

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: 163P105

Luminaire Tested: **GCASF2048-440A-PAF**

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: 163P105
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: GCASF2048-440A-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

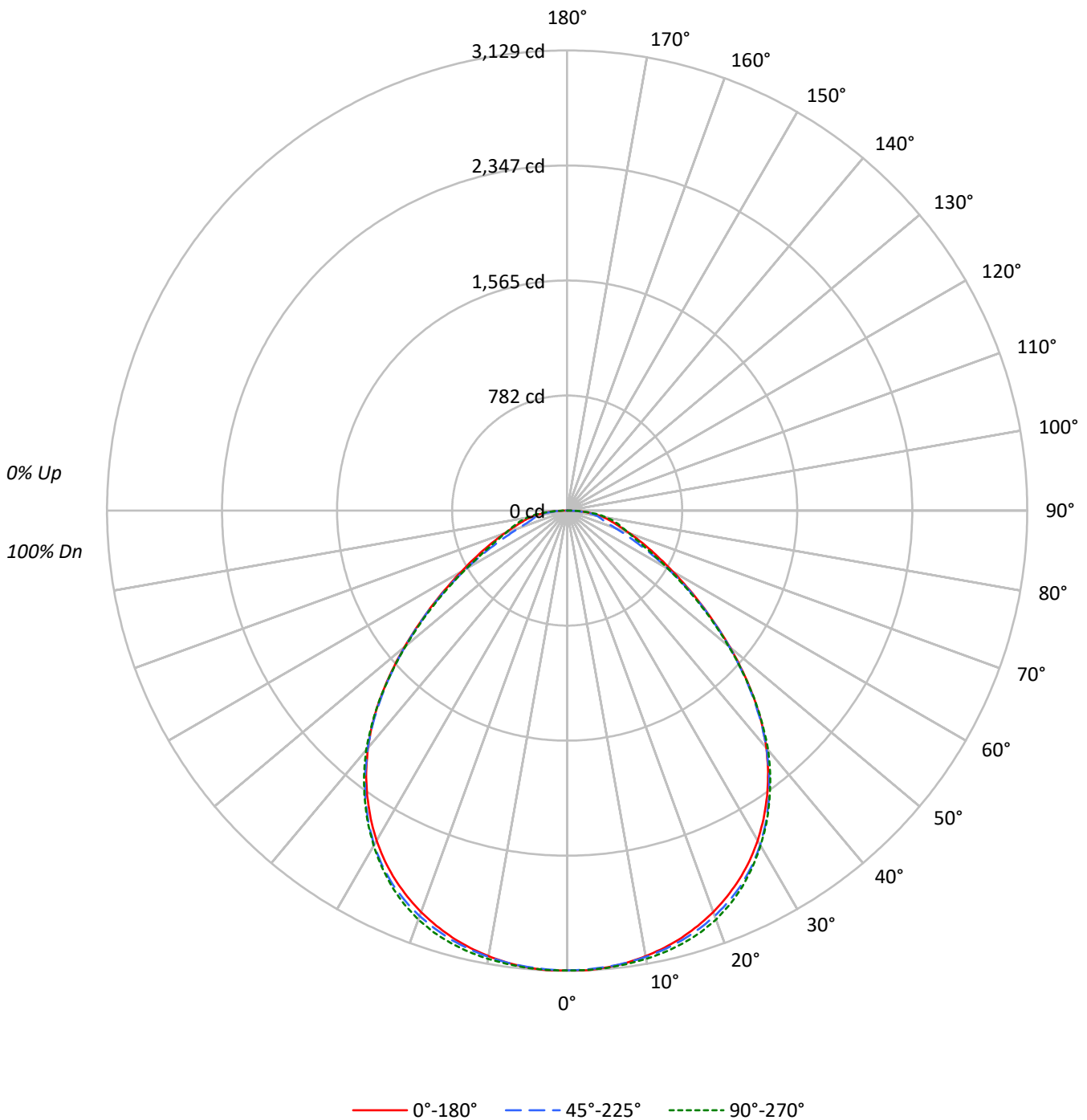
Lumens per Lamp: 3050 (4 lamps)
Luminaire Lumens: 7326.2 lumens
Efficiency: 60.1%
Efficacy: 45.3 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.24 / 1.3
Luminous Opening: Rectangular (W 1.35' x L: 3.7' x H: 0')
CIE Type: Direct

