

Scaled data based on original data using

LM-41-14 Approved Method for Photometric Testing Of Indoor Fluorescent Luminaires

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: METALUX

Report Number: 132P114

Luminaire Tested: **2M-332A**

Issue Date: 3/3/2020



**Test Information**

Test Method: LM-41-14  
Report Number: 132P114  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 2M-332A  
Description: 2 X 4 Surface Modular luminaire with a  
.095 pattern 12 acrylic lens  
Light Source: Three - FO32T8/35K - 2850 Lumens ea. - 32 Watts ea.  
Ballast/Driver: Magnetek B332I120RH Electronic - L.O.B.F. = 88.9

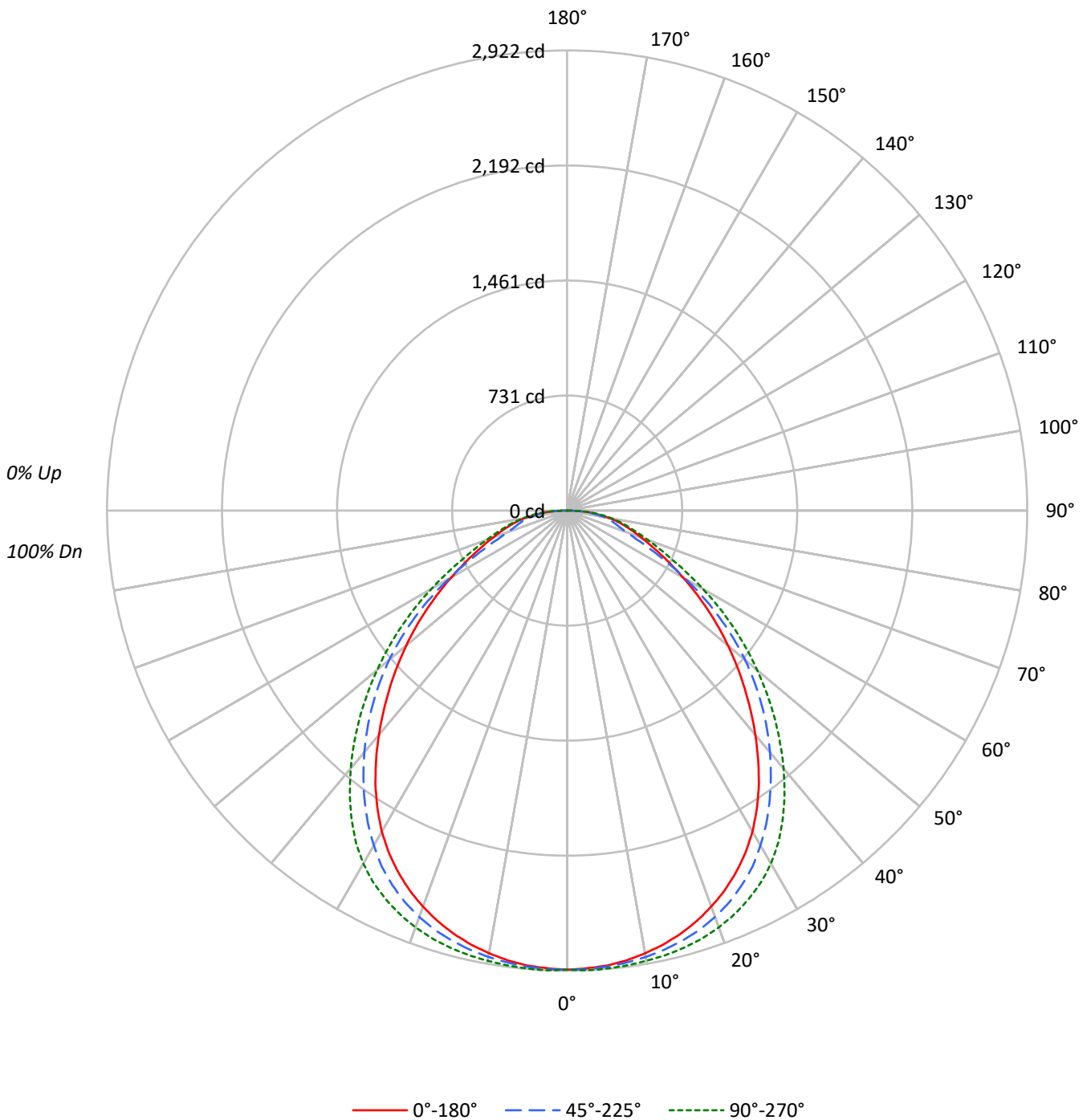
**Summary**

Lumens per Lamp: 2850 (3 lamps)  
Luminaire Lumens: 7247.7 lumens  
Efficiency: 84.8%  
Efficacy: 85.3 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.3 / 1.32  
Luminous Opening: Rectangular (W 1.79' x L: 3.81' x H: 0')  
CIE Type: Direct

Input Watts (W): 85  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT

TEST NUMBER: 132P114  
CATALOG NUMBER: 2M-332A

### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20					20					20					20					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	50	30	10	0	
RCR																						
0	101	101	101	101	99	99	99	99	94	94	94	90	90	90	86	86	86	85				
1	93	89	85	82	90	87	84	81	83	81	78	80	78	76	77	75	74	72				
2	85	78	73	68	83	77	72	67	74	70	66	71	68	64	68	66	63	61				
3	78	69	63	58	76	68	62	57	66	60	56	63	59	55	61	57	54	52				
4	72	62	55	49	70	61	54	49	59	53	48	57	52	48	55	51	47	45				
5	66	56	48	43	64	55	48	43	53	47	42	51	46	42	50	45	41	40				
6	61	50	43	38	60	50	43	38	48	42	37	47	41	37	45	41	37	35				
7	57	46	39	34	55	45	38	34	44	38	33	43	37	33	42	37	33	31				
8	53	42	35	30	52	41	35	30	40	34	30	39	34	30	38	33	30	28				
