# 6" Square Open LED Downlight
# LF6SQML
120V - 277V
0-10V Dimming

DATE: _____  TYPE: _____

FIRM NAME: _____

PROJECT: _____

## LiteFrame®

ENERGY STAR

Ceiling Cutout: 6-3/4"x 6-3/4"
Maximum Ceiling Thickness 1¼"
For conversion to millimeters,
multiply inches by 25.4
Not to Scale

## APPLICATIONS:
LiteFrame LF6SQML is a 6" specification grade LED open 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. 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 upper reflector. Self-trim standard. Painted white self-trim (WT) available as option. Reflector is made from anodized Alanod 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 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 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%.

## 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. EM and EMR are damp rated use only. UL approved for NSF2 non-food zone applications. ENERGY STAR qualified with open clear Alzak reflector.

## WARRANTY:
5 year warranty. See www.prescolite.com for details.



14"
12-3/4"
9-1/8"
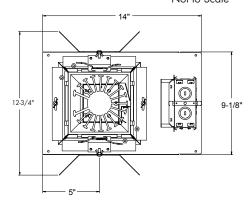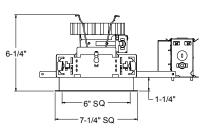5"

6-1/4"
6" SQ
7-1/4" SQ
1-1/4"

**See page 3 for EM/EMR, NX(W)E and CP lineart**

CATALOG NUMBER: _____     EXAMPLE: LF6SQML-6SQML30L40K8CG

Order housing, reflector, and accessories separately

| HOUSING | DRIVER OPTIONS | VOLTAGE OPTIONS | HOUSING OPTIONS | – | TRIM APERTURE | KELVIN | REF. COLOR OPTIONS | REFLECTOR OPTIONS | – | ACCESSORIES |
|---|---|---|---|---|---|---|---|---|---|---|
| ☐ **LF6SQML** Standard 120V-277V 0-10V dimming at 10% | *Standard 0-10V 10% Dimming*<br>☐ **DM1**[1] 0-10V dimming at 1%<br>☐ **EDM**[2,5] Hi-Lume 1% EcoSystem LED Driver<br>☐ **2DM**[2,5] Hi-Lume 1% 2-wire LED Driver (120V only)<br>☐ **DMX**[2,5,7] DMX with RDM dimming to <0.1% | *Standard 120V-277V*<br>☐ **120** 120V<br>☐ **277** 277V<br>☐ **347** 347V | ☐ **CP**[2,3,9,11] Chicago Plenum<br>☐ **LV**[6] Lutron Vive Enabled, 0-10V, 120-277V<br>☐ **LVE (EDM Only)** Lutron Vive Enabled, EcoSystem<br>☐ **NXWE**[7,8,9,11] NX Wireless Enabled<br>☐ **NXE**[7,8,9,11] NX Enabled, Dual SmartPorts<br>☐ **EM**[2,10] Emergency Battery Pack with integral test switch and indicator light<br>☐ **EMR**[2] Emergency Battery Pack with remote test switch and indicator light | | ☐ **6SQML30L** Semi-Diffuse Clear Alzak Reflector with 3000 Lumen Module | ☐ **27K** 2700 Kelvin<br>☐ **30K** 3000 Kelvin<br>☐ **35K** 3500 Kelvin<br>☐ **40K** 4000 Kelvin<br>☐ **50K** 5000 Kelvin<br><br>**CRI**<br>☐ **8** 80+ CRI<br>☐ **9** 90+ CRI | *Standard Clear Alzak*<br>☐ **CG** Champagne Gold Alzak<br>☐ **BL** Black Alzak<br>☐ **WE** Wheat Alzak<br>☐ **LW** Light Wheat Alzak<br>☐ **PW** Pewter Alzak<br>☐ **WH** Painted Matte White Reflector and Flange<br>☐ **BC** Painted Black Reflector and Flange | ☐ **EM**[2,10] Pre-punched reflector for integral test | | ☐ **B24**[3] Set of two 24" bar hangers for T-bar ceilings<br>☐ **B6**[3] Set of two (2) bar hangers for ceiling joist up to 24" centers<br>☐ **LiteGear**[4] Inverter, single phase central lighting, 125VA-250VA<br>☐ **LPS Series**[4] 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 housing, not included as standard
4. See Central Inverter compatibility note and web links on page 2
5. Voltage must be specified if EDM, 2DM or DMX
6. LV requires standard dimming or DM1
7. Not available with CP option
8. Not available with EDM, 2DM or DMX
9. Not available with LV or LVE.
10. EM option required on both housing and trim.
11. Not available with EM or EMR.



