

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: 163P104

Luminaire Tested: **GC2048-440A-PAF**

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: 163P104
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: GC2048-440A-PAF
Description: 20" X 48" Recessed Convertible Body Troffer
with a .095 pattern 12 acrylic lens.
Light Source: Four-F40CW - 3050 Lumens ea. - 40 Watts ea.
Ballast/Driver: Two-Advance R-2S40-1-TP

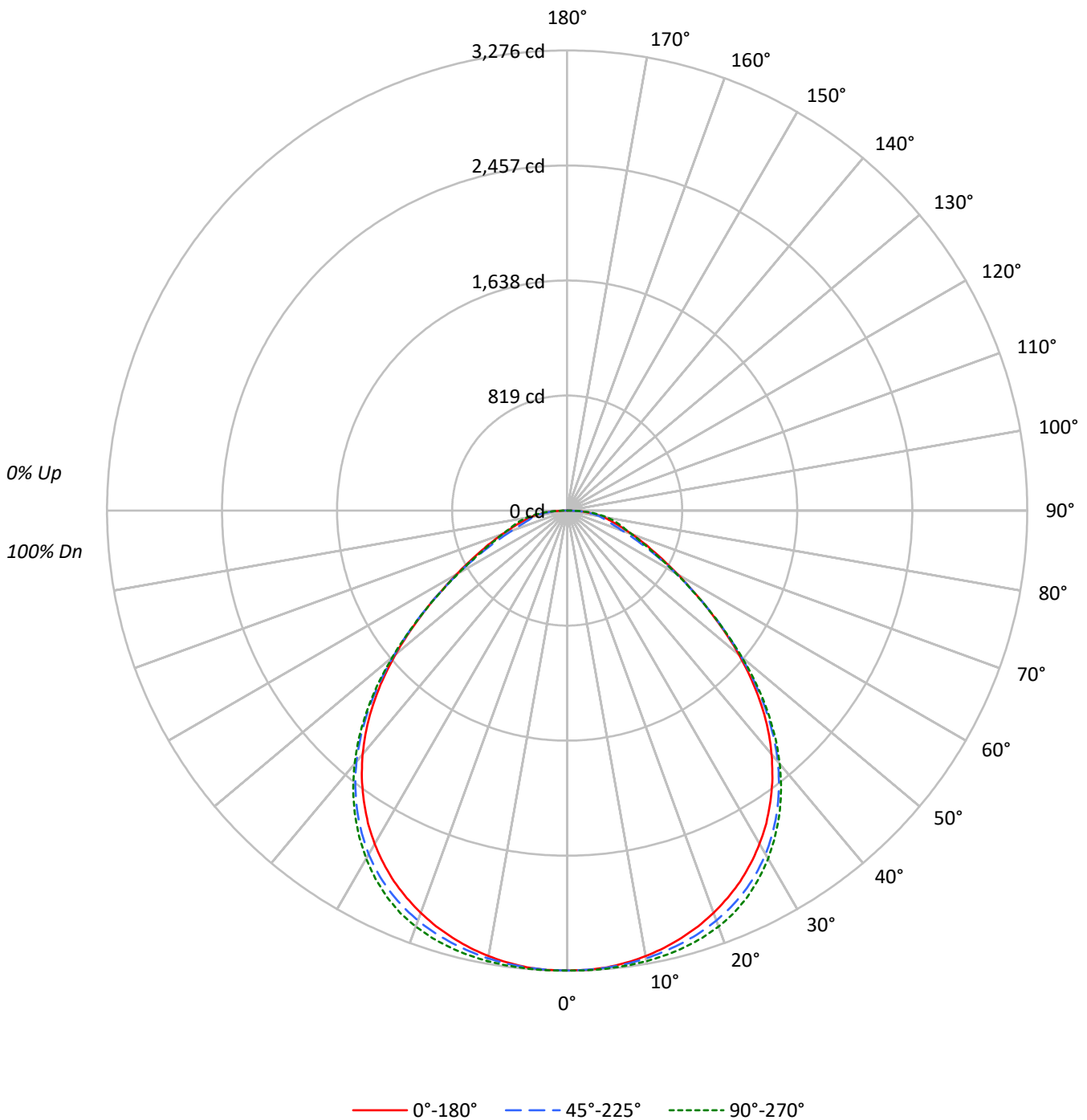
Summary

Lumens per Lamp: 3050 (4 lamps)
Luminaire Lumens: 7999.7 lumens
Efficiency: 65.6%
Efficacy: 49.4 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.28 / 1.33
Luminous Opening: Rectangular (W 1.45' x L: 3.81' x H: 0')
CIE Type: Direct

