

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: 126P110

Luminaire Tested: **2GC-3BX40A156-PAF**

Issue Date: 3/3/2020



**Test Information**

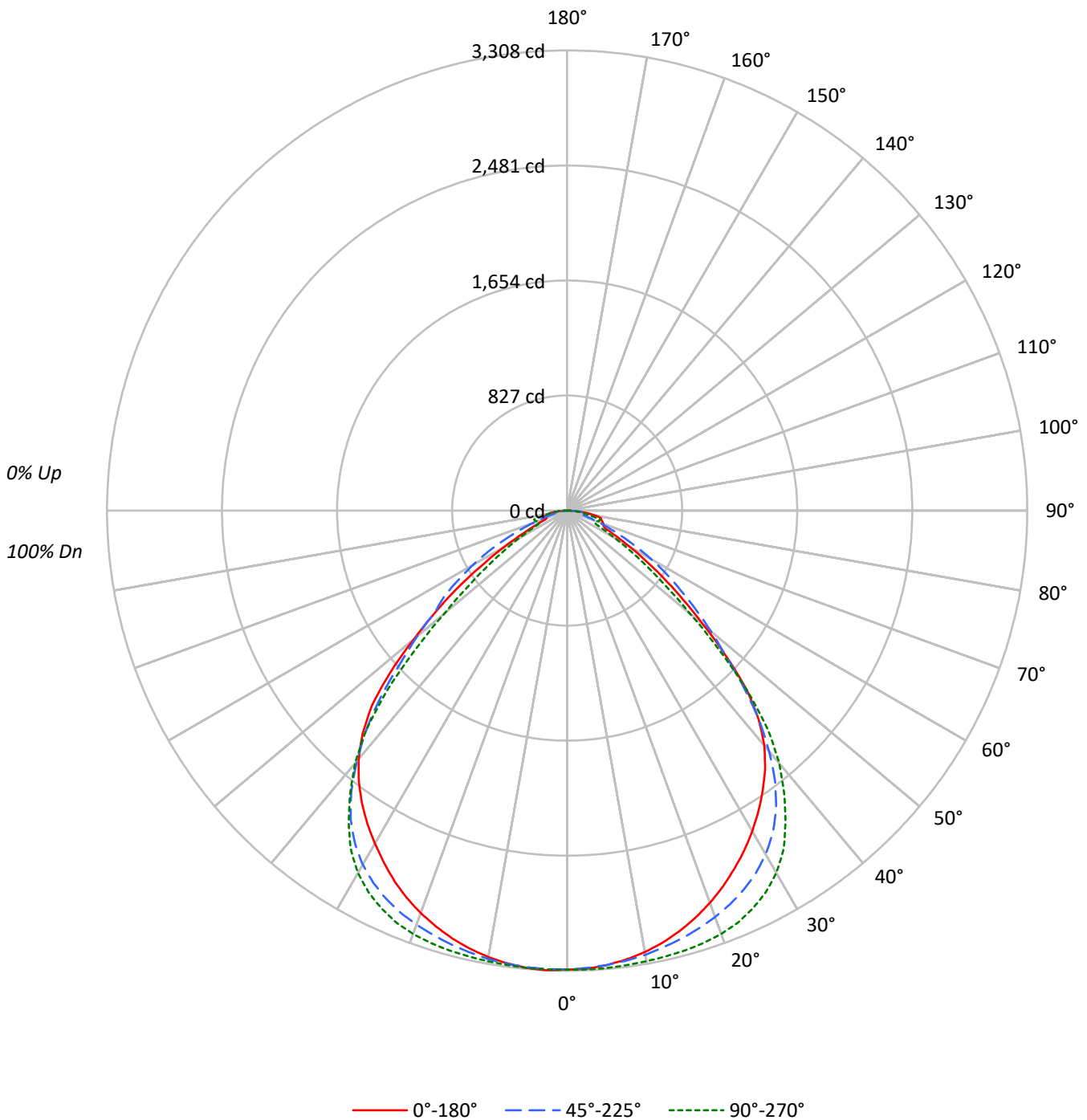
Test Method: LM-41-14  
Report Number: 126P110  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 2GC-3BX40A156-PAF  
Description: 2 X 2 Recessed Convertible Body Troffer with a .156  
pattern 12 acrylic lens.  
Light 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: 7284.1 lumens  
Efficiency: 77.1%  
Efficacy: 74.9 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.32 / 1.3  
Luminous Opening: Rectangular (W 1.78' x L: 1.81' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 97.2  
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									
RC	80									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	92	92	92	92	90	90	90	90	86	86	86	82	82	82	79	79	79	77	77	77	77	77	77	77													
1	85	82	79	77	83	80	78	76	77	75	73	74	73	71	71	70	69	67	67	67	67	67	67	67													
2	79	73	69	65	77	72	68	64	69	66	63	67	64	61	65	62	60	59	59	59	59	59	59	59													
3	73	66	60	56	71	64	59	55	62	58	54	60	57	53	58	55	53	51	51	51	51	51	51	51													
4	67	59	53	49	66	58	53	48	56	51	48	55	50	47	53	49	46	45	45	45	45	45	45	45													
5	62	53	47	43	61	53	47	42	51	46	42	50	45	42	48	44	41	40	40	40	40	40	40	40													
6	58	49	42	38	57	48	42	38	47	41	37	45	41	37	44	40	37	35	35	35	35	35	35	35													
7	54	44	38	34	53	44	38	34	43	37	34	42	37	33	41	36	33	32	32	32	32	32	32	32													
8	50	41	35	31	49	40	34	30	39	34	30	38	34	30	37	33	30	29	29	29	29	29	29	29													
9	47	38	32	28	46	37	31	28	36	31	27	35	31	27	35	30	27	26	26	26	26	26	26	26													
10	44	35	29	25	43	34	29	25	34	29	25	33	28	25	32	28	25	24	24	24	24	24	24	24													

