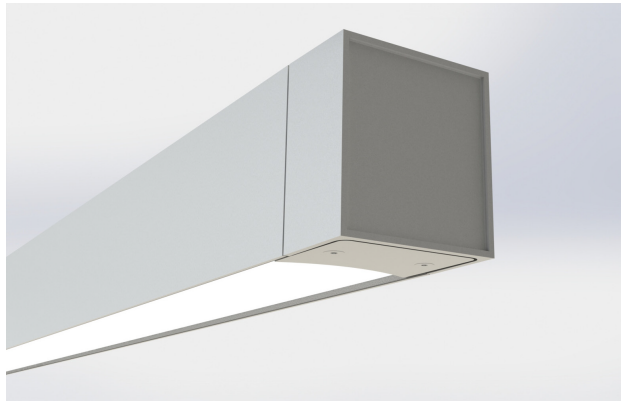


# Microlinea™ Series 3 Direct Wet Location - LED

(Overall Width 3-17/32", Luminous Aperture 3-7/32")



|                |      |
|----------------|------|
| Catalog Number | Type |
| Project Name   |      |

## ML3WL-D

Suspended, Ceiling, Recessed or Wall Mount - Wet Location/IP-65 Rated  
3-17/32" x 3-29/32" Direct (LED)



### S P E C I F I C A T I O N S

#### Housing

One piece .125" thick extruded aluminum. Die-cast aluminum end caps are fully gasketed and secured with no visible fasteners. Standard lengths are nominal 2', 3', 4', 6' and 8'. Provisions may be made for continuous rows of virtually any length.

#### Internal Construction

All internal mechanical components, including fasteners, are aluminum or stainless steel.

#### Finish

Standard and custom finishes are baked powder coat electrostatically applied (2.0 mil minimum thickness) to assure aesthetics and durability.

#### Optical Controls

■ (LOH) .100" thick, high transmittance extruded acrylic snap-in lens, formulated for maximum diffusion of the LED light source. Lens is continuously gasketed against dust and water intrusion.

■ (VR) Vandal Resistant: .100" thick, high transmittance extruded 100% D.R. acrylic lens with tamper-resistant hardware.

#### Reflector/Heat Sink

.060" thick formed aluminum finished with a high reflectance white baked powder coat.

#### Driver

Osram-Sylvania "Optotronic" power supply is UL/CUL recognized, 0-10V dimming available, 120-277 universal voltage. 347V also available.

#### Light Engine

Osram-Sylvania LED modules available for 3000K, 3500K and 4000K CCT:

#### HO - High Output

\*2683 Total Delivered Lms. at 28 System Watts (Values per 4' using 4000K LED modules)

#### MO - Medium Output

\*1713 Total Delivered Lms. at 17 System Watts (Values per 4' using 4000K LED modules)

\*Due to continued advancement in LED technology, lumen performance is subject to change. Please visit our website for the most up-to-date information.

#### Circuitry

All fixtures are factory pre-wired for a single circuit. Provision for multiple switching/circuiting is optional.

#### Wiring

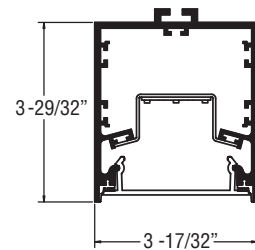
All fixtures intended for continuous rows are provided with factory installed quick-connect wiring.

#### Mounting

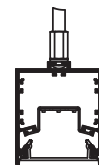
All mounting components are aluminum or stainless steel. Standard finish for wall and ceiling assemblies is matte black. Stem/Canopy assemblies are painted to match fixture housing.

#### Certifications

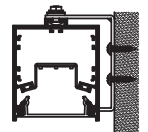
All fixtures are UL/CUL listed for use in 'Wet Locations'. Ambient temperature rated up to 40° C, or 35° C with battery back-up. IP-65 rated\*\*



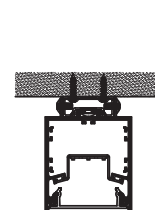
ML3WL-D-HO  
ML3WL-D-MO



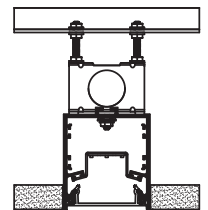
Rigid Stem



Wall



Ceiling



Recessed

\*\*The IP (or Ingress Protection) rating defines the degree of protection for a luminaire from outside elements.

