

DESCRIPTION

The M Series combines a low profile, surface modular design with the latest in energy-efficient technology. The dihedral recessed top design allows for cooler fixture operation. Other features include a die-formed housing, surface or stem mounting (single or continuous row), full seam -welded corners and a broad selection of attractive door frames.

The versatile modular M Series can be the perfect solution when used in applications such as commercial office spaces, schools, hospitals, and retail merchandising.

SPECIFICATION FEATURES

Construction

Housing die formed code gauge prime cold rolled steel. Smooth sides permit flush joint for continuous row mounting. Full seam welded corners. Dihedral recessed top design insures cooler ballast operation. Die formed captive lampholder bracket fully encloses wiring permitting easy lampholder replacement. Ballast covers easily removed without tools.

Electrical*

Ballasts are CBM/ETL Class "P" and are positively secured by mounting bolts. Pressure lock lampholders. UL/CUL listed. Suitable for damp locations.

Finish

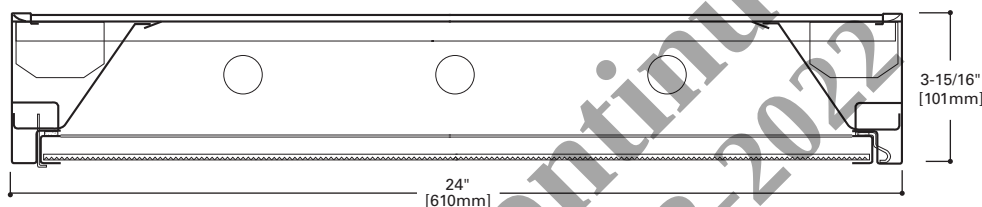
Painted after fabrication. Electrostatically applied baked white polyester powder enamel finish. Multistage cleaning cycle, iron phosphate coating with rust inhibitor. Conveyorized application and baking timing accurately controlled at an elevated temperature.

Hinging/Latching

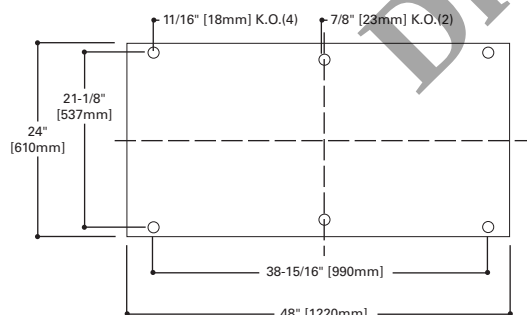
Positive cam action steel latches with baked white enamel finish. Safety lock T-hinges allow hinging and latching either side.

Frame/Shielding

Die formed, heavy gauge, flat steel door. Baked white enamel finish. Reinforced, mitered door frame corners. Door frame quadrasealed to prevent light spillage. Light stabilized 100% virgin acrylic prismatic shielding. Standard #12 pattern. Optional shielding available.



MOUNTING DATA

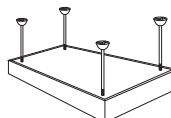


STEM MOUNTING METHODS

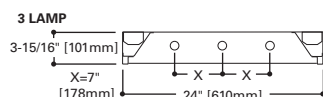
Consult Pre Sales Technical Support for Continuous Row Application

Fixture Application

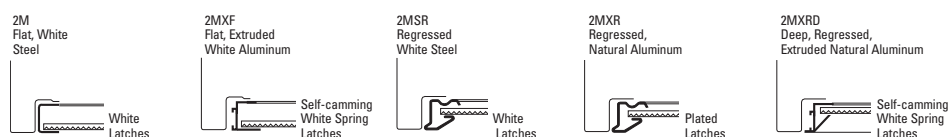
4 Point Suspension



LAMP CONFIGURATIONS



DOOR FRAMES



**2M
340
332**

**2' X 4' SURFACE
3 LAMPS**

Surface Modular

ENERGY DATA

Input Watts:

EB Ballast & STD Lamps

340 (110)

332 (91)

ES Ballast & STD Lamps

340 (136)

332 (108)

Luminaire Efficacy Rating

LER = FL-76

Catalog Number: 2M-332A

**Yearly Cost of 1000 lumens,
3000 hrs at .08 KWH = \$3.16**

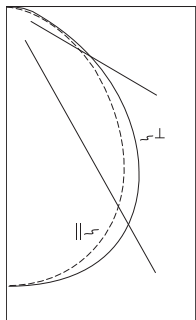
*Reference the lamp/ballast data in the Technical Section for specific lamp/ballast requirements.

LAMPS CONTAIN MERCURY. DISPOSE ACCORDING TO LOCAL, STATE OR FEDERAL LAWS

LINEAR DISCONNECT

Safe and convenient means of disconnecting power.

