LIGHTSTREAMS

MLD2-G PoE SERIES

Drop or Flat Lens Recessed Mount for Grid Ceilings

Architectural Linear LED Illuminating System | LIGHTSTREAMS 2



1-7/8"

2-5/8"

Features

- Power over Ethernet (PoE) enabled as Molex CoreSync.
- Tunable white feature for standard system or PoE system.
- Extruded aluminum housing for perfectly straight lines of light.
- Narrow profile; 1-7/8-inch width.
- Linear lengths; 2-ft. and above in increments of one-inch.
- Featured lens is a 1/2-inch drop style.
- Optional: 1-inch or 1-1/2-inch drop lens.
- Optional: flat style lens.
- · Standard and custom corners.

- Recessed for various grid type ceilings.
- Custom formulated high diffusion extruded acrylic lens.
- Non-glare matte-white polyester powder coating finish.
- · CCEA option available.
- · IC Rated.
- Cataloged standard or custom set lumens-per-foot performances.
- 80 CRI standard. 90 CRI available.
- Fixture lumens per watt ratios up to 110.
- · American Made.



Performance

Based on 4ft. Module, 3500K, 80 CRI

Lumens per Foot	Delivered Lumens (L)	System Watts (W)	Lumens per Watt (LPW)								
A05 LENS											
400	1600	16.0	100								
500	2000	20.3	99								
625	2500	25.9	97								
825	3300	35.4	93								
950	3800	41.6	91								
A10 LENS											
400	1600	15.3	105								
500	2000	19.3	104								
625	2500	24.6	102								
825	3300	33.5	99								
990	3960	41.3	96								
A15 LENS											
400	1600	14.6	110								
500	2000	18.3	109								
625	2500	23.3	107								
825	3300	31.8	104								
1040	4160	41.5	100								

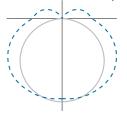
Multiplier for other Color Temp (K) 3000K 97% 3500K 100% 4000K 102%

103%

5000K



Actual performance may differ by +/- 5% when operating between 12V-42VDC.













2-7/8"

Job information:



Fixture Type:

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1040

Architectural Linear LED Illuminating System | Drop or Flat Lens | Recessed Mount for Grid Ceilings

Ex. MLD2-G-144-825-35K-40VDC-A10-180996



MLD2	_		-	_	 40VDC 		-	_	_
SERIES	MOUNTING	MODULE OR	LUMENS/	COLOR	LED MODULES	DIFFUSER	MOLEX DRIVER	EMERGENCY	MISC.
		ROW LENGTH	FT	TEMP	FORWARD VOLTAGE			LIGHTING	
MLD2 LightStreams 2	G Grid 9/16" or 15/16" S Screw Slot or Interfude Grid 9/16"	48 48° Length 96 96° Length 144 144° Length Custom or Row Length. 24" and above in 1" increments. Ex. in inches 82, 384, etc.	A05 LENS 400 500 625 825 950 A10 LENS 400 500 625 825 990 A15 LENS 400 500 625	30K 35K 40K 80 CRI 50K Upon Request TW 27K-57K 92 CRI 93 OK 93 OK 94 OK	40VDC	A05 1/2" Drop A10 1" Drop A15 1-1/2" Drop ASO Flat	Single Channel 180996-XXXX-250-300mA 180996-XXXX-300-350mA 180996-XXXX-360-500mA 180996-XXXX-510-700mA 180996-XXXX-710-880mA 180996-XXXX-890-1050mA Dual Channel 180996-XXXX-300-350mA 180996-XXXX-300-500mA 180996-XXXX-10-700mA 180996-XXXX-10-700mA 180996-XXXX-800-1050mA	Single Channel CORESM-00350 CORESM-00500 CORESM-00700 CORESM-01050 CORESM-00880 Dual Channel COREDM-00350 COREDM-00500 COREDM-00500 COREDM-01050 COREDM-01050 COREDM-01050 COREDM-01050	WL UL "Suitable for Wet Locations" labeled. CCEA Meets the City of Chicago Environmental Air Specifications.

Housings

Extruded aluminum profile in a 0.080-inch wall thickness. Maximum length of each linear component is 12-ft.

.060 aluminum ends are provided where needed at row termini.

A one-piece 14GA galvanized steel joiner/aligner bracket is provided for each joint between housings.

A custom formulated non-glare matte-white polyester powder coating provides an extremely durable and long lasting finish.

Easy-use grid pry outs provided.

Housing intended for recessing grid type ceiling system.

Diffusers

Seamless fit diffusers. Flawless and consistent end-to-end fit.

Extruded from custom formulated acrylic smooth opal material.

Allows maximum light transmission while eliminating pixilation and hot spots.

Standard diffuser is 1/2-inch drop.

Optional diffusers; 1-inch or 1-1/2-inch drop style or flat lens.

Smooth finish on both diffusers compliments the architectural elements.

LED Modules

High performance linear configured LED module boards. Each board consists of multiple mid-power, high efficacy LEDs in a precise layout eliminating the need for supplemental heat sinking.