|                          |   |   |  |
|--------------------------|---|---|--|
| <b>Series</b><br>ML3WL-D | <b>Nominal Lengths:</b><br>2', 3', 4', 6', & 8' | <b>Mounting</b><br>P = Rigid Stem (Up to 24" Standard)<br>W = Wall<br>R = Recessed<br>J = Ceiling | <b>Power Feed Location</b><br>EF = End Feed<br>TF = Top Feed<br>(N/A for Recess Mt.) |
|--------------------------|---|---|--|

## ML3WL-D-HO-K40-4-P-LOH-F01M-EF-120-[ ]

#### Lumen Output

**HO** - High Output  
\*2683 Total Lumens - 95 Lm/W  
**MO** - Medium Output  
\*1713 Total Lumens - 100 Lm/W  
\*Lumen ratings per 4' section (4000K)

#### CCT

**K30**  
3000 Kelvin  
**K35**  
3500 Kelvin  
**K40**  
4000 Kelvin

#### Optical Control

**LOH**  
LED Optimized High Transmittance Lens  
**VR**  
100% D.R. Acrylic Lens with Tamper-Resistant Hardware

#### Standard Finishes

**F01M** Matte White  
**F10** Bronzed  
**F11T** Textured Black  
**F12** Ultrasonic Clear  
**FCC** Custom Color

#### Voltage

120  
277  
347

#### Options

**EMCKT**  
Emergency Circuit (Separate Hot & Neutral)  
**EBPHST**  
Self-Testing Emergency Battery Pack (10 Watt) (N/A for 2' Fixtures) (N/A for 347V)  
**FS**  
Fused Drivers  
**Dim10**  
100 - 10% Dimming  
**Dim1**  
100 - 1% Dimming  
**CWD**  
Cold Weather Driver -40°C Ambient Temp Rating (Available for High Output Only - 3' or Longer Fixtures) (N/A for 100 - 1% Dimming Option)



Precision Architectural Lighting 4830 Timber Creek Drive Houston, Texas 77017  
Tel 713.946.4343 Fax 713.946.4441 www.pal-lighting.com



Made in America

# Suspended/Ceiling/Recessed/Wall

## ML3WL-D-HO-K40-LOH



### Wet Location Direct-High Output

#### LED Optimized High Transmittance Lens

**Catalog Number:** ML3WL-D-HO-K40-4'-X-LOH-120

**Report Number:** #LLIA000676-002A.ies

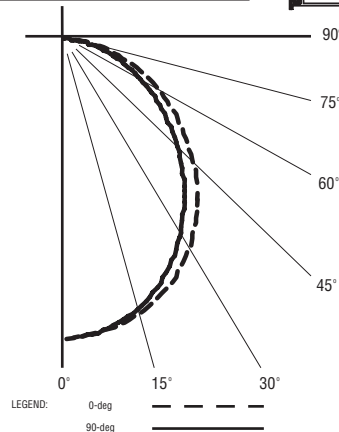
**Luminaire Description:** Extruded Aluminum Housing with White Aluminum Reflector and LED Optimized Acrylic Lens

**LED Module:** Multiple White Low-Power Light Emitting Diodes (LEDs) in a precise layout.

Total Luminaire Efficacy = 94.8 Lm/W

0% Up 100% Down

Color Rendering Index (CRI) = 83



#### ZONAL LUMEN SUMMARY

| Zone    | Lumens | %Fixture |
|---------|--------|----------|
| 0- 30   | 902    | 33.6     |
| 0- 40   | 1408   | 52.5     |
| 0- 60   | 2262   | 84.3     |
| 0- 90   | 2683   | 100.0    |
| 90- 180 | 0      | 0.0      |
| 0- 180  | 2683   | 100.0    |

#### CANDELA DISTRIBUTION

|    | 0.0  | 22.5 | 45.0 | 67.5 | 90.0 |
|----|------|------|------|------|------|
| 0  | 1250 | 1250 | 1250 | 1250 | 1250 |
| 5  | 1242 | 1236 | 1245 | 1240 | 1234 |
| 15 | 1178 | 1165 | 1159 | 1141 | 1131 |
| 25 | 1054 | 1033 | 1003 | 967  | 952  |
| 35 | 884  | 855  | 810  | 761  | 743  |
| 45 | 687  | 659  | 610  | 559  | 542  |
| 55 | 492  | 471  | 425  | 382  | 368  |
| 65 | 313  | 298  | 262  | 231  | 219  |
| 75 | 154  | 145  | 123  | 104  | 96   |
| 85 | 34   | 29   | 18   | 11   | 9    |
| 90 | 0    | 0    | 0    | 0    | 0    |

