

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: 236p145

Luminaire Tested: **I5-454T5-CL-UNV-EBT2**

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: 236p145
Test Lab: METALUX RESEARCH LABORATORIES
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: I5-454T5-CL-UNV-EBT2
Description: I5 SERIES LUMINAIRE WITH SPECULAR ALUMINUM MEDIUM
DISTRIBUTION REFLECTOR AND CLEAR ACRYLIC LENS
AND DOORFRAME
Light Source: FOUR 54-WATT T5HO - 4400 LUMENS EA
Ballast/Driver: ONE ADVANCE ICN-4S54-90C-2LS

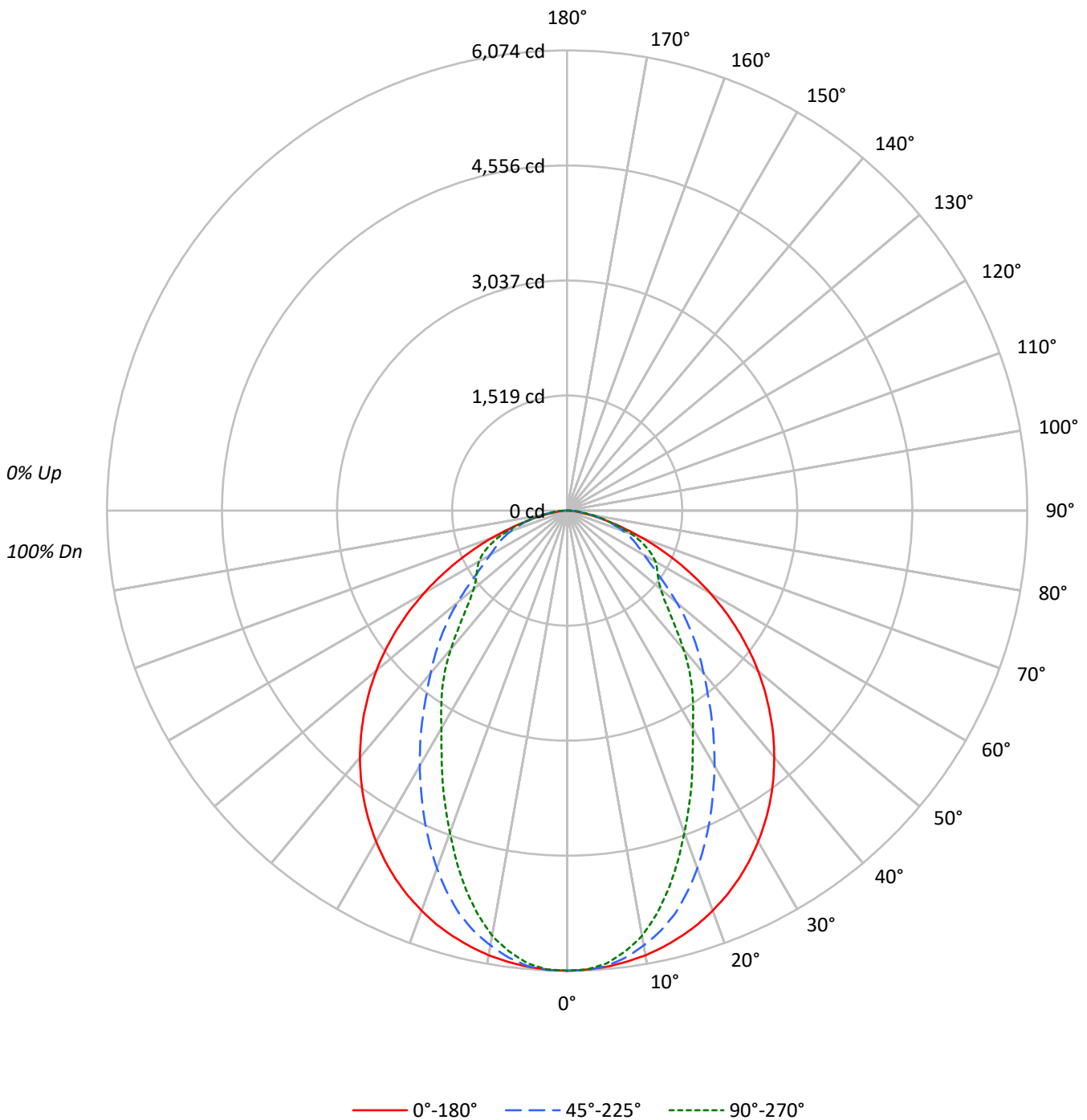
Summary

Lumens per Lamp: 4400 (4 lamps)
Luminaire Lumens: 11804.5 lumens
Efficiency: 67.1%
Efficacy: 59.3 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 0.9 / 1.08
Luminous Opening: Rectangular w/ Sides (W: 0.84' x L: 3.84' x H: 0.06')
CIE Type: Direct

