

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: 108P124

Luminaire Tested:

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: 108P124
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number:
Description: 2 X 4 Recessed Troffer with a PSI Asymmetric IV
acrylic lens equipped with radio frequency
interference grid.
Light Source: Six-F40CW - 3050 Lumens ea. - 40 Watts ea.
Ballast/Driver: -

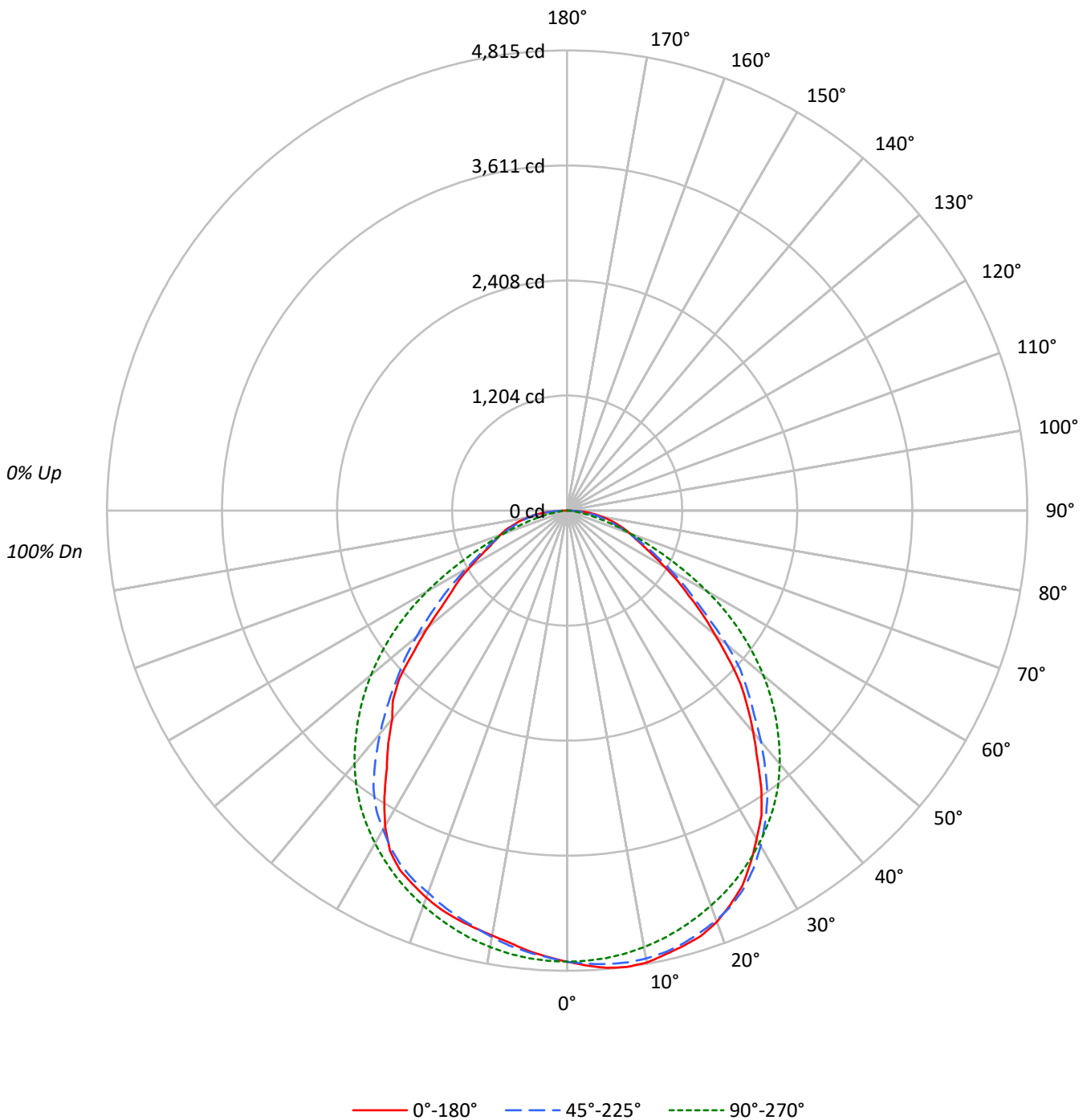
Summary

Lumens per Lamp: 3050 (6 lamps)
Luminaire Lumens: 11214.8 lumens
Efficiency: 61.3%
Efficacy: 46.8 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.26 / 1.28
Luminous Opening: Rectangular (W 3.76' x L: 1.74' x H: 0')
CIE Type: Direct

