

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)	

# Microlinea Series 5 Indirect/Direct Wet Location-IP65-IK10 Rated

The MICROLINEA WET LOCATION SERIES 5 INDIRECT/DIRECT delivers high-performance architectural lighting for exterior applications where indirect illumination is also desired. Purpose-built for outdoor use, this fixture is fully sealed against moisture, dust, insects, and impact. Designed for use as individual units or in continuous runs, the Microlinea Series 5 Wet Location Indirect/Direct fixture offers both flexibility and refined style for modern exterior lighting designs.

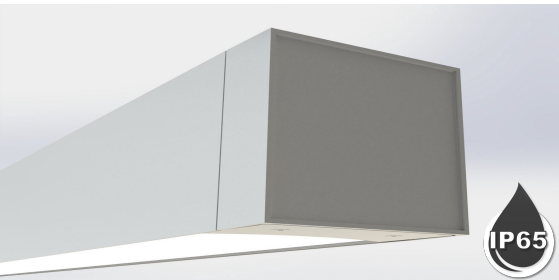
Qty:

Type:

Project Name:

Catalog Number:

## SPECIFICATIONS



### 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.

### Indirect Optical Control

(LOH) .125" thick, high transmittance extruded acrylic lens formulated for maximum diffusion of the LED light source and continuously gasketed against dust and water intrusion.

### Direct Optical Control

(LOH) .125" thick, high transmittance extruded acrylic lens formulated for maximum diffusion of the LED light source and continuously gasketed against dust and water intrusion.

(VR) Vandal Resistant: .125" thick, high transmittance extruded 100% D.R. acrylic lens with tamper-resistant hardware.

### Reflector

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 (Standard)

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

### 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)

### Light Engines/Color Temps./CRI

LED light sources are available for the following Co-ordinated Color Temperatures (CCT):

Standard: 3000K, 3500K, & 4000K

Color Rendering Index (CRI): Standard: 80

### Finish

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

### 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.

### Internal Construction

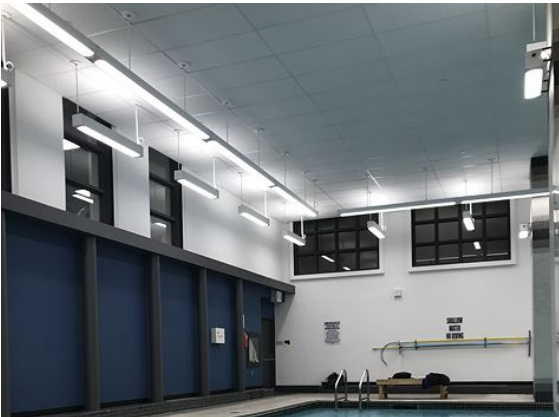
All internal mechanical components, including fasteners, are aluminum or stainless steel.

### Circuitry

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

### Warranty

10 year limited warranty. No other warranty is expressed or implied. Complete warranty terms can be assessed by visiting: <https://pal-lighting.com/company/warranty>



## MICROLINEA SERIES 5 Indirect/Direct Wet Location - Performance Data

Standard Lumen Outputs Available	Standard High Output Up/High Output Down - (HO/HO)	Standard Medium Output Up/High Output Down - (MO/HO)	Standard High Output Up/Medium Output Down - (HO/MO)	Standard Medium Output Up/Medium Output Down - (MO/MO)
Delivered Lumens/Foot - Standard	1615	1299	1302	984
Input Watts/Foot - Standard	17	13	13	10
Lumens/Watt (Efficacy) - Standard	97	98	100	103
Custom Lumens Outputs Available				
Custom Lumens/Foot	Contact Factory for Available Output Ranges			

### Notes:

- Data listed above is based on using 3500K CCT and 80 CRI LED modules
- \*PAL uses fully programmable drivers. Custom outputs (CO) are available. Contact [specs@pallighting.com](mailto:specs@pallighting.com) for more information.
- All values are based on calculated LM-79 photometric reports.

## ORDERING GUIDE

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Series	Outputs	(CCT) Indirect	(CCT) Direct	CRI
<b>ML5WL65-1/D</b> Microlinea Series 5 Indirect/Direct (Wet Location)	<b>HO/HO</b> HO(Up)/HO(Dn)	<b>K30</b> 3000 Kelvin	<b>K30</b> 3000 Kelvin	<b>80</b> Standard
	<b>HO/MO</b> HO(Up)/MO(Dn)	<b>K35</b> 3500 Kelvin	<b>K35</b> 3500 Kelvin	
	<b>MO/HO</b> MO(Up)/HO(Dn)	<b>K40</b> 4000 Kelvin	<b>K40</b> 4000 Kelvin	
	<b>MO/MO</b> MO(Up)/MO(Dn)	<b>RGBW</b> Red/Green/Blue/White	<b>RGBW</b> Red/Green/Blue/White	
	<b>CO/CO</b> Custom Output (Contact factory for available output range)			

