

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: 227P108

Luminaire Tested: **SML-228T5 (SML-2IN-ASY/REV-4FT-2LT-REFL-B)**

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: 227P108
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: SML-228T5 (SML-2IN-ASY/REV-4FT-2LT-REFL-B)
Description: SML Series Staggered Commercial Micro-Striplight
with a solid reverse asymmetric reflector.
Light Source: Two - F28T5/835 - 2900 Lumens ea. - 28 Watts ea.
Ballast/Driver: Magnetek BT5-228/120 Electronic - L.O.B.F. = 97.5%

Summary

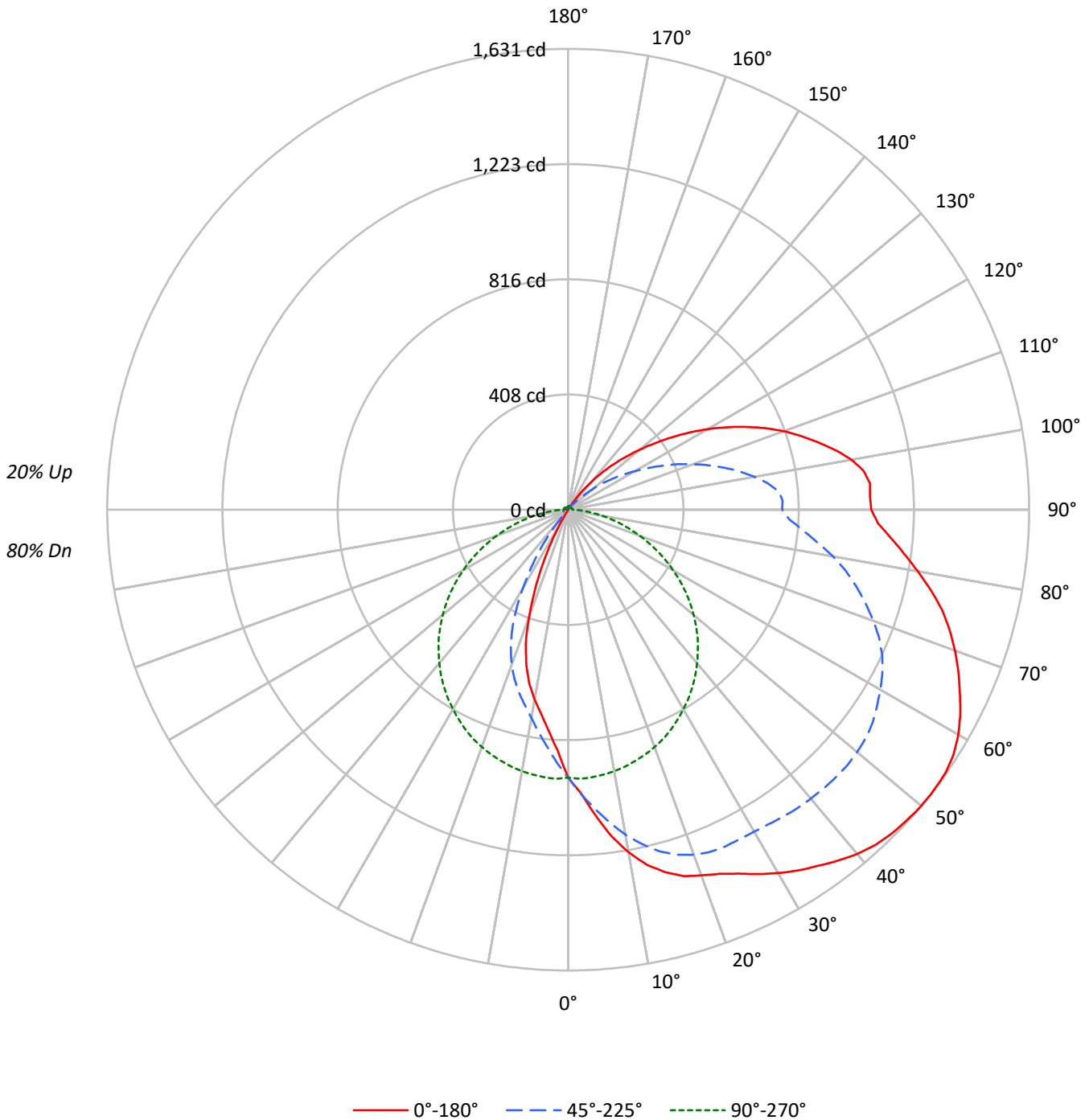
Lumens per Lamp: 2900 (2 lamps)
Luminaire Lumens: 4879.5 lumens
Efficiency: 84.1%
Efficacy: 75.1 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.28 / 1.46
Luminous Opening: Rectangular w/ Sides (W: 4.09' x L: 0.13' x H: 0.21')
CIE Type: Semi-Direct

