

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: 122p112

Luminaire Tested: **SNF-154T5-UNV-EBT-1**

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: 122p112
Test Lab: METALUX RESEARCH LABS
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: SNF-154T5-UNV-EBT-1
Description: COMMERCIAL NARROW STRIP, T5 LAMP
Light Source: ONE T5 LINEAR FLUORESCENT HIGH OUTPUT LAMP
F54T5/850 54 WATTS
Ballast/Driver: -

Summary

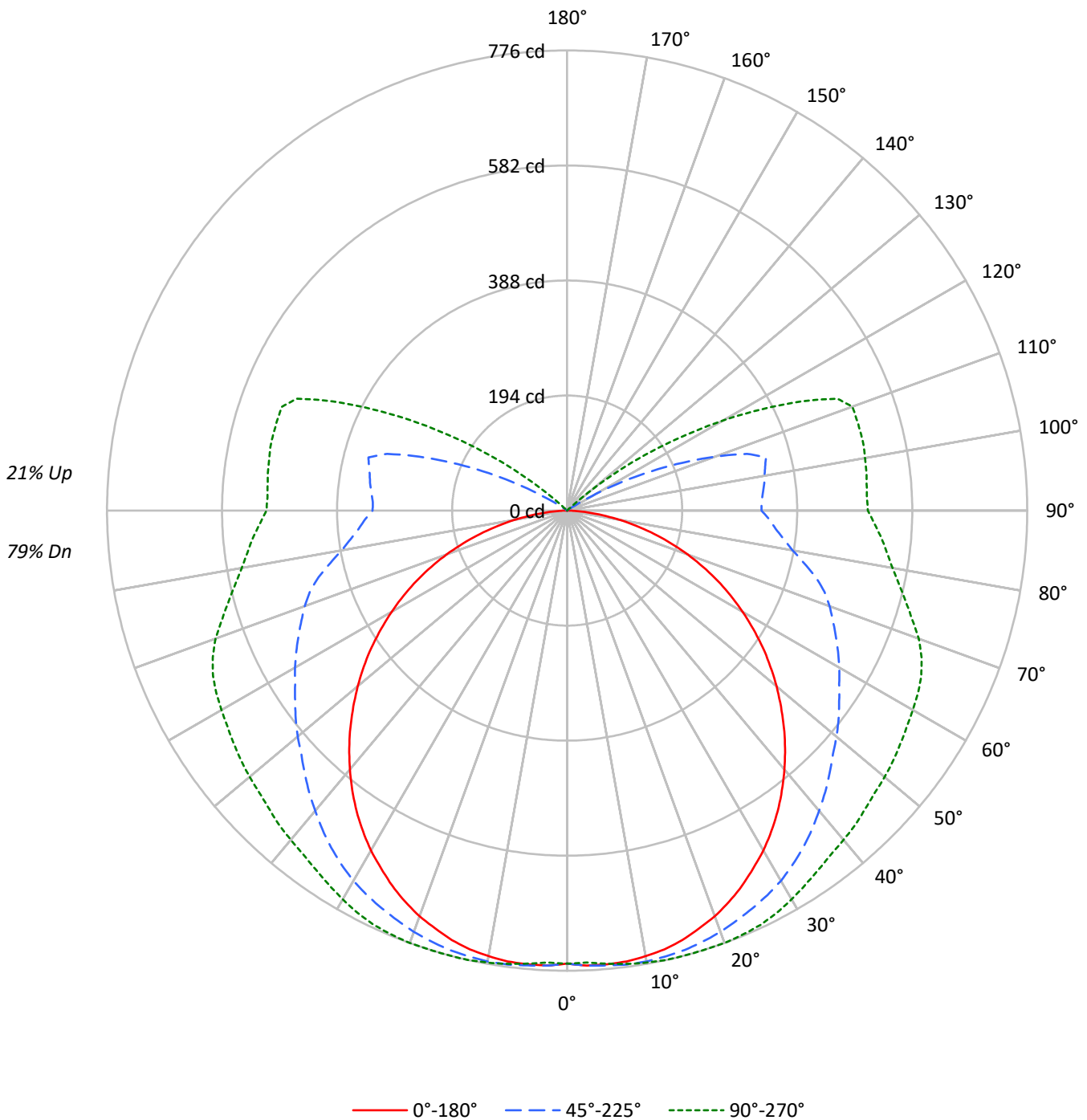
Lumens per Lamp: 4400 (1 lamp)
Luminaire Lumens: 4162.0 lumens
Efficiency: 94.6%
Efficacy: 68.2 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.48 / 1.54
Luminous Opening: Rectangular (W 0.23' x L: 3.83' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 61
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	108	108	108	108	103	103	103	103	94	94	94	86	86	86	79	79	79	75
1	95	89	84	79	90	85	80	76	77	73	70	70	67	64	64	61	59	55
2	85	76	68	62	81	72	65	59	66	60	55	59	55	51	54	50	47	44
3	77	65	57	50	73	62	54	48	57	50	45	51	46	41	47	42	38	35
4	70	57	48	41	66	55	46	40	50	43	37	45	39	35	41	36	32	29
5	64	51	42	35	60	48	40	34	44	37	32	40	34	29	37	31	27	25
6	59	45	36	30	56	43	35	29	40	33	27	36	30	25	33	28	24	21
7	54	41	32	26	51	39	31	25	36	29	24	33	27	22	30	25	21	19
8	50	37	29	23	48	36	28	22	33	26	21	30	24	20	27	22	18	16
9	47	34	26	20	45	33	25	20	30	23	19	28	22	18	25	20	17	15
10	44	31	23	18	42	30	23	18	28	21	17	25	20	16	23	19	15	13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9361	9361	9361
5°	9446	9471	9434
10°	9493	9605	9630
15°	9514	9730	9844
20°	9493	9858	10119
25°	9437	10005	10424
30°	9366	10201	10710
35°	9259	10381	11054
40°	9117	10573	11596
45°	8959	10848	12320
50°	8788	11304	13325
55°	8609	11963	14655
60°	8381	12988	16493
65°	8118	14497	19106
70°	7738	16874	22606
75°	7196	20546	27979
80°	6351	27237	39303
85°	4780	49627	74792



