

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: P31031

Luminaire Tested: **2GR5-254T5A125-UNV-EBT1**

Issue Date: 3/3/2020



**Test Information**

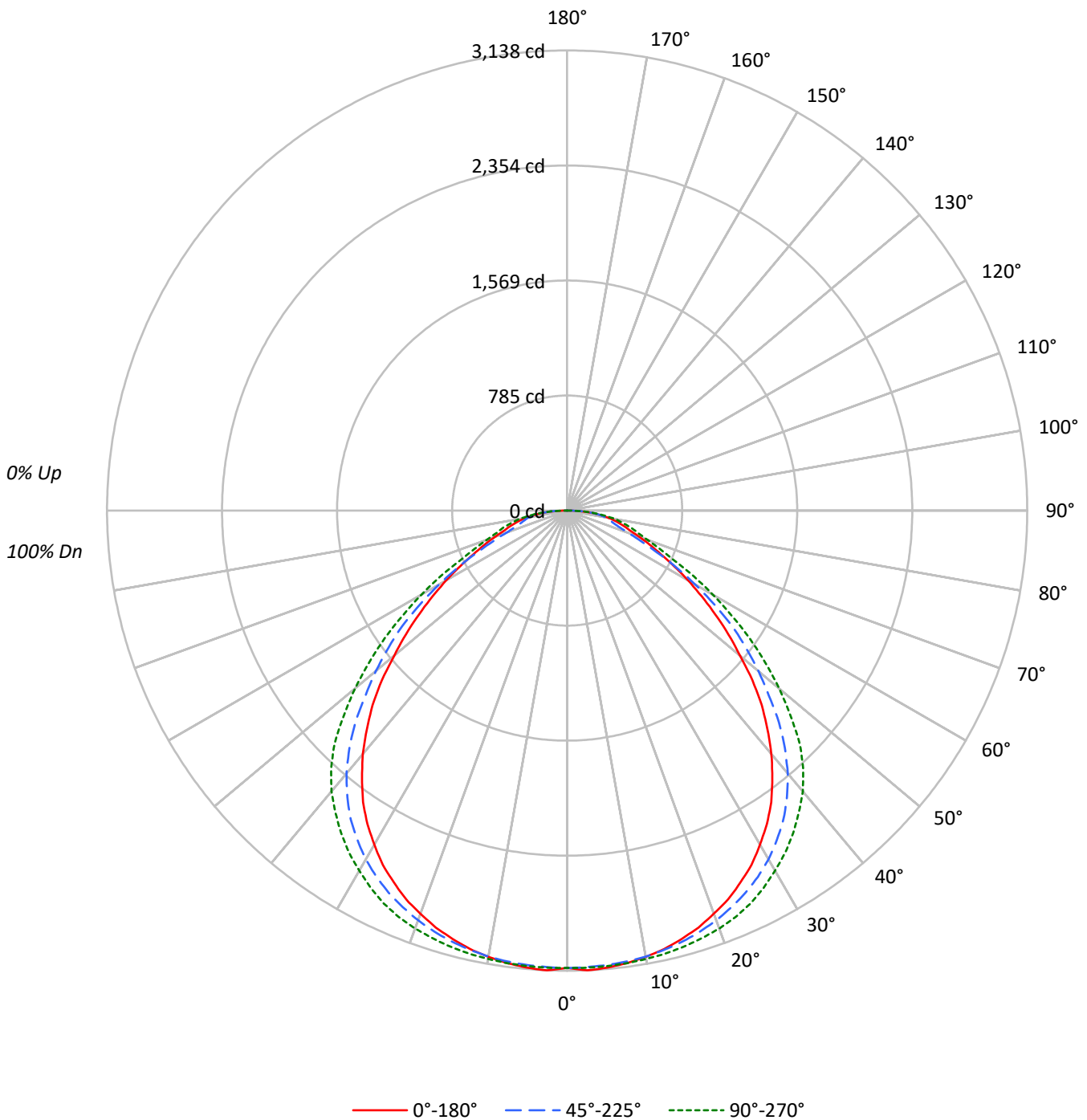
Test Method: LM-41-14  
Report Number: P31031  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 2GR5-254T5A125-UNV-EBT1  
Description: METALUX 2' X 4' COMMERCIAL T5HO TROFFER WITH ACRYLIC PRISMATIC LENS,  
NOM. 0.125" THICK SHIELDING MEDIA  
Light Source: (2) DOUBLE BIPIN T5 LINEAR FLUORESCENT LAMPS 3500K  
GE F54W/T5/835/ECO  
Ballast/Driver: -  
GE254MVPS90-E

