LIGHTSTREAMS

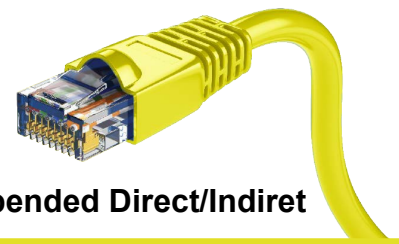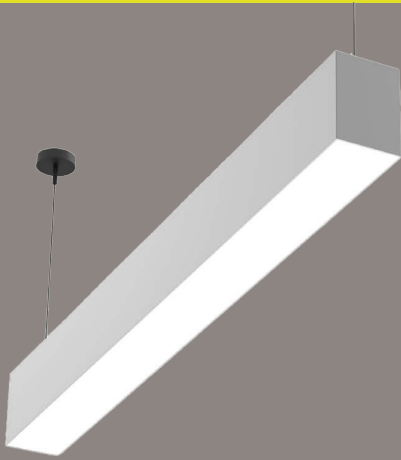## MLS3-DI PoE SERIES

Suspended Direct/Indiret

Architectural Linear LED Illuminating System | LIGHTSTREAMS 3

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.
- Dual directional illumination. Direct downlighting and indirect uplighting.
- Narrow 3-inch wide profile.
- Linear lengths; 2-ft. and above in increments of one-inch.
- Custom formulated high diffusion extruded acrylic lens.
- Non-glare matte-white polyester powder coating finish.
- Cable mount from ceiling.
- Lighting controls and sensors.
- Standard and custom corners.

- A new custom designed batwing-type indirect diffuser. Spreads light from the linear LED boards into two distinct side lobes. When projected onto the ceiling results are a very consistent and wide spread of indirect illumination.
- A new extrusion with a shallower overall height of 4-1/8".
- New additional drop-down or pop-up diffuser.
- Cataloged standard or custom set lumens-per-foot performances.
- 80 CRI standard. 90 CRI available.
- Fixture lumens per watt ratios up to 125.
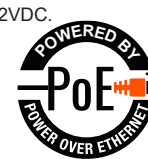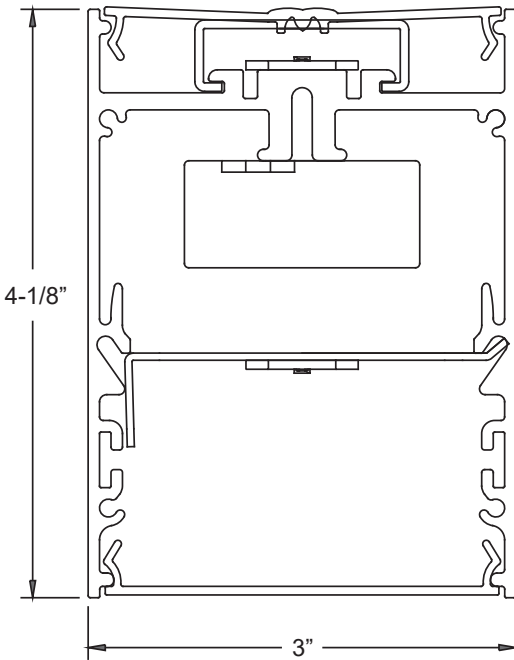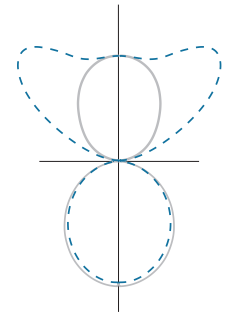- Custom colors available.
- American Made.

