

8" LED Downlight LF8ML LENS

120V-277V
0-10V Dimming

APPLICATIONS:

LiteFrame LF8ML is a 8" specification grade LED lensed 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 LF8ML 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 LF8ML 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. 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. UL approved for NSF2 splash zone applications.

WARRANTY:

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

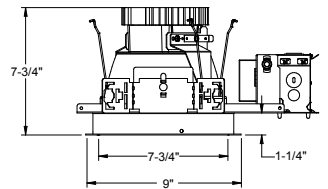
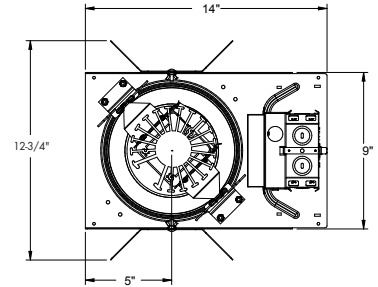
DATE: _____ TYPE: _____

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 3 for
NX(W)E line art.

EXAMPLE: LF8ML-8LFML30L35K8CL

CATALOG NUMBER:

Order housing, reflector, and accessories separately

HOUSING	DRIVER OPTION	VOLTAGE OPTION	TRIM APERTURE	REF. FINISH OPTIONS	REF. COLOR OPTIONS	TRIM OPTIONS	LENS	ACCESSORIES
<input type="checkbox"/> LF8ML Medium Lumen 0-10V 10% dimming 120-277V	Standard 0-10V 10% Dimming <input type="checkbox"/> DM1 ¹ 0-10V dimming at 1% <input type="checkbox"/> EDM ^{2,3} Hi-Lume 1% EcoSystem LED Driver <input type="checkbox"/> 2DM ^{2,3} Hi-Lume 1% 2-wire LED Driver (120V only) <input type="checkbox"/> DMX ^{2,3} DMX with RDM dimming to <0.1%	Standard 120V-277V <input type="checkbox"/> 120 120V <input type="checkbox"/> 277 277V HOUSING OPTIONS <input type="checkbox"/> LV ⁹ Lutron Vive Enabled, 0-10V, 120-277V <input type="checkbox"/> LVE (EDM Only) Lutron Vive Enabled, EcoSystem <input type="checkbox"/> NXWE ^{4,11} NX Wireless Enabled <input type="checkbox"/> NXE ^{4,11} NX Enabled, Dual SmartPorts <input type="checkbox"/> EMR ² Emergency Battery Pack with remote test switch and indicator light	<input type="checkbox"/> 8LFML30L Semi-Diffuse Clear Alzak Reflector with 3000 Lumen Module KELVIN <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"/> VSS Kurt Versen SoftSheen™	<input type="checkbox"/> 8 80+ CRI <input type="checkbox"/> 9 90+ CRI REF. FINISH OPTIONS <input type="checkbox"/> SP Specular <input type="checkbox"/> SS Semi-Specular <input type="checkbox"/> MFC American Matte™ <input type="checkbox"/> V Kurt Versen Specular <input type="checkbox"/> VS Kurt Versen Softglow® <input type="checkbox"/> VSS Kurt Versen SoftSheen™	Standard Clear Alzak <input type="checkbox"/> CG Champagne Gold Alzak <input type="checkbox"/> GD Gold Alzak <input type="checkbox"/> BL Black Alzak <input type="checkbox"/> WE Wheat Alzak <input type="checkbox"/> LW Light Wheat Alzak <input type="checkbox"/> PW Pewter Alzak <input type="checkbox"/> WH Painted Matte White Reflector and Flange <input type="checkbox"/> BC Painted Black Reflector and Flange	<input type="checkbox"/> WT Painted White Flange Only <input type="checkbox"/> TRG Trim Ring Gasket <input type="checkbox"/> WF ⁸ Wide Flange <input type="checkbox"/> BNCT ^{7,10} Black Non-conductive trim <input type="checkbox"/> WNCT ^{7,10} White Non-conductive trim <input type="checkbox"/> BNCTB ^{7,10} Black Non-conductive trim Baffled <input type="checkbox"/> WNCTB ^{7,10} White Non-conductive trim Baffled Notes: ¹ For DM1, do not specify voltage if 120V or 277V ² Not available with 347V ³ Voltage must be specified with EDM, 2DM, DMX or EMR ⁴ Not available with LV, LVE or EMR ⁵ Not available with DMX ⁶ See Central Inverter compatibility note and web links on page 3	<input type="checkbox"/> CL Clear Lens (Regressed Standard) <input type="checkbox"/> DL Diffuse Lens (Regressed Standard)	<input type="checkbox"/> B24 Set of two 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"/> LFSC8 8" Reflector screw cover <input type="checkbox"/> SCA8D Sloped ceiling adapter (see note on back page) <input type="checkbox"/> LiteGear ⁶ Inverter, single phase central lighting, 125VA-250VA <input type="checkbox"/> LPS Series ⁶ LitePower micro-inverter, 20VA-55VA ⁷ Not available with color/finish options. Semi-Diffuse finish only. ⁸ Not available with BNCT, WNCT, BNCTB, or WNCTB. ⁹ LV requires standard dimming or DM1 ¹⁰ Must select CL or DL ¹¹ Not available with EDM, 2DM or DMX

