CML SQUARE

ARCHITECTURAL AREA LUMINAIRE

250-1000W
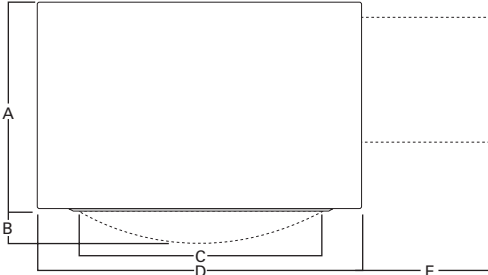**MH/HPS**

DARK SKY COMPLIANT **FCO** Full Cutoff

NOTE: In all flat glass configurations only.

STREETWORKS™   IP55 RATED

Fixture	A	B	C	D	E
CML (in.)	14	3 1/2	19 1/4	22	6 or 14
(mm)	356	89	489	559	152 or 356

HOUSING
Formed aluminum housing has interior-welded seams for structural integrity and is finished in premium TGIC polyester powder coat paint. U.L. listed and CSA certified for wet locations. IP55 rated.

BALLAST TRAY
Ballast tray is securely mounted and inter-locked to housing interior for cooler operation. Tray features toolless removal capability for ease of maintenance and replacement.

BALLAST
Long-life core and coil ballast.

REFLECTOR
Standard rotatable and interchangeable optics allow for an easy field retrofit with respective sag and flat glass doors for areas with restrictive lighting ordinances such as "Dark Sky".

DOOR
Formed aluminum door has heavy-duty hinges, captive retaining screws and is finished in premium TGIC polyester powder coat paint.

LENS
Convex tempered glass lens or flat glass.

GASKET
Standard one-piece extruded EPDM gasket ensures a bug proof installation and is backed by IP55 rating.

ORDERING INFORMATION

SAMPLE NUMBER: CML40MN3VSGBKL

PRODUCT FAMILY [1]	LAMP WATTAGE [2]	LAMP TYPE	VOLTAGE [5]	DISTRIBUTION	LENS TYPE	COLORS (add as suffix/must specify) [9]	OPTIONS + ACCESSORIES (See Below)
CML=CML Square	**25**=250W **40**=400W **75**=750W [3] **91**=1000W [4]	**M**=Metal Halide **S**=High Pressure Sodium	**2**=120V **0**=208V **4**=240V **7**=277V **8**=480V **9**=347V **W**=Multi-Tap wired 120V **N**=Multi-Tap wired 277V **V**=Multi-Tap wired 240V	**1F**=Type I MCO (Horizontal) **2F**=Type II MCO (Horizontal) **2S**=Type II Segmented (Horizontal) [6] **3F**=Type III MCO (Horizontal) **3S**=Type III Segmented (Horizontal) [6] **4S**=Type IV Segmented (Horizontal) [6] **5S**=Type V Segmented (Horizontal) [6] **FT**=Forward Throw (Horizontal) **AR**=Area Round (Vertical) **AS**=Area Square (Vertical) **3V**=Type III (Vertical) **RW**=Rectangular Wide (Vertical) [7] **SL**=Spill Light Eliminator (Horizontal) [8]	**FG**=Flat Glass **SG**=Sag Glass	**WH**=White **BK**=Black **AP**=Grey **BZ**=Bronze **DP**=Dark Platinum **GM**=Graphite Metallic	

OPTIONS + ACCESSORIES [Must be listed in the order shown and separated by a dash]

OPTIONS (add as suffix)
1=Single Fuse (120, 277, or 347V)
2=Double Fuse(208, 240, or 480V)
EM=Quartz Restrike with Delay (Also Strikes at Cold Start)
4=NEMA Twistlock Photocontrol Receptacle
Q=Quartz Restrike (Hot Restrike Only)
HS=House Side Shield [10]
EHS=External House Side Shield
AIR=Arm Included for Round Pole [11]
AIS=Arm Included for Square Pole [11]
VS=Vandal Shield (Arm Mount Only, 400W Maximum)
L=Lamp Included

