

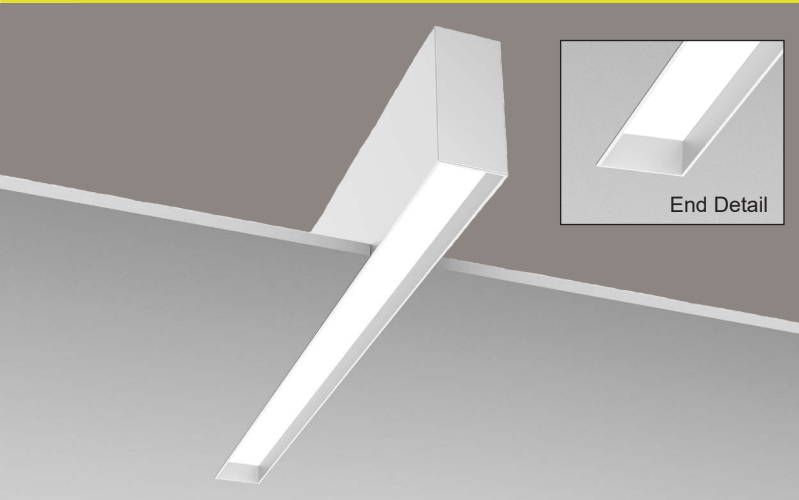
# LIGHTSTREAMS

## MLR2-N5/F PoE SERIES

Architectural Linear LED Illuminating System | LIGHTSTREAMS 2



### Regressed Lens Recessed Mount for Drywall Ceilings



### Features

- Power over Ethernet (PoE) enabled as Molex CoreSync.
- Tunable white feature for PoE system.
- Extruded aluminum housings for perfectly straight lines of light.
- Narrow profile; 1-7/8-inch width.
- Linear lengths; 2-ft. and above in increments of one-inch.
- Architecturally-pleasing 3/4" regression.
- Recessed for drywall ceiling types; trimless or overlapping flange trim.
- Standard and custom corners.
- 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 90.
- American Made.



### Performance- HTA

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

Lumens per Foot (LF)	Delivered Lumens (L)	System Watts (W)	Lumens per Watt (LPW)
400	1600	17.8	90
500	2000	22.7	88
625	2500	29.0	86
860	3440	41.7	82

Multiplier for other Color Temp (K)

3000K	97%
3500K	100%
4000K	102%
5000K	103%



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

### Performance- ASO

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

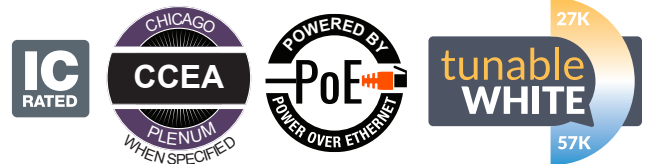
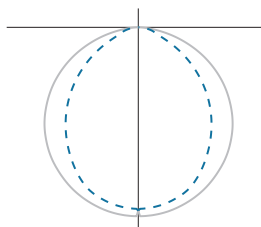
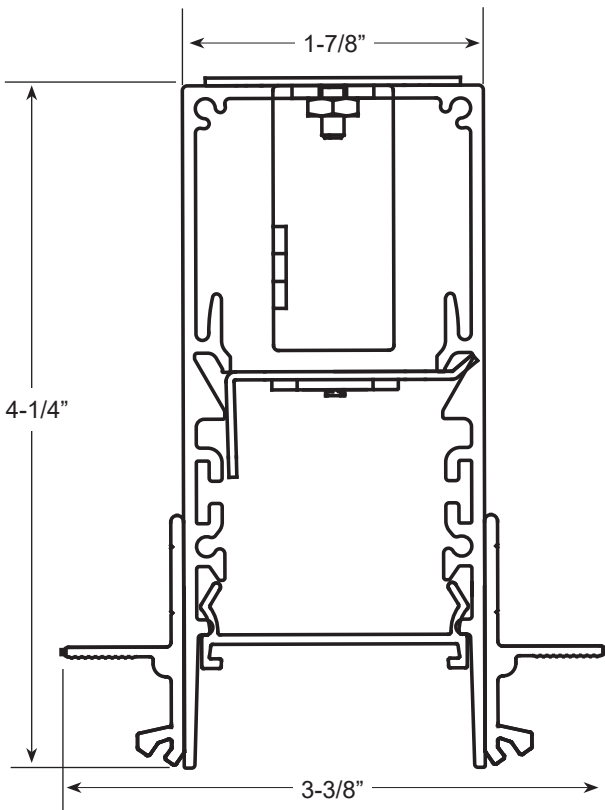
Lumens per Foot (LF)	Delivered Lumens (L)	System Watts (W)	Lumens per Watt (LPW)
400	1600	24.2	66
500	2000	31.1	64
640	2560	41.4	62

Multiplier for other Color Temp (K)

3000K	97%
3500K	100%
4000K	102%
5000K	103%



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



Fixture Type:

