

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: 187P104

Luminaire Tested: **2EP3GX-2BX40W33P-PAF**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: 187P104
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 2EP3GX-2BX40W33P-PAF
Description: 2 X 2 Recessed Convertible Body Troffer with a 3"
deep 9 cell white parabolic louver.
Light Source: Two - F40BX/SPX35/RS - 3150 Lumens ea. - 40 Watts ea.
Ballast/Driver: Magnetek B240I120HP Electronic

Summary

Lumens per Lamp: 3150 (2 lamps)
Luminaire Lumens: 4504.3 lumens
Efficiency: 71.5%
Efficacy: 65.9 lumens/watt
Spacing Criteria (0/90/45): 1.12 / 1.17 / 1.25
Luminous Opening: Rectangular (W 1.73' x L: 1.75' x H: 0')
CIE Type: Direct

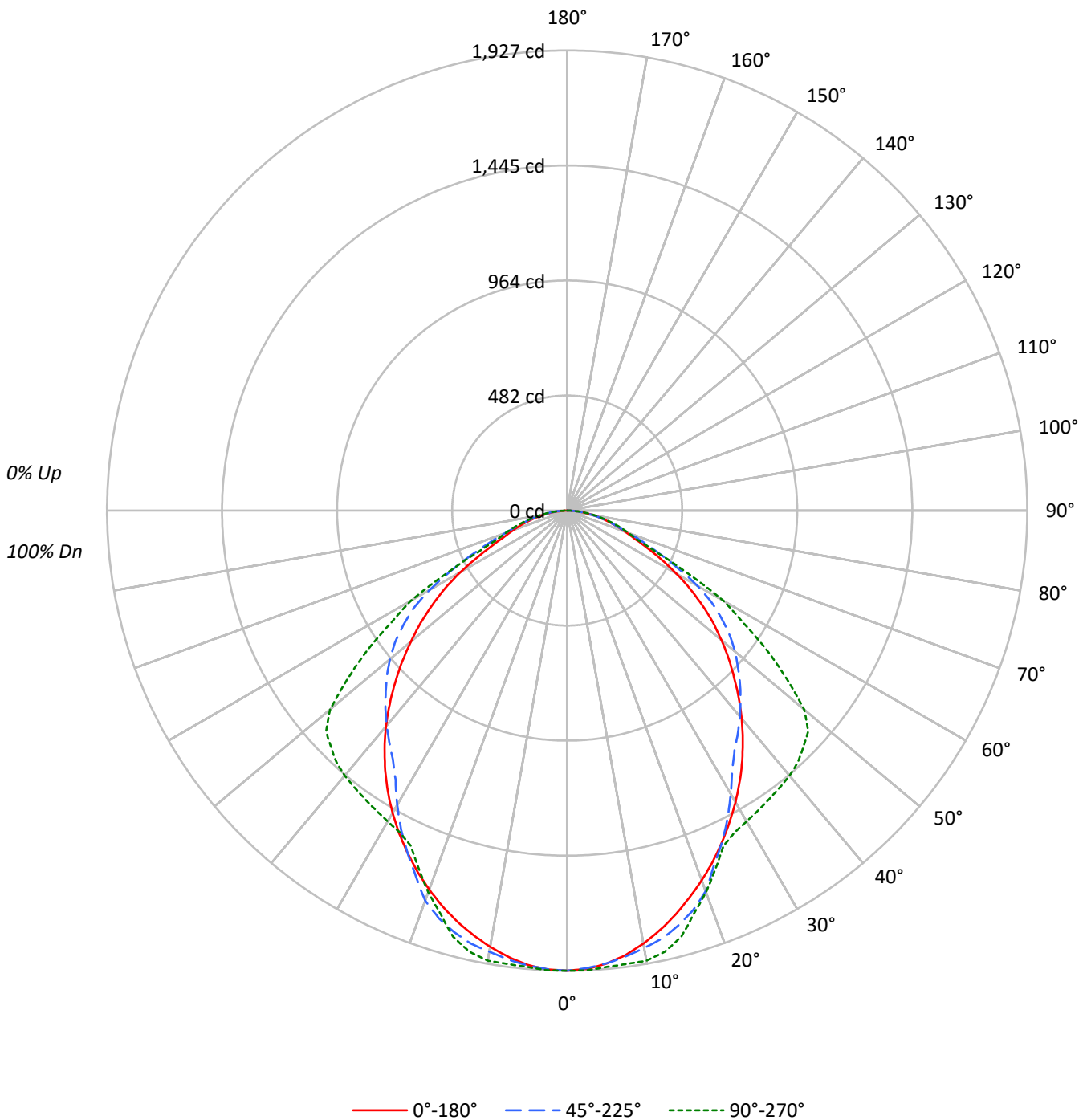
Input Watts (W): 68.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
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	85	85	85	85	83	83	83	83	79	79	79	76	76	76	73	73	73	73	73	73	73	73	71														
1	78	75	73	70	77	74	71	69	71	69	67	68	66	65	65	64	63	63	63	63	63	63	61														
2	72	66	62	58	70	65	61	57	63	59	56	60	57	55	58	56	54	54	54	54	54	54	52														
3	66	59	53	49	64	58	53	49	56	51	48	54	50	47	52	49	46	46	46	46	46	46	45														
4	61	52	47	42	59	52	46	42	50	45	41	48	44	41	47	43	40	40	40	40	40	40	39														
5	56	47	41	36	54	46	41	36	45	40	36	43	39	36	42	38	35	35	35	35	35	35	34														
6	52	43	36	32	50	42	36	32	41	35	32	39	35	31	38	34	31	31	31	31	31	31	30														
7	48	39	33	28	47	38	32	28	37	32	28	36	31	28	35	31	28	28	28	28	28	28	26														
8	45	35	30	25	44	35	29	25	34	29	25	33	28	25	32	28	25	25	25	25	25	25	24														
9	42	33	27	23	41	32	27	23	31	26	23	31	26	23	30	26	23	23	23	23	23	23	21														
10	39	30	25	21	38	30	24	21	29	24	21	28	24	21	28	24	21	21	21	21	21	21	19														

