

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: 117P100

Luminaire Tested: **2GCAML-440S613H-LE3-PAF**

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: 117P100
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 2GCAML-440S613H-LE3-PAF
Description: 2' X 4' Recessed troffer with an ALP 1.5" deep
78 cell anodized semi-specular parabolic louver.
Light Source: Four-F40WW - 3200 Lumens ea. - 40 Watts ea.
Ballast/Driver: -

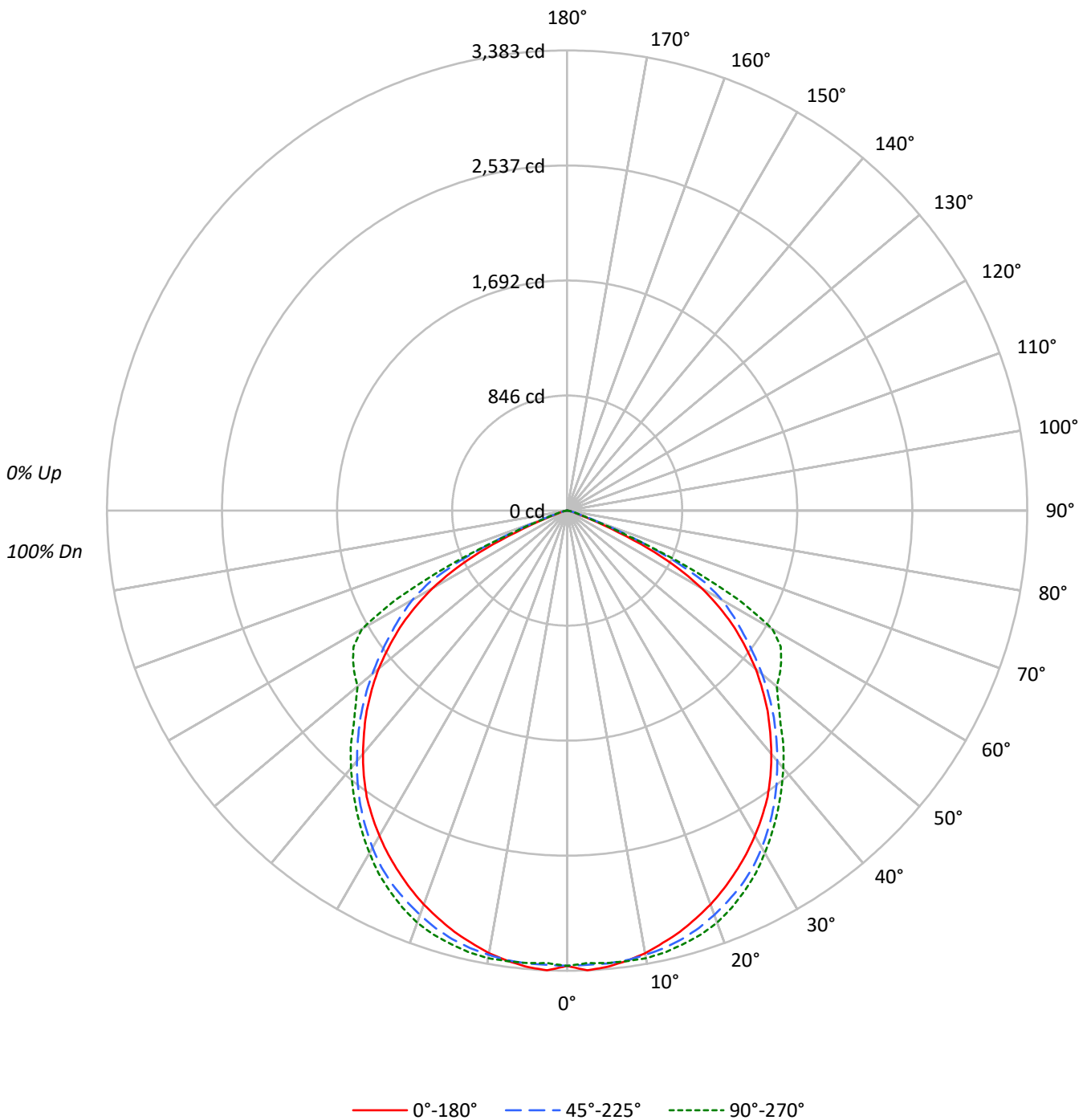
Summary

Lumens per Lamp: 3200 (4 lamps)
Luminaire Lumens: 8294.6 lumens
Efficiency: 64.8%
Efficacy: 47.4 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.35
Luminous Opening: Rectangular (W 1.74' x L: 3.76' x H: 0')
CIE Type: Direct

