

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: 109P148

Luminaire Tested: **2EP3GX-2U6T8S33M/I-PAF**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: 109P148  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 2EP3GX-2U6T8S33M/I-PAF  
Description: 2 X 2 Recessed Convertible Body Troffer with  
a 3" deep 9 cell specular low iridescent  
parabolic louver.  
Light Source: Two-FB31T8/TL735/6 - 2650 Lumens ea. - 31 Watts ea.  
Ballast/Driver: Triad-Utrad B232I120 Electronic

**Summary**

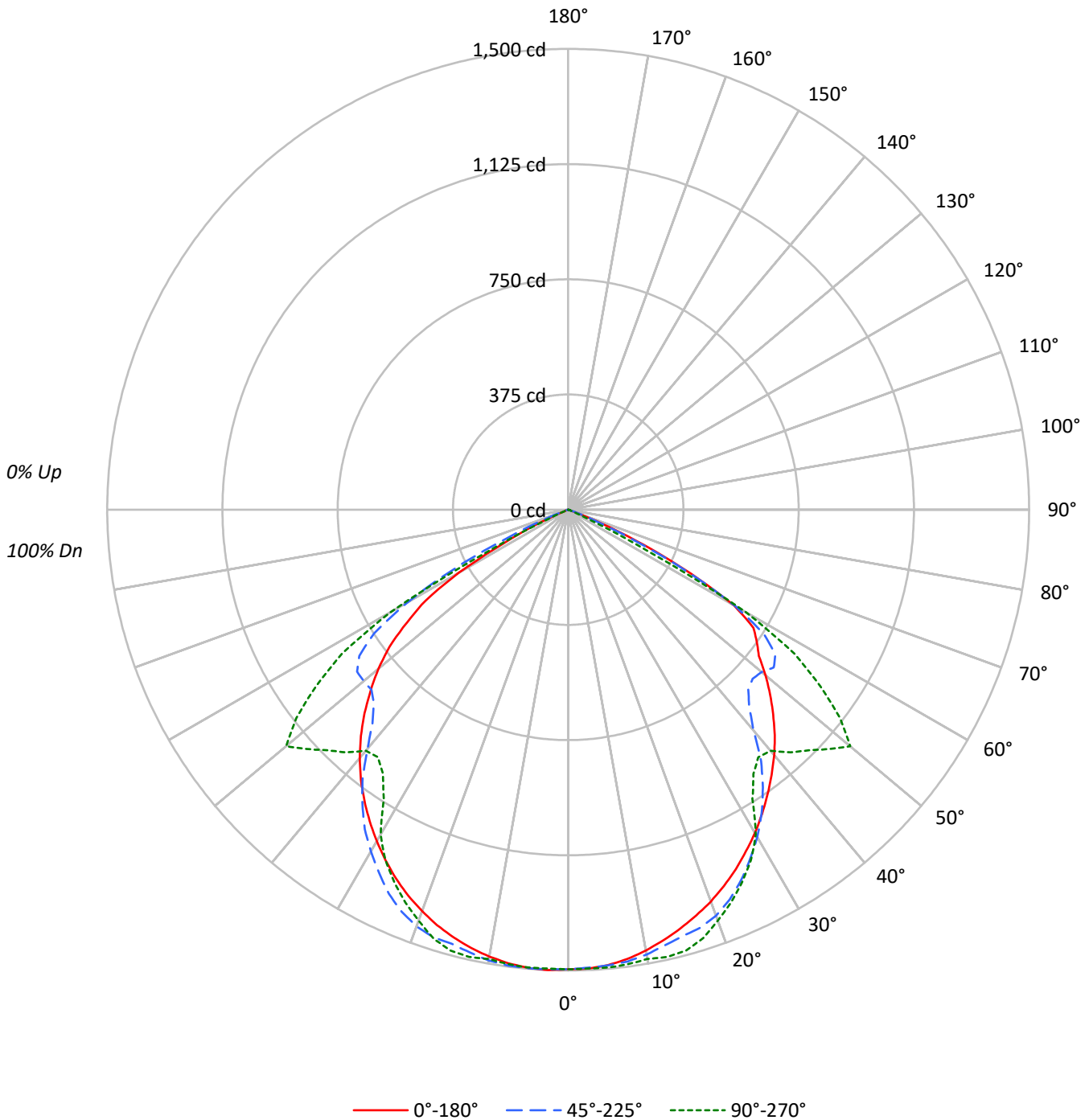
Lumens per Lamp: 2650 (2 lamps)  
Luminaire Lumens: 3564.4 lumens  
Efficiency: 67.3%  
Efficacy: 61.0 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.2 / 1.28  
Luminous Opening: Rectangular (W 1.73' x L: 1.75' x H: 0')  
CIE Type: Direct

Input Watts (W): 58.4  
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	80	80	80	80	78	78	78	78	75	75	75		72	72	72		69	69	69	67
1	75	72	70	68	73	71	69	67	68	66	65		65	64	63		63	62	61	60
2	69	64	60	57	67	63	60	57	61	58	55		59	56	54		57	55	53	52
3	63	57	52	49	62	56	52	48	54	51	47		53	49	47		51	48	46	45
4	58	51	46	42	57	50	45	42	49	44	41		47	43	40		46	43	40	39
5	54	46	40	36	52	45	40	36	44	39	36		43	39	35		41	38	35	34
6	50	41	36	32	49	41	36	32	40	35	31		39	34	31		38	34	31	30
7	46	38	32	28	45	37	32	28	36	31	28		35	31	28		34	30	28	26
8	43	34	29	25	42	34	29	25	33	28	25		32	28	25		31	28	25	24
9	40	32	26	23	39	31	26	23	30	26	23		30	25	22		29	25	22	21
10	38	29	24	21	37	29	24	21	28	24	21		28	23	20		27	23	20	19

