

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: 227P111

Luminaire Tested: **SM-128T5 (SM-2IN-SYM-4FT-REFL-B)**

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: 227P111
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: SM-128T5 (SM-2IN-SYM-4FT-REFL-B)
Description: SM Series Commercial Micro-Striplight
with a solid symmetric reflector.
Light Source: One - F28T5/835 - 2900 Lumens - 28 Watts
Ballast/Driver: Magnetek BT5-128/120 Electronic - L.O.B.F. = 97.5%

Summary

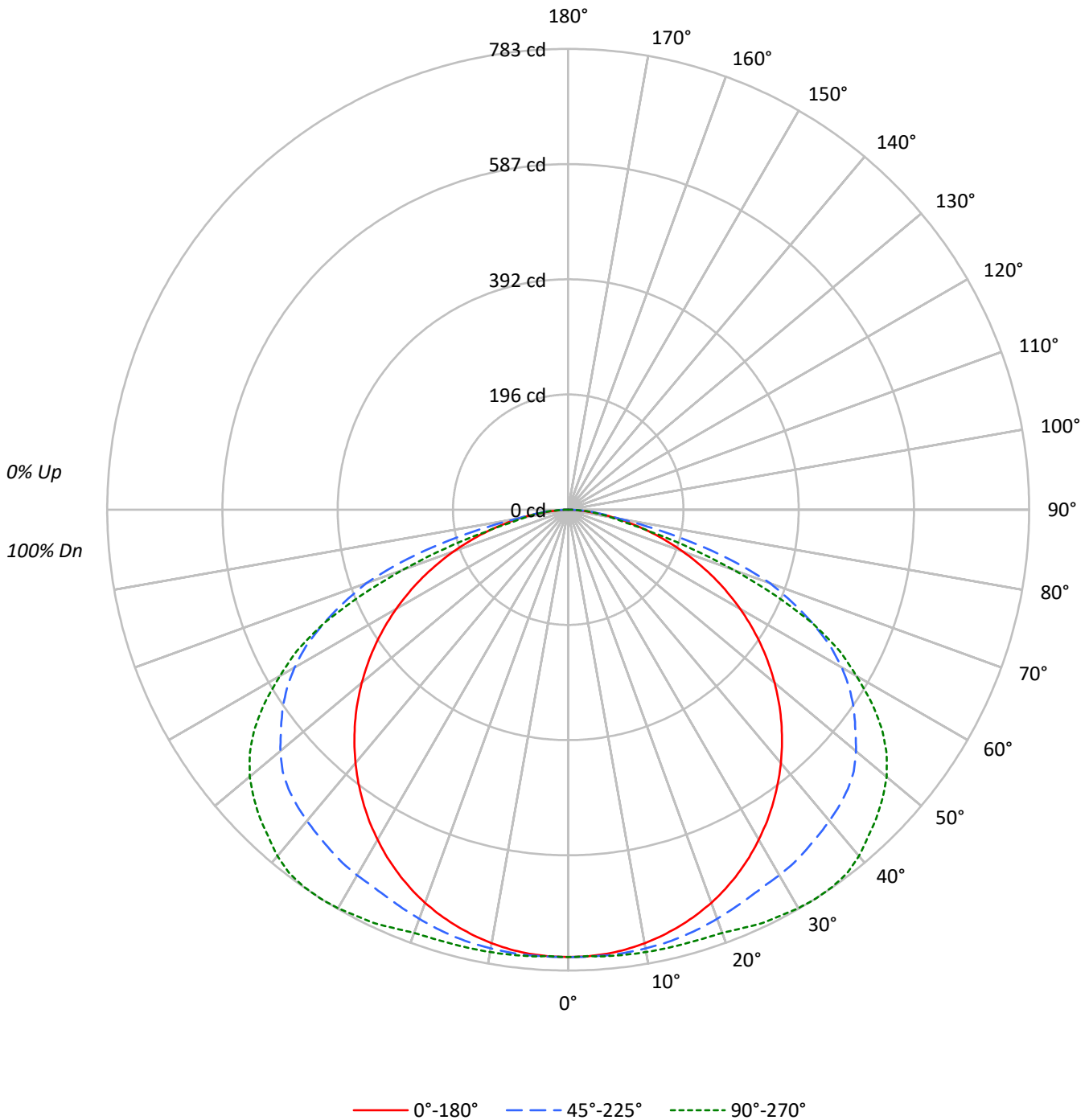
Lumens per Lamp: 2900 (1 lamp)
Luminaire Lumens: 2732.8 lumens
Efficiency: 94.2%
Efficacy: 73.9 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.56 / 1.6
Luminous Opening: Rectangular (W 0.38' x L: 3.76' x H: 0')
CIE Type: Direct

Input Watts (W): 37
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	112	112	112	112	110	110	110	110	105	105	105	100	100	100	96	96	96	94
1	102	97	93	89	99	95	91	88	91	88	85	87	85	82	84	82	80	78
2	92	84	77	71	90	82	76	70	79	73	69	76	71	67	73	69	66	64
3	83	73	65	58	81	71	64	58	68	62	57	66	60	56	63	59	55	53
4	76	64	55	49	74	63	54	48	60	53	47	58	52	47	56	51	46	44
5	69	57	48	41	67	56	47	41	54	46	40	52	45	40	50	44	40	37
6	64	51	42	35	62	50	41	35	48	41	35	46	40	35	45	39	34	32
7	59	46	37	31	57	45	37	31	43	36	31	42	35	30	41	35	30	28
8	55	41	33	27	53	41	33	27	39	32	27	38	32	27	37	31	27	25
9	51	38	30	24	50	37	30	24	36	29	24	35	29	24	34	28	24	22
10	48	35	27	22	46	34	27	22	33	27	22	32	26	22	32	26	22	20

