

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: 116P105

Luminaire Tested: **EP3GX2024-2U3S23I-PAF**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: 116P105
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: EP3GX2024-2U3S23I-PAF
Description: 20" X 24" Recessed Troffer with a 3" deep
6 cell semi-specular parabolic louver.
Light Source: TWO-F40CW/U/3 - 2725 Lumens ea. - 40 Watts ea.
Ballast/Driver: Advance REL-2S40-RH-TP Electronic: L.O.B.F. = 84.2

Summary

Lumens per Lamp: 2725 (2 lamps)
Luminaire Lumens: 3472.0 lumens
Efficiency: 63.7%
Efficacy: 52.3 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.33 / 1.37
Luminous Opening: Rectangular (W 1.4' x L: 1.75' x H: 0')
CIE Type: Direct

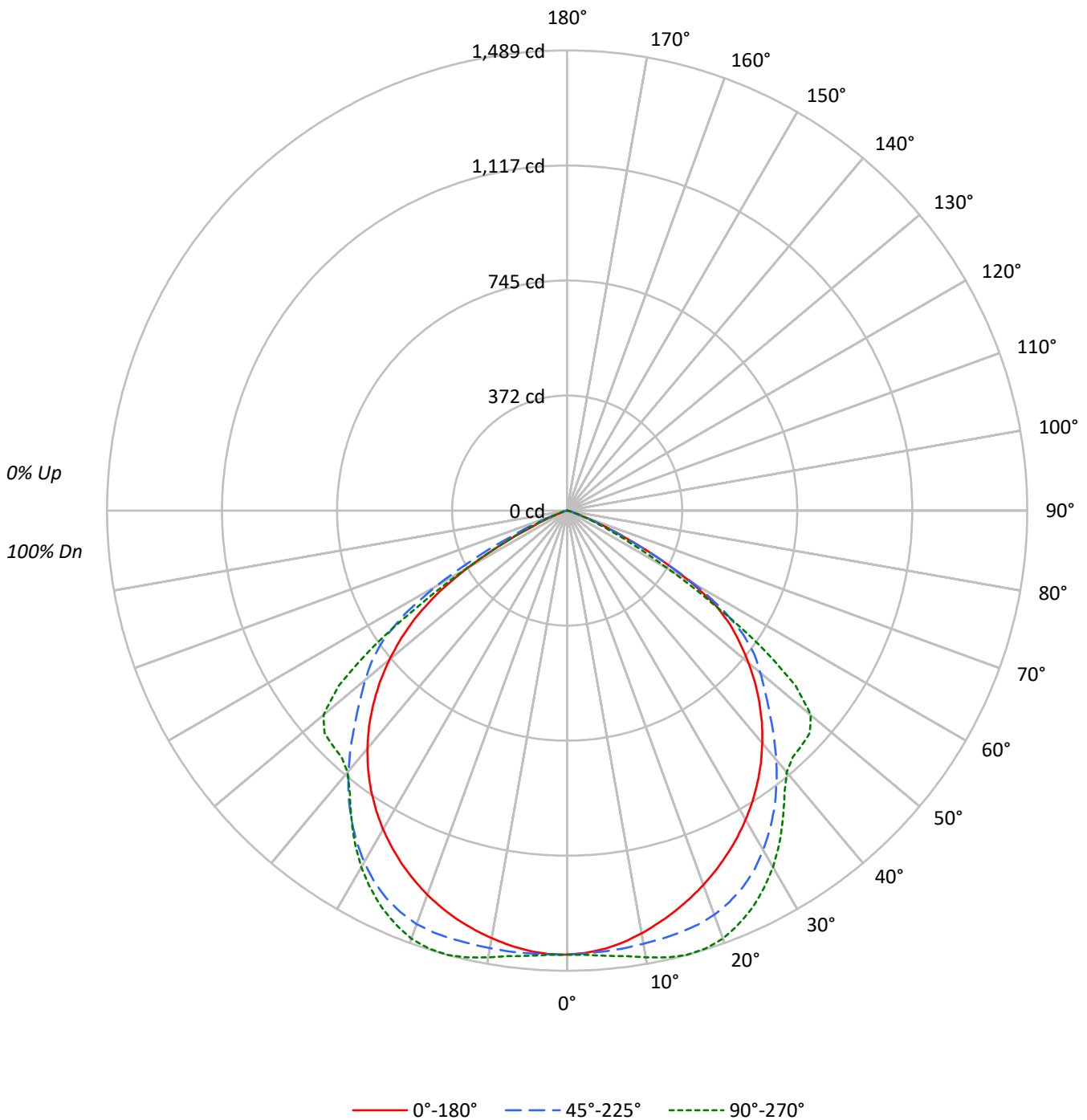
Input Watts (W): 66.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	76	76	76	76	74	74	74	74	71	71	71	68	68	68	65	65	65	64
1	71	68	66	64	69	67	65	63	64	63	61	62	61	59	60	59	58	56
2	65	61	57	54	64	60	57	54	58	55	53	56	53	51	54	52	50	49
3	60	55	50	46	59	54	49	46	52	48	45	50	47	45	48	46	44	43
4	56	49	44	40	54	48	43	40	46	42	39	45	42	39	44	41	38	37
5	51	44	39	35	50	43	38	35	42	38	34	41	37	34	40	36	34	32
6	47	40	34	31	46	39	34	31	38	34	30	37	33	30	36	33	30	29
7	44	36	31	27	43	36	31	27	35	30	27	34	30	27	33	29	27	25
8	41	33	28	24	40	33	28	24	32	27	24	31	27	24	30	27	24	23
9	38	30	25	22	38	30	25	22	29	25	22	29	25	22	28	24	22	21
10	36	28	23	20	35	28	23	20	27	23	20	26	23	20	26	22	20	19

