

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: 105P124

Luminaire Tested: **2G-440A**

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: 105P124
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 2G-440A
Description: 2 X 4 Recessed Troffer with a
.095 pattern 12 acrylic lens.
Light Source: Four-F40CW/RS/WM - 2650 Lumens ea. - 34 Watts ea.
Ballast/Driver: Two-Advance R-2S40-1-TP Electromagnetic

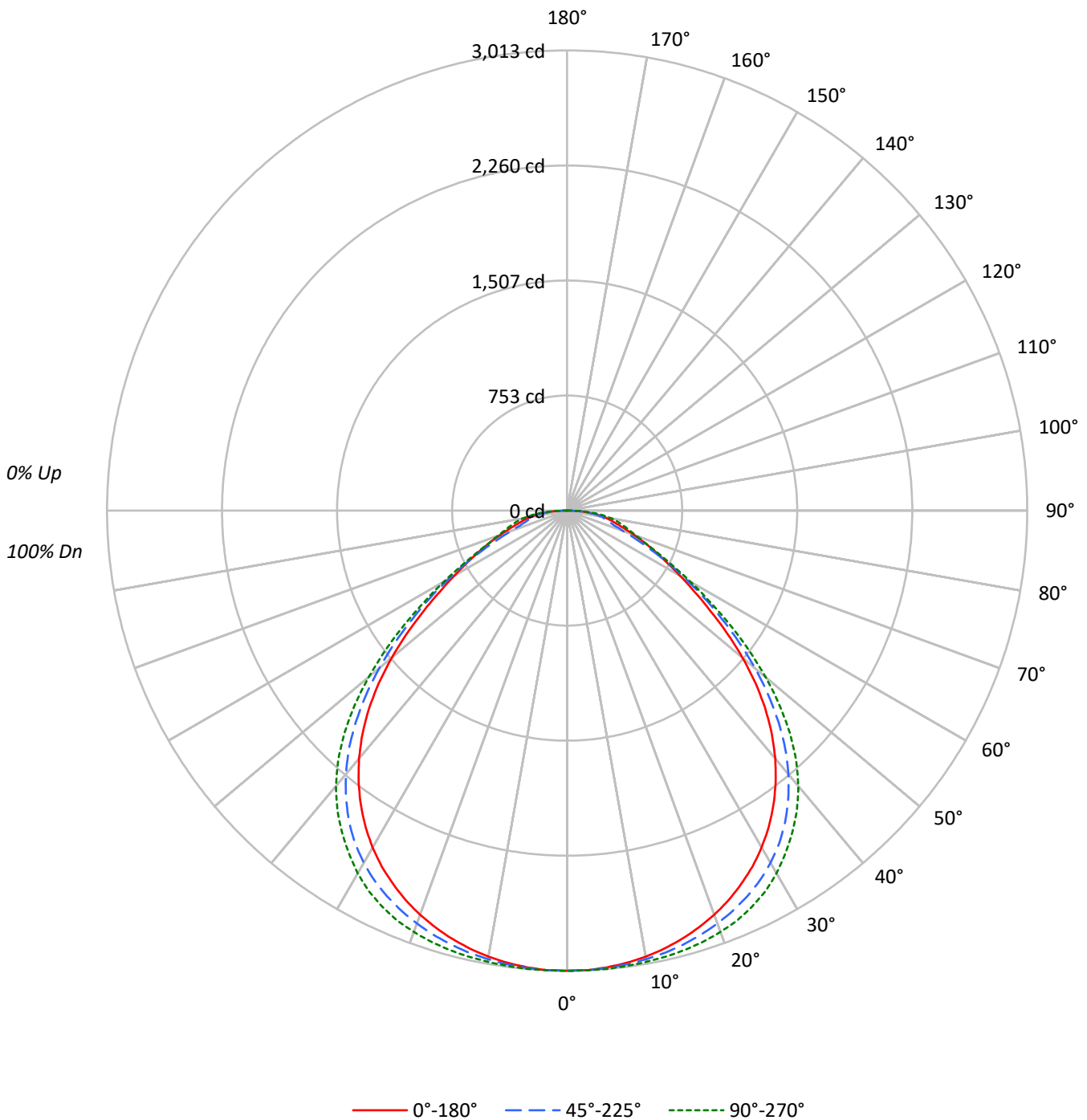
Summary

Lumens per Lamp: 2650 (4 lamps)
Luminaire Lumens: 7682.5 lumens
Efficiency: 72.5%
Efficacy: 53.9 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.33 / 1.37
Luminous Opening: Rectangular (W 1.79' x L: 3.81' x H: 0')
CIE Type: Direct

