4" LED Downlight
LF4ML LENS
120V - 277V
0-10V Dimming

LiteFrame®

Ceiling Cutout: 5"
Maximum Ceiling Thickness ⅝"
For conversion to millimeters,
multiply inches by 25.4
Not to Scale

APPLICATIONS:
LiteFrame LF4ML is a 4" 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℃ (95℉) 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℃ 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 LF4ML 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 LF4ML utilizes the Philips Fortimo LED Driver specifically designed to optimize efficiency of the Fortimo DLM Module. Driver is designed to match the 50,000 hours 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. Driver is universal 120V-277V. 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:
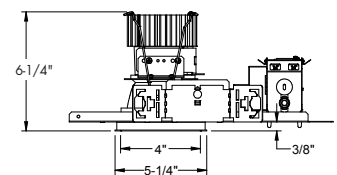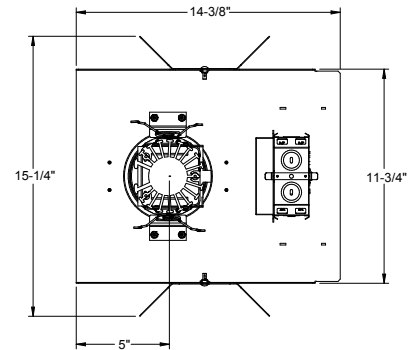5 year warranty. See www.prescolite.com for details.

14-3/8"
15-1/4"
11-3/4"
5"
6-1/4"
4"
5-1/4"
3/8"

See page 3 for CP and NX(W)E line art

CATALOG NUMBER: _____

EXAMPLE: LF4ML-4LFML30L35K8WNCTDL

Order housing, reflector, and accessories separately

HOUSING	DRIVER OPTION	VOLTAGE OPTION	HOUSING OPTIONS	-	TRIM APERTURE	CRI	REF. COLOR OPTIONS	REFLECTOR OPTIONS	TRIM OPTIONS	-	ACCESSORIES
☐ **LF4ML** Medium Lumen 0-10V 10% dimming 120-277V	*Standard 0-10V 10% Dimming* ☐ **DM1**[5] 0-10V dimming at 1% ☐ **EDM**[1,2] Hi-Lume 1% EcoSystem LED Driver ☐ **2DM**[1,2] Hi-Lume 1% 2-wire LED Driver (120V only) ☐ **DMX**[1,2] DMX with RDM dimming to <0.1%	*Standard 120V-277V* ☐ **120** 120V ☐ **277** 277V ☐ **347** 347V	☐ **CP**[1,3,14,15,16] Chicago Plenum ☐ **LV**[11] Lutron Vive Enabled, 0-10V, 120-277V ☐ **LVE (EDM Only)** Lutron Vive Enabled, EcoSystem ☐ **NXWE**[13,14,15,16] NX Wireless Enabled ☐ **NXE**[13,14,15,16] NX Enabled, Dual SmartPorts ☐ **EMR**[1] Emergency Battery Pack with remote test switch and indicator light		☐ **4LFML30L** Semi-Diffuse Clear Alzak Reflector for 3000 Lumen Module **KELVIN** ☐ **27K** 2700 Kelvin ☐ **30K** 3000 Kelvin ☐ **35K** 3500 Kelvin ☐ **40K** 4000 Kelvin ☐ **50K** 5000 Kelvin	☐ **8** 80+ CRI ☐ **9** 90+ CRI **REF. FINISH OPTIONS** *Standard Semi-Diffuse* ☐ **SP** Specular ☐ **SS** Semi-Specular ☐ **MFC** American Matte™ ☐ **V** Kurt Versen Specular ☐ **VS** Kurt Versen Softglow® ☐ **VSS** Kurt Versen SoftSheen™	*Standard Clear Alzak* ☐ **CG** Champagne Gold Alzak ☐ **GD** Gold Alzak ☐ **BL** Black Alzak ☐ **WE** Wheat Alzak ☐ **LW** Light Wheat Alzak ☐ **PW** Pewter Alzak ☐ **WH** Painted Matte White Reflector and Flange ☐ **BC** Painted Black Reflector and Flange	☐ **FLU**[8,9] Flush Mount (Brushed Aluminum Flange Standard) ☐ **IP65**[6,9,10] Flush Lens, Dust and Water tight to IP65 ☐ **VR**[6,9,10] Vandal Resistant	☐ **WT** Painted White Flange Only ☐ **TRG** Trim Ring Gasket ☐ **BNCT**[8,12] Black Non-conductive trim ☐ **WNCT**[8,12] White Non-conductive trim ☐ **BNCTB**[8,12] Black Non-conductive trim Baffled ☐ **WNCTB**[8,12] White Non-conductive trim Baffled **LENS** ☐ **CL**[7] Clear Lens (Regressed Standard) ☐ **DL**[7] Diffuse Lens (Regressed Standard)		☐ **B24**[3] Set of two 24" bar hangers for T-bar ceilings ☐ **B6**[3] Set of two (2) bar hangers for ceiling joist up to 24" centers ☐ **LiteGear**[4] Inverter, single phase central lighting, 125VA-250VA ☐ **LPS Series**[4] LitePower micro-inverter, 20VA-55VA

Notes:
[1] Not available with 347V
[2] Voltage must be specified for EDM, 2DM, or DMX
[3] Bar hanger accessory should be selected with CP housing, not included as standard
[4] See Central Inverter compatibility note and web links on page 3
[5] For DM1, do not specify a voltage if 120 or 277
[6] IP65 and VR can not be chosen together
[7] Not available with IP65 or VR

[8] Not available with color/finish options. Semi-Diffuse finish only.
[9] Not available with BNCT, WNCT, BNCTB, or WNCTB
[10] Not available with FLU
[11] LV requires standard dimming or DM1
[12] Must select CL or DL
[13] Not available with CP option
[14] Not available with EDM, 2DM or DMX
[15] Not available with LV or LVE
[16] Not available with EMR

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LFR-LED-048

PHOTOMETRIC DATA

DRIVER DATA	4LFML30L
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

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

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.

