

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: 163P103

Luminaire Tested: **GC2048-340A-PAF**

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: 163P103
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: GC2048-340A-PAF
Description: 20" X 48" Recessed Convertible Body Troffer
with a .095 pattern 12 acrylic lens.
Light Source: Three-F40CW - 3050 Lumens ea. - 40 Watts ea.
Ballast/Driver: Advance R-2S40-1-TP

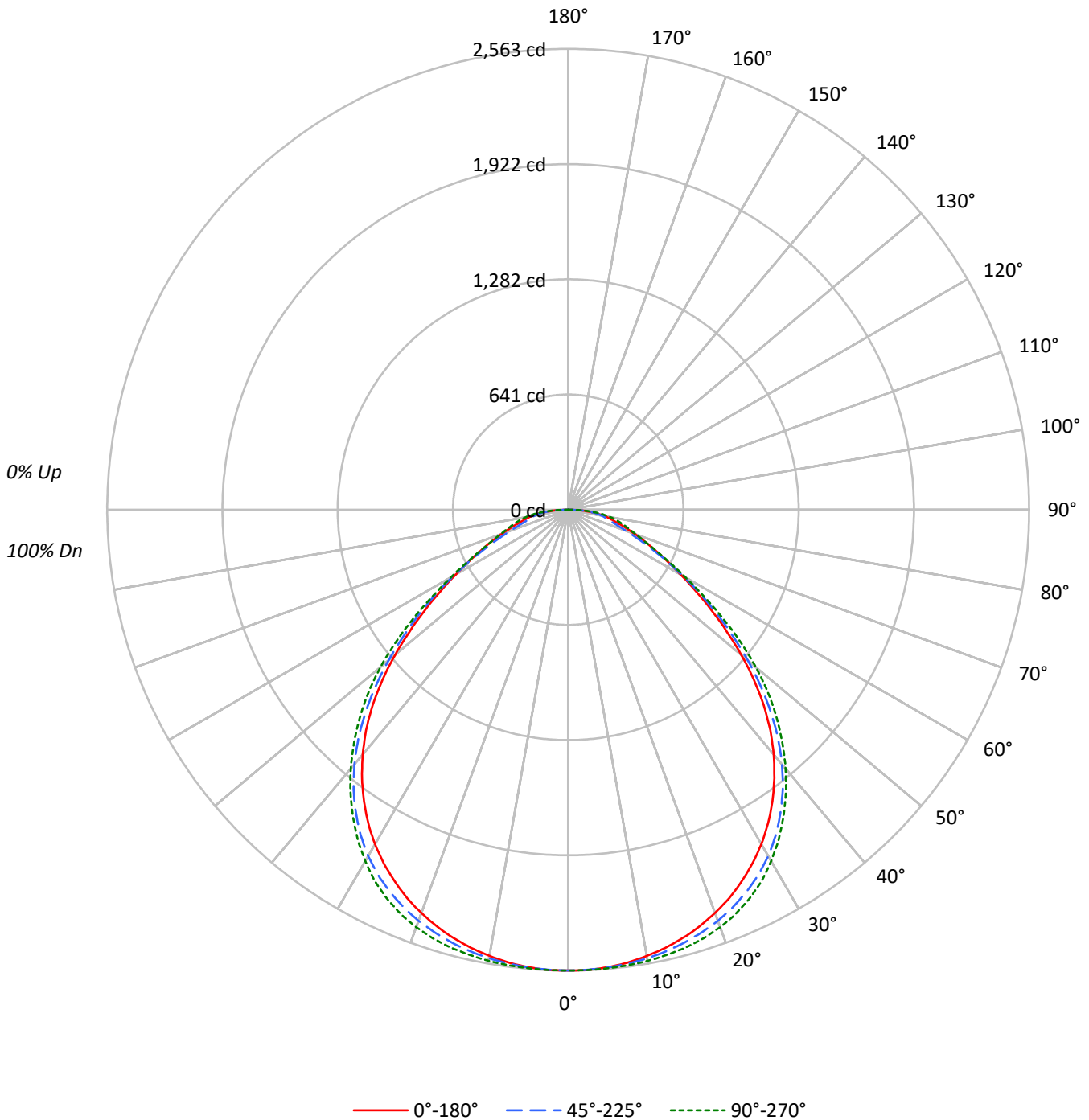
Summary

Lumens per Lamp: 3050 (3 lamps)
Luminaire Lumens: 6372.3 lumens
Efficiency: 69.6%
Efficacy: 48.5 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.29 / 1.34
Luminous Opening: Rectangular (W 1.45' x L: 3.81' x H: 0')
CIE Type: Direct

