

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: 122p113

Luminaire Tested: **SNF-224T5-UNV-EBT-1**

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: 122p113
Test Lab: METALUX RESEARCH LABS
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: SNF-224T5-UNV-EBT-1
Description: 2' COMMERCIAL NARROW STRIP, T5 LAMP
Light Source: TWO T5 LINEAR FLUORESCENT HIGH OUTPUT LAMPS
F24T5/841 24 WATTS
Ballast/Driver: -

Summary

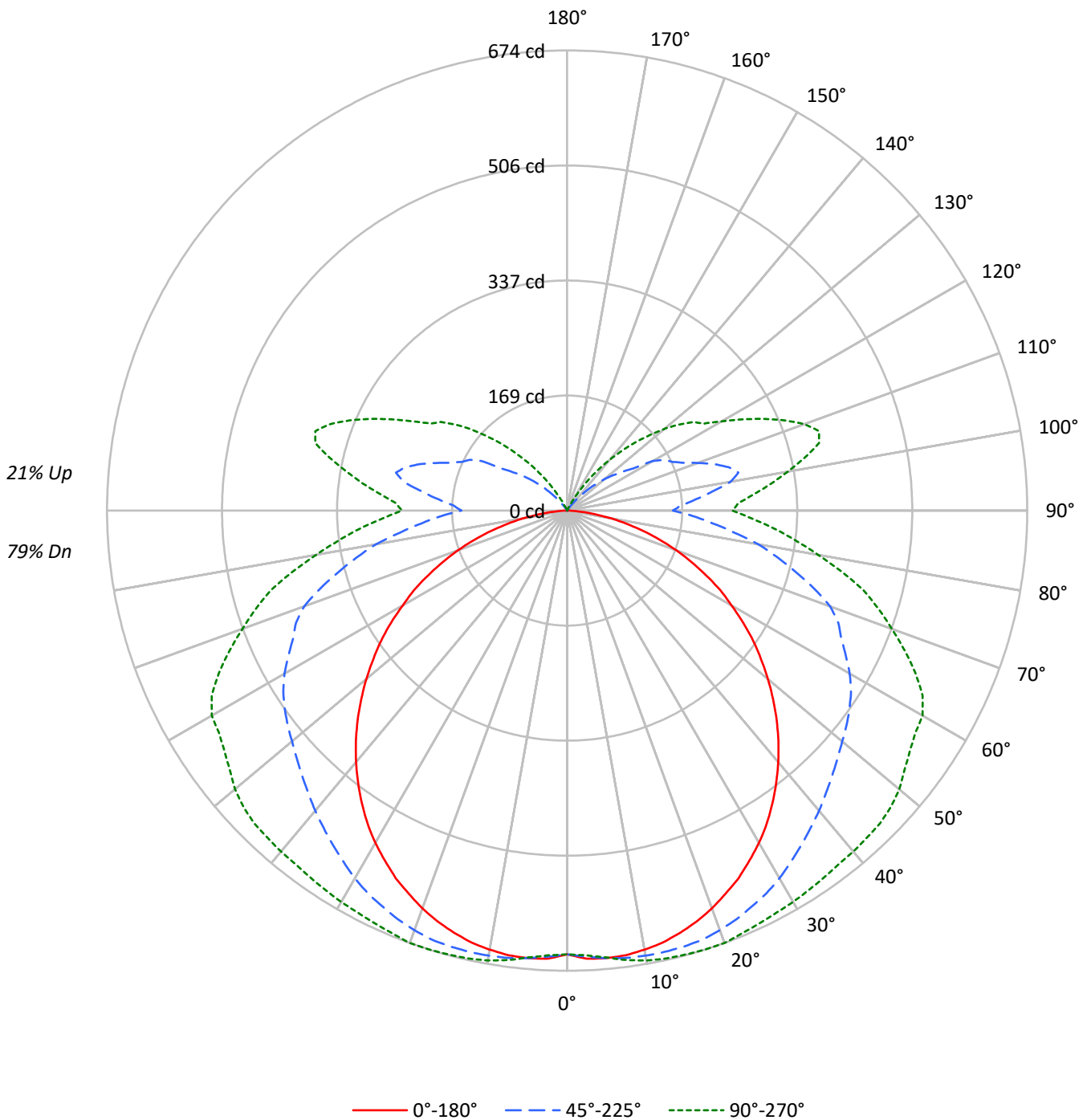
Lumens per Lamp: 1800 (2 lamps)
Luminaire Lumens: 3471.1 lumens
Efficiency: 96.4%
Efficacy: 65.5 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.54 / 1.57
Luminous Opening: Rectangular (W 0.23' x L: 3.83' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 53
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

