

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: 196P102

Luminaire Tested: **2P5GX-2BX40S34MI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: 196P102
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 2P5GX-2BX40S34MI
Description: 2 X 2 Recessed Convertible Body Troffer with a 5"
deep 12 cell specular low iridescent parabolic louver.
Light Source: Two - F40BX/SPX35/RS - 3150 Lumens ea. - 40 Watts ea.
Ballast/Driver: Magnetek B240I120RH Electronic - L.O.B.F. = 91.8

Summary

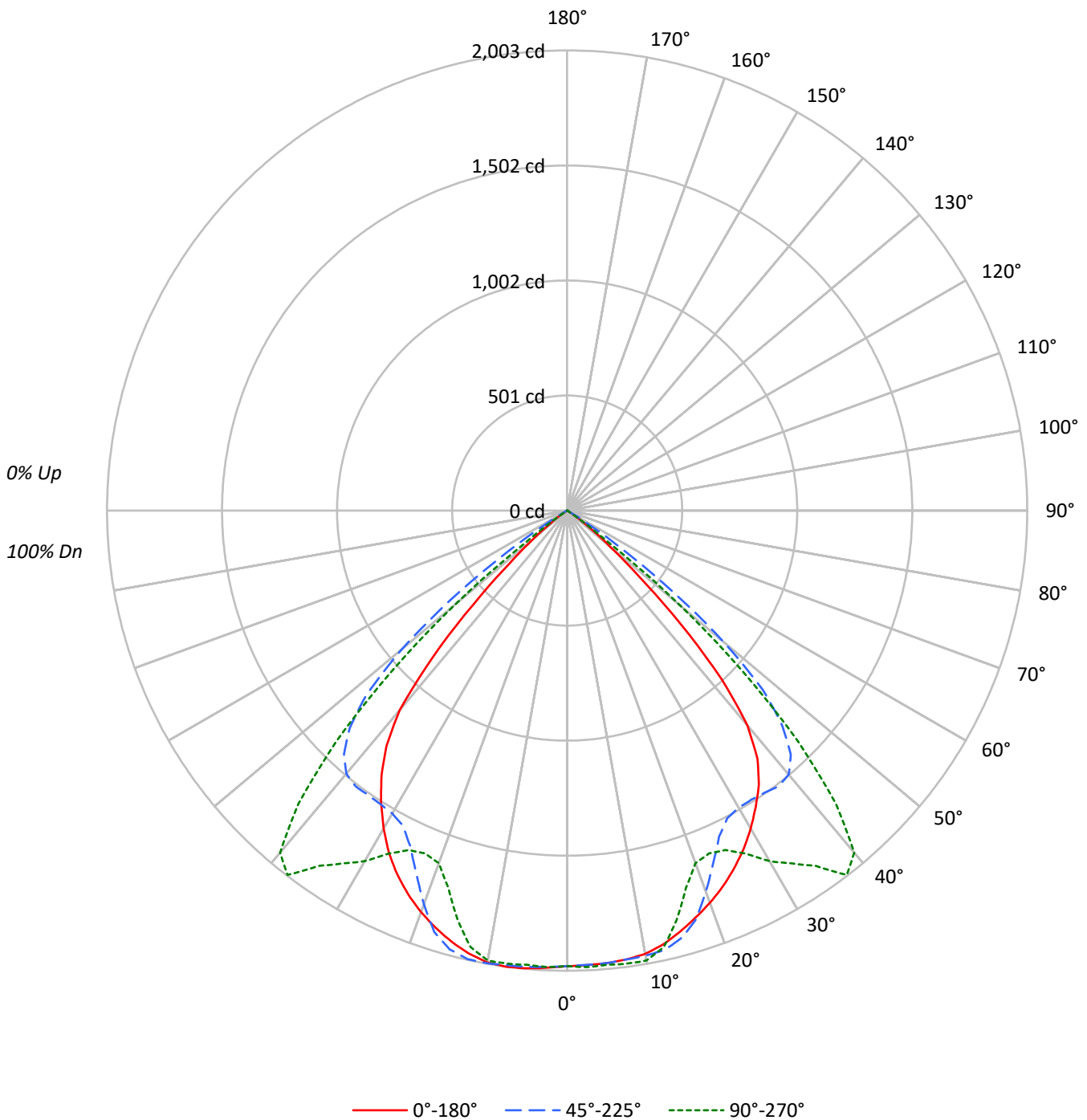
Lumens per Lamp: 3150 (2 lamps)
Luminaire Lumens: 3569.7 lumens
Efficiency: 56.7%
Efficacy: 52.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.54 / 1.39
Luminous Opening: Rectangular (W 1.73' x L: 1.76' x H: 0')
CIE Type: Direct

