

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: P31030

Luminaire Tested: **2GR5-254T5A-UNV-EBT1**

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: P31030
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 2GR5-254T5A-UNV-EBT1
Description: METALUX 2' X 4' COMMERCIAL T5HO TROFFER WITH ACRYLIC PRISMATIC LENS
Light Source: (2) DOUBLE BIPIN T5 LINEAR FLUORESCENT LAMPS 3500K
GE F54W/T5/835/ECO
Ballast/Driver: -
GE254MVPS90-E

Summary

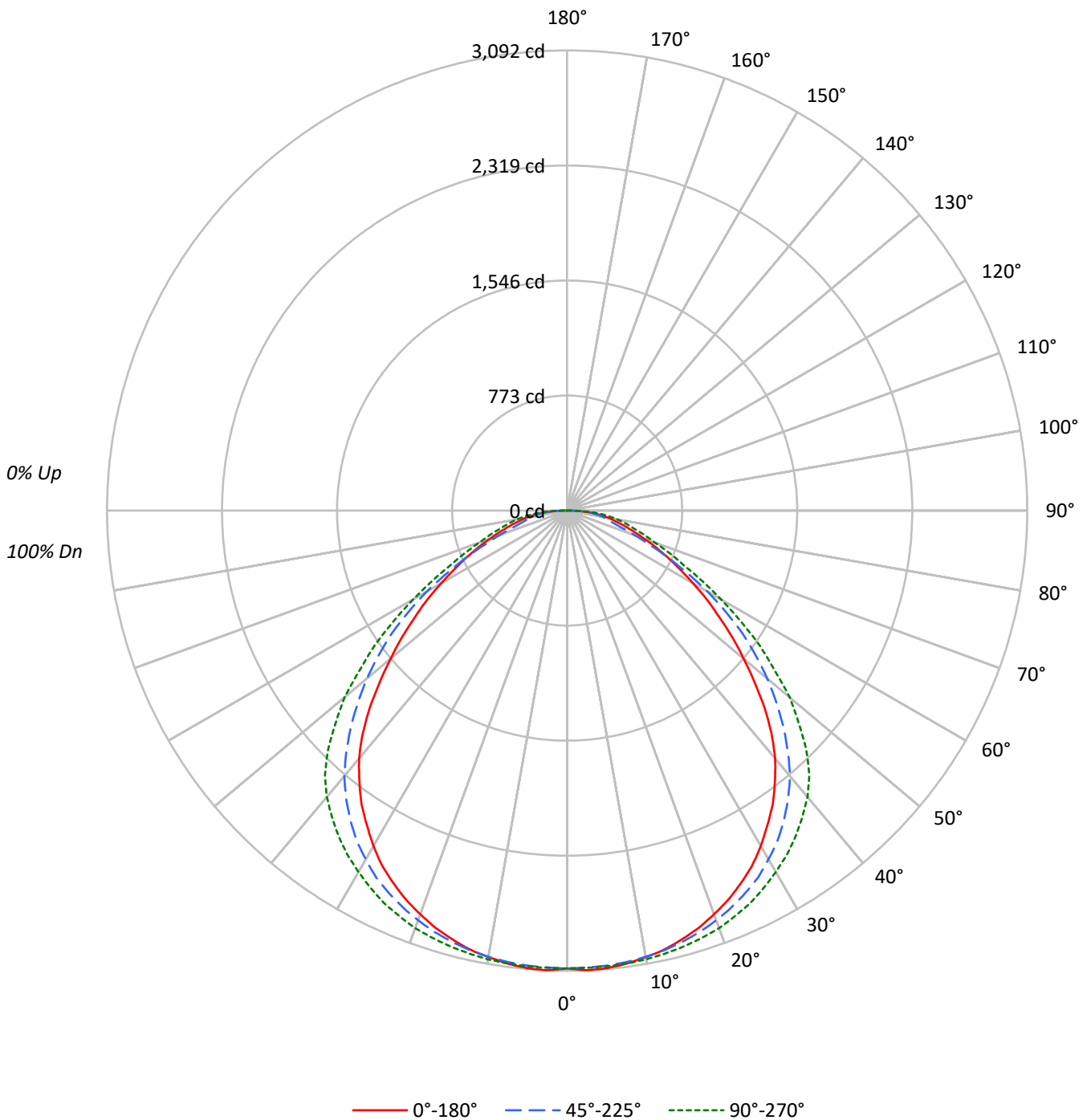
Lumens per Lamp: 4400 (2 lamps)
Luminaire Lumens: 8241.8 lumens
Efficiency: 93.7%
Efficacy: 67.5 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.35 / 1.38
Luminous Opening: Rectangular (W 1.75' x L: 3.83' x H: 0')
CIE Type: Direct