ACCESSORIES (order separately. add color as suffix)
MA1004-XX=14" Arm for Square Pole [12]
MA1005-XX=6" Arm for Square Pole
MA1006-XX=Direct Mount Kit for Square Pole
MA1007-XX=14" Arm for Round Pole [12]
MA1008-XX=6" Arm for Round Pole
MA1009-XX=Direct Mount Kit for Round Pole
MA1010-XX=Single-arm Tenon Adapter for 3 1/2" O.D. Tenon
MA1011-XX=2 @ 180° Tenon Adapter for 3 1/2" O.D. Tenon
MA1012-XX=3 @ 120° Tenon Adapter for 3 1/2" O.D. Tenon
MA1013-XX=4 @ 90° Tenon Adapter for 3 1/2" O.D. Tenon
MA1014-XX=2 @ 90° Tenon Adapter for 3 1/2" O.D. Tenon
MA1015-XX=2 @ 120° Tenon Adapter for 3 1/2" O.D. Tenon
MA1016-XX=3 @ 90° Tenon Adapter for 3 1/2" O.D. Tenon

MA1017-XX=Single-arm Tenon Adapter for 2 3/8" O.D. Tenon
MA1018-XX=2 @ 180° Tenon Adapter for 2 3/8" O.D. Tenon
MA1019-XX=3 @ 120° Tenon Adapter for 2 3/8" O.D. Tenon
MA1029-XX=Wall Mount Bracket with 10" Arm (Specify color)
MA1045-XX=4 @ 90° Tenon Adapter for 2 3/8" O.D. Tenon
MA1048-XX=2 @ 90° Tenon Adapter for 2 3/8" O.D. Tenon
MA1049-XX=3 @ 90° Tenon Adapter for 2 3/8" O.D. Tenon
EHS-XX=External House Side Shield
OA1016=Photocontrol–Multi-Tap
OA1027=Photocontrol–480V
OA1201=Photoelectric Control, 347V NEMA Type

OPTIONAL COLORS [Other finish colors available. Consult your Cooper Lighting representative]

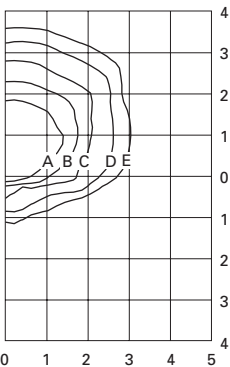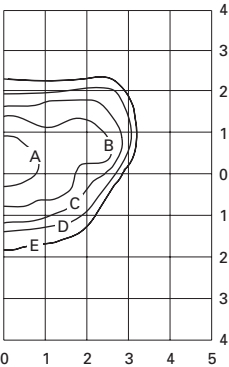| WH White	BK Black	AP Grey	BZ Bronze	DP Dark Platinum	GM Graphite Metallic

SHIPPING DATA
Approximate Net Weight:
79 lbs. (36 kgs.)

NOTES: 1 Arm not included. See options and accessories. **2** Mogul-base lamp socket. **3** 750W Pulse Start for vertical mount only. **4** Requires reduced envelope BT-37 lamp on Metal Halide or ED-37 on HPS. **5** Standard with CWA ballast. **6** Maximum wattage on segmented optical distributions is 400W. 400W Metal Halide lamp must use reduced envelope ED-28 lamp. **7** RW optic not available with flat glass. **8** Must use reduced envelope lamp. Not available in 1000W HPS. **9** Other finish colors available, including a full line of RAL color matches. Consult your Cooper Lighting Representative. **10** House side shields available on 2F, 3F, FT, 2S, 3S, 4S distributions only, and all vertically lamped optics when specified with sag lens. **11** Provided with 11 1/2" arm. **12** Required when mounting fixtures at 90° increments (Arm EPA 0.62).
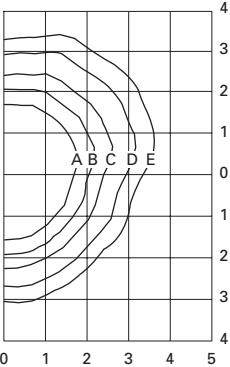
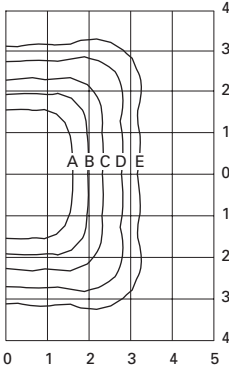## PHOTOMETRICS [Complete IES files available at www.cooperlighting.com]

