

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: 187P103

Luminaire Tested: **2EP3GX-2BX40S33I-PAF**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: 187P103
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 2EP3GX-2BX40S33I-PAF
Description: 2 X 2 Recessed Convertible Body Troffer with a 3"
deep 9 cell semi-specular parabolic louver.
Light Source: Two - F40BX/SPX35/RS - 3150 Lumens ea. - 40 Watts ea.
Ballast/Driver: Magnetek B240I120HP Electronic

Summary

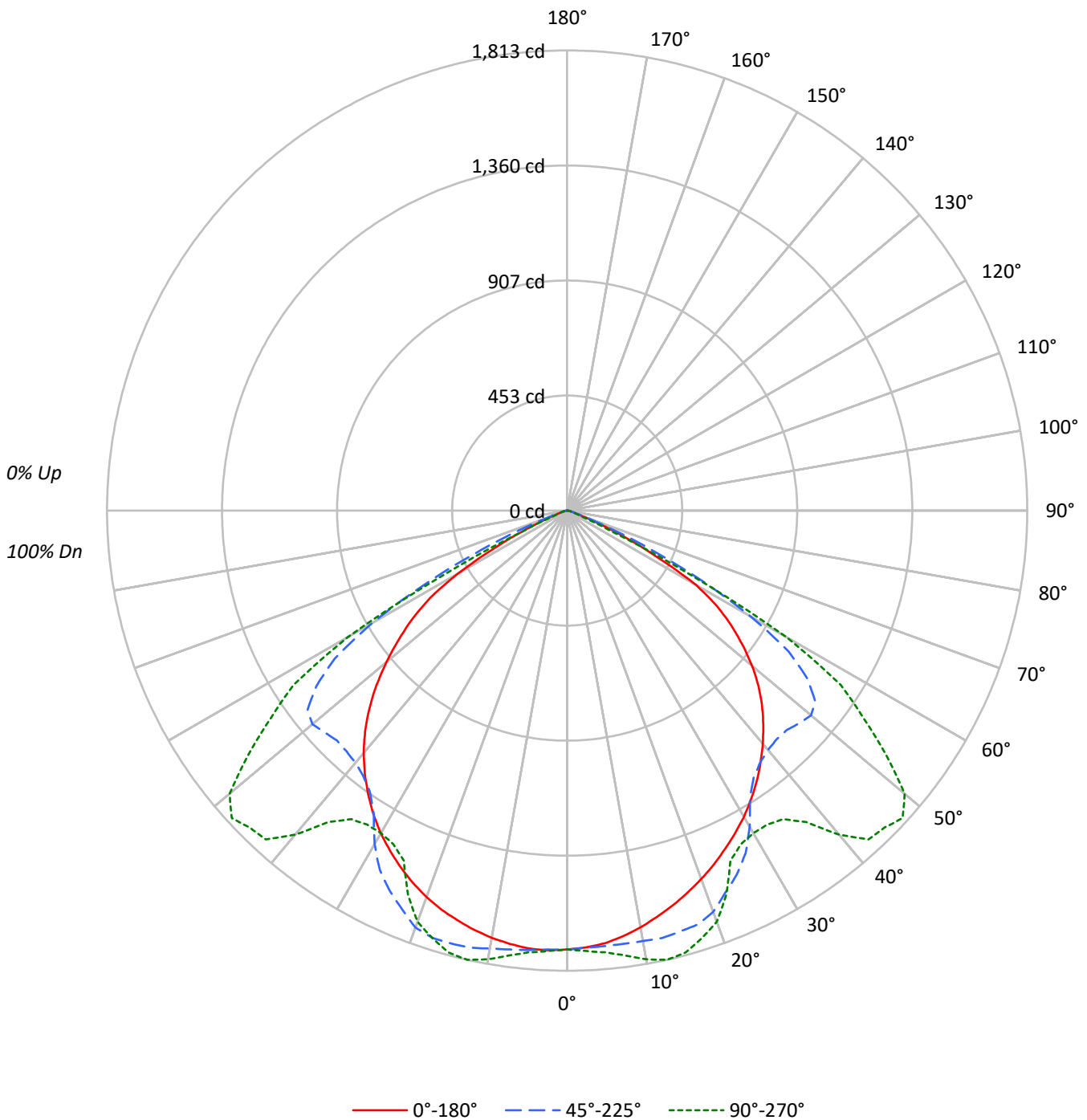
Lumens per Lamp: 3150 (2 lamps)
Luminaire Lumens: 4652.1 lumens
Efficiency: 73.8%
Efficacy: 68.0 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.3 / 1.47
Luminous Opening: Rectangular (W 1.73' x L: 1.75' x H: 0')
CIE Type: Direct

