LITHONIA LIGHTING®

Catalog Number	
Notes	
Type	

FS Series

2FSL2

2' x 2'
LED

eldoLED DLC QPL LISTED nLight

FEATURES & SPECIFICATIONS

INTENDED USE — The FS Series recessed LED luminaire combines modern aesthetics and performance in a general lighting product that enables the transformation from fluorescent to LED. The high efficacy light engine delivers long life and excellent color to ensure a quality lighting installation. Integrated controls options provide for design flexibility and optimum energy savings. Multiple lumen packages and driver options provide solutions for all your lighting applications. **Certain airborne contaminants can diminish integrity of acrylic. Click here for Acrylic Environmental Compatibility table for suitable uses.**

CONSTRUCTION — Rugged, one-piece cold-rolled steel coated polyester, painted after fabrication. The satin white lens provides excellent shielding and wide distribution. End plates include integral T-bar clips. Fixture may be mounted and wired in continuous rows. Total fixture height is only 4-3/8".

ELECTRICAL — Long-life LEDs, coupled with high-efficiency drivers, provide superior illumination for extended service life. The FSL is rated to deliver L80 performance for 50,000 hours. The LEDs have a CRI of 82.

eldoLED driver options deliver choice of dimming range, and choices for control, while assuring flicker-free, low-current inrush, 89% efficiency and low EMI.

Optional integrated nLight® controls make each luminaire addressable - allowing it to digitally communicate with other nLight enabled controls such as dimmers, switches, occupancy sensors and photocontrols. Simply connect all the nLight enabled control devices and the FSL luminaires using standard CAT-5 cabling. Unique plug-and-play convenience allows devices and luminaires to automatically discover each other and self-commission.

Lumen Management: Unique lumen management system (option N80) provides onboard intelligence that actively manages the LED light source so that constant lumen output is maintained over the system life, preventing the energy waste created by the traditional practice of over-lighting.

Step-level dimming option allows system to be switched to 50% power for compliance with common energy codes while maintaining fixture appearance.

Driver disconnect provided where required to comply with US and Canadian codes.

INSTALLATION — Unique grid interfacing arrangement provides mounting into standard 1" and 9/16" tee bar or screw slot grids. 9/16" allows fixture trim to hang level with architectural ceiling tiles. Drywall ceiling adaptors available. Suitable for damp location.

LISTINGS — CSA certified to meet US and Canadian standards. IC rated. DesignLights Consortium® (DLC) qualified product. Not all versions of this product may be DLC qualified. Please check the DLC Qualified Products List at www.designlights.org/QPL to confirm which versions are qualified.

WARRANTY — 5-year limited warranty. Complete warranty terms located at www.acuitybrands.com/CustomerResources/Terms_and_conditions.aspx

Note: Specifications subject to change without notice.

Stock Configurations

Stock Configurations
2FSL2 33L EZ1 LP835
2FSL2 33L EZ1 LP840

ORDERING INFORMATION

Lead times will vary depending on options selected. Consult with your sales representative.

Example: 2FSL2 20L EZ1 LP835 N100

2FSL2								
Series	**Air function**	**Lumens**	**Lens**	**Voltage**	**Driver**	**Color temperature**	**Controls[5]**	**Options**
2FSL2 2X2 FSL	(blank) Static H Heat removal	20L 2000[1] 33L 3300[1] 40L 4000[1]	(blank) Satin white	(blank) MVOLT 347 347[2]	EZ1 eldoLED dims to 1%, 0-10V EZB eldoLED dims to black, 0-10V EDB eldoLED DALI[3] EXB eldoLED DMX/RDM[3] SLD Step-level dimming[3,4] EXA1 Dims to 1%, XPoint wireless enabled EXAB Dims to dark, XPoint wireless enabled	LP830 3000 K LP835 3500 K LP840 4000 K LP850 5000 K	(blank) No controls N80 nlight® with 80% lumen management N80EMG nlight® with 80% lumen management. For use with generator supply EM power. N100 nlight® without lumen management N100EMG nlight® without lumen management. For use with generator supply EM power.	EL7L 700 lumen battery pack EL14L 1400 lumen battery pack CP Chicago plenum PWS1836 6' prewire, 3/8" diameter, 18-gauge, 1-circuit PWS1846 6' prewire, 3/8" diameter, 18-gauge, 2-circuit RRL_ RELOC®-ready luminaire[6] NPLT Narrow pallet

Accessories: Order as separate catalog number.

2FS2 F916	Trim to adjust fixture mounting flush with 9/16" T-bar; for 2x2 fixture
DGA22	Drywall ceiling adaptor , unit installation[7]

Notes
1 Approximate lumen output.
2 Consult factory for availability. Not available with SLD, EL7L, or EL14L.
3 Not available with N80, N80EMG, N100 or N100EMG.
4 When using prewire option, use PWS1846.
5 nIO access limitations with 20L or EZB.
6 For ordering logic consult: RRL_2013.
7 When DGA kits are used, order 2FS2 F916 accessory.

