

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: 227P117

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

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: 227P117
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: SML-128T5 (SML-2IN-ASY/REV-4FT-1LT-REFL-B)
Description: SML Series Staggered Commercial Micro-Striplight
with a solid reverse asymmetric reflector.
Light Source: One - F28T5/835 - 2900 Lumens - 28 Watts
Ballast/Driver: Magnetek BT5-128/120 Electronic - L.O.B.F. = 97.5%

Summary

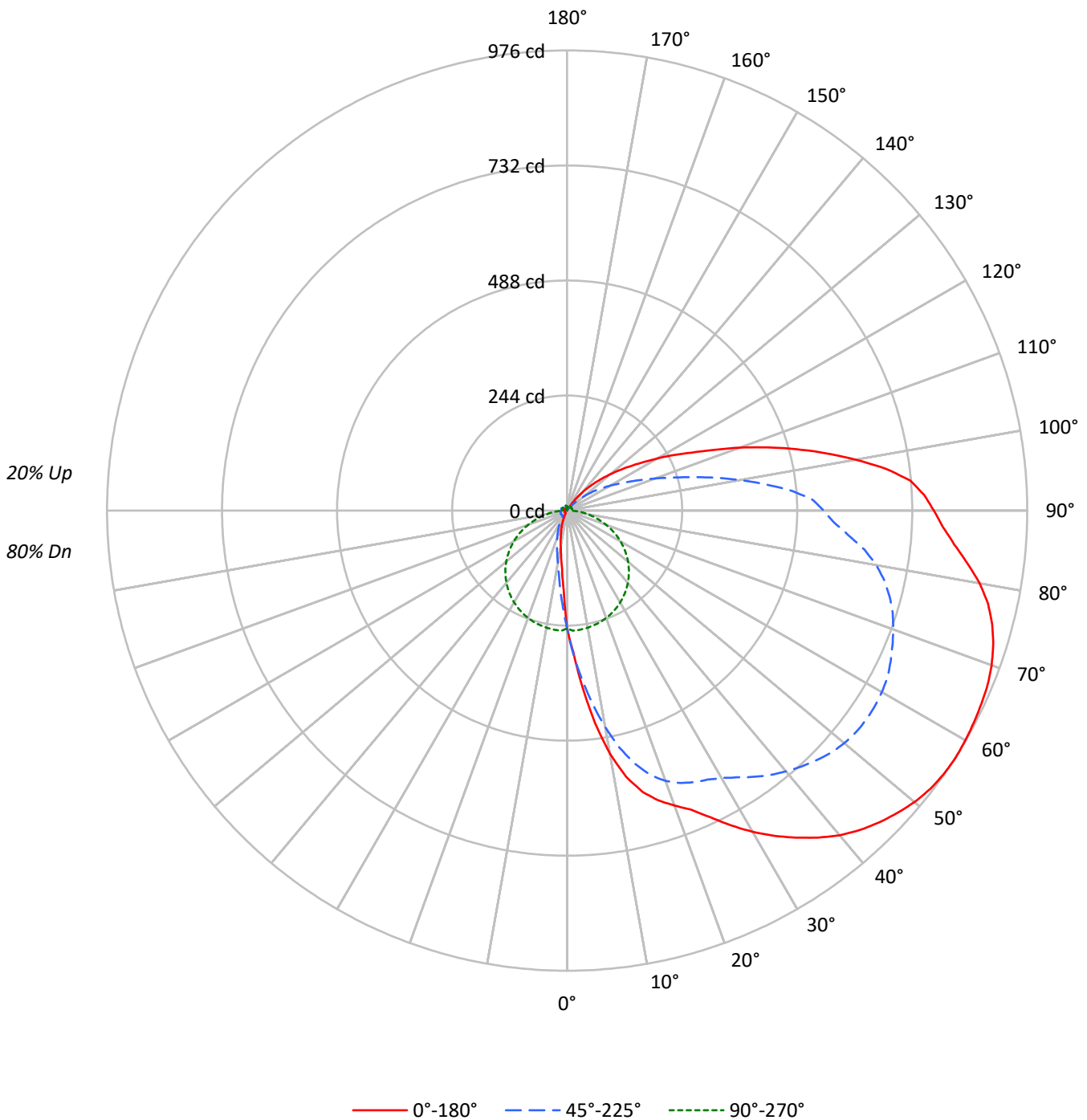
Lumens per Lamp: 2900 (1 lamp)
Luminaire Lumens: 2604.1 lumens
Efficiency: 89.8%
Efficacy: 70.4 lumens/watt
Spacing Criteria (0/90/45): 2.43 / 1.33 / 2.2
Luminous Opening: Rectangular w/ Sides (W: 3.76' x L: 0.1' x H: 0.21')
CIE Type: Semi-Direct

