

DESCRIPTION

The Metroline LED luminaire combines form with function to create a dayform appearance that complements the city landscape. High efficiency LED optics enable visibility tuned to street or pathway environments.

Catalog #		Type
Project		
Comments		Date
Prepared by		

SPECIFICATION FEATURES

Construction

HOUSING: Stainless steel external hardware and the tempered, low-copper content, cast aluminum housing resist salt corrosion for extended life and preservation of finish. Retained driver service door assists maintenance. **POLE:** The pole was constructed specifically to support the luminaire to withstand wind conditions of 110 mph with 1.3 gust factors. **BASE:** Decorative transformer base complements the urban space while providing vandal-resistant access to sidewalk power feed points. Cast aluminum decorative two-piece pole transition has no external hardware to resist vandalism.

Optics

DISTRIBUTION: Type II, III and IV high efficiency AccuLED Optics™ system is standard, featuring a patented design that maximizes light collection and directional distribution onto the application region. Each optical lens is precision manufactured via injection molding then precisely assembled and sealed into the IP66 board module. **LEDs:** High output LEDs, exceeds 70% lumen maintenance at >230,000 hours offered standard in 4000K (+/-275K) CCT and >70 CRI (Optional color temperature available).

Electrical

DRIVER: LED drivers are potted and heat sunk for prolonged life. All LED LightBARS™ and drivers are easily replaced by use of quick disconnects for ease of wiring. Standard drivers feature electronic universal voltage (120-277V 50/60Hz), greater than 0.9 power factor, less than 20% harmonic distortion and feature ambient temperature range of +40°C down to minimum starting temperature of -30°C. Shipped standard with proprietary circuit module designed to withstand 10kV of transient line surge. Dimming drivers are standard. Upward looking NEMA photocontrol standard, with 3-PIN, unless other control option is selected.

Mounting

Tenon mounted on a 2-3/8" O.D. 6-1/4" vertical pipe tenon. Secured by three 1/2" setscrews and an additional securing bolt.

Finish

Housing, pole and decorative transformer case is finished in five-stage super premium TGIC polyester powder coat paint, 2.5 mil nominal thickness for superior protection against fade and wear. LightBAR™ cover plates are standard white. Standard colors include black, bronze, grey, white, dark platinum and graphite metallic. RAL and custom color matches available.

Warranty

Five-year warranty.



MLN METROLINE

LED

ARCHITECTURAL LUMINAIRE



CERTIFICATION DATA

IP66 Rated Optical
UL 1598 Listed
3G Vibration Tested (Single)
1.5G Vibration Tested (Twin)
ISO 9001
RoHS Compliant

ENERGY DATA

>0.9 Power Factor
<20% Total Harmonic Distortion
120-277V 50/60Hz
-35°C - 40°C Ambient Temperature Rating

EPA

Effective Projected Area (Sq. Ft.):
Single: .90
Twin: 1.8

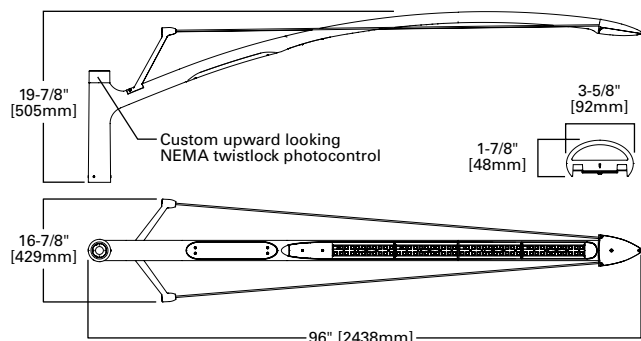
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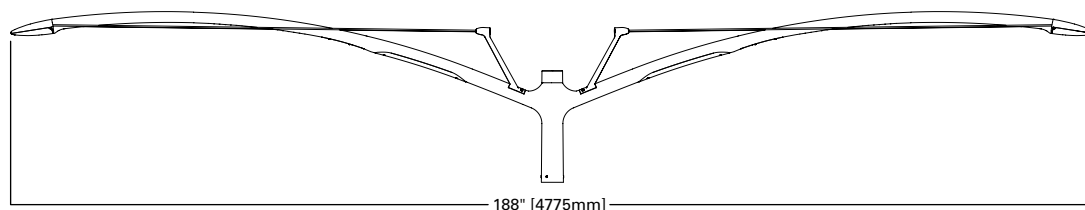
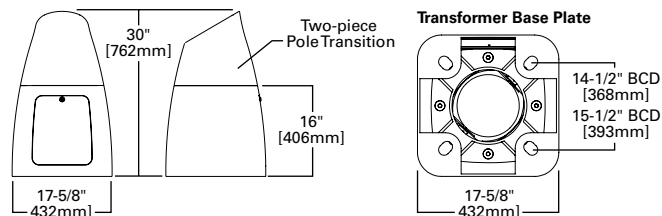
Approximate Net Weight:
Single: 36 lbs. (16.36 kgs.)
Twin: 68 lbs. (30.90 kgs.)