Input Watts (W): 122.1
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

TEST NUMBER: P31030

CATALOG NUMBER: 2GR5-254T5A-UNV-EBT1

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	111	111	111	111	109	109	109	109	104	104	104	100	100	100	96	96	96	94																				
1	102	98	94	91	100	96	92	89	92	89	87	88	86	84	85	83	81	79																				
2	94	86	80	75	91	84	79	74	81	76	72	78	74	71	75	72	69	67																				
3	86	76	69	63	83	75	68	62	72	66	61	69	64	60	67	63	59	57																				
4	79	68	60	54	77	67	59	53	64	58	53	62	57	52	60	55	51	49																				
5	73	61	53	47	71	60	52	46	58	51	46	56	50	45	54	49	45	43																				
6	67	55	47	41	65	54	46	41	52	46	40	51	45	40	49	44	40	38																				
7	62	50	42	36	61	49	42	36	48	41	36	46	40	36	45	40	35	34																				
8	58	46	38	32	57	45	37	32	44	37	32	43	36	32	41	36	32	30																				
9	54	42	34	29	53	41	34	29	40	34	29	39	33	29	38	33	29	27																				
10	51	39	31	26	50	38	31	26	37	31	26	36	30	26	36	30	26	24																				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4936	4936	4936
5°	4971	4943	4951
10°	4965	4960	4989
15°	4954	4982	5037
20°	4928	5001	5099
25°	4892	5019	5154
30°	4823	5014	5195
35°	4719	4973	5240
40°	4556	4878	5262
45°	4257	4661	5156
50°	3862	4381	4873
55°	3491	4023	4417
60°	3129	3495	3835
65°	2829	2840	3269
70°	2576	2257	2937
75°	2474	1965	2864
80°	2597	2227	3188
85°	2890	2762	3719



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	292.4	3.5	3.3	0°	3076	3076	3076	3076	3076	
10°-20°	847.5	10.3	9.6	5°	3086	3071	3069	3065	3074	293
20°-30°	1305.0	15.8	14.8	15°	2982	2979	2999	3015	3032	842
30°-40°	1584.0	19.2	18.0	25°	2763	2779	2835	2879	2911	1272
40°-50°	1583.5	19.2	18.0	35°	2409	2444	2539	2621	2675	1502
50°-60°	1264.7	15.3	14.4	45°	1876	1925	2054	2192	2272	1441
60°-70°	774.9	9.4	8.8	55°	1248	1302	1438	1532	1579	1122
70°-80°	418.1	5.1	4.8	65°	745	705	748	822	861	743
80°-90°	171.7	2.1	2.0	75°	399	360	317	439	462	427
90°-100°	0.0	0.0	0.0	85°	157	147	150	193	202	165
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°	2444.8	29.7	27.8							
0°-40°	4028.9	48.9	45.8							
0°-60°	6877.1	83.4	78.1							
0°-90°	8241.8	100.0	93.7							
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°	8241.8	100.0	93.7							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3076	3076	3076	3076	3076
2.5°	3092	3077	3073	3068	3075
5°	3086	3071	3069	3065	3074
7.5°	3070	3057	3060	3059	3069
10°	3047	3038	3044	3049	3062
12.5°	3021	3010	3025	3035	3048
15°	2982	2979	2999	3015	3032
17.5°	2940	2940	2968	2991	3010
20°	2886	2893	2929	2961	2986
22.5°	2830	2839	2886	2923	2949
25°	2763	2779	2835	2879	2911
27.5°	2691	2706	2779	2828	2859
30°	2603	2627	2706	2766	2804
32.5°	2505	2543	2631	2702	2745
35°	2409	2444	2539	2621	2675
37.5°	2293	2330	2439	2538	2596
40°	2175	2207	2329	2443	2512
42.5°	2033	2074	2195	2326	2409
45°	1876	1925	2054	2192	2272
47.5°	1708	1768	1905	2042	2109
50°	1547	1624	1755	1868	1952
52.5°	1401	1461	1596	1700	1752
55°	1248	1302	1438	1532	1579
57.5°	1114	1147	1260	1333	1380
60°	975	986	1089	1146	1195
62.5°	855	836	906	971	1020
65°	745	705	748	822	861
67.5°	643	589	603	700	741
70°	549	498	481	592	626
72.5°	469	423	385	512	542
75°	399	360	317	439	462
77.5°	334	306	275	376	403
80°	281	253	241	316	345
82.5°	224	198	199	256	279
85°	157	147	150	193	202
87.5°	85	86	87	113	119
90°	0	0	0	0	0

(END OF REPORT)