

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: 236P111

Luminaire Tested: **I5-254T5-G-TBW-UNV-EBT1-UPL**

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: 236P111
Test Lab: METALUX LABORATORIES
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: I5-254T5-G-TBW-UNV-EBT1-UPL
Description: I5 SERIES LUMINAIRE WITH HIGH REFLECTANCE WHITE WIDE
DISTRIBUTION REFLECTOR, UPLIGHT, AND THIN WHITE LOUVER
Light Source: TWO 54-WATT T5HO - 4400 LUMENS EA
Ballast/Driver: ONE UNIVERSAL B254PUNV-D

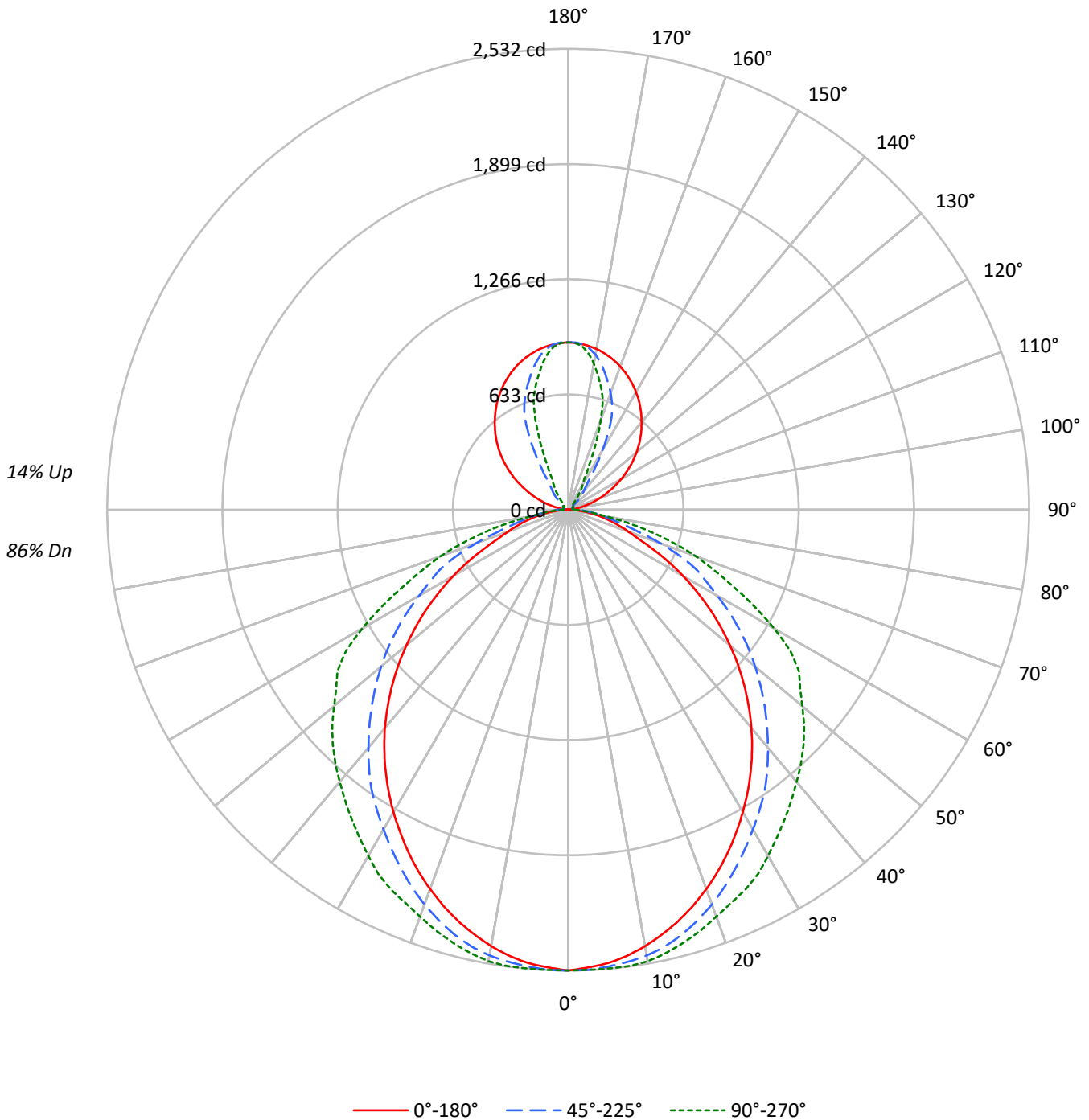
Summary

Lumens per Lamp: 4400 (2 lamps)
Luminaire Lumens: 7711.0 lumens
Efficiency: 87.6%
Efficacy: 65.9 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.29 / 1.32
Luminous Opening: Rectangular w/ Sides (W: 0.85' x L: 3.83' x H: 0.19')
CIE Type: Semi-Direct

Input Watts (W): 117
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	101	101	101	101	97	97	97	97	90	90	90	84	84	84	78	78	78	75
1	93	89	85	82	89	86	82	80	80	77	75	74	72	70	69	67	66	63
2	85	78	72	67	81	75	70	66	70	66	62	65	62	59	61	58	56	53
3	77	68	62	56	74	66	60	55	62	57	52	58	54	50	54	51	48	45
4	71	61	53	48	68	59	52	47	55	49	45	52	47	43	48	44	41	39
5	65	54	47	41	62	53	46	40	49	43	39	46	41	37	44	39	36	34
6	60	49	41	36	58	47	40	35	45	39	34	42	37	33	40	35	32	30
7	56	44	37	32	54	43	36	31	41	35	30	38	33	29	36	32	28	26
8	52	40	33	28	50	39	33	28	37	31	27	35	30	26	33	29	25	23
9	48	37	30	25	47	36	30	25	34	28	24	32	27	23	31	26	23	21
10	45	34	27	23	44	33	27	23	32	26	22	30	25	21	28	24	21	19

