

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: 190P101

Luminaire Tested: **2PGX-2BX40S44I-PAF**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: 190P101
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 2PGX-2BX40S44I-PAF
Description: 2 X 2 Recessed Convertible Body Troffer with a 4" deep
16 cell semi-specular low iridescent precision cell
parabolic louver.
Light Source: Two-F40BX/SPX35/RS - 3150 Lumens ea. - 40 Watts ea.
Ballast/Driver: Valmont 8G3377W Magnetic: L.O.B.F. = 93.4

Summary

Lumens per Lamp: 3150 (2 lamps)
Luminaire Lumens: 3455.7 lumens
Efficiency: 54.9%
Efficacy: 40.0 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 2.11 / 1.72
Luminous Opening: Rectangular (W 1.73' x L: 1.76' x H: 0')
CIE Type: Direct

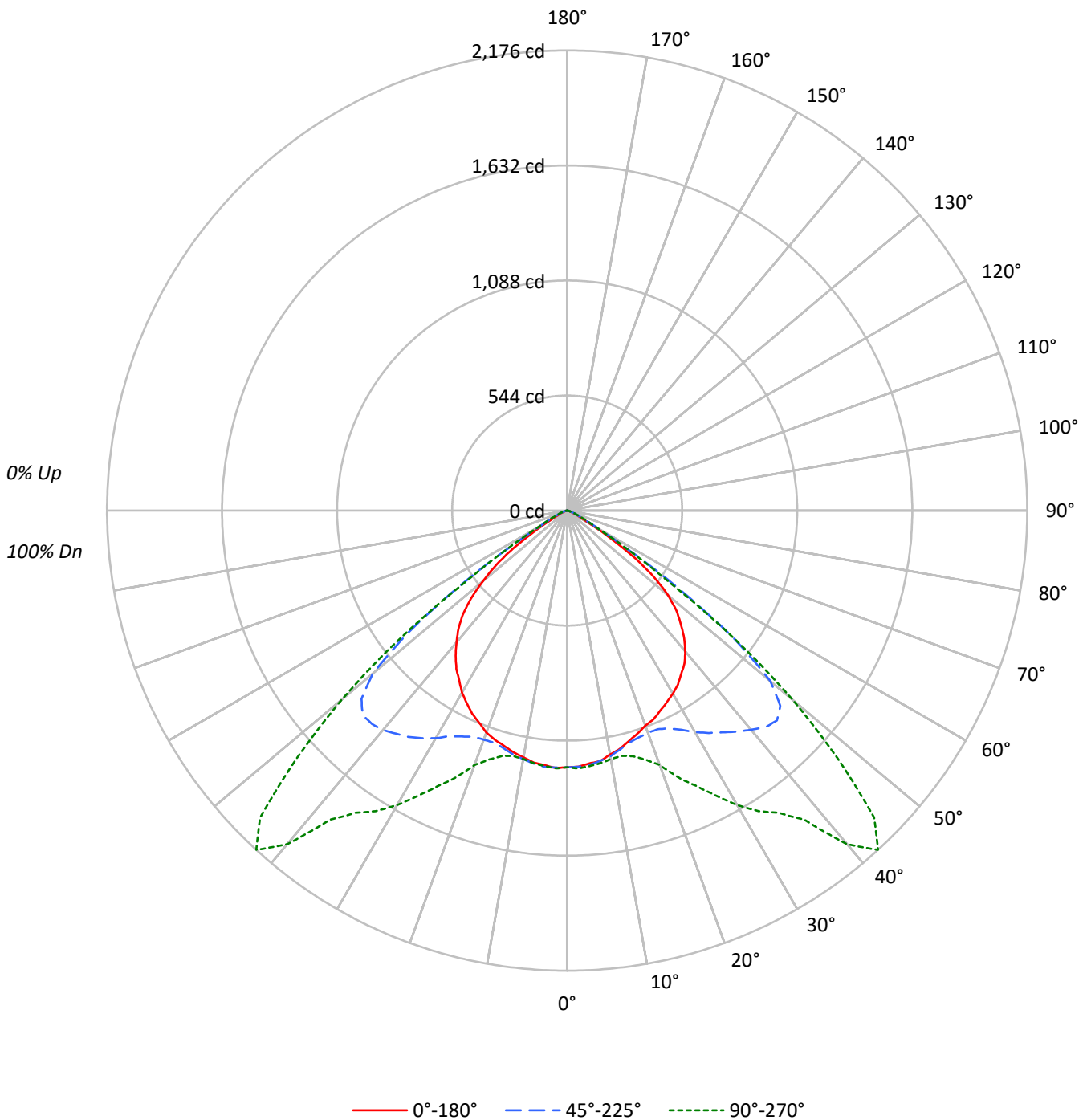
Input Watts (W): 86.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	65	65	65	65	64	64	64	64	61	61	61		58	58	58		56	56	56	55
1	61	59	57	56	60	58	56	55	56	54	53		53	52	51		52	51	50	49
2	57	53	50	47	55	52	49	47	50	48	46		48	46	45		47	45	44	43
3	52	47	43	40	51	46	43	40	45	42	39		43	41	39		42	40	38	37
4	48	42	38	35	47	42	38	35	40	37	34		39	36	34		38	35	33	32
5	44	38	34	30	43	37	33	30	36	33	30		35	32	29		34	31	29	28
6	41	34	30	26	40	34	29	26	33	29	26		32	29	26		31	28	26	25
7	38	31	26	23	37	31	26	23	30	26	23		29	26	23		28	25	23	22
8	35	28	24	21	34	28	24	21	27	23	21		26	23	20		26	23	20	19
9	33	26	21	18	32	25	21	18	25	21	18		24	21	18		24	20	18	17
10	31	24	19	17	30	23	19	17	23	19	17		22	19	16		22	19	16	15

