

Microlinea™ Direct Suspended or Ceiling Mount Series 5 - LED

(4 7/8" Luminous Aperture)

Catalog Number	Type
Project Name	



MLS5-D-LED

5 1/4" X 3 11/16" Direct Suspended or Ceiling Mount



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

Housing
One-piece .090" thick extruded aluminum. Die-cast aluminum end caps are secured with no visible fasteners. Standard lengths are nominal 2', 3', 4', 6', 8' and 12'. Provisions may be made for patterns and continuous rows of any length.

Finish
Standard and premium finishes are baked powder coat electrostatically applied (2.0 mil minimum thickness) to assure aesthetics and durability. Standard finish for stems and canopies is white.

Optical Controls
(LOH) LED optimized high transmittance acrylic snap-in lens.

Reflector/Heat Sink
.040" thick die-formed aluminum finished with a high reflectance white enamel.

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.

Integral Controls
Contact factory for daylight and/or occupancy sensor controls.

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

Light Engine (Standard)
LED light source available standard for 3000K, 3500K and 4000K CCT, in high and medium light outputs, and 80 or 90 CRI. Standard outputs:
HO-High Output
 *3598 Total Delivered Lms. at 41 System Watts
MO-Medium Output
 *2130 Total Delivered Lms. at 23 System Watts
 (*All values per 4' using 4000K LED modules)

Driver (Tunable White)
EldoLED power supply is UL recognized, DALI, 0-10V or DMX available, 120-277 universal voltage.

Light Engine (Tunable White)
Tunable White LED light source available for 2700K thru 6500K CCT, and 80 or 90 CRI. Contact factory for available outputs.

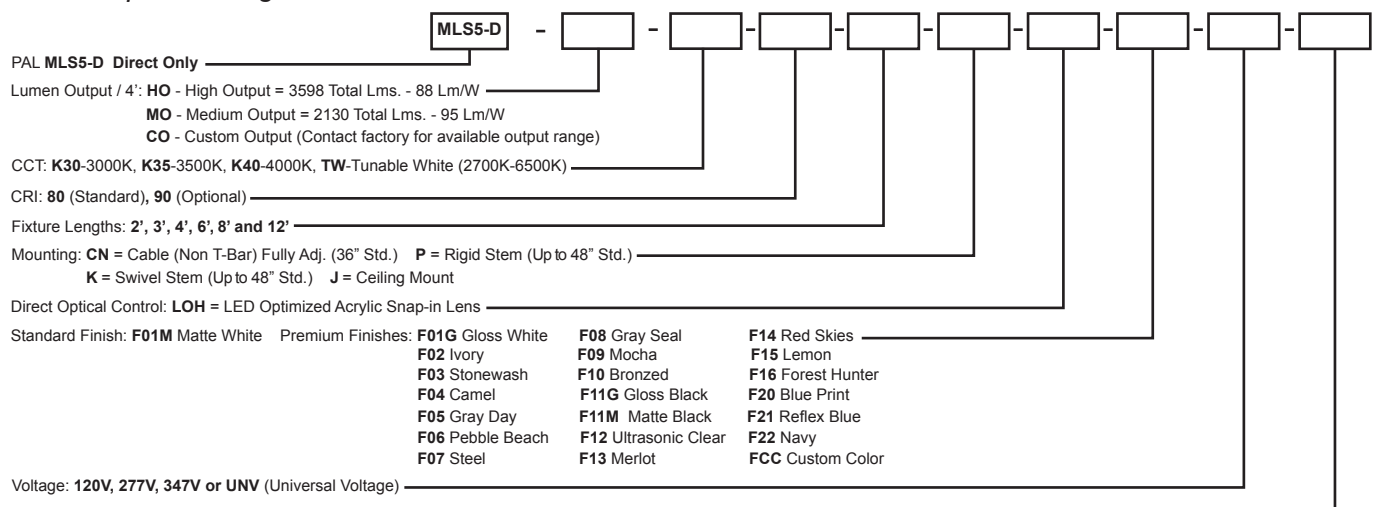
*Due to continued advancement in LED technology, lumen performance is subject to change. Please visit our website for the most up-to-date information.

Certification
All fixtures are ETL listed for use in 'Dry or Damp' Locations.



