

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: P30816

Luminaire Tested: **2GR8-232PB1S-UNV-EB81**

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: P30816
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 2GR8-232PB1S-UNV-EB81
Description: METALUX 2' X 4' COMMERCIAL TROFFER WITH SILVER PARABOLIC
PB1S, 1/2 X 1/2 X 1/2 SILVER PARABOLIC LOUVER, SHIELDING MEDIA
Light Source: (2) DOUBLE BIPIN T8 LINEAR FLUORESCENT LAMPS
Ballast/Driver: -
GE232MAX-N/ULTRA

Summary

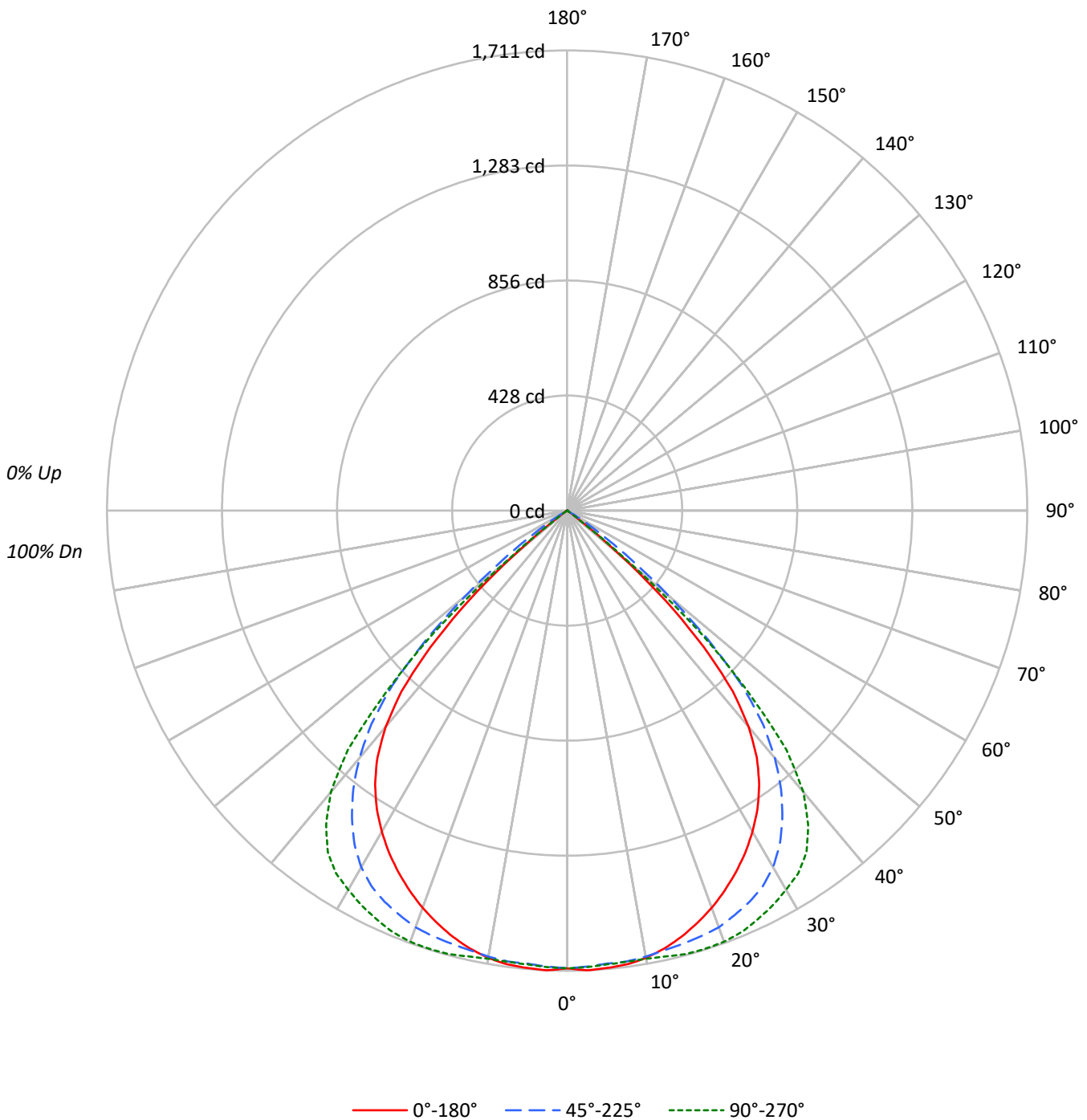
Lumens per Lamp: 3100 (2 lamps)
Luminaire Lumens: 2981.4 lumens
Efficiency: 48.1%
Efficacy: 56.9 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.4 / 1.31
Luminous Opening: Rectangular (W 1.75' x L: 3.83' x H: 0')
CIE Type: Direct