9	50	39	32	27	48	38	32	27	37	31	27	36	31	27	35	30	27	25				
10	47	36	29	25	46	35	29	25	34	29	25	34	28	25	33	28	24	23				

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	4607	4607	4607
5°	4601	4612	4631
10°	4580	4618	4659
15°	4552	4625	4701
20°	4500	4620	4736
25°	4422	4577	4750
30°	4294	4480	4723
35°	4094	4327	4605
40°	3835	4132	4413
45°	3560	3907	4164
50°	3280	3624	3872
55°	2981	3246	3543
60°	2683	2750	3145
65°	2442	2203	2752
70°	2315	1848	2514
75°	2345	1911	2485
80°	2457	2157	2639
85°	2702	2448	2919



TEST NUMBER: 132P114  
 CATALOG NUMBER: 2M-332A

**ZONAL LUMENS:**

**CANDELA DISTRIBUTION:**

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	276.5	3.8	3.2	0°	2915	2915	2915	2915	2915	
10°-20°	797.7	11.0	9.3	5°	2900	2899	2907	2912	2919	275
20°-30°	1208.2	16.7	14.1	15°	2782	2793	2827	2859	2873	784
30°-40°	1403.7	19.4	16.4	25°	2536	2562	2625	2693	2724	1166
40°-50°	1339.3	18.5	15.7	35°	2122	2157	2243	2342	2387	1323
50°-60°	1048.7	14.5	12.3	45°	1593	1644	1748	1838	1863	1229
60°-70°	646.5	8.9	7.6	55°	1082	1101	1178	1232	1286	970
70°-80°	376.0	5.2	4.4	65°	653	611	589	665	736	654
80°-90°	151.0	2.1	1.8	75°	384	348	313	359	407	406
90°-100°	0.0	0.0	0.0	85°	149	145	135	144	161	145
100°-110°	0.0	0.0	0.0	90°	0	0	0	0	0	11
110°-120°	0.0	0.0	0.0	95°	0	0	0	0	0	0
120°-130°	0.0	0.0	0.0	105°	0	0	0	0	0	0
130°-140°	0.0	0.0	0.0	115°	0	0	0	0	0	0
140°-150°	0.0	0.0	0.0	125°	0	0	0	0	0	0
150°-160°	0.0	0.0	0.0	135°	0	0	0	0	0	0
160°-170°	0.0	0.0	0.0	145°	0	0	0	0	0	0
170°-180°	0.0	0.0	0.0	155°	0	0	0	0	0	0
0°-30°	2282.4	31.5	26.7	165°	0	0	0	0	0	0
0°-40°	3686.2	50.9	43.1	175°	0	0	0	0	0	0
0°-60°	6074.1	83.8	71.0	180°	0	0	0	0	0	0
0°-90°	7247.7	100.0	84.8							
90°-120°	0.0	0.0	0.0							
90°-150°	0.0	0.0	0.0							
90°-180°	0.0	0.0	0.0							
0°-180°	7247.7	100.0	84.8							