Input Watts (W): 68.4
Input Voltage (V): NR
Input Current (A_{in}): 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	67	67	67	67	66	66	66	66	63	63	63		60	60	60		58	58	58	57
1	64	62	60	59	62	61	59	58	58	57	56		56	55	54		54	53	53	52
2	60	56	54	51	58	55	53	51	53	51	50		52	50	48		50	49	47	46
3	56	51	48	45	54	50	47	45	49	46	44		47	45	43		46	44	43	42
4	52	47	43	40	51	46	42	40	45	42	39		44	41	39		42	40	38	37
5	48	43	39	36	47	42	38	35	41	38	35		40	37	35		39	36	34	33
6	45	39	35	32	44	39	35	32	38	34	32		37	34	31		36	33	31	30
7	42	36	32	29	41	35	32	29	35	31	29		34	31	28		33	30	28	27
8	40	33	29	26	39	33	29	26	32	28	26		31	28	26		31	28	26	25
9	37	31	26	24	36	30	26	24	30	26	24		29	26	24		29	26	23	23
10	35	28	24	22	34	28	24	22	28	24	22		27	24	22		27	24	21	21

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	7012	7012	7012
5°	7017	7045	7099
10°	7034	7141	7170
15°	6948	6746	7113
20°	6837	6145	6999
25°	6706	6359	6824
30°	6524	7194	6520
35°	6280	8150	6078
40°	5631	8973	5230
45°	3480	7106	2885
50°	1348	3521	1056
55°	321	160	228
60°	64	57	57
65°	50	42	42
70°	31	31	31
75°	27	14	27
80°	20	20	20
85°	41	0	0



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	45°	90°	135°	180°	Flux
0°-10°	189.5	5.3	3.0	0°	1983	1983	1983	1983	1983	
10°-20°	534.8	15.0	8.5	5°	1977	1977	1985	1994	2000	188
20°-30°	771.7	21.6	12.2	15°	1898	1926	1843	1977	1943	535
30°-40°	990.4	27.7	15.7	25°	1719	1565	1630	1614	1749	791
40°-50°	872.8	24.5	13.9	35°	1455	1499	1888	1511	1408	899
50°-60°	202.4	5.7	3.2	45°	696	1325	1421	1339	577	541
60°-70°	5.9	0.2	0.1	55°	52	291	26	340	37	71
70°-80°	1.9	0.1	0.0	65°	6	5	5	5	5	6
80°-90°	0.4	0.0	0.0	75°	2	2	1	2	2	2
90°-100°	0.0	0.0	0.0	85°	1	0	0	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°	1495.9	41.9	23.7	165°	0	0	0	0	0	0
0°-40°	2486.3	69.6	39.5	175°	0	0	0	0	0	0
0°-60°	3561.5	99.8	56.5	180°	0	0	0	0	0	0
0°-90°	3569.7	100.0	56.7							
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°	3569.7	100.0	56.7							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	1983	1983	1983	1983	1983	1983	1983	1983	1983
2.5°	1980	1977	1979	1982	1989	1986	1988	1990	1992
5°	1977	1975	1977	1978	1985	1986	1994	2000	2000
7.5°	1971	1969	1971	1978	1989	1992	1996	2004	2003
10°	1959	1955	1967	1979	1989	1997	2001	1998	1997
12.5°	1934	1930	1959	1952	1945	1976	2000	1984	1975
15°	1898	1899	1926	1872	1843	1900	1977	1961	1943
17.5°	1858	1862	1866	1766	1721	1795	1923	1928	1904
20°	1817	1823	1765	1665	1633	1691	1823	1888	1860
22.5°	1771	1779	1661	1610	1615	1636	1713	1841	1808
25°	1719	1720	1565	1601	1630	1636	1614	1781	1749
27.5°	1662	1652	1509	1614	1683	1654	1546	1705	1680
30°	1598	1567	1493	1666	1762	1714	1523	1612	1597
32.5°	1528	1469	1492	1723	1821	1778	1514	1498	1507
35°	1455	1369	1499	1753	1888	1810	1511	1378	1408
37.5°	1360	1272	1512	1780	1999	1857	1513	1260	1292
40°	1220	1168	1500	1806	1944	1901	1495	1141	1133
42.5°	998	1040	1441	1665	1732	1768	1438	1015	869
45°	696	881	1325	1406	1421	1513	1339	856	577
47.5°	424	707	1157	1064	1037	1157	1181	686	339
50°	245	531	892	695	640	774	941	518	192
52.5°	131	355	580	385	228	421	642	354	97
55°	52	185	291	96	26	123	340	198	37
57.5°	14	51	91	14	10	16	120	69	12
60°	9	11	16	9	8	9	22	13	8
62.5°	7	7	7	7	6	7	7	8	7
65°	6	6	5	5	5	5	5	5	5
67.5°	4	4	4	4	4	4	4	4	4
70°	3	4	3	3	3	3	3	3	3
72.5°	3	3	2	2	2	2	2	3	2
75°	2	2	2	2	1	2	2	2	2
77.5°	1	2	1	1	1	1	1	1	1
80°	1	1	1	1	1	1	1	1	1
82.5°	1	1	1	0	0	0	1	1	1
85°	1	1	0	0	0	0	1	1	0
87.5°	1	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)