

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: P31028

Luminaire Tested: **2GR5-354T5A125-UNV-EBT1**

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: P31028
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 2GR5-354T5A125-UNV-EBT1
Description: METALUX 2' X 4' COMMERCIAL T5HO TROFFER WITH ACRYLIC PRISMATIC LENS,
NOM. 0.125" THICK SHIELDING MEDIA
Light Source: (3) DOUBLE BIPIN T5 LINEAR FLUORESCENT LAMPS 5000K
GE F54W/T5/850/ECO
Ballast/Driver: -
GE454MVPS90-E

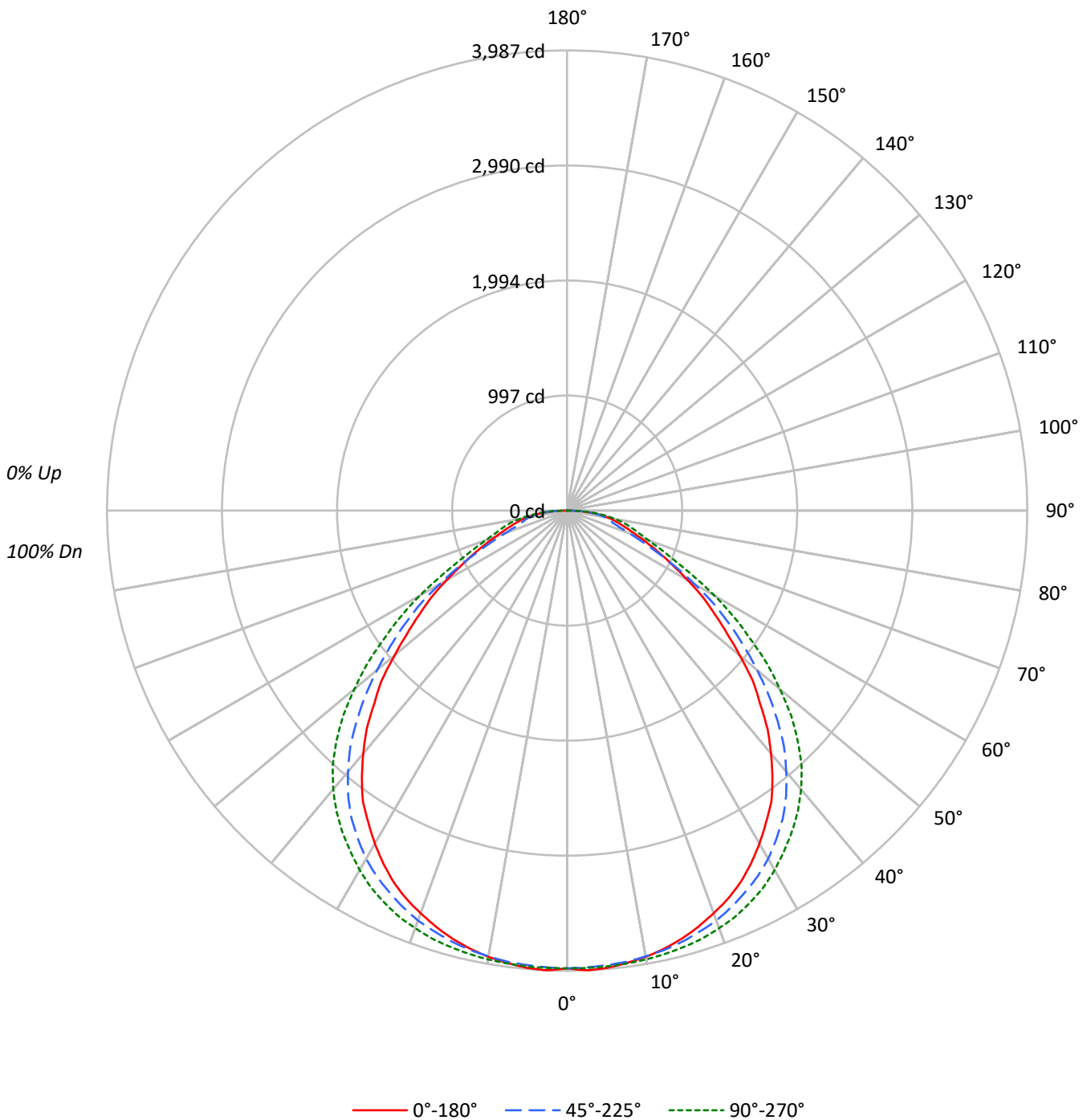
Summary

Lumens per Lamp: 4400 (3 lamps)
Luminaire Lumens: 10393.2 lumens
Efficiency: 78.7%
Efficacy: 62.9 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.34 / 1.37
Luminous Opening: Rectangular (W 1.75' x L: 3.83' x H: 0')
CIE Type: Direct

