

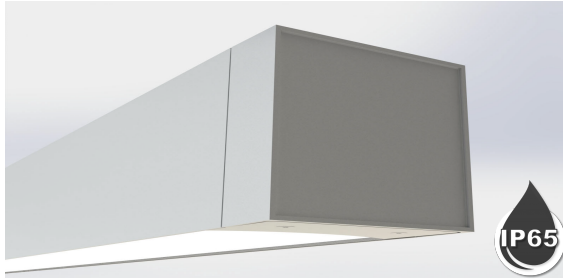
# Microlinea™ Series 5 Indirect/Direct Wet Location-IP65

(Overall Width 5-7/16", Luminous Apertures 5-3/16")

Catalog Number

Type

Project Name



B.U.G. Ratings (Backlight / Uplight / Glare)	
HO/HO:	B1 - U5 - G1
HO/MO:	B1 - U5 - G1
MO/HO:	B1 - U5 - G1
MO/MO:	B1 - U5 - G1

(See Photometric Files for More Information)

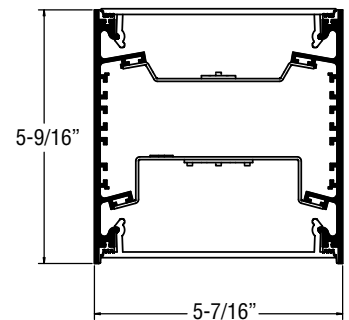
## ML5WL65-I/D IP65 Rated

Suspended or Wall Mount  
Wet Location

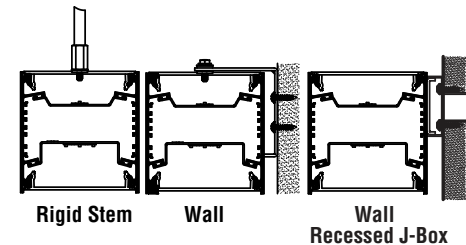
5-7/16" x 5-9/16" Indirect/Direct



Limited Warranty  
LED Boards & Drivers



ML5WL65-I/D-MO/MO  
ML5WL65-I/D-MO/HO  
ML5WL65-I/D-HO/MO  
ML5WL65-I/D-HO/HO



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

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

#### Housing

Two-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 premium finishes are baked powder coat electrostatically applied (2.0 mil minimum thickness) to assure aesthetics and durability.

#### Indirect Optical Controls

- (LOH) .125" thick, high transmittance extruded acrylic lens, for max. diffusion of the LED light source. Lens is gasketed and permanently sealed against dust and water intrusion.
- (VR) Vandal Resistant: .125" thick, high transmittance extruded 100% D.R. acrylic lens with tamper-resistant hardware.

#### Direct Optical Control

- (LOH) .125" thick, high transmittance extruded acrylic snap-in lens, for max. diffusion of the LED light source. Lens is gasketed against dust and water intrusion.
- (VR) Vandal Resistant: .125" thick, high transmittance extruded 100% D.R. acrylic lens with tamper-resistant hardware.

#### Reflector/Heat Sink

- Indirect - .060" thick formed aluminum finished with a high reflectance white enamel.
- Direct - .060" thick formed aluminum finished with a high reflectance white enamel.

#### Driver

Power supply is UL/CUL recognized, 120-277 universal voltage. 347V also available.

#### Light Engine

LED light source available for 3000K, 3500K and 4000K CCT, in High and Medium outputs.

See below and following page for photometric data: lumen outputs, input power (watts), and efficacies.

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 assemblies is matte black. Stem/Canopy assemblies are painted to match fixture housing.

#### Certifications

Fixtures are ETL listed for use in 'Wet Locations.' Ambient operating temperature rated from -30° C up to 50° C, and 0° C up to 50° C with battery back-up. IP-65 rated\*\* IC rated (Recess Mount)

Sample Catalog Number: **ML5WL65-I/D - HO/HO - K40 / K40 - 80 - 4 - P - LOH / LOH - F01M - EF - 120 - DIM1 - OPTIONS**



