

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: 13590.0

Luminaire Tested: **ABI-654T5-N-UNV-EBT2-U**

Issue Date: 3/3/2020



**Test Information**

Test Method: LM-41-14  
Report Number: 13590.0  
Test Lab: BALLABS  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: ABI-654T5-N-UNV-EBT2-U  
Description: ABI SERIES LUMINAIRE WITH SPECULAR ALUMINUM NARROW  
DISTRIBUTION REFLECTOR WITH GASKETED PRISMATIC ACRYLIC LENS  
AND DOORFRAME  
Light Source: SIX 54 WATT T5HO - 4400 LUMENS EA  
Ballast/Driver: ONE UNIVERSAL #B254PUNV-E, ONE UNIVERSAL B254PUNV-D

**Summary**

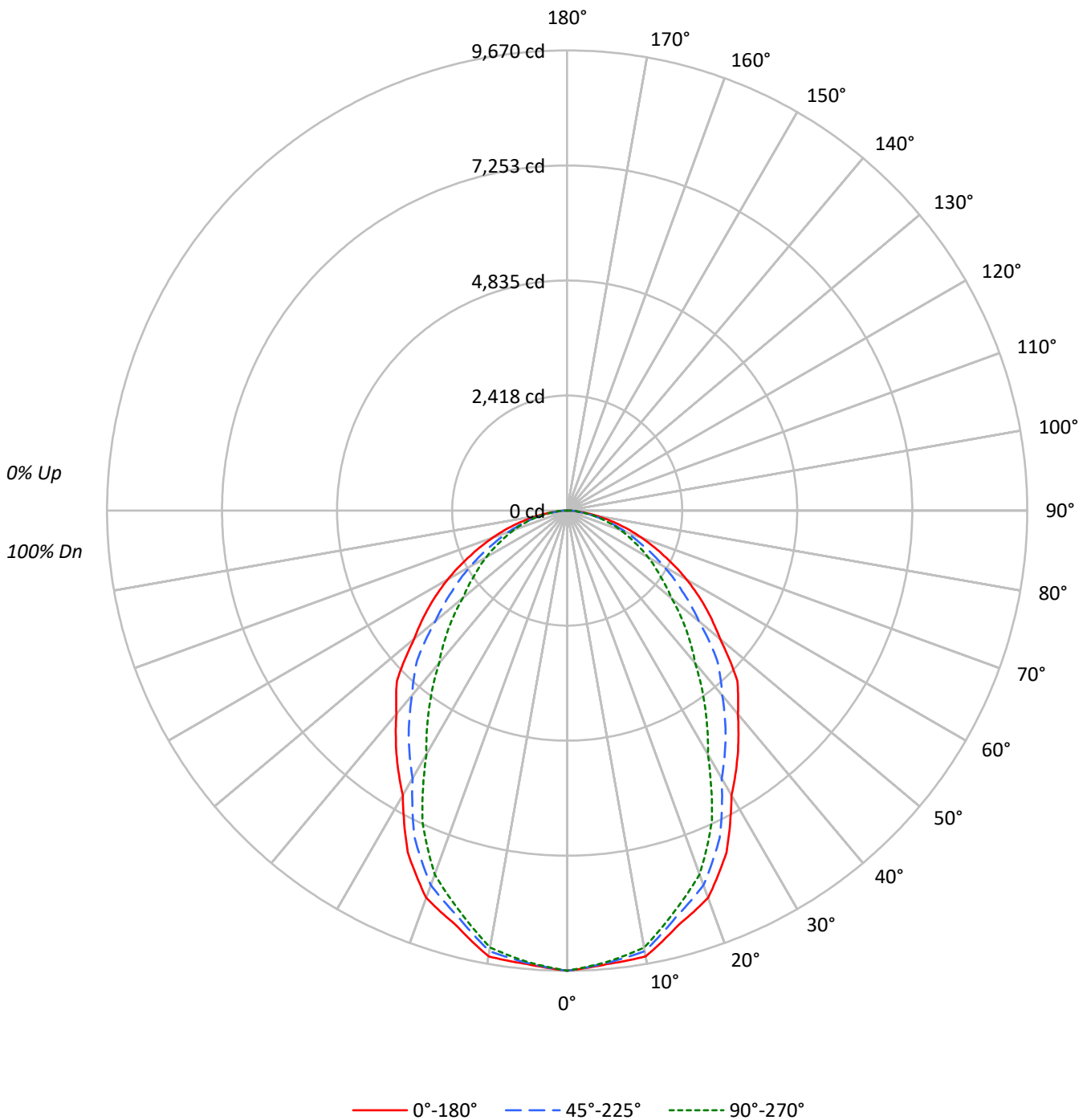
Lumens per Lamp: 5000 (6 lamps)  
Luminaire Lumens: 19532.7 lumens  
Efficiency: 65.1%  
Efficacy: 66.9 lumens/watt  
Spacing Criteria (0/90/45): 1.1 / 1 / 1.15  
Luminous Opening: Rectangular (W 1.73' x L: 3.85' x H: 0')  
CIE Type: Direct

