

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: 182P102

Luminaire Tested: **2GCASF-232A-PAF**

Issue Date: 3/3/2020



**Test Information**

Test Method: LM-41-14  
Report Number: 182P102  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 2GCASF-232A-PAF  
Description: 2 X 4 Recessed Air Supply Troffer with a .095  
pattern 12 acrylic lens.  
Light Source: Two - FO32T8/35K - 2850 Lumens ea. - 32 Watts ea.  
Ballast/Driver: Magnetek B232I120RH Electronic - L.O.B.F. = 87.9

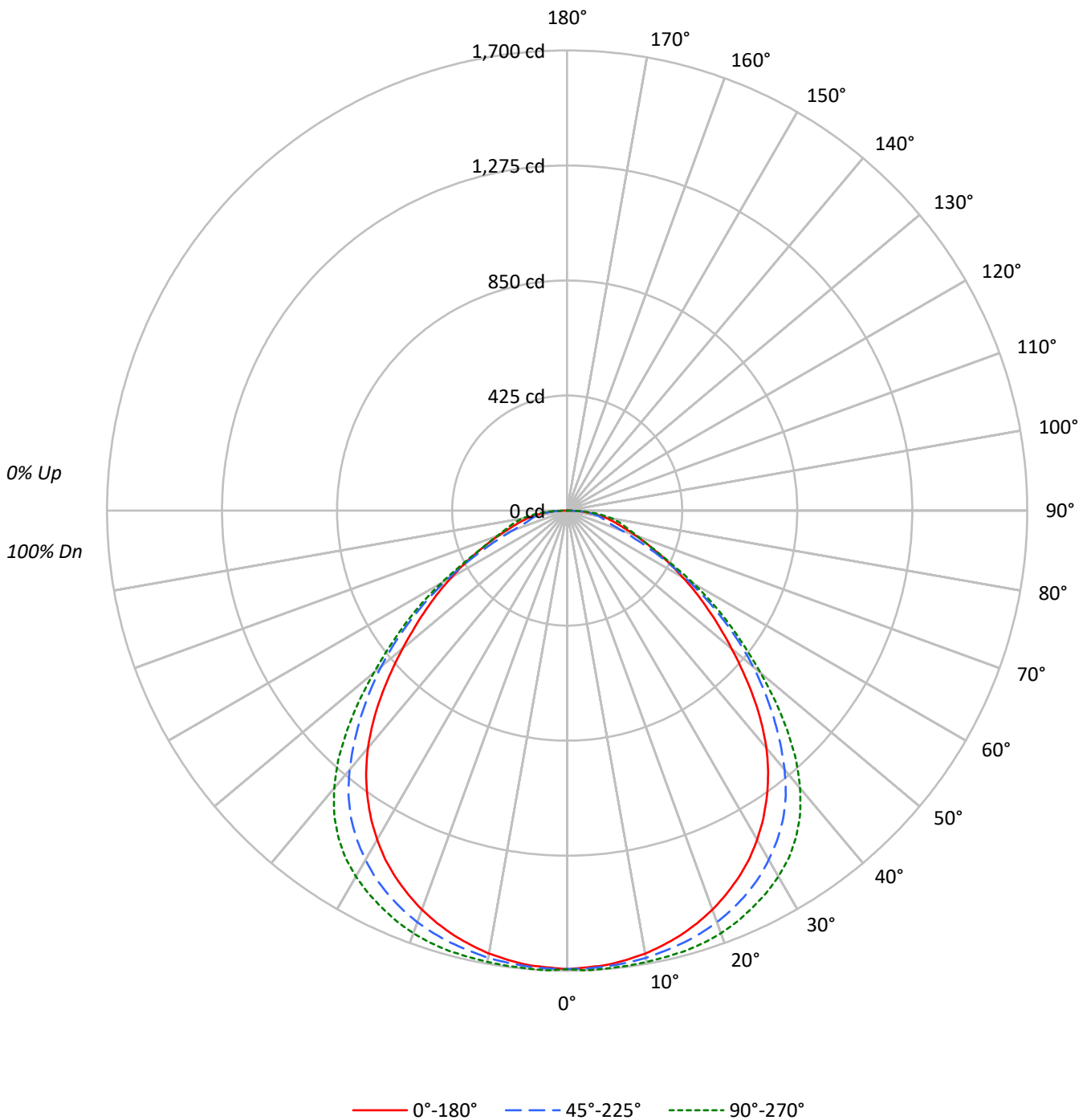
**Summary**

Lumens per Lamp: 2850 (2 lamps)  
Luminaire Lumens: 4288.6 lumens  
Efficiency: 75.2%  
Efficacy: 74.1 lumens/watt  
Spacing Criteria (0/90/45): 1.23 / 1.35 / 1.36  
Luminous Opening: Rectangular (W 1.69' x L: 3.7' x H: 0')  
CIE Type: Direct

