

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: 227P115

Luminaire Tested: **SML-128T5 (SML-2IN-SYM-4FT-1LT-REFL-B)**

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: 227P115
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: SML-128T5 (SML-2IN-SYM-4FT-1LT-REFL-B)
Description: SML Series Staggered 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

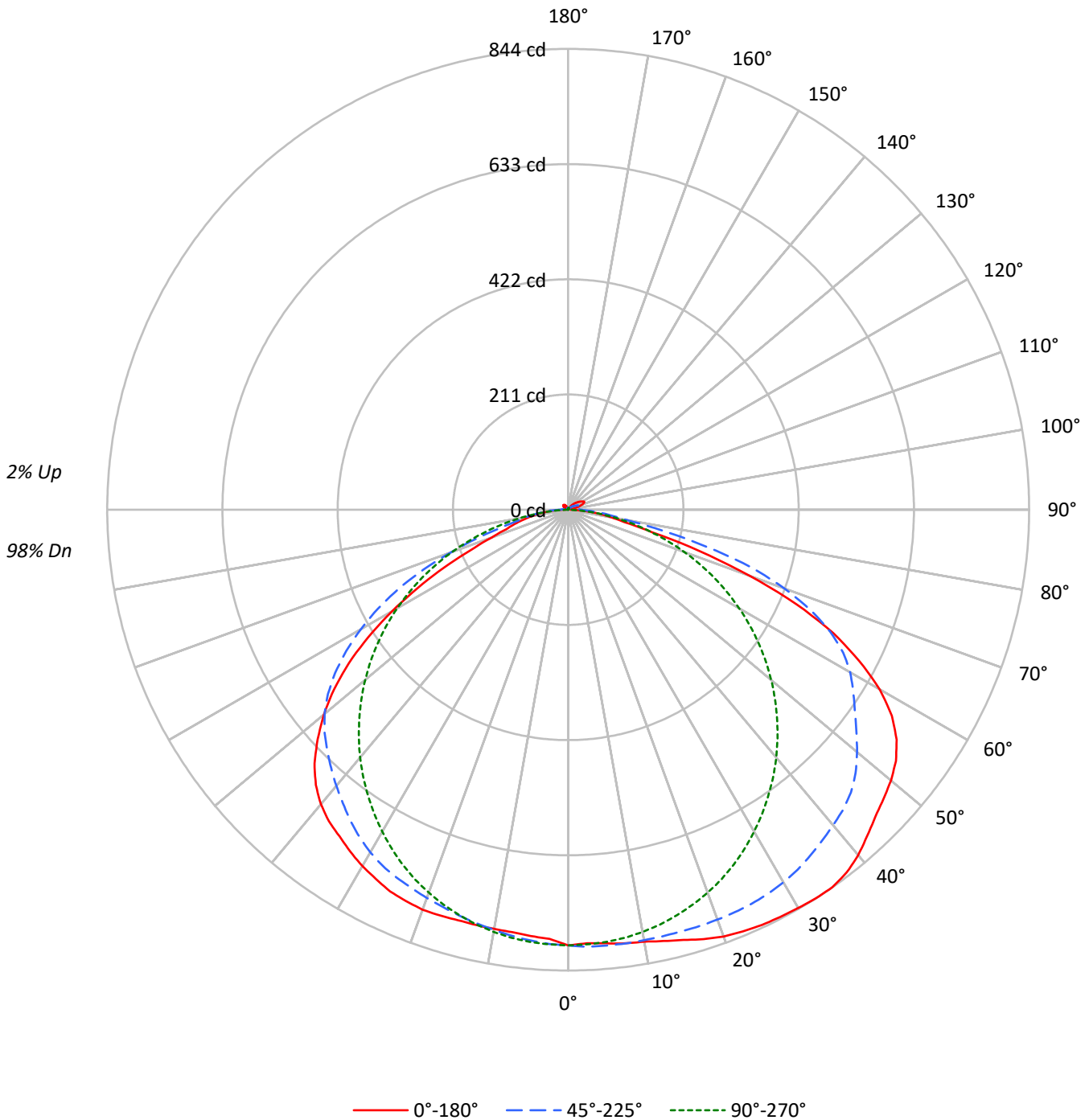
Lumens per Lamp: 2900 (1 lamp)
Luminaire Lumens: 2794.8 lumens
Efficiency: 96.4%
Efficacy: 75.5 lumens/watt
Spacing Criteria (0/90/45): 1.5 / 1.27 / 1.55
Luminous Opening: Rectangular w/ Sides (W: 3.76' x L: 0.38' x H: 0.05')
CIE Type: Direct