Input Watts (W): 292  
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	78	78	78	78	76	76	76	76	72	72	72		69	69	69		66	66	66	65
1	71	69	66	64	70	67	65	63	64	63	61		62	60	59		60	58	57	56
2	66	61	57	53	64	59	56	53	57	54	51		55	52	50		53	51	49	48
3	60	54	49	45	59	53	48	45	51	47	44		49	46	43		48	45	42	41
4	56	48	43	39	54	47	43	39	46	42	38		44	41	38		43	40	37	36
5	51	44	38	34	50	43	38	34	42	37	34		40	36	33		39	36	33	32
6	48	40	34	30	47	39	34	30	38	33	30		37	33	30		36	32	29	28
7	45	36	31	27	43	36	31	27	35	30	27		34	30	27		33	29	26	25
8	42	33	28	24	41	33	28	24	32	27	24		31	27	24		30	27	24	23
9	39	31	26	22	38	30	25	22	30	25	22		29	25	22		28	25	22	21
10	37	29	24	20	36	28	23	20	28	23	20		27	23	20		26	23	20	19

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

	0°	45°	90°
0°	15575	15575	15575
5°	15470	15429	15399
10°	15559	15374	15250
15°	15041	14747	14537
20°	14845	14359	13947
25°	14081	13485	12790
30°	12846	12083	11005
35°	12291	11422	9947
40°	11737	10662	8806
45°	11524	10173	8059
50°	10509	9056	7174
55°	9972	8290	6695
60°	9345	7577	6340
65°	8556	6776	5888
70°	7841	6146	5614
75°	6945	5377	5259
80°	5612	4387	4675
85°	4306	3604	4306



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**ZONAL LUMENS:**

**CANDELA DISTRIBUTION:**

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	907.8	4.6	3.0	0°	9670	9670	9670	9670	9670	
10°-20°	2504.3	12.8	8.3	5°	9568	9562	9543	9530	9524	913
20°-30°	3444.1	17.6	11.5	15°	9020	8951	8844	8762	8718	2557
30°-40°	3570.3	18.3	11.9	25°	7923	7784	7588	7317	7197	3616
40°-50°	3327.8	17.0	11.1	35°	6251	6093	5809	5298	5059	3912
50°-60°	2659.9	13.6	8.9	45°	5059	4926	4466	3772	3538	3840
60°-70°	1853.7	9.5	6.2	55°	3551	3431	2952	2510	2384	3175
70°-80°	991.1	5.1	3.3	65°	2245	2138	1778	1602	1545	2241
80°-90°	273.7	1.4	0.9	75°	1116	1028	864	845	845	1187
90°-100°	0.0	0.0	0.0	85°	233	214	195	233	233	300
100°-110°	0.0	0.0	0.0	90°	31	37	50	56	63	
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°	6856.2	35.1	22.9							
0°-40°	10426.5	53.4	34.8							
0°-60°	16414.2	84.0	54.7							
0°-90°	19532.7	100.0	65.1							
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°	19532.7	100.0	65.1							



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	9670	9670	9670	9670	9670
5°	9568	9562	9543	9530	9524
10°	9513	9475	9400	9349	9324
15°	9020	8951	8844	8762	8718
20°	8661	8541	8377	8213	8137
25°	7923	7784	7588	7317	7197
30°	6907	6743	6497	6100	5917
35°	6251	6093	5809	5298	5059
40°	5582	5437	5071	4447	4188
45°	5059	4926	4466	3772	3538
50°	4194	4075	3614	3015	2863
55°	3551	3431	2952	2510	2384
60°	2901	2781	2352	2056	1968
65°	2245	2138	1778	1602	1545
70°	1665	1564	1305	1217	1192
75°	1116	1028	864	845	845
80°	605	555	473	498	504
85°	233	214	195	233	233
90°	31	37	50	56	63

(END OF REPORT)