





FR Premium commercial LED luminaire

Aesthetics, performance, value. The FR series is a premium luminaire offering an excellent connected lighting solution with the latest solid state and optimized electronic driver technologies.

Aesthetics. Offered in two unique visual aesthetics – Standard and High Performance, the FR series is a modern styled luminaire suitable for any application such as offices, hospitals, schools, retail and other work spaces. With its styled design, FR series is a premium upgrade over traditional lensed troffers, parabolics and direct/indirect lighting products.

Performance. With performance as high as 142 lm/W, the payback period for energy savings may be reduced especially when combined with DLC standard and premium rebates. This connected lighting solution offers further flexibility with 0-10V dimming standard, and step/Bi-level, 10% and 1% DALI, three lumen options, and integrated sensor options to reduce energy consumption and cost while meeting or exceeding national, state and local code requirements. A full complement of emergency lighting options are also available.

Value. Compared to traditional fluorescent and other LED solutions, the FR series offers superior energy efficiency and excellent application flexibility allowing the reduction of overall operating and maintenance costs.

Improved asethetic over traditional prismatic lensed troffer

2 x 4 and 2 x 2 product configurations

Excellent performance with up to 142 lm/W

Two unique versions - Standard or High Performance (HP)

0 to 10V driver, optional step dim, 1%, DALI, and Lutron

CCT: 2700K, 3000K, 3500K, 4000K, 5000K

Ease of driver access with hinged door assembly

Damp location listed





FR Premium commercial LED luminaire



- Recessed: 2' x 2' and 2' x 4'
- Shallow depth: 3.25"
- Tool-less hinged door for easy access
- cULus damp location / IC Rated / RoHS compliant
- Sustainable materials
- Five-year warranty



Performance

- High-performance efficacy up to 142 lumens per watt
- Energy savings in excess of 50% compared to traditional fluorescent troffers
- Five Correlated Color Temperatures (2700K, 3000K, 3500K, 4000K, 5000K) at typical 85 CRI
- 2' x 2': >L88 @ 60,000 hrs. 2' x 4': >L82 @ 60,000 hrs.
- Binning: Per ANSI, 3-step MacAdam ellipse









Options

- Three stocked lumen packages in two CCTs
 - 2' x 2': 3200 (29.4W);
 - 2' x 4': 4000 (30.6W) and 6500 (59.1W)
 - Ten additional lumen packages offered as MTO
- Six different models Standard (Single Bar) or High Performance (Dual Bar)
- Universal (120V/277V) or 347V
- Emergency EL (700) and EL14 (1400), and other options
- Surface mount field install kits
- Flex wiring configurations
- Chicago plenum rated version

Controls

- FR series can include a factory-installed integrated sensor system for occupancy and daylight dimming control, with programming and manual controls from an optional handheld
- FR luminaires include 0-10V dimming drivers for control using wall dimmers (10% - 100%), daylighting sensors and room controllers from Eaton. Optional 1% dimming available.
- FR luminaires are available with native DALI drivers for complete digital energy management fifthlight using Fifth Light addressable lighting controls.
- Connected sensors available with LumaWatt Pro and WaveLinx options.



Energy data





Catalog Number	Performance Type	Nominal Lumens	Wattage	Efficacy (Im/W @ 3500K)
2' x 2'				
22FR-24-UNV-L8XX-CD1-U	Standard	2345	20.2	120.0
22FR-32-UNV-L8XX-CD1-U	Standard	3313	29.4	110.0
22FR-24-HP-UNV-L8XX-CD1-U	Premium	2365	19.4	126.2
22FR-32-HP-UNV-L8XX-CD1-U	Premium	3238	26.1	121.8
2' x 4'				
24FR-30-UNV-L8XX-CD1-U	Premium	3023	22.9	135.3
24FR-40-UNV-L8XX-CD1-U	Premium	4096	30.6	130.6
24FR-50-UNV-L8XX-CD1-U	Premium	5034	40.9	123.4
24FR-65-UNV-L8XX-CD1-U	Standard	6703	59.1	110.7
24FR-69-UNV-L8XX-CD1-U	Standard	6900	67.1	105.2
24FR-72-UNV-L8XX-CD1-U	Standard	7237	68.8	104.6
24FR-30-HP-UNV-L8XX-CD1-U	Premium	3067	21.5	139.0
24FR-40-HP-UNV-L8XX-CD1-U	Premium	4542	29.7	136.1
24FR-50-HP-UNV-L8XX-CD1-U	Premium	5090	38.5	131.8
24FR-65-HP-UNV-L8XX-CD1-U	Premium	6530	53.2	123.6
24FR-69-HP-UNV-L8XX-CD1-U	Premium	6986	57.6	121.3
24FR-72-HP-UNV-L8XX-CD1-U	Standard	7265	63.9	118.5
24FR-80-HP-UNV-L8XX-CD1-U	Standard	8028	68.5	117.0

Notes: Bold=stocked SKUs (STK), available for immediate shipment. Non-bold=MTO SKUs, available in less than two weeks. All models also available in 2700K and 3000K.

Lumens based on 3500K. Use lumen multiplier for 4000K and 5000K.

Connected Lighting Systems ...