The boards produce an even and diffuse light which maximizes optical efficiency.

Color temperatures available 80 CRI: 3000K, 3500K and 4000K. Upon request: 5000K.

Color temperatures available 90 CRI: 2700K, 3000K, 3500K and 4000K.

Tunable White Option

Field tunable range 2700K through 5700K. 80CRI.



PoE Drivers

UL 2108 Listed.

Plenum Rated.

LED output voltage range 12-42VDC.

Class 2 rated electrical device.

Available in both single channel and dual channel. Efficiency: 92% (typical) at 52VDC input, full load.

Constant Current accuracy +/- 3%.

Ambient temperature: 0 to 40°C (32 to 104°F). Storage temperature: -40 to 85°C (-40 to 185°F).

Max case temperature: 75°C (167°F). Environmental rating: Indoor.

Dimming Performance- PoE Driver

Dimming: PWM
Dimming type: Linear
Dimming frequency: 500Hz
Dimming range: 1-100%

Molex-PoE Driver

The Molex CoreSync Programmable Smart LED Driver is a compact low voltage, DC/DC LED driver that can be programmed to specific power outputs, for driving Constant Current LED engines in a wide variety of light fixtures.

Controlled, powered and integrated with a Molex CoreSync PoF Gateway

This DC system provides 71.3 usable watts at the powered device, it operates at 52 VDC and has an amperage allowance 1.73 amps.

Using this product gives the end user the option of making their building a smart building combining IT and OT to one platform, while being able to control but not limited to camaras, shades, occupancy, traffic patterns and DLH.

CoreSync Emergency Lighting Bypass

UL 924 Compliant, Indoor Rated. Ambient operating temperature 0-40C (32-104F).

Electrical- ELB

EM input: 110-277 VAC.

Output: 12-42 VDC up to 1050MA.

Standby Power: 1W.

Operation-ELB

In the event of a power failure, PoE power source failure or disconnection of cabling, the module will bypass normal PoE control and activate the emergency power source. The fixture will power to full brightness and return to normal operation once the emergency has been cleared.

Installations

Designed for recessed installation into acoustical grid ceiling systems.

See ceiling types section. Availability for various types; 15/16" grid, 9/16" grid, 9/16" screw-slot, 9/16" interlude.

For drywall applications see appropriate specification sheets for those ceiling types.

Grid pry outs lock over top of gridwork. Auxiliary suspension required to building structure.

Lengths of 12-ft. and less to use one housing with two ends pre-installed.

Lengths over 12-ft. will be engineered to job requirements using multiple housings with one end pre-installed at each row end.

Lengths over 12-ft. will include appropriate job required quick-connect plug-thru wire harnesses and housing joiners.

Wiring access plate provided on top. End plates have 7/8" KO.

Certificate of Safety Compliance and Listings

Luminaire: UL and CUL listed 1598 and bears their label. Suitable for damp locations

Optional: Suitable for wet locations marking is available. Some limitations apply. Contact factory for all details. IC Rated

CCEA option meets the City of Chicago Environmental Air specifications.

Warranty

5-year limited warranty is standard. Special 10-year warranty available on a job-to-job basis. Complete LED warranty terms available at www.mercltg.com.

Actual performance may differ as a result of end-user environment and application.

Most LED luminaires are suitable to operate in ambient temperatures from -20C (-4F) to 25C (77F).

The following exclusions apply: Luminaires with standby lighting option, integral lighting control options, or wireless control options. Consult factory.

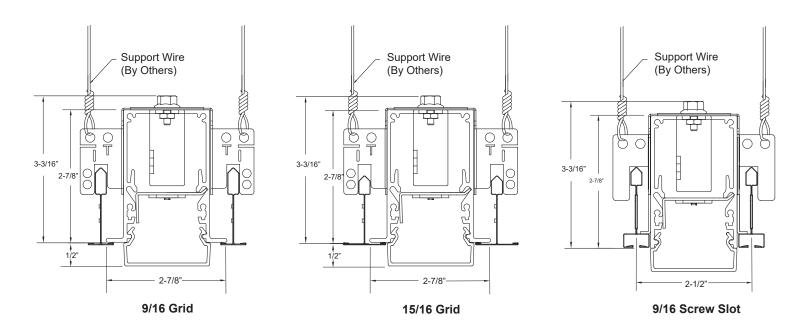
LM-79 testing was measured under a controlled 25C (77F) ambient operating temperature.

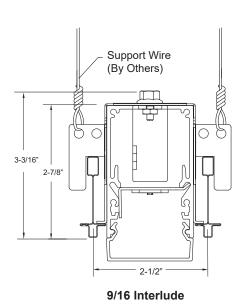


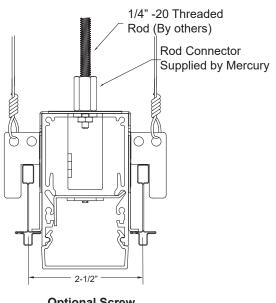
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Grid Ceiling Types and Dimensions







Optional Screw Mounting Method



