

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: 109P137

Luminaire Tested: **2EP3GX-2U1-5/8S33I-PAF**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: 109P137
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 2EP3GX-2U1-5/8S33I-PAF
Description: 2 X 2 Recessed Convertible Body Troffer with a 3" deep 9 cell semi-specular low iridescent parabolic louver.
Light Source: Two-FBO31/35K - 2800 Lumens ea. - 31 Watts ea.
Ballast/Driver: -

Summary

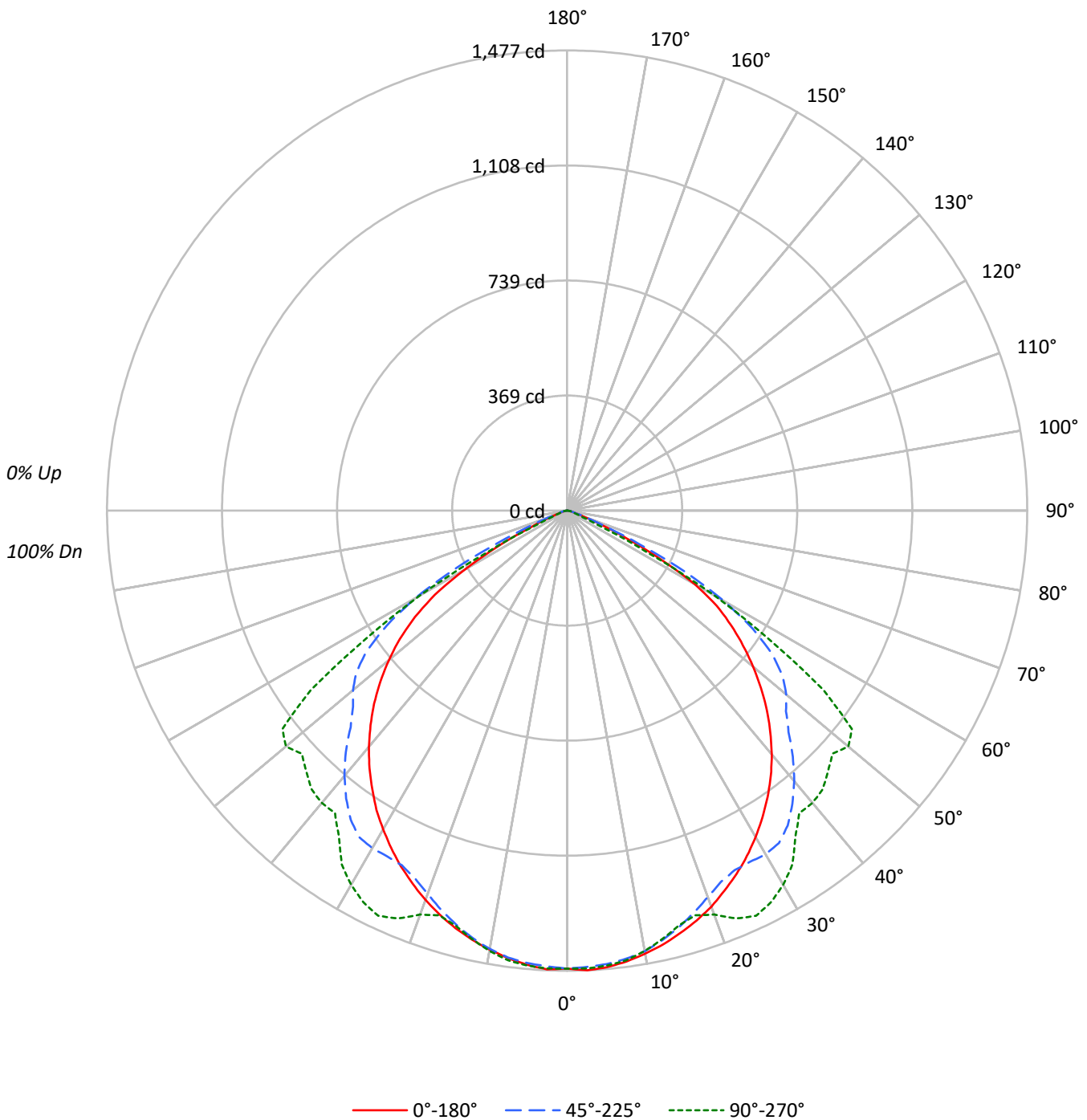
Lumens per Lamp: 2800 (2 lamps)
Luminaire Lumens: 3612.2 lumens
Efficiency: 64.5%
Efficacy: 51.5 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.36 / 1.39
Luminous Opening: Rectangular (W 1.73' x L: 1.75' x H: 0')
CIE Type: Direct

