

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: 160P102

Luminaire Tested: **GXF-232S213I-PAF**

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: 160P102
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: GCXF-232S213I-PAF
Description: 1 X 4 Recessed Convertible Body Troffer
with a 1.5" deep 26 cell semi-specular
low iridescent parabolic louver.
Light Source: Two-F32T8/35K - 2900 Lumens ea. - 32 Watts ea.
Ballast/Driver: Triad-Utrad B2321120RH Electronic

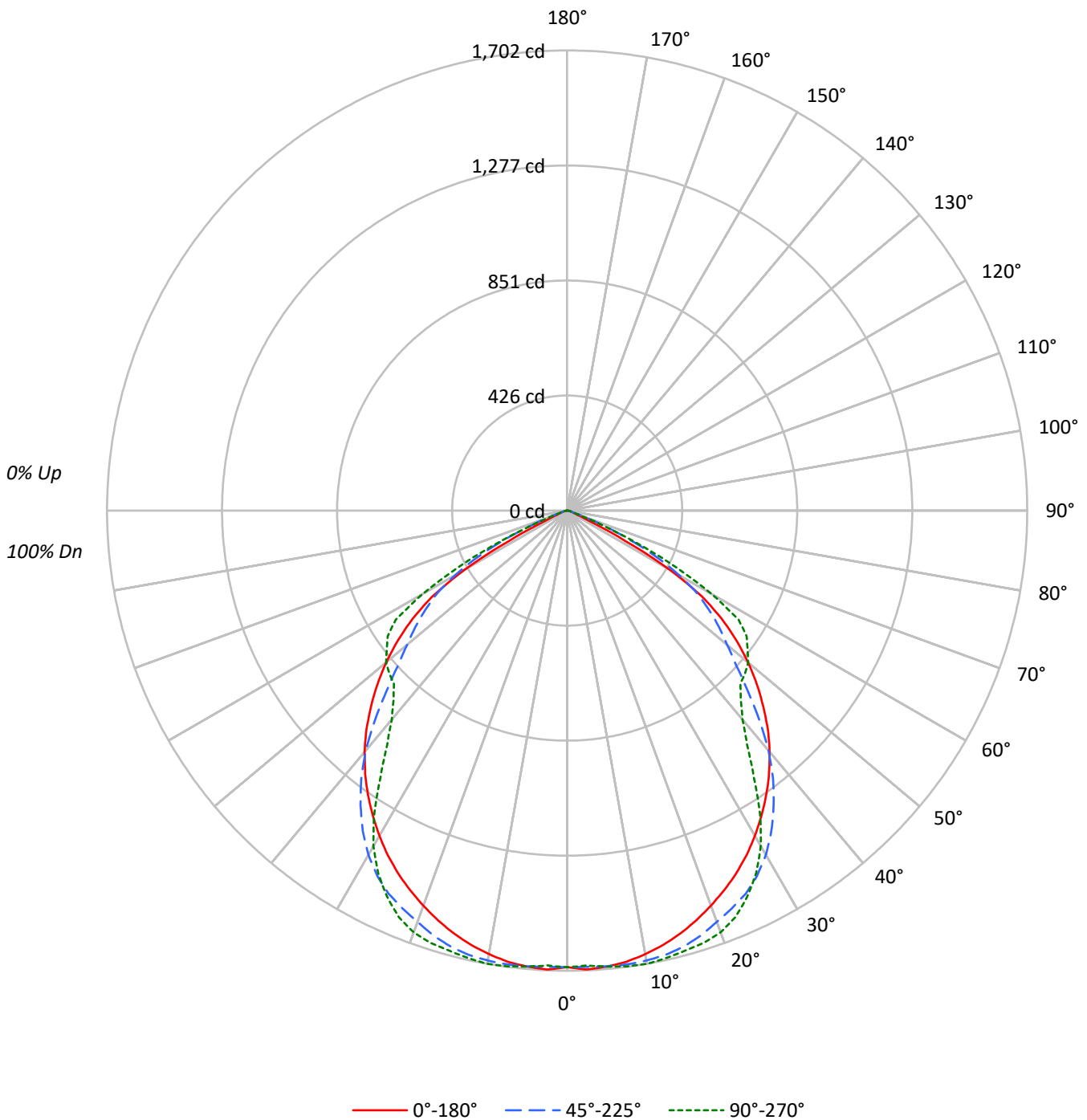
Summary

Lumens per Lamp: 2900 (2 lamps)
Luminaire Lumens: 3774.4 lumens
Efficiency: 65.1%
Efficacy: 61.5 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.23 / 1.29
Luminous Opening: Rectangular (W 0.67' x L: 3.66' x H: 0')
CIE Type: Direct