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	0
RCR																		
0	71	71	71	71	70	70	70	70	67	67	67	64	64	64	61	61	61	60
1	66	63	61	59	64	62	60	58	59	58	56	57	56	54	55	54	53	52
2	61	56	52	49	59	55	51	49	53	50	47	51	48	46	49	47	45	44
3	56	50	45	42	54	49	45	41	47	44	41	46	43	40	44	41	39	38
4	51	45	40	36	50	44	39	36	42	38	35	41	38	35	40	37	34	33
5	47	40	35	31	46	40	35	31	38	34	31	37	34	31	36	33	30	29
6	44	36	31	28	43	36	31	28	35	31	27	34	30	27	33	30	27	26
7	41	33	28	25	40	33	28	25	32	28	25	31	27	24	30	27	24	23
8	38	30	26	22	37	30	25	22	29	25	22	29	25	22	28	24	22	21
9	36	28	23	20	35	28	23	20	27	23	20	26	23	20	26	22	20	19
10	34	26	21	18	33	26	21	18	25	21	18	25	21	18	24	21	18	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6712	6712	6712
5°	6718	6712	6724
10°	6706	6717	6748
15°	6682	6720	6769
20°	6635	6702	6759
25°	6558	6645	6681
30°	6424	6506	6521
35°	6210	6268	6289
40°	5904	5909	5957
45°	5443	5409	5446
50°	4822	4805	4775
55°	4161	4131	4083
60°	3567	3404	3408
65°	3123	2697	2930
70°	2830	2184	2786
75°	2753	2106	2985
80°	3041	2534	3399
85°	3226	2881	3768



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	296.4	4.0	2.4	0°	3127	3127	3127	3127	3127	
10°-20°	853.2	11.6	7.0	5°	3118	3112	3115	3116	3121	296
20°-30°	1286.9	17.6	10.5	15°	3007	3006	3024	3038	3046	848
30°-40°	1488.0	20.3	12.2	25°	2769	2779	2806	2816	2821	1274
40°-50°	1372.0	18.7	11.2	35°	2370	2380	2392	2393	2400	1478
50°-60°	984.8	13.4	8.1	45°	1793	1785	1782	1783	1794	1376
60°-70°	575.8	7.9	4.7	55°	1112	1099	1104	1081	1091	1001
70°-80°	333.6	4.6	2.7	65°	615	569	531	578	577	618
80°-90°	135.6	1.9	1.1	75°	332	308	254	342	360	357
90°-100°	0.0	0.0	0.0	85°	131	118	117	144	153	130
100°-110°	0.0	0.0	0.0	90°	0	0	0	0	0	9
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°	2436.5	33.3	20.0	165°	0	0	0	0	0	0
0°-40°	3924.5	53.6	32.2	175°	0	0	0	0	0	0
0°-60°	6281.2	85.7	51.5	180°	0	0	0	0	0	0
0°-90°	7326.2	100.0	60.1							
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°	7326.2	100.0	60.1							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3127	3127	3127	3127	3127
2.5°	3129	3122	3123	3123	3127
5°	3118	3112	3115	3116	3121
7.5°	3102	3096	3101	3105	3110
10°	3077	3073	3082	3089	3096
12.5°	3046	3043	3056	3068	3075
15°	3007	3006	3024	3038	3046
17.5°	2960	2962	2983	3000	3009
20°	2905	2909	2934	2952	2959
22.5°	2841	2848	2875	2891	2897
25°	2769	2779	2806	2816	2821
27.5°	2686	2698	2722	2728	2731
30°	2592	2603	2625	2627	2631
32.5°	2485	2497	2514	2516	2521
35°	2370	2380	2392	2393	2400
37.5°	2245	2249	2256	2260	2269
40°	2107	2106	2109	2112	2126
42.5°	1957	1951	1950	1953	1965
45°	1793	1785	1782	1783	1794
47.5°	1619	1613	1610	1605	1613
50°	1444	1440	1439	1422	1430
52.5°	1272	1268	1268	1244	1256
55°	1112	1099	1104	1081	1091
57.5°	965	941	944	930	933
60°	831	796	793	793	794
62.5°	715	672	653	674	673
65°	615	569	531	578	577
67.5°	528	484	429	502	502
70°	451	415	348	441	444
72.5°	385	357	290	390	399
75°	332	308	254	342	360
77.5°	289	260	230	294	321
80°	246	212	205	246	275
82.5°	192	164	167	198	219
85°	131	118	117	144	153
87.5°	67	65	61	76	80
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)