Input Watts (W): 239.8
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

TEST NUMBER: 108P124
CATALOG NUMBER:

Luminous Intensity Polar Plot





TEST NUMBER: 108P124

CATALOG NUMBER:

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	73	73	73	73	71	71	71	71	68	68	68	65	65	65	63	63	63	61
1	67	65	62	60	66	63	61	59	61	59	57	58	57	55	56	55	54	53
2	62	57	53	50	60	56	52	49	54	51	48	52	49	47	50	48	46	45
3	57	51	46	42	55	50	45	42	48	44	41	46	43	41	45	42	40	39
4	52	45	40	36	51	45	40	36	43	39	36	42	38	35	40	37	35	34
5	48	41	36	32	47	40	35	32	39	35	31	38	34	31	37	33	31	29
6	45	37	32	28	44	36	31	28	35	31	28	34	30	27	33	30	27	26
7	42	34	29	25	41	33	28	25	32	28	25	31	27	25	31	27	24	23
8	39	31	26	22	38	30	26	22	30	25	22	29	25	22	28	25	22	21
9	36	28	24	20	35	28	23	20	27	23	20	27	23	20	26	23	20	19
10	34	26	22	18	33	26	21	18	25	21	18	25	21	18	24	21	18	17

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	7745	7745	7745
5°	7910	7740	7617
10°	7999	7728	7520
15°	8006	7704	7522
20°	7996	7680	7525
25°	7845	7657	7507
30°	7511	7617	7217
35°	7090	7554	6589
40°	6489	7414	6099
45°	5960	7174	5756
50°	5145	6840	4854
55°	4448	6344	4207
60°	3862	5555	3822
65°	3432	4441	3482
70°	3348	3382	3554
75°	3391	2447	3702
80°	3514	1531	3977
85°	3915	847	4499



TEST NUMBER: 108P124

CATALOG NUMBER:

ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	45°	90°	135°	180°	Flux
0°-10°	447.0	4.0	2.4	0°	4721	4721	4721	4721	4721	
10°-20°	1284.1	11.5	7.0	5°	4803	4764	4700	4640	4625	458
20°-30°	1942.1	17.3	10.6	15°	4714	4690	4536	4403	4429	1331
30°-40°	2233.6	19.9	12.2	25°	4334	4367	4230	4103	4147	1985
40°-50°	2077.4	18.5	11.4	35°	3540	3654	3772	3534	3290	2200
50°-60°	1550.6	13.8	8.5	45°	2569	2672	3092	2532	2481	1959
60°-70°	967.9	8.6	5.3	55°	1555	1643	2218	1611	1471	1408
70°-80°	532.7	4.8	2.9	65°	884	932	1144	937	897	892
80°-90°	179.5	1.6	1.0	75°	535	479	386	548	584	566
90°-100°	0.0	0.0	0.0	85°	208	156	45	219	239	203
100°-110°	0.0	0.0	0.0	90°	0	0	0	0	0	15
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°	3673.2	32.8	20.1	165°	0	0	0	0	0	0
0°-40°	5906.8	52.7	32.3	175°	0	0	0	0	0	0
0°-60°	9534.7	85.0	52.1	180°	0	0	0	0	0	0
0°-90°	11214.8	100.0	61.3							
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°	11214.8	100.0	61.3							



TEST NUMBER: 108P124

CATALOG NUMBER:

