

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: 160P106

Luminaire Tested: **GC-140A-PAF**

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: 160P106
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: GC-140A-PAF
Description: 1 X 4 Recessed Convertible Body Troffer with
a .095 pattern 12 acrylic lens.
Light Source: F40CW - 3050 Lumens - 40 Watts
Ballast/Driver: Advance R-140-1-TP

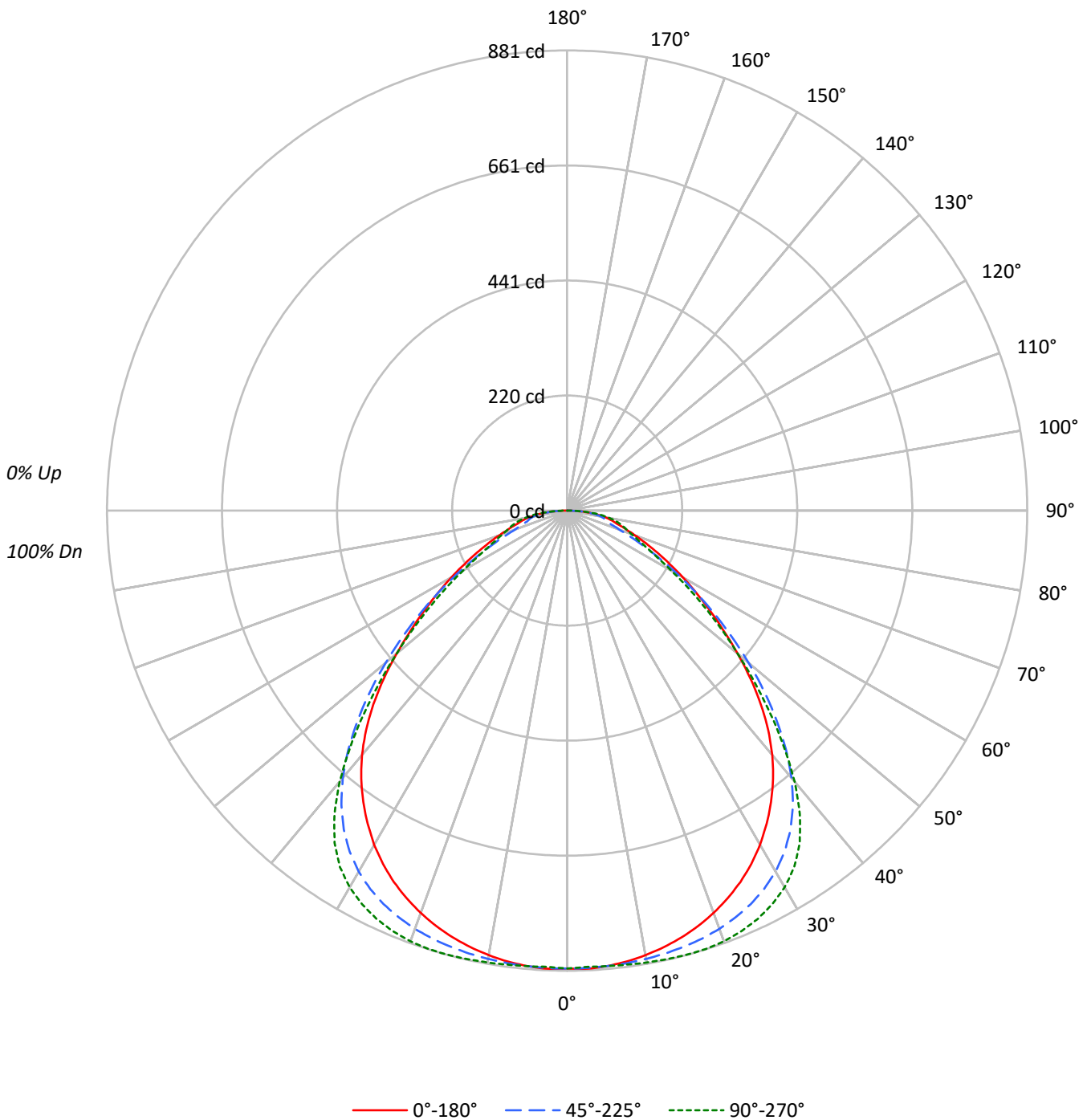
Summary

Lumens per Lamp: 3050 (1 lamp)
Luminaire Lumens: 2209.8 lumens
Efficiency: 72.5%
Efficacy: 44.6 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.37 / 1.36
Luminous Opening: Rectangular (W 0.78' x L: 3.8' x H: 0')
CIE Type: Direct

Input Watts (W): 49.5
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: 160P106
CATALOG NUMBER: GC-140A-PAF

