

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: P31053

Luminaire Tested: **2GR5-228T5PB1S-UNV-EBT1**

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: P31053
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 2GR5-228T5PB1S-UNV-EBT1
Description: METALUX 2' X 4' COMMERCIAL T5HO TROFFER WITH SILVER PARABOLIC
PB1S, 1/2 X 1/2 X 1/2 SILVER PARABOLIC LOUVER, SHIELDING MEDIA
Light Source: (2) DOUBLE BIPIN T5 LINEAR FLUORESCENT LAMPS 3500K
GE F28W/T5/835/ECO
Ballast/Driver: -
GE228MVPS-A

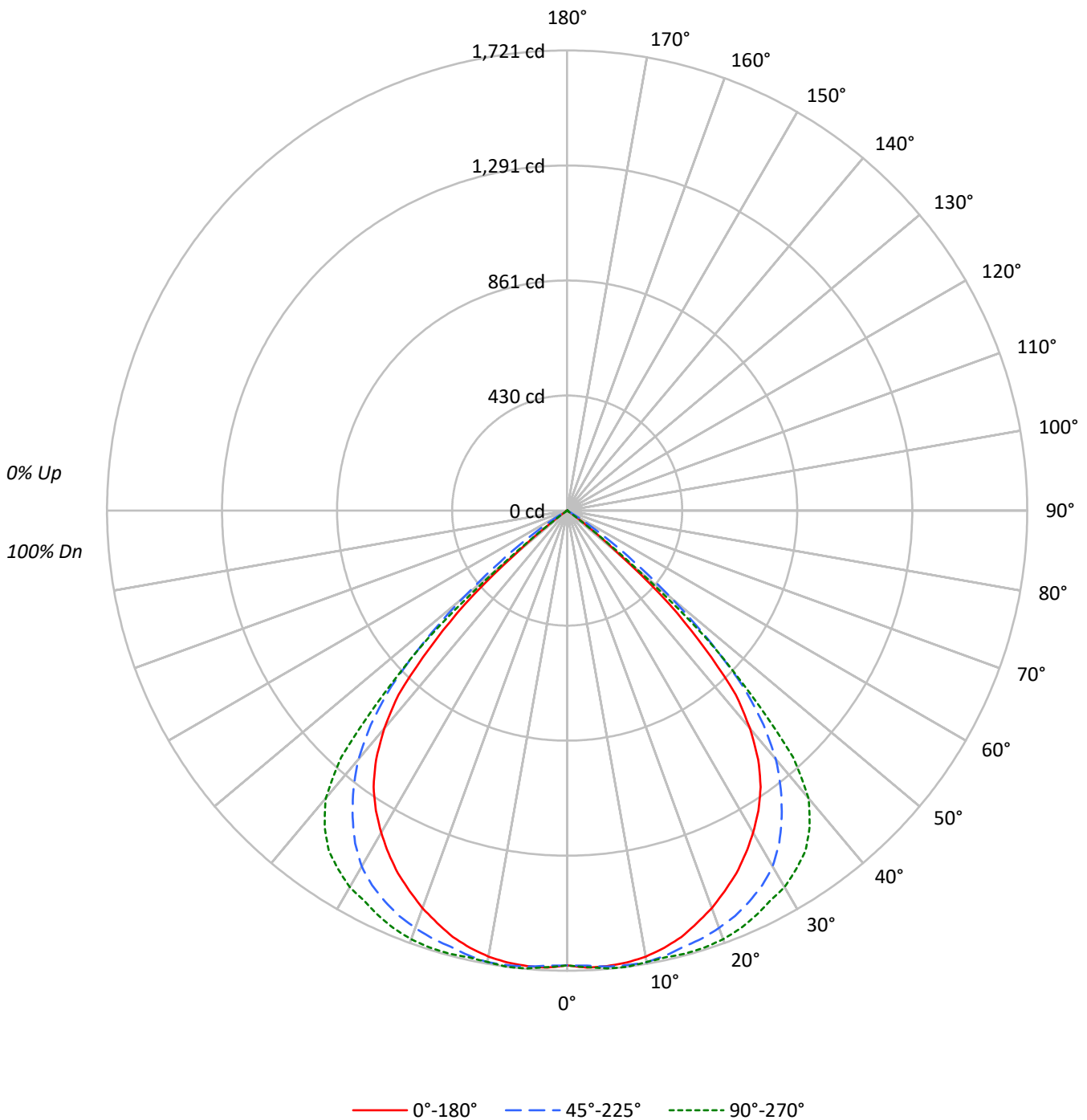
Summary

Lumens per Lamp: 2900 (2 lamps)
Luminaire Lumens: 3019.9 lumens
Efficiency: 52.1%
Efficacy: 48.9 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.4 / 1.31
Luminous Opening: Rectangular (W 1.75' x L: 3.83' x H: 0')
CIE Type: Direct

