

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: 109P149

Luminaire Tested: **2EP3GX-2BX40S44I-PAF**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: 109P149
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 2EP3GX-2BX40S44I-PAF
Description: 2 X 2 Recessed Convertible Body Troffer with a
3" deep 16 cell semi-specular low irideseccnt
parabolic louver.
Light Source: Two-F40BX/SPX35/RS - 3150 Lumens ea. - 40 Watts ea.
Ballast/Driver: Triad-Utrad B232I120RH Electronic

Summary

Lumens per Lamp: 3150 (2 lamps)
Luminaire Lumens: 4420.7 lumens
Efficiency: 70.2%
Efficacy: 60.7 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 2.27 / 1.86
Luminous Opening: Rectangular (W 1.75' x L: 1.73' x H: 0')
CIE Type: Direct

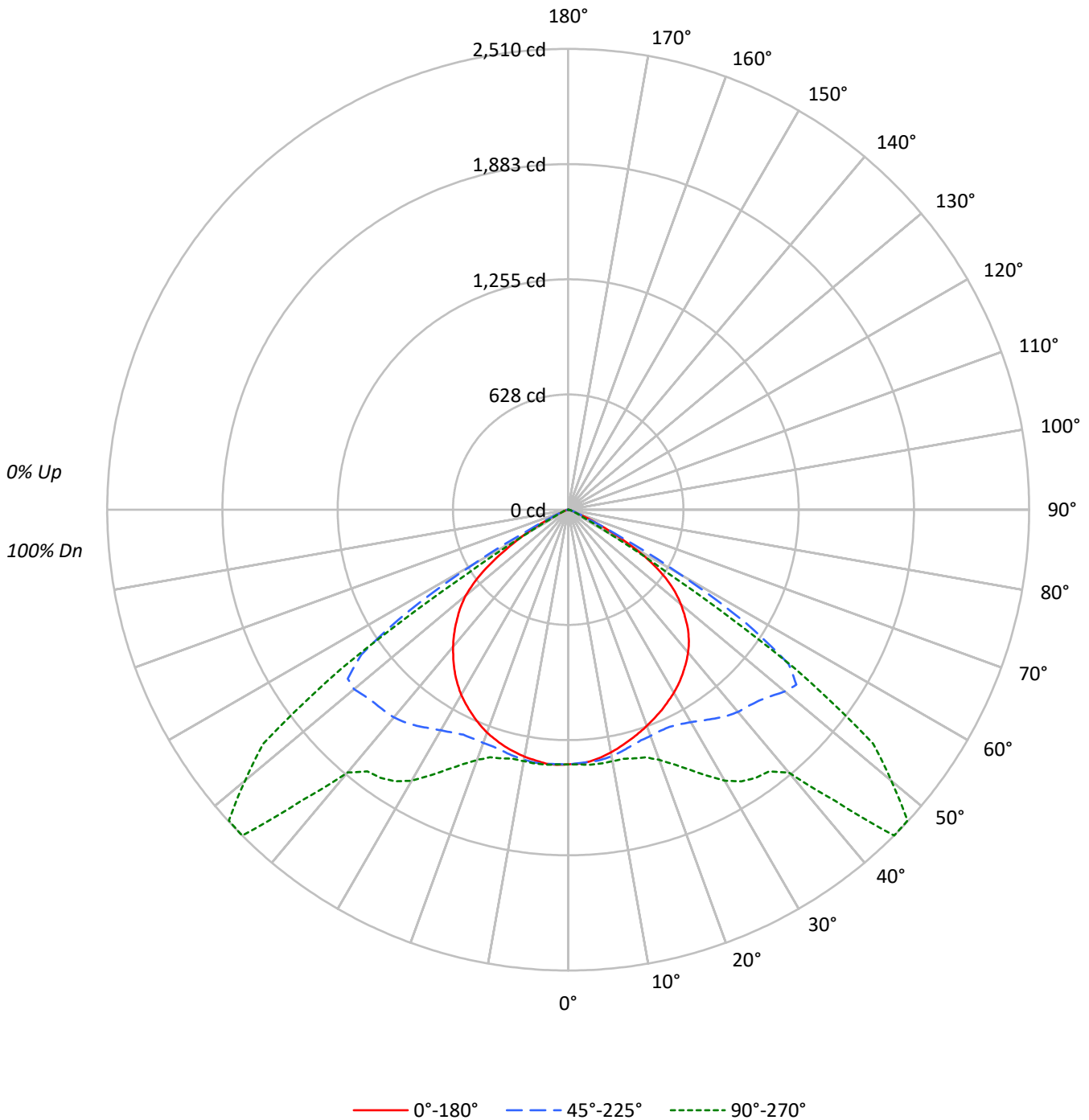
Input Watts (W): 72.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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									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	50	30	10	0														
RCR																																						
0	84	84	84	84	82	82	82	82	78	78	78	75	75	75	72	72	72	70						70														
1	78	75	73	70	76	74	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	56	55	53						53														
3	66	59	54	50	64	58	53	49	56	52	49	54	51	48	52	49	47	45						45														
4	60	52	47	42	59	51	46	42	50	45	41	48	44	41	47	43	40	39						39														
5	55	47	41	36	54	46	40	36	44	40	36	43	39	35	42	38	35	34						34														
6	51	42	36	31	49	41	35	31	40	35	31	39	34	31	38	34	31	29						29														
7	47	38	32	27	46	37	31	27	36	31	27	35	30	27	34	30	27	25						25														
8	43	34	28	24	42	34	28	24	33	28	24	32	27	24	31	27	24	22						22														
9	40	31	25	22	39	31	25	21	30	25	21	29	25	21	28	24	21	20						20														
10	38	28	23	19	37	28	23	19	27	23	19	27	22	19	26	22	19	18						18														