Input Watts (W): 199
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

TEST NUMBER: 236p145
CATALOG NUMBER: I5-454T5-CL-UNV-EBT2

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	80	80	80	80	78	78	78	78	75	75	75		71	71	71		68	68	68	67
1	74	71	68	66	72	69	67	65	67	65	63		64	62	61		62	60	59	58
2	68	63	59	55	66	61	58	54	59	56	53		57	54	52		55	53	51	49
3	62	56	51	47	61	55	50	46	53	49	46		51	48	45		49	46	44	43
4	57	50	45	40	56	49	44	40	48	43	40		46	42	39		45	41	39	37
5	53	45	40	35	52	44	39	35	43	38	35		42	38	35		41	37	34	33
6	49	41	36	31	48	40	35	31	39	35	31		38	34	31		37	33	31	29
7	46	38	32	28	45	37	32	28	36	31	28		35	31	28		34	30	28	26
8	43	35	29	25	42	34	29	25	33	29	25		32	28	25		32	28	25	24
9	40	32	27	23	40	32	27	23	31	26	23		30	26	23		29	26	23	22
10	38	30	25	21	37	29	24	21	29	24	21		28	24	21		27	24	21	20

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	20159	20159	20159
5°	20104	19988	19854
10°	20029	19423	18962
15°	19904	18600	17422
20°	19726	17348	15556
25°	19485	15892	13798
30°	19155	14378	12194
35°	18728	12876	11078
40°	18183	11522	9745
45°	17500	10381	8364
50°	16654	9054	7634
55°	15546	7747	7629
60°	14087	7023	7919
65°	12203	6817	7854
70°	9800	6522	7289
75°	7097	5726	5867
80°	4602	4476	4293
85°	2633	3037	2825



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	569.0	4.8	3.2	0°	6074	6074	6074	6074	6074	
10°-20°	1541.2	13.1	8.8	5°	6043	6040	6033	6018	5998	574
20°-30°	2093.9	17.7	11.9	15°	5818	5725	5506	5265	5171	1641
30°-40°	2219.3	18.8	12.6	25°	5361	5096	4469	4044	3898	2469
40°-50°	1982.1	16.8	11.3	35°	4675	4146	3320	2974	2876	2921
50°-60°	1556.0	13.2	8.8	45°	3789	3030	2353	2024	1914	2919
60°-70°	1115.7	9.5	6.3	55°	2749	1921	1461	1422	1458	2452
70°-80°	581.4	4.9	3.3	65°	1608	1019	987	1125	1159	1592
80°-90°	145.8	1.2	0.8	75°	587	446	553	587	584	647
90°-100°	0.0	0.0	0.0	85°	82	99	138	139	137	109
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°	4204.1	35.6	23.9							
0°-40°	6423.4	54.4	36.5							
0°-60°	9961.6	84.4	56.6							
0°-90°	11804.5	100.0	67.1							
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°	11804.5	100.0	67.1							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	6074	6074	6074	6074	6074
2.5°	6064	6060	6071	6074	6062
5°	6043	6040	6033	6018	5998
7.5°	6008	5998	5948	5894	5870
10°	5960	5933	5828	5745	5700
12.5°	5896	5840	5687	5535	5455
15°	5818	5725	5506	5265	5171
17.5°	5729	5593	5278	4973	4855
20°	5618	5449	5026	4662	4523
22.5°	5498	5282	4751	4343	4207
25°	5361	5096	4469	4044	3898
27.5°	5212	4885	4174	3740	3588
30°	5045	4650	3890	3448	3318
32.5°	4866	4401	3604	3193	3094
35°	4675	4146	3320	2974	2876
37.5°	4470	3874	3047	2754	2643
40°	4254	3595	2802	2520	2389
42.5°	4028	3314	2577	2270	2137
45°	3789	3030	2353	2024	1914
47.5°	3543	2743	2124	1811	1738
50°	3288	2464	1887	1640	1609
52.5°	3023	2186	1659	1513	1520
55°	2749	1921	1461	1422	1458
57.5°	2469	1672	1301	1354	1404
60°	2182	1441	1175	1291	1346
62.5°	1894	1222	1075	1221	1265
65°	1608	1019	987	1125	1159
67.5°	1324	838	895	1011	1040
70°	1055	686	790	885	904
72.5°	807	559	672	742	744
75°	587	446	553	587	584
77.5°	406	342	432	446	443
80°	263	247	319	325	319
82.5°	157	165	219	220	212
85°	82	99	138	139	137
87.5°	29	50	80	89	90
90°	0	0	0	0	0

(END OF REPORT)