

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: 158P100

Luminaire Tested: **P5GX2024-2BX40S24M/I**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: 158P100
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: P5GX2024-2BX40S24M/I
Description: 20 X 24 Recessed Convertible Body Troffer with an
8 cell specular low iridescent precision cell II
parabolic louver.
Light Source: Two-F40BX/SPX35/RS - 3150 Lumens ea. - 40 Watts ea.
Ballast/Driver: -

Summary

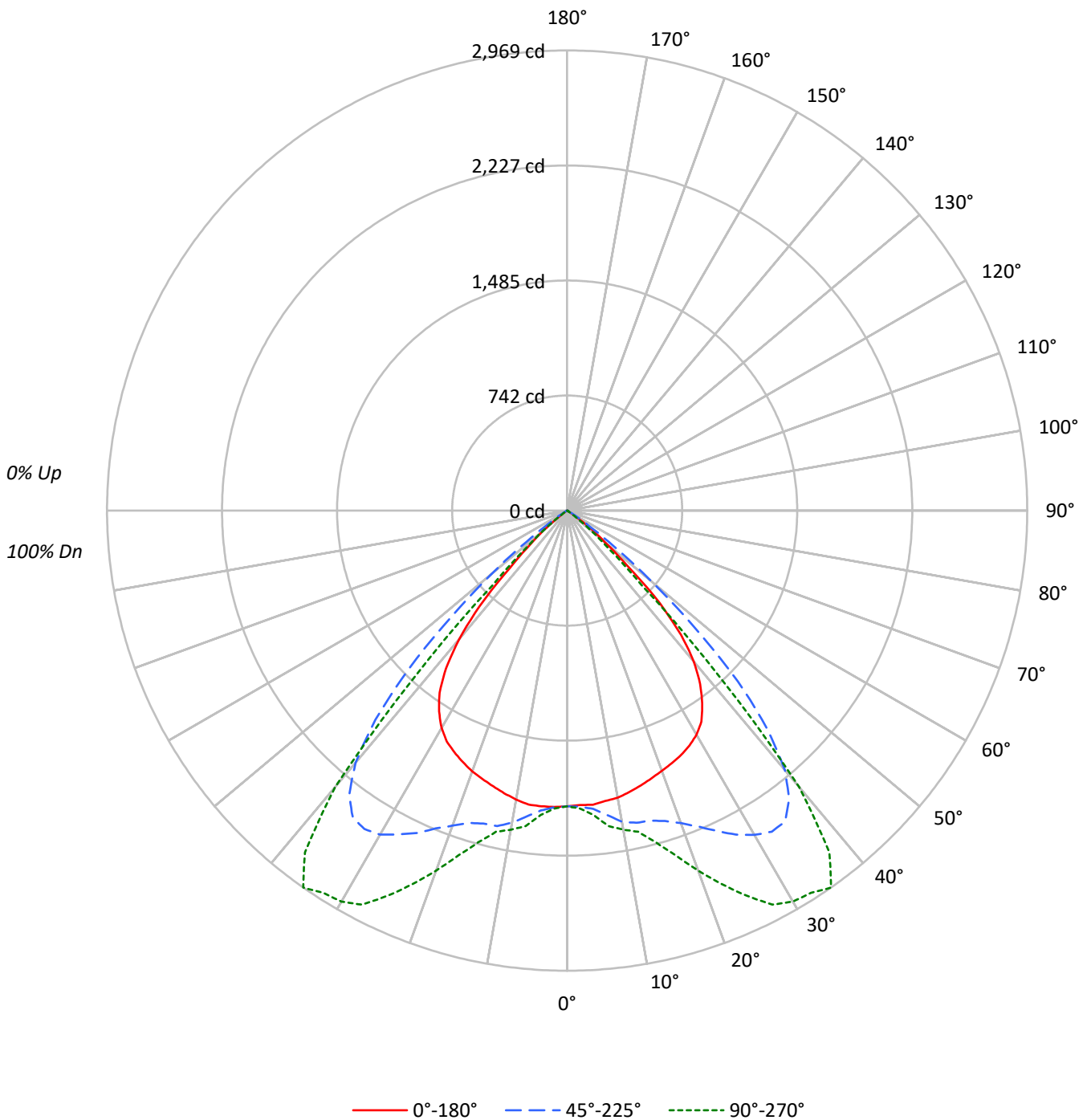
Lumens per Lamp: 3150 (2 lamps)
Luminaire Lumens: 4226.3 lumens
Efficiency: 67.1%
Efficacy: 46.8 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.71 / 1.44
Luminous Opening: Rectangular (W 1.4' x L: 1.75' x H: 0')
CIE Type: Direct