TEST NUMBER: 132P114  
 CATALOG NUMBER: 2M-332A

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2915	2915	2915	2915	2915
2.5°	2909	2907	2914	2917	2922
5°	2900	2899	2907	2912	2919
7.5°	2881	2882	2895	2905	2913
10°	2854	2859	2878	2895	2903
12.5°	2822	2829	2856	2879	2891
15°	2782	2793	2827	2859	2873
17.5°	2734	2749	2792	2829	2849
20°	2676	2692	2747	2792	2816
22.5°	2612	2634	2691	2746	2775
25°	2536	2562	2625	2693	2724
27.5°	2451	2476	2549	2625	2664
30°	2353	2381	2455	2544	2588
32.5°	2242	2274	2354	2450	2497
35°	2122	2157	2243	2342	2387
37.5°	1993	2036	2125	2228	2267
40°	1859	1908	2003	2105	2139
42.5°	1726	1777	1878	1975	2002
45°	1593	1644	1748	1838	1863
47.5°	1462	1508	1615	1693	1720
50°	1334	1373	1474	1542	1575
52.5°	1208	1236	1329	1387	1431
55°	1082	1101	1178	1232	1286
57.5°	963	967	1025	1078	1140
60°	849	838	870	929	995
62.5°	746	718	722	788	859
65°	653	611	589	665	736
67.5°	572	523	480	562	632
70°	501	454	400	480	544
72.5°	440	397	349	415	471
75°	384	348	313	359	407
77.5°	329	301	279	307	349
80°	270	253	237	256	290
82.5°	210	202	188	203	227
85°	149	145	135	144	161
87.5°	80	80	75	77	88
90°	0	0	0	0	0
92.5°	0	0	0	0	0
95°	0	0	0	0	0
97.5°	0	0	0	0	0
100°	0	0	0	0	0
102.5°	0	0	0	0	0
105°	0	0	0	0	0
107.5°	0	0	0	0	0
110°	0	0	0	0	0



TEST NUMBER: 132P114  
CATALOG NUMBER: 2M-332A

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	0	0	0	0	0
115°	0	0	0	0	0
117.5°	0	0	0	0	0
120°	0	0	0	0	0
122.5°	0	0	0	0	0
125°	0	0	0	0	0
127.5°	0	0	0	0	0
130°	0	0	0	0	0
132.5°	0	0	0	0	0
135°	0	0	0	0	0
137.5°	0	0	0	0	0
140°	0	0	0	0	0
142.5°	0	0	0	0	0
145°	0	0	0	0	0
147.5°	0	0	0	0	0
150°	0	0	0	0	0
152.5°	0	0	0	0	0
155°	0	0	0	0	0
157.5°	0	0	0	0	0
160°	0	0	0	0	0
162.5°	0	0	0	0	0
165°	0	0	0	0	0
167.5°	0	0	0	0	0
170°	0	0	0	0	0
172.5°	0	0	0	0	0
175°	0	0	0	0	0
177.5°	0	0	0	0	0
180°	0	0	0	0	0

(END OF REPORT)