Input Watts (W): 61.4
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	77	77	77	77	76	76	76	76	72	72	72	69	69	69	66	66	66	65
1	72	70	68	66	71	69	67	65	66	64	63	63	62	61	61	60	59	58
2	67	63	59	56	65	61	58	55	59	56	54	57	55	53	55	53	52	50
3	62	56	51	48	60	55	51	47	53	50	47	51	48	46	50	47	45	44
4	57	50	45	41	56	49	45	41	48	44	41	46	43	40	45	42	40	38
5	53	45	40	36	51	45	40	36	43	39	36	42	38	35	41	38	35	34
6	49	41	36	32	48	40	35	32	39	35	32	38	34	31	37	34	31	30
7	45	37	32	29	44	37	32	28	36	31	28	35	31	28	34	31	28	27
8	42	34	29	26	41	34	29	26	33	29	25	32	28	25	32	28	25	24
9	40	32	27	23	39	31	26	23	30	26	23	30	26	23	29	25	23	22
10	37	29	24	21	36	29	24	21	28	24	21	28	24	21	27	23	21	20

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7458	7458	7458
5°	7504	7500	7504
10°	7470	7578	7631
15°	7401	7630	7703
20°	7307	7608	7800
25°	7211	7615	7679
30°	7082	7495	7307
35°	6921	7180	6490
40°	6715	6675	5816
45°	6407	5901	5658
50°	5997	5303	6004
55°	5374	4935	6236
60°	3895	4239	5440
65°	940	2717	2967
70°	349	762	620
75°	239	256	307
80°	178	203	229
85°	152	203	203



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	161.3	4.3	2.8	0°	1689	1689	1689	1689	1689	
10°-20°	468.8	12.4	8.1	5°	1693	1686	1692	1696	1693	161
20°-30°	711.1	18.8	12.3	15°	1619	1634	1669	1686	1685	456
30°-40°	804.5	21.3	13.9	25°	1480	1518	1563	1585	1576	681
40°-50°	749.5	19.9	12.9	35°	1284	1329	1332	1256	1204	802
50°-60°	620.3	16.4	10.7	45°	1026	1066	945	889	906	790
60°-70°	234.5	6.2	4.0	55°	698	690	641	737	810	610
70°-80°	20.2	0.5	0.3	65°	90	129	260	282	284	148
80°-90°	4.1	0.1	0.1	75°	14	14	15	17	18	16
90°-100°	0.0	0.0	0.0	85°	3	3	4	4	4	3
100°-110°	0.0	0.0	0.0	90°	0	0	0	0	0	0
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°	1341.2	35.5	23.1	165°	0	0	0	0	0	0
0°-40°	2145.7	56.9	37.0	175°	0	0	0	0	0	0
0°-60°	3515.6	93.1	60.6	180°	0	0	0	0	0	0
0°-90°	3774.4	100.0	65.1							
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°	3774.4	100.0	65.1							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1689	1689	1689	1689	1689
2.5°	1699	1689	1689	1689	1684
5°	1693	1686	1692	1696	1693
7.5°	1683	1680	1693	1701	1700
10°	1666	1670	1690	1704	1702
12.5°	1645	1654	1683	1699	1695
15°	1619	1634	1669	1686	1685
17.5°	1589	1610	1647	1673	1677
20°	1555	1583	1619	1660	1660
22.5°	1519	1553	1592	1631	1627
25°	1480	1518	1563	1585	1576
27.5°	1437	1478	1522	1526	1513
30°	1389	1432	1470	1453	1433
32.5°	1338	1383	1406	1366	1328
35°	1284	1329	1332	1256	1204
37.5°	1227	1273	1251	1134	1093
40°	1165	1213	1158	1027	1009
42.5°	1099	1145	1053	947	950
45°	1026	1066	945	889	906
47.5°	952	980	849	842	892
50°	873	889	772	819	874
52.5°	789	792	708	786	841
55°	698	690	641	737	810
57.5°	591	577	571	675	752
60°	441	447	480	579	616
62.5°	242	286	374	432	455
65°	90	129	260	282	284
67.5°	39	48	143	144	135
70°	27	28	59	57	48
72.5°	19	20	24	26	26
75°	14	14	15	17	18
77.5°	10	10	11	13	13
80°	7	7	8	9	9
82.5°	5	5	6	6	6
85°	3	3	4	4	4
87.5°	2	2	2	2	2
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)