Input Watts (W): 142.6
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	86	86	86	86	84	84	84	84	81	81	81	77	77	77	74	74	74	72																			
1	79	76	73	71	77	75	72	70	71	69	67	69	67	65	66	65	63	62																			
2	73	67	63	59	71	66	62	58	63	60	57	61	58	55	59	56	54	53																			
3	67	60	54	50	65	59	53	49	56	52	48	54	51	48	53	49	47	45																			
4	61	53	47	43	60	52	47	42	51	46	42	49	45	41	47	44	41	39																			
5	57	48	42	37	55	47	41	37	46	40	37	44	40	36	43	39	36	34																			
6	53	43	37	33	51	43	37	33	41	36	32	40	36	32	39	35	32	30																			
7	49	39	33	29	48	39	33	29	38	33	29	37	32	29	36	32	28	27																			
8	46	36	30	26	44	36	30	26	35	29	26	34	29	26	33	29	25	24																			
9	43	33	27	23	42	33	27	23	32	27	23	31	26	23	30	26	23	22																			
10	40	31	25	21	39	30	25	21	30	25	21	29	24	21	28	24	21	20																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4748	4748	4748
5°	4749	4755	4764
10°	4746	4773	4800
15°	4737	4798	4858
20°	4722	4824	4923
25°	4691	4847	4978
30°	4634	4845	4989
35°	4530	4788	4948
40°	4361	4639	4844
45°	4089	4359	4597
50°	3675	3937	4158
55°	3148	3396	3566
60°	2685	2827	2931
65°	2368	2256	2424
70°	2142	1806	2211
75°	2046	1699	2326
80°	2232	2069	2668
85°	2368	2405	3037



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	286.2	3.7	2.7	0°	3013	3013	3013	3013	3013	
10°-20°	830.8	10.8	7.8	5°	3002	3002	3006	3008	3012	285
20°-30°	1282.2	16.7	12.1	15°	2904	2914	2941	2965	2978	820
30°-40°	1543.3	20.1	14.6	25°	2698	2725	2788	2841	2863	1242
40°-50°	1495.1	19.5	14.1	35°	2355	2402	2489	2543	2572	1469
50°-60°	1097.8	14.3	10.4	45°	1835	1876	1956	2021	2063	1407
60°-70°	636.0	8.3	6.0	55°	1146	1175	1236	1259	1298	1033
70°-80°	362.1	4.7	3.4	65°	635	608	605	657	650	636
80°-90°	149.0	1.9	1.4	75°	336	333	279	380	382	363
90°-100°	0.0	0.0	0.0	85°	131	127	133	162	168	131
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°	2399.2	31.2	22.6	165°	0	0	0	0	0	0
0°-40°	3942.5	51.3	37.2	175°	0	0	0	0	0	0
0°-60°	6535.4	85.1	61.7	180°	0	0	0	0	0	0
0°-90°	7682.5	100.0	72.5							
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°	7682.5	100.0	72.5							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3013	3013	3013	3013	3013
2.5°	3012	3011	3012	3011	3013
5°	3002	3002	3006	3008	3012
7.5°	2987	2989	2997	3002	3007
10°	2966	2970	2983	2994	3000
12.5°	2938	2945	2965	2981	2991
15°	2904	2914	2941	2965	2978
17.5°	2863	2877	2912	2944	2960
20°	2816	2833	2877	2917	2936
22.5°	2761	2783	2836	2883	2906
25°	2698	2725	2788	2841	2863
27.5°	2628	2660	2732	2788	2810
30°	2547	2585	2663	2719	2742
32.5°	2457	2500	2584	2636	2660
35°	2355	2402	2489	2543	2572
37.5°	2243	2291	2378	2438	2471
40°	2120	2167	2255	2318	2355
42.5°	1984	2028	2114	2180	2220
45°	1835	1876	1956	2021	2063
47.5°	1673	1710	1786	1844	1887
50°	1499	1534	1606	1655	1696
52.5°	1321	1354	1422	1457	1498
55°	1146	1175	1236	1259	1298
57.5°	989	1003	1063	1071	1104
60°	852	850	897	909	930
62.5°	734	718	744	771	777
65°	635	608	605	657	650
67.5°	546	518	487	566	553
70°	465	444	392	495	480
72.5°	394	383	322	435	425
75°	336	333	279	380	382
77.5°	290	285	254	327	341
80°	246	234	228	275	294
82.5°	194	180	187	222	237
85°	131	127	133	162	168
87.5°	68	70	73	88	90
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)