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	6332	6332	6332
5°	6295	6396	6326
10°	6215	6569	6287
15°	6127	6793	6250
20°	6045	6912	6204
25°	5961	6895	6141
30°	5877	6778	6060
35°	5778	6547	5950
40°	5649	6356	5781
45°	5484	6693	5528
50°	5251	7054	5142
55°	4948	5847	4541
60°	4054	3331	3305
65°	2190	1595	1345
70°	657	502	387
75°	204	238	170
80°	102	152	76
85°	51	51	0



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	45°	90°	135°	180°	Flux
0°-10°	137.0	3.9	2.5	0°	1437	1437	1437	1437	1437	
10°-20°	402.3	11.6	7.4	5°	1423	1431	1446	1438	1430	135
20°-30°	619.9	17.9	11.4	15°	1343	1413	1489	1435	1370	379
30°-40°	735.1	21.2	13.5	25°	1226	1345	1418	1384	1263	565
40°-50°	747.8	21.5	13.7	35°	1074	1170	1217	1218	1106	671
50°-60°	608.9	17.5	11.2	45°	880	927	1074	970	887	678
60°-70°	200.2	5.8	3.7	55°	644	693	761	722	591	565
70°-80°	19.0	0.5	0.3	65°	210	204	153	206	129	224
80°-90°	1.8	0.1	0.0	75°	12	15	14	14	10	18
90°-100°	0.0	0.0	0.0	85°	1	1	1	1	0	1
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°	1159.1	33.4	21.3	165°	0	0	0	0	0	0
0°-40°	1894.2	54.6	34.8	175°	0	0	0	0	0	0
0°-60°	3250.9	93.6	59.6	180°	0	0	0	0	0	0
0°-90°	3472.0	100.0	63.7							
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°	3472.0	100.0	63.7							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	1437	1437	1437	1437	1437	1437	1437	1437	1437
2.5°	1432	1435	1434	1437	1439	1439	1437	1439	1436
5°	1423	1428	1431	1441	1446	1444	1438	1436	1430
7.5°	1408	1415	1428	1445	1454	1451	1439	1429	1419
10°	1389	1400	1423	1454	1468	1461	1438	1419	1405
12.5°	1367	1383	1419	1461	1481	1470	1436	1408	1389
15°	1343	1363	1413	1466	1489	1478	1435	1394	1370
17.5°	1317	1343	1405	1460	1486	1474	1432	1378	1348
20°	1289	1322	1392	1446	1474	1463	1424	1361	1323
22.5°	1259	1299	1371	1421	1449	1440	1407	1341	1294
25°	1226	1275	1345	1386	1418	1408	1384	1318	1263
27.5°	1192	1246	1311	1345	1378	1370	1353	1292	1228
30°	1155	1216	1268	1297	1332	1325	1313	1262	1191
32.5°	1116	1181	1222	1243	1278	1274	1269	1228	1150
35°	1074	1141	1170	1182	1217	1214	1218	1186	1106
37.5°	1030	1096	1113	1117	1155	1150	1162	1138	1058
40°	982	1046	1053	1054	1105	1088	1100	1084	1005
42.5°	933	991	989	1008	1081	1042	1036	1026	949
45°	880	930	927	982	1074	1015	970	961	887
47.5°	825	867	869	963	1065	993	909	891	822
50°	766	800	816	933	1029	958	853	818	750
52.5°	705	732	763	871	932	889	795	740	674
55°	644	660	693	749	761	762	722	655	591
57.5°	568	577	597	578	555	585	621	557	492
60°	460	471	474	400	378	405	489	444	375
62.5°	331	335	332	253	245	260	342	315	244
65°	210	211	204	158	153	161	206	192	129
67.5°	116	109	110	90	85	93	111	95	64
70°	51	51	54	47	39	48	54	45	30
72.5°	22	25	25	24	21	24	25	22	16
75°	12	14	15	15	14	15	14	13	10
77.5°	7	9	10	10	9	10	9	8	6
80°	4	5	6	6	6	6	6	5	3
82.5°	2	3	3	4	3	4	3	2	1
85°	1	1	1	2	1	1	1	1	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)