

LF6SQML LENS

6" LED Lensed Downlight
120V-277V • 0-10V Dimming • NSF2

LiteFrame LF6SQML is a 6" 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.

SPECIFICATIONS

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. Approved for 8 (4 in/4 out) No. 12 AWG conductors rated for 90°C through wiring.

Reflector: Self-trim standard with a regressed clear, prismatic, or diffused lens. Painted white self-trim (WT) available as option. Reflector is made from anodized Alano Miro 4 aluminum.

LED Light Engine: The LF6SQML uses the Philips Fortimo DLM LED Module. This module provides controlled color consistency (3 SDCM) from fixture to fixture. The system is designed for optimal 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 LF6SQML 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. Driver is universal 120V-277V. Optional Lutron Series A driver is also available.

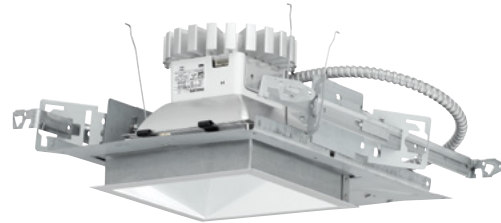
Dimming: Comes standard with 0-10V dimming capability. Flicker-free dimming to 10%. 0-10V control may consume up to 1mA. 0-10V, Lutron 2 wire and EcoSystem dimming available to 1% and DMX with RDM (remote device management) dimming to less than 0.1%.

Catalog Number

Comments

Type

LiteFrame



Installation: Adjustable Bar hangers included (not with CP 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). Housing provides up to 6° rotational adjustment of the square trim.

Certifications: CSA certified to US and Canadian safety standards. Suitable for wet locations. Approved for through wiring. Non-IC rated. UL approved for NSF2 non-food splash zone applications.

ORDERING GUIDE

Order housing, reflector, and accessories separately.

EXAMPLE: LF6SQML-6SQML30L30K8WTCL

HOUSING	DRIVER OPTIONS	VOLTAGE OPTION	HOUSING OPTIONS	TRIM APERTURE	KELVIN	REF. COLOR OPTIONS	TRIM OPTIONS	LENS	ACCESSORIES
<input type="checkbox"/> LF6SQML Standard 120V-277V 0-10V dimming at 10%	<i>Standard 0-10V 10% Dimming</i> <input type="checkbox"/> DM1¹ 0-10V dimming at 1% <input type="checkbox"/> EDM^{2,5} Hi-Lume 1% EcoSystem LED Driver <input type="checkbox"/> 2DM^{2,5} Hi-Lume 1% 2-wire LED Driver (120V only) <input type="checkbox"/> DMX^{2,5,7} DMX with RDM dimming to <0.1%	<i>Standard 120V-277V</i> <input type="checkbox"/> 120 120V <input type="checkbox"/> 277 277V <input type="checkbox"/> 347 347V	<input type="checkbox"/> CP^{2,3,9,10} Chicago Plenum <input type="checkbox"/> LV⁶ Lutron Vive Enabled, 0-10V, 120-277V <input type="checkbox"/> LVE (EDM Only) Lutron Vive Enabled, EcoSystem <input type="checkbox"/> NXWE^{7,8,9,10} NX Wireless Enabled <input type="checkbox"/> NXE^{7,8,9,10} NX Enabled, Dual SmartPorts <input type="checkbox"/> EMR² Emergency Battery Pack with remote test switch and indicator light	<input type="checkbox"/> 6SQML30L Semi-Diffuse Clear Alzak Reflector with 3000 Lumen Module	<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	<i>Standard Clear Alzak</i> <input type="checkbox"/> CG Champagne 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"/> CL Regressed Clear Lens <input type="checkbox"/> DL Regressed Diffuse Lens <input type="checkbox"/> PL Regressed Prismatic Lens	<input type="checkbox"/> B24³ Set of two 24" bar hangers for T-bar ceilings <input type="checkbox"/> B6³ Set of two (2) bar hangers for ceiling joist up to 24" centers <input type="checkbox"/> LiteGear⁴ Inverter, single phase central lighting, 125VA-250VA <input type="checkbox"/> LPS Series⁴ LitePower micro- inverter, 20VA-55VA	

Notes:
1 For DM1, do not specify a voltage if 120 or 277
2 Not available with 347V
3 Bar hanger accessory should be selected with CP housings not included as standard

Notes:

- For DM1, do not specify a voltage if 120 or 277
- Not available with 347V
- Bar hanger accessory should be selected with CP housing, not included as standard
- See Central Inverter compatibility note and web links on page 4
- Voltage must be specified if EDM, 2DM or DMX
- LV requires standard dimming or DM1
- Not available with CP option
- Not available with EDM, 2DM or DMX
- Not available with LV or LVE
- Not available with EM or EMR

