

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: 104P226

Luminaire Tested: **2P2GX-432S613I-PAF**

Issue Date: 3/3/2020



**Test Information**

Test Method: LM-41-14  
Report Number: 104P226  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 2P2GX-432S613I-PAF  
Description: 2 X 4 Recessed Convertible Body Troffer with a  
2" deep 78 cell semi-specular parabolic louver.  
Light Source: Four-FO32T8/35K - 2850 Lumens ea. - 32 Watts ea.  
Ballast/Driver: Two-Triad B232I120RH Electronic; L.O.B.F. = 87.16,87.78

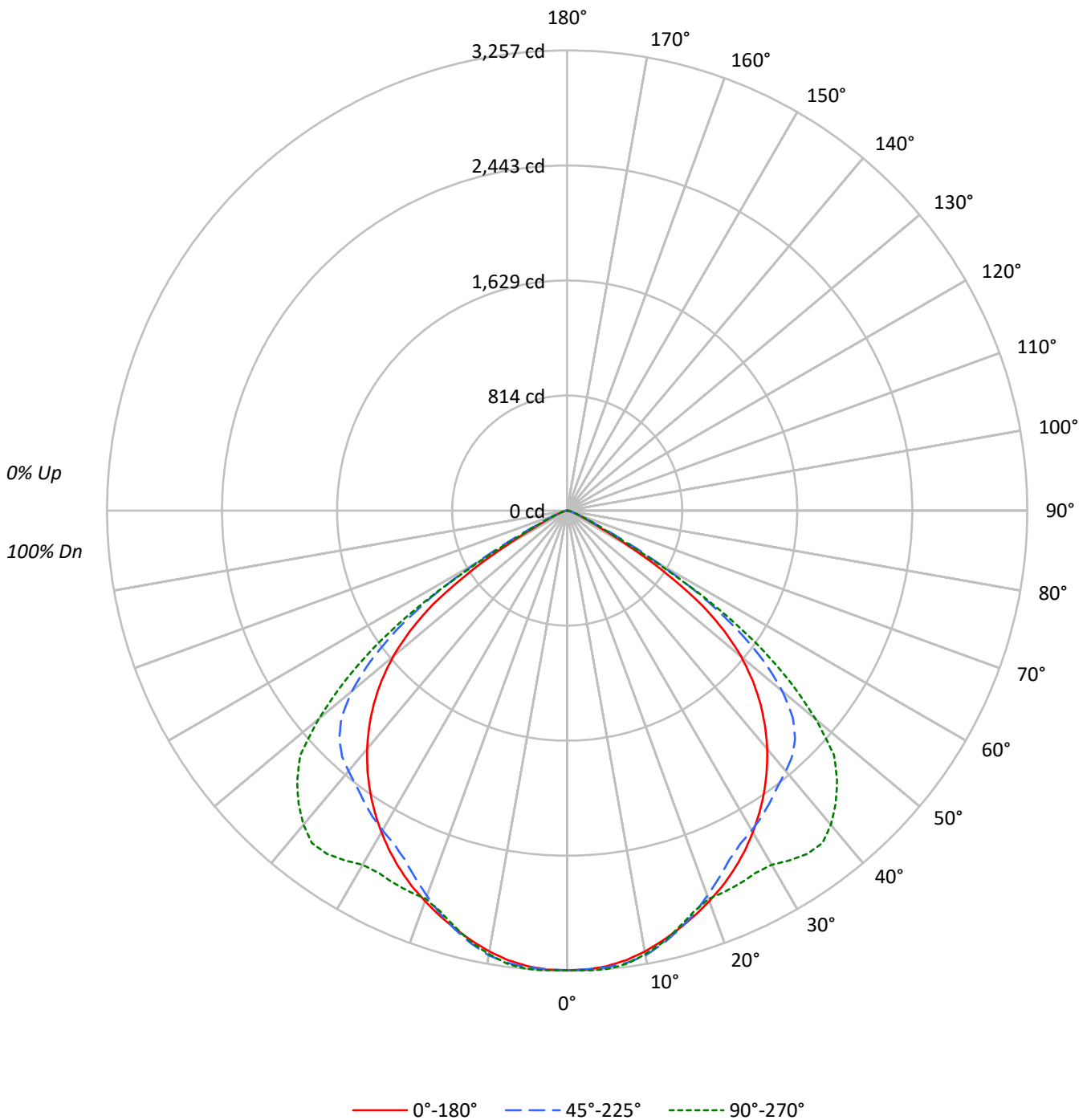
**Summary**

Lumens per Lamp: 2850 (4 lamps)  
Luminaire Lumens: 7337.7 lumens  
Efficiency: 64.4%  
Efficacy: 64.3 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.4 / 1.42  
Luminous Opening: Rectangular (W 1.73' x L: 3.75' x H: 0')  
CIE Type: Direct