Input Watts (W): 57.9  
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	90	90	90	90	87	87	87	87	84	84	84		80	80	80		77	77	77	75
1	82	79	76	73	80	77	75	72	74	72	70		71	70	68		69	67	66	64
2	76	70	65	61	74	68	64	60	66	62	59		63	60	58		61	59	56	55
3	69	62	56	52	68	61	55	51	59	54	50		57	53	49		55	51	49	47
4	64	55	49	44	62	54	49	44	53	47	43		51	46	43		49	45	42	41
5	59	50	43	39	57	49	43	38	47	42	38		46	41	38		45	40	37	36
6	55	45	39	34	53	44	38	34	43	38	34		42	37	33		41	36	33	31
7	51	41	35	30	49	40	34	30	39	34	30		38	33	30		37	33	29	28
8	47	37	31	27	46	37	31	27	36	31	27		35	30	27		34	30	26	25
9	44	34	28	24	43	34	28	24	33	28	24		32	28	24		32	27	24	23
10	41	32	26	22	41	31	26	22	31	26	22		30	25	22		29	25	22	21

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

	0°	45°	90°
0°	2922	2922	2922
5°	2918	2926	2940
10°	2911	2939	2965
15°	2898	2954	3007
20°	2880	2970	3051
25°	2849	2979	3081
30°	2796	2968	3109
35°	2710	2929	3104
40°	2578	2815	3015
45°	2374	2630	2808
50°	2128	2407	2501
55°	1910	2120	2195
60°	1701	1777	1859
65°	1506	1392	1522
70°	1352	1069	1387
75°	1286	986	1453
80°	1381	1182	1679
85°	1445	1385	1860



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**ZONAL LUMENS:**

**CANDELA DISTRIBUTION:**

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	160.9	3.8	2.8	0°	1694	1694	1694	1694	1694	
10°-20°	467.0	10.9	8.2	5°	1685	1684	1690	1693	1698	160
20°-30°	719.0	16.8	12.6	15°	1623	1631	1654	1673	1684	458
30°-40°	862.5	20.1	15.1	25°	1497	1517	1565	1603	1619	689
40°-50°	821.8	19.2	14.4	35°	1287	1320	1391	1449	1474	803
50°-60°	617.3	14.4	10.8	45°	973	1009	1078	1127	1151	748
60°-70°	361.8	8.4	6.3	55°	635	658	705	714	730	570
70°-80°	198.4	4.6	3.5	65°	369	346	341	369	373	369
80°-90°	79.9	1.9	1.4	75°	193	180	148	206	218	208
90°-100°	0.0	0.0	0.0	85°	73	67	70	87	94	73
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°	1346.8	31.4	23.6	165°	0	0	0	0	0	0
0°-40°	2209.4	51.5	38.8	175°	0	0	0	0	0	0
0°-60°	3648.5	85.1	64.0	180°	0	0	0	0	0	0
0°-90°	4288.6	100.0	75.2							
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°	4288.6	100.0	75.2							



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1694	1694	1694	1694	1694
2.5°	1689	1690	1693	1694	1700
5°	1685	1684	1690	1693	1698
7.5°	1674	1677	1685	1690	1696
10°	1662	1665	1678	1686	1693
12.5°	1644	1650	1666	1680	1689
15°	1623	1631	1654	1673	1684
17.5°	1598	1609	1638	1663	1675
20°	1569	1582	1618	1648	1662
22.5°	1535	1552	1594	1628	1643
25°	1497	1517	1565	1603	1619
27.5°	1454	1478	1531	1573	1593
30°	1404	1431	1490	1539	1561
32.5°	1349	1379	1444	1499	1523
35°	1287	1320	1391	1449	1474
37.5°	1220	1253	1327	1386	1414
40°	1145	1179	1250	1310	1339
42.5°	1062	1096	1165	1223	1252
45°	973	1009	1078	1127	1151
47.5°	881	921	988	1025	1043
50°	793	833	897	919	932
52.5°	711	746	802	813	827
55°	635	658	705	714	730
57.5°	563	570	609	619	635
60°	493	486	515	528	539
62.5°	429	410	424	442	447
65°	369	346	341	369	373
67.5°	316	292	270	314	317
70°	268	248	212	272	275
72.5°	227	212	172	238	243
75°	193	180	148	206	218
77.5°	165	151	133	175	195
80°	139	122	119	146	169
82.5°	108	93	98	119	135
85°	73	67	70	87	94
87.5°	37	37	37	48	49
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)