4" Square LED Lensed Downlight
LF4SQSL LENS
120V–277V
0-10V Dimming

LiteFrame®

Ceiling Cutout: 5-1/4" x 5-1/4"
Maximum Ceiling Thickness 1 1/4"
For conversion to millimeters,
multiply inches by 25.4
Not to Scale

See page 4 for EMR, CP and NX(W)E lineart

APPLICATIONS:
LiteFrame LF4SQSL 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°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:
Self-trim standard with a regressed clear, prismatic, or diffused lens. Painted white self-trim (WT) available as option. Reflector is made from anodized Alanod Miro 4 aluminum.

LED LIGHT ENGINE:
The LF4SQSL 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 LF4SQSL 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. EMR is damp rated and for US use only.
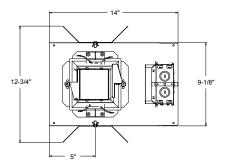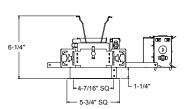
WARRANTY:
5 year warranty. See www.prescolite.com for details.

CATALOG NUMBER: EXAMPLE: LF4SQSLDM1-4SQSL15L40K8CL

Order housing, reflector, and accessories separately

	HOUSING	DRIVER OPTIONS	VOLTAGE OPTION	HOUSING OPTIONS		TRIM APERTURE	KELVIN	REF. COLOR OPTIONS	LENS		ACCESSORIES
STANDARD 0-10V DIMMING	❏ **LF4SQSL** Standard Lumen 0-10V 10% dimming 120-277V	*Standard 0-10V 10% Dimming* ❏ **DM1** 0-10V dimming at 1% ❏ **DMT**[7,8] SpectraSync™ Tunable White ❏ **DMTW**[9] SpectraSync™ Dim to Warm to Warm	*Standard 120V-277V* ❏ **347** 347V	❏ **EMR**[3] Emergency Battery Pack with remote test switch and indicator light ❏ **CP**[2,3,10,12] Chicago Plenum ❏ **LV**[6] Lutron Vive Enabled, 0-10V, 120-277V ❏ **NXWE**[2,11,12] NX Wireless Enabled ❏ **NXE**[2,11,12] NX Enabled, Dual SmartPorts	-	❏ **4SQSL** Semi-Diffuse Clear Alzak **OUTPUT** ❏ **11L** 1100 Lumen Module ❏ **15L** 1500 Lumen Module ❏ **20L**[10] 2000 Lumen Module	❏ **27K** 2700 Kelvin ❏ **30K** 3000 Kelvin ❏ **35K** 3500 Kelvin ❏ **40K** 4000 Kelvin ❏ **50K** 5000 Kelvin ❏ **2230TD**[13] 2200K-3000K SpectraSync™ Dim to Warm ❏ **2750T**[13] 2700K-5000K SpectraSync™ Tunable White ❏ **2765T**[13] 2700K-6500K SpectraSync™ Tunable White **CRI** ❏ **8** 80+ CRI ❏ **9** 90+ CRI	*Standard Clear Alzak* ❏ **CG** Champagne 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 **TRIM OPTIONS** ❏ **WT** Painted White Flange Only	❏ **CL** Regressed Clear Lens ❏ **DL** Regressed Diffuse Lens ❏ **PL** Regressed Prismatic Lens	-	❏ **B24**[5] Set of two 24" bar hangers for T-bar ceilings ❏ **B6**[5] 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

	Use with EDM/2DM/DMX dimming option: Match Housing to Trim Output			
ALTERNATIVE DIMMING TO 1% & 0.1%	❏ **LF4SQSL11L** ❏ **LF4SQSL15L** ❏ **LF4SQSL20L**	❏ **EDM**[1] Hi-Lume 1% EcoSystem LED Driver ❏ **2DM**[1] Hi-Lume 1% 2-wire LED Driver (120V only) ❏ **DMX**[1] DMX with RDM dimming to <0.1%	❏ **120** 120V ❏ **277** 277V	❏ **LVE (EDM Only)** Lutron Vive Enabled, EcoSystem *EDM, 2DM & DMX also available with EMR and VVV*

Notes:
1. For EDM, 2DM and DMX options, housing output must match trim output
2. Not available with EMR, DMX, LV or LVE
3. Not available with 347V
4. See Central Inverter compatibility note and web links on page 2
5. Accessories should be selected with CP housing if required.
6. LV requires standard dimming or DM1
7. Must select either 2750T or 2765T Kelvin with DMT driver option
8. Not available with LV or LVE
9. Must select 2230TD with DMTW driver option
10. Not compatible with DMT or DMTW
11. Not available with CP option
12. Not available with EDM, 2DM or DMX
13. Only available in 90+ CRI

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DRIVER DATA	4SQSL20L	4SQSL15L	4SQSL11L
Input Voltage	120-277V	120-277V	120-277V
Input Frequency	50/60 Hz	50/60 Hz	50/60 Hz
Input Current	0.186A (120V)	0.134A (120V)	0.106A (120V)
	0.081A (277V)	0.058A (277V)	0.046A (277V)
Input Power	22.3W	16.1W	12.7W
Power Factor	≥0.90	≥0.90	≥0.90
THD	<20%	<20%	<20%
EMI Filtering	FCC 47CFR	FCC 47CFR	FCC 47CFR
	Part 15, Class A	Part 15, Class A	Part 15, Class A
Operating Temperature	-20°C to 35°C	-20°C to 35°C	-20°C to 35°C
Dimming	0-10V	0-10V	0-10V

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

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

When operating in EM mode, the fixture will deliver approximately 30% of the published full lumen output.

