

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: 108P104

Luminaire Tested: **2GCAML-440S715M-PAF**

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: 108P104
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 2GCAML-440S715M-PAF
Description: 2 X 4 Recessed Troffer with a 1 1/2" deep
105 cell specular parabolic louver.
Light Source: Four-F40SPX35 - 3275 Lumens ea. - 40 Watts ea.
Ballast/Driver: -

Summary

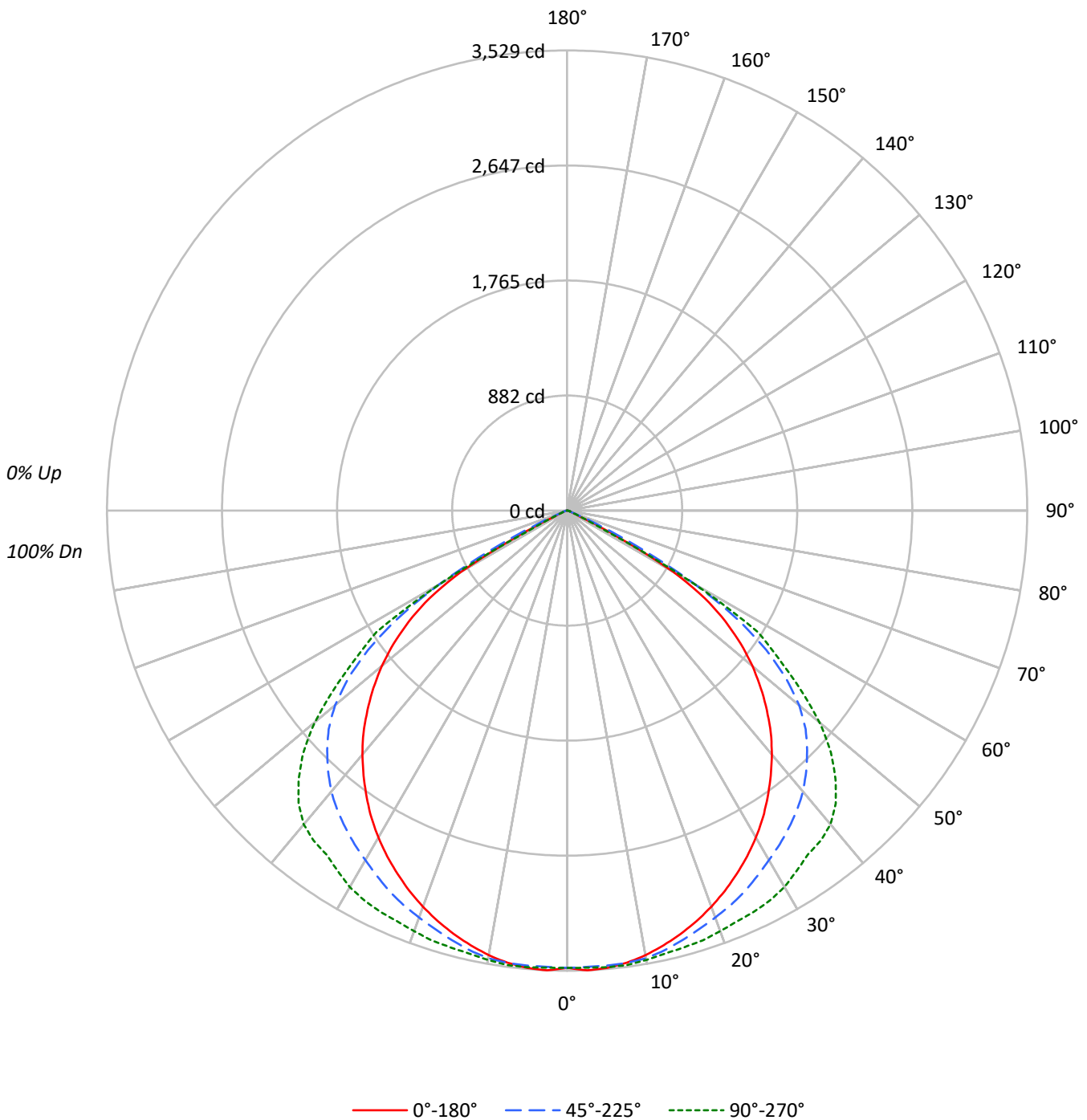
Lumens per Lamp: 3275 (4 lamps)
Luminaire Lumens: 8552.4 lumens
Efficiency: 65.3%
Efficacy: 49.2 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.41 / 1.45
Luminous Opening: Rectangular (W 1.74' x L: 3.76' x H: 0')
CIE Type: Direct

