

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: 122p111

Luminaire Tested: **SNF-254T5-UNV-EBT-1**

Issue Date: 3/3/2020



**Test Information**

Test Method: LM-41-14  
Report Number: 122p111  
Test Lab: METALUX RESEARCH LABS  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: SNF-254T5-UNV-EBT-1  
Description: COMMERCIAL NARROW STRIP, T5 LAMP  
Light Source: TWO T5 LINEAR FLUORESCENT HIGH OUTPUT LAMP  
F54T5/850 54 WATTS  
Ballast/Driver: -

**Summary**

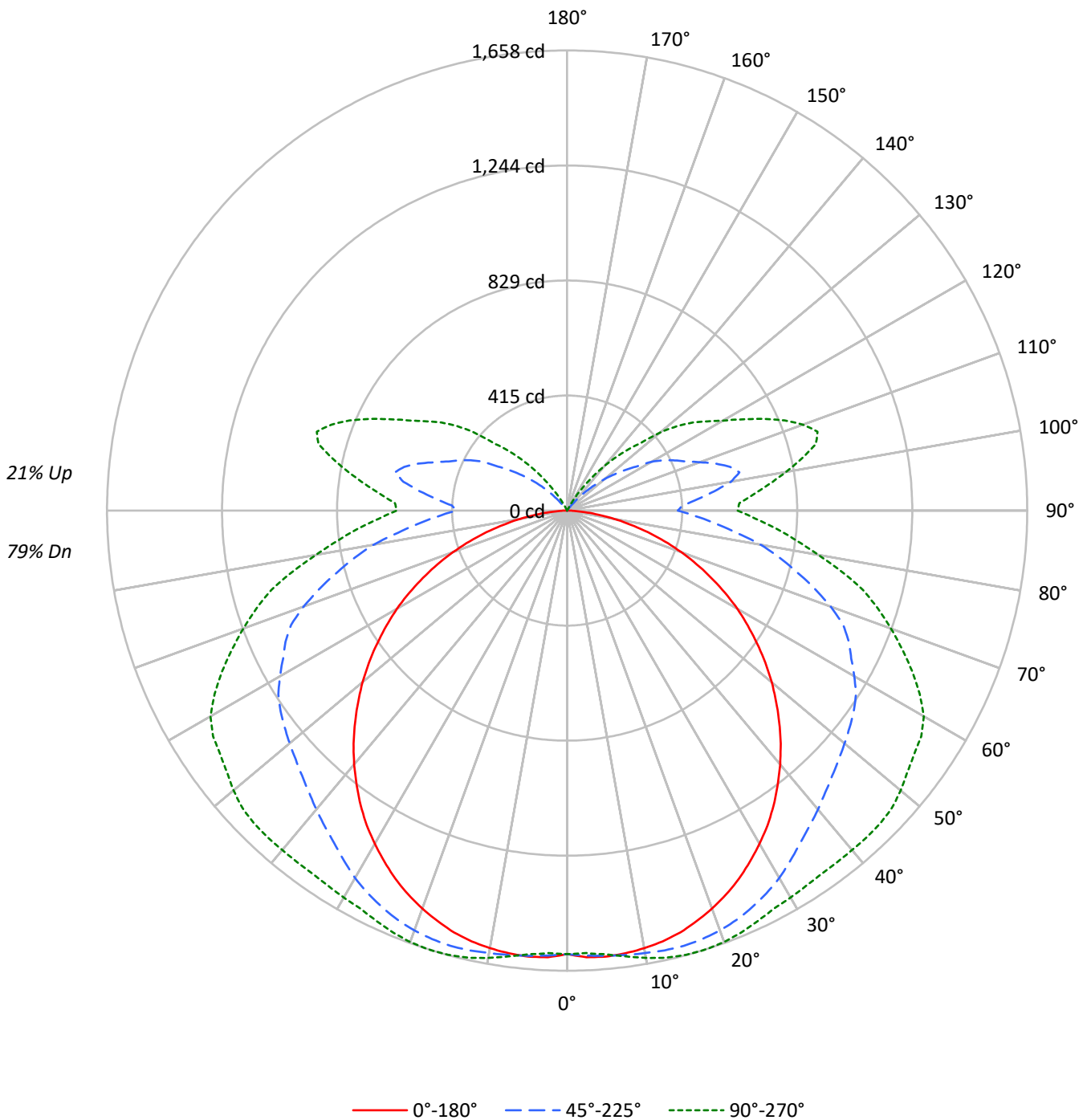
Lumens per Lamp: 4400 (2 lamps)  
Luminaire Lumens: 8570.1 lumens  
Efficiency: 97.4%  
Efficacy: 71.4 lumens/watt  
Spacing Criteria (0/90/45): 1.28 / 1.53 / 1.58  
Luminous Opening: Rectangular (W 0.23' x L: 3.83' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 120  
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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	111	111	111	111	106	106	106	106	97	97	97	89	89	89	81	81	81
1	99	93	88	83	94	89	84	80	81	77	74	73	71	68	67	64	62
2	88	79	72	65	84	76	69	63	69	63	58	63	58	54	57	53	50
3	80	68	60	53	76	65	57	51	59	53	47	54	49	44	49	45	41
4	73	60	51	44	69	57	49	42	52	45	39	47	42	37	43	38	34
5	66	53	44	37	63	51	42	36	46	39	33	42	36	31	38	33	29
6	61	47	38	32	58	45	37	31	41	34	29	38	32	27	35	29	25
7	56	43	34	28	53	41	33	27	37	30	25	34	28	24	31	26	22
8	52	39	30	24	50	37	29	24	34	27	22	31	25	21	29	24	20
9	49	35	27	22	46	34	26	21	31	25	20	29	23	19	26	21	18
10	45	32	25	19	43	31	24	19	29	22	18	27	21	17	25	19	16

