

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: 109P169

Luminaire Tested: **2P2GX-217W23P-PAF**

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: 109P169
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 2P2GX-217W23P-PAF
Description: 2 X 2 Recessed Convertible Body Troffer with
a painted white 6 cell parabolic louver.
Light Source: Two-FO17T8/35K - 1325 Lumens ea. - 17 Watts ea.
Ballast/Driver: Triad B232I120RH Electronic; L.O.B.F. = 87.16

Summary

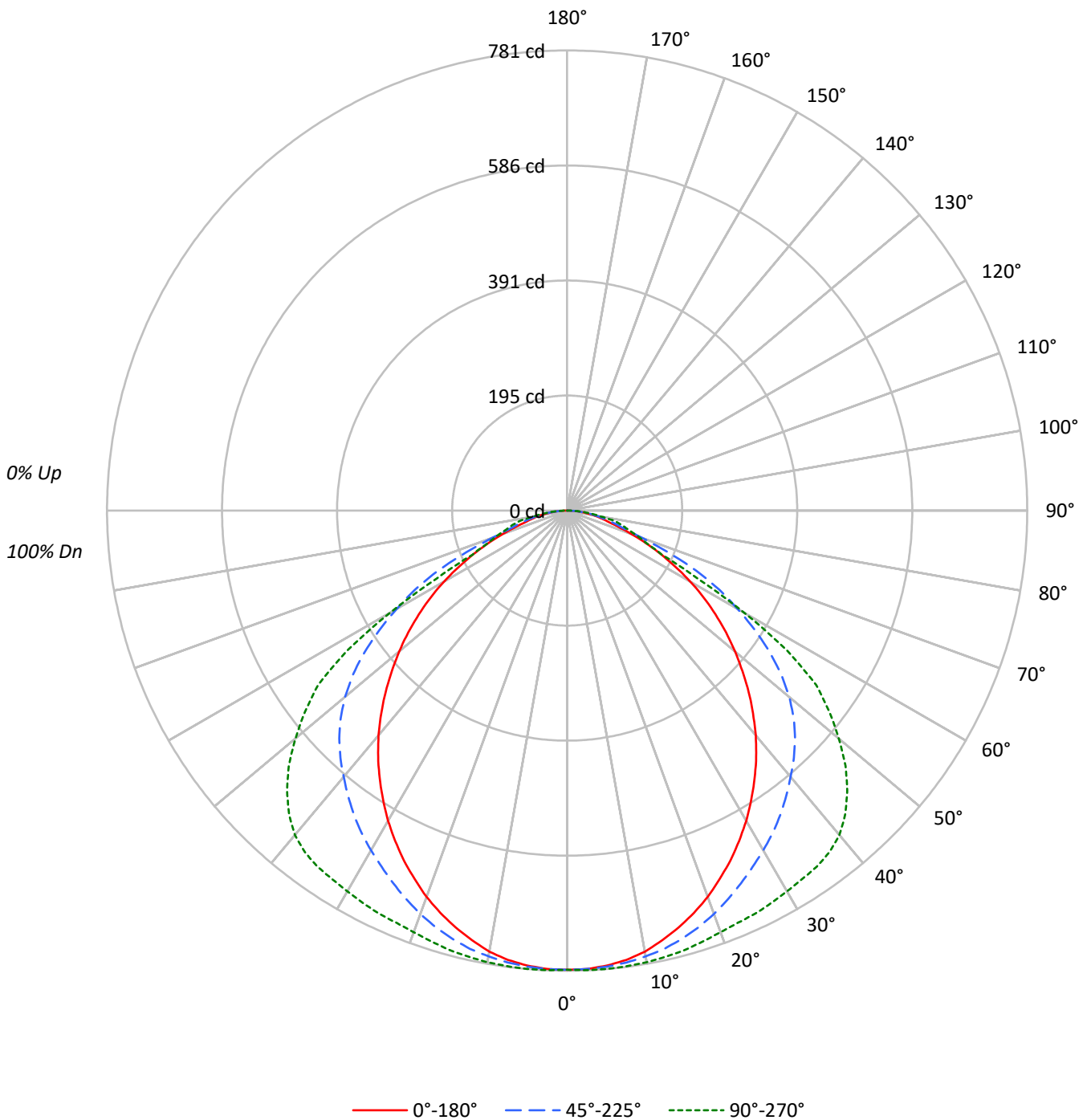
Lumens per Lamp: 1325 (2 lamps)
Luminaire Lumens: 2123.2 lumens
Efficiency: 80.1%
Efficacy: 63.4 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.45 / 1.42
Luminous Opening: Rectangular (W 1.74' x L: 1.75' x H: 0')
CIE Type: Direct

