

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: 109P135

Luminaire Tested: **2PGX-2U15/8S44H-PAF**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: 109P135  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 2PGX-2U15/8S44H-PAF  
Description: 2 X 2 Recessed Convertible Body Troffer with a 4" deep 16 cell semi-specular parabolic louver.  
Light Source: Two-FBO31/35K - 2800 Lumens ea. - 31 Watts ea.  
Ballast/Driver: -

**Summary**

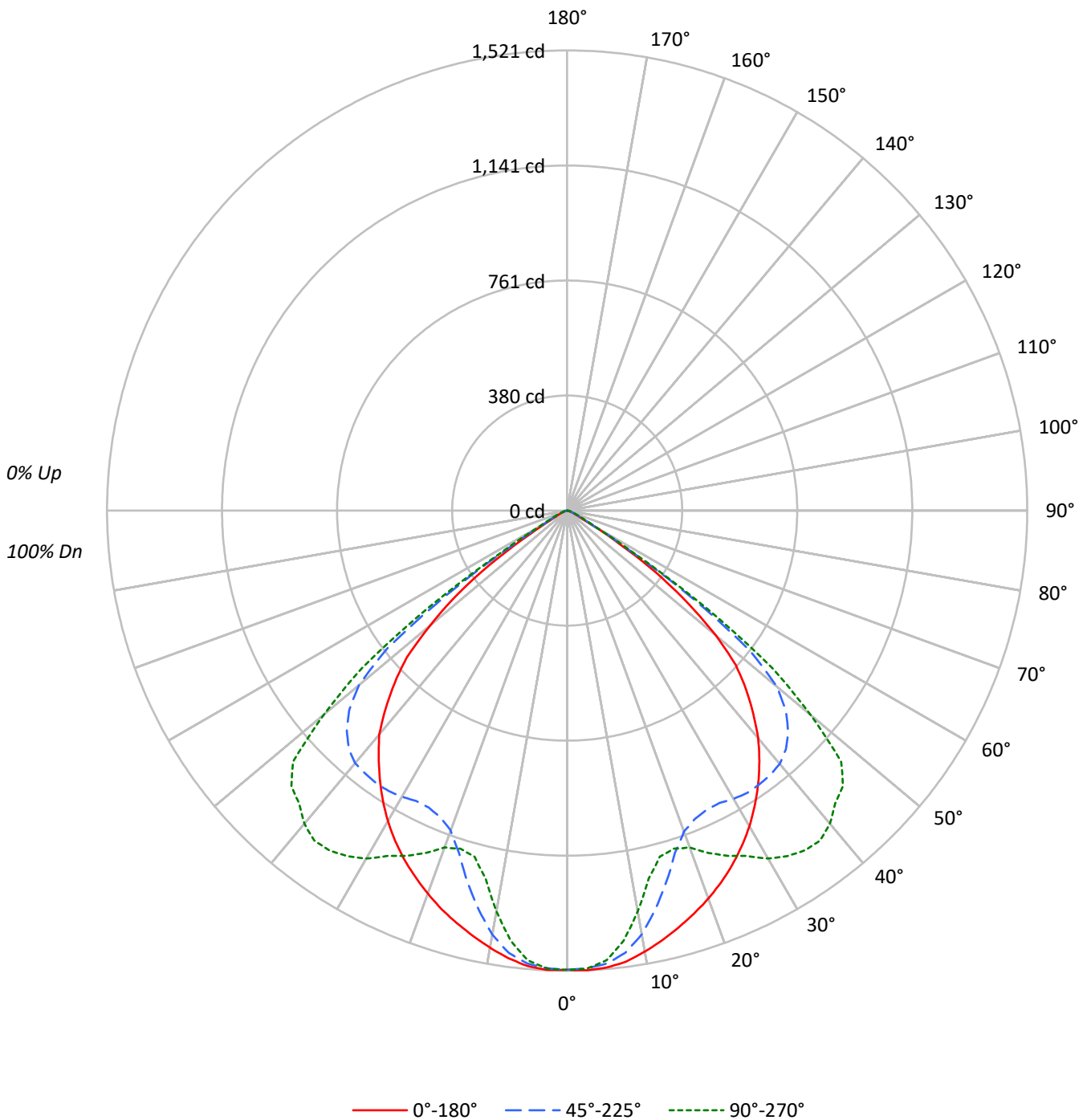
Lumens per Lamp: 2800 (2 lamps)  
Luminaire Lumens: 3015.0 lumens  
Efficiency: 53.8%  
Efficacy: 42.9 lumens/watt  
Spacing Criteria (0/90/45): 1.18 / 1.39 / 1.4  
Luminous Opening: Rectangular (W 1.73' x L: 1.76' x H: 0')  
CIE Type: Direct

