

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.](#)

CONSTRUCTION — One-piece 5VA 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 (.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. Integral 6kV/3kA surge protection, tested in accordance to IEEE/ANSI standards.

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/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.

Stock configurations are offered for shorter lead times:

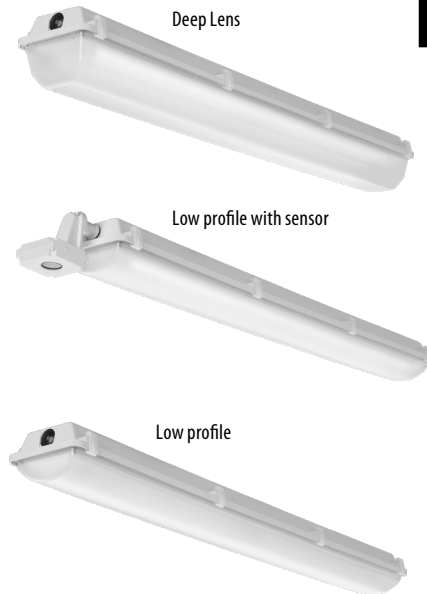
Standard Part Number	Stock Part Number
FEM L48 4000LM LPAFL MD MVOLT GZ10 40K 80CRI	FEM L48 4L MVOLT
FEM L48 4000LM LPAFL MD MVOLT GZ10 50K 80CRI	FEM L48 4L MVOLT 5K

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					35K 3500K	90CRI 90 CRI	
		6000LM 6,000 lumens	IMACD Acrylic, clear deep lens	WD Wide ⁴	120 120V				
		8000LM 8,000 lumens	IMAFD Acrylic, deep frosted lens		277 277V				
		10000LM 10,000 lumens	LPAFL Acrylic, low profile frosted lens ³		347 347V ⁵			40K 4000K	
	L96 96" ²	9000LM 9,000 lumens	LPAFL Acrylic, low profile clear lens ³		480 480V ⁵			50K 5000K	
		12000LM 12,000 lumens	LPAFL Acrylic, low profile clear lens ³						
		15000LM 15,000 lumens	LPPCL Polycarbonate, low profile clear lens ³						
		18000LM 18,000 lumens	LPPCL Polycarbonate, low profile clear lens ³						
		20000LM 20,000 lumens	LPPFL Polycarbonate, low profile frosted lens ³						

Options

SF	Single fuse (available with 120, 277, 347) ⁶	CS88	6' Brad Harrison 16/3 cord and straight blade plug set ⁶	MSI10NWL	Low mount 360° integral motion sensor, wet location, On/Off operation ⁶
DF	Double Fusing (available with 347, 480V) ⁶	CS88L12	12' Brad Harrison 16/3 cord and straight blade plug set ⁶	MSI102L3VWL	Low mount 360° integral motion sensor, wet location, High/Low operation (bi-level) ⁶
BSL520	Bodine® emergency LED battery pack for -20°C and up ^{6,7}	CS88R	Brad Harrison receptacle	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 ^{6,8}	CS89	6' white cord, 16/3, no plug, wet location	MSI10XAWL DSCXAWL	Xpoint wireless integral motion sensor, On/Off operation for motion sensing, override Off due to daylight ⁶
SPD	Surge protection device, additional 10kV/5kA ⁶	CS89L12	12' white cord, 16/3, no plug, wet location	XAD	XPoint™ wireless controller, 0-10V dimming ⁶
WLF	Wet location fitting (two outboard, top)	TRS	Tamper Resistant Torx® T10 screws		
WLFEND	Wet location fitting (one end)	DPMB	Dual pendant mounting bracket		
WLFEND2	Wet location fitting (both ends) ⁹	STSL	Stainless steel latches		

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

- 1 Available with 3000LM, 4000LM, 6000LM, 8000LM, and 10000LM lumen packages. Not available with WD when using low profile diffuser.
- 2 Available with 9000LM, 12000LM, 15000LM, 18000LM, and 20000LM. Not available with low profile diffuser options.
- 3 Not available with L96. Not available with L48 when ordering WD option.
- 4 Not available with L48 when ordering low-profile lens options.
- 5 Utilizes step-down transformer. Not available with BGTD.
- 6 Must specify voltage.
- 7 Not available with 347 or 480V. For use in ambient temperature -20°C and up.
- 8 Available with 120V or 277V only. For use in ambient environments up to 25C. Not available with L48 when ordering 10000LM lumen package. Not available with L96 when ordering 18000LM or 20000LM lumen packages.
- 9 Not available with Sensor options or cord sets, or MSI controls.

FEM LED Low-Profile Enclosed and Gasketed

OPERATIONAL DATA

	Lumen packages	Wattage				Diffusers			
		120v	277v	347v	480v	Acrylic Linear 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

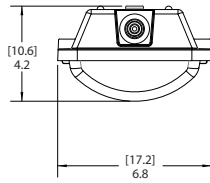
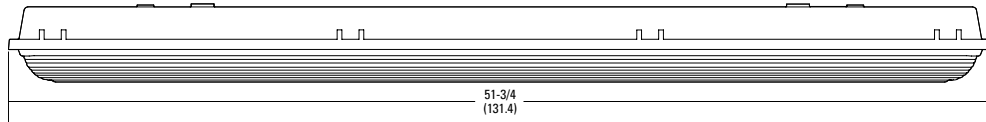
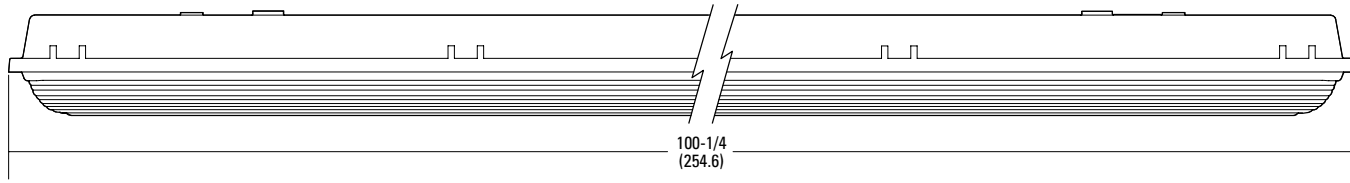
	Lumen packages	Wattage				Diffusers			
		120v	277v	347v	480v	Acrylic Linear Frosted (IMAFI)	Acrylic Frosted (IMAFD)	Acrylic Clear (IMACD)	
L96 Medium Distribution	Delivered Lumens at 30K 80CRI	9000LM	65	64	66	67	8718	8959	9072
		12000LM	88	86	89	90	11370	11685	11831
		15000LM	120	118	122	124	14263	14657	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

FEM LED Low-Profile Enclosed and Gasketed

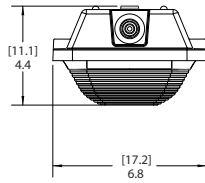
DIMENSIONS

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

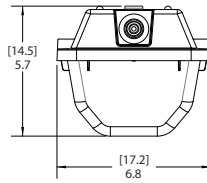
Weight (may vary with options or accessories)
FEM L48: 11.9 lbs (5.397kg)
FEM L96: 24.3 lbs (11.022kg)



Diffuser Type:
LPAFL
LPAFL
LPPFL
LPPCL



Diffuser Type:
IMAFL



Diffuser Type:
IMAFD
IMACD

PHOTOMETRICS

See www.lithonia.com for photometry reports.