

FEATURES & SPECIFICATIONS

INTENDED USE — A general purpose and energy-efficient surface-mounted or suspended LED fixture, suitable for wet, damp and/or cold locations. For vapor-tight demanding environments where moisture or dust is a concern and where relatively low fixture mounting heights and wide fixture spacing are common. Typical applications include industrial facilities, parking garages, retail malls, multi-purpose rooms, garden centers, and food processing. **Certain airborne contaminants can diminish the integrity of acrylic and/or polycarbonate.** [Click here for Acrylic-Polycarbonate Compatibility table for suitable use.](#)

Certain airborne contaminants may adversely affect the functioning of LEDs and other electronic components, depending on various factors such as concentrations of the contaminants, ventilation, and temperature at the end-user location. [Click here for a list of substances that may not be suitable for interaction with LEDs and other electronic components.](#)

CONSTRUCTION — One-piece SVA fiberglass housing with integral perimeter channel utilizing continuous poured-in-place NEMA 4X gasket. Approved as a wireway and for through wiring. Captive polymeric latches are standard. Stainless steel latches (#316) available as an option for food processing or more demanding applications.

Power connection is easily accomplished through pre-drilled holes. Fixture easily mounts to ceilings and other solid structures, or can be suspended with chain, cable or rod using stainless steel mounting brackets (included).

OPTICS — Injection molded, acrylic lens (.080" thick) provides high impact-resistance comparable to 100% DR. For L48 Medium Distribution, a UV stabilized polycarbonate diffuser is available (.080" thick) in clear or frosted for additional impact strength where vandal protection is desired.

Expected service life of 60,000 hours at 80% lumen maintenance (L80); predicted life of more than 100,000 hours.

ELECTRICAL — Utilizes high-efficiency LEDs mounted to core circuit boards. High-efficiency drivers operate 120 thru 277V, 347V and 480V offered with 0-10 volt dimming, allowing granular control when coupled with wireless networking controls. Luminaire Surge Protection Level: Designed to withstand up to 6kV/3kA per ANSI C82.77-5-2015.

INSTALLATION — Fixture can be ceiling or suspended mounted. Pre-punched stainless steel mounting brackets are included (two per luminaire) for easy field-attachment of bolts, screws and other mounting hardware. A covered ceiling is not required to maintain wet location listing or IP rating.

LISTINGS — CSA certified to UL and C-UL standards. Listed for wet locations in ambient temps ranging from -35°C (-31°F) to 25°C (77°F) when fixture is surface mounted or up to 45°C (113°F) when fixture is suspended at least 6" from ceiling. IP65, IP66 and IP67 rated. NSF splash-zone 2 certified and meets FDA/USDA guidelines. Nema 4X rated lens and housing. 1500 PSI hose-down.

DesignLights Consortium® (DLC) Premium qualified product and DLC qualified product. Not all versions of this product may be DLC Premium qualified or 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/CustomResources/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.

Stock configurations are offered for shorter lead times:

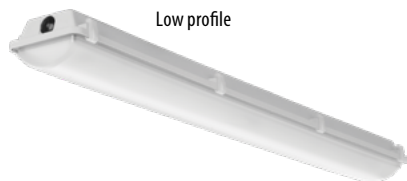
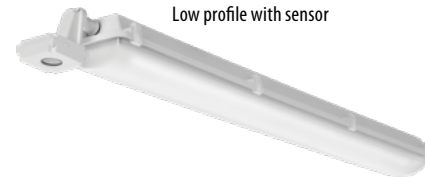
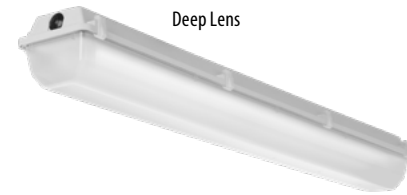
| Standard Part Number | Stock Part Number |
|--|---------------------|
| FEM L48 4000LM LPAFL MD MVOLT GZ10 40K 80CRI | FEM L48 4L MVOLT |
| FEM L48 4000LM LPAFL MD MVOLT GZ10 50K 80CRI | FEM L48 4L MVOLT 5K |

| |
|----------------|
| Catalog Number |
| Notes |
| Type |

Low-Profile Enclosed and Gasketed Industrial

FEM LED

CEILING/ SUSPENDED MOUNT



A+ 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® or XPoint™ Wireless control networks marked by a **shaded background***

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

*See ordering tree for details

FEM LED Low-Profile Enclosed and Gasketed



A+ Capable options indicated by this color background.

