

## 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. Not for use or installation in direct outdoor sunlight. Must be installed under canopy or covered ceiling. For direct sunlight installations, please refer to the [FEX](#) product family. 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 5VA fiberglass housing with integral perimeter channel utilizing continuous poured-in-place NEMA 4X gasket. Approved for through wiring. Captive polymeric latches are standard. Stainless steel latches (316SS) available as an option for food processing or more demanding applications. Power connection is easily accomplished through pre-drilled holes.

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

**INSTALLATION** — A pair of stainless steel (316SS) surface mount brackets (SMB) are included (unless another mounting option is chosen) allowing for surface (ceiling) or suspension mount applications using included bail with aircraft cable or chain. Optional pair of dual pendant mount brackets (DPMB) (316SS) are available for surface (ceiling) or suspension mount applications using either 3/8" threaded rod or included bail with aircraft cable or chain. Optional pair of angle mounting brackets (ANGBKT) (316SS) for horizontal wall mount applications.

**LISTINGS** — CSA Certified to UL and C-UL Standards. Suitable for wet location. IP65, IP66, IP67 rated. NSF Splash Zone 2 and Non-Food Zone rated. NEMA Type 4X rated. Sensors maintain IP65 and IP66 only. See chart on page 5 for Ambient Temperatures.

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](http://www.designlights.org/QPL) to confirm which versions are qualified.

**GOVERNMENT PROCUREMENT** — BAA — Product with the BAA option qualifies as a domestic end product under the Buy American Act as implemented in the FAR and DFARS. Product with the BAA option also qualifies as manufactured in the United States under DOT Buy America regulations.

BABA — Build America Buy America: Product with the BAA option also qualifies as produced in the United States under the definitions of the Build America, Buy America Act.

Please refer to [www.acuitybrands.com/buy-american](http://www.acuitybrands.com/buy-american) for additional information.

**WARRANTY** — 5-year limited warranty. This is the only warranty provided and no other statements in this specification sheet create any warranty of any kind. All other express and implied warranties are disclaimed. Complete warranty terms located at: [www.acuitybrands.com/support/warranty/terms-and-conditions](http://www.acuitybrands.com/support/warranty/terms-and-conditions)

**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.

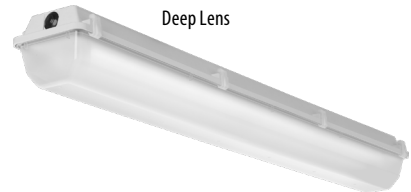
Specifications subject to change without notice.

Catalog Number
Notes
Type

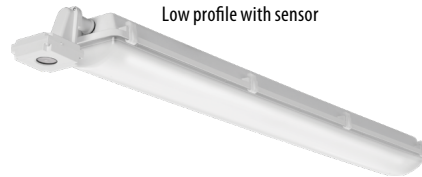
Low-Profile Enclosed and Gasketed Industrial

# FEM LED DC2DC

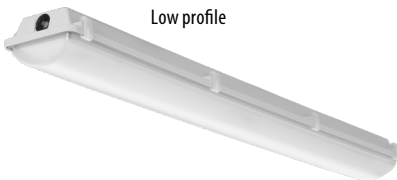
SURFACE/ SUSPENDED/WALL MOUNT



Deep Lens



Low profile with sensor



Low profile



## 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® control networks marked by a [shaded background](#)\*

To learn more about A+, visit [www.acuitybrands.com/aplus](http://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 MD 57VDC 40K 80CRI

Series	Length	Nominal Lumens	Diffuser	Distribution	Voltage	Color temperature	CRI
FEM	L48 48" ‡	4000LM 4,000 lumens 6000LM 6,000 lumens	IMAFL Acrylic, lineal ribbed frosted lens	MD Medium	57VDC 57VDC	35K 3500K 40K 4000K	80CRI 80 CRI 90CRI 90 CRI

