

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: 227P114

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

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: 227P114
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: SM-128T5 (RP-2IN-SYM-4FT-REFL-B)
Description: SM Series Commercial Micro-Striplight
with a perforated 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

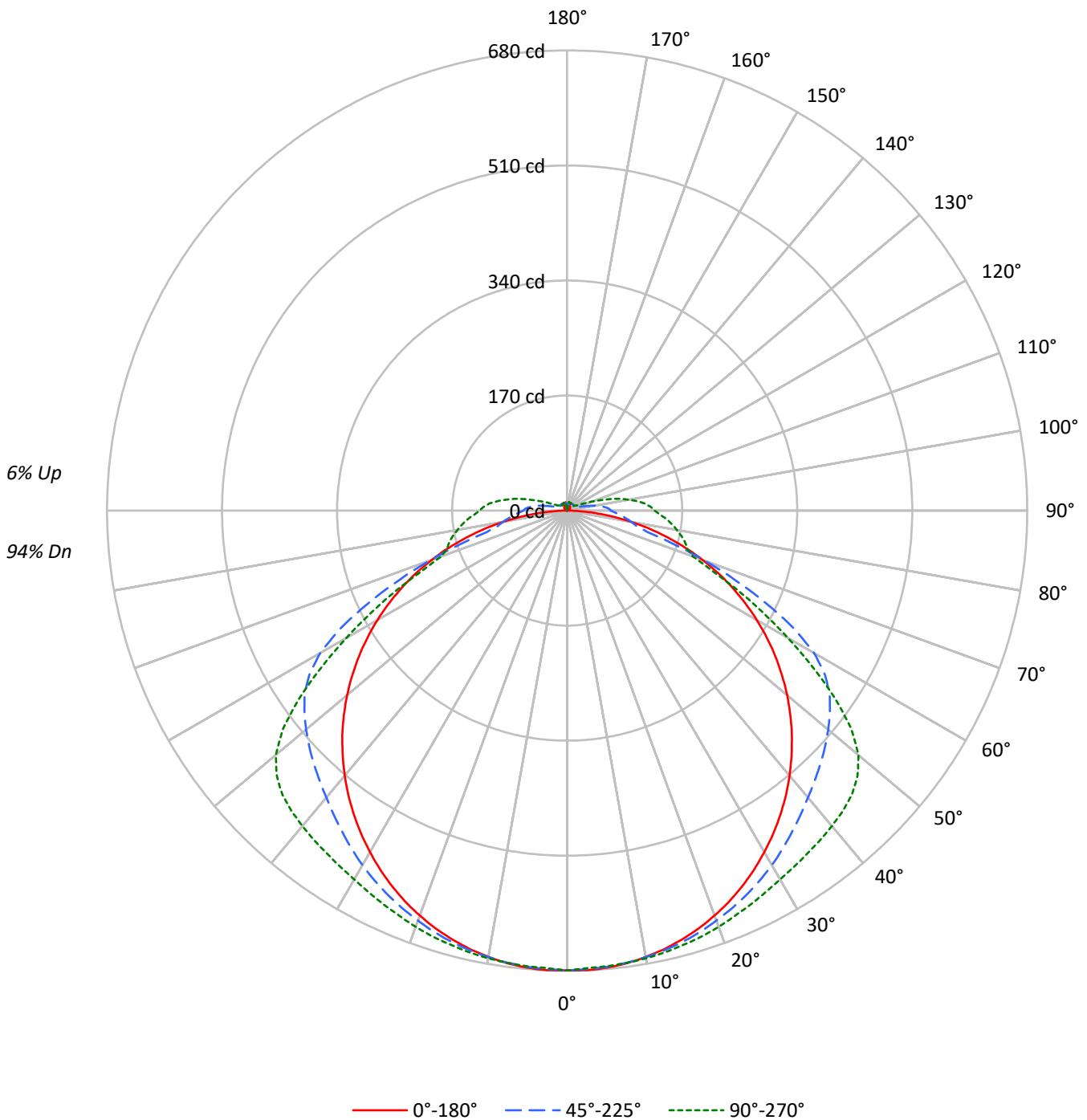
Lumens per Lamp: 2900 (1 lamp)
Luminaire Lumens: 2418.2 lumens
Efficiency: 83.4%
Efficacy: 65.4 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.4 / 1.5
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 3.76' x H: 0.1')
CIE Type: Direct