Precision Architectural Lighting

**LED lighting facts**  
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**Light Output (Lumens)** **2683**

**Watts** **28.3**

**Lumens per Watt (Efficacy)** **94.81**

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**Color Accuracy** **83**

Color Rendering Index (CRI)

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**Light Color** **4003 (Bright White)**

Correlated Color Temperature (CCT)

2700K 3000K 4500K 6500K

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All results are according to IESNA LM-79-2008: Approved Method for the Electrical and Photometric Testing of Solid-State Lighting. The U.S. Department of Energy (DOE) verifies product test data and results.

Visit [www.lightingfacts.com](http://www.lightingfacts.com) for the Label Reference Guide.

Registration Number: 1NRP-SRZEGR (2/21/2017)  
Model Number: ML3WL-D-HO-K40-4-X-LOH-X-X-UNV  
Type: Luminaire - Linear

## ML3WL-D-MO-K40-LOH



### Wet Location Direct-Medium Output

#### LED Optimized High Transmittance Lens

**Catalog Number:** ML3WL-D-MO-K40-4'-X-LOH-120

**Report Number:** #LLIA000676-001A.ies

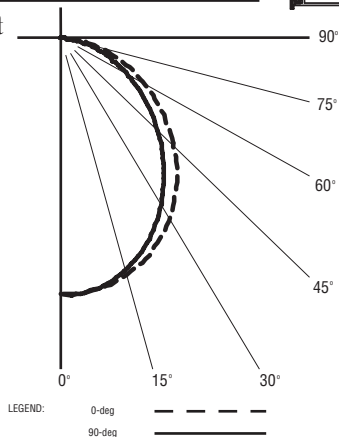
**Luminaire Description:** Extruded Aluminum Housing with White Aluminum Reflector and LED Optimized Acrylic Lens

**LED Module:** Multiple White Low-Power Light Emitting Diodes (LEDs) in a precise layout.

Total Luminaire Efficacy = 99.7 Lm/W

0% Up 100% Down

Color Rendering Index (CRI) = 83



#### ZONAL LUMEN SUMMARY

| Zone    | Lumens | %Fixture |
|---------|--------|----------|
| 0- 30   | 579    | 33.8     |
| 0- 40   | 903    | 52.7     |
| 0- 60   | 1447   | 84.5     |
| 0- 90   | 1713   | 100.0    |
| 90- 180 | 0      | 0.0      |
| 0- 180  | 1713   | 100.0    |

#### CANDELA DISTRIBUTION

|    | 0.0 | 22.5 | 45.0 | 67.5 | 90.0 |
|----|-----|------|------|------|------|
| 0  | 804 | 804  | 804  | 804  | 804  |
| 5  | 799 | 795  | 801  | 798  | 793  |
| 15 | 758 | 749  | 745  | 733  | 726  |
| 25 | 678 | 664  | 644  | 620  | 609  |
| 35 | 569 | 549  | 518  | 486  | 473  |
| 45 | 441 | 422  | 389  | 355  | 344  |
| 55 | 315 | 300  | 270  | 241  | 232  |
| 65 | 199 | 189  | 166  | 145  | 138  |
| 75 | 98  | 92   | 78   | 65   | 60   |
| 85 | 21  | 18   | 11   | 7    | 6    |
| 90 | 0   | 0    | 0    | 0    | 0    |

Precision Architectural Lighting

**LED lighting facts**  
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**Light Output (Lumens)** **1713**

**Watts** **17.18**

**Lumens per Watt (Efficacy)** **99.71**

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**Color Accuracy** **83**

Color Rendering Index (CRI)

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**Light Color** **4002 (Bright White)**

Correlated Color Temperature (CCT)

2700K 3000K 4500K 6500K

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All results are according to IESNA LM-79-2008: Approved Method for the Electrical and Photometric Testing of Solid-State Lighting. The U.S. Department of Energy (DOE) verifies product test data and results.

Visit [www.lightingfacts.com](http://www.lightingfacts.com) for the Label Reference Guide.

Registration Number: 1NRP-67F06C (2/21/2017)  
Model Number: ML3WL-D-MO-K40-4-X-LOH-X-X-UNV  
Type: Luminaire - Linear

