

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: 109P164

Luminaire Tested: **2EP3GX-2U6T8S33I-PAF**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: 109P164  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 2EP3GX-2U6T8S33I-PAF  
Description: 2 X 2 Recessed Troffer with a 3" deep 9 cell  
semi-specular low iridescent parabolic louver.  
Light Source: Two-FB31T8/TL735/6 - 2600 Lumens ea. - 31 Watts ea.  
Ballast/Driver: Triad-Utrad B232I120RH Electronic

**Summary**

Lumens per Lamp: 2600 (2 lamps)  
Luminaire Lumens: 3431.4 lumens  
Efficiency: 66.0%  
Efficacy: 58.0 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.18 / 1.28  
Luminous Opening: Rectangular (W 1.73' x L: 1.75' x H: 0')  
CIE Type: Direct

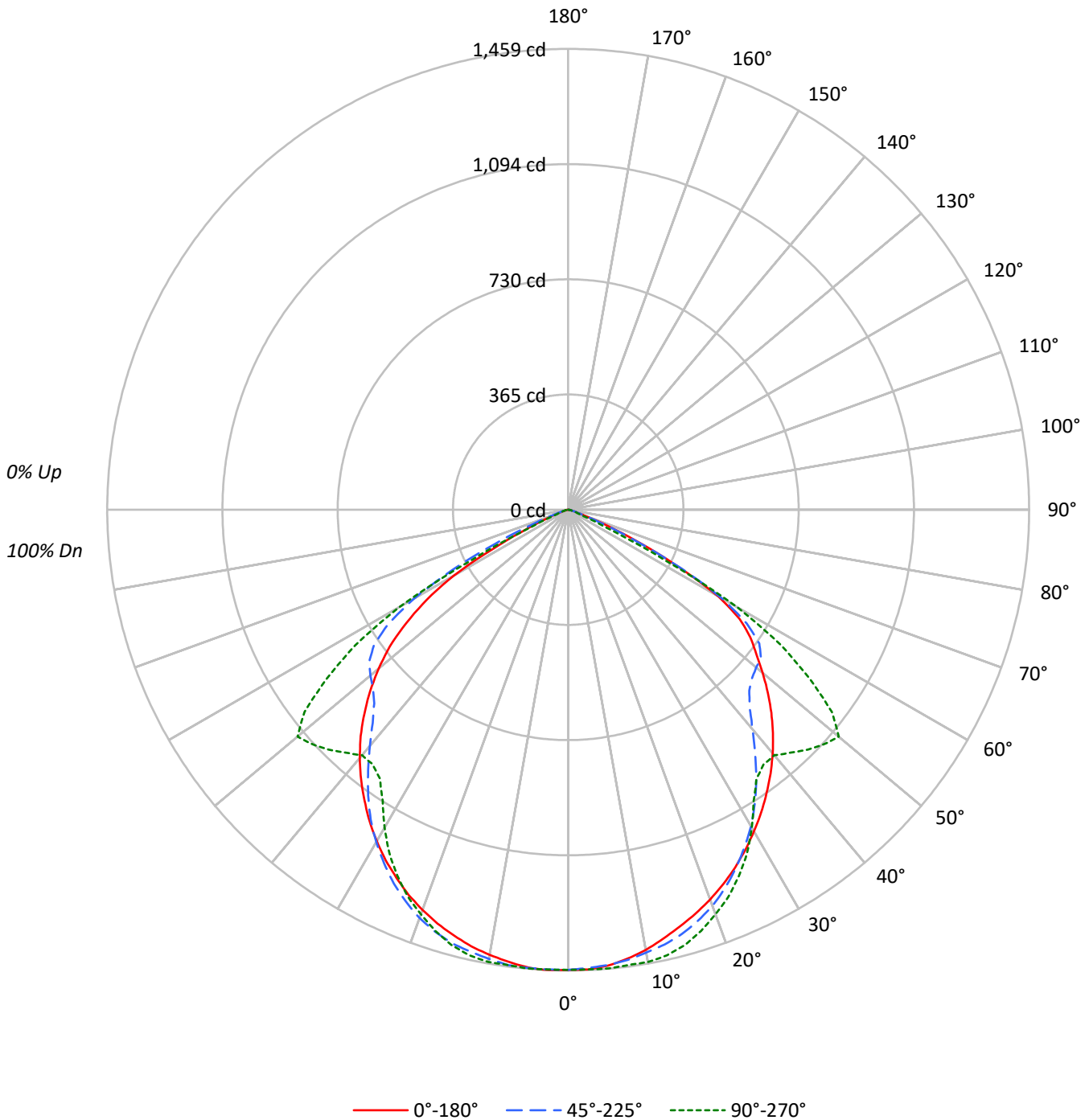
Input Watts (W): 59.2  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: 109P164