Input Watts (W): 68.4
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



TEST NUMBER: 187P103
CATALOG NUMBER: 2EP3GX-2BX40S33I-PAF

Luminous Intensity Polar Plot





TEST NUMBER: 187P103

CATALOG NUMBER: 2EP3GX-2BX40S33I-PAF

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	88	88	88	88	86	86	86	86	82	82	82	79	79	79	75	75	75	74				74
1	82	79	76	74	80	77	75	73	74	72	70	71	70	68	69	67	66				65	
2	75	70	66	62	73	69	65	61	66	63	60	64	61	58	62	59	57				56	
3	69	62	57	52	67	61	56	52	59	54	51	57	53	50	55	52	49				48	
4	63	55	49	45	62	54	49	44	52	48	44	51	47	43	49	46	43				41	
5	58	49	43	38	57	48	43	38	47	42	38	46	41	37	44	40	37				36	
6	54	44	38	34	52	44	38	33	42	37	33	41	36	33	40	36	33				31	
7	50	40	34	30	48	40	34	29	38	33	29	37	33	29	36	32	29				27	
8	46	37	30	26	45	36	30	26	35	30	26	34	29	26	33	29	26				24	
9	43	33	28	24	42	33	27	23	32	27	23	31	27	23	31	26	23				22	
10	40	31	25	21	39	30	25	21	30	25	21	29	24	21	28	24	21				20	

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	6150	6150	6150
5°	6109	6238	6184
10°	6021	6483	6173
15°	5929	6640	6153
20°	5848	6526	6132
25°	5773	5973	6087
30°	5721	6025	6030
35°	5654	6444	5932
40°	5567	7736	5790
45°	5463	8889	5543
50°	5263	9607	5141
55°	4899	8843	4620
60°	4176	7107	3557
65°	2230	1540	1633
70°	634	437	458
75°	289	275	247
80°	164	205	164
85°	82	122	82



TEST NUMBER: 187P103

CATALOG NUMBER: 2EP3GX-2BX40S33I-PAF

ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	45°	90°	135°	180°	Flux
0°-10°	165.5	3.6	2.6	0°	1729	1729	1729	1729	1729	
10°-20°	487.4	10.5	7.7	5°	1711	1722	1747	1738	1732	162
20°-30°	724.7	15.6	11.5	15°	1610	1717	1803	1766	1671	454
30°-40°	877.2	18.9	13.9	25°	1471	1582	1522	1653	1551	679
40°-50°	1043.1	22.4	16.6	35°	1302	1282	1484	1354	1366	814
50°-60°	975.8	21.0	15.5	45°	1086	1223	1767	1282	1102	835
60°-70°	344.6	7.4	5.5	55°	790	1156	1426	1207	745	699
70°-80°	29.4	0.6	0.5	65°	265	365	183	404	194	280
80°-90°	4.4	0.1	0.1	75°	21	25	20	26	18	27
90°-100°	0.0	0.0	0.0	85°	2	4	3	4	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°	1377.6	29.6	21.9	165°	0	0	0	0	0	0
0°-40°	2254.8	48.5	35.8	175°	0	0	0	0	0	0
0°-60°	4273.7	91.9	67.8	180°	0	0	0	0	0	0
0°-90°	4652.1	100.0	73.8							
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°	4652.1	100.0	73.8							



TEST NUMBER: 187P103

CATALOG NUMBER: 2EP3GX-2BX40S33I-PAF

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	1729	1729	1729	1729	1729	1729	1729	1729	1729
2.5°	1723	1720	1724	1730	1737	1734	1731	1731	1734
5°	1711	1709	1722	1736	1747	1744	1738	1732	1732
7.5°	1691	1695	1721	1750	1768	1761	1744	1728	1722
10°	1667	1677	1722	1772	1795	1788	1752	1721	1709
12.5°	1639	1656	1725	1781	1813	1803	1764	1710	1692
15°	1610	1635	1717	1784	1803	1810	1766	1698	1671
17.5°	1578	1615	1710	1743	1766	1774	1765	1685	1648
20°	1545	1594	1683	1703	1724	1735	1748	1672	1620
22.5°	1510	1570	1629	1641	1638	1678	1700	1655	1588
25°	1471	1540	1582	1532	1522	1575	1653	1632	1551
27.5°	1433	1508	1522	1442	1482	1484	1598	1598	1511
30°	1393	1475	1438	1407	1467	1452	1517	1562	1468
32.5°	1349	1432	1340	1387	1467	1438	1417	1517	1420
35°	1302	1372	1282	1381	1484	1438	1354	1457	1366
37.5°	1252	1306	1250	1392	1546	1456	1319	1382	1309
40°	1199	1240	1231	1446	1666	1514	1297	1308	1247
42.5°	1144	1170	1222	1530	1757	1612	1287	1233	1178
45°	1086	1097	1223	1574	1767	1669	1282	1149	1102
47.5°	1022	1024	1240	1565	1793	1656	1294	1058	1019
50°	951	955	1255	1558	1736	1658	1310	969	929
52.5°	872	901	1231	1462	1585	1565	1289	897	838
55°	790	848	1156	1276	1426	1372	1207	830	745
57.5°	699	775	1035	1093	1278	1194	1086	751	640
60°	587	667	838	876	999	969	890	644	500
62.5°	412	494	595	595	540	677	642	489	329
65°	265	304	365	249	183	294	404	301	194
67.5°	139	156	182	86	64	101	205	162	94
70°	61	72	75	49	42	53	86	73	44
72.5°	33	39	37	35	29	36	39	39	28
75°	21	24	25	24	20	25	26	25	18
77.5°	13	16	17	17	14	18	18	16	12
80°	8	10	12	11	10	12	12	11	8
82.5°	4	6	7	7	6	7	7	6	5
85°	2	3	4	4	3	4	4	4	2
87.5°	1	1	1	1	1	1	2	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



TEST NUMBER: 187P103

CATALOG NUMBER: 2EP3GX-2BX40S33I-PAF

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)