

6" LED Downlight LF6SL LENS

120V-277V
0-10V Dimming

APPLICATIONS:

LiteFrame LF6SL 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.

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.

IP65 AND VR:

IP65 and vandal-resistant (VR) options are made of 16GA cold rolled steel stampings and come standard with a clear high impact polycarbonate lens. Each option uses self tapping stainless steel screws painted to match the white trim color standard; tamper-resistant screws are used on the VR option only. The IP65 rated option is completely sealed without the use of silicone on standard non-porous ceiling surfaces.

LED LIGHT ENGINE:

The LF6SL 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 LF6SL 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. Lutron 2 wire, 3 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. EMR is damp rated use only.

WARRANTY:

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

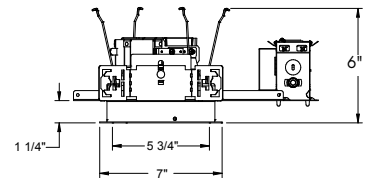
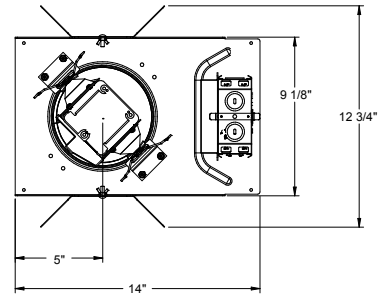
DATE: _____ TYPE: _____

FIRM NAME: _____

PROJECT: _____

LiteFrame®

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



See page 5 for EMR, CP and
NX(W)E line art.

EXAMPLE: LF6SLDM1-6LFSL15L35K8WT

CATALOG NUMBER:

Order housing, reflector, and accessories separately

HOUSING	DRIVER OPTION	HOUSING OPTIONS	TRIM APERTURE	KELVIN	REF. FINISH OPTION	REF. COLOR OPTIONS	TRIM OPTIONS	LENS	ACCESSORIES
<input type="checkbox"/> LF6SL Standard Lumen 0-10V 10% dimming 120-277V	Standard 0-10V 10% Dimming <input type="checkbox"/> DM1 0-10V dimming at 1% <input type="checkbox"/> DMT^{14,15} SpectraSync™ Tunable White <input type="checkbox"/> DMTW¹⁶ SpectraSync™ Tunable Dim to Warm VOLTAGE OPTION Standard 120V-277V <input type="checkbox"/> 347 347V	<input type="checkbox"/> EMR² Emergency Battery Pack with remote test switch and indicator light <input type="checkbox"/> CP^{2,3,4,5,15,17,20} Chicago Plenum <input type="checkbox"/> LV¹² Lutron Vive Enabled, 0-10V, 120-277V <input type="checkbox"/> NXWE^{3,15,18,19} NX Wireless Enabled <input type="checkbox"/> NXE^{3,15,18,19} NX Enabled, Dual SmartPorts	<input type="checkbox"/> 6LFSL Semi-Diffuse Clear Alzak OUTPUT <input type="checkbox"/> 11L 1100 Lumen Module <input type="checkbox"/> 15L 1500 Lumen Module <input type="checkbox"/> 20L¹⁷ 2000 Lumen Module <input type="checkbox"/> 2765T²⁰ 2700K-6500K SpectraSync™ Tunable White	<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"/> 2230TD²⁰ 2200K-3000K SpectraSync™ Dim to Warm <input type="checkbox"/> 2750T²⁰ 2700K-5000K SpectraSync™ Tunable White <input type="checkbox"/> 2765T²⁰ 2700K-6500K SpectraSync™ Tunable White	Standard Semi-Diffuse <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"/> WF¹⁰ Wide Flange <input type="checkbox"/> BNCT^{9,13} Black Non-conductive Trim <input type="checkbox"/> WNCT^{9,13} White Non-conductive Trim <input type="checkbox"/> BNCTB^{9,13} Black Non-conductive Trim Baffled <input type="checkbox"/> WNCTB^{9,13} White Non-conductive Trim Baffled	<input type="checkbox"/> CL⁸ Clear Lens (Regressed Standard) <input type="checkbox"/> DL⁸ Diffuse Lens (Regressed Standard) <input type="checkbox"/> SCA6 Sloped ceiling adapter (see note on back page) <input type="checkbox"/> LiteGear⁶ Inverter, single phase central lighting, 125VA-250VA <input type="checkbox"/> LPS Series⁶ LitePower micro-inverter, 20VA-55VA	NOTES: 1 For HDM, 2DM and DMX options, housing output must match trim output 2 Not available with 347V 3 Not available with EMR 4 CP option must be selected on both housing and trim 5 Not available with DMX 6 See Central Inverter compatibility note and web links on page 2 7 IP65 and VR can not be chosen together 8 Not available with IP65 or VR 9 Not available with color/finish options. Semi-Diffuse finish only. 10 Not available with BNCT, WNCT, BNCTB, or WNCTB. 11 Not available with FLU 12 LV requires standard dimming or DM1 13 Must select CL or DL 14 Must select either 2750T or 2765T Kelvin with DMT driver option 15 Not available with LV or LVE 16 Must select 2230TD with DMTW driver option 17 Not compatible with DMT or DMTW 18 Not available with CP option 19 Not available with HDM, 2DM or DMX 20 Only available in 90+ CRI
Use with HDM/2DM/DMX dimming option: Match Housing to Trim Output			<input type="checkbox"/> LF6SL11L <input type="checkbox"/> LF6SL15L <input type="checkbox"/> LF6SL20L	<input type="checkbox"/> HDM¹ Hi-Lume 1% <input type="checkbox"/> 2DM¹ Hi-Lume 1% 2-wire LED Driver (120V only) <input type="checkbox"/> DMX¹ DMX with RDM dimming to <0.1%	<input type="checkbox"/> 120 120V <input type="checkbox"/> 277 277V <input type="checkbox"/> LVE (HDM Only) Lutron Vive Enabled, EcoSystem *HDM, 2DM & DMX also available with EMR and VVV	CRI <input type="checkbox"/> 8 80+ CRI <input type="checkbox"/> 9 90+ CRI	REFLECTOR OPTIONS <input type="checkbox"/> CP^{2,3,4,5,15,17,20} Chicago Plenum <input type="checkbox"/> FLU^{9,10} Flush Mount (Brushed Aluminum Flange Standard) <input type="checkbox"/> IP65^{7,10,11} Flush Lens, Dust and Water Tight to IP65 <input type="checkbox"/> VR^{7,10,11} Vandal Resistant		