**Summary**

Lumens per Lamp: 4400 (2 lamps)  
Luminaire Lumens: 8176.5 lumens  
Efficiency: 92.9%  
Efficacy: 66.9 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): 122.3  
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

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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	111	111	111	111	108	108	108	108	103	103	103	99	99	99	95	95	95	93
1	102	97	94	90	99	95	92	89	91	89	86	88	85	83	84	83	81	79
2	93	86	80	75	91	84	79	74	81	76	72	78	74	70	75	72	69	67
3	85	76	69	63	83	74	68	62	72	66	61	69	64	60	67	63	59	57
4	78	68	60	54	76	66	59	54	64	58	53	62	57	52	60	55	51	49
5	72	61	53	47	70	60	52	47	58	51	46	56	50	46	54	49	45	43
6	67	55	47	41	65	54	46	41	52	46	41	51	45	40	49	44	40	38
7	62	50	42	36	61	49	42	36	48	41	36	46	40	36	45	40	36	34
8	58	46	38	33	56	45	38	33	44	37	32	43	37	32	42	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	27	50	38	31	27	37	31	27	36	31	26	36	30	26	25

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	5005	5005	5005
5°	5040	5011	5022
10°	5035	5031	5059
15°	5022	5053	5115
20°	4995	5077	5179
25°	4952	5094	5235
30°	4873	5090	5253
35°	4754	5038	5261
40°	4539	4903	5237
45°	4257	4638	5088
50°	3839	4249	4715
55°	3444	3841	4249
60°	3052	3235	3678
65°	2677	2567	3060
70°	2454	2050	2721
75°	2449	2015	2790
80°	2670	2449	3031
85°	2890	2982	3295



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**ZONAL LUMENS:**

**CANDELA DISTRIBUTION:**

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	296.5	3.6	3.4	0°	3119	3119	3119	3119	3119	
10°-20°	859.7	10.5	9.8	5°	3129	3113	3111	3108	3118	297
20°-30°	1323.9	16.2	15.0	15°	3023	3020	3042	3060	3079	853
30°-40°	1597.4	19.5	18.2	25°	2797	2817	2877	2928	2957	1288
40°-50°	1567.3	19.2	17.8	35°	2427	2471	2572	2644	2686	1511
50°-60°	1226.5	15.0	13.9	45°	1876	1906	2044	2161	2242	1439
60°-70°	730.9	8.9	8.3	55°	1231	1264	1373	1494	1519	1105
70°-80°	401.0	4.9	4.6	65°	705	677	676	775	806	710
80°-90°	173.3	2.1	2.0	75°	395	350	325	396	450	421
90°-100°	0.0	0.0	0.0	85°	157	159	162	189	179	166
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°	2480.0	30.3	28.2							
0°-40°	4077.4	49.9	46.3							
0°-60°	6871.3	84.0	78.1							
0°-90°	8176.5	100.0	92.9							
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°	8176.5	100.0	92.9							



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3119	3119	3119	3119	3119
2.5°	3138	3120	3116	3111	3120
5°	3129	3113	3111	3108	3118
7.5°	3113	3100	3102	3102	3113
10°	3090	3079	3088	3092	3105
12.5°	3062	3053	3067	3078	3094
15°	3023	3020	3042	3060	3079
17.5°	2981	2979	3011	3037	3057
20°	2925	2932	2973	3008	3033
22.5°	2870	2878	2928	2974	3000
25°	2797	2817	2877	2928	2957
27.5°	2724	2746	2816	2868	2901
30°	2630	2661	2747	2801	2835
32.5°	2534	2571	2662	2730	2767
35°	2427	2471	2572	2644	2686
37.5°	2298	2358	2463	2551	2596
40°	2167	2219	2341	2433	2500
42.5°	2022	2071	2197	2309	2382
45°	1876	1906	2044	2161	2242
47.5°	1714	1740	1865	1999	2064
50°	1538	1585	1702	1826	1889
52.5°	1386	1418	1536	1663	1702
55°	1231	1264	1373	1494	1519
57.5°	1087	1122	1189	1313	1327
60°	951	957	1008	1117	1146
62.5°	823	809	839	943	976
65°	705	677	676	775	806
67.5°	609	560	546	646	683
70°	523	471	437	539	580
72.5°	448	408	369	460	505
75°	395	350	325	396	450
77.5°	346	302	296	343	390
80°	289	257	265	294	328
82.5°	226	214	220	245	254
85°	157	159	162	189	179
87.5°	83	91	93	112	99
90°	0	0	0	0	0

(END OF REPORT)