

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: 227P107

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

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: 227P107
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: SML-228T5 (SML-2IN-ASY-4FT-2LT-REFL-B)
Description: SML Series Staggered Commercial Micro-Striplight
with a solid asymmetrical 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

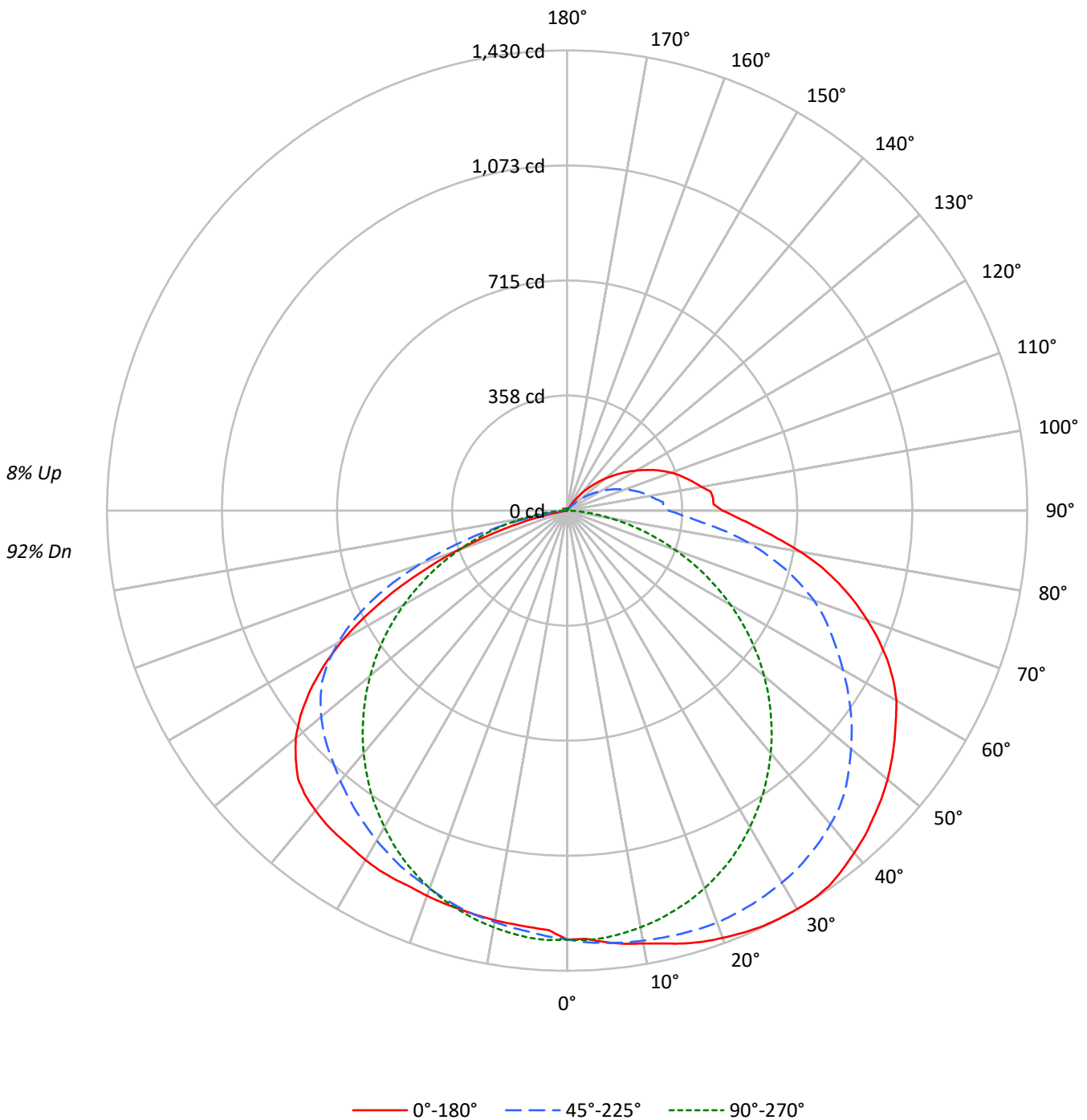
Lumens per Lamp: 2900 (2 lamps)
Luminaire Lumens: 5404.0 lumens
Efficiency: 93.2%
Efficacy: 83.1 lumens/watt
Spacing Criteria (0/90/45): 1.52 / 1.26 / 1.55
Luminous Opening: Rectangular w/ Sides (W: 4.09' x L: 0.29' x H: 0.13')
CIE Type: Direct

