

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: 163P112

Luminaire Tested: **GC2048-432A-PAF**

Issue Date: 3/3/2020



**Test Information**

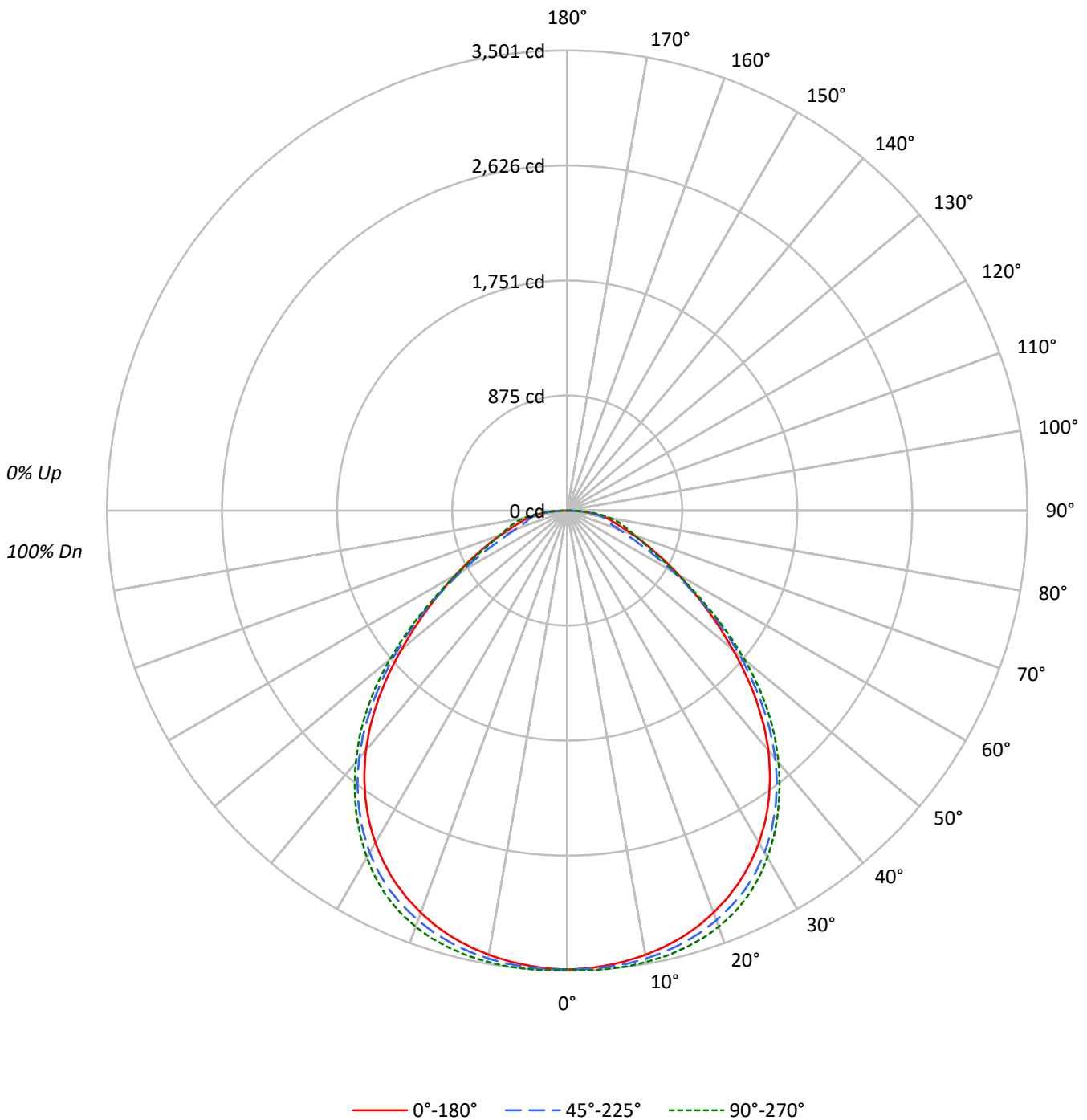
Test Method: LM-41-14  
Report Number: 163P112  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: GC2048-432A-PAF  
Description: 20 X 48 Recessed Convertible Body Troffer  
with a .095 pattern 12 acrylic lens.  
Light Source: Four - FO32T8/35K - 2800 Lumens - 32 Watts ea.  
Ballast/Driver: Magnetek B432I120RH Electronic - L.O.B.F. = 87.9

**Summary**

Lumens per Lamp: 2800 (4 lamps)  
Luminaire Lumens: 8506.3 lumens  
Efficiency: 75.9%  
Efficacy: 78.2 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.28 / 1.32  
Luminous Opening: Rectangular (W 1.45' x L: 3.81' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 108.8  
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