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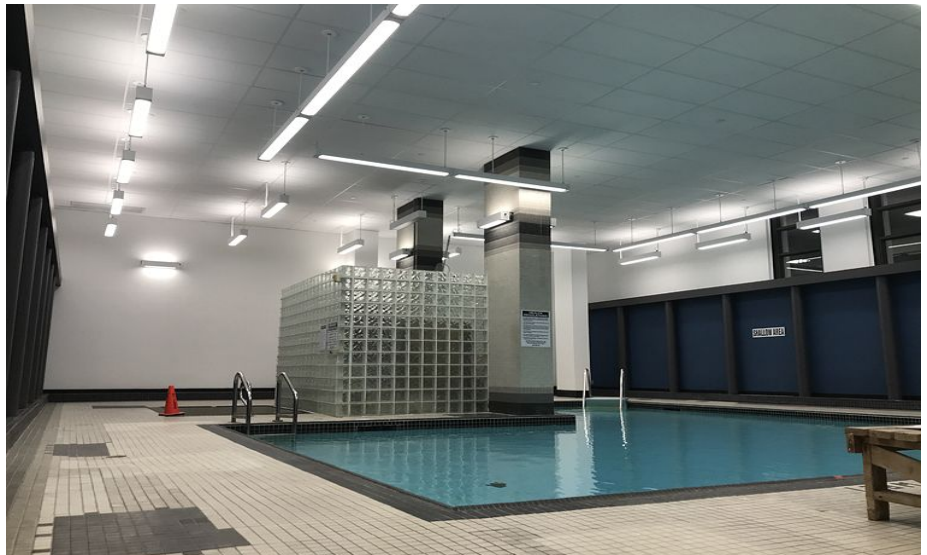
Fixture Lengths			Mounting	Indirect Optical Control		Direct Optical Control		Finishes	
<b>2'</b>	2 Ft	For continuous rows of 8' or longer, specify row length in 1' increments. Example: 13'	<b>P</b>	Rigid Stem (Up to 24" Std.)	<b>LOH</b>	LED Optimized Acrylic Gasketed Lens	<b>LOH</b>	LED Optimized Acrylic Gasketed Lens	<b>F01M</b> Matte White (Standard)
<b>3'</b>	3 Ft		<b>W</b>	Wall Mount					<b>F10</b> Bronzed
<b>4'</b>	4 Ft		<b>WRJ</b>	Wall Mount w/Recess J-Box	<b>VR</b>	100% D.R. Acrylic Lens with Tamper-Resist Hardware	<b>VR</b>	100% D.R. Acrylic Lens with Tamper-Resist Hardware	<b>F11T</b> Textured Black
<b>6'</b>	6 Ft								<b>F12</b> Ultrasonic Clear
<b>8'</b>	8 Ft								<b>FCC</b> Custom Color Match Provide RAL Color# _____

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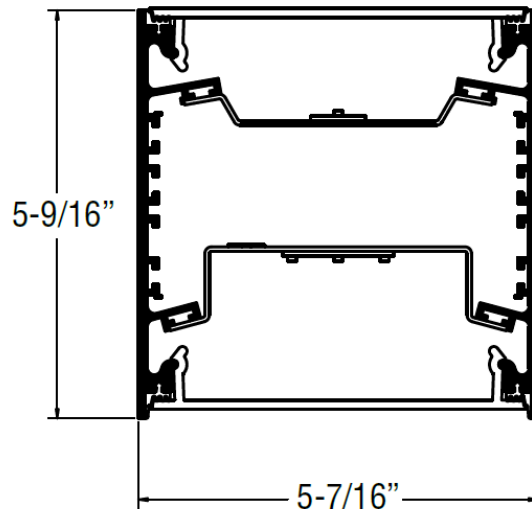
Feed Location		Voltage		Drivers - Dimming <sup>2, 4</sup>		Emergency Options	
<b>TF</b>	Top Feed	<b>120</b>	120V	<b>DIMX</b>	Standard No Dimming	<b>EBPHST</b>	Emergency Battery Pack - 10 Watt Self-Testing. (Integral Mount)
<b>EF</b>	End Feed	<b>277</b>	277V	<b>DIM1</b>	Dimming 100% to 1%		
		<b>UNV</b>	Universal Voltage (120V thru 277V)	<b>CWD</b>	Cold Weather Driver	<b>EMCKT</b>	Emergency Circuit (Separate Hot & Neutral)
		<b>347</b>	347V	<b>DMX</b>	DMX Protocol Driver		
				<b>DALI</b>	DALI Protocol Driver		

### Notes:

- All fixtures are factory pre-wired for a single circuit. Provisions for multiple switching/circuiting is optional.
- Unless otherwise requested, all fixtures contain integral-mount "power-on-board" drivers.
- All fixtures intended for continuous rows are provided with factory installed quick-connect wiring.
- Standard power supply (driver) is UL/CUL recognized, & is available w/0-10V dimming capability & 120 - 277 universal voltage.
- Standard emergency battery pack is a 10 Watt constant power, self-testing, UL 924 listed pack from Iota Engineering - providing 1000 lumens of light for approximately 90 minutes. Battery packs are integral mounted unless otherwise notified. \*Note: Remote mounted battery packs are not wet location listed.
- Custom length fixtures and fixtures rows may require a longer lead time. Contact [specs@pallighting.com](mailto:specs@pallighting.com) for more information.
- RGBW power supply by EldoLED is UL recognized, and is compatible with DALI and DMX protocols.
- IP rated sensors and control systems are available. Contact [specs@pallighting.com](mailto:specs@pallighting.com) for more information.

