

#### **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.** 

 $\textbf{CONSTRUCTION} \ -\! \text{Rugged, one-piece cold-rolled steel coated polyester, painted after fabrication.} \ The$ 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. 90% LED lumen maintenance at 60,000 hours (L90/60,000).

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

Optional integrated nLight®controls make each luminaire addressable, allowing them to digitally communicate with other nLight enabled controls such as dimmers, switches, and nLight AIR RIO. Simply connect all the nLight enabled control devices and the FSLED luminaires using standard Cat-5 cabling,  $or the \, n Light \, AIR \, wireless \, network. \, Unique \, plug-and-play \, convenience \, allows \, devices \, and \, luminaires \, to \, allows \, devices \, and \, luminaires \, to \, allows \, devices \, and \, luminaires \, to \, allows \, devices \, and \, luminaires \, to \, allows \, devices \, and \, luminaires \, to \, allows \, devices \, and \, luminaires \, to \, allows \, devices \, and \, luminaires \, to \, allows \, devices \, and \, luminaires \, to \, allows \, devices \, and \, luminaires \, to \, allows \, devices \, and \, luminaires \, to \, allows \, devices \, and \, luminaires \, to \, allows \, devices \, and \, luminaires \, to \, allows \, devices \, and \, luminaires \, to \, allows \, devices \, and \, allows \, devices \, devices \, allows \, devices \,$ 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.

Integrated Sensor (nLight Wired Networking): This sensor is nLight-enabled, meaning it has the ability to communicate over an nLight network. When wired, using CAT-5 cabling, with other nLightenabled sensors, power packs, or WallPods, an nLight control zone is created. Once linked to a Gateway, directly or via a Bridge, the zone becomes capable of remote status monitoring and control via SensorView software. See page 2 for the nLight sensor options.

Integrated Smart Sensor (nLight Air Wireless Platform): The RES7 sensor is nLight AIR enabled, meaning it has the ability to communicate over the wireless nLight control platform. It is available with an automatic dimming photocell, and either a digital PIR or a microphonics (PDT) dual technology occupancy sensor. It pairs to other luminaires and wall switches through our mobile app CLAIRity, which allows for simple sensor adjustment. See page 4 for more details on the Integrated Smart Sensor.

**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  $Products\ List\ at\ \underline{www.designlights.org/QPL}\ to\ confirm\ which\ versions\ are\ qualified.$ 

**WARRANTY** — 5-year limited warranty. Complete warranty terms located at www.acuitybrands.com/CustomerResources/Terms\_and\_conditions.aspx

**Note:** Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C. Specifications subject to change without notice.

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**FS Series** 













#### **Stock Configurations**

2FSL2 33L EZ1 LP835 2FSL2 33L EZ1 LP840

# \*\* Capable Luminaire

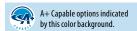
This item is an A+ capable luminaire, which has been designed and tested to provide consistent color appearance and out-of-the-box control compatibility with simple commissioning.

- All configurations of this luminaire meet the Acuity Brands' specification for chromatic consistency
- This luminaire is part of an A+ Certified solution for nLight® control networks when ordered with drivers marked by a shaded background\*
- This luminaire is part of an A+ Certified solution for nLight control networks, providing advanced control functionality at the luminaire level, when selection includes driver and control options marked by a shaded background\*

To learn more about A+, visit www.acuitybrands.com/aplus.

\*See ordering tree for details

LED 2FSL2-2X2



ORDERING INFORMATION

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

**Example:** 2FSL2 33L GZ10 LP835 N100

2FSL2								
Series	Air function	Lumens	Lens	Voltage	Driver	Color temperature	Controls <sup>6</sup>	Options
2FSL2 2X2 FSL	(blank) Static H Heat removal	20L 2000¹ 33L 3300¹ 40L 4000¹	(blank) Satin white	(blank) MVOLT 347 347 <sup>2</sup>	EZ1 eldoLED dims to 1%, 0-10V EZB eldoLED dims to black, 0-10V GZ1 Dims to 1% (0-10V dimming) <sup>3</sup> GZ10 Dims to 10% (0-10V dimming) <sup>3</sup> EDB eldoLED DALI <sup>4</sup> EXB eldoLED DMX/RDM <sup>4</sup> SLD Step-level dimming <sup>4,5</sup> EXA1 Dims to 1%, XPoint wireless enabled EXAB Dims to dark, XPoint wireless enabled EOHN On/Off (nondim)	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 managemen For use with generator supply EM power.  N100 nlight® without lum managemen For use with generator supply EM power.  N101EMG nlight® without lum managemen For use with generator supply EM power.  NLTAIR2 RIO nlight® AIR radio module without sen- sors 7	EL14L 1400 lumen battery pack (non-CEC compliant)  E10WLCP EM Self-Diagnostic battery pack, 10W Constant Power, CEC compliant  CP Chicago plenum  EL PWS1836 6' prewire, 3/8" diameter, 18-gauge, 1-circuit  PWS1846 6' prewire, 3/8" diameter, 18-gauge, 1-gauge, 1-gauge, 1-gauge, 1-gauge, 18-gauge, 19-gauge, 18-gauge, 19-gauge, 18-gauge,