- PAL ML5WL65-I/D Wet Location Indirect/Direct
- Lumen Output/4': HO/HO -HO(Up)/HO(Dn) = 6461 Total Lms - 96 Lm/W  
(Using 4000K) HO/MO -HO(Up)/MO(Dn) = 5208 Total Lms - 99 Lm/W  
MO/HO -MO(Up)/HO(Dn) = 5196 Total Lms - 98 Lm/W  
MO/MO -MO(Up)/MO(Dn) = 3934 Total Lms - 103 Lm/W  
CO/CO - Custom Output (Contact factory for available output range)
- CCT (Indirect): K30-3000K, K35-3500K, K40-4000K  
CCT (Direct): K30-3000K, K35-3500K, K40-4000K  
CRI: 80 (Standard)  
Fixture Length: 2', 3', 4', 6', and 8'
- Mounting: P = Rigid Stem Assy (Stems up to 24" Standard) W = Wall WRJ = Wall Mount w/Recess J-Box
- Indirect Optical Controls: LOH = LED Optimized High Transmitt. Lens VR = 100% DR Acrylic Lens w/Tamper Resist Hardware
- Direct Optical Controls: LOH = LED Optimized High Transmitt. Lens VR = 100% DR Acrylic Lens w/Tamper Resist Hardware
- Standard Finish: F01M Matte White F10 Bronzed F11T Textured Black F12 Ultrasonic Clear FCC Custom Color
- Power Feed Location: EF = End Feed TF = Top Feed
- Voltage: 120V, 277V, 347V or UNV (Universal Voltage)
- Drivers: DIMX = Standard Driver - No Dimming DIM1 = Standard Driver wired for Dimming - 100% to 1%
- CWD = Cold Weather Driver -40 Deg C Ambient Temp Rating (High Output Only - 3' or Longer Fixtures. \*N/A for 100 - 1% Dimming Option)
- Options: EMCKT = Emergency Circuit (Separate Hot & Neutral) EBPHST = Self-Testing Battery Pack (10Watt) \*N/A for 2' Fixture, \*N/A for 347V FS = Fused Drivers



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Tel 713.946.4343 Fax 713.946.4441 www.pal-lighting.com



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# Suspended/Wall

## ML5WL65-I/D-HO/HO-K40



### High Output Up/High Output Down

#### LED Optimized High Transmittance Lens

**Catalog Number:** ML5WL65-I/D-HO/HO-K40-4'-X-LOH/LOH-120

**Report Number:** #LLIA000676-010A.ies

**Luminaire Description:** Extruded Aluminum Housing with White Aluminum Reflector and LED Optimized Acrylic Lenses Up and Down

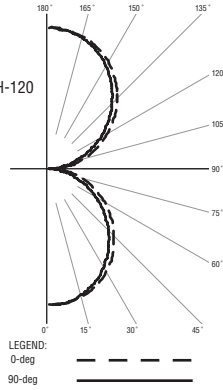
**LED Module:** Multiple White Low-Power Light Emitting Diodes (LEDs) in a precise lay-out.

Total Luminaire Efficacy = 96.6 Lm/W

Input Power / 4': 66.9 W

Color Rendering Index (CRI) = 83

52% Up 48% Down



LEGEND:  
0-deg  
90-deg

LED lighting facts <sup>®</sup>							
A Program of the U.S. DOE							
Light Output (Lumens)	6461						
Watts	66.88						
Lumens per Watt (Efficacy)	96.61						
Color Accuracy Color Rendering Index (CRI)	83						
Light Color Correlated Color Temperature (CCT)	4002 (Bright White)						
<table border="1"> <tr> <td>Warm White</td> <td>Bright White</td> <td>Daylight</td> </tr> <tr> <td>2700K</td> <td>3000K</td> <td>4500K 6500K</td> </tr> </table>		Warm White	Bright White	Daylight	2700K	3000K	4500K 6500K
Warm White	Bright White	Daylight					
2700K	3000K	4500K 6500K					
Warranty**	Yes						
<small>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.</small>							
<small>** See <a href="http://www.lightingfacts.com/products">www.lightingfacts.com/products</a> for details.</small>							
<small>Registration Number: INRP-0A1617 (2/13/2017) Model Number: ML5WL65-I/D-HO/HO-K40-4'-X-LOH/LOH-120 Type Luminaire - Linear</small>							

## ML5WL65-I/D-MO/HO-K40



### Medium Output Up/High Output Down

#### LED Optimized High Transmittance Lens

**Catalog Number:** ML5WL65-I/D-MO/HO-K40-4'-X-LOH/LOH-120

**Report Number:** #LLIA000676-008A.ies

**Luminaire Description:** Extruded Aluminum Housing with White Aluminum Reflector and LED Optimized Acrylic Lenses Up and Down

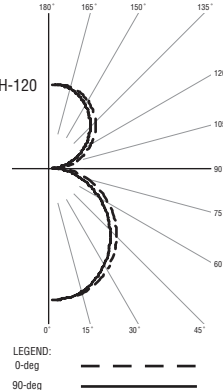
**LED Module:** Multiple White Low-Power Light Emitting Diodes (LEDs) in a precise lay-out.