STANDARD 0-10V DIMMING
ALTERNATIVE DIMMING TO 1% & 0.1%



PHOTOMETRIC DATA

LiteFrame - 6" LF6SL Lens

DRIVER DATA	6LFSL20L	6LFSL15L	6LFSL11L	
Input Voltage	120-277V	120-277V	120-277V	
Input Frequency	50/60 Hz	50/60 Hz	50/60 Hz	
Input Current	0.184A (120V) 0.08 (277V)	0.133A (120V) 0.058A (277V)	0.105A (120V) 0.045A (277V)	
Input Power	22.1W	16.0W	12.6W	
Power Factor	≥0.90	≥0.90	≥0.90	
THD	<20%	<20%	<20%	
EMI Filtering	FCC 47CFR Part 15, Class A	FCC 47CFR Part 15, Class A	FCC 47CFR 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

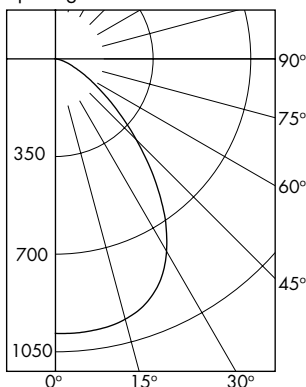
Delivered Lumens

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
11L	80	DL	1013	12.6	80	LF6SL-6LFSL11L30K8DL
11L	80	FLUDL	985	12.6	78	LF6SL-6LFSL11L30K8FLUDL
15L	80	DL	1360	16.0	85	LF6SL-6LFSL15L30K8DL
15L	80	FLUDL	1322	16.0	83	LF6SL-6LFSL15L30K8FLUDL
20L	80	DL	1806	22.1	82	LF6SL-6LFSL20L30K8DL
20L	80	FLUDL	1756	22.1	79	LF6SL-6LFSL20L30K8FLUDL
11L	90	DL	879	13.9	63	LF6SL-6LFSL11L30K9DL
15L	90	DL	1319	19.1	69	LF6SL-6LFSL15L30K9DL
20L	90	DL	1504	25.1	60	LF6SL-6LFSL20L30K9DL

