

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: 197P103

Luminaire Tested: **2P2GX-217S24MI-PAF**

Issue Date: 3/3/2020



**Test Information**

Test Method: LM-41-14  
Report Number: 197P103  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 2P2GX-217S24MI-PAF  
Description: 2 X 2 Recessed Troffer with a 2" deep 8 cell specular  
low iridescent parabolic louver  
Light Source: Two - FO17T8/35K - 1350 Lumens ea. - 17 Watts ea.  
Ballast/Driver: Magnetek B232I120RH Electronic - L.O.B.F. = 91.7

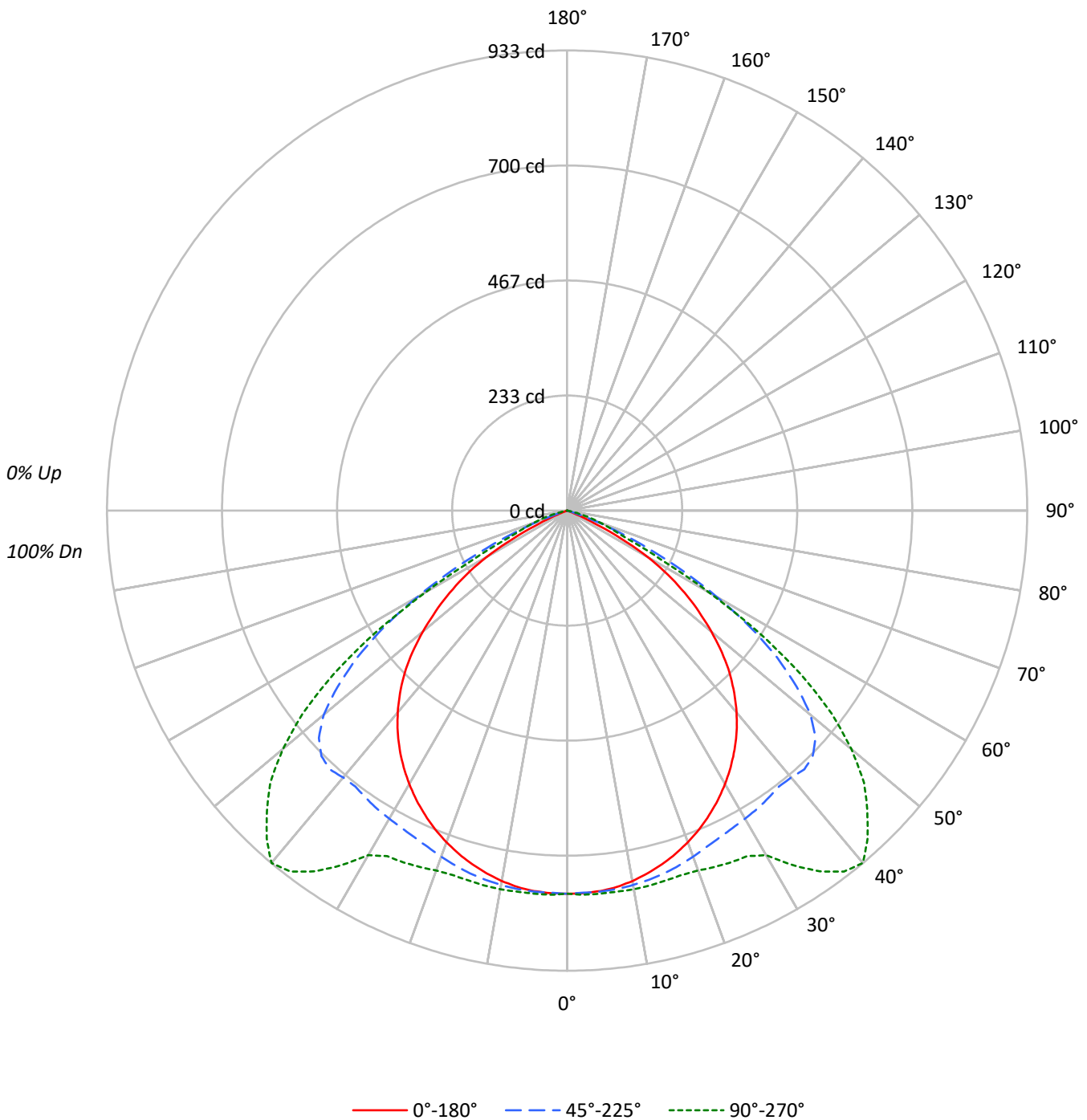
**Summary**

Lumens per Lamp: 1350 (2 lamps)  
Luminaire Lumens: 2184.2 lumens  
Efficiency: 80.9%  
Efficacy: 63.7 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.76 / 1.61  
Luminous Opening: Rectangular (W 1.74' x L: 1.76' x H: 0')  
CIE Type: Direct

Input Watts (W): 34.3  
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

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### Luminous Intensity Polar Plot





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

RF	20									20									20									20									
RC	80									70									30									10									0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0													
RCR																																					
0	96	96	96	96	94	94	94	94	90	90	90	86	86	86	83	83	83	81						81													
1	90	87	84	81	88	85	82	80	81	79	77	78	77	75	75	74	73	71						71													
2	83	77	72	68	81	75	71	67	73	69	66	70	67	64	68	65	63	61						61													
3	76	68	62	58	74	67	62	57	65	60	56	62	59	55	60	57	54	53						53													
4	70	61	54	49	68	60	54	49	58	52	48	56	51	48	54	50	47	45						45													
5	64	54	48	43	62	53	47	42	52	46	42	50	45	41	49	44	41	39						39													
6	59	49	42	37	58	48	42	37	47	41	37	45	40	36	44	40	36	34						34													
7	55	44	37	33	53	44	37	33	42	37	32	41	36	32	40	35	32	30						30													
8	51	40	34	29	50	40	33	29	39	33	29	38	32	29	37	32	28	27						27													
9	47	37	30	26	46	36	30	26	35	30	26	35	29	26	34	29	25	24						24													
10	44	34	28	23	43	33	27	23	33	27	23	32	27	23	31	26	23	22						22													