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				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	109	109	109	109	106	106	106	106	100	100	100	94	94	94	89	89	89	86
1	98	93	88	84	95	90	86	82	85	81	78	80	77	75	75	73	71	69
2	88	80	73	67	85	77	71	66	73	68	63	69	64	60	65	61	58	56
3	80	69	61	55	77	67	60	54	63	57	52	60	54	50	57	52	48	46
4	73	61	52	45	70	59	51	45	56	49	43	53	47	42	50	45	41	38
5	67	54	45	39	64	52	44	38	50	42	37	47	41	36	45	39	35	33
6	61	48	39	33	59	47	39	33	45	37	32	42	36	31	40	35	30	28
7	57	43	35	29	55	42	34	29	40	33	28	38	32	27	36	31	27	24
8	53	39	31	26	51	39	31	25	37	30	25	35	29	24	33	28	24	22
9	49	36	28	23	47	35	28	23	34	27	22	32	26	22	31	25	21	19
10	46	33	26	21	44	32	25	20	31	24	20	30	24	19	28	23	19	17

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	12097	12097	12097
5°	11799	12110	11396
10°	11666	12050	11042
15°	11684	11989	10761
20°	11732	11924	10578
25°	11818	11830	10477
30°	11904	11690	10439
35°	11990	11542	10430
40°	11949	11354	10477
45°	11937	11133	10474
50°	11963	10869	10132
55°	11981	10534	9405
60°	12077	10098	8235
65°	12021	9529	6481
70°	11795	8712	4340
75°	11465	7648	2059
80°	10859	6111	59
85°	10032	3742	0



