

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: 192P100

Luminaire Tested: **PGX2024-2U3S23I-PAF**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: 192P100  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: PGX2024-2U3S23I-PAF  
Description: 20" X 24" Recessed Troffer with a 4" deep  
6 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**

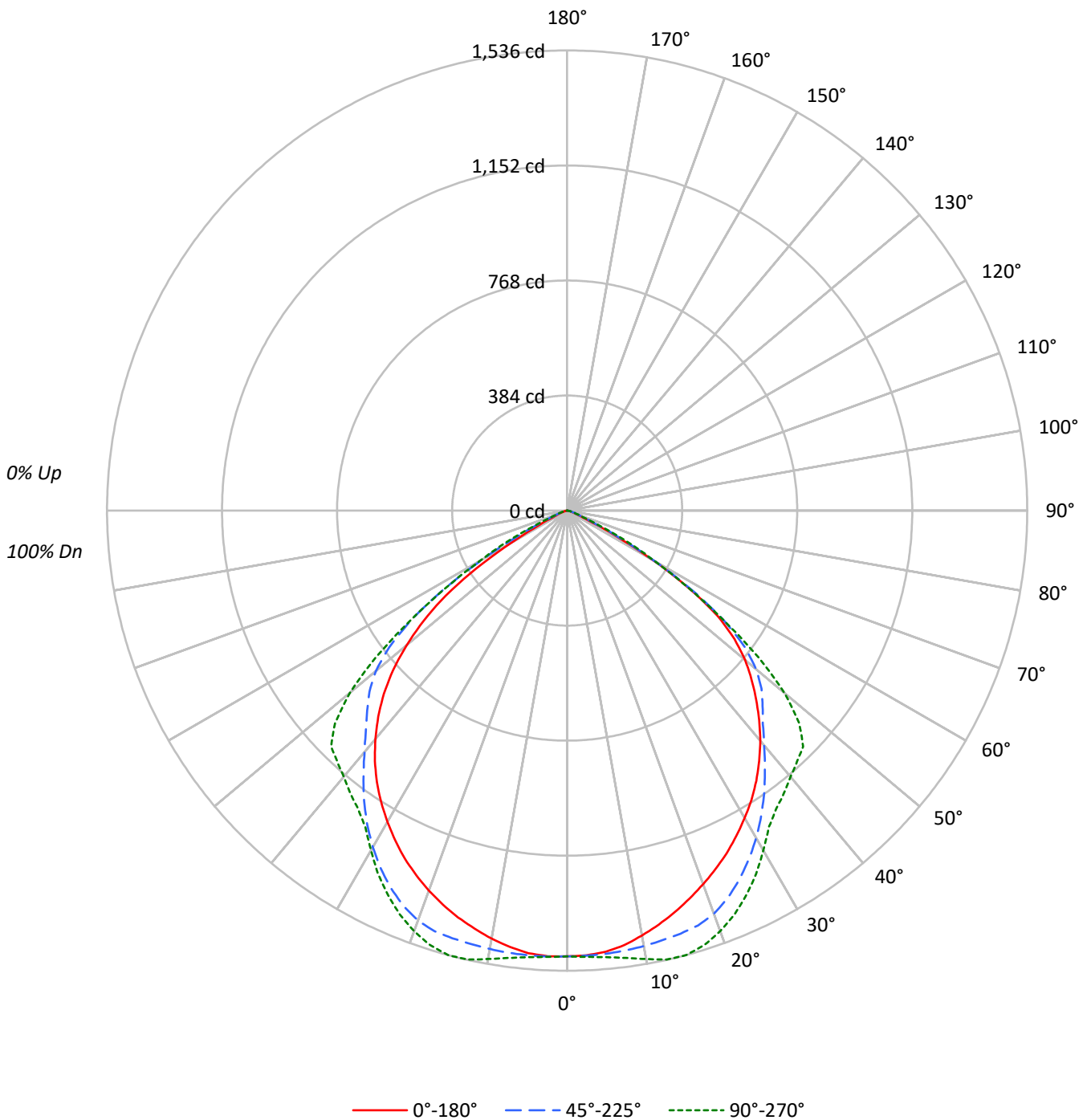
Lumens per Lamp: 2725 (2 lamps)  
Luminaire Lumens: 3327.9 lumens  
Efficiency: 61.1%  
Efficacy: 49.9 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.29 / 1.34  
Luminous Opening: Rectangular (W 1.4' x L: 1.75' x H: 0')  
CIE Type: Direct

