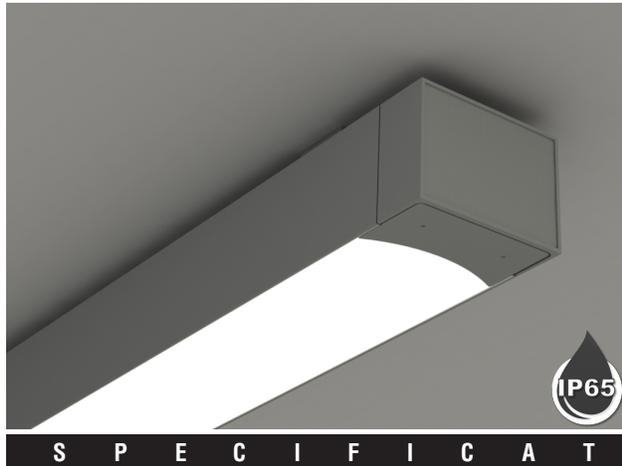


Microlinea™ Series 5 Direct Wet Location-IP65

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

Catalog Number	Type
Project Name	



B.U.G. Ratings
(Backlight / Uplight / Glare)

High Output: B1 - U0 - C1
Medium Output: B1 - U0 - C1
(See Photometric Files for More Information)

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 Control

■ (LOH) .125" thick, high transmittance extruded acrylic lens, formulated for maximum diffusion of the LED light source. Lens is continuously 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.

Reflector/Heat Sink

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

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.

HO - High Output

*3226 Total Delivered Lms. at 41 System Watts (Values per 4' using 3500K LED modules)

MO - Medium Output

*1949 Total Delivered Lms. at 22 System Watts (Values per 4' using 3500K 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, recessed, and ceiling assemblies is matte black. Stem/Canopy assemblies are painted to match fixture housing.

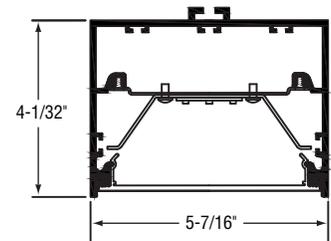
Certifications

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)

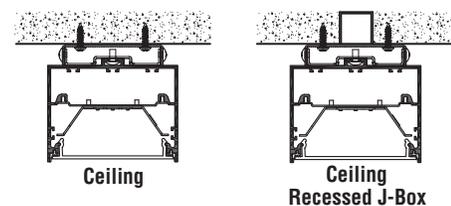
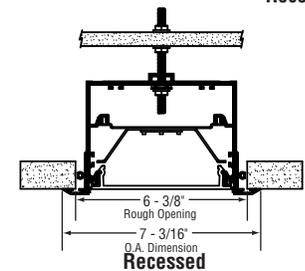
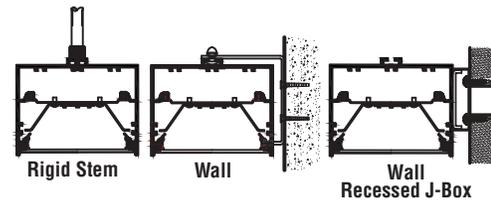
ML5WL65-D IP65 Rated

Suspended, Ceiling, Recessed or Wall Mount - Wet Location

5-7/16" x 4-1/32" Direct



ML5WL65-D-HO
ML5WL65-D-MO



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

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

<p>PAL ML5WL65-D Series 5 Direct - Wet Location</p> <p>Lumen Output / 4': HO - High Output = 3226 Total Lms. - 79 Lm/W (Using 4000K) MO - Medium Output = 1949 Total Lms. - 87 Lm/W CO - Custom Output (Contact factory for available output range)</p> <p>CCT: K30-3000K, K35-3500K, K40-4000K</p> <p>CRI: 80 (Standard)</p> <p>Fixture Lengths: 2', 3', 4', 6', and 8'</p> <p>Mounting: P = Rigid Stem (Up to 24" Std.) W = Wall Mount R = Recessed Mount J = Ceiling Mount</p> <p>WRJ = Wall Mount w/Recess J-Box WRJ = Wall Mount w/Recess J-Box</p> <p>Direct Optical Control: LOH = LED Optimized Acrylic Gasketed Lens</p> <p>VR = 100% D.R. Acrylic Lens with Tamper-Resist Hardware</p> <p>Standard Finish: F01M Matte White F10 Bronzed F11T Textured Black F12 Ultrasonic Clear FCC Custom Color</p> <p>Power Feed Location: EF = End Feed TF = Top Feed (N/A for Recess or Ceiling Mount)</p> <p>Voltage: 120V, 277V, 347V or UNV (Universal Voltage)</p> <p>Drivers: DIMX = Standard Driver - No Dimming DIM1 = Standard Driver wired for Dimming - 100% to 1%</p> <p>CWD = Cold Weather Driver, -40 Deg C Ambient Temp. Rating (High Output Only - 3' or Longer Fixtures) (N/A for 1% Dimming Option)</p> <p>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</p>	
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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