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	73.5	1.8	1.7	0°	764	764	764	764	764	
10°-20°	216.6	5.2	4.9	5°	768	770	770	771	767	73
20°-30°	340.8	8.2	7.7	15°	750	757	767	777	776	212
30°-40°	430.5	10.3	9.8	25°	698	715	740	765	771	322
40°-50°	481.3	11.6	10.9	35°	619	647	694	728	739	387
50°-60°	497.3	11.9	11.3	45°	517	562	626	689	711	399
60°-70°	481.3	11.6	10.9	55°	403	464	560	653	686	360
70°-80°	427.1	10.3	9.7	65°	280	358	500	617	659	277
80°-90°	354.9	8.5	8.1	75°	152	261	434	550	591	161
90°-100°	326.6	7.8	7.4	85°	34	171	353	485	532	39
100°-110°	297.3	7.1	6.8	90°	1	147	328	460	507	2
110°-120°	182.9	4.4	4.2	95°	0	151	331	461	507	0
120°-130°	49.9	1.2	1.1	105°	0	68	347	470	512	0
130°-140°	1.6	0.0	0.0	115°	0	1	157	363	436	0
140°-150°	0.2	0.0	0.0	125°	0	0	1	116	174	0
150°-160°	0.1	0.0	0.0	135°	1	1	0	0	0	0
160°-170°	0.0	0.0	0.0	145°	1	1	0	0	0	1
170°-180°	0.0	0.0	0.0	155°	1	1	0	0	0	0
0°-30°	630.9	15.2	14.3	165°	0	0	0	0	0	0
0°-40°	1061.4	25.5	24.1	175°	0	0	0	0	0	0
0°-60°	2040.1	49.0	46.4	180°	0	0	0	0	0	0
0°-90°	3303.4	79.4	75.1							
90°-120°	806.8	19.4	18.3							
90°-150°	858.5	20.6	19.5							
90°-180°	859.0	20.6	19.5							
0°-180°	4162.0	100.0	94.6							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	764	764	764	764	764
2.5°	768	768	768	767	763
5°	768	770	770	771	767
7.5°	767	769	772	775	771
10°	763	767	772	777	774
12.5°	758	763	770	777	776
15°	750	757	767	777	776
17.5°	739	749	762	775	776
20°	728	740	756	773	776
22.5°	714	728	748	770	774
25°	698	715	740	765	771
27.5°	680	700	731	759	765
30°	662	684	721	750	757
32.5°	641	666	708	740	748
35°	619	647	694	728	739
37.5°	595	627	678	717	731
40°	570	606	661	706	725
42.5°	544	584	644	698	719
45°	517	562	626	689	711
47.5°	489	539	608	678	704
50°	461	515	593	668	699
52.5°	432	490	577	661	693
55°	403	464	560	653	686
57.5°	372	437	544	643	679
60°	342	410	530	634	673
62.5°	311	383	515	625	667
65°	280	358	500	617	659
67.5°	248	333	485	606	647
70°	216	307	471	591	631
72.5°	184	284	455	571	610
75°	152	261	434	550	591
77.5°	120	239	409	530	573
80°	90	219	386	513	557
82.5°	60	195	368	497	544
85°	34	171	353	485	532
87.5°	12	157	341	473	519
90°	1	147	328	460	507
92.5°	0	147	328	459	506
95°	0	151	331	461	507
97.5°	0	157	335	463	509
100°	0	146	338	466	510
102.5°	0	107	342	469	512
105°	0	68	347	470	512
107.5°	0	31	318	472	512
110°	0	7	266	469	512



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0	1	211	423	493
115°	0	1	157	363	436
117.5°	0	1	106	299	370
120°	0	0	57	236	304
122.5°	0	0	17	174	237
125°	0	0	1	116	174
127.5°	0	0	0	60	113
130°	0	0	0	16	55
132.5°	0	0	0	0	12
135°	1	1	0	0	0
137.5°	1	1	0	0	0
140°	1	1	0	0	0
142.5°	1	1	0	0	0
145°	1	1	0	0	0
147.5°	1	1	0	0	0
150°	1	1	0	0	0
152.5°	1	1	0	0	0
155°	1	1	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)