Input Watts (W): 114.2  
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				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	77	77	77	77	75	75	75	75	72	72	72		68	68	68		66	66	66	64
1	72	69	67	65	70	68	66	64	65	64	62		63	62	60		61	60	59	57
2	66	62	59	56	65	61	58	55	59	56	54		57	54	52		55	53	51	50
3	61	56	51	48	60	55	51	47	53	49	46		51	48	46		50	47	45	44
4	57	50	45	41	55	49	45	41	48	44	40		46	43	40		45	42	39	38
5	52	45	40	36	51	44	39	36	43	39	35		42	38	35		41	37	35	34
6	48	41	35	32	47	40	35	32	39	35	31		38	34	31		37	34	31	30
7	45	37	32	28	44	37	32	28	36	31	28		35	31	28		34	30	28	26
8	42	34	29	25	41	33	29	25	33	28	25		32	28	25		31	27	25	24
9	39	31	26	23	38	31	26	23	30	26	23		29	25	23		29	25	22	21
10	37	29	24	21	36	28	24	21	28	23	21		27	23	20		27	23	20	19

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

	0°	45°	90°
0°	5400	5400	5400
5°	5392	5407	5427
10°	5340	5387	5374
15°	5264	5272	5248
20°	5195	5126	5167
25°	5128	4987	5326
30°	5039	5010	5549
35°	4926	5086	6008
40°	4774	5216	6291
45°	4542	5355	6343
50°	4153	5134	5929
55°	3360	4266	4706
60°	1670	2463	2224
65°	597	797	738
70°	311	374	379
75°	186	224	218
80°	124	143	134
85°	57	76	57



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**ZONAL LUMENS:**

**CANDELA DISTRIBUTION:**

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	307.9	4.2	2.7	0°	3253	3253	3253	3253	3253	
10°-20°	864.2	11.8	7.6	5°	3236	3239	3245	3250	3257	307
20°-30°	1294.0	17.6	11.4	15°	3063	3083	3068	3058	3054	864
30°-40°	1623.7	22.1	14.2	25°	2800	2793	2723	2837	2908	1289
40°-50°	1731.0	23.6	15.2	35°	2431	2395	2510	2781	2965	1518
50°-60°	1219.6	16.6	10.7	45°	1935	1940	2281	2511	2702	1484
60°-70°	252.4	3.4	2.2	55°	1161	1281	1474	1508	1626	993
70°-80°	39.8	0.5	0.3	65°	152	187	203	198	188	195
80°-90°	5.1	0.1	0.0	75°	29	33	35	35	34	34
90°-100°	0.0	0.0	0.0	85°	3	4	4	3	3	5
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°	2466.1	33.6	21.6	165°	0	0	0	0	0	0
0°-40°	4089.8	55.7	35.9	175°	0	0	0	0	0	0
0°-60°	7040.4	95.9	61.8	180°	0	0	0	0	0	0
0°-90°	7337.7	100.0	64.4							
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°	7337.7	100.0	64.4							



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3253	3253	3253	3253	3253
2.5°	3252	3249	3249	3252	3257
5°	3236	3239	3245	3250	3257
7.5°	3209	3217	3229	3233	3236
10°	3168	3183	3196	3189	3188
12.5°	3119	3137	3138	3132	3130
15°	3063	3083	3068	3058	3054
17.5°	3005	3022	2991	2977	2977
20°	2941	2953	2902	2897	2925
22.5°	2875	2876	2812	2856	2919
25°	2800	2793	2723	2837	2908
27.5°	2718	2703	2657	2807	2890
30°	2629	2607	2614	2774	2895
32.5°	2534	2504	2566	2768	2934
35°	2431	2395	2510	2781	2965
37.5°	2321	2283	2453	2777	2967
40°	2203	2169	2407	2732	2903
42.5°	2074	2054	2358	2635	2813
45°	1935	1940	2281	2511	2702
47.5°	1781	1818	2165	2360	2561
50°	1608	1677	1988	2160	2296
52.5°	1406	1507	1759	1853	1986
55°	1161	1281	1474	1508	1626
57.5°	845	985	1132	1117	1181
60°	503	639	742	709	670
62.5°	266	347	406	371	316
65°	152	187	203	198	188
67.5°	96	114	118	123	120
70°	64	74	77	79	78
72.5°	43	49	52	53	51
75°	29	33	35	35	34
77.5°	20	22	24	23	22
80°	13	14	15	15	14
82.5°	7	8	9	8	7
85°	3	4	4	3	3
87.5°	1	0	0	0	0
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



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**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)