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	98	98	98	98	95	95	95	95	90	90	90		85	85	85		81	81	81	78
1	89	84	80	77	86	82	78	75	77	75	72		73	71	69		69	68	66	64
2	80	73	67	62	77	71	65	61	67	62	58		64	60	56		60	57	54	52
3	73	64	56	51	70	62	55	50	59	53	48		56	51	47		53	49	46	43
4	66	56	48	43	64	55	47	42	52	46	41		49	44	40		47	42	39	37
5	61	50	42	36	59	49	41	36	46	40	35		44	38	34		42	37	33	31
6	56	45	37	31	54	44	36	31	42	35	30		40	34	30		38	33	29	27
7	52	40	33	28	50	39	32	27	38	31	27		36	30	26		34	29	26	24
8	48	37	29	24	47	36	29	24	34	28	24		33	27	23		31	27	23	21
9	45	33	26	22	43	33	26	22	31	25	21		30	25	21		29	24	20	19
10	42	31	24	20	41	30	24	19	29	23	19		28	23	19		27	22	18	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6707	6707	6707
5°	6704	6555	6502
10°	6683	6419	6348
15°	6658	6301	6216
20°	6627	6183	6111
25°	6589	6082	6025
30°	6542	5989	5983
35°	6496	5900	6006
40°	6445	5846	6083
45°	6389	5853	6173
50°	6317	5890	6117
55°	6229	5926	5569
60°	6113	5718	4656
65°	5955	4855	3720
70°	5726	3623	2924
75°	5354	2375	3009
80°	4747	2194	3166
85°	3526	2259	3388