ORDERING INFORMATION

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

Example: FEM L48 4000LM IMAFL WD MVOLT GZ10 40K 80CRI

| Series | Length | Nominal Lumens | Diffuser | Distribution | Voltage | Driver | Color temperature | CRI |
|--------|----------------------|-----------------------|--|----------------------|-----------------------|----------------------|-------------------|--------------|
| FEM | L48 48" ¹ | 3000LM 3,000 lumens | IMAFL Acrylic, lineal ribbed frosted lens | MD Medium | MVOLT MVOLT | GZ10 0 - 10V dimming | 30K 3000K | 80CRI 80 CRI |
| | | 4000LM 4,000 lumens | | | | | 120 120V | 35K 3500K |
| | | 6000LM 6,000 lumens | IMACD Acrylic, clear deep lens | WD Wide ⁴ | 277 277V | 40K 4000K | | |
| | | 8000LM 8,000 lumens | IMAFD Acrylic, deep frosted lens | | 347 347V ⁵ | 50K 5000K | | |
| | | 10000LM 10,000 lumens | LPAFL Acrylic, low profile frosted lens ³ | | 480 480V ⁵ | | | |
| | L96 96" ² | 9000LM 9,000 lumens | LPAFL Acrylic, low profile clear lens ³ | | | | | |
| | | 12000LM 12,000 lumens | LPPCL Polycarbonate, low profile clear lens ³ | | | | | |
| | | 15000LM 15,000 lumens | LPPFL Polycarbonate, low profile frosted lens ³ | | | | | |
| | | 18000LM 18,000 lumens | | | | | | |
| | | 20000LM 20,000 lumens | | | | | | |

Options

| | | | | |
|---------|--|---------|--|---|
| SF | Single fuse (available with 120, 277, 347) ⁶ | CS88 | 6' Brad Harrison 16/3 cord and straight blade plug set ⁶ | Individual Controls: ¹² |
| DF | Double Fusing (available with 347, 480V) ⁶ | CS88L12 | 12' Brad Harrison 16/3 cord and straight blade plug set ⁶ | MSI10NWL Low mount 360° integral motion sensor, wet location, On/Off operation ⁶ |
| BSL520 | Bodine® emergency LED battery pack for -20°C and up. CA Title 20 Noncompliant ^{7,8} | CS88R | Brad Harrison receptacle | MSI102L3VWL Low mount 360° integral motion sensor, wet location, High/Low operation (bi-level) ⁶ |
| E15WCP | Emergency battery pack, 15W constant power, Certified in CA Title 20 MAEDBS ^{6,7,9} | CS89 | 6' white cord, 16/3, no plug, wet location | MSI10NWL DSCNWL Low mount 360° integral motion sensor, wet location, On/Off operation for motion sensing, override Off due to daylight ⁶ |
| BGTD | Generator transfer device ^{6,10} | CS89L12 | 12' white cord, 16/3, no plug, wet location | Xpoint Wireless: ¹² |
| SPD | Surge protection device, additional 10kV/5kA ⁶ | TRS | Tamper Resistant Torx® T10 screws | MSI10XAWL DSCXAWL Xpoint wireless integral motion sensor, On/Off operation for motion sensing, override Off due to daylight ⁶ |
| WLF | Wet location fitting (two outboard, top) | DPMB | Dual pendant mounting bracket | XAD XPoint™ wireless controller, 0-10V dimming ⁶ |
| WLFEND | Wet location fitting (one end) | STSL | Stainless steel latches | nLight Air: |
| WLFEND2 | Wet location fitting (both ends) ¹¹ | | | NLTAIR2 RSBOR10 nLight AIR generation 2 enabled 306 low mount motion sensor ¹² |

Accessories: Order as separate catalog number.

| | |
|--------------------|--|
| MHCH 36 | Jack chain 36" (pair) |
| MHHK120 | 10' single leg air craft cable (ships as pair) |
| MHHK120SS | 10' single leg air craft cable, stainless steel (ships as pair) |
| RK1 T10BIT W/PIN U | Hex-base driver bit, Torx TX10, for tamper resistant screws with center reject pin |
| FEMDPMB | Dual pendant mounting bracket (ships as a pair) |