Input Watts (W): 65
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									
RC	80									50									30									10									0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0													
RCR																																					
0	96	96	96	96	92	92	92	92	84	84	84	77	77	77	70	70	70	67																			
1	84	79	74	70	80	76	71	67	69	65	62	63	60	57	57	55	53	50																			
2	76	67	60	55	72	64	58	53	58	53	49	53	49	45	48	45	42	39																			
3	68	58	50	44	65	55	48	43	50	45	40	46	41	37	41	38	34	31																			
4	62	51	43	37	59	49	41	35	44	38	33	40	35	31	37	32	29	26																			
5	57	45	37	31	54	43	36	30	39	33	28	36	30	26	33	28	24	22																			
6	52	40	32	27	49	39	31	26	35	29	24	32	27	23	29	25	21	19																			
7	48	36	29	23	46	35	28	22	32	26	21	29	24	20	27	22	19	17																			
8	45	33	26	20	42	32	25	20	29	23	19	27	21	18	25	20	17	15																			
9	42	30	23	18	40	29	22	18	27	21	17	25	19	16	23	18	15	13																			
10	39	28	21	16	37	27	20	16	25	19	15	23	18	14	21	17	13	12																			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	19192	19192	19192
5°	19265	19239	13995
10°	19695	19150	10912
15°	19425	19020	8338
20°	18682	18907	5522
25°	18104	18739	2739
30°	17962	18503	617
35°	17847	18274	35
40°	17850	17963	45
45°	17734	17646	44
50°	17561	17184	32
55°	17375	16672	43
60°	16993	15951	32
65°	16407	15060	43
70°	15847	13954	44
75°	15235	12537	33
80°	14410	10925	34
85°	13676	8782	36



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	45°	90°	135°	180°	Flux
0°-10°	90.9	1.9	1.6	0°	948	948	948	948	948	
10°-20°	267.4	5.5	4.6	5°	1082	1060	951	844	786	108
20°-30°	400.4	8.2	6.9	15°	1328	1252	920	671	570	376
30°-40°	485.1	9.9	8.4	25°	1421	1315	859	469	215	661
40°-50°	551.4	11.3	9.5	35°	1539	1326	766	175	3	968
50°-60°	585.3	12.0	10.1	45°	1620	1339	648	16	4	1252
60°-70°	578.7	11.9	10.0	55°	1628	1315	507	17	4	1455
70°-80°	521.7	10.7	9.0	65°	1529	1226	349	18	4	1516
80°-90°	420.1	8.6	7.2	75°	1369	1056	191	17	3	1442
90°-100°	362.9	7.4	6.3	85°	1146	833	60	15	3	959
100°-110°	279.9	5.7	4.8	90°	1072	757	18	15	3	591
110°-120°	181.2	3.7	3.1	95°	1072	747	14	15	3	863
120°-130°	97.4	2.0	1.7	105°	918	573	14	15	4	971
130°-140°	39.8	0.8	0.7	115°	693	368	13	14	11	689
140°-150°	10.3	0.2	0.2	125°	446	190	13	11	9	404
150°-160°	4.2	0.1	0.1	135°	228	48	13	9	6	179
160°-170°	2.7	0.1	0.0	145°	48	10	13	8	3	37
170°-180°	0.2	0.0	0.0	155°	3	10	13	9	2	2
0°-30°	758.7	15.5	13.1	165°	4	11	14	9	2	1
0°-40°	1243.8	25.5	21.4	175°	0	0	0	0	0	0
0°-60°	2380.5	48.8	41.0	180°	0	0	0	0	0	0
0°-90°	3901.0	79.9	67.3							
90°-120°	823.9	16.9	14.2							
90°-150°	971.4	19.9	16.7							
90°-180°	978.0	20.0	16.9							
0°-180°	4879.5	100.0	84.1							