Made in USA

Performance

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

Direct Lumens Per Foot	Indirect Lumens per Foot	Direct/Indirect %	Delivered Total Lumens (L)	System Watts (W)	Lumens Per Watt (LPW)
400	400	50/50	3200	25.8	124
	500	45/55	3600	28.9	125
	625	40/60	4100	32.9	125
	825	35/65	4900	39.7	123
	950	30/70	5400	44.2	122
	1215	25/75	6460	54.2	119
500	400	55/45	3600	29.3	123
	500	50/50	4000	32.4	123
	625	45/55	4500	36.4	124
	825	40/60	5300	43.2	123
	950	35/65	5800	47.7	122
	1215	30/70	6860	57.7	119
625	400	60/40	4100	33.8	121
	500	55/45	4500	36.9	122
	625	50/50	5000	40.9	122
	825	45/55	5800	47.7	122
	950	40/60	6300	52.2	121
	1215	35/65	7360	62.2	118
825	400	70/30	4900	41.5	118
	500	60/40	5300	44.6	119
	625	55/45	5800	48.6	119
	825	50/50	6600	55.4	119
	950	45/55	7100	59.9	119
	1200	40/60	8160	69.9	117
950	400	70/30	5400	46.7	116
	500	65/35	5800	49.8	116
	625	60/40	6300	53.8	117
	825	55/45	7100	60.6	117
	950	50/50	7600	65.1	117
	1215	45/55	8660	75.1	115
1100 MAX	400	75/25	6000	53.0	113
	500	70/30	6400	56.1	114
	625	65/35	6900	60.1	115
	825	60/40	7700	66.9	115
	950	55/45	8200	71.4	115
	1215	50/50	9260	81.4	114

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

Multiplier for other Color Temp (K)

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

DELIVERING UP TO 125 LUMENS PER WATT

POWERED BY PoE POWER OVER ETHERNET

tunable WHITE 27K – 57K

4-1/8"

3"

Fixture Type:

Job Information:

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.

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MERCURY ARCHITECTURAL LIGHTING

molex
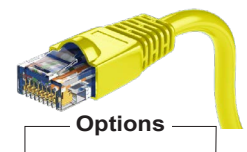
MLS3-DI PoE Series | LIGHTSTREAMS 3
Architectural Linear LED Illuminating System | Suspended Direct/Indirect
Ex. MLS3-DI-144-825-950-35K-HTA-BW-40VDC-180996

Options

MLS3 SERIES	DI MOUNTING	MODULE OR ROW LENGTH	LUMENS/ FT DIRECT	LUMENS/ FT INDIRECT	COLOR TEMP	DIFFUSER/ DIRECT	DIFFUSER/ INDIRECT	40VDC LED MODULES FORWARD VOLTAGE	MOLEX DRIVER	CIRCUITING	EMERGENCY LIGHTING	CUSTOM PAINT COLORS
MLS3 LightStreams 3	**DI** Direct/Indirect Suspended	**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.	**400** **500** HTA **625** **825** **950** **1100** Custom Lumen Packages. Lumen Packages with ASO diffuser. Contact Factory.	**400** **500** BW **625** **825** **950** **1215** Custom Lumen Packages. Lumen Packages with ASO diffuser. Contact Factory.	**30K** **35K** **40K** **50K** 80 CRI Upon Request **TW** 27K-57K **927K** **930K** 90 CRI **935K** **940K**	**HTA** High Transmission Acrylic **ASO** Flat **A05** 1/2" Drop **A10** 1" Drop **A15** 1-1/2" Drop	**BW** Batwing Indirect **A05** 1/2" Pop-Up **A10** 1" Pop-Up **A15** 1-1/2" Pop-Up	**40VDC**	**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-360-500mA 180996-XXXX-510-700mA 180996-XXXX-710-880mA 180996-XXXX-890-1050mA	**1C** Single Circuit **2C** Dual Circuit Direct/Indirect	**Single Channel** CORESM-00350 CORESM-00500 CORESM-00700 CORESM-01050 CORESM-00880 **Dual Channel** COREDM-00350 COREDM-00500 COREDM-00700 COREDM-01050 COREDM-00880	As Specified

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.

Inconspicuous cable hanging brackets at the end.

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.