SVPD

Integrated Sensor System



Adjustable occupancy sensing and daylight dimming

Out-of-the-box functionality with no configuration

Optional handheld remote for field adjustments and personal control

Low-bay and high-bay detection pattern options for various ceiling heights up to 30 feet

LumaWatt Pro

Wireless Connected Lighting System powered by Enlighted



WaveLinx

Wireless Connected Lighting System



Adjustable occupancy sensing and daylight dimming

Simple, secure wireless connectivity with out-of-thebox code compliance

Easy to use mobile application allows for fast set up and unlocks advanced control capabilities

Detection pattern covers standard ceiling applications up to 12 feet

DLVP

Distributed Low Voltage Power System

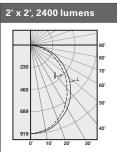


Save on labor costs. With an average of 40% reduction in man hours, DLVP reduces number of qualified electricians needed on the job site and installs

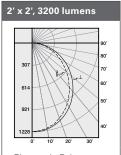
No system commissioning. A contractor can configure the system with the flip of a switch, or by using a handheld remote.

Code compliance made easy. The system was

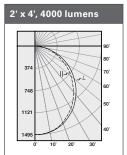
Optics and photometry



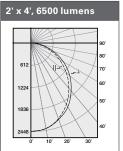
Electronic Driver
Linear LED 3500K
Spacing criterion:
(II) 1.17 x mtg height,
(L) 1.23 x mtg height
Lumens = 2419
Input Watts = 20.2
Efficacy = 119.8 Im/W
Test: 22FR-LD4-24UNV-L835-CD1-U.IES



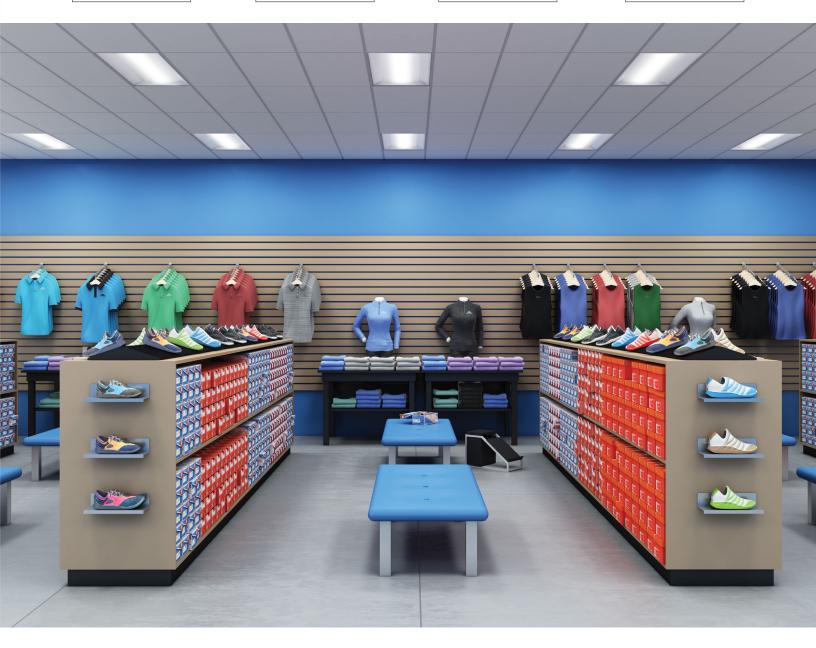
Electronic Driver Linear LED 3500K Spacing criterion: (II) 1.17 x mtg height, (L) 1.23 x mtg height Lumens = 3231 Input Watts = 29.4 Efficacy = 109.9 lm/W Test: 22FR-LD4-32-UNV-L835-CD1-U.IES



Electronic Driver Linear LED 4000K Spacing criterion: (II) 1.19 x mtg height, (L) 1.23 x mtg height Lumens = 3991 Input Watts = 30.6 Efficacy = 130.4 lm/W Test: 24FR-LD4-40-UNV-L835-CD1-U.IES



Electronic Driver Linear LED 4000K Spacing criterion: (II) 1.19 x mtg height, (L) 1.23 x mtg height Lumens = 6543 Input Watts = 59.1 Efficacy = 110.7 lm/W Test: 24FR-LD4-40-UNV-L835-CD1-U.IES



Lighting Product Lines

Halo

Halo Commercial

Portfolio Iris RSA Metalux Corelite Neo-Ray Fail-Safe

MWS Ametrix Shaper

Lumark

McGraw-Edison

Invue Ephesus Lumière Streetworks AtLite

Sure-Lites

Controls Product Lines

Greengate iLumin Zero 88

Fifth Light Technology iLight (International Only)

Connected Lighting Systems

LumaWatt Pro WaveLinx

Distributed Low-Voltage Power

ConnectWorks

Faton

1121 Highway 74 South Peachtree City, GA 30269 P: 770-486-4800 www.eaton.com/lighting

Canada Sales 5925 McLaughlin Road Mississauga, Ontario L5R 1B8 P: 905-501-3000 F: 905-501-3172

© 2018 Eaton All Rights Reserved Printed in USA Publication No. BR519014EN May 9, 2018 Eaton is a registered trademark.

All other trademarks are property of their respective owners.

Product availability, specifications, and compliances are subject to change without notice.

