

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: P31052

Luminaire Tested: **2GR5-228T5A125-UNV-EBT1**

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: P31052
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 2GR5-228T5A125-UNV-EBT1
Description: METALUX 2' X 4' COMMERCIAL T5HO TROFFER WITH ACRYLIC PRISMATIC LENS,
NOM. 0.125" THICK SHIELDING MEDIA
Light Source: (2) DOUBLE BIPIN T5 LINEAR FLUORESCENT LAMPS 3500K
GE F28W/T5/835/ECO
Ballast/Driver: -
GE228MVPS-A

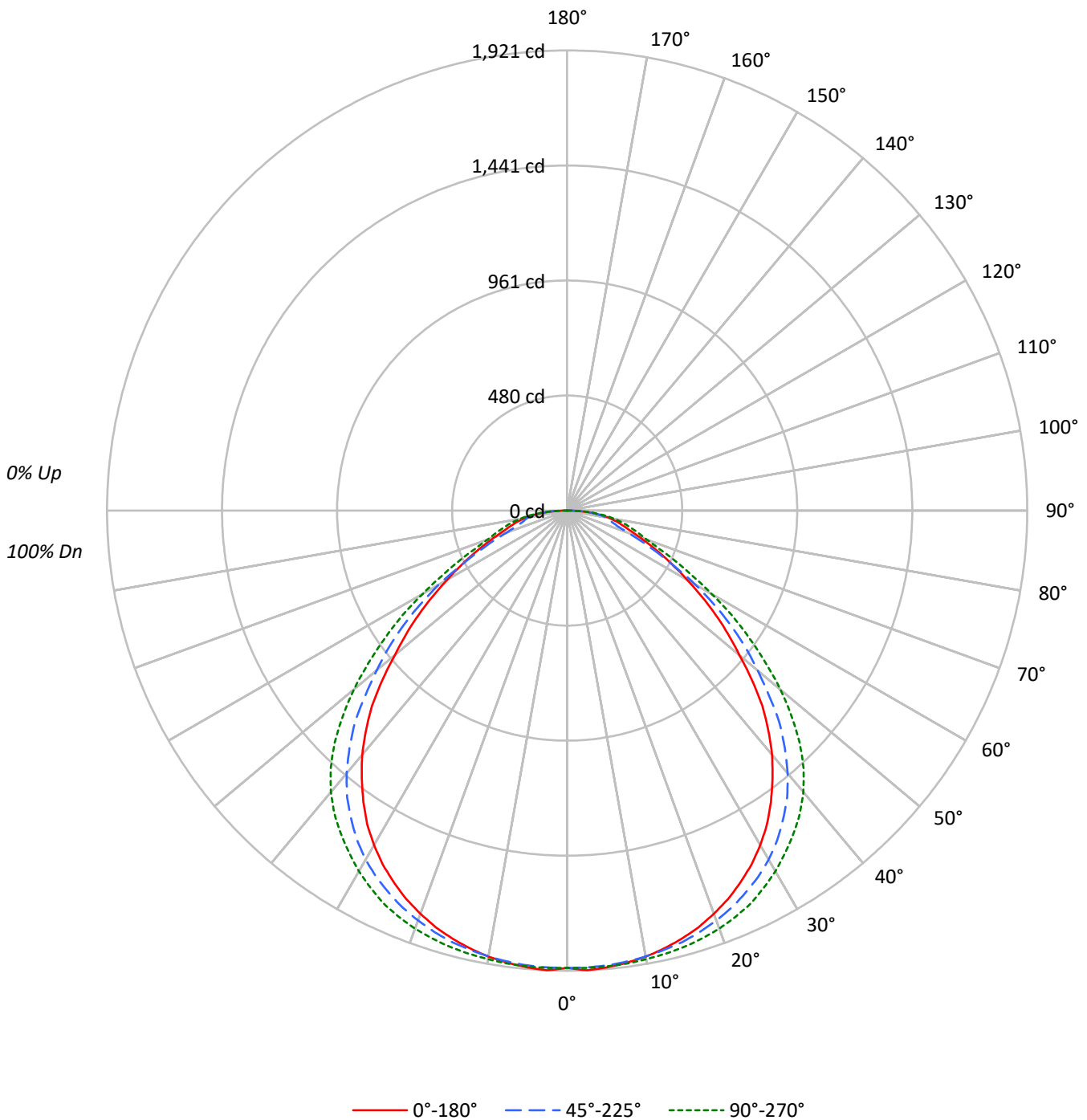
Summary

Lumens per Lamp: 2900 (2 lamps)
Luminaire Lumens: 5005.4 lumens
Efficiency: 86.3%
Efficacy: 81.9 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.34 / 1.37
Luminous Opening: Rectangular (W 1.75' x L: 3.83' x H: 0')
CIE Type: Direct

