

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: 167P121

Luminaire Tested: **RWW-154T5MI**

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: 167P121
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: RWW-154T5MI
Description: Recessed Wall Wash Luminaire
Light Source: One - F54T5/830/HO - 5000 Lumens - 54 Watts
Ballast/Driver: Energy Savings - ES-1-T5-54-120-F-LG - L.O.B.F. = 96.4%

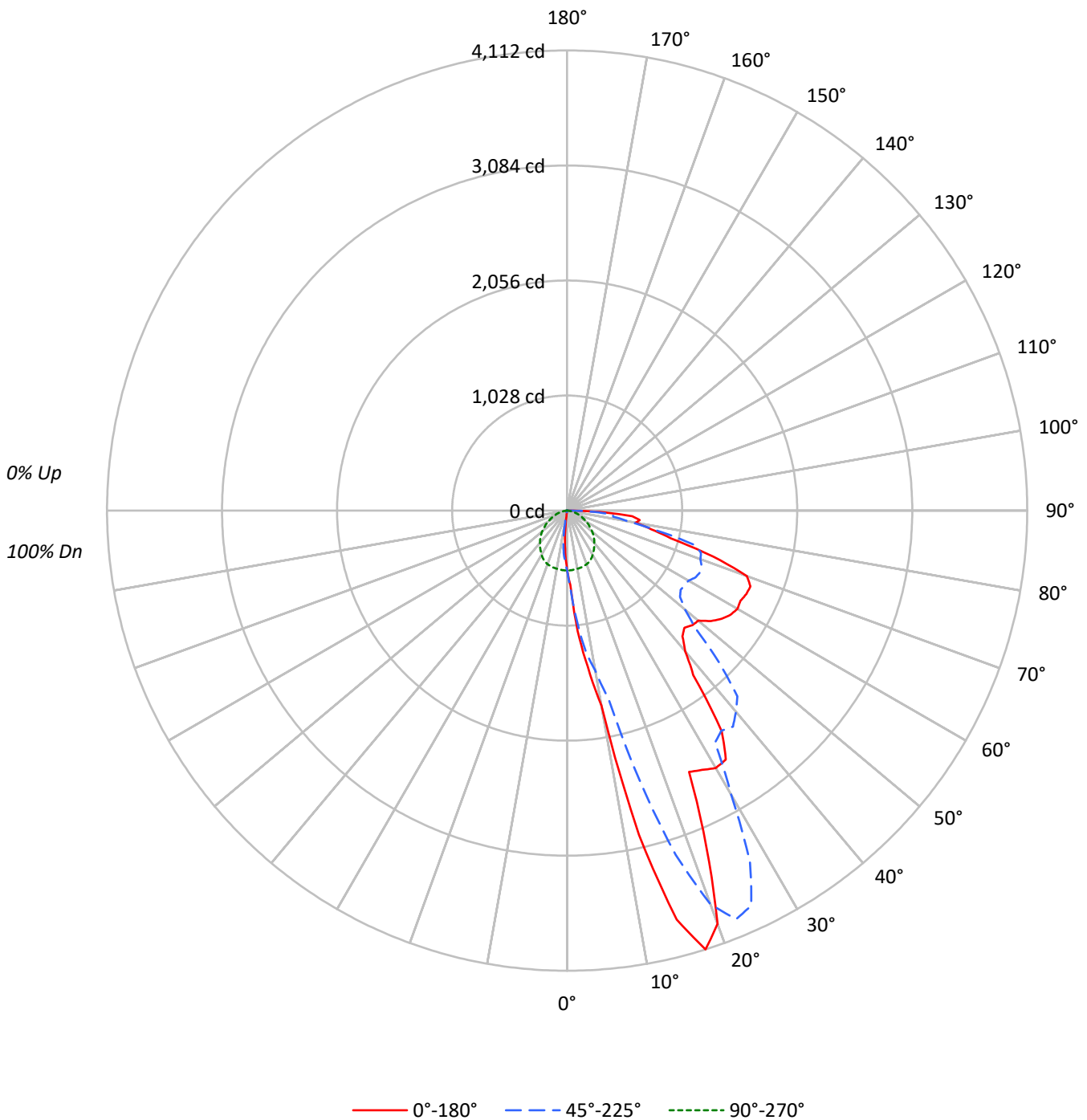
Summary

Lumens per Lamp: 5000 (1 lamp)
Luminaire Lumens: 4290.2 lumens
Efficiency: 85.8%
Efficacy: 73.6 lumens/watt
Spacing Criteria (0/90/45): 1.98 / 1.26 / 1.91
Luminous Opening: Rectangular (W 3.9' x L: 0.66' x H: 0')
CIE Type: Direct

