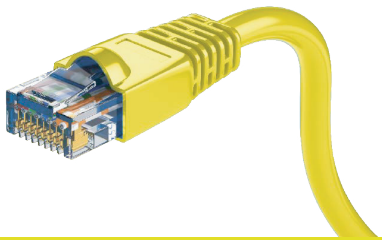
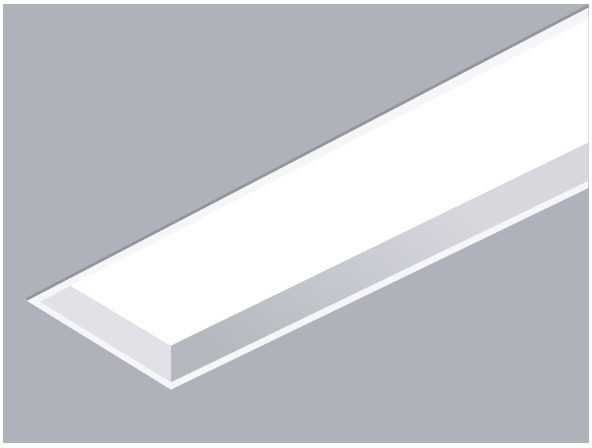


MLR2 PoE SERIES

REGRESSED LENS
RECESSED MOUNT FOR DRYWALL & GRID CEILINGS

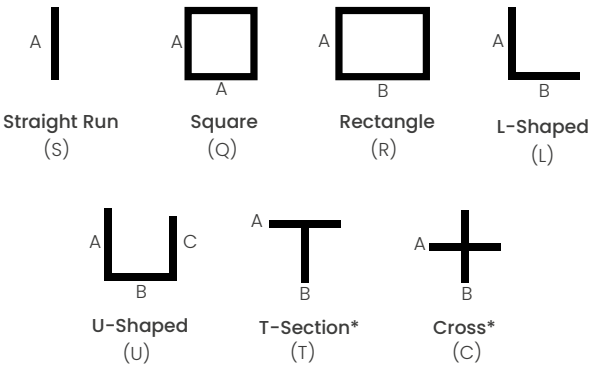
Made in USA



FEATURES

- Power over Ethernet (PoE) enabled as Molex CoreSync.
- Extruded aluminum housing.
- Narrow 1 7/8" wide profile.
- Linear lengths of 2ft and above in increments of 1/16 of an inch.
- Continuous runs and welded patterns available.
- ¾" regression.
- Custom formulated high diffusion extruded acrylic lens.
- Non-glare matte-white polyester powder coating finish.
- Recessed for various ceiling types.
- Standard and custom set lumens-per-foot performances.
- 80 CRI standard. 90 CRI available.
- IC Rated.
- CCEA option available.
- Fixture lumens per watt ratios up to 90.
- Tunable white feature for PoE system.
- Standard and custom corners.
- American Made.

SHAPES/PATTERNS



*Please consult factory to confirm design and layout will comply with specified ceiling

For other shapes/patterns/runs consult the factory.

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
800	3200	41.7	82

Actual performance may differ by +/- 5% when operating between 120V-42VDC.

Multiplier for other Color Temp (K)
3000K 97%
3500K 100%
4000K 102%
5000K 103%

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
600	2400	41.4	62

Actual performance may differ by +/- 5% when operating between 120V-42VDC.

Multiplier for other Color Temp (K)
3000K 97%
3500K 100%
4000K 102%
5000K 103%

IC RATED · CCEA · PoE · tunable WHITE

molex

Fixture type:	Job information:

MLR2 PoE SERIES

MERCURY Lighting Progress

REGRESSED LENS
RECESSED MOUNT FOR DRYWALL & GRID CEILINGS

PRODUCT DEFINITION SHEET

Ex: **MLR2-N5-144-S18-860-35K-40VDC-HTA-180996-XXXX-250-300mA-CORESM-00350-BABA**

1	2	3	4	5	6	7	8	9	10	11

1 SERIES

- ☐ **MLR2** LightStreams 2

2 MOUNTING

- ☐ **N5** Trimless 5/8"
- ☐ **N1** Trimless 1/2"
- ☐ **F** Flange Trim for drywall
- ☐ **G9** Grid 9/16" flat T grid
- ☐ **G15** Grid 15/16" flat T grid
- ☐ **S** Screw Slot
- ☐ **SI** 9/16" Interlude
- ☐ **T9** 9/16" Tegular
- ☐ **T15** 15/16" Tegular

3 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.