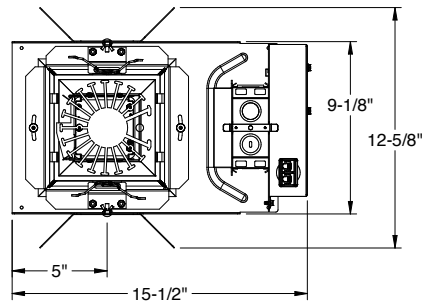
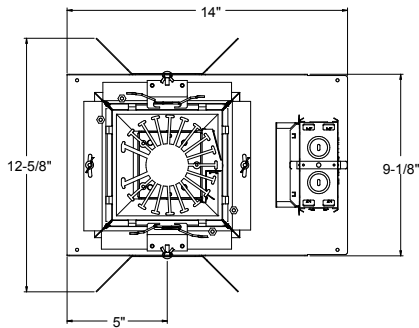
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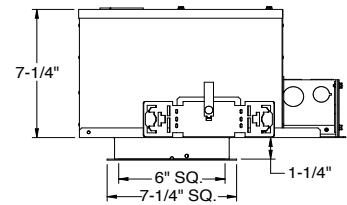
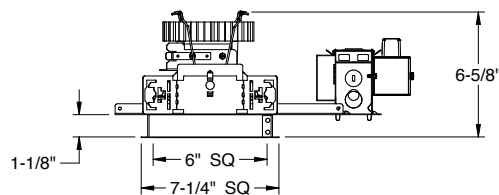
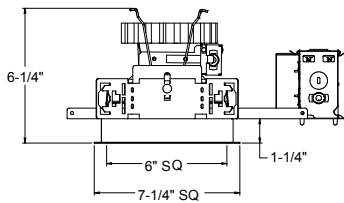
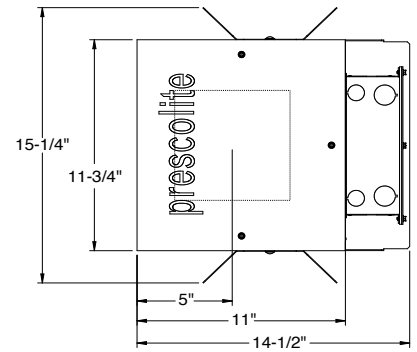
DIMENSIONS

Ceiling Cutout: 6-3/4" x 6-3/4"
Maximum Ceiling Thickness 1 1/4"
For conversion to millimeters, multiply inches by 25.4
Not to Scale

LF6SQML LENS NX(W)E



LF6SQML CP



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PHOTOMETRY

DRIVER DATA	6SQML30L
Input Voltage	120V-277V
Input Frequency	60 Hz
Input Current	0.272A (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	

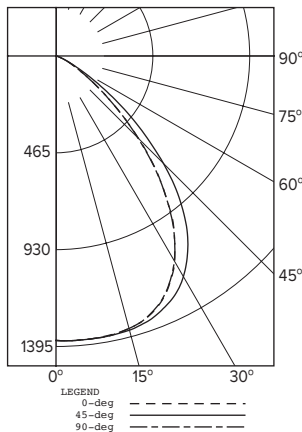
Lumen Multiplier Table

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

LF6SQML-6SQML30L30K DL
LED Light Engine: 3000K, 80 CRI
System Wattage: 32.7W
Fixture Delivered Lumens: 2530
Fixture Efficacy: 77
Spacing Criteria: 1.1

Test No. 18.00414-03
Tested at 25°C Ambient
in accordance to IESNA
LM-79-2008



CANDELA DISTRIBUTION

DEG	0°	45°	90°
0	1364	1364	1364
5	1367	1367	1367
15	1352	1361	1352
25	1251	1297	1248
35	981	1103	975
45	560	728	554
55	206	296	203
65	61	58	61
75	3	9	3
85	0	0	0
90	0	0	0

LUMINANCE DATA IN CANDELA/ SQ. METER

Angle in Vertical	Average
45°	34067
55°	15450
65°	6202
75°	482
85°	0

COEFFICIENTS OF UTILIZATION ZONAL CAVITY METHOD

Room Cavity Ratio	% Effective Ceiling Cavity Reflectance															
	80						50						30		10	
	20% Effective Floor Cavity Reflectance															
	% Wall Reflectance															
	70	50	30	10	70	50	30	10	70	50	30	10	50	30	10	
1	112	108	106	103	110	106	104	101	102	99	97	95	95	94	92	
2	105	99	94	89	102	97	92	88	93	90	86	90	87	84	83	
3	98	89	83	78	95	88	82	78	85	80	76	78	75	80	77	
4	91	81	74	69	89	80	74	69	78	72	68	71	67	74	66	
5	85	74	67	61	83	73	66	61	71	65	61	69	64	60	68	
6	79	68	60	55	77	67	60	55	65	59	54	64	58	54	62	
7	74	62	55	50	72	62	55	50	60	54	49	59	53	49	58	
8	69	58	50	45	68	57	50	45	56	49	45	55	49	45	53	
9	65	53	46	41	64	53	46	41	52	45	41	51	45	41	50	
10	61	49	42	38	60	49	42	38	48	42	37	47	41	37	46	

F45Q51-42S111 30K8C

Test No. 18.0044.03

LF45QSL-45QSL11L30K8CL

Test No. 18.00414-03

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/1vtjHA1
2DM	Lutron	http://bit.ly/1S4WjXK

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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:

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](#).