PHOTOMETRICS

**2M-332A**Energy Saving
BallastFO32T8/35K Lamps
2850 LumensSpacing criterion:
(H) 1.2 x mounting
height, (L) 1.3 x
mounting height

Efficiency 84.8%

Test Report:
2M332A.IES

LER = FL-76

Yearly Cost of 1000
lumens, 3000 hrs at
.08 KWH = \$3.16

Coefficients of Utilization

Effective floor cavity reflectance										20%											
rc	80%				70%				50%				30%				10%				0%
rw	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0			
RCR																					
0	101	101	101	101	99	99	99	99	94	94	94	90	90	90	87	87	87	85			
1	93	90	87	84	91	88	85	82	84	82	80	81	79	77	78	76	75	73			
2	86	80	75	70	84	78	74	70	75	71	68	73	69	66	70	67	65	63			
3	79	71	65	60	77	70	64	60	68	63	59	65	61	58	63	60	57	55			
4	73	64	57	52	71	63	57	52	61	55	51	59	54	50	57	53	50	48			
5	67	57	50	45	66	56	50	45	54	49	44	53	48	44	51	47	43	42			
6	62	52	44	39	61	51	44	39	49	43	39	48	43	38	47	42	38	36			
7	57	47	39	34	56	46	39	34	45	38	34	43	38	34	42	37	34	32			
8	53	42	35	30	52	41	35	30	40	34	30	39	34	30	38	33	29	28			
9	49	38	31	26	48	37	31	26	36	30	26	35	30	26	34	29	26	24			
10	45	34	28	23	44	34	27	23	33	27	23	32	27	23	31	26	23	21			

Zonal Lumen Summary

Zone	Lumens	%Lamp	%Fixture
0-30	2286	26.7	31.5
0-40	3692	43.2	50.9
0-60	6083	71.1	83.9
0-90	7254	84.8	100.0
0-180	7254	84.8	100.0

Typical VCP Percentages

Room Size (Ft.)	Height Along		Height Across	
	8.5'	10.0'	8.5'	10.0'
20 x 20	61	67	59	64
30 x 30	54	59	53	57
30 x 60	45	48	44	47
60 x 30	56	61	56	60
60 x 60	46	49	45	48

Candela

Angle	Along H	45°	Across L
0	2915	2915	2915
5	2900	2907	2919
10	2854	2878	2903
15	2782	2827	2873
20	2676	2747	2816
25	2536	2625	2724
30	2353	2455	2588
35	2122	2243	2387
40	1859	2003	2139
45	1593	1748	1863
50	1334	1474	1575
55	1082	1178	1286
60	849	870	995
65	653	589	736
70	501	400	544
75	384	313	407
80	270	237	290
85	149	135	161
90	0	0	0

ORDERING INFORMATION

SAMPLE NUMBER: 2M-332A-120V-EB81-U

2=2' Width Series M=2' Width	Number of Lamps⁽¹⁾ 3 lamps (Not Included)	Voltage⁽²⁾ 120=120V 277=277V 347=347V UNV=Universal Voltage (120-277V ⁽³⁾)	Ballast Type⁽⁴⁾ ER8 = T8 Electronic Program Rapid Start. Total Harmonic Distortion < 10% No. of Ballast 1, 2 or 3 EB8 = T8 Electronic Instant Start. Total Harmonic Distortion < 10% No. of Ballast 1, 2 or 3 EB8 / PLUS = T8 Electronic Instant Start. High Ballast Factor > 1.13. Total Harmonic Distortion < 20% No. of Ballast 1, 2 or 3 EB2 = T12 Electronic Rapid Start. No. of Ballast 1 or 2	Options VRS =Vandal Resistant ⁽⁷⁾ EKO =End Plate with 7/8" KO (Required for Continuous Row Mounting) RLS =Rotor-Lock Socket (T8 Lamps Only) BE =Black Exterior ⁽⁸⁾ (See options & accessories)	Packaging U=Unit Pack
Standard =Flat White Steel Door (Leave Blank) FA =Flat White Extruded Aluminum Door RA =3/8" Regressed White Extruded Aluminum Door FAN =Flat Natural Extruded Aluminum Door RAN =3/8" Regressed Natural Extruded Aluminum Door FAB =Flat Black Extruded Aluminum Door RAB =3/8" Regressed Black Extruded Aluminum Door	Wattage (Length) 40=40W T12 (48") 32=32W T8 (48")	Options GL =Single Element Fuse GM =Double Element Fuse Emergency =EM Installed			
Lens A =#12 Pattern Acrylic (Standard) A125 =#12 Pattern Acrylic (.125" Thick) A19/156 =#19 Pattern Acrylic (.156" Thick) IMA 48 =Injection Molded Acrylic (.150" Thick) PB1S =Silver Parabolic Louver (1/2" x 1/2" x 1/2") DA =Dropped Dish - Matte White Acrylic (Additional Shielding Media Available)					

NOTES: ⁽¹⁾ 1' x 4' 3-lamp, 2' x 4' 3-lamp have side mounted ballasts covers. ⁽²⁾ Products also available in non-US voltages and frequencies for international markets.
⁽³⁾ Not available when specifying emergencies, voltage must be specific. ⁽⁴⁾ 2' x 2', 2' x 4' require 4-point suspension, side mounted ballast recommended. ⁽⁵⁾ 1' x 4',
 2' x 2', 2' x 4' fixtures. ⁽⁶⁾ For continuous row mounting 7/8" KOs furnished in end of fixture, specify EKO. ⁽⁷⁾ Available on flat doors only. ⁽⁸⁾ Requires a side mounted
 ballast.

Specifications & dimensions subject to change without notice. Consult your Cooper Lighting Solutions Representative for availability and ordering information.

SHIPPING DATA

Catalog No.	Wt.
2M-332A	36 lbs.