Input Watts (W): 66.7  
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	73	73	73	73	71	71	71	71	68	68	68	65	65	65	62	62	62	61
1	68	66	64	62	66	64	63	61	62	60	59	60	58	57	57	57	56	54
2	63	59	56	53	62	58	55	52	56	53	51	54	52	50	52	50	49	48
3	58	53	49	45	57	52	48	45	50	47	44	49	46	44	47	45	43	42
4	54	48	43	39	53	47	43	39	45	42	39	44	41	38	43	40	38	37
5	50	43	38	35	49	42	38	34	41	37	34	40	36	34	39	36	33	32
6	46	39	34	31	45	38	34	30	37	33	30	36	33	30	35	32	30	29
7	43	35	31	27	42	35	30	27	34	30	27	33	30	27	32	29	27	25
8	40	32	28	24	39	32	28	24	31	27	24	31	27	24	30	26	24	23
9	37	30	25	22	37	30	25	22	29	25	22	28	24	22	28	24	22	21
10	35	28	23	20	34	27	23	20	27	23	20	26	22	20	26	22	20	19

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

	0°	90°	180°
0°	6557	6557	6557
5°	6538	6618	6560
10°	6443	6801	6493
15°	6332	7007	6414
20°	6223	7006	6331
25°	6131	6885	6233
30°	6030	6661	6106
35°	5923	6542	5955
40°	5770	6673	5729
45°	5559	6942	5391
50°	5313	6499	4792
55°	4710	4886	3803
60°	2873	2979	1877
65°	772	1230	542
70°	335	464	283
75°	221	272	187
80°	152	152	127
85°	51	51	51



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**ZONAL LUMENS:**

**CANDELA DISTRIBUTION:**

Zone	Lumens	% Fixture	% Lamp		0°	45°	90°	135°	180°	Flux
0°-10°	141.8	4.3	2.6	0°	1488	1488	1488	1488	1488	
10°-20°	413.8	12.4	7.6	5°	1478	1485	1496	1490	1483	140
20°-30°	624.7	18.8	11.5	15°	1388	1462	1536	1478	1406	391
30°-40°	729.4	21.9	13.4	25°	1261	1359	1416	1391	1282	581
40°-50°	740.6	22.3	13.6	35°	1101	1147	1216	1182	1107	688
50°-60°	530.3	15.9	9.7	45°	892	923	1114	944	865	688
60°-70°	127.0	3.8	2.3	55°	613	638	636	633	495	523
70°-80°	18.0	0.5	0.3	65°	74	102	118	96	52	114
80°-90°	2.4	0.1	0.0	75°	13	17	16	16	11	15
90°-100°	0.0	0.0	0.0	85°	1	2	1	2	1	2
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°	1180.2	35.5	21.7	165°	0	0	0	0	0	0
0°-40°	1909.6	57.4	35.0	175°	0	0	0	0	0	0
0°-60°	3180.5	95.6	58.4	180°	0	0	0	0	0	0
0°-90°	3327.9	100.0	61.1							
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°	3327.9	100.0	61.1							



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	1488	1488	1488	1488	1488	1488	1488	1488	1488
2.5°	1486	1486	1487	1486	1491	1488	1490	1490	1489
5°	1478	1479	1485	1489	1496	1492	1490	1487	1483
7.5°	1463	1466	1481	1494	1506	1498	1489	1478	1469
10°	1440	1447	1476	1502	1520	1507	1486	1463	1451
12.5°	1415	1426	1469	1512	1535	1519	1482	1447	1429
15°	1388	1404	1462	1514	1536	1523	1478	1429	1406
17.5°	1358	1380	1452	1499	1521	1510	1472	1409	1379
20°	1327	1357	1432	1468	1494	1482	1456	1387	1350
22.5°	1295	1332	1400	1430	1459	1447	1428	1363	1317
25°	1261	1305	1359	1384	1416	1404	1391	1336	1282
27.5°	1224	1275	1313	1332	1367	1354	1347	1306	1242
30°	1185	1240	1262	1274	1309	1299	1297	1270	1200
32.5°	1145	1200	1206	1211	1253	1237	1242	1227	1155
35°	1101	1152	1147	1154	1216	1180	1182	1177	1107
37.5°	1053	1099	1084	1114	1189	1138	1117	1118	1054
40°	1003	1039	1023	1082	1160	1105	1052	1054	996
42.5°	949	975	967	1050	1136	1069	994	984	933
45°	892	908	923	1017	1114	1034	944	911	865
47.5°	835	840	880	973	1051	986	895	833	788
50°	775	774	824	890	948	899	834	750	699
52.5°	704	702	747	771	806	776	749	657	604
55°	613	614	638	620	636	619	633	557	495
57.5°	483	493	495	464	479	465	485	434	359
60°	326	331	339	334	338	332	324	286	213
62.5°	178	182	199	216	229	216	187	157	108
65°	74	88	102	125	118	125	96	78	52
67.5°	40	47	54	65	58	64	51	43	32
70°	26	31	35	39	36	38	33	29	22
72.5°	18	21	24	26	23	25	23	20	15
75°	13	15	17	17	16	17	16	14	11
77.5°	9	10	12	12	10	11	11	10	7
80°	6	7	8	8	6	7	7	6	5
82.5°	3	4	5	4	4	4	4	4	2
85°	1	2	2	2	1	2	2	1	1
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)