

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: 197P105

Luminaire Tested: **2P2GX-2U1-5/8S33I-PAF**

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: 197P105
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 2P2GX-2U1-5/8S33I-PAF
Description: 2 X 2 Recessed Convertible Body Luminaire with a 2" deep
9 cell semi-specular low iridescent parabolic louver.
Light Source: Two - FB031/35K - 2750 Lumens ea. - 31 Watts ea.
Ballast/Driver: Advance REL-2P32-RH-TP Electronic - L.O.B.F. = 85.2

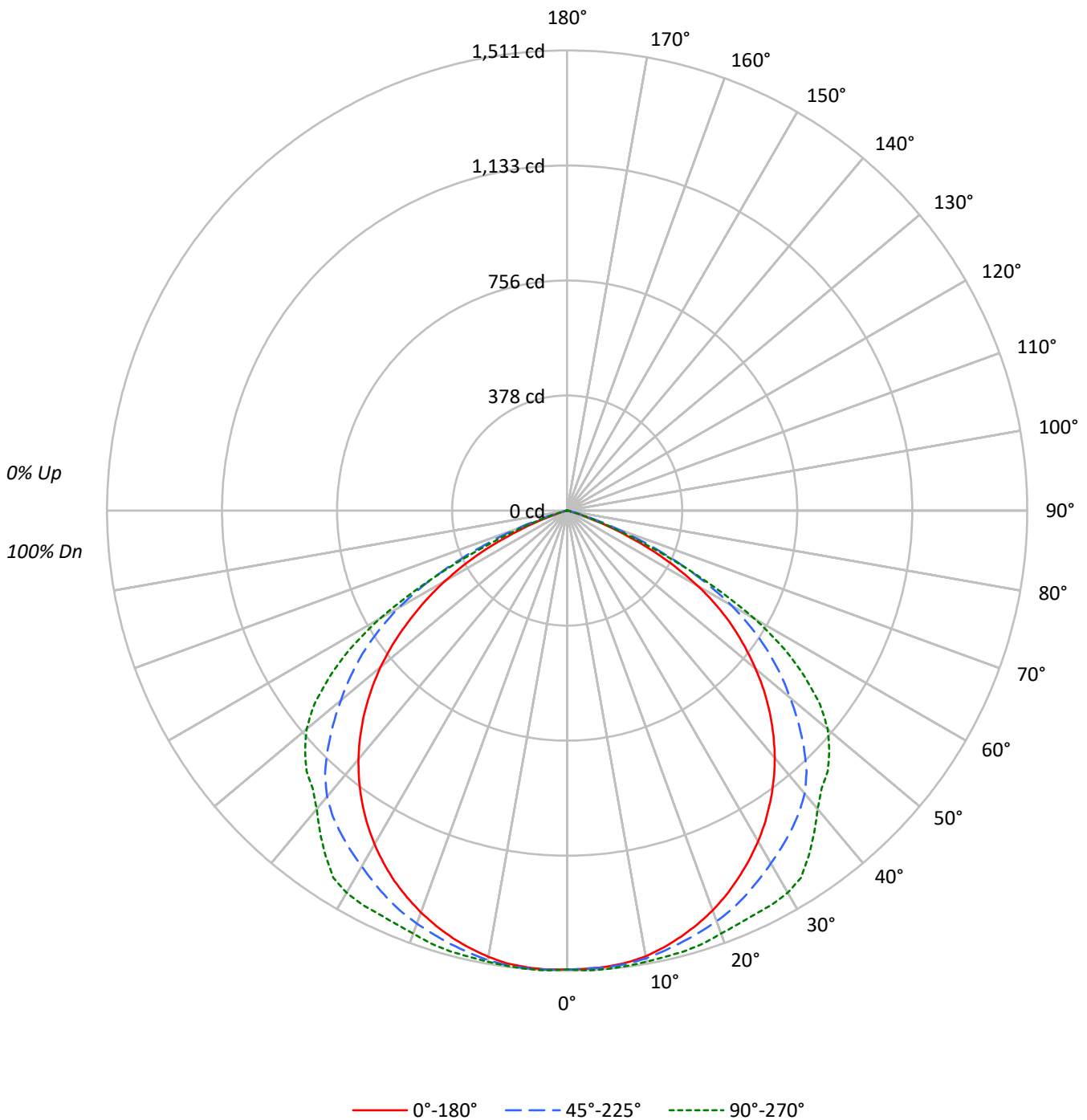
Summary

Lumens per Lamp: 2750 (2 lamps)
Luminaire Lumens: 3968.4 lumens
Efficiency: 72.2%
Efficacy: 74.3 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.41 / 1.44
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									
RC	80									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	50	30	10	0													
RCR																																					
0	86	86	86	86	84	84	84	84	80	80	80	77	77	77	74	74	74	74	74	74	74	74	74	72													
1	80	77	74	72	78	75	73	71	72	70	69	70	68	67	67	66	65	65	65	65	65	65	65	63													
2	73	68	64	60	72	67	63	60	64	61	58	62	59	57	60	58	56	56	56	56	56	56	56	54													
3	67	60	55	51	66	59	54	51	57	53	50	55	52	49	54	51	48	48	48	48	48	48	48	47													
4	62	54	48	44	60	53	47	43	51	46	43	50	45	42	48	44	42	42	42	42	42	42	42	40													
5	57	48	42	38	55	47	42	37	46	41	37	45	40	37	43	39	36	36	36	36	36	36	36	35													
6	53	43	37	33	51	43	37	33	42	36	33	40	36	32	39	35	32	32	32	32	32	32	32	31													
7	49	39	33	29	48	39	33	29	38	33	29	37	32	29	36	32	28	28	28	28	28	28	28	27													
8	45	36	30	26	44	35	30	26	35	29	26	34	29	26	33	29	25	25	25	25	25	25	25	24													
9	42	33	27	23	41	33	27	23	32	27	23	31	26	23	30	26	23	23	23	23	23	23	23	22													
10	40	30	25	21	39	30	25	21	29	24	21	29	24	21	28	24	21	21	21	21	21	21	21	20													

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	5281	5281	5281
5°	5287	5315	5298
10°	5288	5352	5295
15°	5253	5431	5272
20°	5210	5512	5236
25°	5147	5653	5189
30°	5074	5863	5119
35°	4980	5917	5018
40°	4854	5851	4877
45°	4669	5997	4669
50°	4405	6090	4361
55°	4051	5823	3892
60°	3483	4990	3245
65°	2529	3134	2280
70°	1148	1342	922
75°	176	149	162
80°	121	121	101
85°	80	80	80



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	45°	90°	135°	180°	Flux
0°-10°	143.5	3.6	2.6	0°	1507	1507	1507	1507	1507	
