

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: 175P130

Luminaire Tested: **SML-128T5**

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: 175P130
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: SML-128T5
Description: Staggered T5 Micro Striplight
Light Source: One - F28T5/835 - 2900 Lumens ea. - 28 Watts ea.
Ballast/Driver: Magnetek BT5-128 Electronic - L.O.B.F. = 97.5

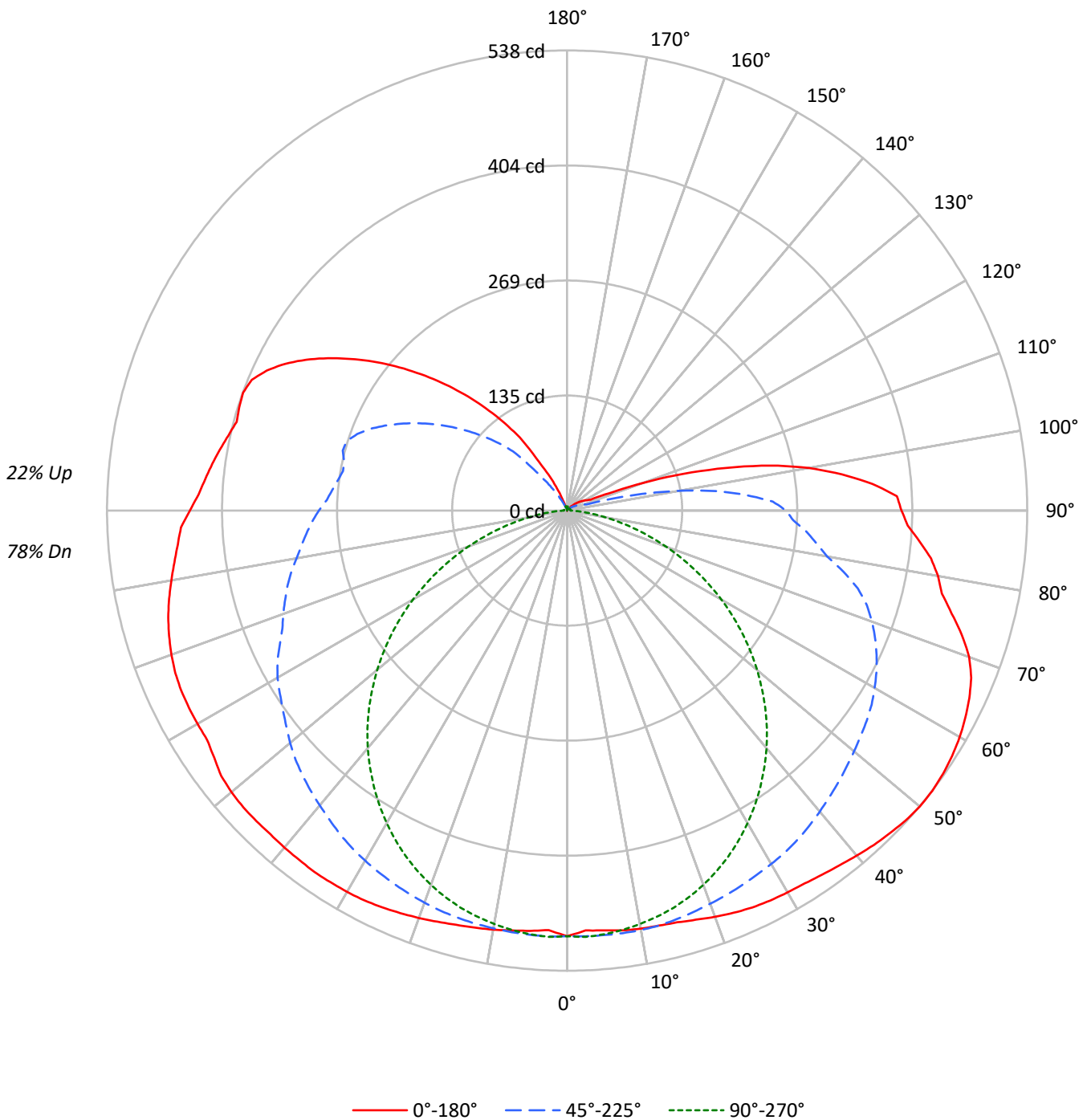
Summary

Lumens per Lamp: 2900 (1 lamp)
Luminaire Lumens: 3043.7 lumens
Efficiency: 105.0%
Efficacy: 80.1 lumens/watt
Spacing Criteria (0/90/45): 1.59 / 1.26 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 3.77' x L: 0.19' x H: 0.08')
CIE Type: Semi-Direct

