

# Microlinea™ Series 3 Wall Wash - LED

(Nominal 2" Luminous Aperture)



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

### Housing

One piece .080" thick extruded aluminum. Die-cast alum. end caps are secured with no visible fasteners. Standard nominal lengths are 2', 3', 4', 6' and 8'.

### Optical Controls

■ Clear Acrylic Enclosure (Snap-in) with concentrating film insert - standard.

### Reflector

Three piece extruded aluminum assembly. Upper and lamp side extrusions are specular. Wall side extrusion is baked "matte white" powder coat to minimize glare to room side.

### 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. Finish of wall bracket arms and wall plate to match fixture housing.

### Extended Arm Wall Brackets

Extruded aluminum arms with die-cast aluminum wall plate. Standard arm lengths are 12", 18", 24" and 30".

### Driver

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

### Light Engine

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

#### HO - High Output

\*2399 Total Delivered Lms. at 41 System Watts (Values per 4' using 4000K LED modules)

#### MO - Medium Output

\*1596 Total Delivered Lms. at 25 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.

### Integral Controls

Contact factory for daylight and/or occupancy sensor controls.

### Certification

All fixtures are ETL listed for use in 'Dry Applications'. 'Damp Location' is optional.

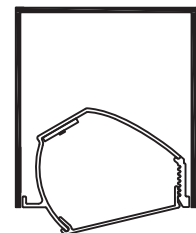
Catalog Number	Type
Project Name	

## ML3WW-LED

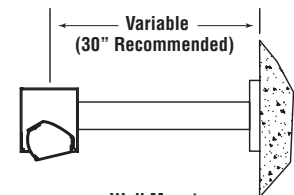
Suspended, Ceiling or Wall Mount  
3 1/8" x 3 1/2" Direct



See Photometry section for photometrics.  
See reverse page for Standard Lengths & Mounting Centers.



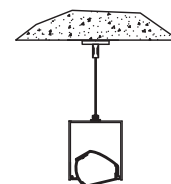
ML3WW-HO  
ML3WW-MO



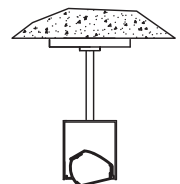
Wall Mount



Ceiling Mount



Cable Mount



Stem Mount

### Series

ML3WW  
Wall Wash

### Standard Lengths:

2', 3', 4', 6', and 8'

## ML3WW-HO-K40-4-EA24-F01M-120-[ ]

### Lumen Output

**HO** - High Output  
\*2399 Total Lumens - 59 Lm/W  
**MO** - Medium Output  
\*1596 Total Lumens - 64 Lm/W

\*Lumen ratings per 4' section (4000K)

### CCT

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

### Mountings

**EA12** = 12" Extended Arm Wall Bracket  
**EA18** = 18" Extended Arm Wall Bracket  
**EA24** = 24" Extended Arm Wall Bracket  
**EA30** = 30" Extended Arm Wall Bracket (Recommended)  
**CT** = Cable (15/16" Tbar) Fully Adjustable (36" Std)  
**CN** = Cable (Non-Tbar) Fully Adjustable (36" Std)  
**P** = Rigid Stem (Up to 48" Standard)  
**K** = Swivel Stem (Up to 48" Standard)  
**J** = Ceiling

### Standard Finishes

**F01M** Matte White  
**Premium Finishes**  
**F01G** Gloss White  
**F02** Ivory  
**F03** Stone Wash  
**F04** Camel  
**F05** Gray Day  
**F06** Pebble Beach  
**F07** Steel  
**F08** Gray Seal  
**F09** Mocha  
**F10** Bronzed  
**F11G** Gloss Black  
**F11M** Matte Black  
**F12** Ultrasonic Clear  
**F13** Merlot  
**F14** Red Skies  
**F15** Lemon  
**F16** Forest Hunter  
**F20** Blue Print  
**F21** Reflex Blue  
**F22** Navy  
**FCC** Custom Color

### Voltage

120  
277

### Options

**NLCKT**  
Night Light Circuit (Common Neutral)  
**EMCKT**  
Emergency Circuit (Separate Hot & Neutral)  
**EBPL**  
Emergency Battery Pack (6 Watt)  
**EBPH**  
Emergency Battery Pack (10 Watt)

### Dim

Dimming  
**FS**  
Fused Drivers  
**GTD**  
Generator Transfer Device  
**DL**  
Damp Location



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 or Wall Mount

## ML3WW-HO-K40



### High Output

#### Asymmetric Wall Wash Optical Control

**Catalog Number:** ML3WW-HO-K40-4'-X-120

**Report Number:** UL#904971.ies

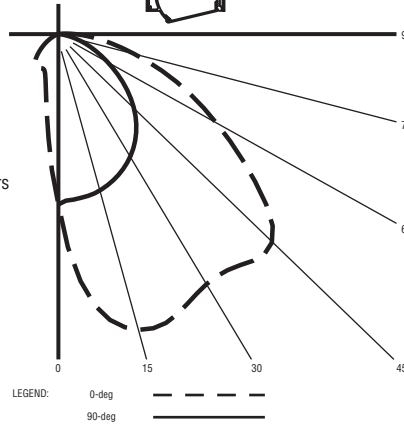
**Luminaire Description:** Extruded Aluminum Housing with Specular Upper and Lamp Side Reflectors and Matte White Wall Side Extrusion

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

Total Luminaire Efficacy = 58.9 Lm/W

0% Up 100% Down

Color Rendering Index (CRI) = 82



#### ZONAL LUMEN SUMMARY

Zone	Lumens	%Fixture
0- 30	627	26.1
0- 40	1050	43.8
0- 60	1930	80.4
0- 90	2391	99.7
90- 180	8	0.3
0- 180	2399	100.0