10°-20°	416.0	10.5	7.6	5°	1503	1505	1511	1509	1506	143
20°-30°	645.0	16.3	11.7	15°	1448	1466	1497	1474	1453	408
30°-40°	801.6	20.2	14.6	25°	1331	1392	1462	1402	1342	613
40°-50°	834.5	21.0	15.2	35°	1164	1282	1383	1295	1173	727
50°-60°	716.6	18.1	13.0	45°	942	1099	1210	1112	942	725
60°-70°	363.8	9.2	6.6	55°	663	805	953	821	637	588
70°-80°	44.5	1.1	0.8	65°	305	396	378	410	275	298
80°-90°	3.0	0.1	0.1	75°	13	34	11	36	12	35
90°-100°	0.0	0.0	0.0	85°	2	3	2	3	2	3
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°	1204.4	30.4	21.9	165°	0	0	0	0	0	0
0°-40°	2006.0	50.5	36.5	175°	0	0	0	0	0	0
0°-60°	3557.1	89.6	64.7	180°	0	0	0	0	0	0
0°-90°	3968.4	100.0	72.2							
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°	3968.4	100.0	72.2							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	1507	1507	1507	1507	1507	1507	1507	1507	1507
2.5°	1506	1503	1505	1509	1511	1510	1509	1508	1508
5°	1503	1500	1505	1509	1511	1511	1509	1508	1506
7.5°	1497	1495	1501	1506	1508	1508	1506	1504	1500
10°	1486	1484	1493	1500	1504	1503	1499	1493	1488
12.5°	1469	1469	1480	1493	1500	1498	1487	1479	1472
15°	1448	1450	1466	1487	1497	1492	1474	1461	1453
17.5°	1424	1428	1451	1479	1490	1485	1459	1440	1430
20°	1397	1402	1435	1466	1478	1472	1443	1416	1404
22.5°	1366	1374	1416	1450	1469	1456	1425	1389	1374
25°	1331	1343	1392	1437	1462	1444	1402	1359	1342
27.5°	1294	1310	1365	1425	1458	1431	1376	1328	1305
30°	1254	1274	1338	1414	1449	1421	1349	1294	1265
32.5°	1211	1235	1311	1397	1429	1404	1323	1256	1221
35°	1164	1194	1282	1365	1383	1373	1295	1216	1173
37.5°	1114	1149	1251	1313	1333	1321	1265	1171	1122
40°	1061	1100	1213	1257	1279	1265	1226	1122	1066
42.5°	1003	1045	1164	1198	1237	1207	1177	1067	1006
45°	942	986	1099	1148	1210	1159	1112	1010	942
47.5°	877	925	1029	1104	1167	1116	1043	947	873
50°	808	857	956	1048	1117	1062	970	880	800
52.5°	736	785	883	985	1047	1000	898	808	721
55°	663	709	805	902	953	915	821	729	637
57.5°	584	628	718	798	846	811	735	642	553
60°	497	535	624	679	712	693	640	546	463
62.5°	401	432	514	539	546	552	530	444	372
65°	305	329	396	385	378	394	410	341	275
67.5°	201	224	276	247	237	255	288	235	172
70°	112	128	166	135	131	142	175	134	90
72.5°	52	63	84	61	55	65	90	67	34
75°	13	20	34	17	11	18	36	20	12
77.5°	9	10	12	9	8	10	13	11	8
80°	6	7	7	6	6	7	7	7	5
82.5°	4	4	4	4	4	4	5	5	3
85°	2	2	3	3	2	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)