PHOTOMETRIC DATA

LiteFrame - 8" LF8ML Lens

DRIVER DATA	8LFML30L
Input Voltage	120V-277V
Input Frequency	60 Hz
Input Current	0.273A (120V) 0.118A (277V)
Input Power	32.7W
Power Factor	≥0.90
THD	<20%
EMI Filtering	FCC 47CFR Part 15, Class A
Operating Temperature	-20°C to 35°C
Dimming	0-10V
Over-voltage, over-current, short-circuit protected	

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

*Power consumption and photometric output may vary slightly with various driver and CRI options.

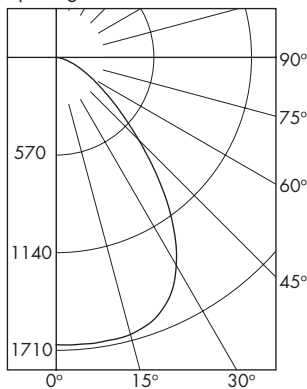
Delivered Lumens

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

Output	CRI	Lens	Delivered Lumens	Input Watts	Lumens Per Watt	Full Catalog String
30L	80	Open	3264	32.7	100	LF8ML-8LFML30L30K8CL
30L	80	Open	3165	32.7	97	LF8ML-8LFML30L30K8DL

LF8ML-8LFML30L30K8DL

LED Light Engine: 3000K, 80 CRI
System Wattage: 32.7W
Fixture Delivered Lumens: 3165
Fixture Efficacy: 97
Spacing Criteria: 1.1



CANDELA DISTRIBUTION

DEG	CANDELA
0	1685
5	1688
15	1682
25	1562
35	1191
45	684
55	338
65	160
75	60
85	6
90	0

ZONAL LUMEN SUMMARY

ZONE	LUMENS	%LUMINAIRE
0-30	1349	43
0-40	2088	66
0-60	2929	93
0-90	3164	100
90-180	0	0
0-180	3164	100

LUMINANCE DATA IN CANDELA/ SQ. METER

Angle in Vertical	Average
45°	31770
55°	19324
65°	12411
75°	7647
85°	2271

COEFFICIENTS OF UTILIZATION ZONAL CAVITY METHOD

Room Cavity Ratio	% Effective Ceiling Cavity Reflectance																
	80				70				50				30				
	20% Effective Floor Cavity Reflectance																
	% Wall Reflectance																
	70	50	30	10	70	50	30	10	50	30	10	50	30	10			
1	111	108	105	102	109	106	103	100	101	99	97	98	96	94	94	93	91
2	104	97	92	87	101	95	90	86	92	88	84	89	85	82	86	83	81
3	96	88	81	76	94	86	80	75	83	78	74	81	76	73	78	75	72
4	89	80	72	67	87	78	71	66	76	70	65	74	69	65	72	67	64
5	83	72	65	59	81	71	64	59	69	63	58	68	62	58	66	61	57
6	78	66	59	53	76	65	58	53	64	57	52	62	56	52	61	56	52
7	73	61	53	48	71	60	53	48	59	52	47	57	52	47	56	51	47
8	68	56	49	44	67	56	48	43	54	48	43	53	47	43	52	47	43
9	64	52	45	40	63	51	44	40	50	44	39	49	44	39	48	43	39
10	60	48	41	37	59	48	41	36	47	41	36	46	40	36	45	40	36

LF8ML-8LFML30L30K8DL

Test No. 18.00445-03

Test No. 18.00445-03

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



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
EDM	Lutron	http://bit.ly/1vtjHAL
2DM	Lutron	http://bit.ly/1S4WjXK

DMX

See instruction sheet on 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 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

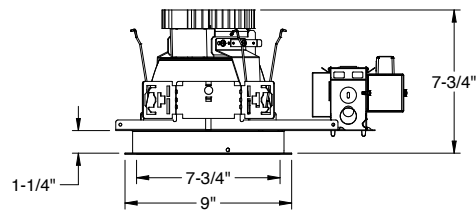
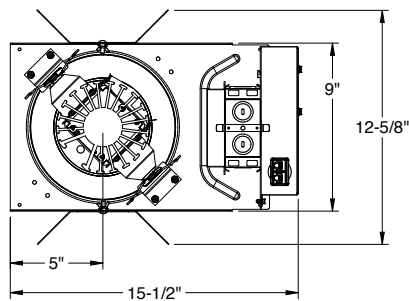
LPS Series: www.dual-lite.com/products/lps

NX Distributed Intelligence: **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](#).



LF8ML LENS NX(W)E