Input Watts (W): 52.4
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

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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	57	57	57	57	56	56	56	56	53	53	53	51	51	51	49	49	49	48	48	48	46	45	45	44														
1	54	53	51	50	53	52	50	49	50	49	48	48	47	46	46	45	45	44	44	43	42	41	40	40														
2	51	48	46	44	50	47	45	43	46	44	42	44	43	42	43	42	41	40	40	39	37	37	36	36														
3	48	44	41	39	47	43	41	39	42	40	38	41	39	37	40	38	37	36	36	35	34	33	32	32														
4	45	40	37	35	44	40	37	34	39	36	34	38	35	34	37	35	33	32	32	31	30	29	29	29														
5	42	37	34	31	41	36	33	31	35	33	31	35	32	30	34	32	30	29	29	28	27	27	27	27														
6	39	34	30	28	38	33	30	28	33	30	28	32	29	28	31	29	27	27	27	26	25	25	25	25														
7	37	31	28	25	36	31	28	25	30	27	25	30	27	25	29	27	25	24	24	24	23	23	23	23														
8	34	29	25	23	34	29	25	23	28	25	23	27	25	23	27	24	23	22	22	22	21	21	21	21														
9	32	27	23	21	32	26	23	21	26	23	21	25	23	21	25	23	21	20	20	20	19	19	19	19														
10	30	25	22	19	30	25	21	19	24	21	19	24	21	19	23	21	19	18	18	18	17	17	17	17														

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2731	2731	2731
5°	2749	2724	2729
10°	2752	2744	2757
15°	2726	2769	2836
20°	2684	2816	2913
25°	2627	2842	2969
30°	2553	2837	3016
35°	2439	2733	3038
40°	2199	2516	2861
45°	1632	2083	2144
50°	627	1221	804
55°	25	428	17
60°	10	42	6
65°	8	8	4
70°	9	5	5
75°	12	6	6
80°	9	9	9
85°	18	18	18



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	161.5	5.4	2.6	0°	1702	1702	1702	1702	1702	
10°-20°	471.7	15.8	7.6	5°	1707	1695	1691	1688	1694	162
20°-30°	732.6	24.6	11.8	15°	1641	1640	1667	1697	1707	462
30°-40°	867.2	29.1	14.0	25°	1484	1508	1605	1670	1677	683
40°-50°	646.8	21.7	10.4	35°	1245	1307	1395	1503	1551	771
50°-60°	97.0	3.3	1.6	45°	719	810	918	954	945	529
60°-70°	2.4	0.1	0.0	55°	9	39	153	31	6	46
70°-80°	1.3	0.0	0.0	65°	2	2	2	2	1	2
80°-90°	0.9	0.0	0.0	75°	2	1	1	1	1	2
90°-100°	0.0	0.0	0.0	85°	1	1	1	1	1	1
100°-110°	0.0	0.0	0.0	90°	0	0	0	0	0	
110°-120°	0.0	0.0	0.0							
120°-130°	0.0	0.0	0.0							
130°-140°	0.0	0.0	0.0							
140°-150°	0.0	0.0	0.0							
150°-160°	0.0	0.0	0.0							
160°-170°	0.0	0.0	0.0							
170°-180°	0.0	0.0	0.0							
0°-30°	1365.8	45.8	22.0							
0°-40°	2233.0	74.9	36.0							
0°-60°	2976.8	99.8	48.0							
0°-90°	2981.4	100.0	48.1							
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°	2981.4	100.0	48.1							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1702	1702	1702	1702	1702
2.5°	1711	1700	1697	1693	1699
5°	1707	1695	1691	1688	1694
7.5°	1702	1690	1691	1688	1692
10°	1689	1678	1684	1684	1692
12.5°	1668	1662	1674	1688	1698
15°	1641	1640	1667	1697	1707
17.5°	1608	1610	1659	1698	1708
20°	1572	1579	1649	1697	1706
22.5°	1530	1544	1628	1686	1696
25°	1484	1508	1605	1670	1677
27.5°	1434	1471	1575	1642	1655
30°	1378	1426	1531	1606	1628
32.5°	1317	1377	1472	1565	1599
35°	1245	1307	1395	1503	1551
37.5°	1159	1224	1307	1415	1472
40°	1050	1122	1201	1297	1366
42.5°	911	989	1078	1155	1207
45°	719	810	918	954	945
47.5°	498	580	709	684	673
50°	251	353	489	426	322
52.5°	71	155	300	176	61
55°	9	39	153	31	6
57.5°	4	5	57	4	3
60°	3	3	13	3	2
62.5°	3	3	3	2	2
65°	2	2	2	2	1
67.5°	2	2	2	2	1
70°	2	2	1	1	1
72.5°	2	2	1	1	1
75°	2	1	1	1	1
77.5°	2	1	1	1	1
80°	1	1	1	1	1
82.5°	1	1	1	1	1
85°	1	1	1	1	1
87.5°	1	1	1	0	0
90°	0	0	0	0	0

(END OF REPORT)