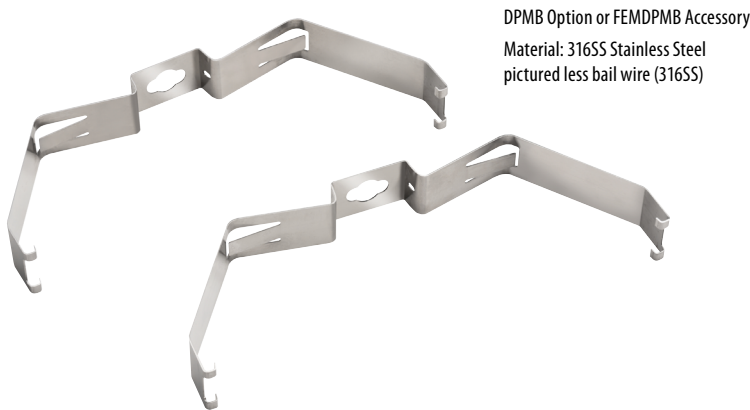
Controls	Options
Control Input: NLTAIR2 nLight® Air Generation 2 enabled, fixture embedded network interface, 0-10V dimming output (LINK)  nLight Wireless: ‡ NLTAIR2 APIRKO nLight® Air Generation 2 enabled, 360° low mount sensor, (8-15' heights) (LINK)	ANGBKT Angle bracket shipped with fixture (316SS) ‡ DPMB Dual pendant mounting bracket (316SS) ‡ SPD Surge protection device, additional 10kV/6kA STSL Stainless steel latches (316SS) TRS Tamper Resistant Torx® T10 screws (18-8SS) WLF Wet location fitting (two outboard, top (L48 - 48 inches off-center) ‡ WLFEND Wet location fitting (one end) ‡ WLFEND2 Wet location fitting (both ends) ‡ WLFPMF Wet location pendant monopoint ‡

NOTE: ‡ indicates option chosen has ordering restrictions. Please reference ordering restrictions chart, below. Options are sorted alphanumerically.

Accessories: Order as separate catalog number.	
MHCH 36	3 foot (36 inches) jack chain (pair)
MHHK120	10 foot (120 inches) single leg air craft cable (ships as pair)
MHHK120SS	10 foot (120 inches) 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) (316SS) ‡
FEMANGBKT	Angle bracket (ships as pair) (316SS) ‡
FEMSMB	Surface mount bracket (ships as pair) (316SS) ‡

‡ Option Value Ordering Restrictions	
Option value	Restriction
ANGBKT, FEMANGBKT	For horizontal wall mount applications. If mounted in an upward orientation, fixture will be damp location listed only.
DPMB, FEMDPMB	For surface (ceiling) or suspension mount applications using either 3/8" threaded rod or included bail with aircraft cable or chain.
FEMSMB	Ships standard with fixture (unless another mounting option is chosen). For surface (ceiling) or suspension mount applications using included bail with aircraft cable or chain.
L48	Not available with WLFPMF.
L96	Not available with WLFPMF.
nLight® Wireless	Not NEMA Type 4X rated. IP65 and IP66 rated.
WLF	If cord is ordered, cord will exit from the end of the fixture. Not NEMA Type 4X rated, order WLF4X when NEMA 4X is required.
WLFEND	If cord is ordered, cord will exit from the end of the fixture. Not NEMA Type 4X rated, order WLFEND4X when NEMA 4X is required. Available with cord or sensor option. Choose only one.
WLFEND2	Not available with sensor or cord options. Not NEMA Type 4X rated, order WLFEND24X when NEMA 4X is required.

MOUNTING OPTIONS



# FEM LED Low-Profile Enclosed and Gasketed

## OPERATIONAL DATA (80 CRI\*, MD\*\*, MVOLT\*\*\*)

Length	Package	Input Wattage	Device Count	CCT	Frosted Lens' Lumens
					IMAFL
L48	4000LM	22.1	1	35K	3362
			1	40K	3525
	6000LM	35.2	1	35K	5014
			1	40K	5255

\* For 90CRI, reduce lumen output by 17.1%  
\*\* For WD reduce output by 4.7%, PGD reduce output by 5.4%  
\*\*\* For HVOLT use scale factor in HVOLT SCALE FACTOR TABLE

## CSA LISTED AMBIENT RATING\*

		Standard** (surface)"	Standard** (suspended)"
L48	4000LM	35°C	50°C
	6000LM	35°C	50°C

\*Minimum Ambient is -30°C unless noted.  
\*\*All options not specifically listed in this table are considered standard