MLS5-D-HO
MLS5-D-MO

Sample Catalog Number: **MLS5-D - HO - K40 - 80 - 4 - CN - LOH - F01M - 120 - DIM10**



Voltage: **120V, 277V, 347V** or **UNV** (Universal Voltage)

Options: **NLCKT** = Night-Light Circuit (Common Neutral) **EMCKT** = Emergency Circuit (Separate Hot & Neutral) **EBPLST** = Self-Testing Emergency Battery Pack (6 Watt)
EBPHST = Self-Testing Emergency Battery Pack (10 Watt) **DALI** = DALI Protocol Driver (Tunable White) **DMX** = DMX Protocol Driver (Tunable White) **0-10V/TW** = 0-10V Driver (Tunable White)
DIM10 = Dimming to 10% **DIM1** = Dimming - to 1% **DIM0** = Dimming - to 0% (Dark) **FS** = Fused Drivers **DL** = Damp Location



Suspended/Ceiling

MLS5-D-HO-K40-LOH



Direct - High Output

LED Optimized High Transmittance Lens

Catalog Number: MLS5-D-HO-K40-80-4'-X-LOH-120

Report Number: UL#1094333.ies

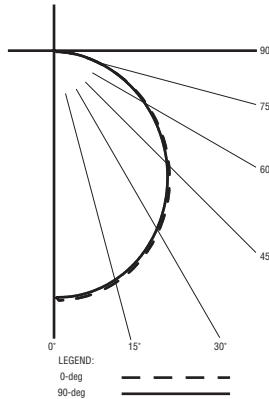
Luminaire Description: Extruded Aluminum Housing with White Aluminum Reflector and LED Optimized Acrylic Lens.

LED Module: Multiple White Low-Power Light Emitting Diodes (LEDs) in a uniform grid pattern.

Total Luminaire Efficacy = 88.2 Lm/W

0% Up 100% Down

Color Rendering Index (CRI) = 83



ZONAL LUMEN SUMMARY

Zone	Lumens	%Fixture
0- 40	1630	45.3
0- 60	2563	79.0
0- 90	3598	100.0
90- 180	0	0.0
0- 180	3598	100.0

CANDELA DISTRIBUTION

	0.0	22.5	45.0	67.5	90.0
0	1308	1308	1308	1308	1308
5	1315	1299	1295	1302	1300
15	1261	1246	1243	1249	1247
25	1158	1143	1142	1146	1144
35	1016	1001	999	1001	1000
45	842	831	829	830	828
55	650	641	639	639	638
65	444	437	437	438	437
75	233	232	235	239	239
85	57	59	64	66	68
90	0	0	0	0	0

MLS5-D-MO-K40-LOH



Direct - Medium Output

LED Optimized High Transmittance Lens

Catalog Number: MLS5-D-MO-K40-80-4'-X-LOH-120

Report Number: UL#1094334.ies

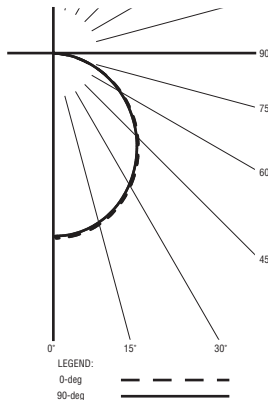
Luminaire Description: Extruded Aluminum Housing with White Aluminum Reflector and LED Optimized Acrylic Lens.

LED Module: Multiple White Low-Power Light Emitting Diodes (LEDs) in a uniform grid pattern.

Total Luminaire Efficacy = 94.5 Lm/W

0% Up 100% Down

Color Rendering Index (CRI) = 83



ZONAL LUMEN SUMMARY

Zone	Lumens	%Fixture
0- 40	966	45.3
0- 60	1518	79.1
0- 90	2130	100.0
90- 180	0	0.0
0- 180	2130	100.0

CANDELA DISTRIBUTION

	0.0	22.5	45.0	67.5	90.0
0	775	775	775	775	775
5	779	770	768	772	771
15	748	739	737	740	739
25	686	678	676	679	678
35	601	593	592	593	592
45	499	492	491	492	490
55	385	379	378	378	377
65	263	259	258	259	258
75	138	137	139	141	141
85	34	35	37	39	40
90	0	0	0	0	0

Precision Architectural Lighting

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

Light Output (Lumens) 3598
Watts 40.8
Lumens per Watt (Efficacy) 88.2

Color Accuracy 83
Color Rendering Index (CRI)

Light Color 3949 (Bright White)
Correlated Color Temperature (CCT)

↓

Warm White Bright White Daylight

2700K 3000K 4500K 6500K

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 for the Label Reference Guide.

Registration Number: 1NRP-8YIFCW (7/21/2015)
Model Number: MLR5-HO-K40-4'-XX-LOH-UNV
Type: Luminaire - Troffer/Grid Ceiling

Precision Architectural Lighting

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

Light Output (Lumens) 2130
Watts 22.53
Lumens per Watt (Efficacy) 94.5

Color Accuracy 83
Color Rendering Index (CRI)

Light Color 3936 (Bright White)
Correlated Color Temperature (CCT)

↓

Warm White Bright White Daylight

2700K 3000K 4500K 6500K

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 for the Label Reference Guide.

Registration Number: 1NRP-D3F27P (7/21/2015)
Model Number: MLR5-MO-K40-4'-XX-LOH-UNV
Type: Luminaire - Troffer/Grid Ceiling

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



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