



8" LED Downlight LC8ML

2400 & 3000 Lumens
120V-277V, 347V
0-10V Dimming

APPLICATIONS:

LiteFrame Commercial LC8ML is a 8" commercial grade LED downlight with available outputs between 2400-3000 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 25°C. Free Air Flow around 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 LC8ML 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 LC8ML utilizes a constant current LED driver that is capable of running both 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 1.2mA 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). 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.

DATE: _____ TYPE: _____

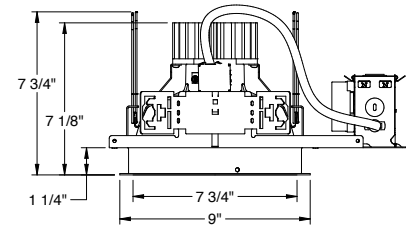
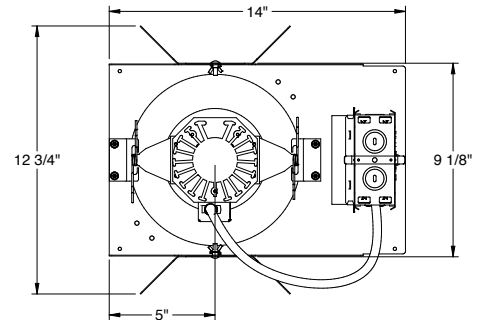
FIRM NAME: _____

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 3 for LC8ML EM line art

Order housing, reflector, and accessories separately

CATALOG NUMBER:

EXAMPLE: LC8MLDM1-8LCML30L35K9WH

HOUSING	DRIVER OPTIONS	VOLTAGE	HOUSING OPTION	TRIM APERTURE	OUTPUT	KELVIN	CRI	REF. FINISH/ COLOR OPTION	REFLECTOR OPTIONS	ACCESSORIES
<input type="checkbox"/> LC8ML Medium Lumen 0-10V Dimming to 10% 120V-277V	Standard 0-10V 10% Dimming <input type="checkbox"/> DM1 0-10V 1% Dimming	Standard 120V-277V <input type="checkbox"/> 347⁴ 347V	<input type="checkbox"/> EM^{5,6} Integral Battery Pack <input type="checkbox"/> EMR⁶ Remote Battery Pack <input type="checkbox"/> CP³ Chicago Plenum	<input type="checkbox"/> 8LCML Medium Lumen Clear Alzak Reflector	<input type="checkbox"/> 24L 2400 Lumen <input type="checkbox"/> 30L 3000 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	<input type="checkbox"/> 8 80+ CRI <input type="checkbox"/> 92 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"/> CP³ Chicago Plenum and <input type="checkbox"/> EM^{5,6} 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 4) <input type="checkbox"/> LiteGear¹ Inverter, single phase central lighting, 125VA- 250VA <input type="checkbox"/> LPS Series¹ LitePower micro-inverter, 20VA-55VA

¹ See Central Inverter compatibility note and web links on page 4.
² Not available in 40K or 50K
³ CP must be selected on both housing and trim
⁴ Not available with CP
⁵ EM must be selected on both the housing and the trim
⁶ Damp location only



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

LF8-LED-044

PHOTOMETRIC DATA

LiteFrame - 8" LC8ML Downlight

DRIVER DATA	8LCML24Lxxx	8LCML30Lxxx
Input Voltage	120-277V	120-277V
Input Frequency	50/60 Hz	50/60 Hz
Input Current	0.267 (120v) 0.116 (277v)	0.337 (120v) 0.146 (277v)
Input Power	32.0W	40.4W
Constant Current Output	675mA	675mA
Power Factor	≥0.90	≥0.90
THD	<20%	<20%
EMI Filtering	FCC 47CFR Part 15, Class A	FCC 47CFR Part 15, Class A
Operating Temperature	-30°C to +35°C	-30°C to +25°C
Dimming	0-10V to 10%	0-10V to 10%
Over-voltage, over-current, short-circuit protected		

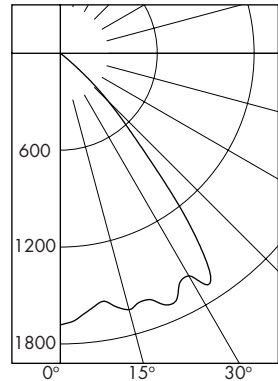
Lumen Multiplier Table

Photometrics for the LC8ML 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	1.14
4000 Kelvin	1.03
3500 Kelvin	1.00
3000 Kelvin	1.00
2700 Kelvin	0.91

