

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: 160P104

Luminaire Tested: **GCASF-240A-PAF**

Issue Date: 3/3/2020



**Test Information**

Test Method: LM-41-14  
Report Number: 160P104  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: GCASF-240A-PAF  
Description: 1 X 4 Recessed Convertible Body Troffer  
with a .095 pattern 12 acrylic lens.  
Light Source: Two-F40CW - 3050 Lumens ea. - 40 Watts ea.  
Ballast/Driver: Advance R-2S40-1-TP

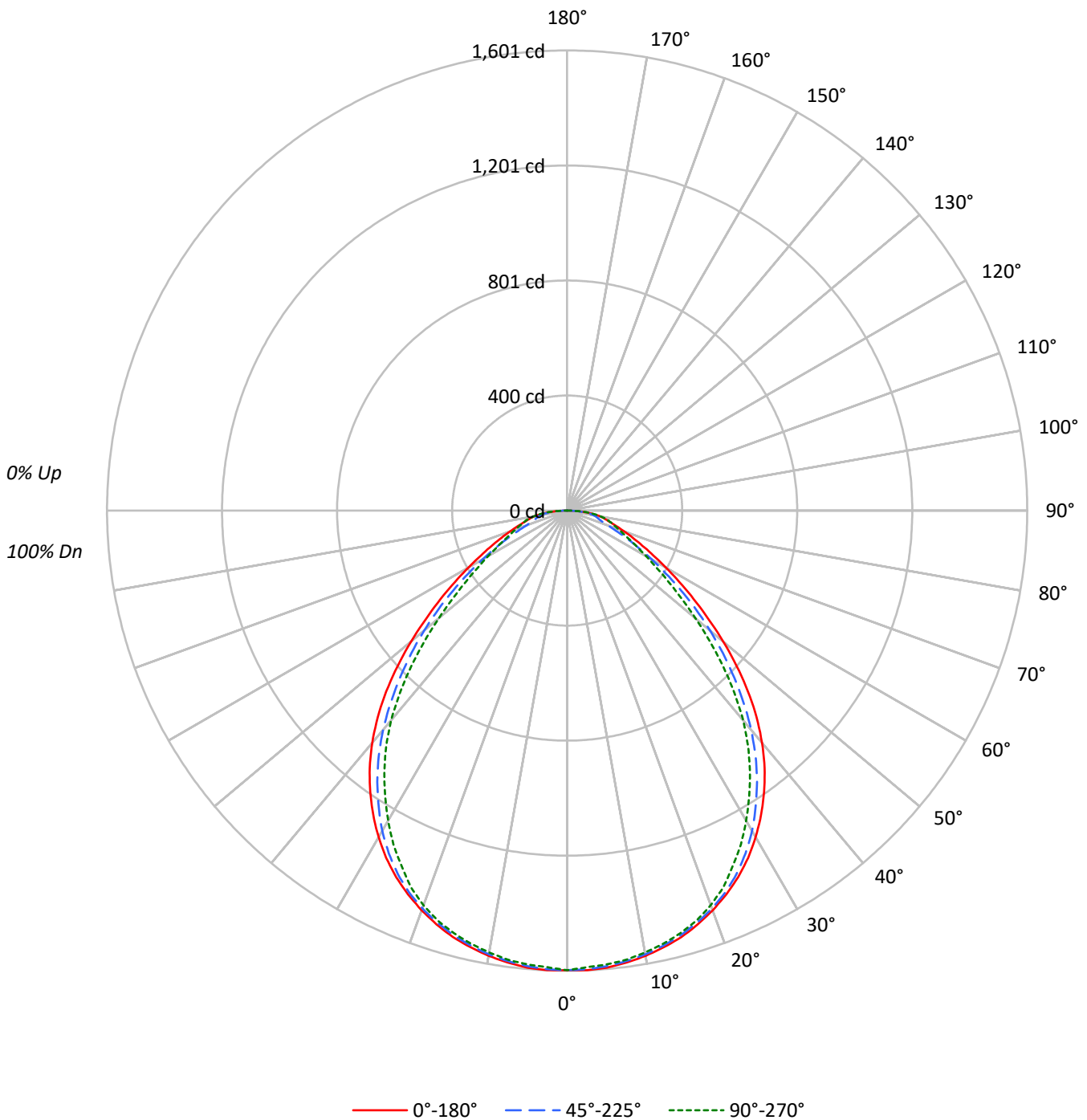
**Summary**

Lumens per Lamp: 3050 (2 lamps)  
Luminaire Lumens: 3468.6 lumens  
Efficiency: 56.9%  
Efficacy: 42.0 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.17 / 1.25  
Luminous Opening: Rectangular (W 0.69' x L: 3.7' x H: 0')  
CIE Type: Direct