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CATALOG NUMBER: SML-228T5 (SML-2IN-ASY/REV-4FT-2LT-REFL-B)

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	948	948	948	948	948	948	948	948	948
2.5°	1002	1022	1005	980	953	923	897	880	853
5°	1082	1097	1060	1007	951	893	844	815	786
7.5°	1164	1170	1115	1034	946	860	795	757	729
10°	1231	1233	1168	1059	940	827	748	708	682
12.5°	1287	1286	1213	1082	931	795	708	663	633
15°	1328	1326	1252	1105	920	763	671	613	570
17.5°	1360	1358	1280	1123	908	730	630	551	499
20°	1377	1375	1300	1136	894	699	584	476	407
22.5°	1395	1387	1311	1146	878	669	530	388	308
25°	1421	1405	1315	1149	859	638	469	295	215
27.5°	1454	1432	1314	1149	838	605	398	208	128
30°	1485	1458	1316	1143	815	570	320	128	51
32.5°	1514	1482	1320	1135	792	533	244	57	5
35°	1539	1502	1326	1122	766	491	175	11	3
37.5°	1566	1523	1332	1105	739	446	110	8	3
40°	1591	1542	1335	1082	709	397	53	8	4
42.5°	1609	1557	1338	1056	679	344	19	8	3
45°	1620	1568	1339	1029	648	286	16	8	4
47.5°	1626	1571	1339	1002	614	229	16	8	3
50°	1631	1570	1335	976	579	175	16	9	3
52.5°	1631	1567	1327	951	544	125	17	9	4
55°	1628	1558	1315	926	507	81	17	9	4
57.5°	1616	1546	1295	900	469	47	17	9	4
60°	1594	1527	1275	873	429	31	17	9	3
62.5°	1564	1498	1253	847	390	28	18	9	4
65°	1529	1462	1226	818	349	28	18	9	4
67.5°	1494	1426	1191	787	309	28	18	9	3
70°	1456	1388	1149	752	269	28	18	9	4
72.5°	1415	1346	1103	715	230	28	18	8	4
75°	1369	1300	1056	675	191	27	17	8	3
77.5°	1314	1246	1007	629	155	27	17	8	3
80°	1256	1185	951	578	121	25	16	8	3
82.5°	1199	1128	889	528	89	24	16	8	3
85°	1146	1075	833	471	60	21	15	7	3
87.5°	1097	1028	783	416	37	19	15	8	3
90°	1072	1004	757	390	18	18	15	8	3
92.5°	1069	1006	759	390	15	19	14	8	3
95°	1072	1004	747	360	14	18	15	8	3
97.5°	1054	978	713	318	14	18	15	8	4
100°	1018	939	669	274	14	17	15	8	4
102.5°	970	891	623	229	14	16	15	8	3
105°	918	840	573	186	14	14	15	9	4
107.5°	865	787	522	151	13	13	15	10	6
110°	812	731	471	121	14	12	15	11	8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	754	673	420	94	13	11	15	12	9
115°	693	614	368	68	13	10	14	13	11
117.5°	632	555	319	45	13	10	13	14	12
120°	570	496	274	29	13	9	13	13	13
122.5°	508	437	230	20	13	9	12	12	11
125°	446	378	190	16	13	9	11	12	9
127.5°	386	323	152	14	13	10	10	11	9
130°	330	271	115	13	13	10	10	10	8
132.5°	277	224	80	13	13	10	9	9	7
135°	228	178	48	13	13	11	9	8	6
137.5°	179	133	28	13	13	11	8	7	5
140°	132	91	18	13	13	11	8	7	5
142.5°	88	52	12	13	13	11	8	6	4
145°	48	26	10	13	13	11	8	5	3
147.5°	22	14	10	13	13	11	8	5	3
150°	9	8	10	13	13	12	9	5	2
152.5°	4	7	10	13	13	12	9	5	2
155°	3	7	10	13	13	12	9	5	2
157.5°	3	7	10	13	14	12	9	5	2
160°	3	7	11	13	14	12	9	5	2
162.5°	4	7	11	13	14	12	9	5	2
165°	4	7	11	13	14	12	9	5	2
167.5°	3	8	11	14	14	13	10	5	2
170°	0	8	11	14	14	13	10	6	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)