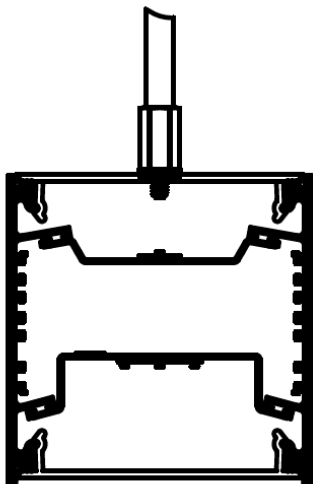


## Suspended or Wall Mount Wet Location

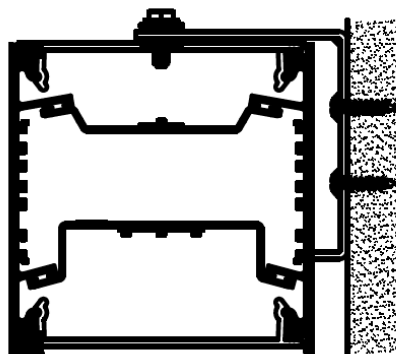


ML5WL65-I/D-MO/MO  
ML5WL65-I/D-MO/HO  
ML5WL65-I/D-HO/MO  
ML5WL65-I/D-HO/HO

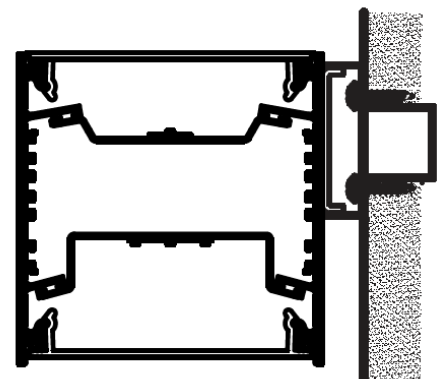
Rigid Stem, Wall & Wall Recessed J-Box:



**Rigid Stem**



**Wall**



**Wall  
Recessed J-Box**

## PHOTOMETRY / LIGHT DISTRIBUTIONS

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

#### High Output Up/High Output Down

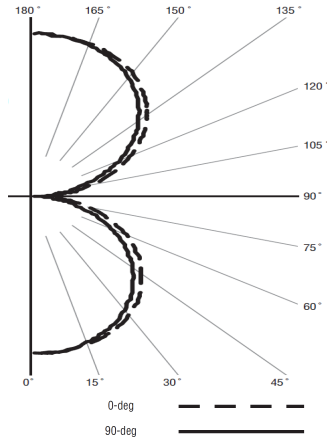


Catalog Number:  
**ML5WL65-I/D-HO/HO-K40-4'-X-LOH/LOH-120**

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

Total Efficacy: **96.6lm/W**  
Input Power per 4': **66.9 W**  
Lumens per 4': **6460**

**52% Up 48% Down**  
Color Rendering Index (CRI) = **83**



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

#### Medium Output Up/High Output Down

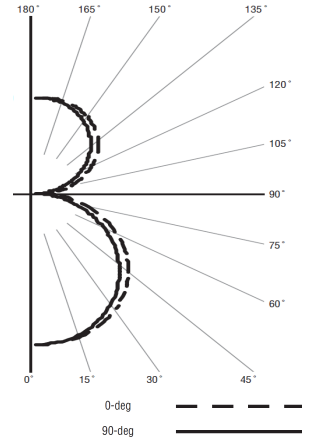


Catalog Number:  
**ML5WL65-I/D-MO/HO-K40-4'-X-LOH/LOH-120**

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

Total Efficacy: **98.3lm/W**  
Input Power per 4': **52.9 W**  
Lumens per 4': **5196**

**40% Up 60% Down**  
Color Rendering Index (CRI) = **84**



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

#### High Output Up/Medium Output Down

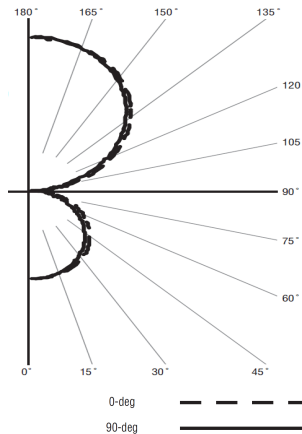


Catalog Number:  
**ML5WL65-I/D-HO/MO-K40-4'-X-LOH/LOH-120**

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

Total Efficacy: **99.6lm/W**  
Input Power per 4': **52.3 W**  
Lumens per 4': **5208**

**64% Up 36% Down**  
Color Rendering Index (CRI) = **83**



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

#### Medium Output Up/Medium Output Down



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

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

Total Efficacy: **102.9lm/W**  
Input Power per 4': **38.3 W**  
Lumens per 4': **3936**

**53% Up 47% Down**  
Color Rendering Index (CRI) = **84**

