

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: 175P129

Luminaire Tested: **SML-228T5**

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: 175P129
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: SML-228T5
Description: Staggered T5 Micro Striplight
Light Source: Two - F28T5/835 - 2900 Lumens - 28 Watts ea.
Ballast/Driver: Energy Savings ES-2-T5-28-120-F Electronic L.O.B.F. = 91.75

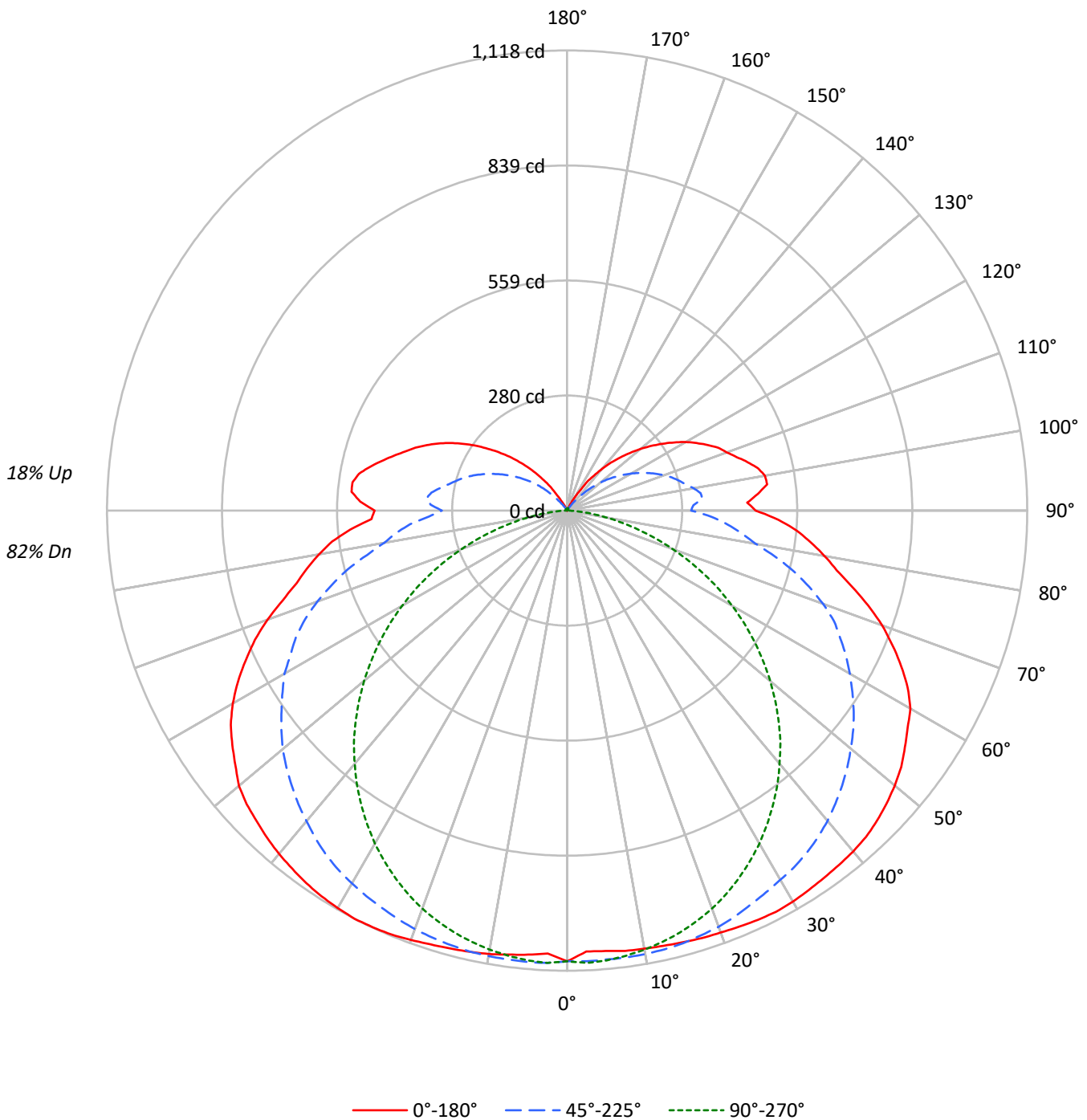
Summary

Lumens per Lamp: 2900 (2 lamps)
Luminaire Lumens: 5558.2 lumens
Efficiency: 95.8%
Efficacy: 88.2 lumens/watt
Spacing Criteria (0/90/45): 1.53 / 1.26 / 1.56
Luminous Opening: Rectangular w/ Sides (W: 0.18' x L: 4.1' x H: 0.08')
CIE Type: Semi-Direct