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8372	8372	8372
5°	8265	8225	8239
10°	8104	8075	8137
15°	7901	7863	7948
20°	7666	7587	7741
25°	7406	7276	7609
30°	7123	6969	7426
35°	6823	6691	7238
40°	6489	6340	7094
45°	6094	5980	6986
50°	5634	5607	6816
55°	5092	5187	6760
60°	4439	4678	6226
65°	3628	4304	5294
70°	2978	3398	4456
75°	2609	2287	3266
80°	2170	1699	1755
85°	1525	1254	1014



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	239.3	3.1	2.7	0°	2532	2532	2532	2532	2532	
10°-20°	678.6	8.8	7.7	5°	2501	2508	2520	2533	2531	237
20°-30°	1007.0	13.1	11.4	15°	2339	2367	2416	2452	2461	659
30°-40°	1186.3	15.4	13.5	25°	2077	2125	2174	2256	2303	956
40°-50°	1203.1	15.6	13.7	35°	1749	1794	1882	2002	2074	1093
50°-60°	1062.0	13.8	12.1	45°	1368	1408	1526	1709	1828	1054
60°-70°	745.3	9.7	8.5	55°	946	994	1148	1371	1547	844
70°-80°	365.3	4.7	4.2	65°	513	566	778	915	1001	516
80°-90°	113.5	1.5	1.3	75°	242	260	308	426	469	258
90°-100°	32.4	0.4	0.4	85°	63	79	106	128	95	68
100°-110°	36.9	0.5	0.4	90°	0	25	53	74	26	4
110°-120°	59.7	0.8	0.7	95°	15	15	32	46	26	21
120°-130°	88.7	1.2	1.0	105°	115	19	23	26	25	123
130°-140°	141.6	1.8	1.6	115°	256	36	29	29	29	255
140°-150°	199.6	2.6	2.3	125°	414	102	32	32	31	370
150°-160°	247.7	3.2	2.8	135°	561	316	88	33	28	432
160°-170°	218.8	2.8	2.5	145°	690	545	198	128	103	431
170°-180°	85.3	1.1	1.0	155°	794	716	567	354	276	366
0°-30°	1924.9	25.0	21.9	165°	871	853	778	722	697	246
0°-40°	3111.2	40.3	35.4	175°	913	915	913	908	900	87
0°-60°	5376.3	69.7	61.1	180°	920	920	920	920	920	
0°-90°	6600.3	85.6	75.0							
90°-120°	129.0	1.7	1.5							
90°-150°	558.9	7.2	6.4							
90°-180°	1111.0	14.4	12.6							
0°-180°	7711.0	100.0	87.6							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2532	2532	2532	2532	2532
2.5°	2518	2524	2531	2535	2531
5°	2501	2508	2520	2533	2531
7.5°	2473	2483	2506	2528	2530
10°	2435	2450	2487	2514	2519
12.5°	2390	2411	2458	2487	2494
15°	2339	2367	2416	2452	2461
17.5°	2281	2317	2365	2407	2423
20°	2218	2260	2308	2356	2379
22.5°	2150	2196	2244	2304	2338
25°	2077	2125	2174	2256	2303
27.5°	1999	2048	2102	2206	2257
30°	1919	1967	2029	2145	2196
32.5°	1836	1882	1956	2074	2134
35°	1749	1794	1882	2002	2074
37.5°	1659	1702	1797	1929	2013
40°	1566	1607	1707	1855	1952
42.5°	1468	1510	1617	1782	1892
45°	1368	1408	1526	1709	1828
47.5°	1266	1306	1434	1631	1758
50°	1160	1203	1341	1548	1678
52.5°	1054	1100	1247	1455	1605
55°	946	994	1148	1371	1547
57.5°	837	884	1049	1306	1448
60°	729	776	944	1203	1306
62.5°	621	668	855	1061	1155
65°	513	566	778	915	1001
67.5°	415	469	667	767	866
70°	350	382	538	650	744
72.5°	295	310	407	537	605
75°	242	260	308	426	469
77.5°	192	223	239	323	335
80°	146	167	187	235	209
82.5°	103	118	147	164	135
85°	63	79	106	128	95
87.5°	25	46	76	98	57
90°	0	25	53	74	26
92.5°	3	16	38	56	20
95°	15	15	32	46	26
97.5°	33	14	27	35	23
100°	56	15	24	29	24
102.5°	83	16	22	26	24
105°	115	19	23	26	25
107.5°	149	21	24	26	26
110°	184	24	24	27	28



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	219	28	26	28	28
115°	256	36	29	29	29
117.5°	296	51	30	31	31
120°	336	69	30	31	33
122.5°	375	85	30	32	32
125°	414	102	32	32	31
127.5°	452	131	34	31	30
130°	490	181	43	30	29
132.5°	526	247	62	31	28
135°	561	316	88	33	28
137.5°	595	386	113	42	31
140°	627	450	133	65	42
142.5°	659	499	154	97	68
145°	690	545	198	128	103
147.5°	719	588	278	152	135
150°	746	630	375	177	161
152.5°	771	672	473	242	192
155°	794	716	567	354	276
157.5°	817	757	629	472	400
160°	837	793	682	587	525
162.5°	855	825	730	663	632
165°	871	853	778	722	697
167.5°	885	877	826	775	755
170°	897	895	865	832	814
172.5°	906	908	894	877	864
175°	913	915	913	908	900
177.5°	917	918	920	921	917
180°	920	920	920	920	920

(END OF REPORT)