CATALOG NUMBER: 2EP3GX-2U6T8S33I-PAF

### Luminous Intensity Polar Plot





TEST NUMBER: 109P164

CATALOG NUMBER: 2EP3GX-2U6T8S33I-PAF

**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	79	79	79	79	77	77	77	77	73	73	73		70	70	70		67	67	67	66
1	73	71	68	66	72	69	67	65	66	65	63		64	63	61		62	61	60	58
2	68	63	59	56	66	62	58	55	59	57	54		57	55	53		55	53	52	50
3	62	56	51	48	61	55	51	47	53	49	46		51	48	46		50	47	45	43
4	57	50	45	41	56	49	44	41	48	43	40		46	42	40		45	42	39	38
5	53	45	39	35	51	44	39	35	43	38	35		42	38	35		40	37	34	33
6	49	41	35	31	48	40	35	31	39	34	31		38	34	30		37	33	30	29
7	45	37	31	28	44	36	31	28	35	31	27		34	30	27		34	30	27	26
8	42	34	28	25	41	33	28	25	32	28	24		32	27	24		31	27	24	23
9	39	31	26	22	38	31	26	22	30	25	22		29	25	22		28	25	22	21
10	37	29	24	20	36	28	23	20	28	23	20		27	23	20		26	23	20	19

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

	0°	90°	180°
0°	5183	5183	5183
5°	5174	5206	5195
10°	5111	5252	5169
15°	5030	5255	5141
20°	4970	5159	5103
25°	4906	5020	5047
30°	4830	4773	4978
35°	4755	4512	4881
40°	4676	4713	4764
45°	4573	5403	4588
50°	4444	6187	4333
55°	4366	5786	3876
60°	3906	4411	2981
65°	2163	1027	1220
70°	572	312	354
75°	234	192	179
80°	123	123	102
85°	41	41	41



TEST NUMBER: 109P164

CATALOG NUMBER: 2EP3GX-2U6T8S33I-PAF

**ZONAL LUMENS:**

**CANDELA DISTRIBUTION:**

Zone	Lumens	% Fixture	% Lamp		0°	45°	90°	135°	180°	Flux
0°-10°	138.2	4.0	2.7	0°	1457	1457	1457	1457	1457	
10°-20°	395.7	11.5	7.6	5°	1449	1447	1458	1456	1455	137
20°-30°	587.3	17.1	11.3	15°	1366	1391	1427	1421	1396	386
30°-40°	673.3	19.6	12.9	25°	1250	1254	1279	1306	1286	576
40°-50°	715.4	20.8	13.8	35°	1095	1038	1039	1104	1124	685
50°-60°	662.0	19.3	12.7	45°	909	810	1074	868	912	701
60°-70°	235.8	6.9	4.5	55°	704	738	933	751	625	620
70°-80°	21.0	0.6	0.4	65°	257	247	122	254	145	269
80°-90°	2.6	0.1	0.1	75°	17	18	14	18	13	22
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°	1121.2	32.7	21.6	165°	0	0	0	0	0	0
0°-40°	1794.5	52.3	34.5	175°	0	0	0	0	0	0
0°-60°	3171.9	92.4	61.0	180°	0	0	0	0	0	0
0°-90°	3431.4	100.0	66.0							
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°	3431.4	100.0	66.0							



TEST NUMBER: 109P164

CATALOG NUMBER: 2EP3GX-2U6T8S33I-PAF

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	1457	1457	1457	1457	1457	1457	1457	1457	1457
2.5°	1457	1452	1452	1456	1457	1459	1457	1459	1459
5°	1449	1443	1447	1453	1458	1459	1456	1456	1455
7.5°	1434	1429	1438	1449	1454	1456	1454	1450	1444
10°	1415	1412	1424	1444	1454	1454	1444	1438	1431
12.5°	1391	1391	1410	1434	1445	1447	1433	1425	1416
15°	1366	1366	1391	1414	1427	1430	1421	1408	1396
17.5°	1341	1342	1365	1385	1398	1404	1401	1387	1374
20°	1313	1315	1335	1348	1363	1371	1376	1364	1348
22.5°	1283	1288	1297	1305	1326	1332	1343	1338	1320
25°	1250	1258	1254	1258	1279	1290	1306	1310	1286
27.5°	1214	1223	1207	1203	1226	1240	1262	1276	1251
30°	1176	1184	1157	1140	1162	1184	1215	1236	1212
32.5°	1137	1141	1100	1071	1093	1117	1163	1193	1170
35°	1095	1092	1038	998	1039	1048	1104	1145	1124
37.5°	1052	1041	971	947	1016	998	1040	1092	1077
40°	1007	987	907	923	1015	975	976	1036	1026
42.5°	959	930	850	923	1043	973	916	977	972
45°	909	872	810	948	1074	988	868	914	912
47.5°	857	814	789	971	1099	1001	838	846	850
50°	803	755	777	980	1118	1006	817	775	783
52.5°	750	697	769	954	1052	980	794	701	712
55°	704	640	738	848	933	882	751	622	625
57.5°	643	579	670	710	799	743	677	532	532
60°	549	493	562	563	620	587	565	433	419
62.5°	399	371	406	387	345	403	412	321	268
65°	257	233	247	179	122	191	254	197	145
67.5°	139	128	122	68	45	70	127	103	71
70°	55	58	56	36	30	36	56	49	34
72.5°	28	30	28	25	20	25	27	27	20
75°	17	18	18	17	14	17	18	17	13
77.5°	10	12	12	12	9	12	12	11	8
80°	6	7	8	8	6	8	8	7	5
82.5°	3	4	5	5	4	5	5	4	2
85°	1	2	2	2	1	2	2	2	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



TEST NUMBER: 109P164

CATALOG NUMBER: 2EP3GX-2U6T8S33I-PAF

**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)