LF6SL-6LFSL20L30K8DL

LED Light Engine: 3000K, 80 CRI
System Wattage: 22.1W
Fixture Delivered Lumens: 1806
Fixture Efficacy: 82
Spacing Criteria: 1.2



CANDELA DISTRIBUTION

DEG	CANDELA
0	984
5	985
15	966
25	883
35	681
45	410
55	198
65	81
75	27
85	0
90	0

ZONAL LUMEN SUMMARY

ZONE	LUMENS	%LUMINAIRE
0-30	770	42.6
0-40	1192	66.0
0-60	1691	93.6
0-90	1806	100.0
90-180	0	0.0
0-180	1806	100.0

LUMINANCE DATA IN CANDELA/SQ. METER

Angle in Vertical	Average
45°	34610
55°	20605
65°	11440
75°	6227
85°	0

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	112	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81
3	96	88	81	76	94	87	80	76	84	79	74	81	77	73	79	75	72
4	90	80	73	67	88	79	72	67	76	70	66	74	69	65	72	68	64
5	84	73	65	60	82	72	65	59	70	63	59	68	62	58	66	61	58
6	78	67	59	53	76	66	58	53	64	58	53	62	57	52	61	56	52
7	73	61	54	48	71	60	53	48	59	52	48	58	52	47	56	51	47
8	68	56	49	44	67	56	49	44	54	48	43	53	47	43	52	47	43
9	64	52	45	40	63	52	45	40	51	44	40	50	44	40	49	43	39
10	60	49	41	37	59	48	41	37	47	41	36	46	40	36	45	40	36

Test No. 18.00419

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



Web: www.prescolite.com • Tech Support: (888) 777-4832
701 Millennium Boulevard • Greenville, SC 29607 U.S.A. • Phone (864) 678-1000
Copyright ©2018 Prescolite, Inc., a division of Hubbell Lighting, Inc. All Rights Reserved
Specifications subject to change without notice. • Printed in U.S.A. • LFR-LED-038 • 4/12/18

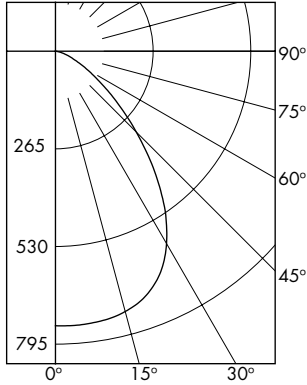


PHOTOMETRIC DATA

LiteFrame - 6" LF6SL Lens

LF6SL-6LFSL15L30K8DL

LED Light Engine: 3000K, 80 CRI
 System Wattage: 16.0W
 Fixture Delivered Lumens: 1360
 Fixture Efficacy: 85
 Spacing Criteria: 1.2



CANDELA DISTRIBUTION

DEG	CANDELA
0	741
5	742
15	727
25	665
35	513
45	309
55	149
65	61
75	20
85	0
90	0

Test No. 18.00419-02

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

ZONAL LUMEN SUMMARY

ZONE	LUMENS	%LUMINAIRE
0-30	580	42.6
0-40	898	66.0
0-60	1273	93.6
0-90	1360	100.0
90-180	0	0.0
0-180	1360	100.0

LUMINANCE DATA IN CANDELA/SQ. METER

Angle in Vertical	Average
45°	26037
55°	15501
65°	8606
75°	4684
85°	0

COEFFICIENTS OF UTILIZATION ZONAL CAVITY METHOD

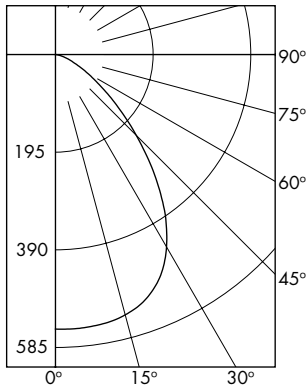
Room Cavity Ratio	% Effective Ceiling Cavity Reflectance																
	80			70			50			30			10				
	70	50	30	70	50	30	70	50	30	70	50	30	70	50	30		
1	112	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81
3	96	88	81	76	94	87	80	76	84	79	74	81	77	73	79	75	72
4	90	80	73	67	88	79	72	67	76	70	66	74	69	65	72	68	64
5	84	73	65	60	82	72	65	59	70	63	59	68	62	58	66	61	58
6	78	67	59	53	76	66	58	53	64	58	53	62	57	52	61	56	52
7	73	61	54	48	71	60	53	48	59	52	48	58	52	47	56	51	47
8	68	56	49	44	67	56	49	44	54	48	43	53	47	43	52	47	43
9	64	52	45	40	63	52	45	40	51	44	40	50	44	40	49	43	39
10	60	49	41	37	59	48	41	37	47	41	36	46	40	36	45	40	36