Input Watts (W): 63
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	110	110	110	110	106	106	106	106	97	97	97	89	89	89	82	82	82	79
1	98	92	87	82	93	88	83	79	81	77	74	74	71	68	68	65	63	60
2	87	78	71	64	83	75	68	62	69	63	58	63	58	54	58	54	51	48
3	79	68	59	52	75	65	57	51	60	53	47	55	49	44	50	45	42	39
4	72	59	50	43	68	57	48	42	52	45	40	48	42	37	44	39	35	32
5	66	53	43	37	62	50	42	36	46	39	34	43	36	32	39	34	30	27
6	60	47	38	31	57	45	37	31	42	34	29	38	32	27	35	30	26	23
7	56	42	33	27	53	41	32	27	38	30	25	35	29	24	32	27	23	20
8	52	38	30	24	49	37	29	23	34	27	22	32	26	21	29	24	20	18
9	48	35	27	21	46	34	26	21	31	25	20	29	23	19	27	22	18	16
10	45	32	24	19	43	31	24	19	29	22	18	27	21	17	25	20	16	14

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	15971	15971	15971
5°	15698	15460	15829
10°	15955	14874	16147
15°	16313	14316	16538
20°	16814	13748	17107
25°	17495	13144	17814
30°	18269	12518	18569
35°	19129	11841	19410
40°	20250	11136	20400
45°	21547	10382	21587
50°	23040	9553	23084
55°	24789	8649	24566
60°	27173	7631	26467
65°	29680	6520	28554
70°	32946	5222	31368
75°	37663	3794	35719
80°	48022	2314	46282
85°	76625	936	72383