Input Watts (W): 175
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	77	77	77	77	75	75	75	75	72	72	72		69	69	69		66	66	66	65
1	72	69	67	65	70	68	66	64	65	63	62		63	61	60		60	59	58	57
2	66	61	58	54	64	60	57	54	58	55	52		56	53	51		54	52	50	49
3	61	54	50	46	59	53	49	46	52	48	45		50	47	44		48	46	43	42
4	56	49	43	39	54	48	43	39	46	42	39		45	41	38		43	40	38	36
5	51	44	38	34	50	43	38	34	42	37	34		40	36	33		39	36	33	32
6	47	39	34	30	46	39	34	30	38	33	30		37	32	29		36	32	29	28
7	44	36	30	27	43	35	30	26	34	30	26		33	29	26		32	29	26	25
8	41	33	27	24	40	32	27	24	31	27	23		31	26	23		30	26	23	22
9	38	30	25	21	37	30	25	21	29	24	21		28	24	21		28	24	21	20
10	36	28	23	19	35	27	23	19	27	22	19		26	22	19		26	22	19	18

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5507	5507	5507
5°	5563	5522	5515
10°	5522	5542	5582
15°	5461	5557	5620
20°	5397	5539	5645
25°	5321	5510	5605
30°	5246	5438	5523
35°	5160	5321	5420
40°	5016	5164	5310
45°	4850	4998	5164
50°	4628	4787	5148
55°	4309	4541	5111
60°	3758	4324	5733
65°	2570	3321	3769
70°	731	1164	904
75°	305	350	394
80°	199	208	218
85°	94	113	94



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	318.6	3.8	2.5	0°	3347	3347	3347	3347	3347	
10°-20°	919.1	11.1	7.2	5°	3368	3351	3343	3341	3339	319
20°-30°	1392.4	16.8	10.9	15°	3206	3220	3262	3292	3299	904
30°-40°	1653.0	19.9	12.9	25°	2931	2984	3035	3068	3087	1351
40°-50°	1662.0	20.0	13.0	35°	2569	2636	2649	2660	2698	1603
50°-60°	1470.7	17.7	11.5	45°	2084	2153	2148	2169	2219	1604
60°-70°	793.5	9.6	6.2	55°	1502	1547	1583	1762	1921	1332
70°-80°	77.0	0.9	0.6	65°	660	713	853	919	968	634
80°-90°	8.4	0.1	0.1	75°	48	52	55	59	62	63
90°-100°	0.0	0.0	0.0	85°	5	6	6	5	5	8
100°-110°	0.0	0.0	0.0	90°	0	0	0	0	0	0
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°	2630.0	31.7	20.5	165°	0	0	0	0	0	0
0°-40°	4283.1	51.6	33.5	175°	0	0	0	0	0	0
0°-60°	7415.8	89.4	57.9	180°	0	0	0	0	0	0
0°-90°	8294.6	100.0	64.8							
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°	8294.6	100.0	64.8							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3347	3347	3347	3347	3347
2.5°	3383	3359	3342	3335	3330
5°	3368	3351	3343	3341	3339
7.5°	3339	3331	3335	3342	3341
10°	3305	3301	3317	3337	3341
12.5°	3255	3268	3294	3323	3327
15°	3206	3220	3262	3292	3299
17.5°	3145	3171	3218	3252	3268
20°	3082	3115	3163	3207	3224
22.5°	3009	3052	3102	3145	3160
25°	2931	2984	3035	3068	3087
27.5°	2850	2909	2957	2980	3004
30°	2761	2826	2862	2884	2907
32.5°	2667	2736	2759	2774	2805
35°	2569	2636	2649	2660	2698
37.5°	2456	2532	2529	2545	2587
40°	2335	2416	2404	2426	2472
42.5°	2210	2288	2277	2301	2354
45°	2084	2153	2148	2169	2219
47.5°	1947	2010	2011	2032	2106
50°	1808	1859	1870	1917	2011
52.5°	1656	1705	1726	1819	1971
55°	1502	1547	1583	1762	1921
57.5°	1330	1381	1453	1677	1862
60°	1142	1200	1314	1551	1742
62.5°	923	987	1140	1317	1421
65°	660	713	853	919	968
67.5°	352	409	518	508	482
70°	152	179	242	205	188
72.5°	74	83	104	95	96
75°	48	52	55	59	62
77.5°	33	34	36	37	40
80°	21	21	22	22	23
82.5°	12	12	12	13	13
85°	5	6	6	5	5
87.5°	2	2	2	2	3
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)