Input Watts (W): 174
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									70									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	78	78	78	78	76	76	76	76	73	73	73	69	69	69	67	67	67	65																				
1	73	70	68	66	71	69	67	65	66	64	63	64	62	61	61	60	59	58																				
2	67	63	59	56	66	62	58	55	59	57	54	57	55	53	55	54	52	51																				
3	62	56	52	48	60	55	51	48	53	50	47	52	48	46	50	47	45	44																				
4	57	50	45	41	56	49	45	41	48	44	41	46	43	40	45	42	40	38																				
5	53	45	40	36	51	44	40	36	43	39	35	42	38	35	41	37	35	33																				
6	49	41	35	32	48	40	35	32	39	35	31	38	34	31	37	34	31	29																				
7	45	37	32	28	44	37	32	28	36	31	28	35	31	28	34	30	27	26																				
8	42	34	29	25	41	33	28	25	33	28	25	32	28	25	31	27	25	23																				
9	39	31	26	23	38	31	26	22	30	25	22	29	25	22	29	25	22	21																				
10	37	29	24	20	36	28	24	20	28	23	20	27	23	20	26	23	20	19																				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5771	5771	5771
5°	5814	5786	5806
10°	5784	5823	5846
15°	5727	5811	5906
20°	5661	5815	6010
25°	5585	5852	6162
30°	5501	5881	6335
35°	5385	5960	6466
40°	5248	6044	6749
45°	5040	6057	6776
50°	4749	5947	6471
55°	4254	5350	5680
60°	3090	3758	3735
65°	413	1137	401
70°	168	183	173
75°	134	134	134
80°	123	133	123
85°	170	170	170



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	333.9	3.9	2.5	0°	3507	3507	3507	3507	3507	
10°-20°	964.6	11.3	7.4	5°	3520	3497	3503	3511	3515	334
20°-30°	1489.4	17.4	11.4	15°	3362	3374	3411	3454	3467	948
30°-40°	1853.6	21.7	14.1	25°	3076	3113	3223	3341	3394	1417
40°-50°	1975.7	23.1	15.1	35°	2681	2770	2967	3140	3219	1676
50°-60°	1568.4	18.3	12.0	45°	2166	2335	2603	2825	2912	1667
60°-70°	333.8	3.9	2.5	55°	1483	1695	1865	1903	1980	1296
70°-80°	24.0	0.3	0.2	65°	106	196	292	138	103	263
80°-90°	9.1	0.1	0.1	75°	21	22	21	21	21	23
90°-100°	0.0	0.0	0.0	85°	9	9	9	8	9	8
100°-110°	0.0	0.0	0.0	90°	0	0	0	0	0	1
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°	2787.9	32.6	21.3	165°	0	0	0	0	0	0
0°-40°	4641.4	54.3	35.4	175°	0	0	0	0	0	0
0°-60°	8185.6	95.7	62.5	180°	0	0	0	0	0	0
0°-90°	8552.4	100.0	65.3							
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°	8552.4	100.0	65.3							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3507	3507	3507	3507	3507
2.5°	3529	3502	3502	3504	3508
5°	3520	3497	3503	3511	3515
7.5°	3498	3482	3499	3513	3515
10°	3462	3454	3485	3499	3499
12.5°	3415	3417	3454	3473	3479
15°	3362	3374	3411	3454	3467
17.5°	3301	3320	3366	3435	3456
20°	3233	3260	3321	3408	3432
22.5°	3158	3190	3276	3372	3409
25°	3076	3113	3223	3341	3394
27.5°	2990	3031	3159	3310	3369
30°	2895	2948	3095	3270	3334
32.5°	2794	2862	3034	3213	3275
35°	2681	2770	2967	3140	3219
37.5°	2564	2673	2895	3077	3192
40°	2443	2567	2814	3024	3142
42.5°	2312	2454	2713	2946	3048
45°	2166	2335	2603	2825	2912
47.5°	2015	2205	2481	2662	2744
50°	1855	2061	2323	2454	2528
52.5°	1678	1894	2118	2204	2257
55°	1483	1695	1865	1903	1980
57.5°	1254	1441	1546	1560	1735
60°	939	1085	1142	1151	1135
62.5°	442	617	674	537	327
65°	106	196	292	138	103
67.5°	48	59	96	57	51
70°	35	38	38	37	36
72.5°	27	28	27	27	27
75°	21	22	21	21	21
77.5°	17	18	17	17	17
80°	13	14	14	13	13
82.5°	11	11	11	10	11
85°	9	9	9	8	9
87.5°	8	7	7	7	7
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)