

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: 109P138

Luminaire Tested: **2P2GX-2U1-5/8S55I-PAF**

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: 109P138
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 2P2GX-2U1-5/8S55I-PAF
Description: 2 X 2 Recessed Convertible Body Troffer with a
2" deep 25 cell semi-specular low iridescent
parabolic louver.
Light Source: Two-FBO31/35K - 2800 Lumens ea. - 31 Watts ea.
Ballast/Driver: Triad-Utrad B2321120RH Electronic

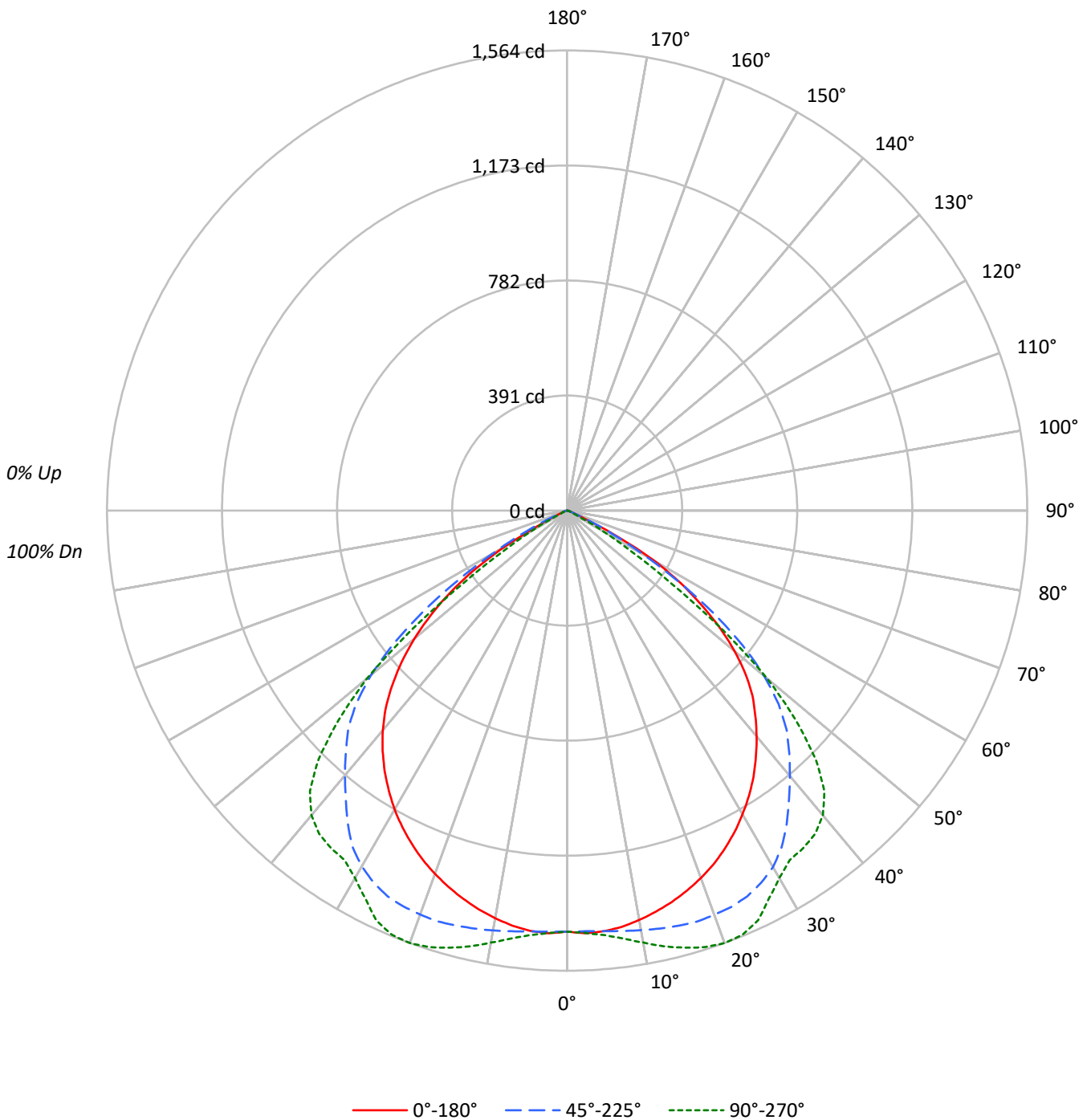
Summary

Lumens per Lamp: 2800 (2 lamps)
Luminaire Lumens: 3382.7 lumens
Efficiency: 60.4%
Efficacy: 58.0 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.49 / 1.44
Luminous Opening: Rectangular (W 1.74' x L: 1.76' x H: 0')
CIE Type: Direct