Notes

- Available with 3000LM, 4000LM, 6000LM, 8000LM, and 10000LM lumen packages. Not available with WD when using low profile diffuser.
- Available with 9000LM, 12000LM, 15000LM, 18000LM, and 20000LM. Not available with low profile diffuser options.
- Not available with L96. Not available with L48 when ordering WD option.
- Not available with L48 when ordering low-profile lens options.
- Utilizes step-down transformer. Not available with BGTD.
- Must specify voltage.
- Not available with 347 or 480V.
- For use with ambient temperatures no lower than -20°C.
- For use with ambient temperatures no lower than -17°C.
- Available with 120V or 277V only. For use in ambient environments up to 25°C. Not available with L48 when ordering 10000LM lumen package. Not available with L96 when ordering 18000LM or 20000LM lumen packages.
- Not available with Sensor options or cord sets, or MSI controls.
- Not available with multiple control options - other MSE or Xpoint.

FEM LED Low-Profile Enclosed and Gasketed

OPERATIONAL DATA

| | Lumen packages | Wattage | | | | Diffusers | | | |
|--|--------------------------------------|---------|------|------|------|--------------------------------|-------------------------------|-----------------------------|-------|
| | | 120v | 277v | 347v | 480v | Acrylic Lineal Frosted (IMAFI) | Frosted (IMAFD, LPAFL, LPPFL) | Clear (IMACD, LPAFL, LPPFL) | |
| L48 Medium Distribution <small>*test results reflect less than 1% difference between acrylic (clear/deep/low profile) and polycarbonate (low profile) lens</small> | Delivered Lumens at 30K 80CRI | 3000LM | 23 | 23 | 24 | 25 | 2972 | 3032 | 3071 |
| | | 4000LM | 31 | 30 | 31 | 32 | 4019 | 4100 | 4153 |
| | | 6000LM | 45 | 44 | 46 | 47 | 5925 | 6044 | 6122 |
| | | 8000LM | 69 | 67 | 70 | 71 | 7593 | 7746 | 7845 |
| | | 10000LM | 80 | 78 | 81 | 82 | 9781 | 9979 | 10107 |
| | Delivered Lumens at 35K 80CRI | 3000LM | 23 | 23 | 24 | 25 | 3039 | 3100 | 3140 |
| | | 4000LM | 31 | 30 | 31 | 32 | 4109 | 4192 | 4246 |
| | | 6000LM | 45 | 44 | 46 | 47 | 6057 | 6179 | 6258 |
| | | 8000LM | 69 | 67 | 70 | 71 | 7762 | 7918 | 8020 |
| | | 10000LM | 80 | 78 | 81 | 82 | 9999 | 10201 | 10332 |
| | Delivered Lumens at 40K 80CRI | 3000LM | 23 | 23 | 24 | 25 | 3086 | 3148 | 3189 |
| | | 4000LM | 31 | 30 | 31 | 32 | 4173 | 4257 | 4312 |
| | | 6000LM | 45 | 44 | 46 | 47 | 6151 | 6275 | 6356 |
| | | 8000LM | 69 | 67 | 70 | 71 | 7883 | 8042 | 8145 |
| | | 10000LM | 80 | 78 | 81 | 82 | 10155 | 10360 | 10493 |
| | Delivered Lumens at 50K 80CRI | 3000LM | 23 | 23 | 24 | 25 | 3200 | 3264 | 3306 |
| | | 4000LM | 31 | 30 | 31 | 32 | 4326 | 4414 | 4470 |
| | | 6000LM | 45 | 44 | 46 | 47 | 6378 | 6506 | 6590 |
| | | 8000LM | 69 | 67 | 70 | 71 | 8173 | 8338 | 8445 |
| | | 10000LM | 80 | 78 | 81 | 82 | 10529 | 10741 | 10879 |

