uses high power Cree LEDs, specifically mixed to provide a minimum of 80 CRI with 3 SDCM color consistency. The use of multiple high 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 LC8HL utilizes a constant current LED driver. This driver is capable of running all 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. 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:

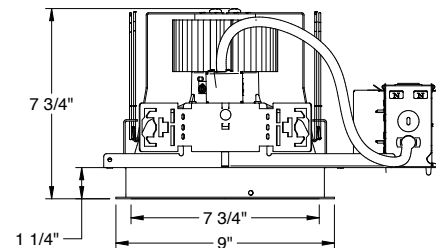
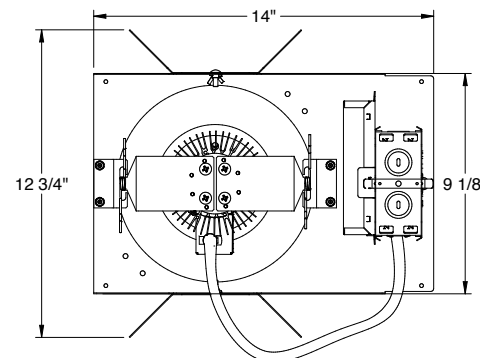
CSA certified to US and Canadian safety standards. Suitable for wet locations. (EM & EMR damp location). Approved for through branch wiring. Non-IC rated. Product is marked spacing and must be installed with the following minimum spacings:

- Center to Center of adjacent luminaires: 24"
- Minimum Overhead Clearance: 8-1/2"
(To bottom of metal pan)
- Center of Luminaire to Side of Building Member: 12"

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 for details.



LC8HL

See page 3 for LC8HL EM lineart

Order housing, reflector, and accessories separately

CATALOG NUMBER:

EXAMPLE: LC8HL-8LCHL60L30K8

HOUSING	DRIVER OPTIONS	VOLTAGE	HOUSING OPTION	TRIM APERTURE	OUTPUT	KELVIN	CRI	REF. FINISH/ COLOR OPTION	REFLECTOR OPTIONS	ACCESSORIES
<input type="checkbox"/> LC8HL ⁴ High Lumen 0-10V Dimming to 10% 120V-277V	<input type="checkbox"/> Standard 0-10V 10% Dimming <input type="checkbox"/> DM1 0-10V 1% Dimming	<input type="checkbox"/> Standard 120V-277V <input type="checkbox"/> 347 347	<input type="checkbox"/> EM ^{2,3} Integral Battery Pack <input type="checkbox"/> EMR ³ Remote Battery Pack	<input type="checkbox"/> 8LCHL High Lumen Clear Alzak Reflector	<input type="checkbox"/> 45L 4500 Lumen <input type="checkbox"/> 60L 6000 Lumen	<input type="checkbox"/> 27K 2700 Kelvin <input type="checkbox"/> 30K 3000 Kelvin <input type="checkbox"/> 35K 3500 Kelvin <input type="checkbox"/> 40K 4000 Kelvin <input type="checkbox"/> 50K 5000 Kelvin	Standard 120V-277V <input type="checkbox"/> 8 80+ CRI <input type="checkbox"/> 9 90+ CRI	Standard Semi-Diffuse Clear, Alzak <input type="checkbox"/> WH Painted Matte White Reflector and Flange	<input type="checkbox"/> WT Painted White Flange only <input type="checkbox"/> WF Wide Flange <input type="checkbox"/> EM ^{2,3} Pre-punched reflector to accept integral test switch	<input type="checkbox"/> B24 Set of two(2) 24" bar hangers for T-bar ceilings <input type="checkbox"/> B6 Set of two (2) bar hangers for ceiling joist up to 24" centers <input type="checkbox"/> SCA8D Sloped ceiling adapter (see note on page 3) <input type="checkbox"/> LiteGear ¹ Inverter, single phase central lighting, 125VA- 250VA

¹ See Central Inverter compatibility note and web link on page 3.
² EM must be selected on both the housing and the trim
³ Damp location only
⁴ Not suitable for outdoor use.