Input Watts (W): 131.3
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	83	83	83	83	81	81	81	81	77	77	77	74	74	74	71	71	71	70
1	76	73	70	68	74	72	69	67	69	67	65	66	64	63	64	62	61	60
2	70	65	60	57	68	63	59	56	61	58	55	59	56	53	57	54	52	51
3	64	57	52	48	63	56	51	47	54	50	47	52	49	46	51	48	45	44
4	59	51	46	41	58	50	45	41	49	44	40	47	43	40	46	42	39	38
5	55	46	40	36	53	45	40	36	44	39	35	43	38	35	41	38	35	33
6	51	42	36	32	49	41	35	31	40	35	31	39	34	31	38	34	31	29
7	47	38	32	28	46	37	32	28	36	31	28	35	31	28	34	30	27	26
8	44	35	29	25	43	34	29	25	33	28	25	33	28	25	32	28	25	23
9	41	32	26	23	40	32	26	23	31	26	23	30	26	22	29	25	22	21
10	38	30	24	21	38	29	24	21	29	24	21	28	24	20	27	23	20	19

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4979	4979	4979
5°	4981	4985	4993
10°	4971	4997	5027
15°	4960	5014	5071
20°	4935	5030	5109
25°	4892	5027	5115
30°	4819	4989	5063
35°	4694	4881	4947
40°	4507	4689	4771
45°	4223	4380	4509
50°	3799	3938	4120
55°	3282	3414	3540
60°	2802	2852	2918
65°	2455	2335	2464
70°	2227	1931	2272
75°	2117	1817	2357
80°	2316	2115	2674
85°	2519	2474	3009



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	243.2	3.8	2.7	0°	2563	2563	2563	2563	2563	
10°-20°	703.8	11.0	7.7	5°	2554	2552	2556	2556	2560	243
20°-30°	1076.5	16.9	11.8	15°	2466	2471	2493	2510	2521	696
30°-40°	1275.3	20.0	13.9	25°	2282	2301	2345	2374	2386	1051
40°-50°	1220.9	19.2	13.3	35°	1979	2011	2058	2076	2086	1235
50°-60°	901.1	14.1	9.8	45°	1537	1562	1594	1619	1641	1179
60°-70°	528.2	8.3	5.8	55°	969	979	1008	1024	1045	872
70°-80°	300.7	4.7	3.3	65°	534	510	508	537	536	536
80°-90°	122.5	1.9	1.3	75°	282	274	242	307	314	306
90°-100°	0.0	0.0	0.0	85°	113	106	111	131	135	112
100°-110°	0.0	0.0	0.0	90°	0	0	0	0	0	8
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°	2023.5	31.8	22.1	165°	0	0	0	0	0	0
0°-40°	3298.8	51.8	36.1	175°	0	0	0	0	0	0
0°-60°	5420.9	85.1	59.2	180°	0	0	0	0	0	0
0°-90°	6372.3	100.0	69.6							
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°	6372.3	100.0	69.6							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2563	2563	2563	2563	2563
2.5°	2563	2559	2561	2560	2563
5°	2554	2552	2556	2556	2560
7.5°	2541	2540	2546	2550	2555
10°	2520	2522	2533	2542	2548
12.5°	2496	2499	2516	2528	2536
15°	2466	2471	2493	2510	2521
17.5°	2430	2438	2466	2488	2500
20°	2387	2399	2433	2459	2471
22.5°	2339	2353	2393	2421	2434
25°	2282	2301	2345	2374	2386
27.5°	2219	2241	2290	2317	2328
30°	2148	2174	2224	2247	2257
32.5°	2069	2097	2147	2166	2177
35°	1979	2011	2058	2076	2086
37.5°	1883	1916	1960	1976	1988
40°	1777	1809	1849	1867	1881
42.5°	1664	1690	1727	1749	1764
45°	1537	1562	1594	1619	1641
47.5°	1401	1422	1451	1481	1508
50°	1257	1277	1303	1333	1363
52.5°	1111	1125	1154	1179	1206
55°	969	979	1008	1024	1045
57.5°	839	840	868	876	890
60°	721	714	734	744	751
62.5°	621	604	615	630	633
65°	534	510	508	537	536
67.5°	458	431	415	462	460
70°	392	368	340	402	400
72.5°	334	317	283	352	352
75°	282	274	242	307	314
77.5°	243	234	214	265	279
80°	207	193	189	223	239
82.5°	165	150	156	180	192
85°	113	106	111	131	135
87.5°	58	58	58	70	71
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)