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	4934	4934	4934
5°	4913	4977	4956
10°	4847	5024	4934
15°	4784	5163	4916
20°	4743	5489	4891
25°	4725	6130	4839
30°	4728	6999	4785
35°	4724	7738	4677
40°	4718	8674	4527
45°	4638	12626	4326
50°	4433	12711	4034
55°	4012	9333	3256
60°	2903	1722	2035
65°	1296	530	800
70°	374	312	281
75°	220	220	179
80°	143	143	102
85°	82	41	41



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	45°	90°	135°	180°	Flux
0°-10°	131.8	3.0	2.1	0°	1387	1387	1387	1387	1387	
10°-20°	383.9	8.7	6.1	5°	1376	1379	1394	1389	1388	130
20°-30°	632.1	14.3	10.0	15°	1299	1331	1402	1363	1335	367
30°-40°	888.3	20.1	14.1	25°	1204	1305	1562	1352	1233	555
40°-50°	1190.8	26.9	18.9	35°	1088	1389	1782	1437	1077	681
50°-60°	1000.9	22.6	15.9	45°	922	1470	2510	1490	860	708
60°-70°	169.2	3.8	2.7	55°	647	1466	1505	1375	525	563
70°-80°	20.6	0.5	0.3	65°	154	125	63	102	95	174
80°-90°	2.9	0.1	0.0	75°	16	20	16	18	13	19
90°-100°	0.0	0.0	0.0	85°	2	2	1	2	1	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°	1147.8	26.0	18.2	165°	0	0	0	0	0	0
0°-40°	2036.2	46.1	32.3	175°	0	0	0	0	0	0
0°-60°	4227.9	95.6	67.1	180°	0	0	0	0	0	0
0°-90°	4420.7	100.0	70.2							
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°	4420.7	100.0	70.2							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	1387	1387	1387	1387	1387	1387	1387	1387	1387
2.5°	1385	1381	1382	1386	1389	1388	1387	1388	1391
5°	1376	1374	1379	1388	1394	1393	1389	1387	1388
7.5°	1361	1361	1374	1386	1394	1395	1389	1380	1377
10°	1342	1346	1363	1380	1391	1392	1383	1371	1366
12.5°	1321	1328	1348	1374	1389	1387	1374	1361	1351
15°	1299	1309	1331	1376	1402	1392	1363	1348	1335
17.5°	1276	1287	1317	1379	1414	1399	1353	1332	1314
20°	1253	1265	1311	1393	1450	1416	1352	1311	1292
22.5°	1228	1243	1304	1425	1500	1452	1350	1288	1264
25°	1204	1220	1305	1464	1562	1496	1352	1262	1233
27.5°	1177	1197	1317	1514	1632	1553	1368	1234	1200
30°	1151	1177	1336	1569	1704	1616	1387	1206	1165
32.5°	1121	1159	1361	1619	1754	1676	1411	1179	1123
35°	1088	1139	1389	1645	1782	1711	1437	1152	1077
37.5°	1053	1119	1416	1655	1796	1733	1460	1119	1027
40°	1016	1100	1438	1675	1868	1765	1477	1087	975
42.5°	973	1084	1451	1758	2150	1860	1484	1059	920
45°	922	1067	1470	1968	2510	2091	1490	1029	860
47.5°	863	1051	1501	2176	2506	2318	1502	999	799
50°	801	1028	1540	2093	2297	2245	1521	966	729
52.5°	733	993	1566	1830	2092	1948	1513	917	639
55°	647	927	1466	1480	1505	1551	1375	832	525
57.5°	539	815	1140	906	648	931	1040	702	398
60°	408	647	711	355	242	363	613	527	286
62.5°	269	433	324	146	104	145	263	340	181
65°	154	245	125	80	63	79	102	180	95
67.5°	66	109	64	52	43	51	56	79	43
70°	36	48	43	37	30	36	37	39	27
72.5°	23	29	29	27	22	25	26	25	19
75°	16	20	20	19	16	18	18	17	13
77.5°	11	13	14	13	11	13	13	11	9
80°	7	9	9	9	7	8	8	7	5
82.5°	5	5	5	5	4	5	4	4	3
85°	2	2	2	2	1	2	2	2	1
87.5°	1	1	1	0	0	0	0	0	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)