LF6SL-6LFSL15L30K8DL

Test No. 18.00419-02

LF6SL-6LFSL11L30K8DL

LED Light Engine: 3000K, 80 CRI
 System Wattage: 12.6W
 Fixture Delivered Lumens: 1013
 Fixture Efficacy: 80
 Spacing Criteria: 1.2



CANDELA DISTRIBUTION

DEG	CANDELA
0	552
5	553
15	542
25	495
35	382
45	230
55	111
65	45
75	15
85	0
90	0

Test No. 18.00419-03

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

ZONAL LUMEN SUMMARY

ZONE	LUMENS	%LUMINAIRE
0-30	432	31.8
0-40	669	49.2
0-60	948	69.7
0-90	1013	74.5
90-180	0	0.0
0-180	1013	74.5

LUMINANCE DATA IN CANDELA/SQ. METER

Angle in Vertical	Average
45°	19397
55°	11548
65°	6412
75°	3490
85°	0

COEFFICIENTS OF UTILIZATION ZONAL CAVITY METHOD

Room Cavity Ratio	% Effective Ceiling Cavity Reflectance																
	80			70			50			30			10				
	70	50	30	70	50	30	70	50	30	70	50	30	70	50	30		
1	112	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81
3	96	88	81	76	94	87	80	76	84	79	74	81	77	73	79	75	72
4	90	80	73	67	88	79	72	67	76	70	66	74	69	65	72	68	64
5	84	73	65	60	82	72	65	59	70	63	59	68	62	58	66	61	58
6	78	67	59	53	76	66	58	53	64	58	53	62	57	52	61	56	52
7	73	61	54	48	71	60	53	48	59	52	48	58	52	47	56	51	47
8	68	56	49	44	67	56	49	44	54	48	43	53	47	43	52	47	43
9	64	52	45	40	63	52	45	40	51	44	40	50	44	40	49	43	39
10	60	49	41	37	59	48	41	37	47	41	36	46	40	36	45	40	36

LF6SL-6LFSL11L30K8DL

Test No. 18.00419-03



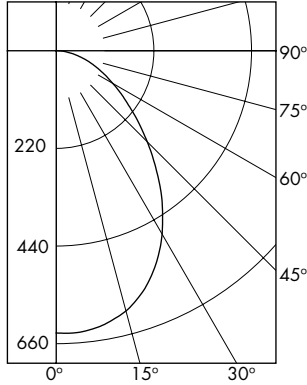
Web: www.prescolite.com • Tech Support: (888) 777-4832
 701 Millennium Boulevard • Greenville, SC 29607 U.S.A. • Phone (864) 678-1000
 Copyright ©2018 Prescolite, Inc., a division of Hubbell Lighting, Inc. All Rights Reserved
 Specifications subject to change without notice. • Printed in U.S.A. • LFR-LED-038 • 4/12/18



PHOTOMETRIC DATA

LiteFrame - 6" LF6SL Lens

LF6SL-6LFSL15L30K8FLUDL
 LED Light Engine: 3000K, 80 CRI
 System Wattage: 16.0W
 Fixture Delivered Lumens: 1322
 Fixture Efficacy: 83
 Spacing Criteria: 1.1