Input Watts (W): 90.3
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



TEST NUMBER: 158P100
CATALOG NUMBER: P5GX2024-2BX40S24M/I

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	80	80	80	80	78	78	78	78	75	75	75	71	71	71	68	68	68	67																				
1	75	73	71	70	74	72	70	69	69	68	66	67	65	64	64	63	63	61																				
2	71	67	64	61	69	66	63	60	64	61	59	62	60	58	60	58	57	55																				
3	66	61	57	54	65	60	57	54	58	55	53	57	54	52	55	53	51	50																				
4	62	56	51	48	61	55	51	48	54	50	47	52	49	47	51	48	46	45																				
5	58	51	46	43	57	50	46	43	49	45	42	48	45	42	47	44	42	40																				
6	54	47	42	39	53	46	42	38	45	41	38	44	41	38	43	40	38	36																				
7	51	43	38	35	50	43	38	35	42	38	35	41	37	34	40	37	34	33																				
8	47	40	35	32	46	39	35	32	38	34	31	38	34	31	37	34	31	30																				
9	44	37	32	29	44	36	32	29	36	31	29	35	31	28	34	31	28	27																				
10	42	34	29	26	41	34	29	26	33	29	26	32	29	26	32	28	26	25																				

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	8377	8377	8377
5°	8395	8691	8440
10°	8386	9317	8439
15°	8345	10072	8372
20°	8349	11545	8368
25°	8429	13283	8337
30°	8466	14767	8213
35°	8141	15913	7691
40°	7284	13336	6235
45°	5246	4234	3241
50°	2165	1359	1346
55°	566	130	130
60°	79	79	61
65°	52	52	42
70°	51	39	26
75°	34	34	17
80°	25	25	25
85°	50	50	0



TEST NUMBER: 158P100

CATALOG NUMBER: P5GX2024-2BX40S24M/I

ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	45°	90°	135°	180°	Flux
0°-10°	187.7	4.4	3.0	0°	1908	1908	1908	1908	1908	
10°-20°	588.4	13.9	9.3	5°	1905	1932	1972	1942	1915	181
20°-30°	1054.4	24.9	16.7	15°	1836	2071	2216	2091	1842	519
30°-40°	1412.8	33.4	22.4	25°	1740	2279	2742	2295	1721	802
40°-50°	860.2	20.4	13.7	35°	1519	2450	2969	2413	1435	939
50°-60°	114.8	2.7	1.8	45°	845	1558	682	1448	522	619
60°-70°	5.6	0.1	0.1	55°	74	168	17	137	17	98
70°-80°	1.9	0.0	0.0	65°	5	5	5	5	4	6
80°-90°	0.4	0.0	0.0	75°	2	2	2	2	1	3
90°-100°	0.0	0.0	0.0	85°	1	0	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°	1830.6	43.3	29.1	165°	0	0	0	0	0	0
0°-40°	3243.4	76.7	51.5	175°	0	0	0	0	0	0
0°-60°	4218.4	99.8	67.0	180°	0	0	0	0	0	0
0°-90°	4226.3	100.0	67.1							
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°	4226.3	100.0	67.1							



TEST NUMBER: 158P100

CATALOG NUMBER: P5GX2024-2BX40S24M/I

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	1908	1908	1908	1908	1908	1908	1908	1908	1908
2.5°	1901	1908	1912	1916	1924	1918	1916	1912	1914
5°	1905	1911	1932	1963	1972	1964	1942	1922	1915
7.5°	1890	1919	1981	2034	2053	2040	1989	1932	1913
10°	1881	1930	2038	2078	2090	2092	2044	1938	1893
12.5°	1860	1939	2063	2096	2123	2110	2085	1942	1869
15°	1836	1942	2071	2168	2216	2184	2091	1955	1842
17.5°	1811	1952	2099	2262	2332	2281	2112	1963	1816
20°	1787	1952	2146	2378	2471	2403	2163	1969	1791
22.5°	1764	1952	2206	2503	2609	2533	2220	1965	1757
25°	1740	1944	2279	2622	2742	2656	2295	1951	1721
27.5°	1709	1938	2357	2729	2866	2774	2355	1929	1681
30°	1670	1922	2416	2825	2913	2870	2414	1895	1620
32.5°	1613	1896	2456	2829	2925	2875	2436	1849	1538
35°	1519	1854	2450	2752	2969	2793	2413	1782	1435
37.5°	1410	1785	2352	2650	2779	2675	2309	1686	1284
40°	1271	1678	2185	2301	2327	2317	2123	1556	1088
42.5°	1088	1489	1911	1788	1472	1790	1831	1338	838
45°	845	1206	1558	1069	682	1095	1448	1021	522
47.5°	525	832	1107	539	371	541	1008	648	308
50°	317	478	704	304	199	306	633	358	197
52.5°	197	260	379	164	66	167	331	174	81
55°	74	112	168	58	17	59	137	60	17
57.5°	14	28	66	15	11	16	51	15	8
60°	9	9	22	9	9	9	17	7	7
62.5°	7	7	7	7	7	7	6	6	5
65°	5	5	5	5	5	6	5	5	4
67.5°	4	4	4	4	4	4	4	4	3
70°	4	3	3	3	3	3	3	3	2
72.5°	3	3	2	2	2	2	2	2	2
75°	2	2	2	1	2	2	2	2	1
77.5°	2	2	1	1	2	1	1	1	1
80°	1	1	1	1	1	1	1	1	1
82.5°	1	1	0	1	1	0	1	1	0
85°	1	0	0	0	1	0	1	0	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



TEST NUMBER: 158P100

CATALOG NUMBER: P5GX2024-2BX40S24M/I

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)