

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: P31029

Luminaire Tested: **2GR5-354T5PB1S-UNV-EBT1**

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: P31029
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 2GR5-354T5PB1S-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: (3) DOUBLE BIPIN T5 LINEAR FLUORESCENT LAMPS 5000K
GE F54W/T5/850/ECO
Ballast/Driver: -
GE454MVPS90-E

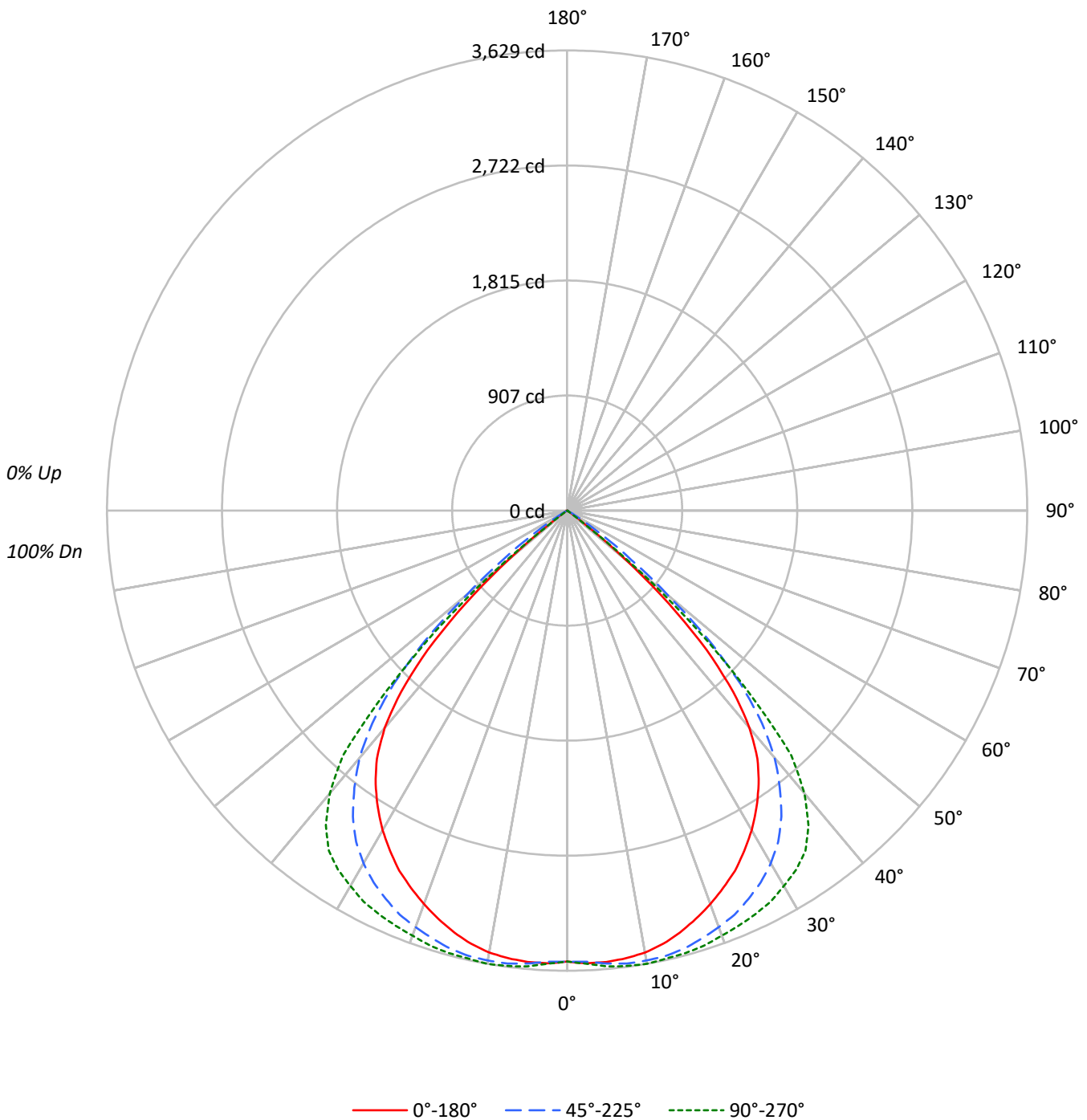
Summary

Lumens per Lamp: 4400 (3 lamps)
Luminaire Lumens: 6334.6 lumens
Efficiency: 48.0%
Efficacy: 38.3 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.41 / 1.31
Luminous Opening: Rectangular (W 1.75' x L: 3.83' x H: 0')
CIE Type: Direct