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 • Tech Support: (888) 777-4832

LFR-LED-046

PHOTOMETRIC DATA

LiteFrame - 8" LC8HL Downlight

DRIVER DATA	8LCHL45Lxxxx	8LCHL60Lxxxx
Input Voltage	120-277V	120-277V
Input Frequency	50/60 Hz	50/60 Hz
Input Current	0.433 (120v) 0.187 (277v)	0.566 (120v) 0.245 (277v)
Input Power	52W	68W
Constant Current Output	1.826A	1.826A
Power Factor	≥0.90	≥0.90
THD	<22%	<16%
EMI Filtering	FCC Title 47 Part 15, Class A	FCC Title 47 Part 15, Class A
Operating Temperature	-30°C to 35°C	-30°C to 30°C
Dimming	0-10V	0-10V
Over-voltage, over-current, short-circuit protected		

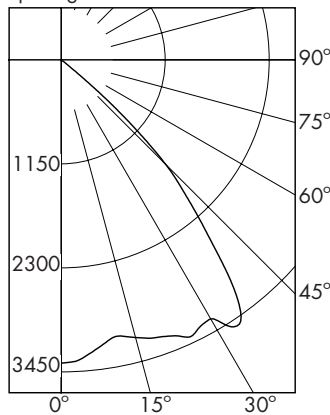
Lumen Multiplier Table

Photometrics for the LC8HL are published below at a nominal 3000 Kelvin temperature. This table may be used to approximate the lumen values at different Kelvin temperatures. Power consumption would stay the same.

5000 Kelvin	1.14
4000 Kelvin	1.03
3500 Kelvin	1.00
3000 Kelvin	1.00
2700 Kelvin	.91
90 CRI	.83

LC8HL 8LCHL60L30K8

LED Light Engine: 3000K, 80 CRI
System Wattage: 68.6W
Fixture Delivered Lumens: 6026
Fixture Efficacy: 87.8
Spacing Criteria: 1.3



CANDELA DISTRIBUTION

DEG	CANDELA
0	3354
5	3279
15	3178
25	3378
35	3469
45	1636
55	21
65	8
75	4
85	1
90	0

Test No. 16.00471

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

ZONAL LUMEN SUMMARY

ZONE	LUMENS	%LUMINAIRE
0-60	6012	99.8
0-90	6026	100.0
90-180	0	0.0
0-180	6026	100.0

LUMINANCE DATA IN CANDELA/SQ. METER

Angle in Vertical	Average
45°	75994
55°	1203
65°	622
75°	508
85°	377

COEFFICIENTS OF UTILIZATION Zonal Cavity Method

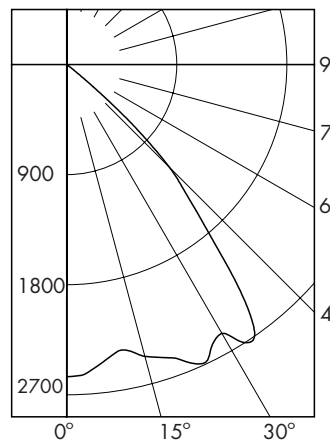
Room Cavity Ratio	% Effective Ceiling Cavity Reflectance																
	80%		70%		50%		30%		10%								
	70	50	30	10	70	50	30	10	50	30	10						
1	113	110	107	104	110	107	105	103	103	101	99	99	98	96	96	95	94
2	106	100	96	92	104	99	94	91	95	92	89	92	89	87	89	87	85
3	99	92	86	81	97	90	85	81	88	83	79	85	81	78	83	80	77
4	93	84	78	73	91	83	77	72	81	76	71	79	74	71	77	73	70
5	87	77	70	65	85	76	70	65	74	69	64	73	68	64	71	67	63
6	82	71	64	59	80	70	64	59	69	63	58	67	62	58	66	61	57
7	76	65	58	53	75	65	58	53	63	57	53	62	57	53	61	56	52
8	72	60	53	49	70	60	53	48	59	53	48	57	52	48	56	51	48
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44
10	63	52	45	41	62	51	45	41	51	45	40	50	44	40	49	44	40