ML5WL65-D-HO-K40-LOH



Wet Location Direct-High Output

LED Optimized High Transmittance Lens

Catalog Number: ML5W65L-D-HO-K40-4'-X-LOH-120

Report Number: UL#1094335.ies

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

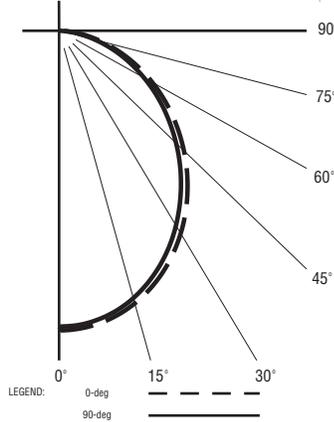
LED Module: Multiple White Low-Power Light Emitting Diodes (LEDs) in a precise layout.

Total Luminaire Efficacy = 78.7 Lm/W

Input Power / 4': 40.97 W

0% Up 100% Down

Color Rendering Index (CRI) = 83



ZONAL LUMEN SUMMARY

Zone	Lumens	%Fixture
0- 30	994	30.8
0- 40	1580	49.0
0- 60	2363	81.7
0- 90	3226	100.0
90- 180	0	0.0
0- 180	3226	100.0

CANDELA DISTRIBUTION

	0.0	22.5	45.0	67.5	90.0
0	1339	1339	1339	1339	1339
5	1345	1328	1323	1330	1328
15	1278	1258	1250	1252	1248
25	1145	1126	1113	1108	1102
35	971	951	933	922	914
45	774	756	737	722	713
55	574	557	540	524	517
65	379	367	352	338	332
75	197	192	182	170	166
85	54	50	41	33	31
90	0	0	0	0	0

PRECISION ARCHITECTURAL LIGHTING

LED lighting facts®
A Program of the U.S. DOE

Light Output (Lumens) **3226**
Watts **40.98**
Lumens per Watt (Efficacy) **78.7**

Color Accuracy **83**
Color Rendering Index (CRI)

Light Color **3994 (Bright White)**
Correlated Color Temperature (CCT)

Warm White | **Bright White** | **Daylight**

2700K 3000K 4500K 6500K

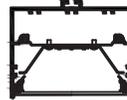
Warranty** **Yes**

All results, except LED Lumen Maintenance, 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.

**** See www.lightingfacts.com/products for details.**

Registration Number: 1NRP-878A4Z (7/17/2015)
 Model Number: ML5IP65-D-HO-K40-4'-W-LOH-FXXX-EF-UNIV
 Type: Luminaire - Linear

ML5WL65-D-MO-K40-LOH



Wet Location Direct-Medium Output

LED Optimized High Transmittance Lens

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

Report Number: UL#1094336.ies

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

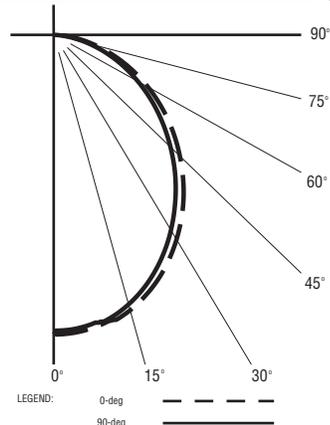
LED Module: Multiple White Low-Power Light Emitting Diodes (LEDs) in a precise layout.

Total Luminaire Efficacy = 86.9 Lm/W

Input Power / 4': 22.39 W

0% Up 100% Down

Color Rendering Index (CRI) = 83



ZONAL LUMEN SUMMARY

Zone	Lumens	%Fixture
0- 30	602	30.8
0- 40	955	49.0
0- 60	1428	81.7
0- 90	1949	100.0
90- 180	0	0.0
0- 180	1949	100.0

CANDELA DISTRIBUTION

	0.0	22.5	45.0	67.5	90.0
0	803	803	803	803	803
5	806	796	793	797	796
15	772	761	756	758	756
25	693	682	673	671	667
35	588	576	565	558	553
45	468	457	446	436	431
55	347	337	326	317	312
65	229	221	213	204	200
75	119	116	110	102	99
85	33	30	25	20	18
90	0	0	0	0	0

PRECISION ARCHITECTURAL LIGHTING

LED lighting facts®
A Program of the U.S. DOE

Light Output (Lumens) **1949**
Watts **22.42**
Lumens per Watt (Efficacy) **86.9**

Color Accuracy **83**
Color Rendering Index (CRI)

Light Color **3980 (Bright White)**
Correlated Color Temperature (CCT)

Warm White | **Bright White** | **Daylight**

2700K 3000K 4500K 6500K

Warranty** **Yes**

All results, except LED Lumen Maintenance, 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.

**** See www.lightingfacts.com/products for details.**

Registration Number: 1NRP-V2H32P (7/17/2015)
 Model Number: ML5IP65-D-MO-K40-4'-W-LOH-FXXX-EF-UNIV
 Type: Luminaire - Linear

For more information, visit our website at www.pal-lighting.com



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