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

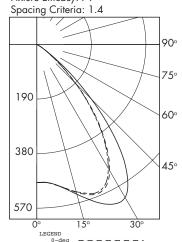|	
80 CRI................1.00	
90 CRI................0.91	

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
20L	80	CL	1789	22.3	80	LF4SQSL-4SQSL20L30K8CL
20L	80	DL	1498	22.3	67	LF4SQSL-4SQSL20L30K8DL
20L	80	PL	1581	22.3	71	LF4SQSL-4SQSL20L30K8PL
15L	80	CL	1301	16.1	81	LF4SQSL-4SQSL15L30K8CL
15L	80	DL	1089	16.1	68	LF4SQSL-4SQSL15L30K8DL
15L	80	PL	1149	16.1	71	LF4SQSL-4SQSL15L30K8PL
11L	80	CL	997	12.7	79	LF4SQSL-4SQSL11L30K8CL
11L	80	DL	835	12.7	66	LF4SQSL-4SQSL11L30K8DL
11L	80	PL	881	12.7	69	LF4SQSL-4SQSL11L30K8PL

LF4SQSL-4SQSL11L30K8CL

LED Light Engine: 3000K, 80 CRI
System Wattage: 12.7W
Fixture Delivered Lumens: 997
Fixture Efficacy: 79
Spacing Criteria: 1.4

CANDELA DISTRIBUTION

DEG	0°	45°	90°
0	481	481	481
5	484	484	484
15	533	540	531
25	555	614	549
35	417	547	411
45	191	269	188
55	42	47	43
65	5	6	5
75	1	2	1
85	0	0	0
90	0	0	0

ZONAL LUMEN SUMMARY

ZONE	LUMENS	%LUMINAIRE
0-30	466	46.7
0-40	760	76.2
0-60	988	99.1
0-90	997	100.0
90-180	0	0.0
0-180	997	100.0

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	50 30 10
1	112	109	106	104	110	107	104	102	103	101	99	99	98	96	96 94 93
2	106	100	95	91	103	98	94	90	95	91	88	92	89	86	89 86 84
3	99	91	85	80	97	90	84	80	87	82	78	84	80	77	82 79 76
4	92	83	77	72	90	82	76	71	80	75	70	78	73	69	76 72 69
5	86	76	69	64	85	75	69	64	73	68	63	72	67	63	70 66 62
6	81	70	63	58	79	69	62	58	68	62	57	66	61	57	65 60 56
7	76	65	57	52	74	64	57	52	62	56	52	61	56	52	60 55 51
8	71	60	52	48	70	59	52	47	58	52	47	57	51	47	56 51 47
9	67	55	48	43	65	55	48	43	54	47	43	53	47	43	52 47 43
10	63	51	44	40	62	51	44	40	50	44	40	49	43	39	48 43 39

LF4SQSL-4SQSL11L30K8CL   Test No. 18.00409

Test No. 18.00409

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

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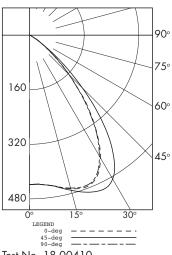**HUBBELL Lighting**

LF4SQSL-4SQSL11L30K8DL

LED Light Engine: 3000K, 80 CRI
System Wattage: 12.7W
Fixture Delivered Lumens: 835
Fixture Efficacy: 66
Spacing Criteria: 1.3

LEGEND
0–deg ---------
45–deg —————
90–deg —·—·—·—

Test No. 18.00410
Tested at 25°C Ambient in accordance to IESNA LM-79-2008

CANDELA DISTRIBUTION

DEG	0°	45°	90°
0	438	438	438
5	440	440	440
15	466	471	464
25	462	501	358
35	340	428	337
45	164	219	162
55	45	46	44
65	5	5	5
75	1	1	1
85	0	0	0
90	0	0	0