Input Watts (W): 82.6  
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	68	68	68	68	66	66	66	66	63	63	63	60	60	60	58	58	58	57
1	63	60	58	56	61	59	57	55	56	55	53	54	53	52	52	51	50	49
2	58	53	50	47	56	52	49	46	50	48	45	49	46	44	47	45	43	42
3	53	48	43	40	52	47	43	40	45	42	39	44	41	38	42	40	38	37
4	49	43	38	35	48	42	38	35	41	37	34	39	36	34	38	35	33	32
5	45	39	34	31	44	38	34	30	37	33	30	36	32	30	35	32	29	28
6	42	35	30	27	41	35	30	27	34	30	27	33	29	26	32	29	26	25
7	39	32	27	24	38	32	27	24	31	27	24	30	26	24	29	26	24	23
8	37	29	25	22	36	29	25	22	28	24	22	28	24	22	27	24	21	20
9	34	27	23	20	34	27	23	20	26	22	20	26	22	20	25	22	19	18
10	32	25	21	18	32	25	21	18	24	21	18	24	20	18	23	20	18	17

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

	0°	45°	90°
0°	6770	6770	6770
5°	6783	6762	6736
10°	6763	6741	6711
15°	6733	6702	6671
20°	6668	6637	6583
25°	6573	6517	6372
30°	6414	6292	6092
35°	6177	5954	5732
40°	5831	5505	5267
45°	5329	4922	4599
50°	4670	4275	3834
55°	3971	3565	3159
60°	3353	2879	2684
65°	2895	2274	2404
70°	2600	1869	2340
75°	2519	1865	2552
80°	2828	2292	2901
85°	2963	2526	3255



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**ZONAL LUMENS:**

**CANDELA DISTRIBUTION:**

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	151.1	4.4	2.5	0°	1599	1599	1599	1599	1599	
10°-20°	431.1	12.4	7.1	5°	1596	1591	1591	1591	1585	152
20°-30°	638.9	18.4	10.5	15°	1536	1530	1529	1529	1522	433
30°-40°	717.8	20.7	11.8	25°	1407	1402	1395	1380	1364	647
40°-50°	634.9	18.3	10.4	35°	1195	1183	1152	1121	1109	745
50°-60°	432.9	12.5	7.1	45°	890	869	822	784	768	683
60°-70°	251.0	7.2	4.1	55°	538	517	483	435	428	485
70°-80°	149.9	4.3	2.5	65°	289	259	227	240	240	291
80°-90°	60.9	1.8	1.0	75°	154	142	114	152	156	167
90°-100°	0.0	0.0	0.0	85°	61	55	52	63	67	61
100°-110°	0.0	0.0	0.0	90°	0	0	0	0	0	4
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°	1221.2	35.2	20.0	165°	0	0	0	0	0	0
0°-40°	1938.9	55.9	31.8	175°	0	0	0	0	0	0
0°-60°	3006.8	86.7	49.3	180°	0	0	0	0	0	0
0°-90°	3468.6	100.0	56.9							
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°	3468.6	100.0	56.9							



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1599	1599	1599	1599	1599
2.5°	1601	1596	1597	1597	1590
5°	1596	1591	1591	1591	1585
7.5°	1586	1581	1581	1582	1576
10°	1573	1568	1568	1568	1561
12.5°	1556	1551	1550	1551	1544
15°	1536	1530	1529	1529	1522
17.5°	1510	1504	1503	1503	1496
20°	1480	1475	1473	1470	1461
22.5°	1446	1441	1438	1430	1419
25°	1407	1402	1395	1380	1364
27.5°	1363	1357	1344	1323	1309
30°	1312	1305	1287	1261	1246
32.5°	1256	1247	1221	1193	1179
35°	1195	1183	1152	1121	1109
37.5°	1129	1114	1077	1044	1034
40°	1055	1038	996	962	953
42.5°	976	956	910	875	862
45°	890	869	822	784	768
47.5°	800	779	735	690	674
50°	709	689	649	597	582
52.5°	619	602	565	511	500
55°	538	517	483	435	428
57.5°	463	437	407	372	367
60°	396	366	340	318	317
62.5°	338	307	279	275	275
65°	289	259	227	240	240
67.5°	247	221	184	213	212
70°	210	190	151	192	189
72.5°	179	164	128	172	171
75°	154	142	114	152	156
77.5°	135	121	105	131	140
80°	116	98	94	108	119
82.5°	90	76	77	87	95
85°	61	55	52	63	67
87.5°	32	30	25	33	32
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)