

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: 14005.0

Luminaire Tested: **ABI-454T5-N-CL-UNV-EBTL1-U**

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: 14005.0
Test Lab: BUILDING ACOUSTICS & LIGHTING LABORATORIES, INC
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: ABI-454T5-N-CL-UNV-EBTL1-U
Description: ABI SERIES LUMINAIRE WITH SPECULAR ALUMINUM NARROW
DISTRIBUTION REFLECTOR WITH GASKETED CLEAR ACRYLIC LENS
AND DOORFRAME
Light Source: FOUR 54 WATT T5HO - 4400 LUMENS EA
Ballast/Driver: -

Summary

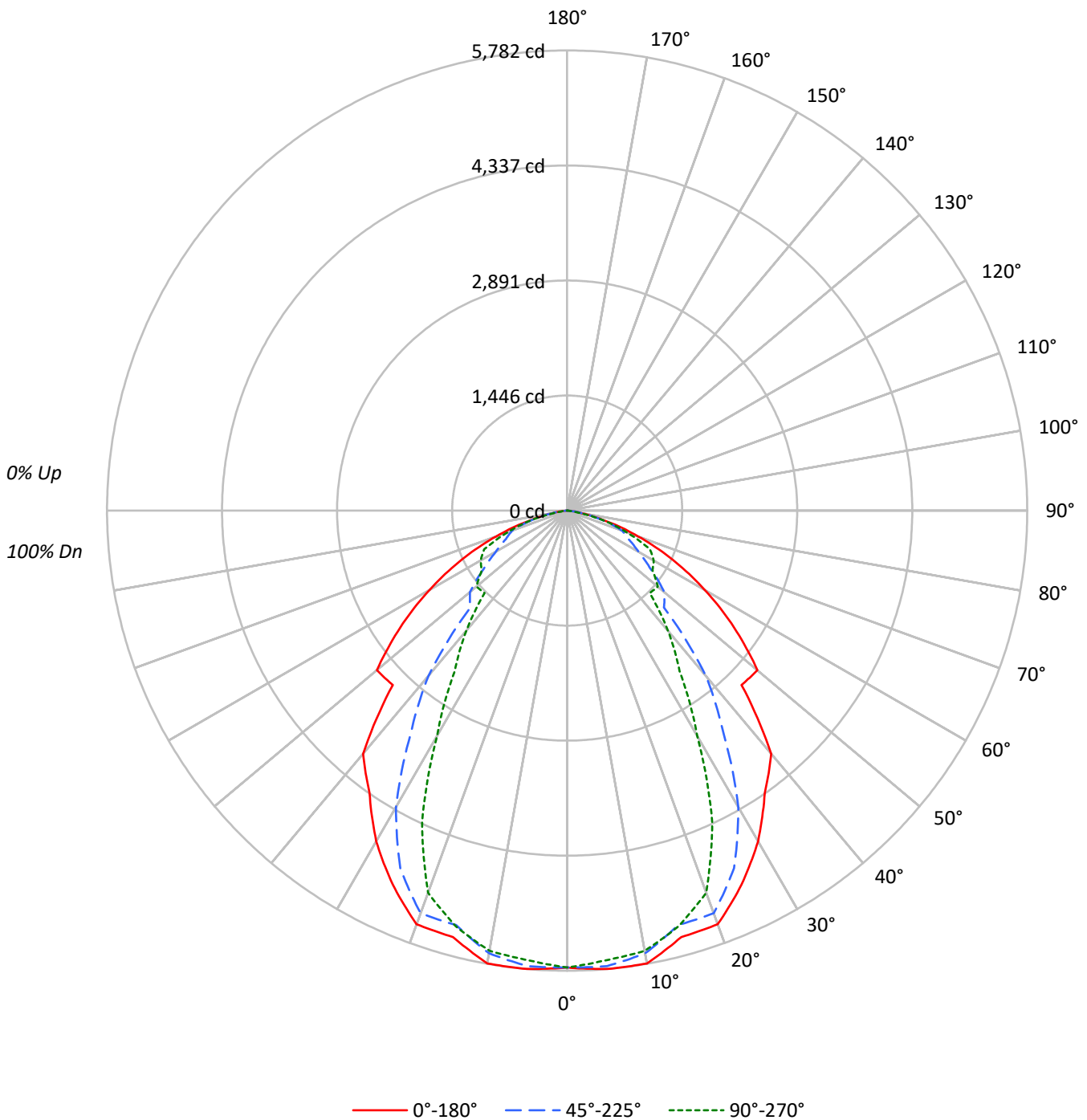
Lumens per Lamp: 4400 (4 lamps)
Luminaire Lumens: 11206.7 lumens
Efficiency: 63.7%
Efficacy: 56.9 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1 / 1.1
Luminous Opening: Rectangular (W 1.08' x L: 3.91' x H: 0')
CIE Type: Direct