Input Watts (W): 165.4
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	57	57	57	57	56	56	56	56	53	53	53	51	51	51	49	49	49	48
1	54	52	51	50	53	51	50	49	49	48	48	48	47	46	46	45	45	44
2	51	48	46	44	50	47	45	43	46	44	42	44	43	41	43	42	41	40
3	48	44	41	39	46	43	41	38	42	40	38	41	39	37	40	38	37	36
4	44	40	37	35	43	40	37	34	38	36	34	37	35	34	37	35	33	32
5	42	37	33	31	41	36	33	31	35	33	31	35	32	30	34	32	30	29
6	39	34	30	28	38	33	30	28	33	30	28	32	29	27	31	29	27	26
7	36	31	28	25	36	31	28	25	30	27	25	29	27	25	29	27	25	24
8	34	29	25	23	33	28	25	23	28	25	23	27	25	23	27	24	23	22
9	32	27	23	21	31	26	23	21	26	23	21	25	23	21	25	23	21	20
10	30	25	21	19	30	24	21	19	24	21	19	24	21	19	23	21	19	18

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5707	5707	5707
5°	5755	5774	5813
10°	5766	5870	5913
15°	5721	5939	6000
20°	5638	5970	6091
25°	5549	5986	6218
30°	5392	5951	6333
35°	5158	5771	6415
40°	4688	5335	6095
45°	3533	4391	4591
50°	1480	2601	1900
55°	73	943	50
60°	26	96	19
65°	23	19	15
70°	19	19	14
75°	25	19	12
80°	28	18	18
85°	37	37	37



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	342.5	5.4	2.6	0°	3557	3557	3557	3557	3557	
10°-20°	1003.6	15.8	7.6	5°	3573	3572	3585	3598	3609	340
20°-30°	1548.6	24.4	11.7	15°	3444	3514	3575	3601	3612	970
30°-40°	1833.8	28.9	13.9	25°	3134	3245	3381	3499	3512	1439
40°-50°	1378.8	21.8	10.4	35°	2633	2765	2946	3174	3275	1633
50°-60°	216.1	3.4	1.6	45°	1557	1704	1935	2029	2023	1145
60°-70°	6.1	0.1	0.0	55°	26	94	337	80	18	112
70°-80°	3.1	0.0	0.0	65°	6	6	5	5	4	6
80°-90°	1.9	0.0	0.0	75°	4	3	3	3	2	4
90°-100°	0.0	0.0	0.0	85°	2	2	2	2	2	2
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°	2894.7	45.7	21.9							
0°-40°	4728.5	74.6	35.8							
0°-60°	6323.4	99.8	47.9							
0°-90°	6334.6	100.0	48.0							
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°	6334.6	100.0	48.0							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3557	3557	3557	3557	3557
2.5°	3574	3562	3562	3566	3577
5°	3573	3572	3585	3598	3609
7.5°	3561	3577	3603	3611	3622
10°	3539	3572	3603	3620	3629
12.5°	3500	3551	3597	3612	3618
15°	3444	3514	3575	3601	3612
17.5°	3376	3457	3537	3594	3596
20°	3302	3397	3496	3563	3567
22.5°	3219	3329	3449	3532	3542
25°	3134	3245	3381	3499	3512
27.5°	3025	3155	3306	3454	3476
30°	2910	3044	3212	3391	3418
32.5°	2779	2926	3098	3298	3360
35°	2633	2765	2946	3174	3275
37.5°	2466	2577	2756	3015	3126
40°	2238	2363	2547	2763	2910
42.5°	1940	2078	2276	2468	2618
45°	1557	1704	1935	2029	2023
47.5°	1093	1233	1519	1488	1407
50°	593	763	1042	909	761
52.5°	181	342	641	416	133
55°	26	94	337	80	18
57.5°	10	15	129	11	8
60°	8	8	30	7	6
62.5°	7	7	7	6	5
65°	6	6	5	5	4
67.5°	5	5	5	4	3
70°	4	4	4	4	3
72.5°	4	4	3	3	2
75°	4	3	3	3	2
77.5°	3	3	3	2	2
80°	3	2	2	2	2
82.5°	2	2	2	2	2
85°	2	2	2	2	2
87.5°	2	2	2	2	2
90°	0	0	0	0	0

(END OF REPORT)