TEST NUMBER: 122p113

CATALOG NUMBER: SNF-224T5-UNV-EBT-1

Luminous Intensity Polar Plot





TEST NUMBER: 122p113

CATALOG NUMBER: SNF-224T5-UNV-EBT-1

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	110	110	110	110	105	105	105	105	96	96	96	88	88	88	80	80	80	76
1	98	92	87	82	93	88	83	79	80	76	73	73	70	67	66	64	62	58
2	88	78	71	65	83	75	68	62	68	63	58	62	57	53	56	53	49	46
3	79	68	59	52	75	65	57	50	59	52	47	54	48	44	49	44	40	37
4	72	59	50	43	68	57	48	42	52	45	39	47	41	36	43	38	34	31
5	66	53	43	37	62	50	42	35	46	39	33	42	36	31	38	33	29	26
6	60	47	38	31	57	45	37	30	41	34	29	38	31	27	34	29	25	23
7	56	42	34	27	53	41	32	27	37	30	25	34	28	23	31	26	22	20
8	52	38	30	24	49	37	29	23	34	27	22	31	25	21	28	23	19	17
9	48	35	27	21	46	34	26	21	31	24	20	29	23	19	26	21	17	15
10	45	32	24	19	43	31	24	19	29	22	18	26	21	17	24	19	16	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7964	7964	7964
5°	8093	8093	8081
10°	8125	8237	8324
15°	8119	8385	8537
20°	8084	8528	8789
25°	8031	8653	9018
30°	7951	8800	9366
35°	7838	8945	9813
40°	7694	9181	10429
45°	7520	9513	11229
50°	7320	10027	12105
55°	7114	10788	13095
60°	6813	11714	14728
65°	6523	12844	16323
70°	6090	14688	18128
75°	5444	16380	21256
80°	4516	20040	26320
85°	2952	30086	42879



TEST NUMBER: 122p113

CATALOG NUMBER: SNF-224T5-UNV-EBT-1

ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	62.9	1.8	1.7	0°	650	650	650	650	650	
10°-20°	186.3	5.4	5.2	5°	658	657	658	657	657	63
20°-30°	293.6	8.5	8.2	15°	640	648	661	670	673	181
30°-40°	373.6	10.8	10.4	25°	594	614	640	659	667	273
40°-50°	423.2	12.2	11.8	35°	524	557	598	638	656	328
50°-60°	438.2	12.6	12.2	45°	434	480	549	621	648	335
60°-70°	416.9	12.0	11.6	55°	333	393	505	585	613	297
70°-80°	338.7	9.8	9.4	65°	225	312	443	537	563	222
80°-90°	214.2	6.2	5.9	75°	115	237	346	422	449	122
90°-100°	186.0	5.4	5.2	85°	21	121	214	282	305	27
100°-110°	223.0	6.4	6.2	90°	0	70	155	219	242	1
110°-120°	161.4	4.6	4.5	95°	0	102	189	252	274	0
120°-130°	94.3	2.7	2.6	105°	0	83	245	355	382	0
130°-140°	45.5	1.3	1.3	115°	0	42	169	276	318	0
140°-150°	12.6	0.4	0.4	125°	0	8	99	199	226	0
150°-160°	0.8	0.0	0.0	135°	0	0	45	116	141	0
160°-170°	0.0	0.0	0.0	145°	1	0	5	40	57	1
170°-180°	0.0	0.0	0.0	155°	1	1	0	0	2	0
0°-30°	542.8	15.6	15.1	165°	0	0	0	0	0	0
0°-40°	916.4	26.4	25.5	175°	0	0	0	0	0	0
0°-60°	1777.7	51.2	49.4	180°	0	0	0	0	0	0
0°-90°	2747.4	79.2	76.3							
90°-120°	570.4	16.4	15.8							
90°-150°	722.9	20.8	20.1							
90°-180°	724.0	20.9	20.1							
0°-180°	3471.1	100.0	96.4							



TEST NUMBER: 122p113

CATALOG NUMBER: SNF-224T5-UNV-EBT-1

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	650	650	650	650	650
2.5°	657	655	654	652	652
5°	658	657	658	657	657
7.5°	657	657	661	663	664
10°	653	656	662	667	669
12.5°	648	653	662	669	672
15°	640	648	661	670	673
17.5°	631	641	659	669	674
20°	620	633	654	668	674
22.5°	607	624	648	664	670
25°	594	614	640	659	667
27.5°	578	602	632	654	664
30°	562	589	622	649	662
32.5°	544	574	610	644	659
35°	524	557	598	638	656
37.5°	503	539	586	633	653
40°	481	520	574	629	652
42.5°	458	501	561	625	650
45°	434	480	549	621	648
47.5°	409	458	537	616	643
50°	384	437	526	608	635
52.5°	358	414	516	598	623
55°	333	393	505	585	613
57.5°	306	372	493	573	605
60°	278	351	478	563	601
62.5°	253	331	460	558	587
65°	225	312	443	537	563
67.5°	197	297	430	510	535
70°	170	281	410	480	506
72.5°	142	262	379	451	478
75°	115	237	346	422	449
77.5°	89	215	315	387	411
80°	64	185	284	349	373
82.5°	41	150	247	313	338
85°	21	121	214	282	305
87.5°	7	92	184	248	271
90°	0	70	155	219	242
92.5°	0	81	166	228	251
95°	0	102	189	252	274
97.5°	0	114	215	278	301
100°	0	104	243	306	328
102.5°	0	90	257	333	356
105°	0	83	245	355	382
107.5°	0	75	226	347	387
110°	0	65	204	327	370



TEST NUMBER: 122p113

CATALOG NUMBER: SNF-224T5-UNV-EBT-1

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0	55	183	303	345
115°	0	42	169	276	318
117.5°	0	29	161	249	289
120°	0	21	145	226	261
122.5°	0	14	115	215	237
125°	0	8	99	199	226
127.5°	0	4	85	179	207
130°	0	1	72	155	186
132.5°	0	0	58	137	163
135°	0	0	45	116	141
137.5°	1	0	32	96	119
140°	1	0	21	77	97
142.5°	1	0	11	58	77
145°	1	0	5	40	57
147.5°	1	1	1	24	38
150°	1	1	0	11	21
152.5°	1	1	0	4	9
155°	1	1	0	0	2
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)