Input Watts (W): 197
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	76	76	76	76	74	74	74	74	71	71	71	68	68	68	65	65	65	64
1	70	68	65	63	69	66	64	62	64	62	60	61	60	58	59	58	57	56
2	65	60	56	53	63	59	56	53	57	54	51	55	52	50	53	51	49	48
3	60	54	49	45	58	53	49	45	51	47	44	49	46	44	48	45	43	42
4	55	48	43	39	54	48	43	39	46	42	39	45	41	38	43	40	38	36
5	51	44	39	35	50	43	38	35	42	38	34	41	37	34	39	36	34	32
6	48	40	35	31	46	39	34	31	38	34	31	37	33	30	36	33	30	29
7	44	37	31	28	43	36	31	28	35	31	28	34	30	27	33	30	27	26
8	42	34	29	25	41	33	28	25	32	28	25	32	28	25	31	27	25	24
9	39	31	26	23	38	31	26	23	30	26	23	29	25	23	29	25	23	21
10	37	29	24	21	36	29	24	21	28	24	21	27	24	21	27	23	21	20

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14608	14608	14608
5°	14769	14674	14483
10°	14929	14596	14513
15°	14612	14199	14244
20°	14977	14582	13837
25°	14560	13923	12106
30°	14097	12637	9614
35°	13447	10648	7651
40°	13250	9005	6554
45°	11152	6189	5275
50°	12351	6314	5886
55°	11357	5687	5807
60°	10173	5267	6392
65°	8797	5124	6912
70°	7060	5453	5892
75°	4867	4444	4552
80°	2608	2682	1495
85°	934	759	613



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	545.5	4.9	3.1	0°	5741	5741	5741	5741	5741	
10°-20°	1547.0	13.8	8.8	5°	5782	5777	5745	5702	5670	551
20°-30°	2198.1	19.6	12.5	15°	5547	5476	5390	5412	5407	1585
30°-40°	2170.1	19.4	12.3	25°	5186	5034	4959	4565	4312	2387
40°-50°	1754.0	15.7	10.0	35°	4329	4236	3428	2695	2463	2732
50°-60°	1460.3	13.0	8.3	45°	3099	2900	1720	1444	1466	2569
60°-70°	1004.7	9.0	5.7	55°	2560	1935	1282	1277	1309	2289
70°-80°	466.4	4.2	2.7	65°	1461	830	851	1083	1148	1451
80°-90°	60.5	0.5	0.3	75°	495	339	452	480	463	558
90°-100°	0.0	0.0	0.0	85°	32	48	26	26	21	66
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°	4290.6	38.3	24.4							
0°-40°	6460.8	57.7	36.7							
0°-60°	9675.1	86.3	55.0							
0°-90°	11206.7	100.0	63.7							
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°	11206.7	100.0	63.7							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5741	5741	5741	5741	5741
5°	5782	5777	5745	5702	5670
10°	5778	5746	5649	5612	5617
15°	5547	5476	5390	5412	5407
20°	5531	5390	5385	5234	5110
25°	5186	5034	4959	4565	4312
30°	4798	4662	4301	3493	3272
35°	4329	4236	3428	2695	2463
40°	3989	3827	2711	2059	1973
45°	3099	2900	1720	1444	1466
50°	3120	2706	1595	1514	1487
55°	2560	1935	1282	1277	1309
60°	1999	1320	1035	1175	1256
65°	1461	830	851	1083	1148
70°	949	528	733	814	792
75°	495	339	452	480	463
80°	178	178	183	135	102
85°	32	48	26	26	21
90°	0	0	0	0	0

(END OF REPORT)