## CONFIGURATION WEIGHTS

	Standard	w/ Sensor	w/ Battery
L48	11	12	12

## NUMBER OF BOARDS AND DRIVERS

Lumen package	Fixture length	Number of boards	Number of drivers
4000LM	L48	2	1
6000LM		2	1

FEM LAT / L48			
Temp (oC)	Temp (oF)	4000LM	6000LM
-20	-4	1.066	1.068
-10	14	1.052	1.054
0	32	1.037	1.039
5	41	1.030	1.031
15	59	1.015	1.016
25	77	1.000	1.000
30	86	0.992	0.992
35	95	0.985	0.984
45	113	0.969	0.968
50	122	0.961	0.960

# FEM LED Low-Profile Enclosed and Gasketed

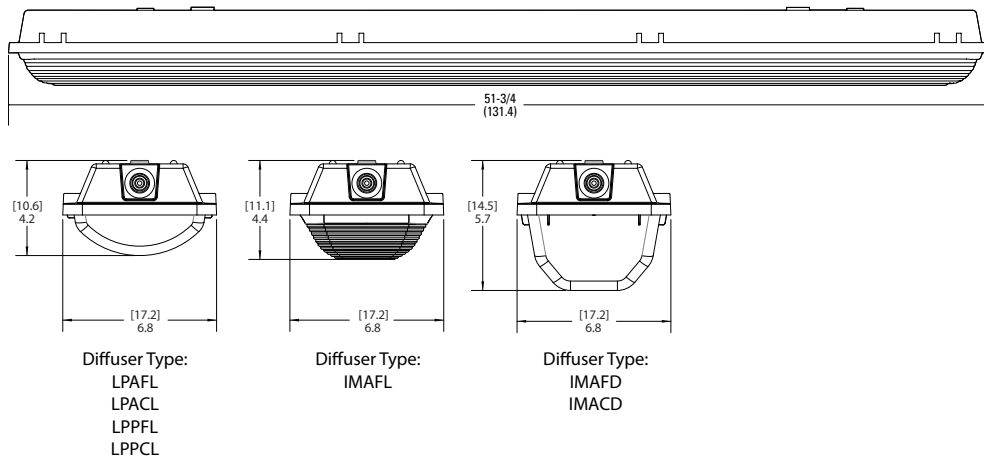
## DIMENSIONS

Specifications subject to change without notice.  
All dimensions are 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)



## DC-powered Lighting, DC2DC Architecture

Acuity Brands' DC2DC architecture provides for distributed low-voltage DC power and digital controls for a range of LED luminaires, including the WRTL series.

The DC2DC architecture enhances an LED lighting system's efficiency by eliminating the need and cost to convert AC to DC power at the luminaire and facilitating the installation and commissioning of lighting controls. Intrinsically more efficient by design, our DC-powered lighting architecture also delivers savings at design and installation, facilitates maintenance, and empowers lighting design focused on sustainable and well-being applications.

Components include:

- DCHUB (ordered separately), distributes DC power and optionally control to up to 1080 VA of DC-powered LED luminaires including support for emergency lighting.
- 57 VDC powered LED luminaires, with Static CCT or Tunable White, based on control options.
- nLight® lighting control
  - Integral or offboard wired networked lighting control, with nLight control devices (ordered separately).
  - Embedded nLight AIR wireless devices in 57VDC powered Static CCT LED luminaires.
- Class 2 power and control cables.
- The number of luminaires that can be supported by a single DCHUB port is a function of luminaire wattage and conductor losses. Please refer to the fixture wattages listed and the DCHUB spec sheet for additional details. Alternatively, the LED luminaires can be supplied by an approved, UL Listed, Class 2 power source supplying between 52.3 and 57.0 VDC at the input to the luminaire.

### Note:

All luminaires require 57VDC option along with the corresponding Control Input option for NLTAIR2 embedded wireless lighting control.

When using nLight embedded wireless controls only 2 #16 AWG (min.) conductors are necessary between the DC power source and the luminaire runs.

Click [DC2DC](#) for more information.

## PHOTOMETRICS

See [www.lithonia.com](http://www.lithonia.com) for photometry reports.