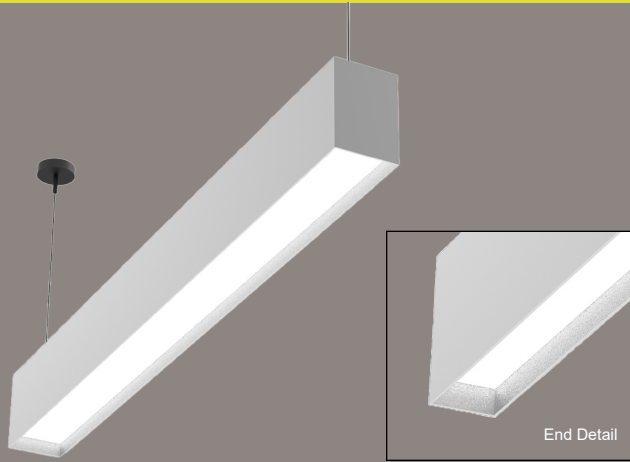# LIGHTSTREAMS

MLR3-M PoE SERIES

Regressed Lens
Suspended or Surface Mount

Architectural Linear LED Illuminating System | LIGHTSTREAMS 3

Features

- Power over Ethernet (PoE) enabled as Molex CoreSync.
- Tunable white feature for PoE system.
- Extruded aluminum housing for perfectly straight lines of light.
- Narrow 3-inch wide profile.
- Linear lengths; 2-ft. and above in increments of one-inch.
- Architecturally-pleasing 3/4" regression.
- Non-glare matte-white polyester powder coating finish.

- Custom formulated high diffusion extruded acrylic lens.
- Cable or stem mount from ceiling, or direct surface mount.
- Cataloged standard or custom set lumens-per-foot performances.
- 80 CRI standard. 90 CRI available.
- Fixture lumens per watt ratios up to 108.
- Standard and custom corners.
- American Made.

Made in USA

End Detail

4-1/4" **3/4"** **3"**

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	14.8	108
500	2000	18.7	107
625	2500	23.7	105
825	3300	32.4	102
1030	4120	41.9	98

Multiplier for other Color Temp (K)

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

DELIVERING UP TO **108** LUMENS PER WATT

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

Performance-ASO

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

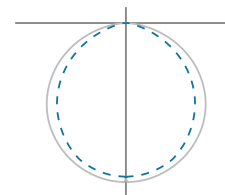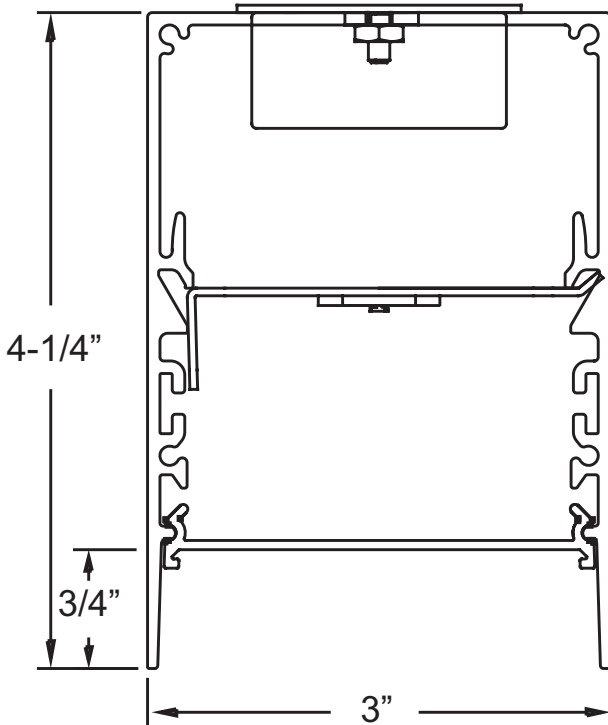| Lumens per Foot (LF)	Delivered Lumens (L)	System Watts (W)	Lumens per Watt (LPW)
400	1600	20.1	80
500	2000	25.7	78
760	3040	41.2	74

Multiplier for other Color Temp (K)

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

DELIVERING UP TO **80** LUMENS PER WATT

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

POWERED BY **PoE** POWER OVER ETHERNET

tunable **WHITE** 27K 57K

Fixture Type:

Job Information:

MERCURY ARCHITECTURAL LIGHTING

molex

Mercury Lighting Products Co, Inc. | 20 Audrey Place STE 2 | Fairfield, NJ 07004-3416 | Tel: 800.637.2584 | Fax: 973.244.9522 | mercltg.com
Specifications subject to change, consult factory when critical.
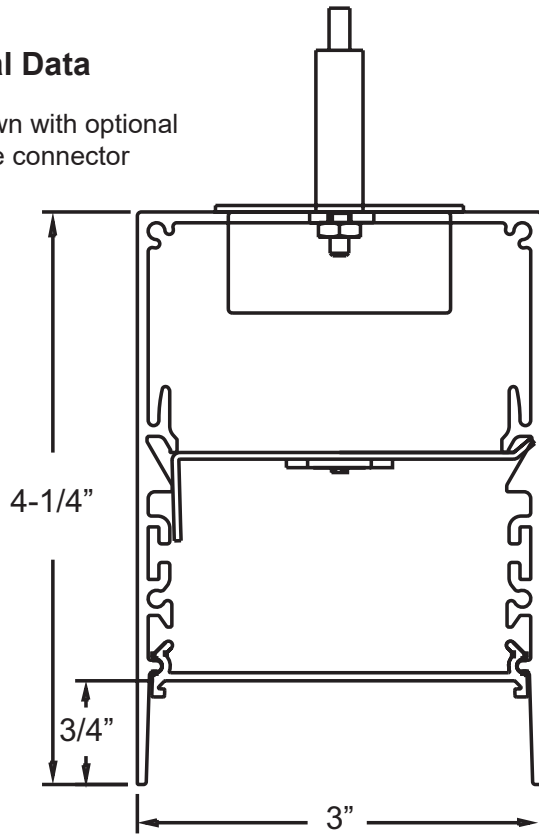
rev. 06/22 **p. 1**

MLR3-M PoE Series | LIGHTSTREAMS 3

Architectural Linear LED Illuminating System | Regressed Lens | Suspended or Surface Mount

Ex. MLR3-M-144-625-35K-40VDC-HTA-180996

Options

SERIES	MOUNTING	MODULE OR ROW LENGTH	LUMENS/FT	COLOR TEMP	LED MODULES FORWARD VOLTAGE	DIFFUSER	MOLEX DRIVER	EMERGENCY LIGHTING	CUSTOM HANGING POINTS
MLR3 LightStreams 3	**M** Suspended Cable Mount	**48** 48" Length	**400** **500**	**30K** **35K** **40K**	**40VDC**	**HTA** High Transmission Acrylic	**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	**Single Channel** CORESM-00350 CORESM-00500 CORESM-00700 CORESM-01050 CORESM-00880	As Specified
	M1 Surface Mount	**96** 96" Length	HTA **625** **825** **1030**	**50K** Upon Request		**ASO** Acrylic Smooth Opal			**CUSTOM PAINT COLORS**
	M2 Suspended Stem Mount	**144** 144" Length	80 CRI	**TW** 27K-57K			**Dual Channel** 180996-XXXX-300-350mA 180996-XXXX-360-500mA 180996-XXXX-510-700mA 180996-XXXX-710-880mA 180996-XXXX-890-1050mA	**Dual Channel** COREDM-00350 COREDM-00500 COREDM-00700 COREDM-01050 COREDM-00880	As Specified
		Custom or Row Length. 24" and above in 1" Increments. Ex. in inches: 82, 384, etc.	ASO **400** **500** **760**	**927K** **930K** **935K** **940K**		**Custom Lumen Package. Contact Factory**			**MISC.** **WL** UL "Suitable for Wet Locations" labeled.
				90 CRI					

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.

Standard or custom hanging points are provided.

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

Custom color finishes on request.

Diffusers

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

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 acrylic smooth opal 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 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.

Corners

Standard 90-degree corners.

Custom angled corners.

Installations

Designed to be suspended on cables. Specify **M**.

For direct surface mounting to most ceiling types, specify **M1** and consult factory.

For stem mounting specify **M2** and consult factory.

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.

All individual modules or multiple module runs to include job required feed wire as specified.

Standard or custom hanging points will be provided per job specifications.

