

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: 108P143

Luminaire Tested: **2GC-440A-PAF**

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: 108P143
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 2GC-440A-PAF
Description: 2 X 4 Recessed Convertible Body Luminaire
with a .095 pattern 12 acrylic lens.
Light Source: Four - F40SPX35/RS/WM - 2900 Lumens ea. - 34 Watts ea.
Ballast/Driver: Two - Advance R-2S40-1-TP Mark III - L.O.B.F. = 88.73

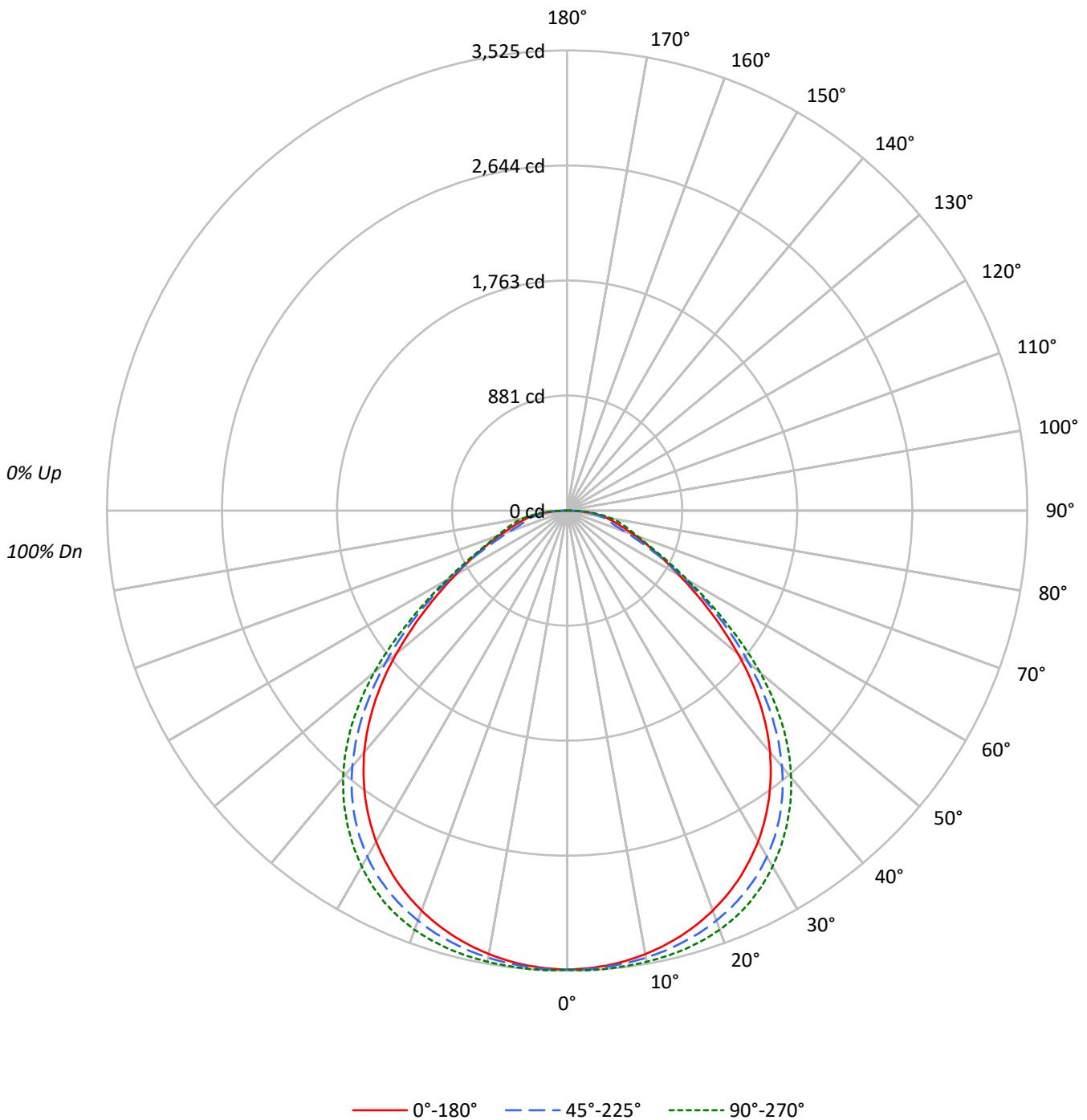
Summary

Lumens per Lamp: 2900 (4 lamps)
Luminaire Lumens: 8839.1 lumens
Efficiency: 76.2%
Efficacy: 61.6 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.31 / 1.35
Luminous Opening: Rectangular (W 1.79' x L: 3.81' x H: 0')
CIE Type: Direct