Input Watts (W): 38
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	119	119	119	119	114	114	114	114	104	104	104	95	95	95	86	86	86	82
1	104	98	92	86	99	93	87	82	84	80	76	76	72	69	69	66	63	59
2	93	83	74	67	88	79	71	64	71	65	59	64	59	54	58	53	50	46
3	84	71	61	53	79	68	59	51	61	54	48	55	49	44	50	45	40	37
4	76	62	52	44	72	59	50	42	54	46	39	48	42	36	43	38	33	30
5	70	55	45	37	66	52	43	36	47	39	33	43	36	31	39	33	28	25
6	64	49	39	32	60	47	37	31	42	34	29	38	32	26	35	29	24	22
7	59	44	34	27	56	42	33	27	38	31	25	35	28	23	32	26	21	19
8	55	40	31	24	52	38	29	23	35	27	22	32	25	20	29	23	19	17
9	51	36	27	21	48	35	26	21	32	25	19	29	23	18	27	21	17	15
10	48	33	25	19	45	32	24	19	29	22	17	27	21	16	25	19	15	13

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	7477	7477	7477
5°	7168	7488	7175
10°	7051	7461	7067
15°	6966	7436	7010
20°	7009	7390	7029
25°	7096	7324	7093
30°	7194	7232	7186
35°	7362	7120	7305
40°	7633	6990	7455
45°	7978	6817	7681
50°	8380	6608	7975
55°	8778	6355	8243
60°	9209	6038	8671
65°	9696	5635	9303
70°	10189	5098	10031
75°	10511	4379	10904
80°	11247	3499	12005
85°	12265	2442	13559