LC8HL 8LCHL60L30K8

Test No. 16.00471

LC8HL 8LCHL45L30K8

LED Light Engine: 3000K, 80 CRI
System Wattage: 52.3W
Fixture Delivered Lumens: 4599
Fixture Efficacy: 87.9
Spacing Criteria: 1.3



CANDELA DISTRIBUTION

DEG	CANDELA
0	2553
5	2497
15	2470
25	2687
35	2680
45	1188
55	18
65	7
75	3
85	1
90	0

Test No. 16.00470

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

ZONAL LUMEN SUMMARY

ZONE	LUMENS	%LUMINAIRE
0-60	4587	99.7
0-90	4599	100.0
90-180	0	0.0
0-180	4599	100.0

LUMINANCE DATA IN CANDELA/SQ. METER

Angle in Vertical	Average
45°	51789
55°	967
65°	511
75°	357
85°	345

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						
1	113	110	107	104	110	107	105	103	103	101	99	100	98	96	96	95	94
2	106	100	96	92	104	99	94	91	95	92	89	92	89	87	89	87	85
3	99	92	86	82	97	91	85	81	88	83	80	85	82	78	83	80	77
4	93	84	78	73	91	83	77	73	81	76	72	79	74	71	77	73	70
5	87	77	70	65	85	76	70	65	75	69	65	73	68	64	71	67	64
6	82	71	64	59	80	70	64	59	69	63	59	67	62	58	66	61	58
7	77	66	59	54	75	65	58	54	64	58	53	62	57	53	61	56	53
8	72	61	54	49	70	60	53	49	59	53	49	58	52	48	57	52	48
9	67	56	49	45	66	56	49	45	55	49	44	54	48	44	53	48	44
10	63	52	45	41	62	52	45	41	51	45	41	50	45	41	49	44	40

LC8HL 8LCHL45L30K8

Test No. 16.00470



Dimming Compatibility Table

Dimming Ballast	Manufacturer	Web Link
DM/DM1	Lutron DDTV	http://bit.ly/11jSvZg
DM/DM1	Leviton AWRMG-7xx, AWSMG-7xx, AWSMT-7xx	http://bit.ly/1BJn2R9

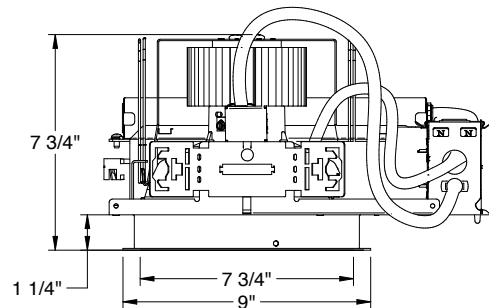
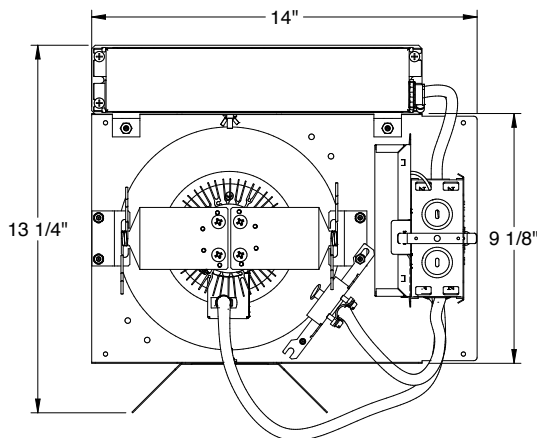
SCA8D

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.

Central Inverters

For full fixture output in back-up mode, we recommend you visit 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



LC8HL EM