

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: 126P109

Luminaire Tested: **2GC-3BX40A-PAF**

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: 126P109
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 2GC-3BX40A-PAF
Description: 2 X 2 Recessed Convertible Body Troffer with a .095
pattern 12 acrylic lens.
Light Source: Three - F40BX/SPX35/RS - 3150 Lumens ea. - 40 Watts ea.
Ballast/Driver: Magnetek C340I120RH Electronic - L.O.B.F. = 90.8

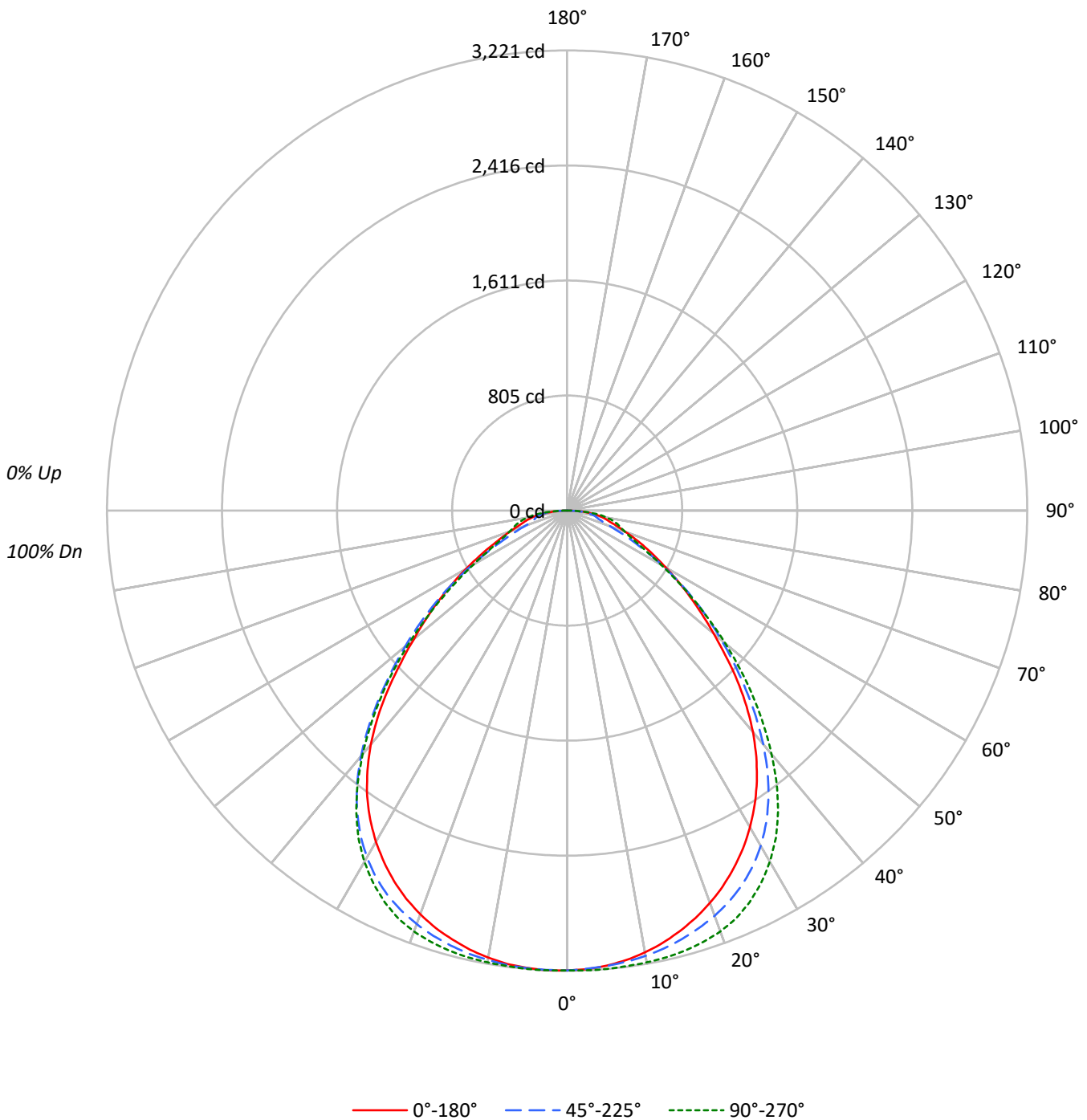
Summary

Lumens per Lamp: 3150 (3 lamps)
Luminaire Lumens: 7439.2 lumens
Efficiency: 78.7%
Efficacy: 76.5 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.29 / 1.3
Luminous Opening: Rectangular (W 1.78' x L: 1.81' x H: 0')
CIE Type: Direct

Input Watts (W): 97.3
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	50	30	10	0		
RCR																										
0	94	94	94	94	92	92	92	92	87	87	87	84	84	84	80	80	80	80	80	80	80	80	80	79		
1	87	83	80	77	84	81	79	76	78	76	74	75	73	72	72	71	69	68	68	68	68	68	68	68		
2	80	74	69	65	78	72	68	64	70	66	63	67	64	61	65	62	60	58	58	58	58	58	58	58		
3	73	66	60	55	71	65	59	55	62	58	54	60	56	53	58	55	52	50	50	50	50	50	50	50		
4	68	59	53	48	66	58	52	47	56	51	47	54	50	46	53	49	46	44	44	44	44	44	44	44		
5	63	53	47	42	61	52	46	42	51	45	41	49	44	41	48	44	40	39	39	39	39	39	39	39		
6	58	48	42	37	57	48	41	37	46	41	37	45	40	36	44	39	36	34	34	34	34	34	34	34		
7	54	44	38	33	53	43	37	33	42	37	33	41	36	32	40	36	32	31	31	31	31	31	31	31		
8	50	40	34	30	49	40	34	30	39	33	29	38	33	29	37	32	29	28	28	28	28	28	28	28		
9	47	37	31	27	46	37	31	27	36	30	27	35	30	27	34	30	26	25	25	25	25	25	25	25		
10	44	34	28	25	43	34	28	24	33	28	24	33	28	24	32	27	24	23	23	23	23	23	23	23		