Performance Data

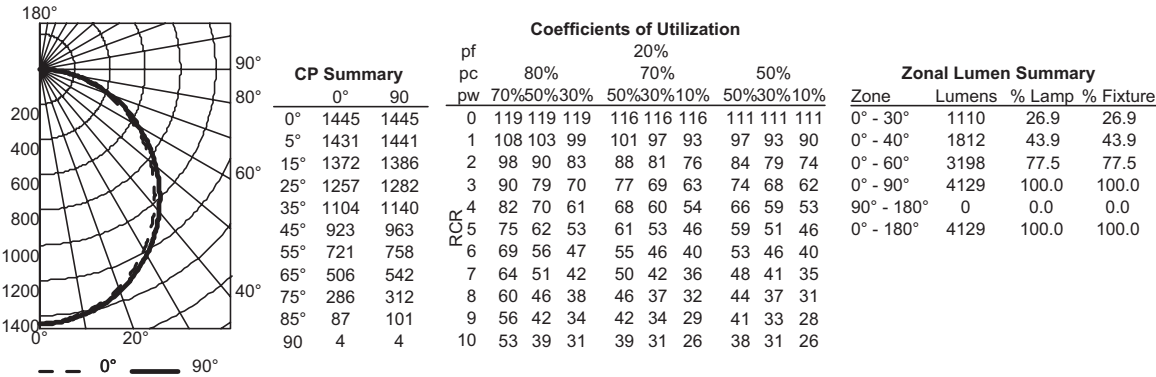| Lumen package	Input watts [1]	Lumens	LPW
20L LP830	20.4	2048	100
20L LP835	20.4	2134	105
20L LP840	20.5	2196	107
20L LP850	20.5	2333	114
33L LP830	34.4	3318	96
33L LP835	34.6	3544	103
33L LP840	34.7	3626	105
33L LP850	34.9	3839	110
40L LP830	41.7	3857	93
40L LP835	41.9	4127	99
40L LP840	42.1	4209	100
40L LP850	41.2	4502	109

Notes

1   Actual wattage may differ by +/- 5% when operating between 120-277V +/- 10%.

PHOTOMETRICS

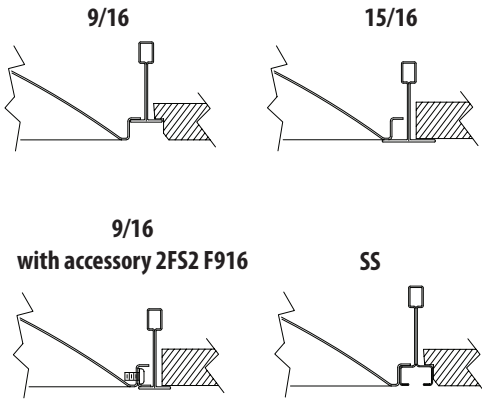**2FSL2 33L LP835,** test no. LTL24691P5, tested in accordance to IESNA LM-79

CP Summary

	0°	90
0°	1240	1240
5°	1228	1237
15°	1178	1190
25°	1080	1100
35°	948	979
45°	792	827
55°	619	650
65°	434	465
75°	246	268
85°	74	87
90	3	3

Coefficients of Utilization

pf					20%					
pc		80%			70%			50%		
pw	70%	50%	30%	50%	30%	10%	50%	30%	10%
0	119	119	119	116	116	116	111	111	111
1	108	103	99	101	97	93	97	93	90
2	98	90	83	88	81	76	84	79	74
3	90	79	70	77	69	63	74	68	62
RCR 4	82	70	61	68	60	54	66	59	53
5	75	62	53	61	53	46	59	51	46
6	69	56	47	55	46	40	53	46	40
7	64	51	42	50	42	36	48	41	35
8	60	46	38	46	37	32	44	37	31
9	56	42	34	42	34	29	41	33	28
10	53	39	31	39	31	26	38	31	26

Zonal Lumen Summary

Zone	Lumens	% Lamp	% Fixture
0° - 30°	953	26.9	26.9
0° - 40°	1556	43.9	43.9
0° - 60°	2746	77.5	77.5
0° - 90°	3545	100.0	100.0
90° - 180°	0	0.0	0.0
0° - 180°	3545	100.0	100.0

2FSL2 40L LP835, test no. LTL24691P9, tested in accordance to IESNA LM-79

CP Summary

	0°	90
0°	1445	1445
5°	1431	1441
15°	1372	1386
25°	1257	1282
35°	1104	1140
45°	923	963
55°	721	758
65°	506	542
75°	286	312
85°	87	101
90	4	4