#### CANDELA DISTRIBUTION

	0.0	22.5	45.0	67.5	90.0
0	764	764	764	764	764
5	1112	1082	1009	891	746
15	1373	1347	1276	1088	722
25	1335	1324	1291	1146	668
35	1292	1255	1190	1090	584
45	1322	1258	1104	934	464
55	985	972	899	691	316
65	638	615	539	384	181
75	344	323	261	173	78
85	143	130	92	45	11
90	75	65	39	13	0

PRECISION ARCHITECTURAL LIGHTING

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

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**Light Output (Lumens)** 2399  
**Watts** 40.71  
**Lumens per Watt (Efficacy)** 58.93

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**Color Accuracy** 82  
Color Rendering Index (CRI)

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**Light Color** 4000 (Bright White)  
Correlated Color Temperature (CCT)

↓

Warm White
Bright White
Daylight

2700K    3000K    4500K    6500K

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**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](http://www.lightingfacts.com/products) for details.

Registration Number: 1NRP-NSXIMDE (7/30/2015)  
Model Number: ML3WW-HO-K40-4-XX-XX-UNV  
Type: Luminaire - Wallwash

# ML3WW-MO-K40



### Medium Output

#### Asymmetric Wall Wash Optical Control

**Catalog Number:** ML3WW-MO-K40-4'-X-120

**Report Number:** UL#904972.ies

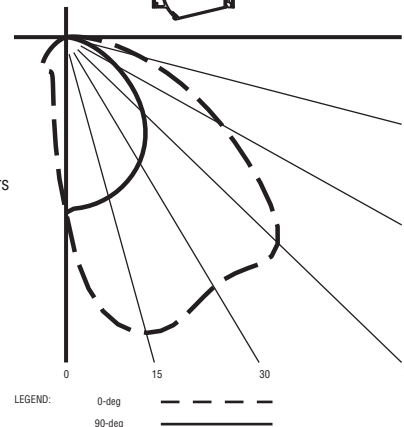
**Luminaire Description:** Extruded Aluminum Housing with Specular Upper and Lamp Side Reflectors and Matte White Wall Side Extrusion

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

Total Luminaire Efficacy = 64.3 Lm/W

0% Up 100% Down

Color Rendering Index (CRI) = 82



#### ZONAL LUMEN SUMMARY

Zone	Lumens	%Fixture
0- 30	420	26.4
0- 40	703	44.1
0- 60	1288	80.7
0- 90	1590	99.7
90- 180	6	0.3
0- 180	1596	100.0

#### CANDELA DISTRIBUTION

	0.0	22.5	45.0	67.5	90.0
0	524	524	524	524	524
5	754	732	684	609	511
15	914	896	852	734	492
25	886	879	859	767	454
35	861	834	791	727	396
45	873	834	735	623	314
55	646	640	597	458	212
65	414	401	354	253	120
75	223	209	171	114	51
85	92	83	60	29	7
90	47	41	25	8	0

PRECISION ARCHITECTURAL LIGHTING

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

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**Light Output (Lumens)** 1596  
**Watts** 24.82  
**Lumens per Watt (Efficacy)** 64.3

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**Color Accuracy** 82  
Color Rendering Index (CRI)

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**Light Color** 4000 (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.

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Registration Number: 1NRP-F40BR2 (7/30/2015)  
Model Number: ML3WW-MO-K40-4-XX-XX-UNV  
Type: Luminaire - Wallwash

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



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Made in America

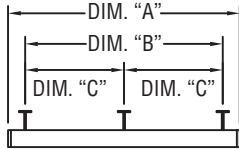
# ML3WW - Wall Wash

## Suspended, Ceiling or Wall Mount

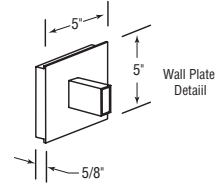
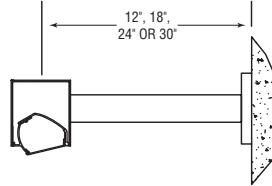
(LED)

### Standard Fixture Lengths and Mounting Centers

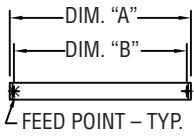
#### Wall Mount



FIXTURE LENGTH	MOUNTING CENTERS		
	DIM. "A"	DIM. "B"	DIM. "C"
48 7/8"	34 7/8"	—	—
95 11/16"	81 11/16"	—	—
142 1/2"	128 1/2"	64 1/4"	—



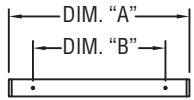
#### Cable Mount



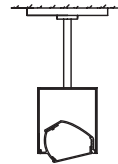
FIXTURE LENGTH	MTG. CENTERS
	DIM. "B"
48 7/8"	45 7/8"
95 11/16"	92 11/16"
142 1/2"	139 1/2"



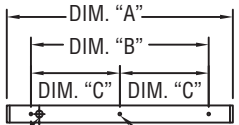
#### Stem Mount



FIXTURE LENGTH	MTG. CENTERS
	DIM. "B"
48 7/8"	34 7/8"
95 11/16"	81 11/16"
142 1/2"	128 1/2"



#### Direct Ceiling Mount



FIXTURE LENGTH	MOUNTING CENTERS		
	DIM. "A"	DIM. "B"	DIM. "C"
48 7/8"	34 7/8"	—	—
95 11/16"	81 11/16"	—	—
142 1/2"	128 1/2"	64 1/4"	—



3" (TYP) FEED POINT — TYP.  
 2" DIA. HOLE  
 5/16" DIA. MTG. HOLE — TYP.

PAL RESERVES THE RIGHT TO CHANGE PRODUCT DESIGN AND SPECIFICATIONS. CONTACT FACTORY FOR MOST RECENT PRODUCT INFORMATION.