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	45°	90°	135°	180°	Flux
0°-10°	104.5	1.9	1.8	0°	1095	1095	1095	1095	1095	
10°-20°	307.5	5.5	5.3	5°	1074	1095	1097	1101	1083	103
20°-30°	488.2	8.8	8.4	15°	1086	1088	1061	1093	1101	308
30°-40°	629.0	11.3	10.8	25°	1097	1056	986	1065	1117	507
40°-50°	714.3	12.9	12.3	35°	1089	1015	872	1021	1105	684
50°-60°	732.7	13.2	12.6	45°	1065	945	727	946	1067	823
60°-70°	676.3	12.2	11.7	55°	1002	850	556	847	993	898
70°-80°	540.8	9.7	9.3	65°	896	732	369	727	862	886
80°-90°	378.8	6.8	6.5	75°	717	570	179	552	680	761
90°-100°	315.3	5.7	5.4	85°	560	392	34	383	529	472
100°-110°	270.9	4.9	4.7	90°	458	301	3	304	468	256
110°-120°	196.5	3.5	3.4	95°	465	330	3	343	526	386
120°-130°	121.7	2.2	2.1	105°	454	281	3	279	466	479
130°-140°	60.1	1.1	1.0	115°	377	216	3	211	376	373
140°-150°	18.2	0.3	0.3	125°	283	143	3	137	276	255
150°-160°	2.6	0.0	0.0	135°	183	71	4	63	171	143
160°-170°	1.0	0.0	0.0	145°	86	13	4	9	69	54
170°-180°	0.1	0.0	0.0	155°	9	3	5	3	3	7
0°-30°	900.1	16.2	15.5	165°	0	4	6	4	1	0
0°-40°	1529.1	27.5	26.4	175°	0	0	0	0	0	0
0°-60°	2976.0	53.5	51.3	180°	0	0	0	0	0	
0°-90°	4572.0	82.3	78.8							
90°-120°	782.6	14.1	13.5							
90°-150°	982.6	17.7	16.9							
90°-180°	986.0	17.7	17.0							
0°-180°	5558.2	100.0	95.8							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	1095	1095	1095	1095	1095	1095	1095	1095	1095
2.5°	1072	1095	1096	1096	1100	1101	1100	1099	1077
5°	1074	1097	1095	1092	1097	1099	1101	1103	1083
7.5°	1079	1100	1095	1088	1091	1095	1100	1106	1088
10°	1081	1102	1094	1084	1083	1089	1099	1109	1094
12.5°	1083	1103	1092	1078	1073	1082	1097	1111	1098
15°	1086	1105	1088	1069	1061	1072	1093	1113	1101
17.5°	1089	1105	1082	1057	1046	1060	1088	1114	1105
20°	1091	1105	1076	1042	1029	1046	1082	1114	1110
22.5°	1094	1106	1067	1025	1009	1031	1074	1114	1115
25°	1097	1106	1056	1007	986	1013	1065	1115	1117
27.5°	1099	1104	1046	988	961	994	1056	1112	1118
30°	1097	1101	1036	966	934	972	1046	1108	1115
32.5°	1093	1095	1027	944	904	949	1035	1102	1111
35°	1089	1089	1015	919	872	924	1021	1093	1105
37.5°	1085	1082	1001	893	839	898	1004	1082	1097
40°	1081	1072	984	865	803	870	985	1071	1089
42.5°	1075	1061	965	836	767	841	967	1059	1079
45°	1065	1048	945	806	727	812	946	1047	1067
47.5°	1053	1033	923	776	686	782	925	1031	1056
50°	1039	1016	900	745	644	749	902	1014	1041
52.5°	1023	996	876	713	600	715	875	994	1016
55°	1002	974	850	678	556	680	847	966	993
57.5°	981	947	822	643	510	644	820	940	969
60°	963	925	793	606	463	608	793	916	938
62.5°	933	900	764	569	417	570	757	879	902
65°	896	863	732	532	369	531	727	839	862
67.5°	856	823	702	493	320	493	689	797	821
70°	814	780	661	455	272	454	645	753	775
72.5°	767	733	617	417	225	416	599	705	724
75°	717	682	570	377	179	374	552	652	680
77.5°	671	633	518	341	136	334	498	612	647
80°	635	594	465	298	97	290	451	579	612
82.5°	598	557	428	251	63	243	419	541	576
85°	560	518	392	203	34	200	383	502	529
87.5°	514	471	352	175	12	172	336	447	476
90°	458	419	301	136	3	137	304	422	468
92.5°	438	414	307	146	3	152	332	453	503
95°	465	444	330	142	3	143	343	475	526
97.5°	490	457	327	130	3	130	333	474	526
100°	488	450	312	120	3	119	314	461	514
102.5°	475	434	295	109	3	108	295	438	491
105°	454	413	281	98	3	96	279	414	466
107.5°	432	393	267	87	3	85	264	393	442
110°	413	377	250	76	2	74	247	374	419



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	398	359	234	66	3	63	229	354	399
115°	377	338	216	53	3	53	211	332	376
117.5°	355	317	198	44	3	41	192	310	353
120°	333	295	180	31	3	30	174	287	328
122.5°	308	271	161	23	3	19	155	263	302
125°	283	248	143	16	3	13	137	239	276
127.5°	258	224	125	10	3	8	119	215	249
130°	233	200	106	5	3	5	101	191	223
132.5°	207	177	87	4	3	3	81	166	197
135°	183	154	71	3	4	3	63	143	171
137.5°	158	130	49	3	4	3	42	120	145
140°	133	104	35	3	4	3	26	95	120
142.5°	107	84	24	4	4	4	16	72	92
145°	86	56	13	4	4	4	9	45	69
147.5°	56	39	6	4	5	4	4	28	39
150°	38	24	3	4	5	4	3	16	23
152.5°	22	11	3	4	5	4	3	6	12
155°	9	4	3	5	5	5	3	2	3
157.5°	2	2	3	5	5	5	3	1	1
160°	0	2	4	5	6	5	4	2	0
162.5°	0	2	4	5	6	5	4	2	0
165°	0	2	4	5	6	5	4	2	1
167.5°	0	2	4	5	6	5	4	2	1
170°	1	2	4	6	6	6	4	2	1
172.5°	0	0	0	0	0	0	0	0	0
175°	0	0	0	0	0	0	0	0	0
177.5°	0	0	0	0	0	0	0	0	0
180°	0	0	0	0	0	0	0	0	0

(END OF REPORT)