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	6854	6854	6854
5°	6798	6848	6820
10°	6650	6913	6700
15°	6452	6802	6559
20°	6238	6439	6393
25°	6017	6079	6205
30°	5791	6173	6005
35°	5549	6405	5767
40°	5280	6728	5479
45°	4975	7038	5126
50°	4665	7172	4731
55°	4291	6350	4273
60°	3763	5378	3664
65°	3123	3484	2878
70°	2683	2839	2506
75°	2460	2639	2268
80°	2274	2438	2028
85°	2041	2122	1632



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	45°	90°	135°	180°	Flux
0°-10°	181.1	4.0	2.9	0°	1927	1927	1927	1927	1927	
10°-20°	507.2	11.3	8.1	5°	1904	1903	1918	1912	1910	180
20°-30°	719.4	16.0	11.4	15°	1752	1799	1847	1828	1781	493
30°-40°	835.8	18.6	13.3	25°	1533	1534	1549	1581	1581	706
40°-50°	864.3	19.2	13.7	35°	1278	1223	1475	1272	1328	798
50°-60°	730.8	16.2	11.6	45°	989	1024	1399	1075	1019	763
60°-70°	417.0	9.3	6.6	55°	692	790	1024	838	689	616
70°-80°	193.2	4.3	3.1	65°	371	426	414	444	342	374
80°-90°	55.5	1.2	0.9	75°	179	179	192	181	165	191
90°-100°	0.0	0.0	0.0	85°	50	48	52	50	40	53
100°-110°	0.0	0.0	0.0	90°	0	0	0	0	0	3
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°	1407.7	31.3	22.3	165°	0	0	0	0	0	0
0°-40°	2243.5	49.8	35.6	175°	0	0	0	0	0	0
0°-60°	3838.6	85.2	60.9	180°	0	0	0	0	0	0
0°-90°	4504.3	100.0	71.5							
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°	4504.3	100.0	71.5							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	1927	1927	1927	1927	1927	1927	1927	1927	1927
2.5°	1921	1916	1918	1922	1927	1924	1922	1923	1923
5°	1904	1898	1903	1911	1918	1914	1912	1912	1910
7.5°	1877	1870	1883	1902	1915	1907	1896	1890	1885
10°	1841	1834	1860	1897	1914	1904	1876	1862	1855
12.5°	1799	1793	1836	1875	1892	1886	1858	1829	1820
15°	1752	1749	1799	1839	1847	1852	1828	1793	1781
17.5°	1700	1703	1754	1759	1768	1775	1789	1754	1737
20°	1648	1655	1696	1689	1701	1704	1738	1713	1689
22.5°	1592	1604	1607	1610	1623	1628	1656	1668	1637
25°	1533	1548	1534	1526	1549	1546	1581	1617	1581
27.5°	1472	1488	1454	1457	1519	1477	1506	1560	1524
30°	1410	1427	1370	1424	1503	1446	1423	1499	1462
32.5°	1345	1360	1286	1395	1489	1420	1337	1430	1397
35°	1278	1281	1223	1366	1475	1396	1272	1355	1328
37.5°	1208	1194	1174	1336	1462	1370	1223	1265	1256
40°	1137	1114	1125	1306	1449	1344	1175	1179	1180
42.5°	1063	1032	1075	1275	1430	1317	1126	1094	1100
45°	989	949	1024	1236	1399	1282	1075	1006	1019
47.5°	917	866	970	1188	1369	1238	1023	916	937
50°	843	788	918	1140	1296	1191	969	827	855
52.5°	769	720	858	1050	1160	1104	909	750	773
55°	692	657	790	921	1024	969	838	681	689
57.5°	610	591	719	794	873	837	763	612	606
60°	529	523	629	666	756	699	667	541	515
62.5°	447	453	524	562	571	590	552	464	424
65°	371	377	426	415	414	430	444	386	342
67.5°	303	306	344	319	317	325	352	309	282
70°	258	254	271	265	273	267	276	253	241
72.5°	216	213	218	224	232	226	220	213	202
75°	179	175	179	186	192	188	181	176	165
77.5°	144	139	143	150	154	151	145	140	131
80°	111	106	109	115	119	116	112	107	99
82.5°	79	75	78	82	85	83	80	76	69
85°	50	45	48	50	52	52	50	47	40
87.5°	23	18	19	21	23	22	22	21	16
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)