Input Watts (W): 58.3
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	72	72	72	72	70	70	70	70	67	67	67	64	64	64	62	62	62	60
1	67	65	63	62	66	64	62	61	61	60	59	59	58	57	57	56	55	54
2	63	59	55	53	61	58	55	52	56	53	51	54	52	50	52	50	49	48
3	58	53	49	45	57	52	48	45	50	47	44	49	46	44	47	45	43	42
4	54	47	43	40	52	47	43	39	45	42	39	44	41	38	43	40	38	37
5	50	43	38	35	48	42	38	35	41	37	34	40	37	34	39	36	34	32
6	46	39	34	31	45	38	34	31	37	33	30	36	33	30	35	32	30	29
7	43	35	31	27	42	35	30	27	34	30	27	33	30	27	33	29	27	26
8	40	32	28	25	39	32	28	24	31	27	24	31	27	24	30	27	24	23
9	37	30	25	22	37	29	25	22	29	25	22	28	25	22	28	24	22	21
10	35	28	23	20	34	27	23	20	27	23	20	26	22	20	26	22	20	19

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	5030	5030	5030
5°	5063	5109	5060
10°	5043	5322	5022
15°	5011	5597	4971
20°	4971	5850	4915
25°	4918	5957	4848
30°	4838	5853	4761
35°	4737	6007	4638
40°	4598	6203	4474
45°	4429	5940	4185
50°	4063	4856	3713
55°	3401	2647	2972
60°	2418	1054	1680
65°	549	183	324
70°	206	123	164
75°	136	95	109
80°	101	61	81
85°	81	40	40



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	45°	90°	135°	180°	Flux
0°-10°	137.5	4.1	2.5	0°	1431	1431	1431	1431	1431	
10°-20°	412.4	12.2	7.4	5°	1435	1435	1448	1436	1434	136
20°-30°	653.3	19.3	11.7	15°	1377	1461	1538	1460	1366	388
30°-40°	797.1	23.6	14.2	25°	1268	1447	1536	1446	1250	584
40°-50°	800.2	23.7	14.3	35°	1104	1301	1400	1300	1081	689
50°-60°	481.6	14.2	8.6	45°	891	1055	1195	1053	842	681
60°-70°	88.9	2.6	1.6	55°	555	606	432	595	485	491
70°-80°	9.8	0.3	0.2	65°	66	90	22	86	39	117
80°-90°	1.9	0.1	0.0	75°	10	9	7	9	8	11
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°	1203.2	35.6	21.5	165°	0	0	0	0	0	0
0°-40°	2000.2	59.1	35.7	175°	0	0	0	0	0	0
0°-60°	3282.1	97.0	58.6	180°	0	0	0	0	0	0
0°-90°	3382.7	100.0	60.4							
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°	3382.7	100.0	60.4							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	1431	1431	1431	1431	1431	1431	1431	1431	1431
2.5°	1438	1429	1431	1433	1437	1434	1432	1430	1438
5°	1435	1427	1435	1443	1448	1443	1436	1429	1434
7.5°	1427	1423	1441	1458	1467	1459	1442	1425	1423
10°	1413	1415	1448	1478	1491	1479	1449	1417	1407
12.5°	1396	1405	1455	1501	1517	1501	1455	1406	1388
15°	1377	1393	1461	1519	1538	1520	1460	1393	1366
17.5°	1354	1380	1465	1533	1556	1533	1464	1379	1341
20°	1329	1365	1462	1540	1564	1540	1461	1364	1314
22.5°	1301	1349	1458	1535	1560	1535	1456	1346	1284
25°	1268	1329	1447	1517	1536	1519	1446	1326	1250
27.5°	1232	1304	1427	1479	1486	1481	1425	1302	1213
30°	1192	1277	1399	1425	1442	1425	1396	1274	1173
32.5°	1150	1243	1357	1378	1408	1379	1357	1242	1128
35°	1104	1204	1301	1341	1400	1341	1300	1202	1081
37.5°	1054	1162	1238	1321	1385	1323	1236	1159	1030
40°	1002	1112	1178	1285	1352	1286	1175	1109	975
42.5°	947	1055	1117	1231	1294	1230	1113	1050	913
45°	891	988	1055	1148	1195	1148	1053	980	842
47.5°	823	911	975	1028	1054	1026	973	898	763
50°	743	819	874	878	888	876	870	804	679
52.5°	653	711	751	705	666	704	745	695	585
55°	555	590	606	500	432	498	595	572	485
57.5°	455	457	446	313	261	313	435	441	372
60°	344	325	300	182	150	182	290	308	239
62.5°	202	199	181	93	56	93	175	182	108
65°	66	88	90	31	22	30	86	79	39
67.5°	31	34	38	19	16	19	36	32	23
70°	20	21	18	14	12	14	17	20	16
72.5°	14	14	12	11	9	11	12	13	11
75°	10	10	9	8	7	8	9	10	8
77.5°	7	7	6	6	5	6	6	7	6
80°	5	5	4	4	3	4	4	5	4
82.5°	3	3	3	2	2	2	3	3	2
85°	2	2	2	1	1	1	2	1	1
87.5°	1	1	1	1	1	1	1	1	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)