4 SHAPE (ENTER LENGTH IN PRODUCT CODE ABOVE)

- ☐ **S__** Individual/Straight Run Section (enter length, ex. S18)
- ☐ **Q__** Square Configuration (enter side length A, ex: Q18)
- ☐ **R__/__** Rectangular Configuration (enter side lengths A and B, ex. R12/24)
- ☐ **L__/__** L-Shaped Configuration (enter side lengths A and B, ex. L12/24)
- ☐ **U__/__/__** U-Shaped Configuration (enter side lengths A, B, and C, ex. U12/12/24)
- ☐ **T__/__** T-Section* (enter side lengths A and B, ex. T12/24)
- ☐ **C__/__** Cross Configuration* (enter side lengths A and B, ex. C12/24)

All corners of shape must be 90°, same plane.
Lengths greater than 8' consist of multiple individual housing sections joined together. Lengths are nominal and may vary based on lamping and other specification selections.
Consult Mercury when exact lengths are required.
Consult factory for corners other than 90°
*Please consult factory to confirm design and layout will comply with specified ceiling

5 LUMENS/FT

HTA
- ☐ **400**
- ☐ **500**
- ☐ **625**
- ☐ **860**

ASO
- ☐ **400**
- ☐ **500**
- ☐ **640**

Custom Lumen Packages.

6 COLOR TEMP-CCT

80 CRI
- ☐ **30K** 3000K
- ☐ **35K** 3500K
- ☐ **40K** 4000K
- ☐ **50K** 5000K Upon request
- ☐ **TW** Tunable White 2700K-6500K

90 CRI
- ☐ **927K** 2700K
- ☐ **930K** 3000K
- ☐ **935K** 3500K
- ☐ **940K** 4000K

7 LED FORWARD VOLTAGE

- ☐ **40VDC**

8 DIFFUSER

- ☐ **HTA** High Transmission Acrylic
- ☐ **ASO** Acrylic Smooth Opal (Performance is reduced with this diffuser)

9 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**

OPTIONS

10 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**

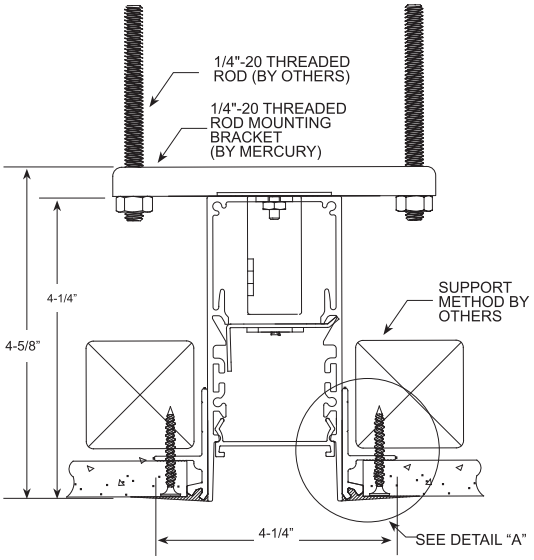
11 MISC.

- ☐ **WL** UL "Suitable for Wet Locations" labeled.
- ☐ **CCEA** Meets the City of Chicago Environmental Air specifications.
- ☐ **BABA** Consult factory