LC8ML 8LCML24L35K8

LED Light Engine: 3500K, 80+ CRI
System Wattage: 32.0W
Fixture Delivered Lumens: 2625
Fixture Efficacy: 82.0
Spacing Criteria: 1.2



CANDELA DISTRIBUTION	
DEG	CANDELA
0	1682
5	1623
15	1644
25	1693
35	1582
45	419
55	6
65	2
75	1
85	1
90	0

ZONAL LUMEN SUMMARY

ZONE	LUMENS	%LUMINAIRE
0-30	1373	52.3
0-40	2270	86.5
0-60	2621	99.8
0-90	2625	100.0
90-180	0	0.0
0-180	2625	100.0

LUMINANCE DATA IN CANDELA/SQ. METER

Angle in Vertical	AVERAGE
45°	18266
55°	322
65°	146
75°	119
85°	354

Test No. 15.00537

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

COEFFICIENTS OF UTILIZATION Zonal Cavity Method

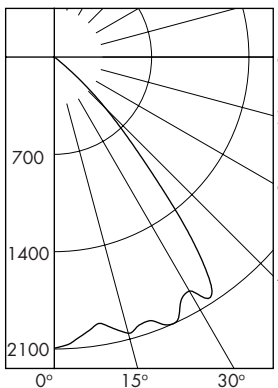
Room Cavity Ratio	% Effective Ceiling Cavity Reflectance					% Effective Floor Cavity Reflectance																			
	80%					70%					50%					30%					10%				
	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10					
1	113	110	107	105	110	108	105	103	104	102	100	100	98	97	96	95	94								
2	107	101	97	93	104	99	95	92	96	93	90	93	90	88	90	88	86								
3	100	93	88	83	98	92	87	83	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	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	65	54	48	44	53	48	44	52	47	43	52	47	43								

LC8ML 8LCML24L35K8

Test No. 15.00537

LC8ML 8LCML30L35K8

LED Light Engine: 3500K, 80+ CRI
System Wattage: 40.4W
Fixture Delivered Lumens: 3256
Fixture Efficacy: 80.6
Spacing Criteria: 1.2



CANDELA DISTRIBUTION	
DEG	CANDELA
0	2095
5	2025
15	2057
25	2093
35	1940
45	524
55	7
65	3
75	2
85	1
90	0

ZONAL LUMEN SUMMARY

ZONE	LUMENS	%LUMINAIRE
0-30	1702	52.3
0-40	2806	86.2
0-60	3250	99.8
0-90	3256	100.0
90-180	0	0
0-180	3256	100.0

LUMINANCE DATA IN CANDELA/SQ. METER

Angle in Vertical	AVERAGE
45°	22843
55°	376
65°	219
75°	238
85°	354

Test No. 15.00538

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

COEFFICIENTS OF UTILIZATION Zonal Cavity Method

Room Cavity Ratio	% Effective Ceiling Cavity Reflectance					% Effective Floor Cavity Reflectance																			
	80%					70%					50%					30%					10%				
	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	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	88	83	98	92	87	83	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	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	48	44	52	47	43	52	47	43								

LC8ML 8LCML30L35K8

Test No. 15.00538



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LiteFrame - 8" LC8ML Downlight

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

Central Inverters

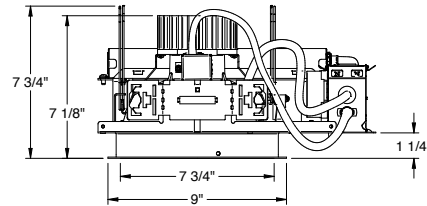
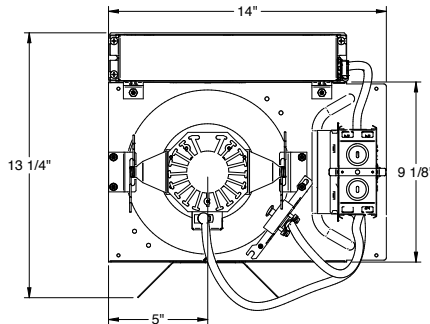
For full fixture output in back-up mode, we recommend you visit www.dual-lite.com for your Central Lighting Inverter options. Please contact your local Hubbell representative for any assistance with proper sizing and loading of your inverter selection. Central lighting inverters must be ordered separately.

LiteGear: www.dual-lite.com/products/litegear_lg_series

LPS Series: 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.



LC8ML EM