CANDELA DISTRIBUTION

DEG	CANDELA
0	636
5	636
15	607
25	531
35	416
45	290
55	187
65	114
75	59
85	18
90	0

ZONAL LUMEN SUMMARY

ZONE	LUMENS	%LUMINAIRE
0-30	474	35.9
0-40	734	55.5
0-60	1126	85.2
0-90	1322	100.0
90-180	0	0.0
0-180	1322	100.0

LUMINANCE DATA IN CANDELA/ SQ. METER

Angle in Vertical	Average
45°	26757
55°	21270
65°	17598
75°	14872
85°	0

COEFFICIENTS OF UTILIZATION ZONAL CAVITY METHOD

Room Cavity Ratio	% Effective Ceiling Cavity Reflectance																
	80				70				50				10				
	20% Effective Floor Cavity Reflectance																
	% Wall Reflectance																
	70	50	30	10	70	50	30	10	50	30	10	50	30	10			
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88
2	101	94	87	82	99	92	86	81	88	84	79	85	81	78	82	79	76
3	93	83	76	70	91	82	75	70	79	73	68	76	71	67	74	70	66
4	86	75	67	61	84	74	66	60	71	65	60	69	63	59	67	62	58
5	80	68	59	53	78	67	59	53	65	58	52	63	57	52	61	56	51
6	74	62	53	47	72	61	53	47	59	52	47	57	51	46	56	50	46
7	69	56	48	42	67	56	48	42	54	47	42	53	46	42	51	46	41
8	64	52	44	38	63	51	43	38	50	43	38	49	42	38	47	42	38
9	60	48	40	35	59	47	40	35	46	39	35	45	39	34	44	38	34
10	57	44	37	32	56	44	37	32	43	36	32	42	36	32	41	35	31

Test No. 18.00420

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

Dimming Compatibility Table

Dimming Ballast	Manufacturer	Web Link
DM/DM1	Lutron DTV	http://bit.ly/11jSvZg
DM/DM1	Leviton AWRMG-7xx, AWSMG-7xx, AWSMT-7xx	http://bit.ly/1BJn2R9
HDM	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: SpectraSync™

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 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](#).



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

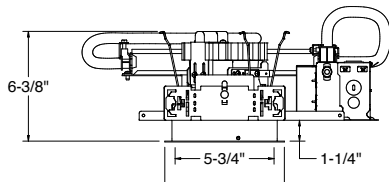
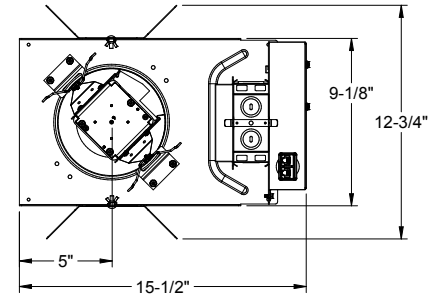
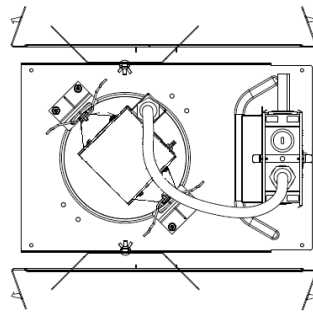
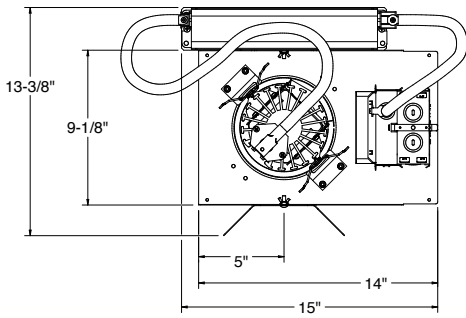
701 Millennium Boulevard • Greenville, SC 29607 U.S.A. • Phone (864) 678-1000

Copyright ©2018 Prescolite, Inc., a division of Hubbell Lighting, Inc. All Rights Reserved

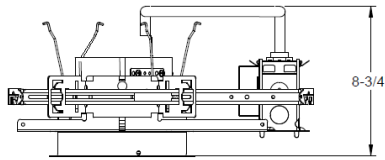
Specifications subject to change without notice. • Printed in U.S.A. • LFR-LED-038 • 4/12/18



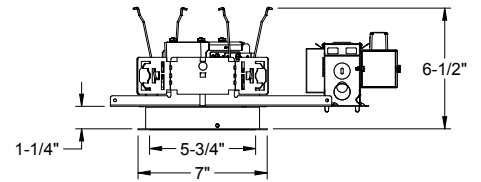
LiteFrame - 6" LF6SL Lens



LF6SL EMR



LF6SL CP



LF6SL LENS NX(W)

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.



Web: www.prescolite.com • Tech Support: (888) 777-4832
 701 Millennium Boulevard • Greenville, SC 29607 U.S.A. • Phone (864) 678-1000
 Copyright ©2018 Prescolite, Inc., a division of Hubbell Lighting, Inc. All Rights Reserved
 Specifications subject to change without notice. • Printed in U.S.A. • LFR-LED-038 • 4/12/18