Job Information:



# MLR2-N5/F PoE Series | LIGHTSTREAMS 2

Architectural Linear LED Illuminating System | Regressed Lens | Recessed Mount for Drywall Ceilings

Ex. MLR2-N5-144-860-35K-40VDC-HTA-180996



MLR2		40VDC								
SERIES	MOUNTING	MODULE OR ROW LENGTH	LUMENS/ FT	COLOR TEMP	LED FORWARD VOLTAGE	DIFFUSER	MOLEX DRIVER	EMERGENCY LIGHTING	MISC.	
MLR2 LightStreams 2	<b>N5</b> Trimless Plaster-In for 5/8" Drywall	<b>48</b> 48" Length	<b>400</b> <b>500</b> <b>625</b> <b>860</b>	<b>30K</b> <b>35K</b> <b>40K</b> <b>50K</b> Upon Request	40VDC	<b>HTA</b> High Transmission Acrylic <b>ASO</b> Acrylic Smooth Opal (Performance is reduced with this diffuser)	<b>Single Channel</b> 180996-XXXX-250-300mA 180996-XXXX-300-350mA 180996-XXXX-360-500mA 180996-XXXX-510-700mA 180996-XXXX-710-880mA 180996-XXXX-890-1050mA	<b>Single Channel</b> CORESM-00350 CORESM-00500 CORESM-00700 CORESM-01050 CORESM-00880	<b>WL</b> UL "Suitable for Wet Locations" labeled. <b>CCEA</b> Meets the City of Chicago Environmental Air specifications.	
	<b>N1</b> Trimless Plaster-In for 1/2" Drywall	<b>96</b> 96" Length	<b>400</b> <b>500</b> <b>640</b>							
	<b>F</b> Overlapping Flange Trim	<b>144</b> 144" Length	<b>400</b> <b>500</b> <b>640</b>							
		Custom or Row Length. 24" and above in 1" increments. Ex. in inches: 82, 384, etc.	Custom Lumen Packages	<b>927K</b> <b>930K</b> <b>935K</b> <b>940K</b>			<b>Dual Channel</b> 180996-XXXX-300-350mA 180996-XXXX-360-500mA 180996-XXXX-510-700mA 180996-XXXX-710-880mA 180996-XXXX-890-1050mA	<b>Dual Channel</b> COREDM-00350 COREDM-00500 COREDM-00700 COREDM-01050 COREDM-00880		

## 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.

Internal cold-rolled steel components.

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

Housing intended for recessing into drywall type ceiling systems.

Trimless housing for plaster-in or overlapping flange trim. See ceiling types section.

## Diffusers

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

Diffusers are regressed into housing.

**HTA diffuser:** extruded from custom formulated high transmission white acrylic material. Specify when the highest performance levels are required.

**ASO diffuser:** extruded from custom formulated smooth opal acrylic material. Specify when a more esthetically white appearance is desired.

Allows maximum light transmission while eliminating pixilation and hot spots.

Smooth finish 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 PoE 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 cameras, 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.

## Corners

Standard 90-degree corners.

Custom angled corners.

## Installations

Designed for recessed installation into drywall type ceiling systems.

See ceiling types section for typical installations.

Trimless housing requires plastering-in after installation.

Overlapping trim neatly closes off drywall opening.

For all recessed grid applications see appropriate specification sheets for those ceiling types.

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](http://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).

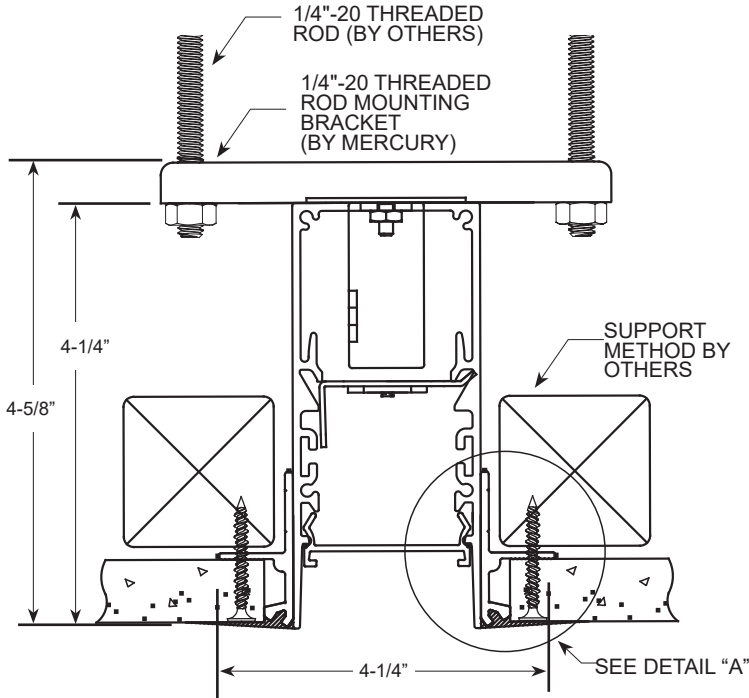
The following exclusions apply: Luminaires with standby lighting option, integral lighting control options, or wireless control options. Consult factory.