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

	0°	90°	180°
0°	5321	5321	5321
5°	5313	5342	5345
10°	5263	5364	5335
15°	5196	5469	5306
20°	5137	5386	5262
25°	5067	5251	5200
30°	4990	5015	5118
35°	4911	4559	5020
40°	4843	4755	4899
45°	4744	5569	4713
50°	4637	6629	4460
55°	4645	6208	3975
60°	4432	4766	2924
65°	2289	572	968
70°	156	83	83
75°	69	55	41
80°	41	41	20
85°	41	0	0



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**ZONAL LUMENS:**

**CANDELA DISTRIBUTION:**

Zone	Lumens	% Fixture	% Lamp	0°	45°	90°	135°	180°	Flux
0°-10°	142.1	4.0	2.7	0°	1496	1496	1496	1496	
10°-20°	410.5	11.5	7.7	5°	1488	1489	1496	1498	141
20°-30°	615.1	17.3	11.6	15°	1411	1437	1485	1463	398
30°-40°	701.9	19.7	13.2	25°	1291	1331	1338	1380	595
40°-50°	747.8	21.0	14.1	35°	1131	1104	1050	1168	708
50°-60°	717.9	20.1	13.5	45°	943	828	1107	894	728
60°-70°	222.5	6.2	4.2	55°	749	823	1001	830	666
70°-80°	5.9	0.2	0.1	65°	272	247	68	225	285
80°-90°	0.8	0.0	0.0	75°	5	5	4	5	6
90°-100°	0.0	0.0	0.0	85°	1	1	0	1	1
100°-110°	0.0	0.0	0.0	90°	0	0	0	0	0
110°-120°	0.0	0.0	0.0	95°	0	0	0	0	0
120°-130°	0.0	0.0	0.0	105°	0	0	0	0	0
130°-140°	0.0	0.0	0.0	115°	0	0	0	0	0
140°-150°	0.0	0.0	0.0	125°	0	0	0	0	0
150°-160°	0.0	0.0	0.0	135°	0	0	0	0	0
160°-170°	0.0	0.0	0.0	145°	0	0	0	0	0
170°-180°	0.0	0.0	0.0	155°	0	0	0	0	0
0°-30°	1167.7	32.8	22.0	165°	0	0	0	0	0
0°-40°	1869.6	52.5	35.3	175°	0	0	0	0	0
0°-60°	3335.3	93.6	62.9	180°	0	0	0	0	0
0°-90°	3564.4	100.0	67.3						
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°	3564.4	100.0	67.3						



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	1496	1496	1496	1496	1496	1496	1496	1496	1496
2.5°	1495	1494	1492	1495	1495	1498	1497	1499	1500
5°	1488	1486	1489	1495	1496	1498	1498	1498	1497
7.5°	1475	1474	1483	1490	1492	1498	1497	1492	1489
10°	1457	1458	1470	1480	1485	1489	1490	1483	1477
12.5°	1435	1439	1452	1478	1491	1488	1476	1471	1461
15°	1411	1417	1437	1476	1485	1490	1463	1455	1441
17.5°	1385	1392	1427	1455	1462	1472	1459	1435	1418
20°	1357	1363	1406	1419	1423	1442	1443	1410	1390
22.5°	1325	1333	1373	1373	1384	1400	1416	1381	1360
25°	1291	1304	1331	1326	1338	1359	1380	1351	1325
27.5°	1253	1276	1282	1273	1287	1310	1333	1322	1287
30°	1215	1245	1230	1212	1221	1255	1284	1290	1246
32.5°	1174	1207	1172	1114	1116	1170	1232	1251	1202
35°	1131	1161	1104	1026	1050	1078	1168	1205	1156
37.5°	1087	1111	1031	960	1016	1017	1098	1152	1108
40°	1043	1055	938	933	1024	989	1015	1095	1055
42.5°	995	995	871	946	1071	1001	943	1031	998
45°	943	932	828	998	1107	1036	894	962	937
47.5°	891	866	814	1034	1153	1067	868	890	872
50°	838	804	822	1080	1198	1103	868	814	806
52.5°	782	743	843	1061	1115	1080	866	737	733
55°	749	696	823	934	1001	966	830	659	641
57.5°	715	646	756	782	872	816	748	560	550
60°	623	553	627	616	670	640	606	450	411
62.5°	450	408	440	397	299	406	422	313	233
65°	272	236	247	127	68	132	225	160	115
67.5°	122	108	93	24	13	26	86	62	17
70°	15	20	25	9	8	9	25	11	8
72.5°	7	7	7	6	6	6	7	7	5
75°	5	5	5	5	4	5	5	4	3
77.5°	3	3	3	3	3	3	3	3	2
80°	2	2	2	2	2	2	2	2	1
82.5°	1	1	1	2	1	1	2	1	0
85°	1	1	1	1	0	1	1	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)