Input Watts (W): 161.9
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	50	30	10	0		
RCR																										
0	78	78	78	78	76	76	76	76	73	73	73	70	70	70	67	67	67	66					66			
1	72	69	66	64	70	68	65	63	65	63	61	62	61	59	60	59	57	56					56			
2	66	61	57	53	64	60	56	53	57	54	52	55	53	50	53	51	49	48					48			
3	61	54	49	45	59	53	49	45	51	47	44	49	46	43	48	45	43	41					41			
4	56	48	43	39	54	48	43	39	46	42	38	45	41	38	43	40	37	36					36			
5	52	44	38	34	50	43	38	34	42	37	33	40	36	33	39	36	33	31					31			
6	48	40	34	30	47	39	34	30	38	33	30	37	33	29	36	32	29	28					28			
7	44	36	31	27	43	35	30	27	34	30	26	34	29	26	33	29	26	25					25			
8	41	33	28	24	40	33	27	24	32	27	24	31	27	24	30	26	23	22					22			
9	39	30	25	22	38	30	25	22	29	25	21	29	24	21	28	24	21	20					20			
10	36	28	23	20	36	28	23	20	27	23	20	26	22	19	26	22	19	18					18			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6361	6361	6361
5°	6366	6370	6383
10°	6354	6386	6425
15°	6334	6406	6477
20°	6302	6422	6517
25°	6247	6410	6506
30°	6147	6340	6418
35°	5986	6183	6252
40°	5744	5922	5973
45°	5372	5490	5542
50°	4833	4887	4909
55°	4153	4180	4166
60°	3532	3474	3474
65°	3080	2846	2970
70°	2778	2369	2766
75°	2657	2252	2905
80°	2898	2629	3301
85°	3165	3076	3723



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	310.7	3.9	2.5	0°	3274	3274	3274	3274	3274	
10°-20°	898.9	11.2	7.4	5°	3264	3260	3266	3266	3273	310
20°-30°	1371.6	17.1	11.2	15°	3149	3157	3185	3207	3220	889
30°-40°	1616.2	20.2	13.2	25°	2914	2937	2990	3022	3035	1341
40°-50°	1527.0	19.1	12.5	35°	2524	2557	2607	2622	2636	1575
50°-60°	1103.4	13.8	9.0	45°	1955	1975	1998	2004	2017	1500
60°-70°	646.8	8.1	5.3	55°	1226	1227	1234	1218	1230	1104
70°-80°	372.1	4.7	3.0	65°	670	634	619	648	646	673
80°-90°	152.8	1.9	1.3	75°	354	341	300	379	387	382
90°-100°	0.0	0.0	0.0	85°	142	133	138	163	167	140
100°-110°	0.0	0.0	0.0	90°	0	0	0	0	0	10
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°	2581.3	32.3	21.2	165°	0	0	0	0	0	0
0°-40°	4197.5	52.5	34.4	175°	0	0	0	0	0	0
0°-60°	6827.9	85.4	56.0	180°	0	0	0	0	0	0
0°-90°	7999.7	100.0	65.6							
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°	7999.7	100.0	65.6							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3274	3274	3274	3274	3274
2.5°	3273	3269	3272	3270	3276
5°	3264	3260	3266	3266	3273
7.5°	3246	3244	3254	3258	3267
10°	3221	3222	3237	3247	3257
12.5°	3189	3192	3214	3230	3242
15°	3149	3157	3185	3207	3220
17.5°	3103	3114	3150	3176	3191
20°	3048	3063	3106	3136	3152
22.5°	2985	3005	3053	3086	3102
25°	2914	2937	2990	3022	3035
27.5°	2832	2860	2914	2943	2955
30°	2740	2772	2826	2850	2861
32.5°	2639	2673	2723	2743	2754
35°	2524	2557	2607	2622	2636
37.5°	2401	2432	2478	2490	2502
40°	2265	2294	2335	2343	2355
42.5°	2117	2142	2172	2182	2194
45°	1955	1975	1998	2004	2017
47.5°	1781	1796	1810	1813	1826
50°	1599	1607	1617	1613	1624
52.5°	1410	1414	1423	1412	1424
55°	1226	1227	1234	1218	1230
57.5°	1058	1051	1056	1043	1051
60°	909	890	894	890	894
62.5°	780	751	747	759	758
65°	670	634	619	648	646
67.5°	574	536	508	561	558
70°	489	457	417	491	487
72.5°	416	394	349	432	431
75°	354	341	300	379	387
77.5°	303	292	266	327	343
80°	259	242	235	277	295
82.5°	207	188	193	223	238
85°	142	133	138	163	167
87.5°	74	73	73	88	89
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)