

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: METALUX

Report Number: P236195

Luminaire Tested: **2SWLED-20SL-LN-UNV-L850-CD1-U**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P236195
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1709-316-5)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 2SWLED-20SL-LN-UNV-L850-CD1-U
Description: METALUX SWLED LINEAR LUMINAIRE
2FT FIXTURE WITH 1 ROW LED, NARROW LENS
Light Source: (56) 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

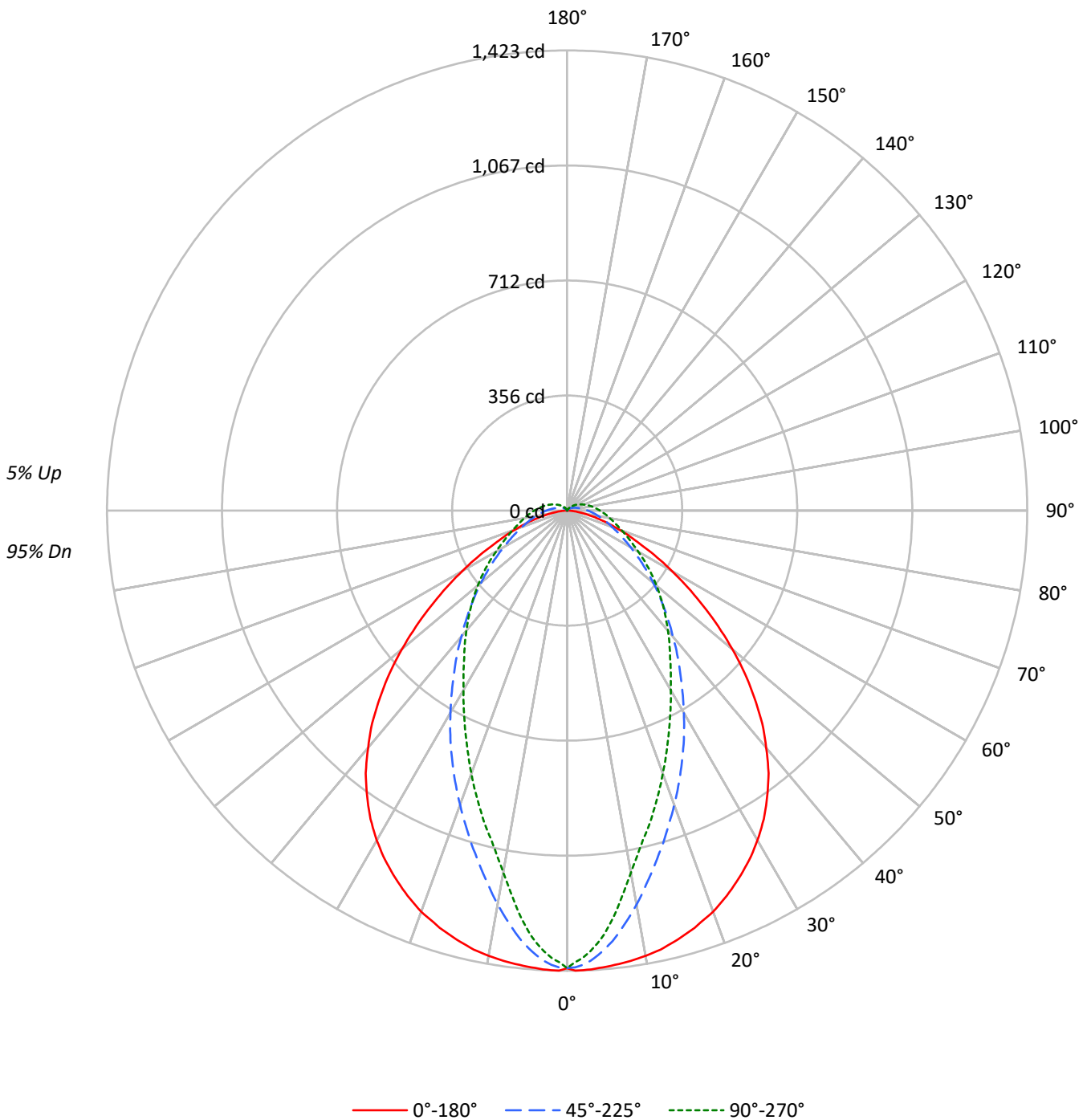
Lumens per Lamp: N/A
Luminaire Lumens: 2532.0 lumens
Efficiency: N/A
Efficacy: 122.9 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 0.74 / 0.96
Luminous Opening: Rectangular w/ Sides (W: 0.38' x L: 2' x H: 0.15')
CIE Type: Direct