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	103	103	103	103	98	98	98	98	90	90	90	82	82	82	75	75	75	71
1	88	82	76	71	84	78	73	68	71	67	63	64	61	58	58	55	53	49
2	78	69	61	54	74	65	58	52	59	53	48	53	48	44	48	44	40	37
3	70	59	50	42	66	56	47	41	50	43	38	45	39	35	40	36	32	29
4	63	51	41	34	60	48	40	33	43	36	31	39	33	28	35	30	26	23
5	58	45	35	28	54	42	34	27	38	31	25	34	28	23	31	26	22	19
6	53	40	31	24	50	38	29	23	34	27	22	31	25	20	28	22	18	16
7	49	35	27	21	46	34	26	20	31	24	19	28	22	17	25	20	16	14
8	45	32	24	18	43	31	23	17	28	21	16	25	19	15	23	18	14	12
9	42	29	21	16	40	28	20	15	25	19	14	23	17	13	21	16	12	10
10	39	27	19	14	37	25	18	14	23	17	13	21	16	12	19	14	11	9

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	7145	7145	7145
5°	9162	7278	3025
10°	11108	7257	1661
15°	11711	7248	960
20°	11495	7238	532
25°	11449	7222	244
30°	11751	7202	84
35°	11976	7181	81
40°	12162	7150	80
45°	12216	7101	77
50°	12229	7044	76
55°	12166	6943	76
60°	12040	6818	75
65°	11933	6642	73
70°	11848	6364	74
75°	11686	5986	74
80°	11345	5496	73
85°	10826	5012	74



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	45°	90°	135°	180°	Flux
0°-10°	25.6	1.0	0.9	0°	250	250	250	250	250	
10°-20°	86.7	3.3	3.0	5°	377	359	254	166	125	41
20°-30°	151.1	5.8	5.2	15°	618	556	248	83	51	175
30°-40°	217.6	8.4	7.5	25°	717	636	235	45	15	335
40°-50°	278.3	10.7	9.6	35°	847	690	214	20	6	532
50°-60°	323.6	12.4	11.2	45°	935	749	185	14	6	724
60°-70°	347.0	13.3	12.0	55°	975	774	150	15	6	873
70°-80°	342.7	13.2	11.8	65°	970	757	110	15	6	961
80°-90°	298.8	11.5	10.3	75°	934	708	65	14	6	983
90°-100°	236.9	9.1	8.2	85°	824	599	25	13	6	687
100°-110°	146.5	5.6	5.1	90°	778	544	8	12	5	426
110°-120°	78.6	3.0	2.7	95°	730	479	10	12	6	572
120°-130°	40.2	1.5	1.4	105°	503	274	11	13	6	534
130°-140°	18.3	0.7	0.6	115°	290	144	11	12	6	295
140°-150°	6.8	0.3	0.2	125°	164	75	10	10	6	151
150°-160°	3.3	0.1	0.1	135°	83	27	10	10	5	66
160°-170°	1.9	0.1	0.1	145°	24	8	10	8	5	16
170°-180°	0.1	0.0	0.0	155°	3	6	10	7	5	1
0°-30°	263.5	10.1	9.1	165°	0	6	11	9	3	0
0°-40°	481.0	18.5	16.6	175°	0	0	0	0	0	0
0°-60°	1082.9	41.6	37.3	180°	0	0	0	0	0	
0°-90°	2071.4	79.5	71.4							
90°-120°	462.0	17.7	15.9							
90°-150°	527.3	20.3	18.2							
90°-180°	533.0	20.5	18.4							
0°-180°	2604.1	100.0	89.8							