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			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	114	114	114	114	111	111	111	111	106	106	106	101	101	101	97	97	97	95
1	104	99	95	91	101	97	93	89	92	89	86	88	86	83	85	83	81	78
2	94	86	79	73	91	84	78	72	80	75	70	77	72	68	73	70	67	64
3	85	75	67	60	83	73	66	60	70	64	58	67	62	57	64	60	56	54
4	78	66	57	50	75	64	56	50	62	55	49	59	53	48	57	52	47	45
5	71	58	49	43	69	57	49	43	55	48	42	53	46	41	51	45	41	38
6	66	52	43	37	64	51	43	37	49	42	36	48	41	36	46	40	35	33
7	61	47	39	32	59	46	38	32	45	37	32	43	36	31	42	36	31	29
8	56	43	34	29	55	42	34	29	41	33	28	39	33	28	38	32	28	26
9	52	39	31	26	51	39	31	25	37	30	25	36	30	25	35	29	25	23
10	49	36	28	23	48	35	28	23	34	27	23	33	27	23	32	27	22	21

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	6012	6012	6012
5°	5960	6004	5861
10°	6006	5992	5829
15°	6147	5976	5864
20°	6365	5955	5964
25°	6572	5924	6041
30°	6810	5877	6094
35°	7105	5823	6150
40°	7315	5764	6239
45°	7487	5687	6184
50°	7816	5598	5918
55°	8118	5482	5424
60°	8084	5327	4571
65°	7460	5109	3490
70°	5709	4800	2425
75°	3112	4332	1972
80°	1975	3635	1679
85°	1181	2266	1215



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	45°	90°	135°	180°	Flux
0°-10°	75.8	2.7	2.6	0°	798	798	798	798	798	
10°-20°	222.3	8.0	7.7	5°	797	801	795	792	784	76
20°-30°	353.5	12.6	12.2	15°	816	799	769	770	778	232
30°-40°	453.6	16.2	15.6	25°	839	796	717	743	771	388
40°-50°	507.3	18.2	17.5	35°	844	773	639	695	730	527
50°-60°	494.6	17.7	17.1	45°	795	732	541	624	657	617
60°-70°	388.1	13.9	13.4	55°	734	640	425	521	491	651
70°-80°	194.8	7.0	6.7	65°	537	530	295	342	251	518
80°-90°	52.1	1.9	1.8	75°	159	263	156	128	101	193
90°-100°	10.9	0.4	0.4	85°	34	54	30	44	35	37
100°-110°	11.1	0.4	0.4	90°	4	22	1	14	7	4
110°-120°	11.6	0.4	0.4	95°	4	18	0	9	4	4
120°-130°	8.6	0.3	0.3	105°	17	22	0	7	4	18
130°-140°	5.5	0.2	0.2	115°	33	18	0	9	7	31
140°-150°	2.8	0.1	0.1	125°	25	11	1	10	10	23
150°-160°	1.3	0.0	0.0	135°	16	6	1	9	12	12
160°-170°	0.9	0.0	0.0	145°	7	2	2	3	11	5
170°-180°	0.1	0.0	0.0	155°	2	3	2	2	4	1
0°-30°	651.6	23.3	22.5	165°	3	3	3	3	3	1
0°-40°	1105.3	39.5	38.1	175°	0	0	0	0	0	0
0°-60°	2107.1	75.4	72.7	180°	0	0	0	0	0	
0°-90°	2742.2	98.1	94.6							
90°-120°	33.6	1.2	1.2							
90°-150°	50.4	1.8	1.7							
90°-180°	53.0	1.9	1.8							
0°-180°	2794.8	100.0	96.4							



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CATALOG NUMBER: SML-128T5 (SML-2IN-SYM-4FT-1LT-REFL-B)