Input Watts (W): 20.6
Input Voltage (V): 120
Input Current (A_{in}): 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	118	118	118	118	114	114	114	114	108	108	108	103	103	103	97	97	97	95
1	108	103	99	96	105	101	97	93	95	92	90	91	88	86	86	84	83	80
2	99	91	85	80	96	89	83	78	85	80	76	81	77	73	77	74	71	69
3	91	81	74	68	88	79	72	67	76	70	65	72	67	63	69	65	62	59
4	84	73	65	59	82	71	64	58	68	62	57	65	60	55	63	58	54	52
5	78	66	58	52	76	65	57	51	62	55	50	60	54	49	57	52	48	46
6	73	60	52	46	70	59	51	45	57	50	45	55	49	44	53	47	43	41
7	68	55	47	41	66	54	46	41	52	45	40	50	44	40	49	43	39	37
8	63	51	43	37	62	50	42	37	48	41	36	47	40	36	45	40	35	34
9	59	47	39	34	58	46	39	34	45	38	33	43	37	33	42	36	32	31
10	56	44	36	31	55	43	36	31	42	35	31	40	34	30	39	34	30	28

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	20304	20304	20304
5°	20266	19038	18323
10°	20118	17047	15500
15°	19899	15008	13386
20°	19642	13215	11578
25°	19228	11584	10004
30°	18725	10063	8670
35°	17986	8681	7648
40°	16910	7488	6845
45°	15478	6472	6151
50°	13708	5593	5497
55°	11632	4817	4905
60°	9549	4160	4350
65°	7506	3649	3935
70°	5922	3269	3666
75°	4477	3027	3484
80°	3122	2857	3442
85°	1841	2787	3538