Input Watts (W): 61.7
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				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	62	62	62	62	61	61	61	61	58	58	58	55	55	55	53	53	53	52
1	59	57	55	54	57	56	54	53	54	53	52	52	51	50	50	49	49	48
2	55	52	50	48	54	51	49	47	49	48	46	48	46	45	46	45	44	43
3	52	48	45	42	50	47	44	42	45	43	41	44	42	40	43	41	40	39
4	48	44	40	37	47	43	40	37	42	39	37	41	38	36	40	38	36	35
5	45	40	36	34	44	39	36	33	38	35	33	37	35	33	37	34	33	32
6	42	37	33	30	41	36	33	30	35	32	30	35	32	30	34	31	29	29
7	39	34	30	27	39	33	30	27	33	29	27	32	29	27	31	29	27	26
8	37	31	27	25	36	31	27	25	30	27	25	30	27	25	29	26	25	24
9	35	29	25	23	34	29	25	23	28	25	23	28	25	23	27	24	22	22
10	33	27	23	21	32	27	23	21	26	23	21	26	23	21	25	23	21	20

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2729	2729	2729
5°	2754	2757	2769
10°	2760	2794	2793
15°	2743	2804	2849
20°	2701	2836	2913
25°	2650	2856	2958
30°	2577	2848	3013
35°	2472	2740	3044
40°	2227	2545	2943
45°	1652	2115	2197
50°	644	1263	844
55°	39	473	22
60°	13	55	10
65°	11	11	8
70°	9	9	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°	163.3	5.4	2.8	0°	1701	1701	1701	1701	1701	
10°-20°	476.9	15.8	8.2	5°	1710	1708	1712	1713	1719	163
20°-30°	736.9	24.4	12.7	15°	1651	1671	1688	1708	1715	465
30°-40°	872.6	28.9	15.0	25°	1497	1536	1613	1668	1671	688
40°-50°	658.9	21.8	11.4	35°	1262	1313	1399	1508	1554	780
50°-60°	105.7	3.5	1.8	45°	728	799	932	982	968	542
60°-70°	3.1	0.1	0.1	55°	14	52	169	34	8	53
70°-80°	1.5	0.1	0.0	65°	3	3	3	2	2	3
80°-90°	1.0	0.0	0.0	75°	2	2	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°	1377.1	45.6	23.7							
0°-40°	2249.7	74.5	38.8							
0°-60°	3014.3	99.8	52.0							
0°-90°	3019.9	100.0	52.1							
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°	3019.9	100.0	52.1							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1701	1701	1701	1701	1701
2.5°	1711	1703	1703	1705	1709
5°	1710	1708	1712	1713	1719
7.5°	1705	1707	1715	1716	1721
10°	1694	1703	1715	1711	1714
12.5°	1675	1690	1704	1704	1711
15°	1651	1671	1688	1708	1715
17.5°	1617	1643	1678	1709	1713
20°	1582	1613	1661	1700	1706
22.5°	1540	1576	1641	1689	1692
25°	1497	1536	1613	1668	1671
27.5°	1446	1492	1580	1638	1645
30°	1391	1442	1537	1608	1626
32.5°	1331	1383	1476	1570	1592
35°	1262	1313	1399	1508	1554
37.5°	1174	1223	1313	1436	1490
40°	1063	1116	1215	1328	1405
42.5°	934	984	1087	1188	1251
45°	728	799	932	982	968
47.5°	521	580	721	720	705
50°	258	358	506	442	338
52.5°	93	177	316	195	85
55°	14	52	169	34	8
57.5°	5	9	64	6	4
60°	4	4	17	4	3
62.5°	3	3	4	3	2
65°	3	3	3	2	2
67.5°	3	3	2	2	2
70°	2	2	2	2	1
72.5°	2	2	2	2	1
75°	2	2	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	1	1
90°	0	0	0	0	0

(END OF REPORT)