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	64.4	2.7	2.2	0°	679	679	679	679	679	
10°-20°	186.7	7.7	6.4	5°	678	677	677	679	676	64
20°-30°	289.5	12.0	10.0	15°	656	656	660	666	664	185
30°-40°	365.1	15.1	12.6	25°	612	615	627	640	642	282
40°-50°	409.7	16.9	14.1	35°	549	557	580	608	619	344
50°-60°	397.6	16.4	13.7	45°	470	484	529	579	595	362
60°-70°	295.7	12.2	10.2	55°	376	397	474	492	483	336
70°-80°	171.7	7.1	5.9	65°	270	311	325	286	277	266
80°-90°	94.4	3.9	3.3	75°	154	184	123	162	180	163
90°-100°	61.2	2.5	2.1	85°	41	38	80	130	148	45
100°-110°	33.2	1.4	1.1	90°	1	16	64	112	129	3
110°-120°	14.5	0.6	0.5	95°	0	14	57	100	116	0
120°-130°	10.3	0.4	0.4	105°	1	14	24	52	66	1
130°-140°	8.7	0.4	0.3	115°	2	14	13	16	21	2
140°-150°	7.1	0.3	0.2	125°	4	14	12	11	12	4
150°-160°	5.1	0.2	0.2	135°	6	13	12	11	11	5
160°-170°	3.1	0.1	0.1	145°	7	12	12	12	12	5
170°-180°	0.2	0.0	0.0	155°	8	11	11	12	12	4
0°-30°	540.6	22.4	18.6	165°	11	11	11	10	12	3
0°-40°	905.8	37.5	31.2	175°	0	0	0	0	0	0
0°-60°	1713.0	70.8	59.1	180°	0	0	0	0	0	
0°-90°	2274.8	94.1	78.4							
90°-120°	108.9	4.5	3.8							
90°-150°	134.9	5.6	4.7							
90°-180°	143.0	5.9	4.9							
0°-180°	2418.2	100.0	83.4							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	679.4	679.4	679.4	679.4	679.4
2.5°	679.9	678.6	678.4	679.5	676.7
5°	678.1	676.6	676.7	678.8	676.0
7.5°	674.8	673.5	673.9	676.4	674.2
10°	669.8	669.1	670.0	673.0	671.8
12.5°	663.7	663.4	665.5	669.9	668.6
15°	656.1	656.5	659.9	665.8	664.4
17.5°	647.4	648.3	653.0	660.5	660.2
20°	636.9	638.3	644.8	653.8	654.7
22.5°	625.4	627.4	636.1	647.0	648.0
25°	612.4	615.4	626.8	639.6	642.1
27.5°	598.3	602.5	616.4	631.6	635.6
30°	582.7	588.5	605.1	623.6	629.4
32.5°	566.6	573.5	592.7	615.7	624.0
35°	549.1	557.3	579.6	608.5	618.7
37.5°	530.8	540.2	566.7	601.9	614.1
40°	511.3	522.4	553.6	594.9	608.6
42.5°	490.9	503.5	541.3	587.1	602.6
45°	469.8	483.7	529.4	578.9	594.7
47.5°	447.5	462.6	516.9	568.9	581.8
50°	424.4	441.0	503.6	553.1	562.0
52.5°	400.4	419.2	489.4	529.0	528.9
55°	375.7	397.2	473.5	492.0	482.9
57.5°	350.2	375.1	451.8	443.7	430.3
60°	323.9	353.7	421.4	390.3	376.7
62.5°	296.9	332.6	378.1	336.7	325.9
65°	269.5	310.9	324.9	285.9	277.0
67.5°	241.6	289.1	269.5	237.0	230.7
70°	212.9	265.5	216.1	193.5	197.3
72.5°	183.8	232.2	165.6	169.7	185.7
75°	154.3	184.5	123.3	162.4	180.4
77.5°	125.2	134.5	104.8	154.5	172.7
80°	96.1	88.1	96.1	145.8	164.6
82.5°	67.7	53.7	87.6	137.5	156.6
85°	40.6	37.8	79.8	129.7	147.8
87.5°	16.4	25.4	71.2	119.9	137.2
90°	1.4	16.0	64.3	112.0	129.0
92.5°	0.0	15.2	62.2	107.2	123.7
95°	0.1	14.0	56.7	99.8	115.9
97.5°	0.2	13.5	49.2	89.4	104.7
100°	0.5	13.5	41.1	77.9	92.6
102.5°	0.8	13.6	31.7	66.0	79.8
105°	1.0	13.7	24.2	52.4	66.0
107.5°	1.2	13.8	17.7	39.4	50.0
110°	1.5	13.9	13.6	30.0	38.6



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CATALOG NUMBER: SM-128T5 (RP-2IN-SYM-4FT-REFL-B)

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	1.9	14.0	13.0	21.6	29.1
115°	2.3	13.9	13.0	16.1	21.3
117.5°	2.6	13.9	12.5	14.8	16.8
120°	3.1	13.9	12.1	13.7	15.4
122.5°	3.6	13.7	12.0	12.6	14.0
125°	4.2	13.6	12.0	11.2	12.4
127.5°	4.8	13.5	12.0	10.8	10.8
130°	5.3	13.5	12.2	10.8	10.5
132.5°	5.8	13.4	12.3	10.9	10.5
135°	6.2	13.1	12.5	11.1	10.6
137.5°	6.5	12.6	12.6	11.3	10.8
140°	6.8	12.1	12.4	11.5	11.1
142.5°	7.1	11.9	12.3	11.7	11.3
145°	7.4	11.6	12.1	11.9	11.5
147.5°	7.7	11.4	11.9	11.9	11.7
150°	8.0	11.0	11.6	12.1	11.7
152.5°	8.2	10.9	11.3	12.2	12.0
155°	8.4	10.8	10.9	12.1	12.2
157.5°	9.0	10.7	10.7	11.7	12.4
160°	9.9	10.6	10.7	11.0	12.4
162.5°	10.3	10.7	10.6	10.6	12.4
165°	11.0	11.0	10.8	10.3	12.4
167.5°	11.8	11.5	11.1	10.1	12.6
170°	12.5	11.9	11.3	9.9	12.7
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)