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5726	5726	5726
5°	5728	5748	5759
10°	5722	5791	5838
15°	5712	5855	5956
20°	5699	5932	6134
25°	5672	6041	6448
30°	5632	6238	6801
35°	5585	6485	7194
40°	5526	6789	7557
45°	5456	7155	7890
50°	5365	7480	8274
55°	5245	7782	8547
60°	5085	8088	8517
65°	4859	8187	8179
70°	4553	8024	6575
75°	4127	6529	4209
80°	3536	3822	3184
85°	2619	3267	2827



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	72.5	2.7	2.5	0°	760	760	760	760	760	
10°-20°	212.2	7.8	7.3	5°	758	758	760	764	762	72
20°-30°	337.1	12.3	11.6	15°	732	739	751	763	764	207
30°-40°	438.9	16.1	15.1	25°	682	698	727	765	776	314
40°-50°	499.5	18.3	17.2	35°	607	638	705	765	782	380
50°-60°	501.4	18.3	17.3	45°	512	566	672	723	741	395
60°-70°	413.8	15.1	14.3	55°	399	493	592	639	651	357
70°-80°	211.0	7.7	7.3	65°	273	404	459	468	459	270
80°-90°	46.3	1.7	1.6	75°	142	248	224	165	145	150
90°-100°	0.0	0.0	0.0	85°	30	49	38	34	33	36
100°-110°	0.0	0.0	0.0	90°	0	0	0	0	0	1
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°	621.8	22.8	21.4	165°	0	0	0	0	0	0
0°-40°	1060.6	38.8	36.6	175°	0	0	0	0	0	0
0°-60°	2061.6	75.4	71.1	180°	0	0	0	0	0	0
0°-90°	2732.8	100.0	94.2							
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°	2732.8	100.0	94.2							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	760.1	760.1	760.1	760.1	760.1
2.5°	759.6	759.3	760.1	762.6	759.2
5°	757.5	757.8	760.1	764.3	761.6
7.5°	753.6	755.2	759.1	764.6	762.5
10°	748.0	751.3	757.0	763.8	763.2
12.5°	741.0	745.8	754.5	763.8	763.6
15°	732.4	739.3	750.7	763.2	763.7
17.5°	722.4	731.1	745.6	761.6	764.0
20°	710.9	721.4	739.9	759.2	765.1
22.5°	697.6	710.5	733.4	760.5	769.9
25°	682.3	698.0	726.8	764.6	775.7
27.5°	665.8	684.5	720.9	765.8	778.3
30°	647.4	670.0	717.1	765.8	781.8
32.5°	628.2	654.5	712.4	766.0	783.4
35°	607.3	637.6	705.1	764.7	782.2
37.5°	585.3	620.0	697.6	760.9	778.4
40°	561.9	601.7	690.3	753.6	768.4
42.5°	537.5	583.4	681.8	740.2	753.8
45°	512.1	566.0	671.6	723.3	740.6
47.5°	485.5	549.4	658.0	707.9	724.5
50°	457.8	531.8	638.2	689.4	706.0
52.5°	429.2	512.6	614.8	667.1	682.0
55°	399.3	493.1	592.5	639.3	650.7
57.5°	368.8	474.1	566.9	604.9	611.6
60°	337.5	453.6	536.8	562.9	565.3
62.5°	305.4	431.9	501.9	515.6	519.8
65°	272.6	404.3	459.3	467.5	458.8
67.5°	239.7	368.7	412.5	399.7	380.7
70°	206.7	334.4	364.3	320.7	298.5
72.5°	173.9	294.4	299.2	240.6	219.0
75°	141.8	247.8	224.3	165.0	144.6
77.5°	110.9	202.3	150.5	104.2	96.9
80°	81.5	154.2	88.1	74.9	73.4
82.5°	54.4	94.8	58.2	54.2	52.8
85°	30.3	48.6	37.8	33.9	32.7
87.5°	10.5	27.7	18.2	14.1	12.7
90°	0.0	0.0	0.0	0.0	0.0
92.5°	0.0	0.0	0.0	0.0	0.0
95°	0.0	0.0	0.0	0.0	0.0
97.5°	0.0	0.0	0.0	0.0	0.0
100°	0.0	0.0	0.0	0.0	0.0
102.5°	0.0	0.0	0.0	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0
107.5°	0.0	0.0	0.0	0.0	0.0
110°	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	0.0	0.0	0.0	0.0
115°	0.0	0.0	0.0	0.0	0.0
117.5°	0.0	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.0	0.0	0.0
122.5°	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0
127.5°	0.0	0.0	0.0	0.0	0.0
130°	0.0	0.0	0.0	0.0	0.0
132.5°	0.0	0.0	0.0	0.0	0.0
135°	0.0	0.0	0.0	0.0	0.0
137.5°	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0
142.5°	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)