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	4293	4293	4293
5°	4259	4305	4291
10°	4204	4283	4258
15°	4129	4400	4217
20°	4071	4816	4203
25°	4069	5598	4139
30°	4083	6565	4058
35°	4062	7528	3941
40°	4006	9499	3757
45°	3805	10261	3490
50°	3422	7652	2866
55°	2417	3569	1899
60°	827	1139	636
65°	385	527	318
70°	227	310	196
75°	150	191	137
80°	102	122	81
85°	81	41	41



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	45°	90°	135°	180°	Flux
0°-10°	114.8	3.3	1.8	0°	1214	1214	1214	1214	1214	
10°-20°	330.6	9.6	5.2	5°	1200	1207	1213	1217	1209	114
20°-30°	558.3	16.2	8.9	15°	1128	1135	1202	1163	1152	319
30°-40°	821.7	23.8	13.0	25°	1043	1136	1435	1179	1061	482
40°-50°	1021.7	29.6	16.2	35°	941	1280	1744	1307	913	589
50°-60°	521.7	15.1	8.3	45°	761	1403	2052	1367	698	583
60°-70°	69.0	2.0	1.1	55°	392	645	579	609	308	337
70°-80°	15.4	0.4	0.2	65°	46	62	63	58	38	53
80°-90°	2.5	0.1	0.0	75°	11	15	14	14	10	13
90°-100°	0.0	0.0	0.0	85°	2	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°	1003.7	29.0	15.9	165°	0	0	0	0	0	0
0°-40°	1825.5	52.8	29.0	175°	0	0	0	0	0	0
0°-60°	3368.8	97.5	53.5	180°	0	0	0	0	0	0
0°-90°	3455.7	100.0	54.9							
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°	3455.7	100.0	54.9							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	1214	1214	1214	1214	1214	1214	1214	1214	1214
2.5°	1212	1213	1213	1215	1220	1217	1216	1218	1218
5°	1200	1202	1207	1210	1213	1215	1217	1218	1209
7.5°	1195	1191	1194	1200	1205	1207	1207	1208	1202
10°	1171	1171	1179	1188	1193	1198	1193	1196	1186
12.5°	1154	1150	1157	1178	1188	1190	1181	1176	1171
15°	1128	1125	1135	1183	1202	1192	1163	1160	1152
17.5°	1106	1107	1125	1192	1235	1207	1150	1138	1136
20°	1082	1082	1118	1222	1280	1241	1153	1117	1117
22.5°	1068	1063	1119	1270	1363	1289	1157	1097	1086
25°	1043	1042	1136	1328	1435	1359	1179	1072	1061
27.5°	1021	1026	1169	1387	1517	1426	1202	1050	1027
30°	1000	1012	1209	1448	1608	1496	1243	1021	994
32.5°	975	1002	1247	1515	1685	1570	1276	1004	950
35°	941	989	1280	1560	1744	1627	1307	979	913
37.5°	912	984	1318	1613	1843	1683	1330	956	866
40°	868	974	1353	1689	2058	1772	1355	929	814
42.5°	819	962	1389	1813	2176	1903	1368	905	762
45°	761	950	1403	1807	2052	1888	1367	883	698
47.5°	701	927	1367	1588	1734	1683	1319	850	618
50°	622	886	1253	1263	1391	1332	1199	790	521
52.5°	522	783	999	935	1009	981	946	681	424
55°	392	599	645	611	579	644	609	520	308
57.5°	241	374	328	333	322	346	306	334	179
60°	117	185	162	180	161	181	150	172	90
62.5°	70	95	95	98	96	99	89	86	56
65°	46	58	62	63	63	63	58	53	38
67.5°	31	39	42	43	43	42	39	35	26
70°	22	27	29	30	30	29	27	24	19
72.5°	16	19	21	21	20	20	20	17	13
75°	11	13	15	15	14	14	14	12	10
77.5°	8	9	10	10	10	10	10	9	7
80°	5	6	7	6	6	6	6	6	4
82.5°	4	4	4	4	3	4	4	4	2
85°	2	2	2	2	1	1	2	2	1
87.5°	1	1	1	1	0	0	0	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)