Standard direct diffuser: extruded from custom formulated high transmission white acrylic material. Allows maximum light transmission while eliminating pixilation and hot spots.

Optional direct diffuser: extruded from custom formulated smooth opal acrylic material. Offers a more esthetically white appearance. Note: reduces performance by up to 25%.

Smooth finish on both diffusers compliments the architectural elements.

Standard indirect diffuser: custom extruded batwing-type that spreads the light in a very consistent and wide beam illumination.

Additional options: 1/2", 3/4", and 1-1/2" drop style diffusers may be added to the direct position. May also be added to the indirect position as a pop-up diffuser.

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.

Integral Lighting Controls

Various lighting controls and sensors are optional. Consult factory.

Corners

Standard 90-degree corners.

Custom angled corners.

Installations

Designed to be suspended on cables.

Easy-connect cable hangers make installations easy.

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.

Certificate of Safety Compliance and Listings

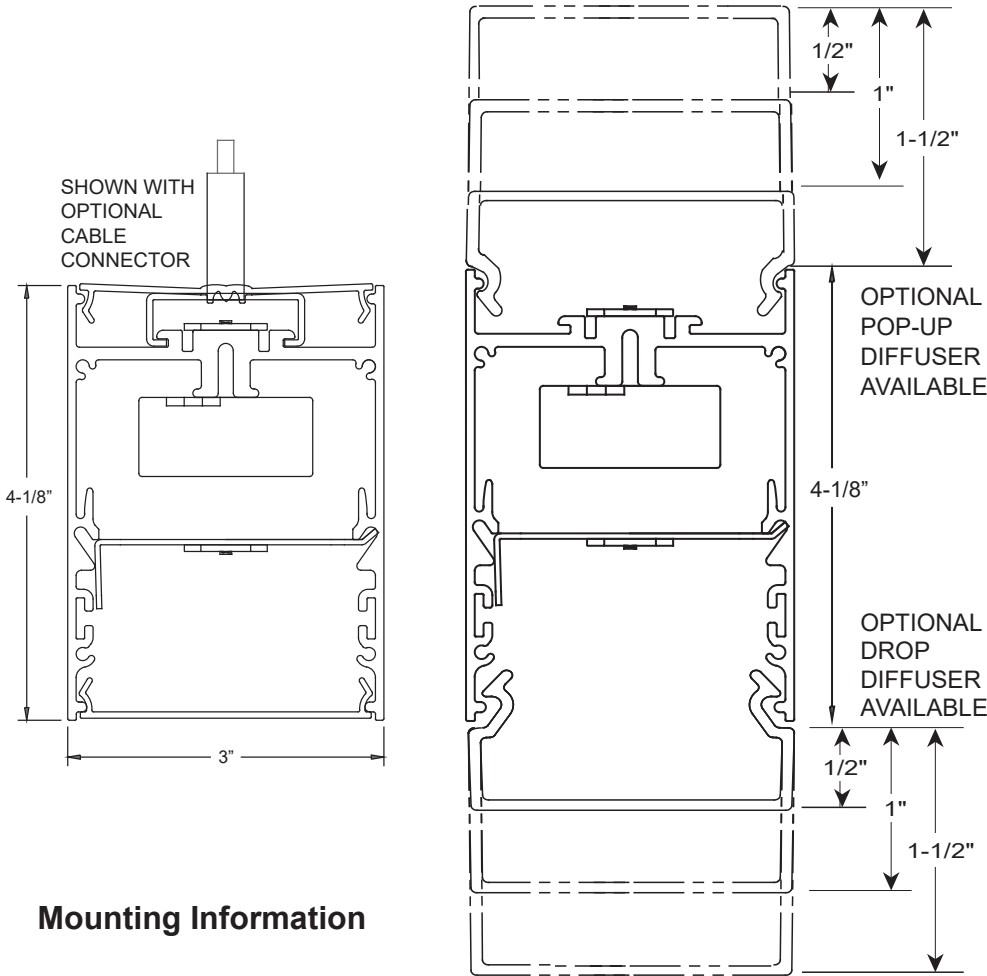Luminaire: UL and CUL listed 1598 and bears their label. Suitable for damp locations.