## prescolite
A Division of Hubbell Lighting, Inc.

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-021**

| 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℃ to 35℃ |
| Dimming | 0-10V |

Over-voltage, over-current, short-circuit protected

*Power consumptionand 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 |

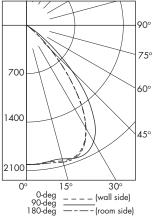| | |
|---|---|
| 80 CRI | 1.00 |
| 90 CRI | 0.91 |

## 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 | Open | 3273 | 32.7 | 100 | LF6SQML-6SQML30L30K8 |
| 30L | 90 | Open | 2686 | 36.0 | 75 | LF6SQML-6SQML30L30K9 |

### LF6SQML-6SQML30L30K8

LED Light Engine: 3000K, 80 CRI
System Wattage: 32.7W
Fixture Delivered Lumens: 3273
Fixture Efficacy: 100



**CANDELA DISTRIBUTION**

| DEG | 0 | 45 | 90 |
|---|---|---|---|
| 0 | 2012 | 2012 | 2012 |
| 5 | 2008 | 2013 | 2018 |
| 15 | 2030 | 2000 | 2048 |
| 25 | 1930 | 2041 | 1948 |
| 35 | 1356 | 1720 | 1369 |
| 45 | 490 | 921 | 496 |
| 55 | 41 | 198 | 42 |
| 65 | 19 | 17 | 19 |
| 75 | 3 | 5 | 3 |
| 85 | 1 | 1 | 1 |
| 90 | 0 | 0 | 0 |

0-deg _ _ _ _ (wall side)
90-deg ———
180-deg ———— (room side)

Test No. 18.00379
Tested at 25℃ Ambient in accordance to IESNA LM-79-2008

**LUMINANCE DATA IN CANDELA/SQ. METER**

| Angle in Vertical | 0 DEG | 90 DEG | 180 DEG |
|---|---|---|---|
| 45° | 29836 | 56080 | 30201 |
| 55° | 3078 | 14863 | 3153 |
| 65° | 1936 | 1732 | 1936 |
| 75° | 499 | 832 | 499 |
| 85° | 494 | 494 | 494 |

**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 | 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 | 90 87 85 |
| 3 | 100 | 92 | 86 | 82 | 97 | 91 | 85 | 81 | 88 | 83 | 80 | 85 | 82 | 79 | 83 80 77 |
| 4 | 93 | 85 | 78 | 73 | 91 | 83 | 77 | 73 | 81 | 76 | 72 | 79 | 75 | 71 | 77 73 70 |
| 5 | 88 | 78 | 71 | 66 | 86 | 77 | 71 | 66 | 75 | 69 | 65 | 73 | 68 | 65 | 72 67 64 |
| 6 | 82 | 72 | 65 | 60 | 81 | 71 | 64 | 60 | 69 | 64 | 59 | 68 | 63 | 59 | 66 62 58 |
| 7 | 77 | 66 | 59 | 55 | 76 | 66 | 59 | 54 | 64 | 58 | 54 | 63 | 58 | 54 | 62 57 53 |
| 8 | 73 | 62 | 55 | 50 | 71 | 61 | 54 | 50 | 60 | 54 | 50 | 59 | 53 | 49 | 58 53 49 |
| 9 | 68 | 57 | 50 | 46 | 67 | 57 | 50 | 46 | 56 | 50 | 46 | 55 | 49 | 45 | 54 49 45 |
| 10 | 64 | 53 | 47 | 42 | 63 | 53 | 46 | 42 | 52 | 46 | 42 | 51 | 46 | 42 | 50 45 42 |

LF6SQML-6SQML30L30K8    Test No. 18.00379

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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/1vtjHAI |
| 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.

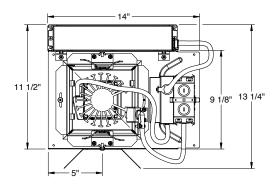**LiteGear:** www.dual-lite.com/products/litegear_lg_series
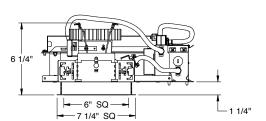**LPS Series:** www.dual-lite.com/products/lps

### 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.
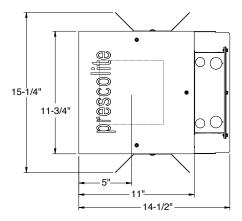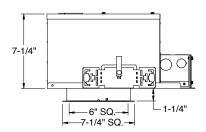See separate NX™ Solutions Guide for additional details.
See Hubbell Controls Solution NX Brochure.



**LF6SQML EM/EMR**



**LF6SQML CP**

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