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	4721	4721	4721	4721	4721	4721	4721	4721	4721
2.5°	4766	4755	4746	4729	4714	4693	4680	4671	4675
5°	4803	4784	4764	4729	4700	4659	4640	4625	4625
7.5°	4815	4791	4769	4724	4674	4620	4593	4568	4563
10°	4802	4777	4759	4706	4639	4574	4531	4508	4514
12.5°	4756	4734	4734	4681	4593	4517	4464	4463	4473
15°	4714	4687	4690	4641	4536	4446	4403	4413	4429
17.5°	4664	4634	4630	4593	4472	4364	4334	4360	4379
20°	4580	4559	4563	4533	4399	4268	4255	4299	4310
22.5°	4463	4442	4481	4465	4320	4166	4187	4216	4229
25°	4334	4302	4367	4382	4230	4054	4103	4125	4147
27.5°	4156	4135	4222	4291	4130	3931	3988	4024	4014
30°	3965	3944	4050	4182	4021	3796	3853	3871	3810
32.5°	3784	3754	3858	4050	3901	3652	3717	3649	3558
35°	3540	3529	3654	3889	3772	3509	3534	3390	3290
37.5°	3265	3262	3405	3710	3626	3345	3295	3136	3074
40°	3030	3013	3155	3507	3462	3159	3044	2897	2848
42.5°	2797	2783	2897	3293	3281	2969	2791	2683	2698
45°	2569	2551	2672	3036	3092	2765	2532	2516	2481
47.5°	2286	2273	2456	2755	2893	2535	2306	2269	2168
50°	2016	1998	2183	2462	2680	2289	2065	1986	1902
52.5°	1789	1772	1880	2197	2452	2048	1824	1725	1655
55°	1555	1543	1643	1948	2218	1810	1611	1517	1471
57.5°	1368	1348	1443	1682	1963	1562	1406	1344	1328
60°	1177	1172	1254	1430	1693	1352	1221	1201	1165
62.5°	1013	1002	1078	1207	1413	1165	1064	1059	1020
65°	884	861	932	1006	1144	999	937	921	897
67.5°	772	745	798	841	907	848	830	815	810
70°	698	656	671	703	705	707	722	736	741
72.5°	620	580	566	575	535	583	630	663	674
75°	535	507	479	458	386	472	548	590	584
77.5°	454	427	395	359	260	370	479	505	503
80°	372	344	317	268	162	288	401	417	421
82.5°	295	265	237	191	89	219	319	329	337
85°	208	180	156	118	45	152	219	239	239
87.5°	112	88	78	55	17	82	115	135	116
90°	0	0	0	0	0	0	0	0	0
92.5°	0	0	0	0	0	0	0	0	0
95°	0	0	0	0	0	0	0	0	0
97.5°	0	0	0	0	0	0	0	0	0
100°	0	0	0	0	0	0	0	0	0
102.5°	0	0	0	0	0	0	0	0	0
105°	0	0	0	0	0	0	0	0	0
107.5°	0	0	0	0	0	0	0	0	0
110°	0	0	0	0	0	0	0	0	0



TEST NUMBER: 108P124

CATALOG NUMBER:

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	0	0	0	0	0	0	0	0	0
115°	0	0	0	0	0	0	0	0	0
117.5°	0	0	0	0	0	0	0	0	0
120°	0	0	0	0	0	0	0	0	0
122.5°	0	0	0	0	0	0	0	0	0
125°	0	0	0	0	0	0	0	0	0
127.5°	0	0	0	0	0	0	0	0	0
130°	0	0	0	0	0	0	0	0	0
132.5°	0	0	0	0	0	0	0	0	0
135°	0	0	0	0	0	0	0	0	0
137.5°	0	0	0	0	0	0	0	0	0
140°	0	0	0	0	0	0	0	0	0
142.5°	0	0	0	0	0	0	0	0	0
145°	0	0	0	0	0	0	0	0	0
147.5°	0	0	0	0	0	0	0	0	0
150°	0	0	0	0	0	0	0	0	0
152.5°	0	0	0	0	0	0	0	0	0
155°	0	0	0	0	0	0	0	0	0
157.5°	0	0	0	0	0	0	0	0	0
160°	0	0	0	0	0	0	0	0	0
162.5°	0	0	0	0	0	0	0	0	0
165°	0	0	0	0	0	0	0	0	0
167.5°	0	0	0	0	0	0	0	0	0
170°	0	0	0	0	0	0	0	0	0
172.5°	0	0	0	0	0	0	0	0	0
175°	0	0	0	0	0	0	0	0	0
177.5°	0	0	0	0	0	0	0	0	0
180°	0	0	0	0	0	0	0	0	0

(END OF REPORT)