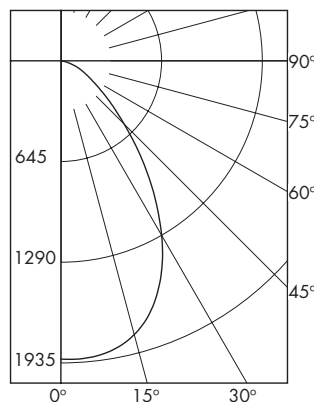|	
4000 Kelvin	1.07
3500 Kelvin	1.00
3000 Kelvin	1.00
2700 Kelvin	0.95
80 CRI................1.00	
90 CRI................0.91	

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	CL	3033	32.7	93	LF4ML-4LFML30L30K8CL
30L	80	DL	2953	32.7	90	LF4ML-4LFML30L30K8DL

LF4ML-4LFML30L30K8DL
LED Light Engine: 3000K, 80 CRI
System Wattage: 32.7W
Fixture Delivered Lumens: 2953
Fixture Efficacy: 90
Spacing Criteria: 1.1

CANDELA DISTRIBUTION

DEG	CANDELA
0	1911
5	1911
15	1816
25	1518
35	1039
45	575
55	289
65	148
75	52
85	0
90	0

Test No. 18.00441-03
Tested at 25°C Ambient in accordance to IESNA LM-79-2008

ZONAL LUMEN SUMMARY

ZONE	LUMENS	%LUMINAIRE
0-30	1384	47
0-40	2031	69
0-60	2743	93
0-90	2953	100
90-180	0	0
0-180	2953	100

LUMINANCE DATA IN CANDELA/SQ. METER

Angle in Vertical	Average
45°	100147
55°	62061
65°	43010
75°	24873
85°	0

COEFFICIENTS OF UTILIZATION   ZONAL CAVITY METHOD

Room Cavity Ratio	% Effective Ceiling Cavity Reflectance														
	80			70			50			30			10		
	20% Effective Floor Cavity Reflectance														
	% Wall Reflectance														
	70	50	30	10	70	50	30	10	50	30	10	50	30	10	
1	112	108	105	102	109	106	103	100	102	99	97	98	96	94	95 93 92
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87 84 82
3	97	89	82	77	95	87	81	76	84	79	75	82	78	74	79 76 73
4	90	81	74	68	88	80	73	68	77	72	67	75	70	66	73 69 65
5	84	74	67	61	83	73	66	61	71	65	60	69	64	60	67 63 59
6	79	68	60	55	77	67	60	55	65	59	54	64	58	54	62 57 54
7	74	63	55	50	73	62	55	50	60	54	50	59	53	49	58 53 49
8	70	58	51	46	68	57	50	46	56	50	45	55	49	45	54 49 45
9	66	54	47	42	64	53	47	42	52	46	42	51	46	42	50 45 41
10	62	50	43	39	61	50	43	39	49	43	39	48	42	38	47 42 38

LF4ML-4LFML30L30K8DL   Test No. 18.00441-03

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Dimming Compatibility Table

Dimming Ballast	Manufacturer	Web Link
DM/DM1	Lutron DVTV	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.

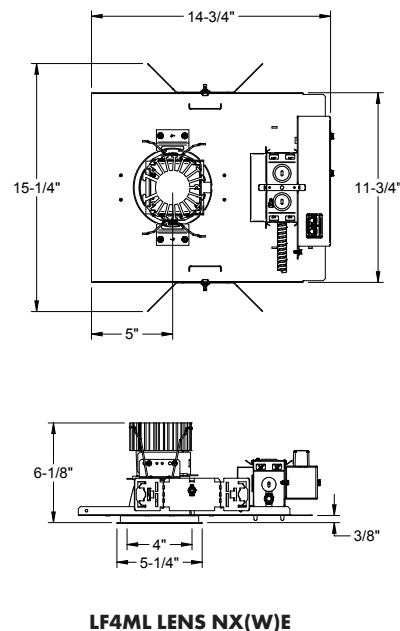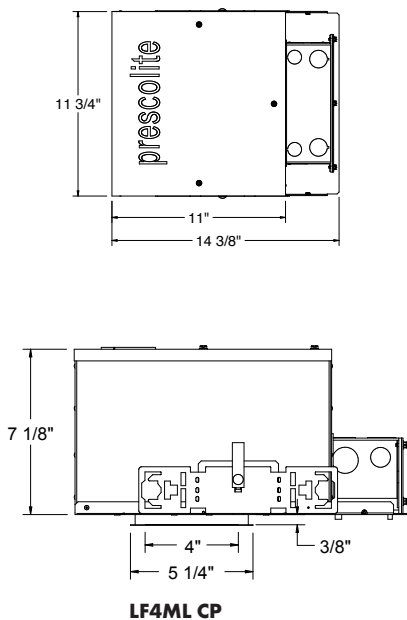**LiteGear:** www.dual-lite.com/products/litegear_lg_series
LPS Series: www.dual-lite.com/products/lps

NX Distrubuted 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.

LF4ML CP

LF4ML LENS NX(W)E

NOTES:
When ordering a sloped ceiling adapter, specify the degree of slope in 5° increments, max. 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.

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