# **Accessories:** Order as separate catalog number.

Trim to adjust fixture mounting flush with 2FS2 F916

9/16" T-bar; for 2x2 fixture

DGA22 FS/VT Drywall ceiling adaptor, unit installation

#### Notes

- Approximate lumen output.
- Consult factory for availability. Not available with SLD, EL7L, or EL14L.
- GZ1, GZ10 drivers not available with any Controls options.
- Not available with N80, N80EMG, N100 or N100EMG.
- When using prewire option, use PWS1846.
- nIO access limitations with 20L or EZB.
- RIO available with EZ1 and EZB drivers only.
- 8 For ordering logic consult: RRL 2013.

LED 2FSL2-2X2

	Performanc	e Data	
Lumen package	Lumens	Input watts	LPW
20L LP830	2182	17.8	123
20L LP835	2273	17.8	128
20L LP840	2340	17.8	131
20L LP850	2485	17.8	139
33L LP830	3535	29.9	118
33L LP835	3776	30.1	125
33L LP840	3863	30.2	128
33L LP850	4090	30.4	135
40L LP830	4109	36.3	113
40L LP835	4397	36.5	121
40L LP840	4484	36.6	122
40L LP850	4796	36.6	131

#### How to Estimate Delivered Lumens in Emergency Mode

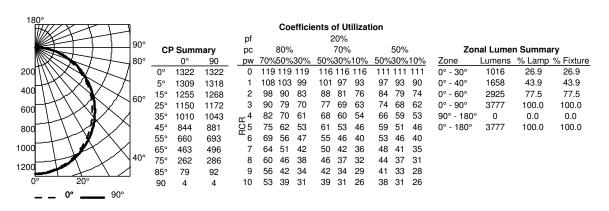
Use the formula below to estimate the delivered lumens in emergency mode

#### Delivered Lumens = 1.25 x P x LPW

 $P=0 uput\ power\ of\ emergency\ driver.\ P=10W\ for\ E10WLCP\ option.$   $LPW=Lumen\ per\ watt\ rating\ of\ the\ luminaire.\ This\ information\ is\ available\ on\ the\ ABL\ luminaire\ spec\ sheet.\ LPW=Lumen\ per\ watt\ rating\ of\ the\ luminaire.\ LPW\ information\ available\ in\ Performance\ Data\ section.$ 

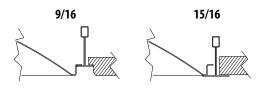
# **PHOTOMETRICS**

2FSL2 33L LP835, test no. LTL24691P109, tested in accordance to IESNA LM-79



LED 2FSL2-2X2

# **MOUNTING DATA**

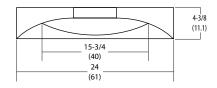


# 9/16 with accessory 2FS2 F916 SS

# **DIMENSIONS**

All dimensions are inches (centimeters) unless otherwise specified.

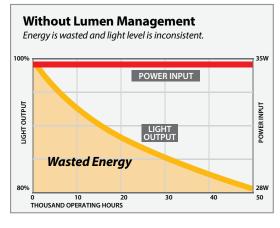
Specifications Length: 24 (61.0) Width: 24 (61.0) Depth: 4-3/8 (11.1)

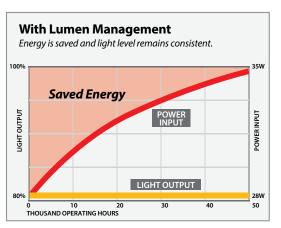


<b>nLight® Control Accessories:</b> Order as separate catalog number. Visit <u>www.sensorswitch.com/nLight</u> for complete listing of nLight controls.							
WallPod stations	Model number	Occupancy sensors	Model number				
On/Off	nPODM [color]	Small motion 360°, ceiling (PIR / dual tech)	nCM 9 / nCM 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 D				
On/Off & Dimming	nCM ADCX	Cat-5 cable (plenum rated)	Model number				
		10', CAT5 10FT	CATS 10FT J1				
		15', CAT5 15FT	CATS 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.





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