ZONAL LUMEN SUMMARY

ZONE	LUMENS	%LUMINAIRE
0-30	394	47.3
0-40	630	75.5
0-60	826	99.0
0-90	835	100.0
90-180	0	0.0
0-180	835	100.0

COEFFICIENTS OF UTILIZATION — ZONAL CAVITY METHOD

% Effective Ceiling Cavity Reflectance — 20% Effective Floor Cavity Reflectance

Room Cavity Ratio	80				70				50			30			10		
% Wall Reflectance	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
1	112	109	106	104	110	107	104	102	103	101	99	99	98	96	96	94	93
2	106	100	95	91	103	98	94	90	95	91	88	92	89	86	89	86	84
3	99	91	85	80	97	90	84	80	87	82	78	84	80	77	82	79	76
4	92	83	77	72	90	82	76	71	80	74	70	78	73	69	76	72	69
5	86	76	69	64	85	75	69	64	73	68	63	72	67	63	70	66	62
6	81	70	63	58	79	69	63	58	68	62	57	66	61	57	65	60	56
7	76	65	57	52	74	64	57	52	62	56	52	61	56	52	60	55	51
8	71	60	53	48	70	59	52	48	58	52	47	57	51	47	56	51	47
9	67	55	48	44	65	55	48	44	54	48	43	53	47	43	52	47	43
10	63	51	45	40	62	51	44	40	50	44	40	49	44	40	48	43	40

LF4SQSL-4SQSL11L30K8DL — Test No. 18.00410

LF4SQSL-4SQSL11L30K8PL

LED Light Engine: 3000K, 80 CRI
System Wattage: 12.7W
Fixture Delivered Lumens: 881
Fixture Efficacy: 69
Spacing Criteria: 1.2

LEGEND
0–deg ---------
45–deg —————
90–deg —·—·—·—

Test No. 18.00411
Tested at 25°C Ambient in accordance to IESNA LM-79-2008

CANDELA DISTRIBUTION

DEG	0°	45°	90°
0	532	532	532
5	535	535	535
15	575	580	571
25	545	600	533
35	351	450	347
45	133	187	129
55	33	31	31
65	3	4	3
75	1	1	1
85	0	0	0
90	0	0	0

ZONAL LUMEN SUMMARY

ZONE	LUMENS	%LUMINAIRE
0-30	437	53.7
0-40	716	81.3
0-60	874	99.2
0-90	881	100.0
90-180	0	0.0
0-180	881	100.0

COEFFICIENTS OF UTILIZATION — ZONAL CAVITY METHOD

% Effective Ceiling Cavity Reflectance — 20% Effective Floor Cavity Reflectance

Room Cavity Ratio	80				70				50			30			10		
% 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	100	100	98	97	96	95	94
2	106	101	96	92	104	99	95	91	96	92	89	93	90	87	90	87	85
3	100	92	87	82	98	91	86	82	88	84	80	86	82	79	84	80	78
4	94	85	79	74	92	84	78	73	82	77	73	80	75	72	78	74	71
5	88	78	72	67	86	77	71	67	76	70	66	74	69	65	72	68	65
6	83	72	66	61	81	72	65	60	70	64	60	69	63	60	67	63	59
7	78	67	60	55	76	66	60	55	65	59	55	64	59	55	63	58	54
8	73	62	55	51	72	62	55	51	61	55	50	59	54	50	58	54	50
9	69	58	51	47	68	57	51	47	56	51	47	56	50	46	55	50	46
10	65	54	48	43	64	54	47	43	53	47	43	52	47	43	51	46	43

LF4SQSL-4SQSL11L30K8PL — Test No. 18.00411

Web: **www.prescolite.com** • Tech Support: **(888) 777-4832**
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HUBBELL Lighting

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

SpectraSync™ Color Tuning Technology:
Control your space based on the needs of the application, specific activities throughout the day and preferences of the occupants with two distinct SpectraSync™ Color Tuning Technology.
Dim to Warm: Dim to Warm mimics the familiar warming effect that occurs with traditional incandescent sources as they are dimmed. (Available with 2200K-3000K).
Tunable White: Tunable White offers users the ability to tailor CCT to their personal preference, enhancing task visibility, material and colors or the aesthetics of the space. (Available with 2700K-5000K or 2700K-6500K).
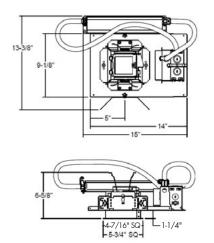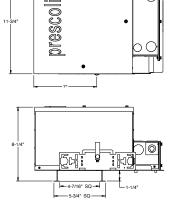See separate SpectraSync™ Tech Sheet for additional details.
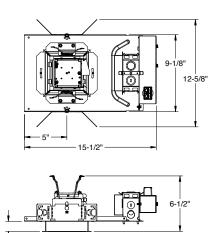
NX Distrubuted Intelligence:
Supports indoor and outdoor applications, wired, wireless and hybrid networked NX lighting control deployments and enables emerging applications such as Hubbell Lighting's SpectraSync™ color tuning technology.
See separate NX™ Solutions Guide for additional details.
See Hubbell Controls Solution NX Brochure.

LF4SQSL EMR

LF4SQSL CP

LF4SQSL LENS NX(W)E