

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: 227P116

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

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: 227P116
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: SML-128T5 (SML-2IN-ASY-4FT-1LT-REFL-B)
Description: SML Series Staggered Commercial Micro-Striplight
with a solid 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

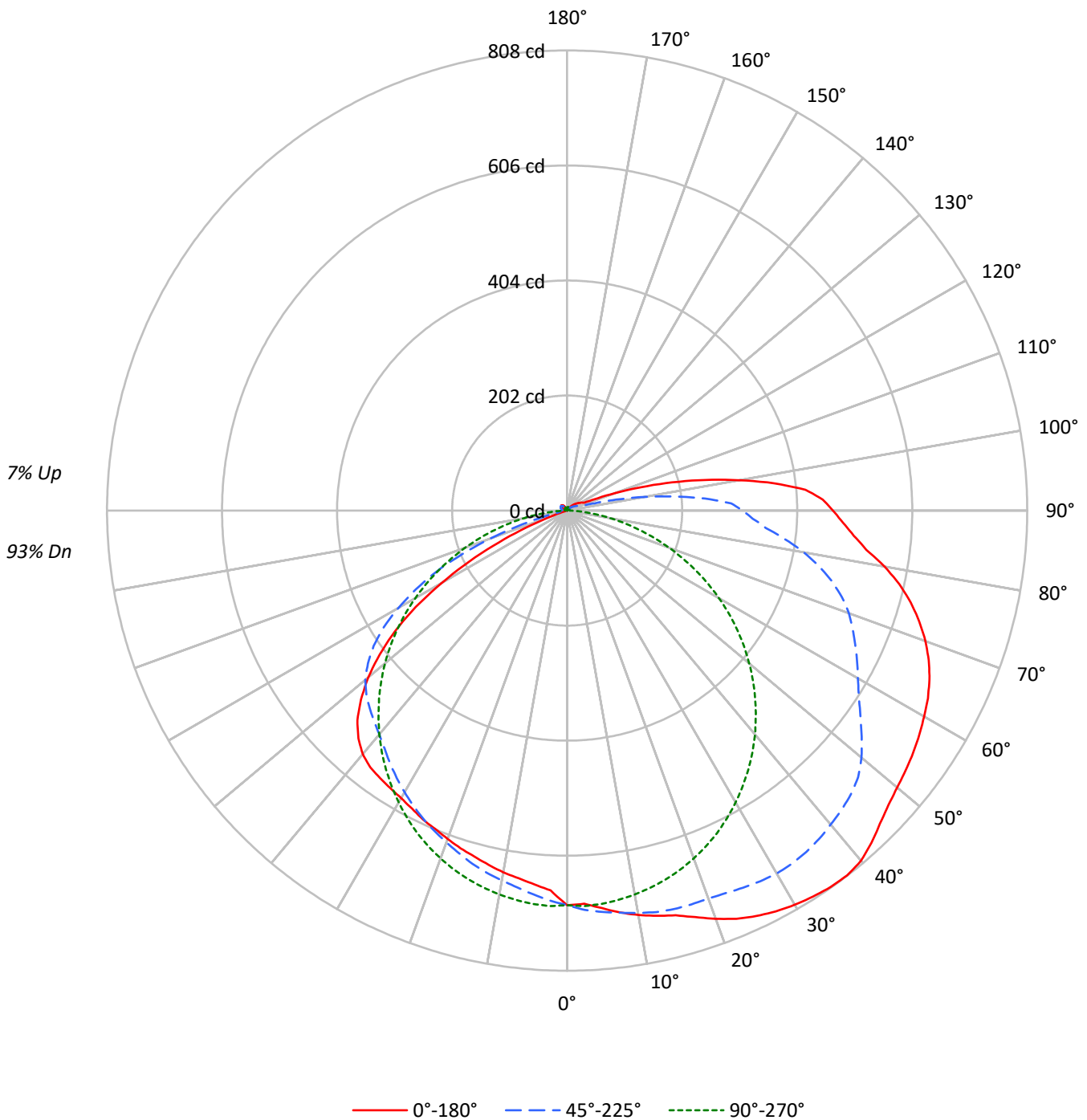
Lumens per Lamp: 2900 (1 lamp)
Luminaire Lumens: 2877.7 lumens
Efficiency: 99.2%
Efficacy: 77.8 lumens/watt
Spacing Criteria (0/90/45): 1.52 / 1.27 / 1.57
Luminous Opening: Rectangular w/ Sides (W: 3.76' x L: 0.31' x H: 0.1')
CIE Type: Direct