Total Luminaire Efficacy = 98.3 Lm/W

Input Power / 4': 52.9 W

Color Rendering Index (CRI) = 84

40% Up 60% Down



LEGEND:  
0-deg  
90-deg

LED lighting facts <sup>®</sup>							
A Program of the U.S. DOE							
Light Output (Lumens)	5196						
Watts	52.84						
Lumens per Watt (Efficacy)	98.33						
Color Accuracy Color Rendering Index (CRI)	84						
Light Color Correlated Color Temperature (CCT)	3997 (Bright White)						
<table border="1"> <tr> <td>Warm White</td> <td>Bright White</td> <td>Daylight</td> </tr> <tr> <td>2700K</td> <td>3000K</td> <td>4500K 6500K</td> </tr> </table>		Warm White	Bright White	Daylight	2700K	3000K	4500K 6500K
Warm White	Bright White	Daylight					
2700K	3000K	4500K 6500K					
Warranty**	Yes						
<small>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.</small>							
<small>Visit <a href="http://www.lightingfacts.com">www.lightingfacts.com</a> for the Label Reference Guide.</small>							
<small>Registration Number: INRP-2R4GIC (2/14/2017) Model Number: ML5WL65-I/D-MO/HO-K40-4'-X-LOH/LOH-120 Type Luminaire - Linear</small>							

## ML5WL65-I/D-HO/MO-K40



### High Output Up/Medium Output Down

#### LED Optimized High Transmittance Lens

**Catalog Number:** ML5WL65-I/D-HO/MO-K40-4'-X-LOH/LOH-120

**Report Number:** #LLIA000676-009A.ies

**Luminaire Description:** Extruded Aluminum Housing with White Aluminum Reflector and LED Optimized Acrylic Lenses Up and Down

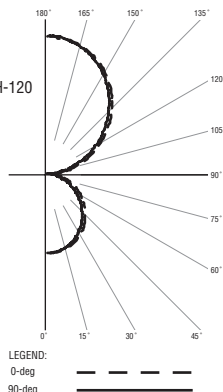
**LED Module:** Multiple White Low-Power Light Emitting Diodes (LEDs) in a precise lay-out.

Total Luminaire Efficacy = 99.6 Lm/W

Input Power / 4': 52.3 W

Color Rendering Index (CRI) = 83

64% Up 36% Down



LEGEND:  
0-deg  
90-deg

LED lighting facts <sup>®</sup>							
A Program of the U.S. DOE							
Light Output (Lumens)	5208						
Watts	52.32						
Lumens per Watt (Efficacy)	99.54						
Color Accuracy Color Rendering Index (CRI)	83						
Light Color Correlated Color Temperature (CCT)	3997 (Bright White)						
<table border="1"> <tr> <td>Warm White</td> <td>Bright White</td> <td>Daylight</td> </tr> <tr> <td>2700K</td> <td>3000K</td> <td>4500K 6500K</td> </tr> </table>		Warm White	Bright White	Daylight	2700K	3000K	4500K 6500K
Warm White	Bright White	Daylight					
2700K	3000K	4500K 6500K					
Warranty**	Yes						
<small>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.</small>							
<small>Visit <a href="http://www.lightingfacts.com">www.lightingfacts.com</a> for the Label Reference Guide.</small>							
<small>Registration Number: INRP-0258KJ (2/14/2017) Model Number: ML5WL65-I/D-HO/MO-K40-4'-X-LOH/LOH-120 Type Luminaire - Linear</small>							

## ML5WL65-I/D-MO/MO-K40



### Medium Output Up/Medium Output Down

#### LED Optimized High Transmittance Lens

**Catalog Number:** ML5WL65-I/D-MO/MO-K40-4'-X-LOH/LOH-120

**Report Number:** #LLIA000676-007A.ies

**Luminaire Description:** Extruded Aluminum Housing with White Aluminum Reflector and LED Optimized Acrylic Lenses Up and Down

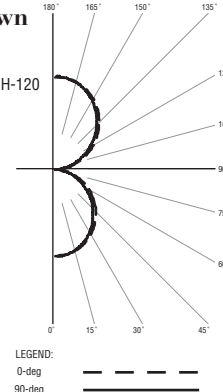
**LED Module:** Multiple White Low-Power Light Emitting Diodes (LEDs) in a precise lay-out.

Total Luminaire Efficacy = 102.9 Lm/W

Input Power / 4': 38.3 W

Color Rendering Index (CRI) = 84

53% Up 47% Down



LEGEND:  
0-deg  
90-deg

LED lighting facts <sup>®</sup>							
A Program of the U.S. DOE							
Light Output (Lumens)	3934						
Watts	38.23						
Lumens per Watt (Efficacy)	102.9						
Color Accuracy Color Rendering Index (CRI)	84						
Light Color Correlated Color Temperature (CCT)	3994 (Bright White)						
<table border="1"> <tr> <td>Warm White</td> <td>Bright White</td> <td>Daylight</td> </tr> <tr> <td>2700K</td> <td>3000K</td> <td>4500K 6500K</td> </tr> </table>		Warm White	Bright White	Daylight	2700K	3000K	4500K 6500K
Warm White	Bright White	Daylight					
2700K	3000K	4500K 6500K					
Warranty**	Yes						
<small>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.</small>							
<small>** See <a href="http://www.lightingfacts.com/products">www.lightingfacts.com/products</a> for details.</small>							
<small>Registration Number: INRP-E10C2E (2/14/2017) Model Number: ML5WL65-I/D-MO/MO-K40-4'-X-LOH/LOH-120 Type Luminaire - Linear</small>							

For more information, visit our website at [www.pal-lighting.com](http://www.pal-lighting.com)



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