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	45°	90°	135°	180°	Flux
0°-10°	47.4	1.6	1.6	0°	498	498	498	498	498	
10°-20°	139.5	4.6	4.8	5°	493	498	497	498	493	47
20°-30°	222.4	7.3	7.7	15°	498	495	481	493	501	142
30°-40°	289.3	9.5	10.0	25°	512	483	446	481	512	237
40°-50°	336.6	11.1	11.6	35°	520	470	394	462	516	327
50°-60°	360.3	11.8	12.4	45°	534	449	328	438	514	413
60°-70°	360.1	11.8	12.4	55°	536	428	250	406	504	480
70°-80°	334.3	11.0	11.5	65°	519	399	166	371	498	514
80°-90°	290.3	9.5	10.0	75°	466	352	81	338	483	494
90°-100°	239.5	7.9	8.3	85°	414	281	18	306	457	344
100°-110°	167.3	5.5	5.8	90°	391	256	4	290	441	215
110°-120°	114.8	3.8	4.0	95°	358	209	4	276	425	277
120°-130°	76.6	2.5	2.6	105°	193	49	4	272	400	204
130°-140°	42.8	1.4	1.5	115°	30	16	4	235	388	42
140°-150°	17.4	0.6	0.6	125°	18	8	4	172	309	16
150°-160°	4.0	0.1	0.1	135°	8	3	4	109	214	6
160°-170°	0.9	0.0	0.0	145°	0	3	4	37	120	1
170°-180°	0.1	0.0	0.0	155°	0	3	5	5	31	0
0°-30°	409.3	13.4	14.1	165°	0	3	5	3	1	0
0°-40°	698.6	23.0	24.1	175°	0	0	0	0	0	0
0°-60°	1395.5	45.8	48.1	180°	0	0	0	0	0	0
0°-90°	2380.2	78.2	82.1							
90°-120°	521.7	17.1	18.0							
90°-150°	658.5	21.6	22.7							
90°-180°	663.0	21.8	22.9							
0°-180°	3043.7	100.0	105.0							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	497.6	497.6	497.6	497.6	497.6	497.6	497.6	497.6	497.6
2.5°	491.4	498.2	498.3	497.7	498.9	498.9	498.4	497.6	490.9
5°	492.7	499.3	498.2	495.7	497.3	497.5	497.9	498.5	493.2
7.5°	495.1	500.8	498.3	494.0	494.6	495.3	497.1	499.2	495.1
10°	496.4	501.9	498.0	492.2	490.8	492.3	496.0	500.4	497.5
12.5°	496.9	502.2	496.9	489.5	486.2	488.5	494.7	501.3	499.4
15°	498.3	502.8	494.6	485.4	480.7	483.8	493.0	502.0	501.4
17.5°	501.5	504.6	491.9	479.9	473.8	478.0	490.7	503.0	504.0
20°	505.5	506.9	489.2	473.2	465.7	471.4	487.8	503.8	506.9
22.5°	509.0	509.3	486.4	465.6	456.4	464.0	484.4	504.5	509.4
25°	512.0	510.5	483.4	457.3	446.1	455.8	480.8	505.2	511.8
27.5°	514.0	510.9	480.1	448.2	434.5	446.8	476.9	505.2	513.7
30°	515.4	510.8	477.1	438.3	421.9	436.9	472.6	505.4	514.8
32.5°	516.9	510.8	473.9	428.0	408.4	426.2	467.9	505.0	515.2
35°	519.6	511.6	469.7	417.4	393.9	414.8	462.4	503.3	515.6
37.5°	522.8	512.8	464.8	406.3	378.7	403.0	456.0	501.8	514.7
40°	526.6	513.5	459.4	394.7	362.7	390.4	450.0	499.9	514.3
42.5°	530.5	513.6	454.0	382.6	345.5	377.5	444.0	498.3	513.5
45°	533.5	513.8	448.7	369.9	327.6	364.4	437.6	496.6	513.6
47.5°	536.5	514.3	443.2	356.9	309.0	350.5	430.7	493.9	513.5
50°	538.3	514.3	438.0	343.5	289.8	336.0	422.7	491.1	512.3
52.5°	538.2	512.3	432.6	329.6	270.2	321.3	413.9	487.7	509.7
55°	536.5	508.5	427.7	315.3	249.9	306.8	405.7	483.3	503.8
57.5°	533.8	503.5	422.1	301.4	229.1	292.2	398.2	477.4	499.0
60°	529.9	499.2	415.1	287.7	208.3	277.9	391.0	471.3	498.9
62.5°	524.9	494.1	407.8	274.9	186.9	263.3	381.8	466.4	498.7
65°	518.9	487.2	399.3	262.9	165.7	248.5	370.8	463.8	497.9
67.5°	511.4	479.7	389.8	251.7	144.1	233.8	360.3	460.5	495.9
70°	500.2	469.3	379.2	240.9	122.8	219.6	353.1	457.2	492.4
72.5°	484.1	453.4	367.3	229.1	101.6	205.8	345.7	452.5	487.9
75°	465.5	434.6	351.8	215.0	81.4	191.6	338.4	446.4	482.9
77.5°	448.7	415.3	331.0	199.7	62.5	176.1	330.2	440.1	476.7
80°	440.3	404.0	308.5	183.5	45.3	164.4	321.3	433.2	470.0
82.5°	429.1	393.3	293.9	163.0	30.1	153.5	313.2	426.1	463.1
85°	413.5	378.7	280.7	139.0	17.6	144.2	305.8	419.3	457.1
87.5°	398.4	363.8	264.7	124.0	8.4	136.8	298.5	412.7	451.9
90°	390.9	357.3	255.9	110.2	4.1	128.8	290.3	403.7	441.1
92.5°	385.9	345.7	240.6	91.9	3.7	122.1	281.4	393.8	431.2
95°	358.2	315.3	209.4	65.0	3.7	117.1	275.6	387.2	424.7
97.5°	324.1	280.4	174.9	34.1	3.6	119.9	270.5	380.6	418.4
100°	286.5	240.9	132.9	15.0	3.6	121.8	266.0	374.7	412.2
102.5°	243.5	193.5	89.7	12.3	3.6	116.4	267.2	368.6	405.6
105°	192.7	145.0	49.3	10.1	3.5	109.2	271.6	366.1	400.2
107.5°	142.6	98.1	24.0	8.3	3.5	101.1	270.2	368.9	401.9
110°	95.2	55.4	20.2	6.7	3.4	92.7	261.3	370.0	403.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	52.8	30.0	17.8	5.4	3.4	84.4	249.4	364.0	399.2
115°	29.9	25.5	15.5	4.2	3.5	76.2	235.0	349.9	387.5
117.5°	26.3	22.9	13.3	3.4	3.5	68.2	219.7	334.2	371.7
120°	23.6	20.3	11.2	3.2	3.5	60.2	204.1	315.9	352.7
122.5°	20.9	17.8	9.4	3.2	3.6	49.0	188.4	295.6	331.6
125°	18.1	15.2	7.6	3.2	3.7	38.5	172.3	274.3	309.0
127.5°	15.5	12.8	5.9	3.3	3.7	31.8	156.4	253.1	286.2
130°	12.9	10.4	4.6	3.4	3.8	25.5	140.6	231.6	262.6
132.5°	10.3	8.2	3.4	3.5	3.9	19.3	124.9	209.7	238.5
135°	7.8	6.0	2.6	3.6	4.0	13.2	109.4	188.1	214.5
137.5°	5.5	4.1	2.6	3.7	4.1	8.7	94.0	167.0	190.8
140°	3.4	2.5	2.6	3.8	4.2	5.8	70.1	145.7	167.0
142.5°	1.5	1.4	2.7	3.9	4.3	4.5	50.1	124.9	143.3
145°	0.2	1.2	2.7	3.9	4.4	4.1	37.2	104.5	120.3
147.5°	0.0	1.2	2.8	4.0	4.5	4.1	26.1	75.2	97.3
150°	0.0	1.3	2.9	4.1	4.5	4.2	16.8	56.0	64.7
152.5°	0.0	1.4	3.0	4.2	4.6	4.2	9.7	39.5	47.3
155°	0.1	1.5	3.1	4.2	4.7	4.3	5.3	22.6	31.2
157.5°	0.2	1.5	3.2	4.3	4.8	4.4	3.7	10.9	16.7
160°	0.3	1.6	3.3	4.4	4.9	4.4	3.3	4.1	5.8
162.5°	0.3	1.7	3.3	4.5	4.9	4.5	3.4	2.0	1.4
165°	0.4	1.8	3.4	4.5	5.0	4.5	3.4	1.8	0.8
167.5°	0.5	1.8	3.4	4.6	5.0	4.5	3.4	1.8	0.8
170°	0.6	1.9	3.5	4.7	5.1	4.6	3.5	1.9	0.9
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)