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

	0°	45°	90°
0°	2731	2731	2731
5°	2732	2736	2750
10°	2722	2751	2782
15°	2702	2770	2824
20°	2677	2793	2904
25°	2643	2836	3051
30°	2599	2927	3274
35°	2540	3052	3832
40°	2452	3242	4280
45°	2317	3501	4278
50°	2087	3524	4113
55°	1781	3184	3546
60°	1339	2472	2335
65°	511	1493	1081
70°	40	476	719
75°	26	42	378
80°	20	30	26
85°	20	28	24



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**ZONAL LUMENS:**

**CANDELA DISTRIBUTION:**

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	73.9	3.4	2.7	0°	777	777	777	777	777	
10°-20°	215.1	9.8	8.0	5°	774	774	775	778	780	74
20°-30°	339.6	15.5	12.6	15°	742	749	761	773	776	209
30°-40°	456.3	20.9	16.9	25°	681	699	731	774	787	314
40°-50°	521.4	23.9	19.3	35°	592	627	711	835	893	369
50°-60°	416.6	19.1	15.4	45°	466	531	704	828	861	357
60°-70°	146.1	6.7	5.4	55°	291	381	520	567	579	258
70°-80°	14.6	0.7	0.5	65°	62	110	180	144	130	74
80°-90°	0.7	0.0	0.0	75°	2	2	3	22	28	2
90°-100°	0.0	0.0	0.0	85°	0	1	1	1	1	1
100°-110°	0.0	0.0	0.0	90°	0	0	0	0	0	0
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°	628.5	28.8	23.3	165°	0	0	0	0	0	0
0°-40°	1084.9	49.7	40.2	175°	0	0	0	0	0	0
0°-60°	2022.8	92.6	74.9	180°	0	0	0	0	0	0
0°-90°	2184.2	100.0	80.9							
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°	2184.2	100.0	80.9							



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	776.9	776.9	776.9	776.9	776.9
2.5°	776.5	775.9	775.6	777.4	779.6
5°	774.2	774.1	775.4	778.3	779.5
7.5°	769.9	770.6	774.0	777.4	779.2
10°	762.6	765.4	770.9	776.8	779.5
12.5°	753.3	757.7	766.6	775.9	778.6
15°	742.5	748.7	761.3	773.2	776.0
17.5°	729.9	738.2	754.5	770.1	774.6
20°	715.7	726.1	746.7	768.6	776.5
22.5°	699.5	713.2	738.3	770.0	782.0
25°	681.4	698.7	731.3	773.9	786.7
27.5°	661.8	683.0	725.7	776.1	789.9
30°	640.3	665.9	721.3	778.7	806.6
32.5°	616.9	647.4	717.1	797.3	852.6
35°	591.9	627.1	711.3	834.8	893.0
37.5°	564.6	605.4	705.4	861.4	922.4
40°	534.4	582.2	706.6	874.3	932.7
42.5°	501.5	557.6	711.8	867.5	901.8
45°	466.2	530.6	704.3	827.6	860.6
47.5°	425.7	500.6	682.8	780.4	816.6
50°	381.7	465.3	644.5	725.5	752.2
52.5°	336.7	425.4	586.7	652.0	676.2
55°	290.7	380.8	519.6	566.6	578.6
57.5°	242.6	329.6	441.0	462.4	461.8
60°	190.5	269.6	351.7	348.5	332.1
62.5°	123.0	196.4	262.1	234.2	213.2
65°	61.5	110.0	179.5	144.0	130.0
67.5°	20.1	45.8	106.8	89.2	95.7
70°	3.9	9.5	46.3	63.3	70.0
72.5°	2.7	3.2	14.4	40.8	47.6
75°	1.9	2.3	3.1	21.6	27.8
77.5°	1.4	1.7	2.0	7.3	9.6
80°	1.0	1.2	1.5	1.6	1.3
82.5°	0.8	0.9	1.0	1.0	0.9
85°	0.5	0.6	0.7	0.7	0.6
87.5°	0.3	0.3	0.3	0.3	0.3
90°	0.0	0.0	0.0	0.0	0.0
92.5°	0.0	0.0	0.0	0.0	0.0
95°	0.0	0.0	0.0	0.0	0.0
97.5°	0.0	0.0	0.0	0.0	0.0
100°	0.0	0.0	0.0	0.0	0.0
102.5°	0.0	0.0	0.0	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0
107.5°	0.0	0.0	0.0	0.0	0.0
110°	0.0	0.0	0.0	0.0	0.0



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	0.0	0.0	0.0	0.0
115°	0.0	0.0	0.0	0.0	0.0
117.5°	0.0	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.0	0.0	0.0
122.5°	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0
127.5°	0.0	0.0	0.0	0.0	0.0
130°	0.0	0.0	0.0	0.0	0.0
132.5°	0.0	0.0	0.0	0.0	0.0
135°	0.0	0.0	0.0	0.0	0.0
137.5°	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0
142.5°	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)