

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: 236P109

Luminaire Tested: **I5-254T5-UNV-EBT1**

Issue Date: 3/3/2020



**Test Information**

Test Method: LM-41-14  
Report Number: 236P109  
Test Lab: METALUX LABORATORIES  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: I5-254T5-UNV-EBT1  
Description: I5 SERIES LUMINAIRE WITH SPECULAR ALUMINUM MEDIUM  
DISTRIBUTION REFLECTOR  
Light Source: TWO 54-WATT T5HO - 4400 LUMENS EA  
Ballast/Driver: ONE UNIVERSAL B254PUNV-D

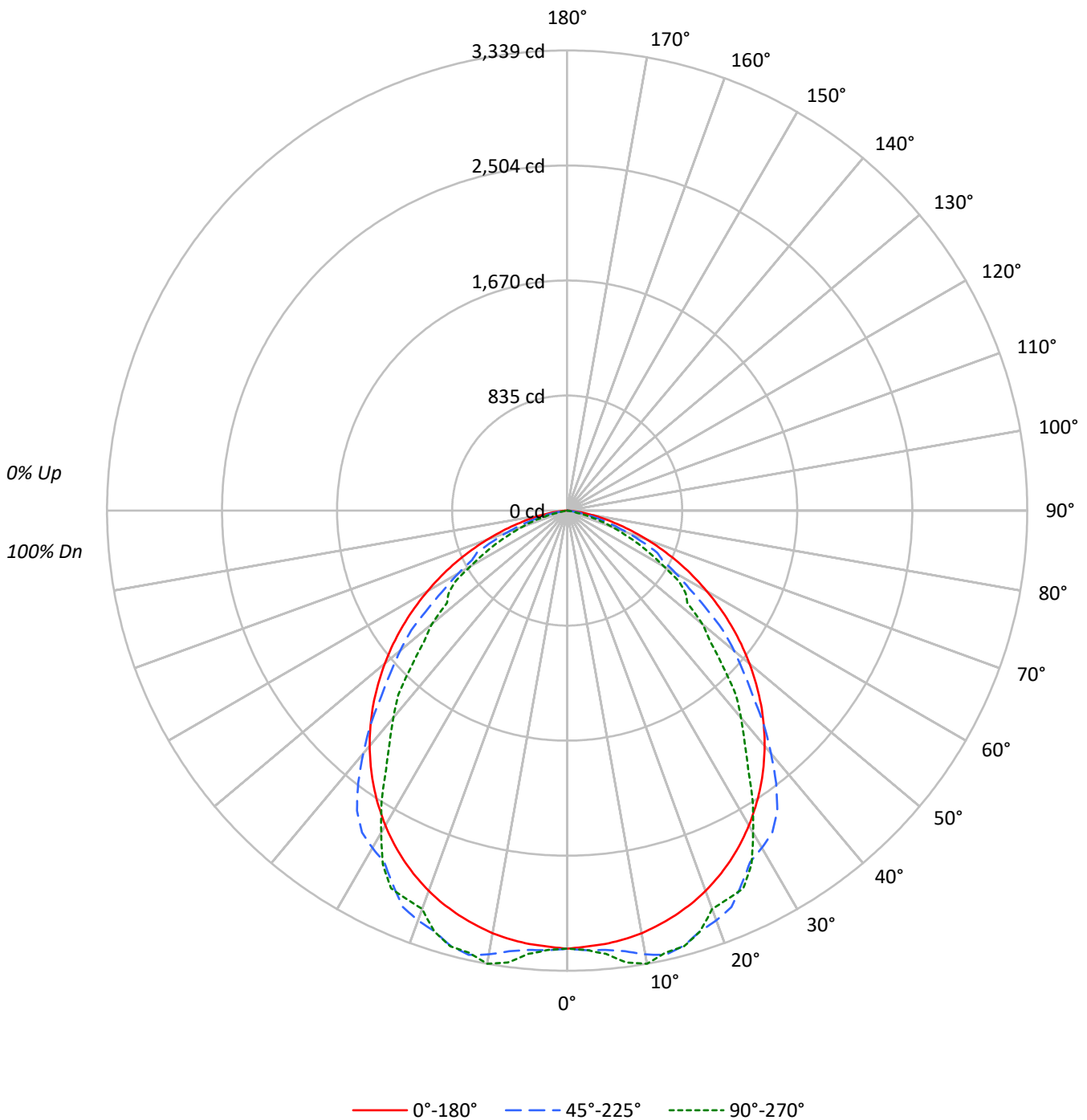
**Summary**

Lumens per Lamp: 4400 (2 lamps)  
Luminaire Lumens: 7787.3 lumens  
Efficiency: 88.5%  
Efficacy: 70.8 lumens/watt  
Spacing Criteria (0/90/45): 1.23 / 1.23 / 1.32  
Luminous Opening: Rectangular (W 0.85' x L: 3.83' x H: 0')  
CIE Type: Direct

Input Watts (W): 110  
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	105	105	105	105	103	103	103	103	98	98	98	94	94	94	90	90	90	88
1	98	94	91	88	95	92	89	86	88	86	84	85	83	81	82	80	79	77
2	90	83	78	73	87	82	77	72	78	74	71	76	72	69	73	70	68	66
3	82	74	67	62	80	73	66	62	70	65	61	68	63	59	65	62	58	57
4	76	66	59	53	74	65	58	53	63	57	52	61	56	52	59	55	51	49
5	70	59	52	47	68	58	52	46	57	51	46	55	50	45	53	49	45	43
6	65	54	46	41	63	53	46	41	51	45	41	50	44	40	49	44	40	38
7	60	49	42	37	59	48	41	36	47	41	36	46	40	36	45	39	36	34
8	56	45	38	33	55	44	37	33	43	37	32	42	36	32	41	36	32	30
9	53	41	34	30	51	41	34	30	40	34	29	39	33	29	38	33	29	28
10	49	38	31	27	48	38	31	27	37	31	27	36	31	27	35	30	27	25