Coefficients of Utilization

pf					20%					
pc		80%			70%			50%		
pw	70%	50%	30%	50%	30%	10%	50%	30%	10%
0	119	119	119	116	116	116	111	111	111
1	108	103	99	101	97	93	97	93	90
2	98	90	83	88	81	76	84	79	74
3	90	79	70	77	69	63	74	68	62
RCR 4	82	70	61	68	60	54	66	59	53
5	75	62	53	61	53	46	59	51	46
6	69	56	47	55	46	40	53	46	40
7	64	51	42	50	42	36	48	41	35
8	60	46	38	46	37	32	44	37	31
9	56	42	34	42	34	29	41	33	28
10	53	39	31	39	31	26	38	31	26

Zonal Lumen Summary

Zone	Lumens	% Lamp	% Fixture
0° - 30°	1110	26.9	26.9
0° - 40°	1812	43.9	43.9
0° - 60°	3198	77.5	77.5
0° - 90°	4129	100.0	100.0
90° - 180°	0	0.0	0.0
0° - 180°	4129	100.0	100.0

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MOUNTING DATA

9/16

15/16

9/16
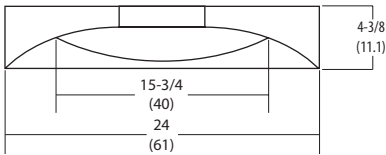**with accessory 2FS2 F916**

SS

DIMENSIONS

All dimensions are inches (centimeters) unless otherwise specified.

Specifications
Length: 24 (61.0)
Width: 24 (61.0)
Depth: 4-3/8 (11.1)

4-3/8
(11.1)

15-3/4
(40)

24
(61)

nLight® Control Accessories:			
Order as separate catalog number. Visit www.sensorswitch.com/nLight for complete listing of nLight controls.			
WallPod stations	**Model number**	**Occupancy sensors**	**Model number**
On/Off	nPODM [color]	Small motion 360°, ceiling (PIR / dual tech)	nCM 9 / nCM PDT 9
On/Off & Raise/Lower	nPODM DX [color]	Large motion 360°, ceiling (PIR / dual tech)	nCM 10 / nCM PDT 10
Graphic Touchscreen	nPOD GFX [color]	Wide view (PIR / dual tech)	nWV 16 / nWV PDT 16
Photocell controls	**Model number**	Wall Switch w/ Raise/Lower (PIR / dual tech)	nWSX LV DX / nWSX PDT LV DX
On/Off & Dimming	nCM ADCX	**Cat-5 cable (plenum rated)**	**Model number**
		10', CAT5 10FT	CAT5 10FT J1
		15', CAT5 15FT	CAT5 15FT J1

Constant Lumen Management

Enabled by the embedded nLight control, the FSL actively tracks its run-time and manages its light source such that constant lumen output is maintained over the system life. Referred to as lumen management, this feature eliminates the energy waste created by the traditional practice of over-lighting.

Without Lumen Management
Energy is wasted and light level is inconsistent.

POWER INPUT

LIGHT OUTPUT

Wasted Energy

100%

80%

35W

28W

0   10   20   30   40   50
THOUSAND OPERATING HOURS

LIGHT OUTPUT

POWER INPUT

With Lumen Management
Energy is saved and light level remains consistent.

Saved Energy

POWER INPUT

LIGHT OUTPUT

100%

80%

35W

28W

0   10   20   30   40   50
THOUSAND OPERATING HOURS

LIGHT OUTPUT

POWER INPUT
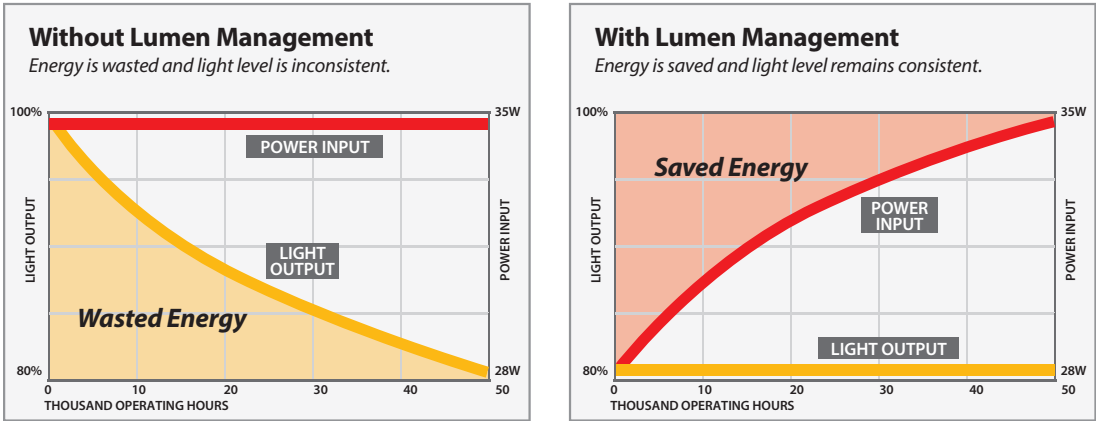
Notes

With nlight 80% lumen management input watts start at 28 and gradually increasing to 35 at 50,000 hrs when using 33L system.

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2FSL2-2X2