

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: 163P101

Luminaire Tested: **GCASF2048-240A-PAF**

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: 163P101
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: GCASF2048-240A-PAF
Description: 20" X 48" 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

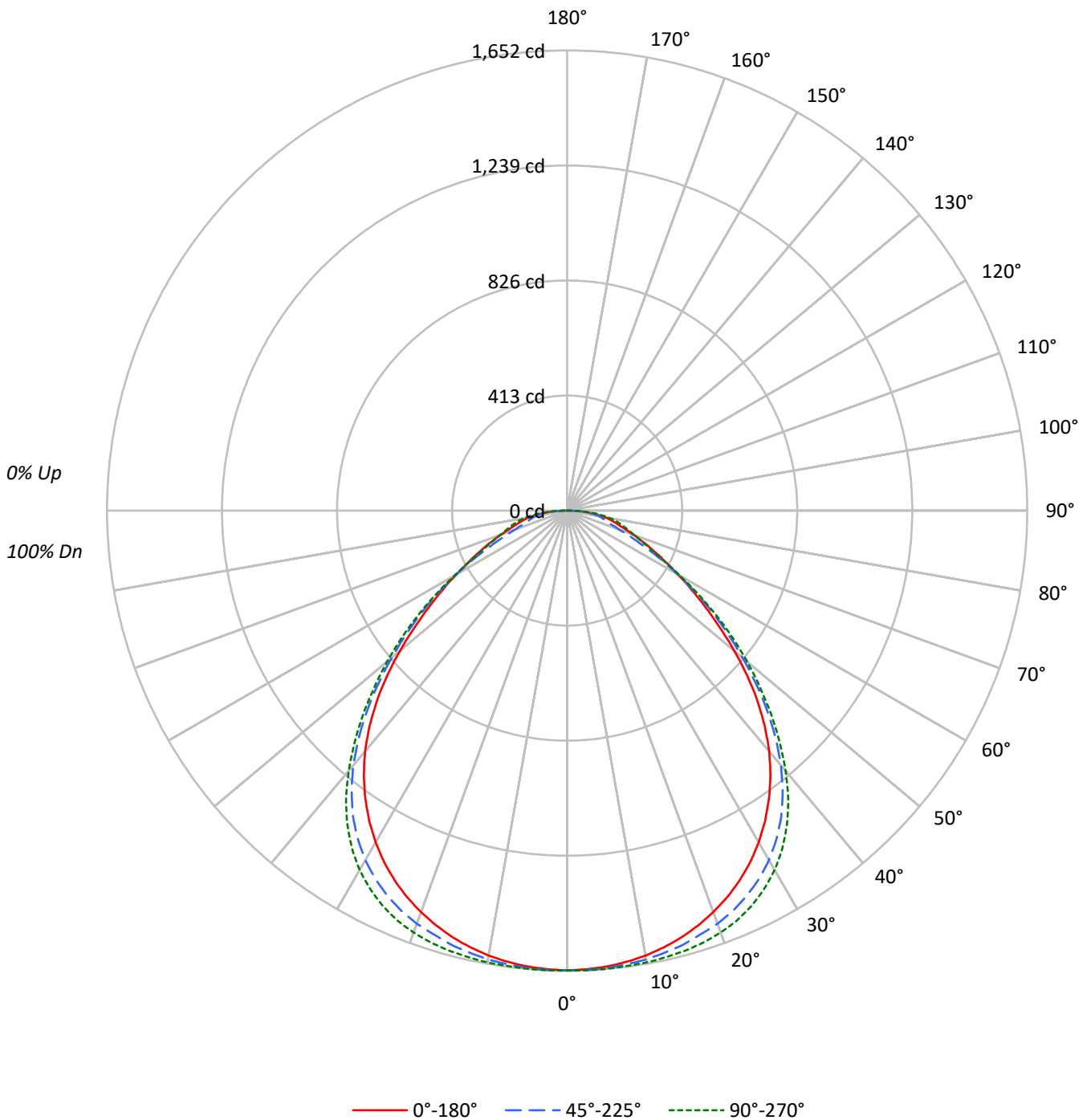
Lumens per Lamp: 3050 (2 lamps)
Luminaire Lumens: 4074.2 lumens
Efficiency: 66.8%
Efficacy: 48.4 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.32 / 1.34
Luminous Opening: Rectangular (W 1.35' x L: 3.7' x H: 0')
CIE Type: Direct