CUSTOM PAINT COLORS

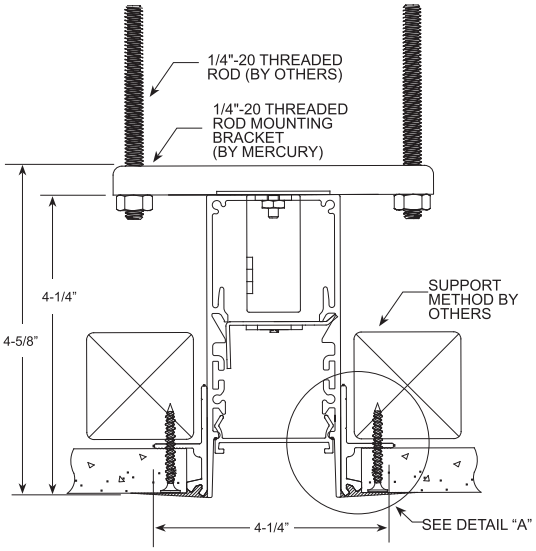
- ☐ As Specified

MOUNTING



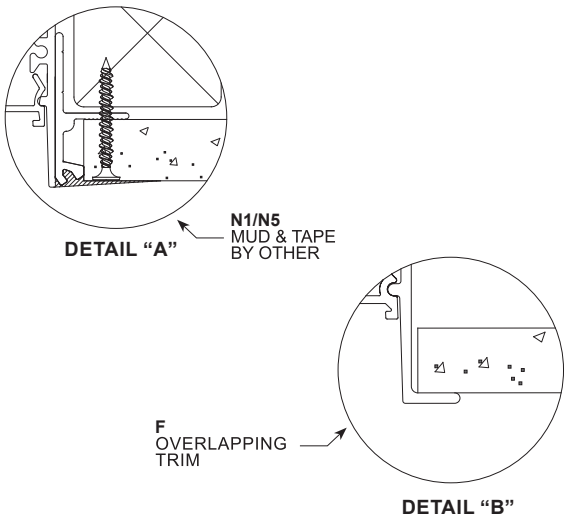
N5

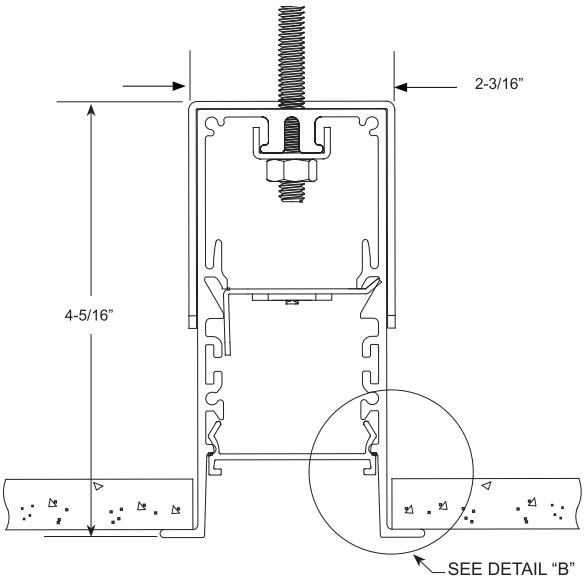
Trimless 5/8"



N1

Trimless 1/2"