Input Watts (W): 70.2  
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				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	64	64	64	64	63	63	63	63	60	60	60	57	57	57	55	55	55	54
1	60	58	57	55	59	57	55	54	55	54	52	53	52	51	51	50	49	48
2	56	52	50	47	55	51	49	47	50	47	46	48	46	45	46	45	44	43
3	52	47	44	41	51	46	43	40	45	42	40	43	41	39	42	40	38	37
4	48	42	39	35	47	42	38	35	41	37	35	39	37	34	38	36	34	33
5	44	38	34	31	43	38	34	31	37	33	31	36	33	30	35	32	30	29
6	41	35	31	28	40	34	30	27	33	30	27	33	29	27	32	29	27	26
7	38	32	28	25	37	31	27	24	31	27	24	30	27	24	29	26	24	23
8	36	29	25	22	35	29	25	22	28	24	22	27	24	22	27	24	22	21
9	33	27	23	20	33	26	23	20	26	22	20	25	22	20	25	22	20	19
10	31	25	21	18	31	24	21	18	24	20	18	23	20	18	23	20	18	17

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

	0°	90°	180°
0°	5368	5368	5368
5°	5381	5296	5363
10°	5314	4829	5267
15°	5220	4334	5165
20°	5136	4459	5069
25°	5041	4912	4967
30°	4920	5422	4838
35°	4753	5918	4662
40°	4533	6236	4459
45°	4186	6446	4036
50°	3526	5776	3262
55°	2238	3459	1930
60°	651	778	438
65°	251	368	234
70°	155	217	155
75°	109	137	109
80°	81	81	81
85°	81	41	81



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**ZONAL LUMENS:**

**CANDELA DISTRIBUTION:**

Zone	Lumens	% Fixture	% Lamp		0°	45°	90°	135°	180°	Flux
0°-10°	140.6	4.7	2.5	0°	1518	1518	1518	1518	1518	
10°-20°	365.0	12.1	6.5	5°	1516	1503	1492	1503	1511	144
20°-30°	545.7	18.1	9.7	15°	1426	1269	1184	1272	1411	402
30°-40°	711.3	23.6	12.7	25°	1292	1091	1259	1083	1273	595
40°-50°	772.8	25.6	13.8	35°	1101	1106	1371	1100	1080	687
50°-60°	420.9	14.0	7.5	45°	837	1033	1289	1030	807	638
60°-70°	45.7	1.5	0.8	55°	363	511	561	486	313	318
70°-80°	10.8	0.4	0.2	65°	30	38	44	38	28	37
80°-90°	2.1	0.1	0.0	75°	8	10	10	10	8	9
90°-100°	0.0	0.0	0.0	85°	2	2	1	2	2	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°	1051.3	34.9	18.8	165°	0	0	0	0	0	0
0°-40°	1762.7	58.5	31.5	175°	0	0	0	0	0	0
0°-60°	2956.4	98.1	52.8	180°	0	0	0	0	0	0
0°-90°	3015.0	100.0	53.8							
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°	3015.0	100.0	53.8							



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	1518	1518	1518	1518	1518	1518	1518	1518	1518
2.5°	1521	1516	1514	1513	1515	1513	1514	1516	1520
5°	1516	1509	1503	1494	1492	1494	1503	1509	1511
7.5°	1503	1491	1474	1446	1433	1446	1475	1491	1492
10°	1480	1463	1422	1367	1345	1369	1423	1463	1467
12.5°	1454	1428	1349	1278	1246	1279	1351	1429	1440
15°	1426	1386	1269	1196	1184	1195	1272	1388	1411
17.5°	1396	1336	1186	1165	1172	1161	1188	1338	1381
20°	1365	1278	1129	1160	1185	1154	1125	1283	1347
22.5°	1330	1218	1103	1176	1225	1170	1096	1222	1311
25°	1292	1156	1091	1206	1259	1200	1083	1159	1273
27.5°	1250	1093	1090	1229	1287	1223	1082	1096	1231
30°	1205	1029	1100	1246	1328	1241	1092	1034	1185
32.5°	1155	977	1107	1272	1354	1268	1099	979	1134
35°	1101	936	1106	1280	1371	1277	1100	934	1080
37.5°	1044	900	1102	1281	1374	1278	1096	899	1023
40°	982	866	1093	1262	1351	1259	1090	868	966
42.5°	911	829	1070	1220	1312	1218	1068	836	888
45°	837	795	1033	1170	1289	1170	1030	798	807
47.5°	756	759	980	1115	1229	1114	977	753	719
50°	641	704	904	994	1050	989	899	693	593
52.5°	505	594	763	766	856	760	751	586	464
55°	363	435	511	543	561	536	486	425	313
57.5°	205	263	243	303	259	297	214	245	141
60°	92	127	103	133	110	131	93	107	62
62.5°	45	57	59	66	66	66	56	53	40
65°	30	34	38	42	44	42	38	34	28
67.5°	21	23	27	29	30	29	26	24	20
70°	15	17	19	20	21	20	19	17	15
72.5°	11	12	14	14	14	14	14	12	11
75°	8	9	10	10	10	10	10	9	8
77.5°	6	7	7	7	7	7	7	7	6
80°	4	5	5	5	4	5	5	5	4
82.5°	3	3	3	3	3	3	3	3	3
85°	2	2	2	1	1	1	2	2	2
87.5°	1	1	1	0	0	1	1	1	1
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)