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.

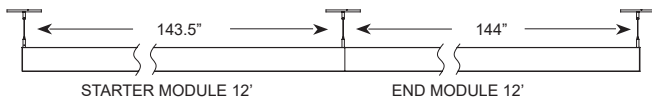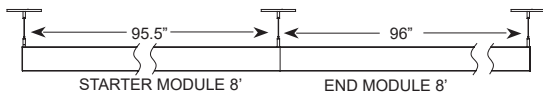LM-79 testing was measured under a controlled 25C (77F) ambient operating temperature.
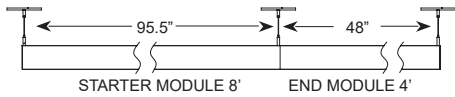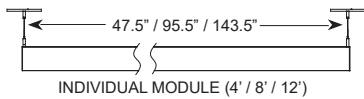
Mercury Lighting Products Co, Inc. | 20 Audrey Place STE 2 | Fairfield, NJ 07004-3416 | Tel: 800.637.2584 | Fax: 973.244.9522 | mercltg.com

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Dimensional Data

SHOWN WITH OPTIONAL CABLE CONNECTOR

4-1/8"

3"

1/2"
1"
1-1/2"

OPTIONAL POP-UP DIFFUSER AVAILABLE

4-1/8"

OPTIONAL DROP DIFFUSER AVAILABLE

1/2"
1"
1-1/2"

Hanging Accessories

CABLE SETS

STEM SETS

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'

Consult factory for additional row length information
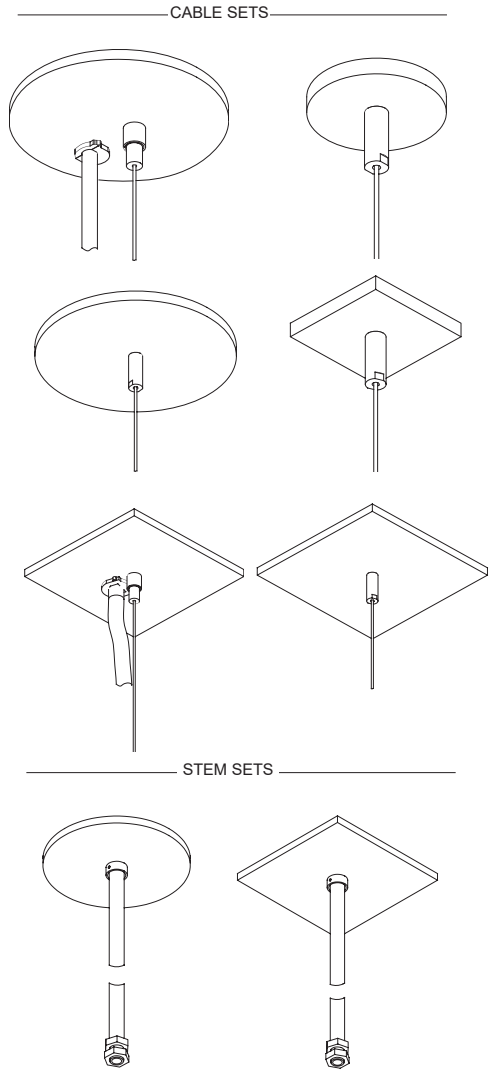
Part #	Description
R5PF-100	Round 5" power feed canopy, Hanging hardware, 100" long 1/16" cable.
R5-100	Round 5" canopy, Hanging hardware, 100" long 1/16" cable.
R2-100	Round 2" canopy, Hanging hardware, 100" long 1/16" cable.
S5PF-100	Square 5" power feed canopy, Hanging hardware, 100" long 1/16" cable.
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.

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