Input Watts (W): 33.5
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									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	50	30	10	0													
RCR																																					
0	95	95	95	95	93	93	93	93	89	89	89	85	85	85	82	82	82	80																			
1	88	84	81	78	86	82	80	77	79	77	75	76	74	72	73	72	70	69																			
2	80	74	69	65	78	73	68	64	70	66	62	67	64	61	65	62	60	58																			
3	73	65	59	54	71	64	58	54	62	57	53	60	55	52	58	54	51	49																			
4	67	58	51	46	66	57	51	46	55	50	45	53	48	45	51	47	44	42																			
5	62	52	45	40	60	51	45	40	49	44	39	48	43	39	46	42	38	37																			
6	57	47	40	35	56	46	39	35	45	39	34	43	38	34	42	37	34	32																			
7	53	42	36	31	52	42	35	31	41	35	30	39	34	30	38	34	30	28																			
8	49	39	32	27	48	38	32	27	37	31	27	36	31	27	35	30	27	25																			
9	46	35	29	25	45	35	29	25	34	28	24	33	28	24	32	28	24	23																			
10	43	33	26	22	42	32	26	22	32	26	22	31	26	22	30	25	22	21																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2755	2755	2755
5°	2751	2757	2771
10°	2729	2758	2794
15°	2681	2755	2826
20°	2625	2741	2865
25°	2557	2723	2945
30°	2482	2718	3046
35°	2394	2722	3186
40°	2299	2724	3318
45°	2179	2735	3362
50°	2046	2706	3312
55°	1894	2590	3182
60°	1708	2363	2455
65°	1471	2023	1485
70°	1199	1377	1322
75°	964	1113	1321
80°	920	1016	1177
85°	824	921	1071



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	73.9	3.5	2.8	0°	779	779	779	779	779	
10°-20°	212.3	10.0	8.0	5°	775	775	777	779	781	74
20°-30°	324.1	15.3	12.2	15°	732	738	752	767	772	206
30°-40°	399.6	18.8	15.1	25°	655	669	698	738	755	302
40°-50°	422.2	19.9	15.9	35°	555	576	631	702	738	347
50°-60°	365.1	17.2	13.8	45°	436	464	547	631	672	336
60°-70°	209.6	9.9	7.9	55°	307	343	420	477	516	275
70°-80°	90.3	4.3	3.4	65°	176	210	242	193	178	175
80°-90°	26.0	1.2	1.0	75°	71	76	82	89	97	79
90°-100°	0.0	0.0	0.0	85°	20	21	23	25	26	22
100°-110°	0.0	0.0	0.0	90°	0	0	0	0	0	1
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°	610.3	28.7	23.0	165°	0	0	0	0	0	0
0°-40°	1009.9	47.6	38.1	175°	0	0	0	0	0	0
0°-60°	1797.3	84.6	67.8	180°	0	0	0	0	0	0
0°-90°	2123.2	100.0	80.1							
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°	2123.2	100.0	80.1							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	779.3	779.3	779.3	779.3	779.3
2.5°	778.7	778.0	778.6	779.7	780.7
5°	775.1	775.4	776.8	779.1	780.8
7.5°	769.2	770.2	773.5	777.4	779.9
10°	760.1	762.0	768.2	775.3	778.3
12.5°	746.8	751.0	761.8	772.0	775.5
15°	732.4	738.1	752.5	767.1	772.1
17.5°	715.8	723.5	741.5	760.0	766.6
20°	697.7	706.8	728.6	752.4	761.3
22.5°	676.7	688.8	713.8	745.0	757.3
25°	655.4	668.9	698.1	738.4	754.9
27.5°	632.0	647.5	681.7	730.2	750.8
30°	607.9	625.2	665.7	720.9	746.1
32.5°	581.6	601.2	649.2	711.4	741.8
35°	554.7	575.9	630.7	701.9	738.2
37.5°	527.1	549.3	610.7	690.2	731.0
40°	498.0	521.7	590.1	676.4	718.9
42.5°	466.9	493.1	569.6	657.3	698.8
45°	435.8	463.9	547.0	631.4	672.3
47.5°	403.6	434.8	521.4	599.0	640.8
50°	371.9	404.7	492.0	562.6	602.1
52.5°	339.9	373.9	458.5	521.0	560.8
55°	307.3	342.7	420.2	477.2	516.2
57.5°	275.0	310.9	378.1	427.7	443.4
60°	241.5	279.1	334.2	356.1	347.2
62.5°	207.9	245.5	291.3	271.1	249.9
65°	175.8	210.3	241.8	192.9	177.5
67.5°	144.9	173.4	185.2	145.4	147.9
70°	116.0	136.9	133.2	123.8	127.9
72.5°	90.2	103.7	100.2	105.4	109.1
75°	70.6	76.3	81.5	89.0	96.7
77.5°	57.8	60.4	65.0	73.8	83.9
80°	45.2	47.1	49.9	56.4	57.8
82.5°	32.7	34.1	36.2	39.6	41.4
85°	20.3	21.2	22.7	24.9	26.4
87.5°	8.9	9.3	9.9	11.0	11.7
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)