

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: 197P106

Luminaire Tested: **2P2GX-2U1-5/8S34I-PAF**

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: 197P106
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 2P2GX-2U1-5/8S34I-PAF
Description: 2 X 2 Recessed Convertible Body Luminaire with a 2" deep
12 cell semi-specular low iridescent parabolic louver.
Light Source: Two - FBO31/35K - 2750 Lumens ea. - 31 Watts ea.
Ballast/Driver: Advance REL-2P32-RH-TP Electronic - L.O.B.F. = 85.2

Summary

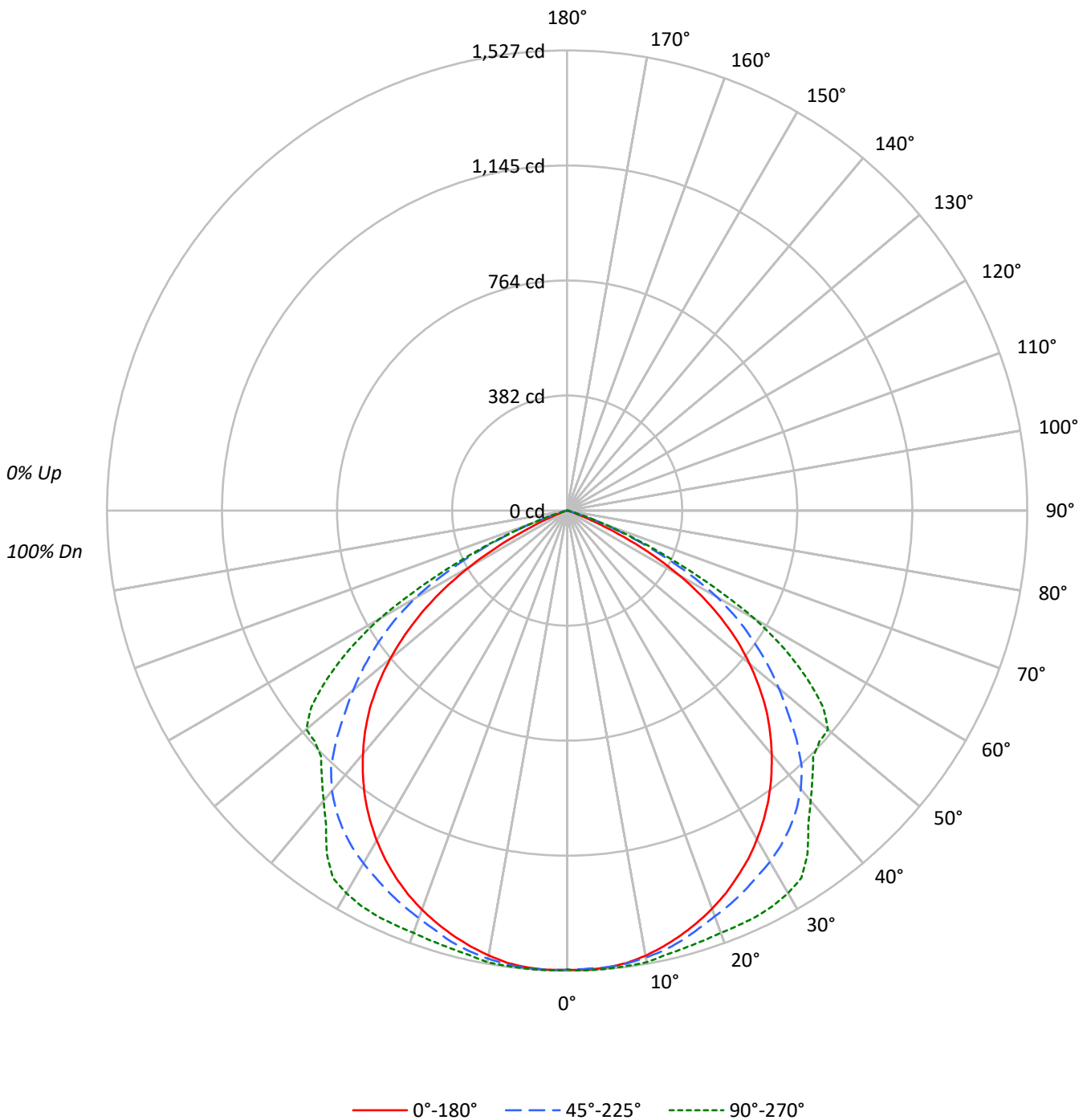
Lumens per Lamp: 2750 (2 lamps)
Luminaire Lumens: 3855.2 lumens
Efficiency: 70.1%
Efficacy: 72.2 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.4 / 1.42
Luminous Opening: Rectangular (W 1.74' x L: 1.76' x H: 0')
CIE Type: Direct