Input Watts (W): 143.5
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					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	91	91	91	91	89	89	89	89	85	85	85	81	81	81	78	78	78	76				
1	83	80	77	74	81	78	76	73	75	73	71	72	70	69	69	68	67	65				
2	77	71	66	62	75	69	65	61	67	63	60	64	61	58	62	59	57	55				
3	70	63	57	52	68	62	56	52	59	55	51	57	53	50	55	52	49	48				
4	65	56	50	45	63	55	49	45	53	48	44	51	47	43	50	46	43	41				
5	60	50	44	39	58	50	43	39	48	43	38	46	42	38	45	41	38	36				
6	55	46	39	34	54	45	39	34	44	38	34	42	37	34	41	37	33	32				
7	51	41	35	31	50	41	35	30	40	34	30	39	34	30	38	33	30	28				
8	48	38	32	27	47	37	31	27	36	31	27	35	31	27	35	30	27	25				
9	45	35	29	25	44	34	29	25	34	28	25	33	28	24	32	28	24	23				
10	42	32	26	22	41	32	26	22	31	26	22	30	26	22	30	25	22	21				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5542	5542	5542
5°	5533	5551	5573
10°	5520	5565	5616
15°	5501	5586	5677
20°	5468	5606	5732
25°	5414	5607	5757
30°	5328	5571	5728
35°	5184	5471	5648
40°	4976	5270	5492
45°	4658	4934	5210
50°	4190	4457	4731
55°	3637	3876	4052
60°	3126	3237	3356
65°	2755	2625	2845
70°	2511	2165	2640
75°	2448	2070	2770
80°	2686	2423	3122
85°	2893	2766	3435



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	333.9	3.8	2.9	0°	3517	3517	3517	3517	3517	
10°-20°	967.1	10.9	8.3	5°	3498	3501	3509	3514	3523	332
20°-30°	1481.5	16.8	12.8	15°	3372	3388	3424	3459	3480	951
30°-40°	1764.2	20.0	15.2	25°	3114	3151	3225	3283	3311	1433
40°-50°	1697.3	19.2	14.6	35°	2695	2751	2844	2903	2936	1682
50°-60°	1256.7	14.2	10.8	45°	2090	2137	2214	2286	2338	1603
60°-70°	741.0	8.4	6.4	55°	1324	1347	1411	1445	1475	1191
70°-80°	424.8	4.8	3.7	65°	739	714	704	762	763	742
80°-90°	172.7	2.0	1.5	75°	402	387	340	432	455	432
90°-100°	0.0	0.0	0.0	85°	160	151	153	182	190	158
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°	2782.5	31.5	24.0	165°	0	0	0	0	0	0
0°-40°	4546.7	51.4	39.2	175°	0	0	0	0	0	0
0°-60°	7500.7	84.9	64.7	180°	0	0	0	0	0	0
0°-90°	8839.1	100.0	76.2							
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°	8839.1	100.0	76.2							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3517	3517	3517	3517	3517
2.5°	3510	3512	3517	3518	3525
5°	3498	3501	3509	3514	3523
7.5°	3478	3483	3495	3507	3517
10°	3450	3458	3478	3497	3510
12.5°	3415	3427	3455	3481	3497
15°	3372	3388	3424	3459	3480
17.5°	3321	3341	3388	3431	3453
20°	3261	3286	3343	3393	3418
22.5°	3192	3223	3289	3344	3371
25°	3114	3151	3225	3283	3311
27.5°	3025	3069	3151	3208	3237
30°	2928	2975	3062	3120	3148
32.5°	2816	2870	2960	3018	3048
35°	2695	2751	2844	2903	2936
37.5°	2562	2620	2711	2774	2811
40°	2419	2474	2562	2629	2670
42.5°	2260	2313	2395	2466	2513
45°	2090	2137	2214	2286	2338
47.5°	1905	1945	2019	2090	2143
50°	1709	1747	1818	1880	1930
52.5°	1513	1545	1613	1660	1702
55°	1324	1347	1411	1445	1475
57.5°	1148	1161	1214	1242	1261
60°	992	991	1027	1057	1065
62.5°	857	841	856	896	899
65°	739	714	704	762	763
67.5°	636	608	574	654	656
70°	545	521	470	568	573
72.5°	466	449	392	496	509
75°	402	387	340	432	455
77.5°	348	330	303	372	403
80°	296	272	267	314	344
82.5°	233	212	218	253	273
85°	160	151	153	182	190
87.5°	83	83	80	99	101
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)