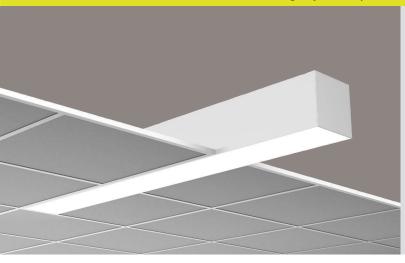# LIGHTSTREAMS

MLS4-G PoE SERIES

Recessed Mount for 4"- OC Grid Ceilings

Architectural Linear LED Illuminating System | LIGHTSTREAMS 4
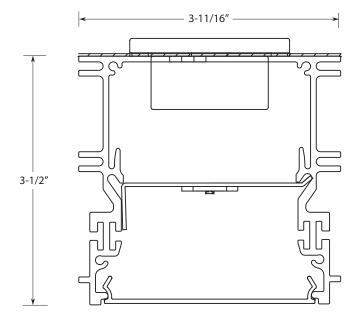
Features

- 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 fits 4-inch on-center grid ceilings.
- 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.

- Compatible with various grid ceiling types.
- Cataloged standard or custom set lumens-per-foot performances.
- 80 CRI standard. 90 CRI available.
- IC Rated.
- CCEA option available.
- Fixture lumens per watt ratios up to 118.
- Lighting controls and sensors.
- American Made.

Made in USA

3-11/16"

3-1/2"

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	13.6	118
500	2000	17.1	117
625	2500	21.6	116
825	3300	29.3	113
950	3800	34.5	110
1120	4480	41.7	107

Multiplier for other Color Temp (K)

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

DELIVERING UP TO 118 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	16.9	95
500	2000	21.3	94
625	2500	27.3	92
900	3600	41.4	87

Multiplier for other Color Temp (K)

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

DELIVERING UP TO 95 LUMENS PER WATT

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

IC RATED | **CCEA CHICAGO PLENUM WHEN SPECIFIED** | **POWERED BY PoE POWER OVER ETHERNET** | **tunable WHITE 27K 57K**

Fixture Type:

Job Information:

MERCURY ARCHITECTURAL LIGHTING

molex

Specifications subject to change, consult factory when critical.

MLS4-G PoE Series | LIGHTSTREAMS 4
Architectural Linear LED Illuminating System | Recessed Mount for Grid Ceilings

Ex. MLS4-G-144-825-35K-HTA-40VDC-180996

Options

MLS4							40VDC				
SERIES	**MOUNTING**	**MODULE OR ROW LENGTH**	**LUMENS/ FT**	**COLOR TEMP**	**DIFFUSER**	**LED MODULES FORWARD VOLTAGE**	**MOLEX DRIVER**		**EMERGENCY LIGHTING**	**MISC.**	

MLS4
LightStreams 4

MOUNTING
G Grid 15/16"
G9 Grid 9/16"
S Screw Slot or Interlude Grid 9/16"
T Grid 15/16" Tegular Tile
T9 Grid 9/16" Tegular Tile

MODULE OR ROW LENGTH
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.

LUMENS/FT
HTA
400
500
625
825
950
1120
ASO
400
500
625
900
Custom Lumen Packages.

COLOR TEMP
80 CRI
30K
35K
40K
50K Upon Request
TW 27K-57K
90 CRI
927K
930K
935K
940K

DIFFUSER
HTA High Transmission Acrylic
ASO Acrylic Smooth Opal (Performance is reduced with this diffuser)

LED MODULES FORWARD VOLTAGE
40VDC

MOLEX DRIVER
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

EMERGENCY LIGHTING
Single Channel
CORESM-00350
CORESM-00500
CORESM-00700
CORESM-01050
CORESM-00880
Dual Channel
COREDM-00350
COREDM-00500
COREDM-00700
COREDM-01050
COREDM-00880

MISC.
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.

Internal cold-rolled steel components.

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.

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.

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.

Integral Lighting Controls

Various lighting controls and sensors are optional. Consult factory.

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.

Installations

Designed for recessed installation into acoustical grid ceiling systems, including Armstrong® 4" TechZone™.

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

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.

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.

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
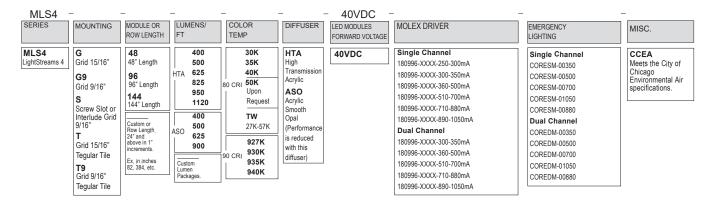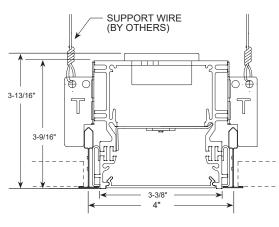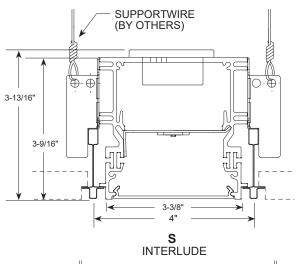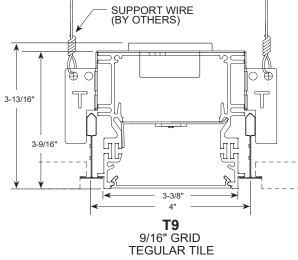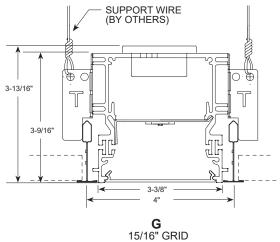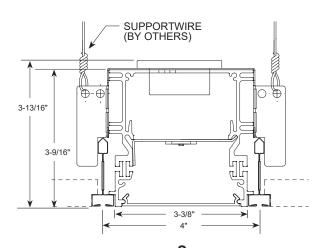*Specifications subject to change, consult factory when critical.*
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Grid Ceiling Types and Dimensions

G9
9/16" GRID

G
15/16" GRID

S
INTERLUDE

S
SCREW SLOT

T9
9/16" GRID
TEGULAR TILE

T
15/16" GRID
TEGULAR TILE
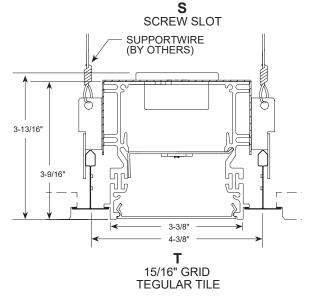
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