Input Watts (W): 61.1
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	50	30	10	0	
RCR																						
0	103	103	103	103	100	100	100	100	96	96	96	92	92	92	88	88	88	86				86
1	94	90	87	84	92	89	85	82	85	82	80	82	79	77	78	77	75	73				73
2	86	80	74	69	84	78	73	69	75	71	67	72	69	65	70	67	64	62				62
3	79	71	64	59	77	69	63	58	67	61	57	64	60	56	62	58	55	53				53
4	73	63	56	50	71	62	55	50	60	54	49	58	53	48	56	51	48	46				46
5	67	56	49	43	65	55	48	43	54	48	43	52	47	42	50	46	42	40				40
6	62	51	44	38	60	50	43	38	49	42	38	47	42	37	46	41	37	35				35
7	58	46	39	34	56	46	39	34	44	38	33	43	37	33	42	37	33	31				31
8	54	42	35	30	52	42	35	30	41	34	30	40	34	30	39	33	30	28				28
9	50	39	32	27	49	38	32	27	37	31	27	37	31	27	36	31	27	25				25
10	47	36	29	25	46	35	29	25	35	29	25	34	28	25	33	28	24	23				23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3063	3063	3063
5°	3083	3070	3076
10°	3081	3079	3099
15°	3073	3096	3133
20°	3058	3109	3171
25°	3031	3118	3206
30°	2987	3116	3222
35°	2905	3079	3226
40°	2788	2999	3213
45°	2614	2846	3116
50°	2344	2591	2901
55°	2112	2333	2596
60°	1858	1983	2237
65°	1652	1576	1891
70°	1492	1262	1651
75°	1488	1221	1692
80°	1663	1515	1867
85°	1786	1823	2025



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	181.5	3.6	3.1	0°	1909	1909	1909	1909	1909	
10°-20°	526.5	10.5	9.1	5°	1914	1905	1906	1903	1910	182
20°-30°	810.8	16.2	14.0	15°	1850	1849	1864	1875	1886	522
30°-40°	978.5	19.5	16.9	25°	1712	1726	1761	1794	1811	788
40°-50°	960.1	19.2	16.6	35°	1483	1512	1572	1620	1647	926
50°-60°	749.4	15.0	12.9	45°	1152	1167	1254	1325	1373	882
60°-70°	446.8	8.9	7.7	55°	755	774	834	914	928	675
70°-80°	244.9	4.9	4.2	65°	435	410	415	477	498	435
80°-90°	106.8	2.1	1.8	75°	240	215	197	240	273	257
90°-100°	0.0	0.0	0.0	85°	97	99	99	115	110	103
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°	1518.9	30.3	26.2							
0°-40°	2497.4	49.9	43.1							
0°-60°	4206.9	84.0	72.5							
0°-90°	5005.4	100.0	86.3							
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°	5005.4	100.0	86.3							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1909	1909	1909	1909	1909
2.5°	1921	1910	1909	1906	1911
5°	1914	1905	1906	1903	1910
7.5°	1904	1898	1899	1899	1907
10°	1891	1885	1890	1895	1902
12.5°	1872	1869	1878	1886	1895
15°	1850	1849	1864	1875	1886
17.5°	1824	1824	1844	1861	1873
20°	1791	1796	1821	1843	1857
22.5°	1755	1762	1794	1821	1836
25°	1712	1726	1761	1794	1811
27.5°	1666	1681	1725	1758	1776
30°	1612	1632	1682	1718	1739
32.5°	1553	1575	1632	1671	1694
35°	1483	1512	1572	1620	1647
37.5°	1408	1442	1509	1563	1596
40°	1331	1358	1432	1495	1534
42.5°	1243	1265	1345	1417	1461
45°	1152	1167	1254	1325	1373
47.5°	1045	1062	1143	1225	1271
50°	939	965	1038	1120	1162
52.5°	847	870	937	1016	1045
55°	755	774	834	914	928
57.5°	664	680	724	802	818
60°	579	585	618	682	697
62.5°	503	495	507	573	590
65°	435	410	415	477	498
67.5°	373	342	337	397	414
70°	318	290	269	333	352
72.5°	274	247	224	280	311
75°	240	215	197	240	273
77.5°	210	185	181	209	241
80°	180	156	164	180	202
82.5°	141	130	136	152	159
85°	97	99	99	115	110
87.5°	51	60	57	66	62
90°	0	0	0	0	0

(END OF REPORT)