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

	0°	90°	180°
0°	11002	11002	11002
5°	10974	11047	11044
10°	10908	11134	11033
15°	10800	11297	10993
20°	10647	11492	10920
25°	10455	11610	10808
30°	10248	11576	10637
35°	9984	11139	10460
40°	9592	10319	10145
45°	8624	8633	9364
50°	6639	5985	7464
55°	4935	4080	5470
60°	3434	2660	3494
65°	2390	1775	1964
70°	2690	2203	1521
75°	3259	3156	2280
80°	3974	2611	2592
85°	3710	2869	2486



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**ZONAL LUMENS:**

**CANDELA DISTRIBUTION:**

Zone	Lumens	% Fixture	% Lamp		0°	45°	90°	135°	180°	Flux
0°-10°	313.2	4.3	3.3	0°	3300	3300	3300	3300	3300	
10°-20°	907.1	12.5	9.6	5°	3279	3279	3301	3295	3300	311
20°-30°	1395.6	19.2	14.8	15°	3129	3184	3273	3228	3185	882
30°-40°	1644.4	22.6	17.4	25°	2842	3006	3156	3080	2938	1309
40°-50°	1431.5	19.7	15.1	35°	2453	2619	2737	2712	2570	1531
50°-60°	852.8	11.7	9.0	45°	1829	1793	1831	1896	1986	1377
60°-70°	417.8	5.7	4.4	55°	849	994	702	1082	941	770
70°-80°	229.0	3.1	2.4	65°	303	427	225	498	249	338
80°-90°	92.7	1.3	1.0	75°	253	122	245	121	177	267
90°-100°	0.0	0.0	0.0	85°	97	93	75	64	65	103
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°	2615.9	35.9	27.7	165°	0	0	0	0	0	0
0°-40°	4260.3	58.5	45.1	175°	0	0	0	0	0	0
0°-60°	6544.6	89.8	69.3	180°	0	0	0	0	0	0
0°-90°	7284.1	100.0	77.1							
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°	7284.1	100.0	77.1							



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	3300	3300	3300	3300	3300	3300	3300	3300	3300
2.5°	3296	3292	3290	3296	3302	3303	3298	3304	3308
5°	3279	3277	3279	3290	3301	3301	3295	3298	3300
7.5°	3255	3254	3263	3281	3295	3295	3286	3285	3283
10°	3222	3225	3242	3268	3289	3288	3273	3264	3259
12.5°	3180	3186	3214	3254	3282	3277	3252	3234	3226
15°	3129	3140	3184	3238	3273	3264	3228	3197	3185
17.5°	3068	3088	3149	3220	3260	3249	3199	3155	3135
20°	3001	3027	3109	3193	3239	3227	3167	3103	3078
22.5°	2925	2963	3062	3156	3206	3195	3129	3045	3013
25°	2842	2891	3006	3106	3156	3148	3080	2980	2938
27.5°	2756	2812	2938	3037	3093	3082	3017	2907	2852
30°	2662	2726	2854	2948	3007	2997	2939	2826	2763
32.5°	2560	2629	2750	2835	2894	2886	2839	2735	2671
35°	2453	2520	2619	2685	2737	2742	2712	2637	2570
37.5°	2338	2399	2456	2506	2562	2565	2550	2525	2460
40°	2204	2255	2258	2319	2371	2379	2352	2391	2331
42.5°	2039	2064	2043	2107	2137	2171	2137	2216	2177
45°	1829	1822	1793	1857	1831	1904	1896	1990	1986
47.5°	1552	1595	1544	1612	1482	1620	1627	1736	1728
50°	1280	1420	1346	1334	1154	1362	1406	1512	1439
52.5°	1050	1238	1160	1066	899	1106	1195	1296	1184
55°	849	1046	994	845	702	892	1082	1082	941
57.5°	666	875	845	651	537	701	925	897	702
60°	515	747	694	501	399	548	780	746	524
62.5°	390	647	551	402	293	435	638	645	358
65°	303	563	427	339	225	363	498	566	249
67.5°	281	481	316	302	216	311	372	471	174
70°	276	393	223	282	226	269	264	387	156
72.5°	266	315	157	270	244	244	178	321	176
75°	253	257	122	257	245	232	121	266	177
77.5°	249	219	146	238	178	207	83	221	154
80°	207	208	154	207	136	184	73	171	135
82.5°	157	170	133	157	112	148	78	141	106
85°	97	103	93	95	75	99	64	85	65
87.5°	40	46	39	44	32	47	31	35	25
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)