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	116	116	116	116	113	113	113	113	106	106	106	100	100	100	95	95	95	92
1	104	98	93	88	100	95	90	86	89	85	82	84	81	78	79	77	75	72
2	93	84	76	70	90	81	74	68	77	71	66	72	67	63	68	64	60	58
3	84	73	64	57	81	71	62	56	67	60	54	63	57	52	59	54	50	47
4	77	64	54	47	74	62	53	46	59	51	45	55	49	44	52	47	42	40
5	70	57	47	40	68	55	46	39	52	44	38	49	43	37	47	41	36	34
6	65	51	41	34	62	49	40	34	47	39	33	44	37	32	42	36	31	29
7	60	46	37	30	58	45	36	30	42	35	29	40	33	28	38	32	28	25
8	56	41	33	27	54	40	32	26	39	31	26	37	30	25	35	29	24	22
9	52	38	29	24	50	37	29	23	35	28	23	34	27	22	32	26	22	20
10	48	35	27	21	47	34	26	21	33	26	21	31	25	20	30	24	20	18

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	6398	6398	6398
5°	6318	6411	5939
10°	6398	6389	5724
15°	6475	6362	5535
20°	6710	6327	5396
25°	6958	6280	5303
30°	7185	6214	5241
35°	7420	6138	5270
40°	7617	6050	5298
45°	7673	5941	5144
50°	7849	5812	4731
55°	8176	5652	4063
60°	8575	5442	3017
65°	9067	5160	1709
70°	9585	4783	402
75°	10117	4275	57
80°	10638	3563	60
85°	11418	2381	70



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	45°	90°	135°	180°	Flux
0°-10°	65.8	2.3	2.3	0°	693	693	693	693	693	
10°-20°	192.7	6.7	6.6	5°	701	708	693	677	659	68
20°-30°	306.0	10.6	10.6	15°	736	724	670	642	629	210
30°-40°	394.8	13.7	13.6	25°	786	731	624	597	599	363
40°-50°	446.4	15.5	15.4	35°	807	732	555	542	573	506
50°-60°	440.4	15.3	15.2	45°	777	705	467	490	521	602
60°-70°	372.9	13.0	12.9	55°	742	628	364	415	369	665
70°-80°	267.4	9.3	9.2	65°	702	558	250	253	132	695
80°-90°	183.4	6.4	6.3	75°	625	482	132	44	4	658
90°-100°	122.9	4.3	4.2	85°	505	350	29	12	3	425
100°-110°	46.7	1.6	1.6	90°	466	308	5	10	3	256
110°-120°	14.9	0.5	0.5	95°	420	243	4	10	3	317
120°-130°	10.2	0.4	0.4	105°	191	50	4	9	3	205
130°-140°	6.6	0.2	0.2	115°	33	19	4	13	8	43
140°-150°	3.4	0.1	0.1	125°	23	12	4	13	12	20
150°-160°	1.7	0.1	0.1	135°	13	6	5	11	13	10
160°-170°	1.2	0.0	0.0	145°	4	3	5	4	10	3
170°-180°	0.1	0.0	0.0	155°	0	4	6	4	2	0
0°-30°	564.6	19.6	19.5	165°	0	4	6	5	2	0
0°-40°	959.4	33.3	33.1	175°	0	0	0	0	0	0
0°-60°	1846.2	64.2	63.7	180°	0	0	0	0	0	0
0°-90°	2669.9	92.8	92.1							
90°-120°	184.5	6.4	6.4							
90°-150°	204.7	7.1	7.1							
90°-180°	208.0	7.2	7.2							
0°-180°	2877.7	100.0	99.2							



