

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: 163P111

Luminaire Tested: **GCASF2048-332A-PAF**

Issue Date: 3/3/2020



**Test Information**

Test Method: LM-41-14  
Report Number: 163P111  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: GCASF2048-332A-PAF  
Description: 20 X 48 Recessed Air Supply Convertible Body Troffer  
with a .095 pattern 12 acrylic lens.  
Light Source: Three - FO32T8/35K - 2850 Lumens ea. - 32 Watts ea.  
Ballast/Driver: Magnetek B332I120RH Electronic - L.O.B.F. = 88.9

**Summary**

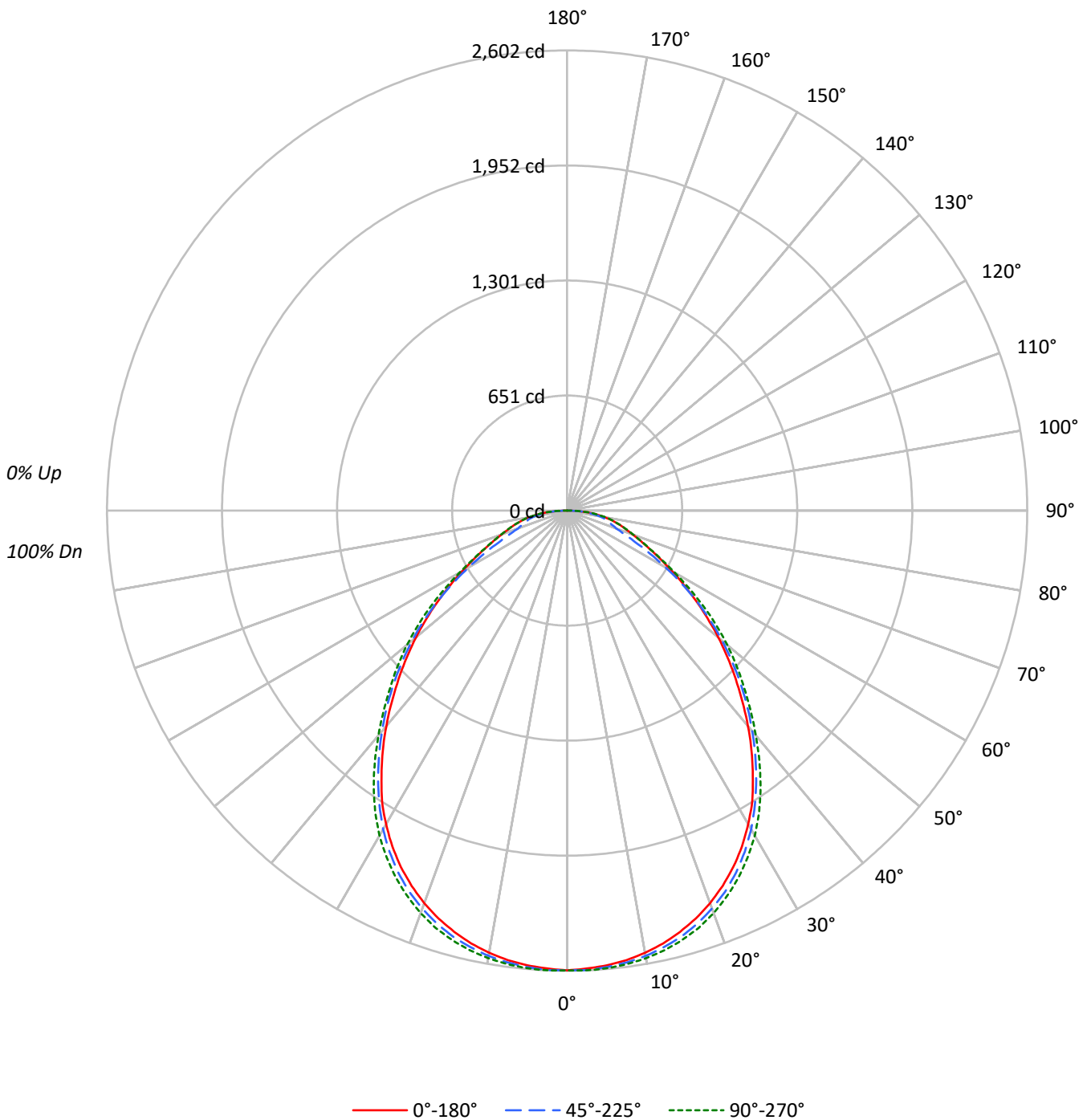
Lumens per Lamp: 2850 (3 lamps)  
Luminaire Lumens: 5905.7 lumens  
Efficiency: 69.1%  
Efficacy: 70.3 lumens/watt  
Spacing Criteria (0/90/45): 1.18 / 1.21 / 1.26  
Luminous Opening: Rectangular (W 1.35' x L: 3.7' x H: 0')  
CIE Type: Direct

Input Watts (W): 84  
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: 163P111