Input Watts (W): 165.2
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									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	94	94	94	94	92	92	92	92	87	87	87	84	84	84	80	80	80	80	80	80	79																
1	86	83	79	76	84	81	78	75	77	75	73	74	72	71	72	70	69	69	69	69	67																
2	79	73	68	63	77	71	66	63	68	64	61	66	63	60	63	61	58	58	58	58	57																
3	72	64	58	53	70	63	57	53	61	56	52	59	54	51	57	53	50	50	50	50	48																
4	66	57	51	46	65	56	50	45	54	49	45	53	48	44	51	47	44	44	44	44	42																
5	61	51	45	40	60	51	44	39	49	43	39	47	42	39	46	42	38	38	38	38	37																
6	57	46	40	35	55	46	39	35	44	39	34	43	38	34	42	37	34	34	34	34	32																
7	53	42	36	31	51	42	35	31	40	35	31	39	34	30	38	34	30	30	30	30	29																
8	49	39	32	28	48	38	32	28	37	31	27	36	31	27	35	31	27	27	27	27	26																
9	46	35	29	25	45	35	29	25	34	29	25	33	28	25	32	28	24	24	24	24	23																
10	43	33	27	23	42	32	26	23	32	26	22	31	26	22	30	26	22	22	22	22	21																

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6364	6364	6364
5°	6406	6367	6386
10°	6398	6390	6434
15°	6379	6422	6500
20°	6338	6454	6574
25°	6294	6459	6636
30°	6173	6453	6663
35°	6041	6380	6652
40°	5756	6185	6602
45°	5364	5852	6415
50°	4873	5362	6003
55°	4361	4809	5413
60°	3877	4098	4733
65°	3413	3269	3926
70°	3082	2641	3495
75°	3056	2542	3583
80°	3410	3086	3899
85°	3774	3848	4400



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	377.0	3.6	2.9	0°	3966	3966	3966	3966	3966	
10°-20°	1093.0	10.5	8.3	5°	3977	3957	3953	3957	3965	378
20°-30°	1681.2	16.2	12.7	15°	3840	3840	3866	3896	3913	1083
30°-40°	2024.0	19.5	15.3	25°	3555	3581	3648	3719	3748	1634
40°-50°	1988.3	19.1	15.1	35°	3084	3134	3257	3350	3396	1917
50°-60°	1557.2	15.0	11.8	45°	2364	2426	2579	2742	2827	1824
60°-70°	936.1	9.0	7.1	55°	1559	1613	1719	1905	1935	1400
70°-80°	512.1	4.9	3.9	65°	899	864	861	1008	1034	900
80°-90°	224.2	2.2	1.7	75°	493	444	410	509	578	530
90°-100°	0.0	0.0	0.0	85°	205	203	209	244	239	216
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°	3151.2	30.3	23.9							
0°-40°	5175.2	49.8	39.2							
0°-60°	8720.7	83.9	66.1							
0°-90°	10393.2	100.0	78.7							
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°	10393.2	100.0	78.7							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3966	3966	3966	3966	3966
2.5°	3987	3967	3961	3960	3967
5°	3977	3957	3953	3957	3965
7.5°	3954	3942	3942	3949	3958
10°	3927	3917	3922	3936	3949
12.5°	3888	3882	3898	3920	3934
15°	3840	3840	3866	3896	3913
17.5°	3781	3788	3824	3866	3889
20°	3712	3726	3780	3827	3850
22.5°	3641	3658	3719	3780	3808
25°	3555	3581	3648	3719	3748
27.5°	3448	3487	3574	3648	3682
30°	3332	3387	3483	3557	3596
32.5°	3206	3267	3373	3459	3497
35°	3084	3134	3257	3350	3396
37.5°	2922	2983	3116	3225	3284
40°	2748	2822	2953	3091	3152
42.5°	2571	2636	2783	2934	3007
45°	2364	2426	2579	2742	2827
47.5°	2181	2220	2369	2537	2633
50°	1952	2003	2148	2324	2405
52.5°	1743	1798	1931	2111	2187
55°	1559	1613	1719	1905	1935
57.5°	1389	1410	1509	1674	1710
60°	1208	1220	1277	1443	1475
62.5°	1037	1032	1062	1221	1238
65°	899	864	861	1008	1034
67.5°	771	720	701	839	879
70°	657	604	563	694	745
72.5°	570	521	471	593	651
75°	493	444	410	509	578
77.5°	431	386	373	440	509
80°	369	328	334	378	422
82.5°	292	266	282	318	333
85°	205	203	209	244	239
87.5°	112	123	123	149	138
90°	0	0	0	0	0

(END OF REPORT)