CML40MSLF.IES
400-Watt MH
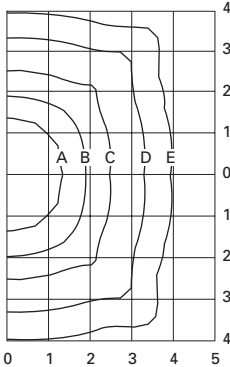36,000-Lumen Clear Lamp
SLE—Spill Light Eliminator Flat Glass

CML40S3FF.IES
400-Watt HPS
50,000-Lumen Clear Lamp
Type III Flat Glass

CML91M3VF.IES
1000-Watt MH
110,000-Lumen Clear Lamp
Type III Vertical Flat Glass

CML91MASF.IES
1000-Watt MH
110,000-Lumen Clear Lamp
Area Square Flat Glass

CML91MASS.IES
1000-Watt MH
110,000-Lumen Clear Lamp
Area Square Flat Glass

FOOTCANDLE TABLE

Select mounting height and read across for footcandle values of each isofootcandle line. Distance in units of mounting height.

Mounting Height	Footcandle Values for Isofootcandle Lines				
	A	B	C	D	E
CML40MSLF.IES					
30'	2.00	1.00	0.50	0.20	0.10
35'	1.46	0.73	0.37	0.15	0.07
40'	1.12	0.56	0.28	0.11	0.06
CML40S3FF.IES					
30'	2.00	1.00	0.50	0.25	0.10
35'	1.46	0.73	0.37	0.18	0.07
40'	1.12	0.56	0.28	0.14	0.06

FOOTCANDLE TABLE

Select mounting height and read across for footcandle values of each isofootcandle line. Distance in units of mounting height.

Mounting Height	Footcandle Values for Isofootcandle Lines				
	A	B	C	D	E
CML91M3VF.IES / CML91MASF.IES / CML91MASS.IES					
30'	3.50	2.00	1.00	0.50	0.20
35'	2.60	0.73	0.37	0.18	0.07
40'	2.00	1.00	0.50	0.20	0.10

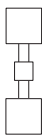## MOUNTING CONFIGURATIONS

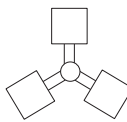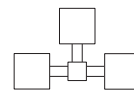Wall Mount
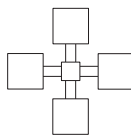
Arm Mount Single

Arm Mount 2 @ 180°

Arm Mount 2 @ 90°

Arm Mount 3 @ 120° (Round Pole Only)

Arm Mount 3 @ 90°

Arm Mount 4 @ 90°

E.P.A. TABLE

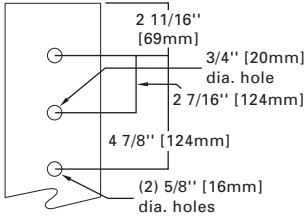|	DRILL PATTERN	SINGLE [W/ARM WHERE APPLICABLE]	2 @ 180°	2 @ 90°	3 @ 90°	3 @ 120°	4 @ 90°
CML	"M"	3.1	6.2	7.2	9.8	9.8	11.1

NOTE: 1 Assumes 14" arm for 90° and 120° mounting configurations, 6" for all else.

DRILLING PATTERN

TYPE "M"

2 11/16'' [69mm]

3/4'' [20mm] dia. hole

2 7/16'' [124mm]

4 7/8'' [124mm]

(2) 5/8'' [16mm] dia. holes

DARK SKY COMPLIANT [FULL CUTOFF PERFORMANCE]

SLE "SPILL LIGHT ELIMINATOR"