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

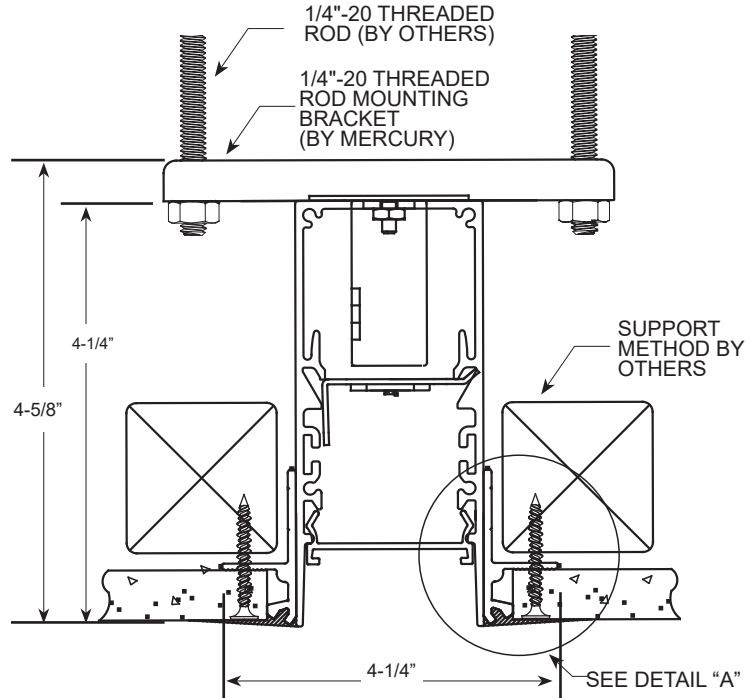


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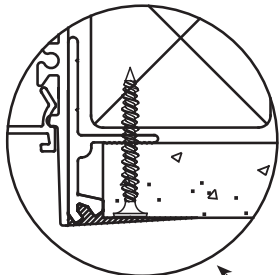
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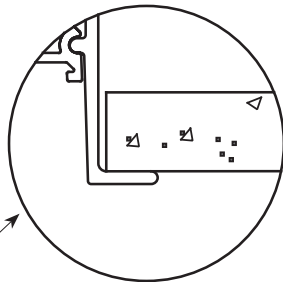
**N1**  
**TRIMLESS FIT**  
**FOR 1/2" DRYWALL**  
 (REQUIRES PLASTERING-IN  
 AFTER INSTALLATION BY OTHERS)



**N5**  
**TRIMLESS FIT**  
**FOR 5/8" DRYWALL**  
 (REQUIRES PLASTERING-IN  
 AFTER INSTALLATION BY OTHERS)

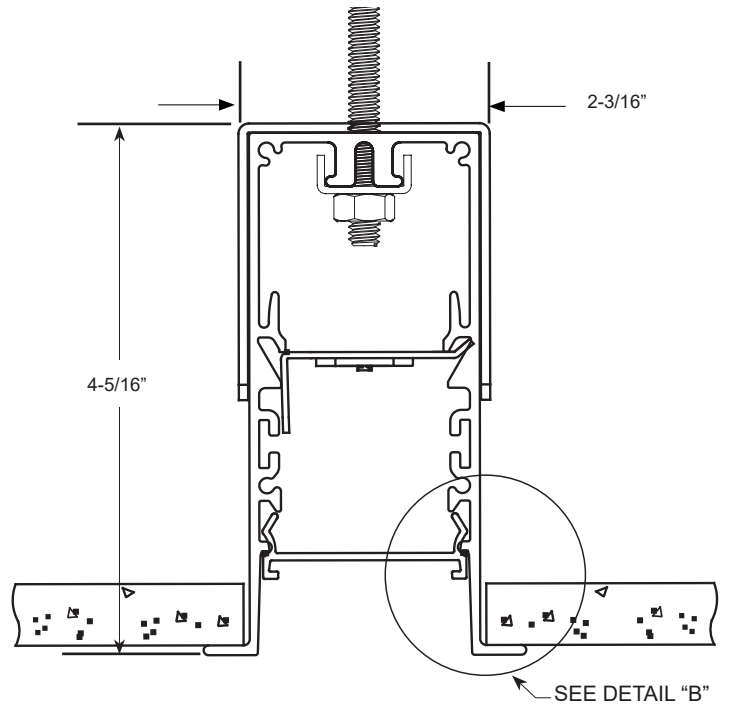


**DETAIL "A"**  
 N1/N5  
 MUD & TAPE  
 BY OTHER



**F**  
 OVERLAPPING  
 TRIM

**DETAIL "B"**



**F**  
 OVERLAPPING TRIM