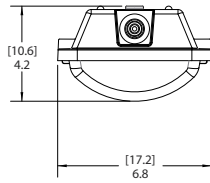
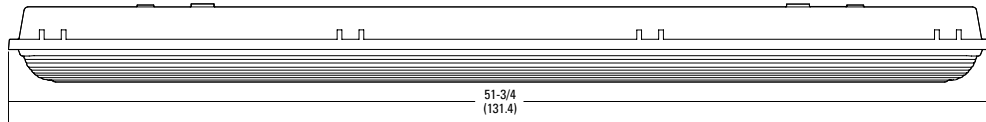
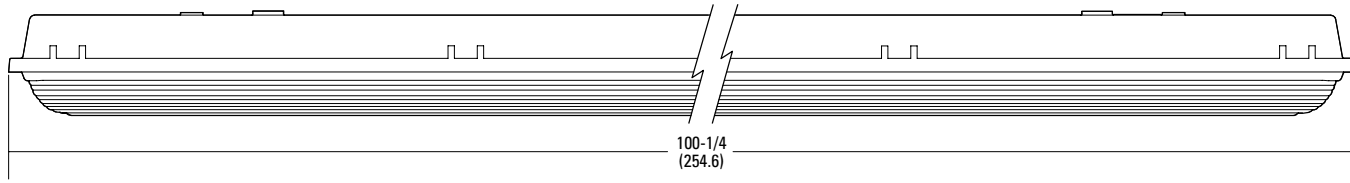
| | Lumen packages | Wattage | | | | Diffusers | | | |
|--------------------------------|--------------------------------------|---------|------|------|------|--------------------------------|-------------------------|-----------------------|-------|
| | | 120v | 277v | 347v | 480v | Acrylic Lineal Frosted (IMAFI) | Acrylic Frosted (IMAFD) | Acrylic Clear (IMACD) | |
| L96 Medium Distribution | Delivered Lumens at 30K 80CRI | 9000LM | 65 | 64 | 66 | 67 | 8718 | 8959 | 9072 |
| | | 12000LM | 88 | 86 | 89 | 90 | 11370 | 11685 | 11831 |
| | | 15000LM | 120 | 118 | 122 | 124 | 14263 | 14657 | 14841 |
| | | 18000LM | 145 | 141 | 146 | 148 | 16863 | 17330 | 17547 |
| | | 20000LM | 160 | 156 | 162 | 164 | 19313 | 19847 | 20096 |
| | Delivered Lumens at 35K 80CRI | 9000LM | 65 | 64 | 66 | 67 | 8913 | 9159 | 9274 |
| | | 12000LM | 88 | 86 | 89 | 90 | 11624 | 11945 | 12095 |
| | | 15000LM | 120 | 118 | 122 | 124 | 14581 | 14984 | 15172 |
| | | 18000LM | 145 | 141 | 146 | 148 | 17239 | 17716 | 17938 |
| | | 20000LM | 160 | 156 | 162 | 164 | 19743 | 20289 | 20544 |
| | Delivered Lumens at 40K 80CRI | 9000LM | 65 | 64 | 66 | 67 | 9051 | 9302 | 9419 |
| | | 12000LM | 88 | 86 | 89 | 90 | 11805 | 12131 | 12284 |
| | | 15000LM | 120 | 118 | 122 | 124 | 14808 | 15218 | 15409 |
| | | 18000LM | 145 | 141 | 146 | 148 | 17507 | 17992 | 18218 |
| | | 20000LM | 160 | 156 | 162 | 164 | 20051 | 20605 | 20864 |
| | Delivered Lumens at 50K 80CRI | 9000LM | 65 | 64 | 66 | 67 | 9385 | 9644 | 9765 |
| | | 12000LM | 88 | 86 | 89 | 90 | 12239 | 12578 | 12736 |
| | | 15000LM | 120 | 118 | 122 | 124 | 15353 | 15778 | 15976 |
| | | 18000LM | 145 | 141 | 146 | 148 | 18152 | 18654 | 18888 |
| | | 20000LM | 160 | 156 | 162 | 164 | 20789 | 21364 | 21632 |

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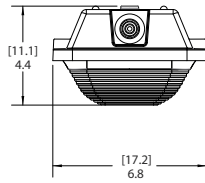
DIMENSIONS

Specifications subject to change without notice.
All dimensions are in inches (centimeters) unless otherwise indicated.

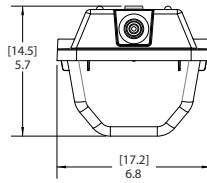
Weight (may vary with options or accessories)
FEM L48: 11.9 lbs (5.397kg)
FEM L96: 24.3 lbs (11.022kg)



Diffuser Type:
LPAFL
LPAFL
LPPFL
LPPCL



Diffuser Type:
IMAFL



Diffuser Type:
IMAFD
IMACD

PHOTOMETRICS

See www.lithonia.com for photometry reports.