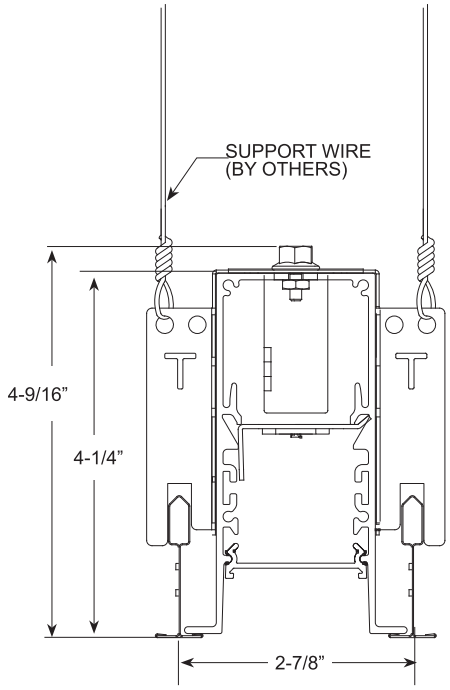




F

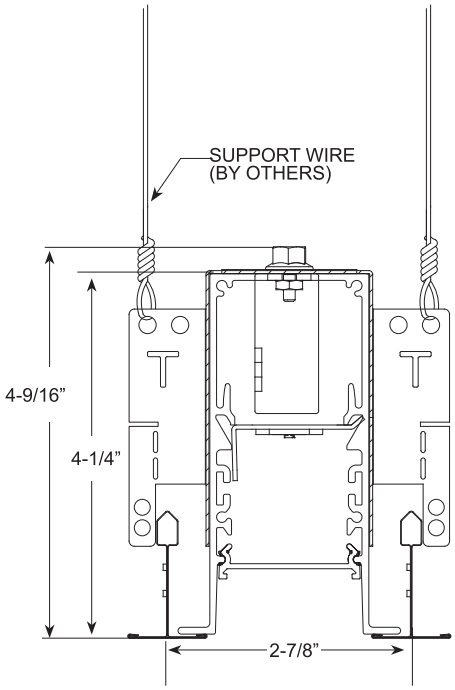
Flange Trim for drywall

MOUNTING



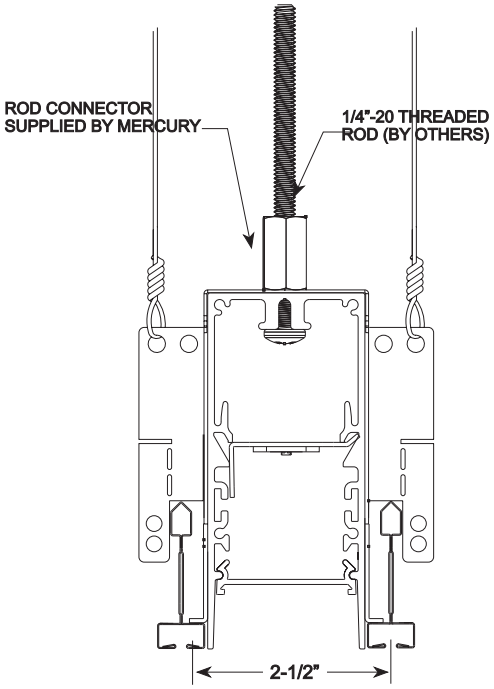
G9

Grid 9/16" flat T grid



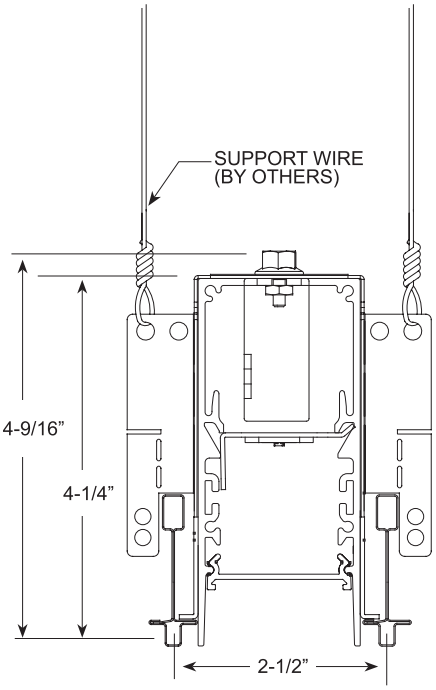
G15

Grid 15/16" flat T grid



S

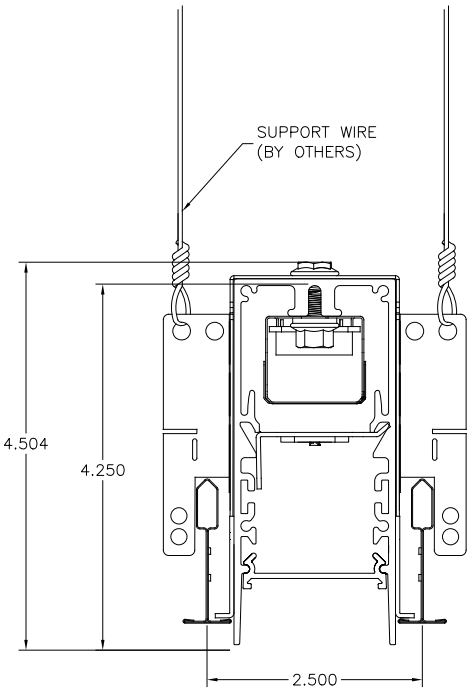
Screw Slot



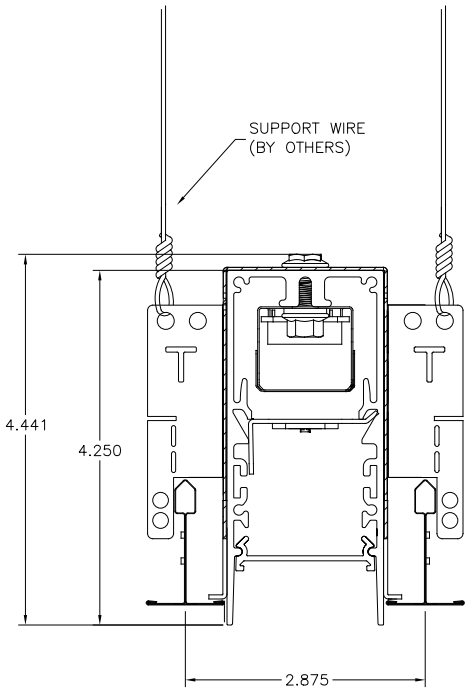
SI

9/16" Interlude

MOUNTING



T9
9/16" Tegular



T15
15/16" Tegular

For surface and suspended options please visit the rest of the MLR2 family.

MLR2 PoE SERIES

REGRESSED LENS
RECESSED MOUNT FOR DRYWALL & GRID CEILINGS

MERCURY
Lighting Progress

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 into grid type ceiling system.

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 40ºC (32 to 104ºF).
Storage temperature: -40 to 85ºC (-40 to 185ºF).
Max case temperature: 75ºC (167ºF).
Environmental rating: Indoor.

DIMMING PERFORMANCE- PoE DRIVER

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

ELECTRICAL- ELB

EM input: 110-277 VAC.
Output: 12-42 VDC up to 1050MA.
Standby Power: 1W.

CORNERS

Standard 90-degree corners.
Custom angled corners.

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).

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 controls options, or wireless control options. Consult factory.
LM-79 testing was measured under a controlled 25C (77F) ambient operating temperature.