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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	90	90	90	90	88	88	88	88	84	84	84	81	81	81	77	77	77	76						76													
1	83	80	77	74	81	78	75	73	75	73	71	72	70	69	69	68	66	65						65													
2	76	71	66	62	74	69	65	61	67	63	60	64	61	58	62	59	57	55						55													
3	70	63	57	52	68	62	56	52	59	55	51	57	53	50	55	52	49	48						48													
4	65	56	50	45	63	55	49	45	53	48	44	52	47	44	50	46	43	41						41													
5	60	51	44	39	58	50	44	39	48	43	39	47	42	38	45	41	38	36						36													
6	55	46	39	35	54	45	39	35	44	38	34	42	38	34	41	37	34	32						32													
7	51	42	35	31	50	41	35	31	40	35	31	39	34	30	38	33	30	29						29													
8	48	38	32	28	47	38	32	28	37	31	27	36	31	27	35	30	27	26						26													
9	45	35	29	25	44	35	29	25	34	29	25	33	28	25	32	28	25	23						23													
10	42	32	27	23	41	32	27	23	31	26	23	31	26	23	30	26	22	21						21													

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	6794	6794	6794
5°	6785	6808	6838
10°	6780	6838	6889
15°	6772	6861	6941
20°	6741	6870	6978
25°	6676	6846	6960
30°	6558	6751	6848
35°	6356	6560	6646
40°	6050	6256	6355
45°	5591	5786	5946
50°	4979	5191	5324
55°	4366	4444	4545
60°	3813	3611	3767
65°	3356	2854	3236
70°	3015	2366	3089
75°	2894	2398	3323
80°	3238	3014	3776
85°	3482	3505	4130



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**ZONAL LUMENS:**

**CANDELA DISTRIBUTION:**

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	331.9	3.9	3.0	0°	3492	3492	3492	3492	3492	
10°-20°	961.0	11.3	8.6	5°	3474	3474	3486	3494	3501	330
20°-30°	1463.4	17.2	13.1	15°	3362	3371	3406	3434	3446	949
30°-40°	1713.2	20.1	15.3	25°	3110	3133	3189	3228	3242	1431
40°-50°	1611.2	18.9	14.4	35°	2676	2708	2762	2784	2798	1668
50°-60°	1168.0	13.7	10.4	45°	2032	2062	2103	2134	2161	1560
60°-70°	680.3	8.0	6.1	55°	1287	1274	1310	1308	1340	1157
70°-80°	405.3	4.8	3.6	65°	729	651	620	695	703	731
80°-90°	172.0	2.0	1.5	75°	385	366	319	419	442	417
90°-100°	0.0	0.0	0.0	85°	156	151	157	183	185	155
100°-110°	0.0	0.0	0.0	90°	0	0	0	0	0	11
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°	2756.3	32.4	24.6	165°	0	0	0	0	0	0
0°-40°	4469.5	52.5	39.9	175°	0	0	0	0	0	0
0°-60°	7248.7	85.2	64.7	180°	0	0	0	0	0	0
0°-90°	8506.3	100.0	75.9							
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°	8506.3	100.0	75.9							



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3492	3492	3492	3492	3492
2.5°	3486	3483	3491	3496	3501
5°	3474	3474	3486	3494	3501
7.5°	3456	3459	3477	3489	3497
10°	3432	3437	3461	3478	3487
12.5°	3401	3407	3437	3460	3471
15°	3362	3371	3406	3434	3446
17.5°	3314	3326	3367	3400	3414
20°	3256	3271	3318	3356	3370
22.5°	3188	3208	3258	3299	3314
25°	3110	3133	3189	3228	3242
27.5°	3021	3048	3104	3139	3153
30°	2919	2949	3005	3035	3048
32.5°	2804	2836	2891	2916	2929
35°	2676	2708	2762	2784	2798
37.5°	2535	2565	2620	2639	2654
40°	2382	2410	2463	2485	2502
42.5°	2214	2243	2291	2318	2338
45°	2032	2062	2103	2134	2161
47.5°	1840	1870	1909	1936	1966
50°	1645	1673	1715	1727	1759
52.5°	1459	1473	1514	1512	1548
55°	1287	1274	1310	1308	1340
57.5°	1126	1082	1112	1120	1143
60°	980	912	928	953	968
62.5°	847	767	763	811	821
65°	729	651	620	695	703
67.5°	625	556	505	607	613
70°	530	480	416	536	543
72.5°	448	418	355	476	489
75°	385	366	319	419	442
77.5°	337	317	297	364	394
80°	289	266	269	309	337
82.5°	227	211	222	253	270
85°	156	151	157	183	185
87.5°	82	83	85	97	95
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)