Input Watts (W): 84.2
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	50	30	10	0	
RCR																						
0	80	80	80	80	78	78	78	78	74	74	74	71	71	71	68	68	68	67				
1	73	70	68	65	71	69	66	64	66	64	62	63	62	60	61	60	59	57				
2	67	62	58	54	66	61	57	54	59	55	53	56	54	51	54	52	50	49				
3	62	55	50	46	60	54	49	46	52	48	45	50	47	44	49	46	43	42				
4	57	49	44	40	55	49	43	39	47	42	39	45	41	38	44	41	38	36				
5	53	44	39	35	51	44	38	34	42	38	34	41	37	34	40	36	33	32				
6	49	40	35	30	47	40	34	30	38	34	30	37	33	30	36	33	30	28				
7	45	37	31	27	44	36	31	27	35	30	27	34	30	27	33	29	26	25				
8	42	34	28	24	41	33	28	24	32	27	24	31	27	24	31	27	24	23				
9	39	31	26	22	39	30	25	22	30	25	22	29	25	22	28	24	22	20				
10	37	29	23	20	36	28	23	20	28	23	20	27	23	20	26	22	20	19				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3544	3544	3544
5°	3540	3551	3557
10°	3535	3566	3590
15°	3524	3584	3635
20°	3504	3604	3682
25°	3470	3614	3709
30°	3408	3591	3693
35°	3309	3511	3605
40°	3161	3345	3418
45°	2932	3084	3145
50°	2615	2745	2815
55°	2275	2380	2436
60°	1975	1975	2005
65°	1747	1559	1696
70°	1588	1249	1607
75°	1543	1194	1708
80°	1693	1446	1941
85°	1773	1625	2143



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	156.8	3.8	2.6	0°	1651	1651	1651	1651	1651	
10°-20°	455.3	11.2	7.5	5°	1643	1644	1648	1649	1651	156
20°-30°	699.8	17.2	11.5	15°	1586	1594	1613	1629	1636	447
30°-40°	827.9	20.3	13.6	25°	1465	1485	1526	1555	1566	674
40°-50°	774.0	19.0	12.7	35°	1263	1292	1340	1365	1376	788
50°-60°	565.1	13.9	9.3	45°	966	988	1016	1024	1036	741
60°-70°	329.8	8.1	5.4	55°	608	618	636	641	651	547
70°-80°	189.1	4.6	3.1	65°	344	321	307	334	334	345
80°-90°	76.3	1.9	1.3	75°	186	173	144	195	206	200
90°-100°	0.0	0.0	0.0	85°	72	66	66	82	87	72
100°-110°	0.0	0.0	0.0	90°	0	0	0	0	0	5
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°	1311.9	32.2	21.5	165°	0	0	0	0	0	0
0°-40°	2139.8	52.5	35.1	175°	0	0	0	0	0	0
0°-60°	3479.0	85.4	57.0	180°	0	0	0	0	0	0
0°-90°	4074.2	100.0	66.8							
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°	4074.2	100.0	66.8							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1651	1651	1651	1651	1651
2.5°	1648	1649	1651	1651	1652
5°	1643	1644	1648	1649	1651
7.5°	1634	1637	1643	1646	1649
10°	1622	1626	1636	1642	1647
12.5°	1606	1611	1625	1637	1642
15°	1586	1594	1613	1629	1636
17.5°	1562	1573	1595	1618	1626
20°	1534	1548	1578	1603	1612
22.5°	1502	1519	1555	1583	1593
25°	1465	1485	1526	1555	1566
27.5°	1423	1447	1491	1521	1532
30°	1375	1401	1449	1479	1490
32.5°	1322	1351	1399	1427	1438
35°	1263	1292	1340	1365	1376
37.5°	1199	1228	1271	1294	1304
40°	1128	1155	1194	1212	1220
42.5°	1050	1075	1108	1122	1130
45°	966	988	1016	1024	1036
47.5°	876	896	919	926	939
50°	783	804	822	826	843
52.5°	692	710	727	731	747
55°	608	618	636	641	651
57.5°	530	529	546	551	556
60°	460	449	460	466	467
62.5°	398	379	380	393	393
65°	344	321	307	334	334
67.5°	296	273	247	289	290
70°	253	233	199	253	256
72.5°	215	201	165	223	228
75°	186	173	144	195	206
77.5°	162	146	131	167	183
80°	137	119	117	139	157
82.5°	106	92	95	112	124
85°	72	66	66	82	87
87.5°	37	36	34	43	44
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)