TEST NUMBER: 227P117

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

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	249.6	249.6	249.6	249.6	249.6	249.6	249.6	249.6	249.6
2.5°	301.2	319.5	305.0	281.4	254.9	226.7	205.1	190.7	168.3
5°	377.4	391.6	358.9	309.6	254.5	202.1	166.3	144.5	124.6
7.5°	454.8	463.4	413.7	338.0	253.6	180.3	134.7	112.5	97.4
10°	523.6	526.6	466.6	366.1	252.1	160.4	112.7	91.2	78.3
12.5°	578.2	578.3	515.7	394.1	250.2	142.3	96.2	74.8	63.3
15°	617.5	617.5	555.6	421.0	248.2	127.1	82.7	61.8	50.6
17.5°	644.7	645.0	588.2	446.5	245.6	115.3	71.3	50.6	40.0
20°	665.7	664.1	610.3	470.5	242.4	104.8	61.4	40.7	30.8
22.5°	686.7	681.4	625.4	489.8	238.9	95.4	52.8	32.2	22.5
25°	717.4	705.0	635.6	505.6	234.6	86.9	44.9	24.7	15.3
27.5°	752.6	736.6	643.5	518.0	230.1	79.1	37.9	18.0	8.9
30°	786.5	767.8	654.7	527.0	224.9	72.1	31.5	12.2	5.6
32.5°	818.2	795.9	671.0	531.1	219.4	65.5	25.6	9.1	5.6
35°	846.6	821.8	689.5	531.9	213.5	59.4	20.4	9.0	5.7
37.5°	874.3	846.0	707.0	529.2	207.1	53.5	15.9	9.2	5.7
40°	898.9	868.3	722.0	523.7	200.3	48.0	13.9	9.3	5.9
42.5°	919.1	887.6	736.1	516.2	192.9	43.0	14.0	9.4	5.9
45°	935.4	902.6	748.6	508.2	185.2	38.2	14.3	9.4	5.9
47.5°	949.7	914.4	759.9	502.3	177.2	33.7	14.5	9.5	6.0
50°	961.8	922.9	767.5	499.4	168.7	29.6	14.6	9.7	6.0
52.5°	970.4	930.1	772.1	497.7	159.6	25.9	14.8	9.7	6.1
55°	974.8	933.2	774.1	495.6	150.2	23.0	15.0	9.7	6.1
57.5°	976.5	932.4	773.4	492.5	140.5	22.0	15.1	9.8	6.0
60°	975.2	929.5	770.7	488.7	130.6	22.1	15.0	9.7	6.1
62.5°	972.7	925.3	766.0	485.3	120.3	22.3	14.9	9.6	6.1
65°	969.5	920.0	757.1	480.8	109.8	22.2	14.9	9.5	5.9
67.5°	965.5	913.8	746.8	473.7	98.8	21.8	14.9	9.6	6.0
70°	958.3	907.5	736.2	464.6	87.7	21.3	14.7	9.6	6.0
72.5°	947.6	897.1	724.1	452.4	76.5	20.5	14.5	9.5	5.9
75°	933.7	882.1	708.3	435.4	65.4	19.6	14.1	9.4	5.9
77.5°	914.5	861.4	689.6	414.9	54.5	18.4	13.9	9.2	5.7
80°	888.4	834.6	665.8	393.8	43.9	17.3	13.5	9.0	5.7
82.5°	856.3	801.8	636.1	371.1	34.1	16.5	13.1	8.9	5.6
85°	824.1	769.1	598.6	342.6	25.0	15.8	12.8	8.8	5.6
87.5°	797.9	742.3	565.7	302.7	15.3	15.1	12.6	8.7	5.5
90°	777.8	721.9	543.9	275.8	8.4	14.5	12.3	8.6	5.4
92.5°	757.9	700.4	521.2	246.7	9.0	14.3	12.1	8.5	5.5
95°	730.3	667.7	478.6	202.7	9.6	14.5	12.1	8.6	5.6
97.5°	681.1	614.4	424.7	163.7	10.2	14.9	12.3	8.7	5.6
100°	621.5	555.6	372.3	129.8	10.5	15.1	12.5	8.7	5.7
102.5°	561.7	497.9	321.3	101.0	10.7	14.5	12.6	8.8	5.8
105°	502.8	440.8	273.5	80.3	10.8	13.7	12.8	8.9	5.8
107.5°	445.3	386.3	231.2	65.8	10.8	13.0	12.9	9.0	5.9
110°	389.6	333.2	198.7	54.0	10.8	12.3	12.6	9.1	6.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	335.8	286.3	169.5	43.9	10.8	11.7	12.3	9.2	6.2
115°	290.2	250.4	144.4	35.0	10.7	11.1	11.9	9.1	6.2
117.5°	254.5	218.0	123.7	26.9	10.7	10.7	11.4	8.8	6.1
120°	221.2	188.3	105.5	19.4	10.6	10.5	11.1	8.6	6.2
122.5°	190.5	162.8	89.4	14.3	10.5	10.6	10.8	8.4	5.8
125°	164.5	140.3	74.6	12.6	10.5	10.7	10.5	8.3	5.5
127.5°	141.5	118.9	61.0	11.4	10.4	10.6	10.2	8.1	5.5
130°	120.2	99.9	48.7	10.7	10.4	10.1	9.9	7.9	5.6
132.5°	100.9	83.2	37.3	10.0	10.5	9.7	9.6	7.7	5.5
135°	83.1	67.6	26.9	9.3	10.4	9.1	9.7	7.5	5.3
137.5°	66.4	52.6	17.0	8.8	10.4	9.2	9.9	7.4	5.2
140°	51.1	39.1	11.3	8.4	10.4	9.4	9.5	7.2	5.1
142.5°	37.2	26.7	9.5	8.0	10.4	9.6	8.4	7.3	4.9
145°	24.0	14.8	8.5	7.8	10.4	9.6	8.3	7.6	5.1
147.5°	11.6	8.4	7.7	7.6	10.4	9.7	7.8	8.0	5.5
150°	5.3	6.4	7.2	7.4	10.4	9.9	7.5	8.1	5.9
152.5°	3.5	5.4	6.7	7.4	10.3	10.0	7.4	6.7	5.8
155°	2.6	4.7	6.3	7.3	10.2	10.4	7.4	4.8	4.7
157.5°	2.0	4.1	5.9	7.5	10.2	10.6	7.4	4.5	3.4
160°	1.4	3.6	5.7	8.0	10.6	10.6	7.4	4.4	3.1
162.5°	0.9	3.2	5.5	8.3	10.6	10.7	8.1	4.4	3.0
165°	0.5	2.9	5.5	8.7	10.7	10.5	8.6	4.3	3.0
167.5°	0.1	2.6	5.8	9.0	10.7	10.6	8.6	4.4	3.1
170°	0.0	2.9	6.5	9.3	10.8	10.5	8.6	4.4	3.3
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)