CATALOG NUMBER: GCASF2048-332A-PAF

### Luminous Intensity Polar Plot





TEST NUMBER: 163P111

CATALOG NUMBER: GCASF2048-332A-PAF

**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	82	82	82	82	80	80	80	80	77	77	77	73	73	73	70	70	70	69
1	76	73	70	68	74	71	69	66	68	66	64	66	64	62	63	62	61	59
2	70	64	60	56	68	63	59	56	61	57	54	58	56	53	56	54	52	51
3	64	57	52	48	62	56	51	47	54	50	47	52	49	46	51	48	45	44
4	59	51	46	41	57	50	45	41	49	44	40	47	43	40	46	42	39	38
5	55	46	40	36	53	45	40	36	44	39	35	43	38	35	41	38	35	33
6	51	42	36	32	49	41	36	32	40	35	31	39	35	31	38	34	31	30
7	47	38	32	28	46	38	32	28	37	32	28	36	31	28	35	31	28	26
8	44	35	29	26	43	35	29	26	34	29	25	33	28	25	32	28	25	24
9	41	32	27	23	40	32	27	23	31	26	23	30	26	23	30	26	23	22
10	39	30	25	21	38	30	25	21	29	24	21	28	24	21	28	24	21	20

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

	0°	45°	90°
0°	5581	5581	5581
5°	5561	5583	5598
10°	5534	5573	5601
15°	5480	5542	5586
20°	5395	5471	5532
25°	5267	5350	5426
30°	5076	5158	5259
35°	4795	4884	4997
40°	4458	4564	4651
45°	4092	4213	4295
50°	3727	3820	3947
55°	3330	3345	3514
60°	2932	2765	3022
65°	2621	2179	2646
70°	2473	1858	2491
75°	2521	1999	2554
80°	2658	2299	2744
85°	2955	2561	3029



TEST NUMBER: 163P111

CATALOG NUMBER: GCASF2048-332A-PAF

**ZONAL LUMENS:**

**CANDELA DISTRIBUTION:**

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	246.0	4.2	2.9	0°	2600	2600	2600	2600	2600	
10°-20°	701.9	11.9	8.2	5°	2581	2583	2591	2593	2598	245
20°-30°	1037.3	17.6	12.1	15°	2466	2473	2494	2505	2514	695
30°-40°	1164.7	19.7	13.6	25°	2224	2234	2259	2280	2291	1022
40°-50°	1068.8	18.1	12.5	35°	1830	1843	1864	1892	1907	1143
50°-60°	803.2	13.6	9.4	45°	1348	1366	1388	1412	1415	1040
60°-70°	479.2	8.1	5.6	55°	890	874	894	910	939	798
70°-80°	287.8	4.9	3.4	65°	516	469	429	471	521	519
80°-90°	116.8	2.0	1.4	75°	304	271	241	270	308	321
90°-100°	0.0	0.0	0.0	85°	120	113	104	111	123	116
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°	1985.2	33.6	23.2	165°	0	0	0	0	0	0
0°-40°	3149.9	53.3	36.8	175°	0	0	0	0	0	0
0°-60°	5022.0	85.0	58.7	180°	0	0	0	0	0	0
0°-90°	5905.7	100.0	69.1							
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°	5905.7	100.0	69.1							



TEST NUMBER: 163P111

CATALOG NUMBER: GCASF2048-332A-PAF

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2600	2600	2600	2600	2600
2.5°	2592	2592	2600	2598	2602
5°	2581	2583	2591	2593	2598
7.5°	2564	2566	2577	2581	2587
10°	2539	2544	2557	2563	2570
12.5°	2507	2512	2529	2538	2546
15°	2466	2473	2494	2505	2514
17.5°	2419	2428	2449	2464	2474
20°	2362	2372	2395	2413	2422
22.5°	2297	2308	2333	2351	2361
25°	2224	2234	2259	2280	2291
27.5°	2141	2150	2175	2199	2211
30°	2048	2056	2081	2106	2122
32.5°	1949	1954	1976	2004	2020
35°	1830	1843	1864	1892	1907
37.5°	1713	1726	1748	1774	1786
40°	1591	1609	1629	1654	1660
42.5°	1468	1488	1509	1533	1536
45°	1348	1366	1388	1412	1415
47.5°	1230	1242	1266	1289	1300
50°	1116	1117	1144	1165	1182
52.5°	1000	995	1020	1038	1061
55°	890	874	894	910	939
57.5°	783	759	768	782	817
60°	683	651	644	663	704
62.5°	593	553	529	558	604
65°	516	469	429	471	521
67.5°	450	402	351	404	453
70°	394	350	296	352	397
72.5°	346	308	263	309	350
75°	304	271	241	270	308
77.5°	262	234	218	233	267
80°	215	197	186	195	222
82.5°	168	158	146	155	174
85°	120	113	104	111	123
87.5°	63	61	56	57	66
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



TEST NUMBER: 163P111

CATALOG NUMBER: GCASF2048-332A-PAF

**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)