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.

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.

MERCURY ARCHITECTURAL LIGHTING

molex

Mercury Lighting Products Co, Inc. | 20 Audrey Place STE 2 | Fairfield, NJ 07004-3416 | Tel: 800.637.2584 | Fax: 973.244.9522 | mercltg.com
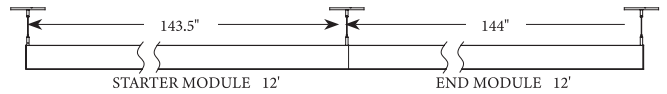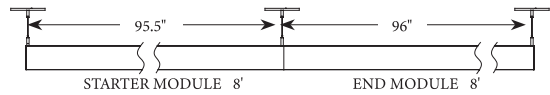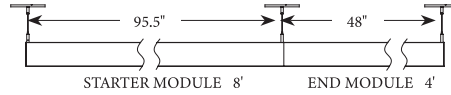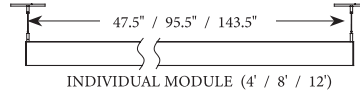*Specifications subject to change, consult factory when critical.*
rev. 06/22 **p. 2**

Dimensional Data

Shown with optional cable connector

4-1/4"

3/4"

3"

Mounting Information

47.5" / 95.5" / 143.5"

INDIVIDUAL MODULE (4' / 8' / 12')

95.5"   48"

STARTER MODULE 8'   END MODULE 4'

95.5"   96"

STARTER MODULE 8'   END MODULE 8'

143.5"   144"

STARTER MODULE 12'   END MODULE 12'

Hanging Accessories

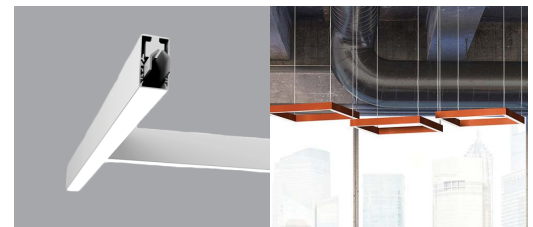CABLE SETS

STEM SETS
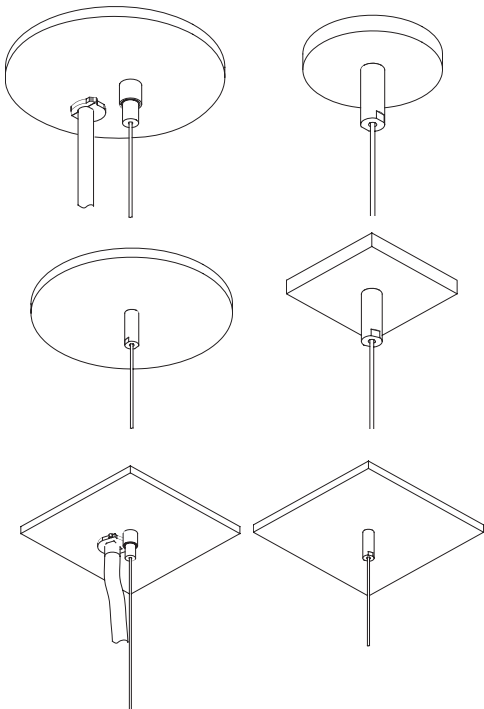
Part #	Description
R5PF-100	Round 5" power feed canopy, Hanging hardware, 100" long 1/16" cable.
R5-100	Round 5" canopy, Hanging hardware, 100" long 1/16" cable.
R2-100	Round 2" canopy, Hanging hardware, 100" long 1/16" cable.
S5PF-100	Square 5" power feed canopy, Hanging hardware, 100" long 1/16" cable.
S5-100	Square 5" canopy, Hanging hardware, 100" long 1/16" cable.
S2-100	Square 2" canopy, Hanging hardware, 100" long 1/16" cable.
RP5-24	Round 5" canopy, Hanging hardware, 24" long 1/2" dia. stem.
SP5-24	Square 5" canopy, Hanging hardware, 24" long 1/2" dia. stem.

Other cable and stem lengths available. Consult factory.

Patterns, Shapes, Runs

90 Degree Corner

T-Section

Cross

Specifications subject to change, consult factory when critical.