Input Watts (W): 58.3
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	102	102	102	102	100	100	100	100	95	95	95	91	91	91	88	88	88	86
1	92	87	83	79	90	85	81	78	82	78	75	78	76	73	75	73	71	69
2	83	75	69	63	81	73	67	62	70	65	61	67	63	59	65	61	58	56
3	75	65	58	52	73	64	57	51	61	55	50	59	54	49	57	52	48	46
4	69	58	49	43	66	56	49	43	54	48	42	52	46	42	50	45	41	39
5	63	51	43	37	61	50	42	37	48	41	36	47	41	36	45	40	35	34
6	58	46	38	32	56	45	37	32	43	37	32	42	36	31	41	35	31	29
7	54	41	34	28	52	41	33	28	39	33	28	38	32	28	37	31	27	25
8	50	38	30	25	48	37	30	25	36	29	25	35	29	24	34	28	24	23
9	46	34	27	22	45	34	27	22	33	27	22	32	26	22	31	26	22	20
10	43	32	25	20	42	31	25	20	30	24	20	30	24	20	29	23	20	18

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	2244	2244	2244
5°	4560	2252	925
10°	7562	2257	56
15°	16492	2271	48
20°	17602	2285	36
25°	11970	2271	33
30°	12911	2222	29
35°	12381	2148	36
40°	9024	2077	33
45°	8817	2006	36
50°	10021	1912	33
55°	12382	1784	37
60°	14794	1650	42
65°	17592	1514	50
70°	21048	1379	62
75°	15583	1236	81
80°	15080	970	145
85°	28257	435	242



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	45°	90°	135°	180°	Flux
0°-10°	65.2	1.5	1.3	0°	533	533	533	533	533	
10°-20°	353.6	8.2	7.1	5°	1079	985	533	363	219	123
20°-30°	621.9	14.5	12.4	15°	3784	2486	521	11	11	1004
30°-40°	745.5	17.4	14.9	25°	2577	3893	489	6	7	1340
40°-50°	671.2	15.6	13.4	35°	2409	2401	418	4	7	1406
50°-60°	616.7	14.4	12.3	45°	1481	1916	337	3	6	1182
60°-70°	610.5	14.2	12.2	55°	1687	1237	243	3	5	1501
70°-80°	438.5	10.2	8.8	65°	1766	1309	152	2	5	1742
80°-90°	167.1	3.9	3.3	75°	958	1168	76	2	5	1123
90°-100°	0.0	0.0	0.0	85°	585	408	9	2	5	462
100°-110°	0.0	0.0	0.0	90°	0	0	0	0	0	40
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°	1040.7	24.3	20.8	165°	0	0	0	0	0	0
0°-40°	1786.3	41.6	35.7	175°	0	0	0	0	0	0
0°-60°	3074.1	71.7	61.5	180°	0	0	0	0	0	0
0°-90°	4290.2	100.0	85.8							
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°	4290.2	100.0	85.8							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	533	533	533	533	533	533	533	533	533
2.5°	666	784	705	600	535	489	450	425	374
5°	1079	1164	985	715	533	440	363	306	219
7.5°	1409	1452	1268	870	531	392	257	124	48
10°	1769	1882	1458	1027	528	343	105	29	13
12.5°	2969	2903	1740	1186	525	293	33	11	12
15°	3784	3668	2486	1312	521	208	11	10	11
17.5°	4112	4075	3225	1395	516	112	9	9	10
20°	3929	4005	3744	1482	510	60	8	8	8
22.5°	3250	3486	3951	1659	501	30	7	7	8
25°	2577	2778	3893	2012	489	15	6	6	7
27.5°	2612	2566	3538	2515	474	11	6	6	7
30°	2656	2652	2931	2821	457	10	5	5	6
32.5°	2639	2600	2459	3067	438	9	4	5	6
35°	2409	2531	2401	3214	418	7	4	5	7
37.5°	1851	2139	2433	3203	398	7	4	5	8
40°	1642	1736	2347	3088	378	6	3	4	6
42.5°	1524	1564	2250	2847	358	5	3	4	5
45°	1481	1475	1916	2481	337	4	3	4	6
47.5°	1517	1459	1548	2028	315	4	3	4	5
50°	1530	1486	1375	1716	292	2	3	4	5
52.5°	1620	1519	1271	1631	268	2	3	4	5
55°	1687	1590	1237	1593	243	2	3	4	5
57.5°	1732	1635	1242	1494	220	2	3	4	5
60°	1757	1664	1253	1366	196	1	2	4	5
62.5°	1746	1661	1293	1090	173	1	2	4	6
65°	1766	1663	1309	871	152	1	2	4	5
67.5°	1773	1673	1299	744	132	1	3	4	5
70°	1710	1629	1268	695	112	1	2	4	5
72.5°	1369	1383	1254	653	95	1	3	4	5
75°	958	949	1168	643	76	1	2	4	5
77.5°	770	734	816	597	58	1	2	4	5
80°	622	580	553	535	40	1	2	4	6
82.5°	655	606	416	392	23	1	2	4	5
85°	585	510	408	196	9	1	2	4	5
87.5°	291	201	198	140	3	1	2	4	5
90°	0	0	0	0	0	0	0	0	0
92.5°	0	0	0	0	0	0	0	0	0
95°	0	0	0	0	0	0	0	0	0
97.5°	0	0	0	0	0	0	0	0	0
100°	0	0	0	0	0	0	0	0	0
102.5°	0	0	0	0	0	0	0	0	0
105°	0	0	0	0	0	0	0	0	0
107.5°	0	0	0	0	0	0	0	0	0
110°	0	0	0	0	0	0	0	0	0



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CANDELA DISTRIBUTION (continued):

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

(END OF REPORT)