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	126.4	5.0
10°-20°	318.9	12.6
20°-30°	419.3	16.6
30°-40°	435.5	17.2
40°-50°	386.9	15.3
50°-60°	297.5	11.8
60°-70°	203.1	8.0
70°-80°	131.6	5.2
80°-90°	82.6	3.3
90°-100°	52.6	2.1
100°-110°	34.1	1.3
110°-120°	21.5	0.8
120°-130°	12.4	0.5
130°-140°	6.2	0.2
140°-150°	2.6	0.1
150°-160°	0.8	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	864.6	34.1
0°-40°	1300.1	51.3
0°-60°	1984.6	78.4
0°-90°	2401.8	94.9
90°-120°	108.1	4.3
90°-150°	129.4	5.1
90°-180°	130.0	5.1
0°-180°	2532.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1415	1415	1415	1415	1415	
5°	1416	1397	1359	1325	1315	135
15°	1365	1256	1098	1013	995	385
25°	1256	1040	843	764	746	578
35°	1079	797	609	560	555	673
45°	818	545	423	416	421	630
55°	513	337	282	297	305	461
65°	256	189	183	204	212	260
75°	103	96	121	147	154	112
85°	20	43	80	108	117	24
90°	0	29	64	91	102	1
95°	0	18	50	78	88	0
105°	0	9	32	54	65	0
115°	0	5	20	38	45	0
125°	0	2	13	25	30	0
135°	1	1	7	14	18	0
145°	1	1	3	7	8	1
155°	1	1	1	2	3	0
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1414.7	1414.7	1414.7	1414.7	1414.7
1°	1422.9	1419.8	1412.6	1401.3	1397.2
2°	1421.9	1416.7	1405.4	1390.0	1383.9
3°	1420.8	1411.6	1394.1	1372.6	1365.4
4°	1417.8	1405.4	1377.7	1351.0	1341.8
5°	1415.7	1397.2	1359.2	1325.4	1315.1
6°	1412.6	1388.0	1338.7	1295.6	1282.2
7°	1409.5	1377.7	1315.1	1263.8	1247.3
8°	1406.5	1366.4	1289.4	1228.9	1209.4
9°	1402.4	1354.1	1263.8	1195.0	1172.4
10°	1398.2	1340.8	1237.1	1161.1	1136.5
11°	1393.1	1326.4	1209.4	1127.2	1103.6
12°	1388.0	1310.0	1180.6	1096.4	1072.8
13°	1380.8	1292.5	1152.9	1067.7	1044.1
14°	1373.6	1275.1	1126.2	1040.0	1020.5
15°	1365.4	1255.5	1098.5	1013.3	994.8
16°	1357.2	1236.0	1072.8	986.6	968.1
17°	1349.0	1215.5	1046.1	960.9	942.4
18°	1338.7	1195.0	1019.4	935.2	916.8
19°	1329.5	1174.4	993.8	910.6	891.1
20°	1320.2	1152.9	968.1	884.9	865.4
22.5°	1289.4	1098.5	905.5	823.3	803.8
25°	1255.5	1040.0	842.9	763.8	746.3
26°	1241.2	1017.4	819.2	741.2	723.8
27°	1225.8	993.8	794.6	718.6	702.2
28°	1211.4	970.2	770.0	697.1	681.7
29°	1194.0	946.5	746.3	675.5	662.2
30°	1177.5	921.9	721.7	655.0	640.6
32.5°	1131.3	859.3	663.2	605.7	596.5
35°	1079.0	796.7	608.8	560.5	555.4
37.5°	1023.5	733.0	558.5	522.5	519.5
40°	957.8	669.4	509.2	484.6	484.6
42.5°	893.2	605.7	464.0	449.7	451.7
45°	818.2	545.1	423.0	415.8	420.9
47.5°	745.3	486.6	384.0	384.0	390.1
50°	667.3	433.2	348.0	353.2	360.3
52.5°	589.3	382.9	313.1	324.4	332.6
55°	513.3	336.7	282.3	296.7	304.9
57.5°	441.4	294.6	252.5	271.0	279.2
60°	374.7	253.6	226.9	246.4	253.6
62.5°	314.1	219.7	203.3	223.8	232.0
65°	255.6	188.9	182.7	204.3	212.5
67.5°	210.5	162.2	164.3	187.9	195.1
70°	169.4	137.6	147.8	172.5	180.7
72.5°	134.5	116.0	133.5	159.1	166.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
75°	102.7	96.5	121.1	146.8	154.0
77.5°	76.0	80.1	108.8	135.5	143.7
80°	53.4	65.7	98.6	125.2	133.5
82.5°	34.9	53.4	88.3	116.0	125.2
85°	20.5	43.1	80.1	107.8	117.0
87.5°	9.2	34.9	71.9	99.6	108.8
90°	0.0	28.7	63.7	91.4	101.6
92.5°	0.0	22.6	57.5	84.2	94.4
95°	0.0	18.5	50.3	78.0	88.3
97.5°	0.0	15.4	45.2	71.9	81.1
100°	0.0	12.3	40.0	65.7	76.0
102.5°	0.0	10.3	35.9	59.5	69.8
105°	0.0	9.2	31.8	54.4	64.7
107.5°	0.0	7.2	28.7	50.3	59.5
110°	0.0	6.2	25.7	46.2	54.4
112.5°	0.0	6.2	22.6	41.1	49.3
115°	0.0	5.1	20.5	38.0	45.2
117.5°	0.0	4.1	18.5	33.9	41.1
120°	0.0	3.1	16.4	30.8	37.0
122.5°	0.0	3.1	14.4	27.7	32.9
125°	0.0	2.1	13.3	24.6	29.8
127.5°	0.0	2.1	11.3	21.6	25.7
130°	0.0	1.0	10.3	19.5	22.6
132.5°	0.0	1.0	9.2	16.4	19.5
135°	1.0	1.0	7.2	14.4	17.5
137.5°	0.0	1.0	6.2	12.3	14.4
140°	1.0	1.0	5.1	10.3	12.3
142.5°	1.0	1.0	4.1	9.2	10.3
145°	1.0	1.0	3.1	7.2	8.2
147.5°	1.0	1.0	2.1	6.2	7.2
150°	1.0	1.0	2.1	4.1	5.1
152.5°	1.0	1.0	1.0	3.1	4.1
155°	1.0	1.0	1.0	2.1	3.1
157.5°	1.0	1.0	1.0	1.0	2.1
160°	1.0	1.0	1.0	1.0	1.0
162.5°	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0
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)