

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: 192P101

Luminaire Tested: **PGX2024-2U3S34I-PAF**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: 192P101  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: PGX2024-2U3S34I-PAF  
Description: 20" X 24" Recessed Troffer with a 4" deep  
12 cell semi-specular parabolic louver.  
Light Source: TWO-F40CW/U/3 - 2725 Lumens ea. - 40 Watts ea.  
Ballast/Driver: Advance REL-2S40-RH-TP Electronic: L.O.B.F. = 84.2

**Summary**

Lumens per Lamp: 2725 (2 lamps)  
Luminaire Lumens: 2866.7 lumens  
Efficiency: 52.6%  
Efficacy: 43.2 lumens/watt  
Spacing Criteria (0/90/45): 1.18 / 1.33 / 1.35  
Luminous Opening: Rectangular (W 1.4' x L: 1.75' x H: 0')  
CIE Type: Direct

Input Watts (W): 66.3  
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	0
RCR																		
0	63	63	63	63	61	61	61	61	58	58	58	56	56	56	54	54	54	53
1	59	57	55	54	57	56	54	53	54	52	51	52	51	50	50	49	48	47
2	55	51	49	46	53	50	48	46	49	46	45	47	45	44	45	44	43	42
3	51	46	43	40	49	45	42	40	44	41	39	43	40	38	41	39	38	37
4	47	42	38	35	46	41	37	35	40	37	34	39	36	34	38	35	33	32
5	44	38	34	31	43	37	33	31	36	33	30	35	32	30	34	32	30	29
6	40	34	30	27	40	34	30	27	33	29	27	32	29	27	31	29	26	26
7	38	31	27	24	37	31	27	24	30	27	24	29	26	24	29	26	24	23
8	35	29	25	22	34	28	25	22	28	24	22	27	24	22	26	24	21	21
9	33	26	22	20	32	26	22	20	26	22	20	25	22	20	24	22	19	19
10	31	24	21	18	30	24	20	18	24	20	18	23	20	18	23	20	18	17

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

	0°	90°	180°
0°	6116	6116	6116
5°	6082	6104	6096
10°	5965	6059	5992
15°	5839	6113	5894
20°	5749	6223	5815
25°	5684	6272	5713
30°	5597	6289	5572
35°	5493	6418	5380
40°	5373	6644	5097
45°	5129	6793	4599
50°	4470	5978	3757
55°	3050	4202	2374
60°	1075	1393	749
65°	386	480	323
70°	206	258	180
75°	119	153	102
80°	76	76	51
85°	51	0	0



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**ZONAL LUMENS:**

**CANDELA DISTRIBUTION:**

Zone	Lumens	% Fixture	% Lamp		0°	45°	90°	135°	180°	Flux
0°-10°	130.5	4.6	2.4	0°	1388	1388	1388	1388	1388	
10°-20°	368.5	12.9	6.8	5°	1375	1375	1380	1382	1378	130
20°-30°	557.9	19.5	10.2	15°	1280	1283	1340	1299	1292	361
30°-40°	671.4	23.4	12.3	25°	1169	1188	1290	1210	1175	538
40°-50°	683.8	23.9	12.5	35°	1021	1052	1193	1066	1000	638
50°-60°	391.1	13.6	7.2	45°	823	890	1090	879	738	626
60°-70°	53.0	1.8	1.0	55°	397	479	547	454	309	346
70°-80°	9.6	0.3	0.2	65°	37	42	46	40	31	47
80°-90°	1.1	0.0	0.0	75°	7	9	9	8	6	9
90°-100°	0.0	0.0	0.0	85°	1	1	0	0	0	1
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°	1056.8	36.9	19.4	165°	0	0	0	0	0	0
0°-40°	1728.2	60.3	31.7	175°	0	0	0	0	0	0
0°-60°	2803.0	97.8	51.4	180°	0	0	0	0	0	0
0°-90°	2866.7	100.0	52.6							
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°	2866.7	100.0	52.6							



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	1388	1388	1388	1388	1388	1388	1388	1388	1388
2.5°	1385	1386	1384	1387	1387	1387	1388	1388	1386
5°	1375	1376	1375	1379	1380	1381	1382	1382	1378
7.5°	1357	1358	1359	1365	1367	1368	1369	1367	1359
10°	1333	1333	1336	1348	1354	1352	1348	1346	1339
12.5°	1306	1305	1309	1335	1346	1339	1323	1323	1316
15°	1280	1276	1283	1322	1340	1326	1299	1298	1292
17.5°	1253	1247	1260	1310	1336	1315	1278	1270	1267
20°	1226	1216	1235	1294	1327	1301	1256	1240	1240
22.5°	1198	1186	1213	1272	1310	1280	1234	1209	1210
25°	1169	1155	1188	1244	1290	1254	1210	1176	1175
27.5°	1136	1124	1159	1214	1266	1225	1182	1140	1137
30°	1100	1089	1126	1178	1236	1191	1148	1101	1095
32.5°	1062	1052	1091	1140	1208	1152	1109	1058	1049
35°	1021	1014	1052	1109	1193	1119	1066	1013	1000
37.5°	978	974	1008	1086	1176	1096	1018	964	945
40°	934	930	966	1059	1155	1067	969	910	886
42.5°	881	880	929	1023	1127	1031	925	850	818
45°	823	822	890	975	1090	982	879	785	738
47.5°	751	753	837	906	999	911	821	709	653
50°	652	666	758	797	872	799	740	619	548
52.5°	530	550	645	657	723	656	623	502	443
55°	397	417	479	490	547	486	454	373	309
57.5°	248	272	274	321	337	314	253	235	167
60°	122	144	128	171	158	168	119	124	85
62.5°	61	71	69	82	74	80	65	64	48
65°	37	40	42	45	46	44	40	38	31
67.5°	24	26	27	29	30	28	26	24	21
70°	16	17	19	19	20	19	18	16	14
72.5°	11	12	13	13	13	13	12	11	9
75°	7	8	9	9	9	9	8	8	6
77.5°	5	5	6	6	6	6	6	5	4
80°	3	3	4	4	3	4	3	3	2
82.5°	2	2	2	2	2	2	2	2	1
85°	1	1	1	1	0	0	0	0	0
87.5°	0	0	0	0	0	0	0	0	0
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)