Input Watts (W): 53.4
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	50	30	10	0	
RCR																						
0	83	83	83	83	82	82	82	82	78	78	78	75	75	75	72	72	72	70				70
1	78	75	73	70	76	73	71	69	71	69	67	68	66	65	65	64	63	62				62
2	72	67	63	59	70	65	62	58	63	60	57	61	58	56	59	57	55	53				53
3	66	59	54	50	64	58	53	50	56	52	49	54	51	48	53	50	47	46				46
4	60	53	47	43	59	52	47	43	50	46	42	49	45	42	47	44	41	40				40
5	56	47	42	37	54	47	41	37	45	40	37	44	40	36	43	39	36	35				35
6	52	43	37	33	50	42	37	33	41	36	32	40	35	32	39	35	32	30				30
7	48	39	33	29	47	38	33	29	37	32	29	36	32	28	35	31	28	27				27
8	44	35	30	26	43	35	30	26	34	29	26	33	29	25	32	28	25	24				24
9	42	33	27	23	41	32	27	23	31	26	23	31	26	23	30	26	23	22				22
10	39	30	25	21	38	30	24	21	29	24	21	28	24	21	28	24	21	20				20

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	5341	5341	5341
5°	5354	5368	5354
10°	5338	5416	5334
15°	5293	5453	5297
20°	5243	5560	5255
25°	5177	5746	5197
30°	5099	5932	5115
35°	4988	5951	4997
40°	4831	5750	4822
45°	4629	5724	4584
50°	4307	6161	4182
55°	3819	5945	3580
60°	3014	5039	2628
65°	1725	3151	1236
70°	348	1352	256
75°	162	176	135
80°	101	141	81
85°	80	121	40



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	45°	90°	135°	180°	Flux
0°-10°	144.9	3.8	2.6	0°	1524	1524	1524	1524	1524	
10°-20°	418.1	10.8	7.6	5°	1522	1521	1526	1525	1522	145
20°-30°	648.2	16.8	11.8	15°	1459	1476	1503	1482	1460	412
30°-40°	799.6	20.7	14.5	25°	1339	1392	1486	1398	1344	617
40°-50°	813.6	21.1	14.8	35°	1166	1287	1391	1295	1168	728
50°-60°	687.5	17.8	12.5	45°	934	1077	1155	1085	925	717
60°-70°	310.2	8.0	5.6	55°	625	754	973	766	586	553
70°-80°	30.3	0.8	0.6	65°	208	338	380	346	149	211
80°-90°	2.8	0.1	0.1	75°	12	16	13	16	10	15
90°-100°	0.0	0.0	0.0	85°	2	2	3	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°	1211.2	31.4	22.0	165°	0	0	0	0	0	0
0°-40°	2010.8	52.2	36.6	175°	0	0	0	0	0	0
0°-60°	3511.9	91.1	63.9	180°	0	0	0	0	0	0
0°-90°	3855.2	100.0	70.1							
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°	3855.2	100.0	70.1							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	1524	1524	1524	1524	1524	1524	1524	1524	1524
2.5°	1525	1521	1522	1526	1527	1526	1525	1525	1525
5°	1522	1517	1521	1525	1526	1525	1525	1523	1522
7.5°	1514	1510	1516	1522	1524	1522	1519	1517	1514
10°	1500	1497	1506	1518	1522	1519	1510	1503	1499
12.5°	1481	1480	1494	1506	1510	1508	1498	1486	1481
15°	1459	1460	1476	1492	1503	1496	1482	1466	1460
17.5°	1434	1436	1454	1483	1497	1487	1459	1444	1436
20°	1406	1411	1433	1471	1491	1475	1439	1420	1409
22.5°	1375	1383	1414	1461	1489	1465	1420	1392	1379
25°	1339	1352	1392	1453	1486	1458	1398	1362	1344
27.5°	1302	1315	1368	1441	1479	1445	1375	1327	1306
30°	1260	1275	1346	1426	1466	1430	1352	1288	1264
32.5°	1215	1233	1319	1404	1446	1408	1326	1247	1218
35°	1166	1189	1287	1371	1391	1375	1295	1203	1168
37.5°	1113	1142	1250	1306	1314	1311	1258	1157	1113
40°	1056	1091	1206	1227	1257	1233	1214	1106	1054
42.5°	997	1034	1152	1166	1205	1172	1160	1050	992
45°	934	974	1077	1108	1155	1113	1085	991	925
47.5°	863	908	994	1050	1135	1056	1003	927	849
50°	790	835	917	1013	1130	1019	926	854	767
52.5°	713	756	838	977	1070	985	849	770	680
55°	625	667	754	893	973	905	766	679	586
57.5°	532	569	670	783	856	796	681	579	486
60°	430	463	574	657	719	671	585	470	375
62.5°	322	348	459	515	548	528	469	352	262
65°	208	234	338	362	380	371	346	235	149
67.5°	99	129	221	233	240	240	227	126	59
70°	34	48	120	126	132	131	123	48	25
72.5°	19	23	49	56	55	59	51	23	16
75°	12	14	16	16	13	16	16	14	10
77.5°	8	9	10	10	9	10	10	9	7
80°	5	6	6	7	7	7	6	6	4
82.5°	3	3	4	4	4	4	4	4	3
85°	2	2	2	3	3	3	2	2	1
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)