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	10732	10732	10732
5°	10703	10780	10756
10°	10630	10870	10759
15°	10520	11007	10727
20°	10370	11123	10668
25°	10157	11124	10535
30°	9855	10925	10306
35°	9422	10476	9939
40°	8809	9692	9305
45°	7949	8680	8369
50°	6929	7479	7267
55°	6097	6225	6365
60°	5321	5061	5454
65°	4725	4276	4615
70°	4231	4162	4075
75°	4045	4689	4032
80°	4589	5433	4397
85°	5202	6006	4437



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	45°	90°	135°	180°	Flux
0°-10°	305.6	4.1	3.2	0°	3219	3219	3219	3219	3219	
10°-20°	884.1	11.9	9.4	5°	3198	3200	3221	3215	3214	303
20°-30°	1344.7	18.1	14.2	15°	3048	3105	3189	3152	3108	859
30°-40°	1550.3	20.8	16.4	25°	2761	2894	3024	2972	2864	1270
40°-50°	1383.3	18.6	14.6	35°	2315	2457	2574	2565	2442	1442
50°-60°	970.4	13.0	10.3	45°	1686	1767	1841	1862	1775	1296
60°-70°	552.6	7.4	5.8	55°	1049	1081	1071	1123	1095	942
70°-80°	316.7	4.3	3.4	65°	599	507	542	499	585	598
80°-90°	131.5	1.8	1.4	75°	314	228	364	237	313	341
90°-100°	0.0	0.0	0.0	85°	136	113	157	122	116	132
100°-110°	0.0	0.0	0.0	90°	0	0	0	0	0	10
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°	2534.4	34.1	26.8	165°	0	0	0	0	0	0
0°-40°	4084.8	54.9	43.2	175°	0	0	0	0	0	0
0°-60°	6438.4	86.5	68.1	180°	0	0	0	0	0	0
0°-90°	7439.2	100.0	78.7							
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°	7439.2	100.0	78.7							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	3219	3219	3219	3219	3219	3219	3219	3219	3219
2.5°	3213	3212	3210	3216	3221	3221	3218	3221	3221
5°	3198	3197	3200	3210	3221	3220	3215	3216	3214
7.5°	3173	3176	3185	3202	3216	3216	3208	3203	3201
10°	3140	3147	3165	3192	3211	3210	3194	3184	3178
12.5°	3099	3109	3139	3177	3203	3200	3177	3157	3148
15°	3048	3063	3105	3156	3189	3183	3152	3123	3108
17.5°	2990	3010	3065	3129	3167	3160	3120	3082	3063
20°	2923	2950	3019	3093	3135	3127	3080	3031	3007
22.5°	2847	2879	2962	3044	3090	3083	3031	2971	2942
25°	2761	2801	2894	2978	3024	3021	2972	2901	2864
27.5°	2667	2710	2811	2894	2940	2938	2896	2820	2775
30°	2560	2608	2711	2790	2838	2839	2803	2725	2677
32.5°	2443	2492	2593	2668	2718	2724	2693	2618	2566
35°	2315	2360	2457	2522	2574	2588	2565	2496	2442
37.5°	2175	2216	2304	2360	2409	2429	2417	2353	2297
40°	2024	2058	2135	2181	2227	2250	2246	2194	2138
42.5°	1859	1889	1955	1987	2036	2049	2060	2019	1963
45°	1686	1711	1767	1786	1841	1834	1862	1832	1775
47.5°	1505	1538	1585	1594	1641	1626	1667	1647	1580
50°	1336	1368	1410	1413	1442	1434	1479	1467	1401
52.5°	1186	1200	1242	1238	1251	1254	1299	1288	1243
55°	1049	1039	1081	1072	1071	1081	1123	1110	1095
57.5°	918	889	923	915	905	921	948	941	953
60°	798	756	770	774	759	779	778	789	818
62.5°	691	646	630	654	636	656	628	660	694
65°	599	556	507	558	542	553	499	551	585
67.5°	512	478	404	481	474	473	392	462	495
70°	434	409	321	420	427	415	311	391	418
72.5°	366	350	262	367	394	370	260	335	359
75°	314	297	228	320	364	325	237	289	313
77.5°	276	249	209	274	329	280	224	243	273
80°	239	200	188	225	283	233	205	197	229
82.5°	190	155	153	185	227	194	169	152	176
85°	136	114	113	134	157	143	122	112	116
87.5°	76	64	63	75	76	76	63	62	52
90°	0	0	0	0	0	0	0	0	0
92.5°	0	0	0	0	0	0	0	0	0
95°	0	0	0	0	0	0	0	0	0
97.5°	0	0	0	0	0	0	0	0	0
100°	0	0	0	0	0	0	0	0	0
102.5°	0	0	0	0	0	0	0	0	0
105°	0	0	0	0	0	0	0	0	0
107.5°	0	0	0	0	0	0	0	0	0
110°	0	0	0	0	0	0	0	0	0



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CANDELA DISTRIBUTION (continued):

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

(END OF REPORT)