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

	0°	45°	90°
0°	10511	10511	10511
5°	10478	10621	10717
10°	10455	10979	11210
15°	10403	11190	11207
20°	10334	11133	10823
25°	10222	10919	11032
30°	10072	10789	10301
35°	9877	10733	9243
40°	9621	9932	8468
45°	9300	8917	7463
50°	8883	8127	6594
55°	8376	7033	6058
60°	7737	6031	5370
65°	6971	5649	4428
70°	5974	4457	3413
75°	4791	3181	2082
80°	3446	1599	209
85°	1707	341	76



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**ZONAL LUMENS:**

**CANDELA DISTRIBUTION:**

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	307.3	3.9	3.5	0°	3179	3179	3179	3179	3179	
10°-20°	903.5	11.6	10.3	5°	3157	3180	3200	3225	3229	300
20°-30°	1367.5	17.6	15.5	15°	3039	3136	3269	3268	3274	857
30°-40°	1570.1	20.2	17.8	25°	2802	3016	2993	3011	3024	1290
40°-50°	1458.2	18.7	16.6	35°	2447	2655	2659	2408	2290	1529
50°-60°	1149.5	14.8	13.1	45°	1989	2134	1907	1722	1596	1532
60°-70°	720.4	9.3	8.2	55°	1453	1600	1220	1026	1051	1297
70°-80°	281.0	3.6	3.2	65°	891	872	722	605	566	882
80°-90°	29.9	0.4	0.3	75°	375	325	249	192	163	405
90°-100°	0.0	0.0	0.0	85°	45	29	9	6	2	68
100°-110°	0.0	0.0	0.0	90°	0	0	0	0	0	2
110°-120°	0.0	0.0	0.0	95°	0	0	0	0	0	0
120°-130°	0.0	0.0	0.0	105°	0	0	0	0	0	0
130°-140°	0.0	0.0	0.0	115°	0	0	0	0	0	0
140°-150°	0.0	0.0	0.0	125°	0	0	0	0	0	0
150°-160°	0.0	0.0	0.0	135°	0	0	0	0	0	0
160°-170°	0.0	0.0	0.0	145°	0	0	0	0	0	0
170°-180°	0.0	0.0	0.0	155°	0	0	0	0	0	0
0°-30°	2578.2	33.1	29.3	165°	0	0	0	0	0	0
0°-40°	4148.3	53.3	47.1	175°	0	0	0	0	0	0
0°-60°	6756.0	86.8	76.8	180°	0	0	0	0	0	0
0°-90°	7787.3	100.0	88.5							
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°	7787.3	100.0	88.5							



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3179	3179	3179	3179	3179
2.5°	3167	3184	3193	3197	3191
5°	3157	3180	3200	3225	3229
7.5°	3139	3172	3225	3292	3308
10°	3114	3159	3270	3342	3339
12.5°	3079	3146	3302	3301	3286
15°	3039	3136	3269	3268	3274
17.5°	2992	3126	3201	3234	3203
20°	2937	3111	3164	3112	3076
22.5°	2873	3078	3114	3022	3050
25°	2802	3016	2993	3011	3024
27.5°	2724	2925	2875	2946	2895
30°	2638	2826	2826	2793	2698
32.5°	2546	2741	2770	2598	2506
35°	2447	2655	2659	2408	2290
37.5°	2341	2554	2490	2194	2114
40°	2229	2419	2301	2025	1962
42.5°	2113	2268	2116	1875	1813
45°	1989	2134	1907	1722	1596
47.5°	1859	2028	1736	1504	1410
50°	1727	1918	1580	1330	1282
52.5°	1591	1775	1424	1194	1098
55°	1453	1600	1220	1026	1051
57.5°	1312	1411	1050	983	968
60°	1170	1223	912	880	812
62.5°	1032	1031	777	727	684
65°	891	872	722	605	566
67.5°	751	727	585	487	448
70°	618	560	461	378	353
72.5°	491	427	348	287	258
75°	375	325	249	192	163
77.5°	271	242	164	102	74
80°	181	150	84	26	11
82.5°	107	80	21	7	3
85°	45	29	9	6	2
87.5°	17	11	7	4	2
90°	0	0	0	0	0
92.5°	0	0	0	0	0
95°	0	0	0	0	0
97.5°	0	0	0	0	0
100°	0	0	0	0	0
102.5°	0	0	0	0	0
105°	0	0	0	0	0
107.5°	0	0	0	0	0
110°	0	0	0	0	0



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	0	0	0	0	0
115°	0	0	0	0	0
117.5°	0	0	0	0	0
120°	0	0	0	0	0
122.5°	0	0	0	0	0
125°	0	0	0	0	0
127.5°	0	0	0	0	0
130°	0	0	0	0	0
132.5°	0	0	0	0	0
135°	0	0	0	0	0
137.5°	0	0	0	0	0
140°	0	0	0	0	0
142.5°	0	0	0	0	0
145°	0	0	0	0	0
147.5°	0	0	0	0	0
150°	0	0	0	0	0
152.5°	0	0	0	0	0
155°	0	0	0	0	0
157.5°	0	0	0	0	0
160°	0	0	0	0	0
162.5°	0	0	0	0	0
165°	0	0	0	0	0
167.5°	0	0	0	0	0
170°	0	0	0	0	0
172.5°	0	0	0	0	0
175°	0	0	0	0	0
177.5°	0	0	0	0	0
180°	0	0	0	0	0

(END OF REPORT)