Luminous Intensity Polar Plot





TEST NUMBER: 160P106
 CATALOG NUMBER: GC-140A-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	50	30	10	0	
RCR																						
0	86	86	86	86	84	84	84	84	81	81	81	77	77	77	74	74	74	72				
1	79	76	73	71	78	75	72	70	72	69	68	69	67	65	66	65	64	62				
2	73	67	63	59	71	66	62	58	64	60	57	61	58	56	59	57	55	53				
3	67	60	54	50	65	59	54	50	57	52	49	55	51	48	53	50	47	46				
4	62	54	48	43	60	53	47	43	51	46	42	49	45	42	48	44	41	40				
5	57	48	42	38	56	47	42	37	46	41	37	45	40	37	43	39	36	35				
6	53	44	38	33	52	43	37	33	42	37	33	41	36	32	39	35	32	31				
7	49	40	34	29	48	39	33	29	38	33	29	37	32	29	36	32	29	27				
8	46	36	30	26	45	36	30	26	35	30	26	34	29	26	33	29	26	25				
9	43	33	28	24	42	33	28	24	32	27	24	31	27	24	31	27	23	22				
10	40	31	25	22	39	31	25	22	30	25	22	29	25	21	29	24	21	20				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3177	3177	3177
5°	3184	3184	3184
10°	3180	3207	3232
15°	3174	3243	3303
20°	3161	3286	3384
25°	3137	3324	3450
30°	3091	3340	3484
35°	3012	3298	3434
40°	2890	3160	3204
45°	2688	2905	2822
50°	2400	2557	2403
55°	2106	2169	2019
60°	1856	1771	1670
65°	1632	1397	1434
70°	1457	1120	1385
75°	1400	1107	1518
80°	1555	1379	1724
85°	1646	1555	1904



TEST NUMBER: 160P106
 CATALOG NUMBER: GC-140A-PAF

ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	83.4	3.8	2.7	0°	877	877	877	877	877	
10°-20°	244.3	11.1	8.0	5°	876	874	876	877	876	83
20°-30°	381.2	17.2	12.5	15°	846	850	864	878	881	239
30°-40°	458.2	20.7	15.0	25°	785	799	831	856	863	361
40°-50°	423.3	19.2	13.9	35°	681	705	746	769	776	425
50°-60°	300.8	13.6	9.9	45°	524	544	567	556	551	402
60°-70°	175.0	7.9	5.7	55°	333	346	343	324	320	300
70°-80°	101.9	4.6	3.3	65°	190	178	163	172	167	191
80°-90°	41.7	1.9	1.4	75°	100	95	79	103	108	108
90°-100°	0.0	0.0	0.0	85°	40	37	37	43	46	39
100°-110°	0.0	0.0	0.0	90°	0	0	0	0	0	3
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°	708.9	32.1	23.2	165°	0	0	0	0	0	0
0°-40°	1167.1	52.8	38.3	175°	0	0	0	0	0	0
0°-60°	1891.2	85.6	62.0	180°	0	0	0	0	0	0
0°-90°	2209.8	100.0	72.5							
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°	2209.8	100.0	72.5							



TEST NUMBER: 160P106
 CATALOG NUMBER: GC-140A-PAF

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	876.8	876.8	876.8	876.8	876.8
2.5°	878.1	875.9	876.6	877.0	874.3
5°	875.5	873.7	875.5	877.4	875.5
7.5°	870.9	870.1	874.0	877.8	876.9
10°	864.3	864.9	871.5	878.2	878.4
12.5°	856.2	858.2	868.4	878.3	879.7
15°	846.0	849.9	864.4	878.0	880.6
17.5°	834.1	840.1	859.2	876.3	880.3
20°	819.7	828.4	852.2	872.5	877.5
22.5°	803.3	815.1	843.0	865.8	871.7
25°	784.7	799.3	831.4	856.0	862.8
27.5°	763.1	780.8	816.6	842.8	850.0
30°	738.8	759.3	798.2	824.8	832.7
32.5°	710.8	734.1	774.5	800.8	809.3
35°	680.8	704.8	745.5	769.3	776.2
37.5°	647.6	671.3	710.1	728.1	732.0
40°	611.0	633.5	668.1	677.1	677.4
42.5°	569.9	590.9	620.0	618.8	615.1
45°	524.5	543.8	566.8	555.7	550.7
47.5°	476.0	494.6	511.0	491.4	486.7
50°	425.8	445.0	453.6	429.7	426.3
52.5°	377.6	396.1	397.1	373.7	371.2
55°	333.4	345.6	343.4	323.9	319.6
57.5°	293.2	295.8	292.3	277.7	273.2
60°	256.1	249.3	244.4	236.3	230.5
62.5°	221.1	210.1	201.0	200.5	195.1
65°	190.3	177.6	162.9	171.5	167.2
67.5°	162.6	150.6	131.0	149.5	146.5
70°	137.5	128.5	105.7	132.5	130.7
72.5°	116.6	110.6	88.7	117.6	118.5
75°	100.0	95.3	79.1	103.3	108.4
77.5°	87.5	80.4	73.1	88.9	97.0
80°	74.5	65.9	66.1	74.1	82.6
82.5°	57.7	51.3	53.7	60.3	65.5
85°	39.6	37.4	37.4	43.4	45.8
87.5°	20.1	20.6	19.0	22.5	22.1
90°	0.0	0.0	0.0	0.0	0.0
92.5°	0.0	0.0	0.0	0.0	0.0
95°	0.0	0.0	0.0	0.0	0.0
97.5°	0.0	0.0	0.0	0.0	0.0
100°	0.0	0.0	0.0	0.0	0.0
102.5°	0.0	0.0	0.0	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0
107.5°	0.0	0.0	0.0	0.0	0.0
110°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: 160P106
CATALOG NUMBER: GC-140A-PAF

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	0.0	0.0	0.0	0.0
115°	0.0	0.0	0.0	0.0	0.0
117.5°	0.0	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.0	0.0	0.0
122.5°	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0
127.5°	0.0	0.0	0.0	0.0	0.0
130°	0.0	0.0	0.0	0.0	0.0
132.5°	0.0	0.0	0.0	0.0	0.0
135°	0.0	0.0	0.0	0.0	0.0
137.5°	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0
142.5°	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)