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	45°	90°	135°	180°	Flux
0°-10°	127.0	2.3	2.2	0°	1333	1333	1333	1333	1333	
10°-20°	373.0	6.9	6.4	5°	1346	1349	1333	1315	1300	129
20°-30°	591.4	10.9	10.2	15°	1393	1362	1287	1279	1283	395
30°-40°	760.3	14.1	13.1	25°	1427	1352	1199	1221	1265	660
40°-50°	856.9	15.9	14.8	35°	1422	1309	1065	1142	1237	889
50°-60°	854.7	15.8	14.7	45°	1347	1224	895	1050	1182	1042
60°-70°	725.1	13.4	12.5	55°	1242	1075	696	930	975	1113
70°-80°	475.4	8.8	8.2	65°	1098	905	474	677	592	1084
80°-90°	229.5	4.2	4.0	75°	874	701	244	279	157	920
90°-100°	147.2	2.7	2.5	85°	590	420	49	13	0	512
100°-110°	114.5	2.1	2.0	90°	483	316	4	11	0	268
110°-120°	78.1	1.4	1.3	95°	455	299	3	10	0	366
120°-130°	43.9	0.8	0.8	105°	384	228	3	11	4	407
130°-140°	19.1	0.4	0.3	115°	298	156	3	9	13	296
140°-150°	4.9	0.1	0.1	125°	201	88	3	6	8	181
150°-160°	1.7	0.0	0.0	135°	111	27	4	3	5	87
160°-170°	1.2	0.0	0.0	145°	30	3	5	3	2	21
170°-180°	0.1	0.0	0.0	155°	0	3	6	4	1	0
0°-30°	1091.4	20.2	18.8	165°	0	5	7	5	2	0
0°-40°	1851.8	34.3	31.9	175°	0	0	0	0	0	0
0°-60°	3563.3	65.9	61.4	180°	0	0	0	0	0	0
0°-90°	4993.3	92.4	86.1							
90°-120°	339.8	6.3	5.9							
90°-150°	407.7	7.5	7.0							
90°-180°	411.0	7.6	7.1							
0°-180°	5404.0	100.0	93.2							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	1333	1333	1333	1333	1333	1333	1333	1333	1333
2.5°	1332	1347	1343	1339	1336	1330	1325	1322	1305
5°	1346	1358	1349	1340	1333	1322	1315	1314	1300
7.5°	1358	1367	1354	1339	1325	1311	1307	1309	1296
10°	1366	1374	1357	1336	1315	1300	1298	1303	1293
12.5°	1378	1386	1360	1331	1303	1285	1290	1298	1288
15°	1393	1397	1362	1323	1287	1270	1279	1291	1283
17.5°	1405	1408	1363	1312	1270	1254	1265	1282	1279
20°	1413	1414	1363	1297	1249	1235	1250	1272	1274
22.5°	1421	1417	1358	1282	1225	1213	1235	1265	1267
25°	1427	1420	1352	1263	1199	1188	1221	1257	1265
27.5°	1429	1422	1344	1243	1169	1162	1202	1247	1261
30°	1430	1421	1335	1222	1136	1134	1184	1238	1254
32.5°	1429	1415	1325	1200	1101	1104	1163	1226	1244
35°	1422	1407	1309	1175	1065	1071	1142	1212	1237
37.5°	1406	1392	1293	1148	1025	1036	1120	1201	1229
40°	1388	1369	1273	1118	984	1000	1096	1187	1217
42.5°	1370	1346	1252	1087	941	963	1072	1172	1203
45°	1347	1322	1224	1053	895	925	1050	1151	1182
47.5°	1325	1295	1188	1019	848	885	1026	1128	1144
50°	1300	1266	1152	982	799	846	998	1091	1101
52.5°	1272	1235	1115	944	749	805	966	1040	1044
55°	1242	1201	1075	904	696	766	930	981	975
57.5°	1211	1165	1033	862	642	725	882	912	896
60°	1182	1132	990	815	587	682	823	829	806
62.5°	1143	1097	947	760	530	640	755	736	702
65°	1098	1053	905	699	474	596	677	632	592
67.5°	1047	1003	864	640	415	551	586	523	477
70°	992	949	816	581	357	497	488	411	365
72.5°	935	891	760	524	300	428	384	301	255
75°	874	829	701	472	244	353	279	198	157
77.5°	809	764	637	425	189	271	181	115	73
80°	736	692	571	372	138	185	100	29	4
82.5°	658	612	498	314	91	101	26	5	1
85°	590	543	420	249	49	38	13	5	0
87.5°	532	485	360	179	17	14	12	4	0
90°	483	439	316	140	4	13	11	4	0
92.5°	455	417	299	135	3	12	11	4	0
95°	455	421	299	120	3	12	10	4	0
97.5°	450	403	277	107	3	11	10	4	0
100°	424	383	260	94	3	10	10	3	0
102.5°	404	365	245	81	3	9	11	4	1
105°	384	346	228	70	3	8	11	7	4
107.5°	365	326	210	58	3	7	11	9	8
110°	344	305	192	48	3	6	11	10	10



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	321	283	173	38	3	5	10	12	12
115°	298	260	156	28	3	4	9	13	13
117.5°	273	238	138	19	3	4	8	12	14
120°	249	215	121	11	3	3	7	10	13
122.5°	225	193	104	6	3	3	7	9	10
125°	201	171	88	4	3	3	6	8	8
127.5°	177	149	72	3	3	3	5	8	7
130°	155	128	57	3	4	3	4	6	8
132.5°	132	107	41	3	4	3	4	6	7
135°	111	88	27	4	4	4	3	5	5
137.5°	90	68	16	4	4	4	3	4	4
140°	69	48	8	4	5	4	3	3	3
142.5°	49	31	4	4	5	4	3	2	2
145°	30	17	3	4	5	4	3	2	2
147.5°	15	8	3	5	5	5	3	2	1
150°	5	3	3	5	5	5	3	2	1
152.5°	1	2	3	5	6	5	4	2	1
155°	0	2	3	5	6	5	4	2	1
157.5°	0	2	4	5	6	6	4	2	1
160°	0	2	4	6	7	6	4	2	1
162.5°	1	2	4	6	7	6	5	3	2
165°	0	3	5	6	7	6	5	3	2
167.5°	1	3	5	6	7	6	5	3	2
170°	1	3	5	7	7	7	5	3	2
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)