TEST NUMBER: 227P116

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

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	692.8	692.8	692.8	692.8	692.8	692.8	692.8	692.8	692.8
2.5°	691.0	702.9	701.9	699.2	695.1	690.8	685.7	681.6	667.6
5°	700.8	711.9	707.5	701.2	693.2	684.4	676.8	672.1	658.8
7.5°	711.8	721.0	712.3	701.9	689.6	677.0	667.7	663.4	651.3
10°	721.1	728.9	717.4	701.3	684.5	668.3	659.4	656.1	645.1
12.5°	728.7	735.4	722.1	700.0	678.1	658.7	651.5	648.7	637.1
15°	735.8	741.8	724.4	697.7	670.2	648.7	642.1	640.3	629.0
17.5°	748.2	751.4	725.0	694.0	661.0	638.2	631.0	630.8	621.9
20°	763.0	763.5	724.8	688.8	650.0	626.0	620.0	620.5	613.5
22.5°	775.8	774.5	727.0	682.1	637.7	612.8	608.8	612.5	605.1
25°	785.6	783.2	730.7	673.6	624.0	598.3	597.4	603.5	598.7
27.5°	793.4	790.2	733.8	663.2	608.6	582.9	584.5	593.2	589.9
30°	799.3	794.4	735.9	651.6	591.7	566.5	570.9	582.6	583.0
32.5°	803.7	796.0	735.2	639.3	573.7	548.7	556.7	573.1	577.9
35°	806.8	796.7	731.7	627.5	554.6	529.9	542.0	566.4	573.1
37.5°	807.5	796.1	726.9	616.7	534.5	510.2	526.8	560.0	567.9
40°	802.9	791.9	719.8	606.2	513.1	490.0	513.0	552.7	558.4
42.5°	791.1	781.6	712.9	594.7	490.3	469.3	501.7	541.6	542.6
45°	777.1	765.8	704.6	582.1	467.0	447.9	490.5	524.8	520.9
47.5°	765.1	749.4	693.1	567.6	442.7	426.3	478.2	502.5	491.1
50°	756.4	734.6	674.8	551.0	417.4	404.4	462.6	473.3	455.9
52.5°	749.3	723.6	651.8	533.6	391.4	382.5	441.0	436.6	414.8
55°	741.8	712.6	628.5	515.0	364.4	360.2	414.7	394.5	368.6
57.5°	733.2	701.7	607.0	495.3	336.7	339.0	382.0	348.8	315.1
60°	723.7	691.0	589.4	475.1	308.2	319.6	342.7	295.6	254.6
62.5°	714.1	679.8	574.2	453.1	279.3	300.2	299.2	235.6	193.5
65°	702.0	667.0	558.1	424.7	249.6	279.7	252.7	175.6	132.3
67.5°	687.4	650.9	542.4	387.6	219.9	252.6	199.0	118.8	77.0
70°	669.6	634.2	526.5	352.7	190.1	218.8	143.7	64.9	28.1
72.5°	648.5	613.1	506.0	324.9	160.8	178.0	91.2	20.5	4.4
75°	624.9	588.2	481.6	301.8	131.7	136.7	44.1	7.6	3.5
77.5°	597.5	559.4	453.4	280.1	103.6	94.2	15.4	7.1	3.4
80°	566.0	526.6	421.8	256.3	77.1	52.0	13.2	6.8	3.2
82.5°	530.0	490.5	386.1	226.2	52.0	20.5	12.3	6.5	3.1
85°	505.1	464.1	350.1	190.8	29.3	15.4	11.6	6.2	3.1
87.5°	484.8	443.7	326.4	155.3	11.4	13.8	11.0	6.1	3.0
90°	466.5	424.9	307.7	136.0	4.6	12.5	10.4	5.8	3.0
92.5°	449.1	407.0	288.4	109.9	4.1	11.7	9.9	5.6	2.9
95°	419.9	369.8	242.8	68.4	4.0	11.3	9.6	5.5	3.0
97.5°	366.9	314.3	188.9	34.0	4.0	10.8	9.5	5.5	2.9
100°	307.1	255.8	137.1	16.9	4.0	11.1	9.2	5.5	3.0
102.5°	248.2	199.1	88.7	14.4	4.0	11.0	9.0	5.5	3.1
105°	190.8	143.8	49.6	12.5	4.0	10.8	9.3	5.5	3.2
107.5°	136.3	96.1	27.4	10.8	4.0	10.5	10.7	5.5	3.4
110°	89.4	55.3	23.3	9.4	4.0	10.2	11.7	6.4	3.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	50.1	33.8	21.2	8.2	4.0	10.0	12.4	8.5	5.7
115°	33.4	29.4	19.1	7.0	4.0	9.5	12.8	10.0	7.9
117.5°	30.1	27.0	17.2	6.0	4.1	8.9	13.1	11.1	9.3
120°	27.6	24.9	15.2	5.2	4.2	8.1	13.4	11.9	10.6
122.5°	25.1	22.6	13.5	4.5	4.3	7.2	13.5	12.4	11.2
125°	22.7	20.2	12.0	4.1	4.4	6.3	13.4	13.2	11.5
127.5°	20.2	17.5	10.3	3.9	4.5	5.4	13.2	13.6	12.2
130°	17.7	15.2	8.8	3.9	4.6	4.9	12.7	13.7	13.3
132.5°	15.2	13.2	7.3	4.0	4.7	4.7	12.0	13.6	13.4
135°	12.9	11.1	6.1	4.1	4.9	4.5	11.1	13.4	13.3
137.5°	10.6	9.1	4.9	4.2	5.0	4.7	9.8	13.0	12.9
140°	8.4	7.3	4.0	4.4	5.2	4.7	7.7	12.1	12.2
142.5°	6.2	5.4	3.4	4.5	5.3	4.9	5.2	10.7	11.2
145°	4.2	3.7	3.2	4.6	5.3	5.0	4.5	9.0	9.7
147.5°	2.4	2.5	3.2	4.7	5.5	5.1	4.1	7.1	7.8
150°	1.0	1.7	3.4	4.9	5.6	5.2	3.9	5.1	5.7
152.5°	0.1	1.4	3.4	5.1	5.7	5.4	3.9	3.3	3.7
155°	0.0	1.5	3.5	5.1	5.8	5.6	4.0	2.2	2.1
157.5°	0.0	1.6	3.7	5.4	6.0	5.8	4.2	2.2	1.5
160°	0.2	1.8	3.8	5.6	6.2	5.9	4.3	2.3	1.3
162.5°	0.3	1.9	4.1	5.7	6.4	5.9	4.5	2.4	1.5
165°	0.5	2.1	4.2	5.8	6.4	6.1	4.7	2.5	1.5
167.5°	0.7	2.3	4.4	5.9	6.6	6.1	4.8	2.5	1.6
170°	0.8	2.5	4.6	6.1	6.6	6.2	4.8	2.6	1.7
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)