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	798.0	798.0	798.0	798.0	798.0	798.0	798.0	798.0	798.0
2.5°	794.6	803.3	801.1	798.8	796.9	796.1	796.1	795.9	786.6
5°	797.2	805.6	801.3	797.6	794.8	792.5	792.1	792.7	783.9
7.5°	801.1	808.0	801.3	795.3	790.9	787.4	787.2	788.6	780.5
10°	803.3	809.4	800.7	791.8	785.1	781.2	781.4	785.0	779.6
12.5°	809.0	813.9	800.2	787.2	777.9	772.9	775.8	783.0	779.1
15°	815.9	820.2	799.4	781.2	768.9	764.2	769.8	781.3	778.4
17.5°	824.7	827.4	799.6	773.7	758.5	754.0	763.1	778.4	779.4
20°	831.9	833.5	798.9	764.6	746.4	742.3	756.7	775.3	779.6
22.5°	836.0	836.3	797.9	753.9	732.8	729.4	750.0	773.8	775.8
25°	839.1	837.8	796.1	742.1	717.1	715.5	743.4	768.5	771.4
27.5°	840.8	838.8	792.7	730.2	699.8	701.0	735.5	759.6	762.5
30°	842.3	837.9	788.2	717.3	680.8	685.6	724.7	748.2	753.7
32.5°	843.9	836.7	781.5	704.2	660.6	669.1	711.0	736.2	742.5
35°	843.7	834.7	773.1	689.9	639.1	651.2	695.3	723.4	730.3
37.5°	837.5	829.1	764.0	675.3	616.5	632.4	677.6	710.3	719.4
40°	826.0	817.7	754.4	660.0	592.7	613.4	660.3	696.9	704.4
42.5°	810.2	801.9	745.0	643.4	567.3	594.4	642.3	679.8	683.9
45°	795.2	783.0	732.3	625.0	540.9	573.9	623.6	657.4	656.8
47.5°	783.1	765.9	713.8	605.2	513.5	551.4	604.7	629.7	621.9
50°	771.5	750.7	690.4	584.6	485.2	527.3	582.3	595.0	584.1
52.5°	756.2	735.4	664.7	562.7	455.9	501.7	554.2	554.9	540.2
55°	734.2	714.6	640.5	540.9	425.3	475.0	520.9	510.8	490.6
57.5°	702.4	686.0	618.8	518.8	393.9	447.9	481.8	460.6	433.9
60°	658.8	647.7	596.0	494.8	361.7	418.2	439.0	404.6	372.5
62.5°	601.3	597.1	567.9	466.1	328.8	387.9	392.6	344.6	311.0
65°	536.6	536.1	529.7	431.3	294.8	356.9	342.3	283.7	251.0
67.5°	452.9	463.1	480.2	391.9	260.8	320.4	286.2	225.6	193.0
70°	352.9	371.4	420.7	357.9	225.9	277.8	229.6	171.1	149.9
72.5°	251.3	272.1	352.0	327.6	191.1	232.4	175.7	131.4	118.9
75°	159.4	179.1	263.4	287.7	156.2	188.0	127.7	105.9	101.0
77.5°	105.2	115.1	175.2	233.4	122.7	141.2	95.7	88.7	84.2
80°	79.5	86.7	106.8	177.5	90.1	96.2	77.0	72.0	67.6
82.5°	55.9	62.8	78.0	109.5	61.0	61.9	60.3	55.8	51.5
85°	34.2	40.7	54.5	60.2	30.2	43.7	43.8	40.0	35.2
87.5°	14.1	20.3	33.1	38.2	9.8	28.6	28.3	24.2	19.4
90°	4.2	11.7	21.9	23.9	1.0	15.4	14.2	10.6	6.6
92.5°	4.0	11.1	20.2	19.9	0.3	12.0	10.5	6.7	4.0
95°	4.4	10.8	18.5	16.4	0.3	9.8	9.3	6.3	4.0
97.5°	4.9	10.8	18.0	14.6	0.2	8.9	8.2	6.0	4.0
100°	6.8	13.1	19.3	13.7	0.2	8.4	7.5	5.7	4.1
102.5°	11.7	17.2	20.8	11.7	0.2	7.9	7.2	5.5	4.2
105°	17.0	21.5	22.1	9.9	0.2	7.4	7.0	5.4	4.4
107.5°	22.1	25.1	23.2	8.1	0.2	6.9	7.5	5.4	4.4
110°	26.3	28.3	22.3	6.8	0.2	6.5	8.2	5.6	4.6



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	30.2	30.7	20.3	5.5	0.2	6.1	8.7	6.7	5.3
115°	32.6	30.4	18.3	4.4	0.3	5.7	9.0	8.1	7.1
117.5°	32.5	28.3	16.4	3.3	0.4	5.2	9.3	8.9	8.3
120°	30.3	26.2	14.4	2.5	0.4	4.7	9.3	9.5	9.4
122.5°	27.9	24.1	12.8	1.9	0.5	4.1	9.5	9.9	9.9
125°	25.4	21.8	11.3	1.4	0.7	3.2	9.6	10.5	10.0
127.5°	23.0	19.0	9.8	1.2	0.8	2.4	9.5	10.9	10.6
130°	20.6	16.8	8.2	1.1	0.9	1.8	9.3	11.1	11.7
132.5°	18.2	15.0	6.8	1.2	1.1	1.5	8.9	11.2	12.0
135°	16.0	13.0	5.5	1.4	1.2	1.4	8.6	11.3	12.1
137.5°	13.7	10.9	4.3	1.5	1.4	1.5	7.9	11.2	12.1
140°	11.4	9.0	3.2	1.6	1.6	1.7	6.1	10.8	11.8
142.5°	9.2	7.1	2.6	1.7	1.6	1.7	3.8	10.2	11.4
145°	7.1	5.4	2.3	1.9	1.8	1.9	3.1	9.3	10.8
147.5°	5.2	4.0	2.2	2.0	1.9	2.1	2.6	7.9	9.5
150°	3.6	3.0	2.4	2.1	2.1	2.2	2.4	6.1	7.9
152.5°	2.7	2.7	2.4	2.3	2.2	2.3	2.5	4.1	5.9
155°	2.4	2.7	2.6	2.4	2.3	2.6	2.5	2.8	4.2
157.5°	2.4	2.7	2.7	2.6	2.5	2.8	2.7	2.8	3.3
160°	2.5	3.0	2.8	2.8	2.8	3.0	2.9	2.8	3.2
162.5°	2.5	3.0	3.0	2.9	2.9	3.1	3.1	3.0	3.3
165°	2.7	3.1	3.0	3.0	2.9	3.1	3.3	3.1	3.4
167.5°	3.0	3.3	3.2	3.3	3.1	3.3	3.4	3.2	3.4
170°	2.9	3.4	3.4	3.4	3.3	3.3	3.5	3.4	3.7
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)