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	77	77	77	77	75	75	75	75	72	72	72		69	69	69		66	66	66	65
1	72	69	67	65	70	68	66	64	65	63	62		63	61	60		60	59	58	57
2	66	61	58	55	64	60	57	54	58	55	53		56	54	52		54	52	50	49
3	61	55	50	46	59	54	49	46	52	48	45		50	47	44		49	46	44	42
4	56	49	44	40	54	48	43	40	46	42	39		45	41	39		44	41	38	37
5	51	44	38	35	50	43	38	34	42	37	34		41	37	34		39	36	33	32
6	48	40	34	30	46	39	34	30	38	33	30		37	33	30		36	32	29	28
7	44	36	31	27	43	35	30	27	34	30	27		33	29	26		33	29	26	25
8	41	33	27	24	40	32	27	24	31	27	24		31	27	24		30	26	23	22
9	38	30	25	21	37	30	25	21	29	24	21		28	24	21		28	24	21	20
10	36	28	23	19	35	27	23	19	27	22	19		26	22	19		26	22	19	18

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	5229	5229	5229
5°	5252	5235	5227
10°	5216	5183	5169
15°	5170	5082	5108
20°	5122	5224	5034
25°	5051	5632	4949
30°	4970	5697	4851
35°	4872	5545	4737
40°	4746	5688	4597
45°	4563	5956	4407
50°	4311	6519	4134
55°	3988	6226	3696
60°	3372	3899	2718
65°	1784	901	1195
70°	562	343	385
75°	275	247	220
80°	184	184	143
85°	122	122	82



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	45°	90°	135°	180°	Flux
0°-10°	138.7	3.8	2.5	0°	1470	1470	1470	1470	1470	
10°-20°	390.9	10.8	7.0	5°	1471	1461	1466	1458	1464	140
20°-30°	606.2	16.8	10.8	15°	1404	1385	1380	1376	1387	396
30°-40°	744.9	20.6	13.3	25°	1287	1273	1435	1256	1261	593
40°-50°	785.7	21.8	14.0	35°	1122	1234	1277	1211	1091	701
50°-60°	691.4	19.1	12.3	45°	907	1005	1184	983	876	698
60°-70°	225.7	6.2	4.0	55°	643	803	1004	785	596	570
70°-80°	24.6	0.7	0.4	65°	212	259	107	241	142	226
80°-90°	4.1	0.1	0.1	75°	20	22	18	21	16	25
90°-100°	0.0	0.0	0.0	85°	3	4	3	3	2	4
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°	1135.9	31.4	20.3	165°	0	0	0	0	0	0
0°-40°	1880.7	52.1	33.6	175°	0	0	0	0	0	0
0°-60°	3357.9	93.0	60.0	180°	0	0	0	0	0	0
0°-90°	3612.2	100.0	64.5							
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°	3612.2	100.0	64.5							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	1470	1470	1470	1470	1470	1470	1470	1470	1470
2.5°	1477	1467	1466	1469	1471	1468	1464	1465	1474
5°	1471	1461	1461	1464	1466	1463	1458	1458	1464
7.5°	1460	1451	1451	1454	1456	1452	1447	1445	1449
10°	1444	1435	1436	1435	1435	1432	1429	1428	1431
12.5°	1426	1416	1412	1410	1409	1407	1405	1408	1411
15°	1404	1393	1385	1381	1380	1375	1376	1384	1387
17.5°	1380	1368	1353	1353	1362	1347	1344	1358	1360
20°	1353	1338	1320	1347	1380	1339	1309	1327	1330
22.5°	1320	1303	1290	1370	1417	1358	1277	1292	1296
25°	1287	1268	1273	1393	1435	1381	1256	1253	1261
27.5°	1250	1226	1271	1392	1417	1378	1251	1213	1222
30°	1210	1186	1274	1363	1387	1348	1251	1172	1181
32.5°	1167	1143	1265	1325	1346	1310	1243	1130	1139
35°	1122	1098	1234	1273	1277	1259	1211	1086	1091
37.5°	1074	1056	1187	1200	1224	1186	1165	1041	1042
40°	1022	1014	1134	1158	1225	1138	1112	998	990
42.5°	965	974	1072	1142	1214	1127	1052	957	934
45°	907	933	1005	1118	1184	1104	983	917	876
47.5°	844	885	953	1082	1155	1071	932	871	814
50°	779	828	918	1051	1178	1041	897	816	747
52.5°	712	760	871	1027	1152	1018	853	748	677
55°	643	683	803	944	1004	934	785	670	596
57.5°	570	597	707	766	765	754	687	579	504
60°	474	498	582	549	548	537	563	468	382
62.5°	336	369	429	352	287	345	406	331	254
65°	212	230	259	161	107	158	241	204	142
67.5°	111	125	130	64	46	62	119	107	75
70°	54	63	59	40	33	39	54	54	37
72.5°	30	35	32	28	24	28	30	31	24
75°	20	23	22	21	18	21	21	21	16
77.5°	13	15	16	15	13	15	15	14	11
80°	9	10	11	11	9	10	10	9	7
82.5°	5	6	7	7	5	7	6	6	4
85°	3	3	4	3	3	3	3	3	2
87.5°	1	1	1	1	1	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)