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

	0°	45°	90°
0°	19580	19580	19580
5°	19840	19803	19741
10°	19920	20144	20368
15°	19967	20601	21019
20°	19898	20993	21567
25°	19793	21321	22037
30°	19610	21633	22779
35°	19401	21884	23903
40°	19098	22489	25544
45°	18732	23411	27639
50°	18338	24876	29909
55°	17859	26938	32620
60°	17350	29285	36367
65°	16613	32472	39778
70°	15656	36184	44459
75°	14250	40572	52265
80°	12066	49958	64847
85°	8857	75355	106565



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**ZONAL LUMENS:**

**CANDELA DISTRIBUTION:**

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	154.0	1.8	1.7	0°	1598	1598	1598	1598	1598	
10°-20°	457.9	5.3	5.2	5°	1613	1608	1610	1613	1605	154
20°-30°	722.0	8.4	8.2	15°	1574	1586	1624	1655	1657	444
30°-40°	917.6	10.7	10.4	25°	1464	1513	1577	1621	1630	674
40°-50°	1045.7	12.2	11.9	35°	1297	1379	1463	1560	1598	811
50°-60°	1091.2	12.7	12.4	45°	1081	1193	1351	1530	1595	834
60°-70°	1034.9	12.1	11.8	55°	836	974	1261	1454	1527	748
70°-80°	842.7	9.8	9.6	65°	573	783	1120	1310	1372	567
80°-90°	537.4	6.3	6.1	75°	301	608	857	1042	1104	318
90°-100°	463.2	5.4	5.3	85°	63	307	536	699	758	74
100°-110°	548.1	6.4	6.2	90°	2	181	399	557	614	4
110°-120°	396.8	4.6	4.5	95°	1	260	471	621	674	1
120°-130°	230.9	2.7	2.6	105°	0	207	608	867	928	0
130°-140°	102.2	1.2	1.2	115°	0	93	428	681	782	0
140°-150°	24.4	0.3	0.3	125°	1	11	253	483	553	1
150°-160°	0.8	0.0	0.0	135°	1	1	105	256	313	1
160°-170°	0.0	0.0	0.0	145°	1	1	2	77	115	1
170°-180°	0.0	0.0	0.0	155°	2	2	1	0	0	1
0°-30°	1333.9	15.6	15.2	165°	0	0	0	0	0	0
0°-40°	2251.5	26.3	25.6	175°	0	0	0	0	0	0
0°-60°	4388.4	51.2	49.9	180°	0	0	0	0	0	0
0°-90°	6803.5	79.4	77.3							
90°-120°	1408.2	16.4	16.0							
90°-150°	1765.8	20.6	20.1							
90°-180°	1767.0	20.6	20.1							
0°-180°	8570.1	100.0	97.4							



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1598	1598	1598	1598	1598
2.5°	1611	1606	1605	1605	1596
5°	1613	1608	1610	1613	1605
7.5°	1609	1607	1615	1625	1620
10°	1601	1603	1619	1639	1637
12.5°	1590	1596	1623	1651	1650
15°	1574	1586	1624	1655	1657
17.5°	1551	1572	1619	1654	1658
20°	1526	1556	1610	1649	1654
22.5°	1497	1536	1596	1638	1644
25°	1464	1513	1577	1621	1630
27.5°	1426	1485	1555	1602	1616
30°	1386	1454	1529	1587	1610
32.5°	1344	1418	1496	1574	1603
35°	1297	1379	1463	1560	1598
37.5°	1246	1337	1434	1550	1597
40°	1194	1292	1406	1543	1597
42.5°	1139	1243	1377	1537	1597
45°	1081	1193	1351	1530	1595
47.5°	1022	1139	1327	1522	1587
50°	962	1084	1305	1508	1569
52.5°	900	1027	1283	1483	1546
55°	836	974	1261	1454	1527
57.5°	772	922	1234	1431	1513
60°	708	871	1195	1410	1484
62.5°	641	823	1154	1370	1432
65°	573	783	1120	1310	1372
67.5°	505	748	1077	1247	1307
70°	437	713	1010	1178	1241
72.5°	368	664	935	1109	1174
75°	301	608	857	1042	1104
77.5°	234	548	784	958	1012
80°	171	464	708	864	919
82.5°	113	381	616	776	835
85°	63	307	536	699	758
87.5°	24	235	464	623	680
90°	2	181	399	557	614
92.5°	1	205	416	567	621
95°	1	260	471	621	674
97.5°	1	293	535	683	735
100°	1	264	599	749	800
102.5°	0	228	636	815	866
105°	0	207	608	867	928
107.5°	0	182	562	853	946
110°	0	142	509	805	905



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	0	116	462	746	848
115°	0	93	428	681	782
117.5°	0	70	393	620	711
120°	1	48	352	570	648
122.5°	1	28	295	530	598
125°	1	11	253	483	553
127.5°	1	3	215	428	500
130°	1	1	177	358	438
132.5°	1	1	140	306	360
135°	1	1	105	256	313
137.5°	1	1	70	208	261
140°	1	1	39	162	211
142.5°	2	1	13	118	163
145°	1	1	2	77	115
147.5°	2	1	1	40	72
150°	2	2	1	10	34
152.5°	2	2	1	0	5
155°	2	2	1	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)