Volume (cu. ft.):

Single: 10.5
Twin: 22.6

DIMENSIONS



TWIN MOUNT (MLN2)**DECORATIVE TRANSFORMER BASE WITH SHROUD (OPTIONAL)****POWER AND LUMENS**

Lumen Package (350mA)		B1	B2	B3
Power Wattage (Watts)		42W	71W	94W
Current (mA) @ 120V		450	660	870
Current (mA) @ 208V		260	380	500
Current (mA) @ 240V		220	330	440
Current (mA) @ 277V		190	280	380
Type II	Lumens	5,139	8,617	11,112
	BUG Rating	B1-U1-G1	B2-U1-G2	B3-U1-G3
Type III	Lumens	5,590	9,372	12,086
	BUG Rating	B2-U1-G2	B2-U1-G2	B3-U2-G3
Type IV	Lumens	5,568	9,336	12,039
	BUG Rating	B1-U1-G1	B2-U1-G2	B2-U2-G2

COLOR TEMPERATURE

Color Temperature (CCT)	CRI (Nominal)	Multiplier
4000	70	1.00
3000	70	0.89
3000	80	0.82

LUMEN MAINTENANCE

Ambient Temperature	TM-21 Lumen Maintenance (60,000 Hours)	Calculated L70 (Hours)
25°C	>91%	>230,000
40°C	>88%	>172,000
50°C	>86%	>142,000

NOTE: Maintenance data applies to the highest drive current and represents the worst case at the highest wattage.

LUMEN MULTIPLIER

Ambient Temperature	Lumen Multiplier
0°C	1.02
10°C	1.01
25°C	1.00
40°C	0.99
50°C	0.97

ORDERING INFORMATION

Sample Number: MLN-B3-D-U-T3-DP

Product Family ^{1, 2, 3}	Lumens ^{4, 5}	Driver	Voltage	Distribution	Controls
MLN=Metroline MLN2=Metroline Twin Mount	B1=Nominal 5,300 Lumens B2=Nominal 9,000 Lumens B3=Nominal 11,500 Lumens	D=Dimming (0-10V)	U=Universal (120-277V)	T2=Type II T3=Type III T4=Type IV	[BLANK]=Custom Upward Looking Photocontrol with 3-PIN NEMA Twistlock Receptacle Standard 4=Standard 3-PIN Photocontrol Receptacle ⁶ 4N7=NEMA 7-PIN Twistlock Photocontrol Receptacle ⁶
Options (Add as Suffix)		Color		Accessories (Order Separately) ¹⁰	
7030=70 CRI / 3000K CCT ⁷ 8030=80 CRI / 3000K CCT ⁷ HA=50°C High Ambient DIM=0-10V External Dimming Leads ⁸		AP=Grey BZ=Bronze BK=Black DP=Dark Platinum GM=Graphite Metallic WH=White CC=Custom Color ⁹		ML-PC-XX=Replacement Upward Facing NEMA Photocontrol LB/HSS-21=Field Installed House Side Shield	

NOTES:

- Customer is responsible to ensure product specifications and listings meet the needs and requirements of the application and where installed for use. Refer to our warranties and limitation of liability at www.cooperlighting.com for additional support information or contact factory as needed.
- Customer is responsible for engineering analysis to confirm pole and fixture compatibility for all applications. Refer to our white paper WP513001EN for additional information.
- Fixture slips over standard 2-3/8" x 6-1/4" tenon.
- Lumens are nominal. See lumen table for more information.
- Standard 4000K CCT, nominal 70 CRI. For MLN2 (twin mount) double lumens.
- Photocontrol not included.
- Extended lead times apply. Use dedicated IES files when performing layouts. These files are published on the Metroline luminaire product page on the website.
- Not available for B1 or B2 lumen package.
- Custom and RAL color matching available upon request. Consult your lighting representative at Cooper Lighting Solutions for more information.
- Replace XX with color designation.