

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: P236246

Luminaire Tested: **4SWLED-20SL-LN-UNV-L850-CD1-U**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P236246
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1709-316-17)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 4SWLED-20SL-LN-UNV-L850-CD1-U
Description: METALUX SWLED LINEAR LUMINAIRE
4FT FIXTURE WITH 1 ROW LED, NARROW LENS
Light Source: (112) 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

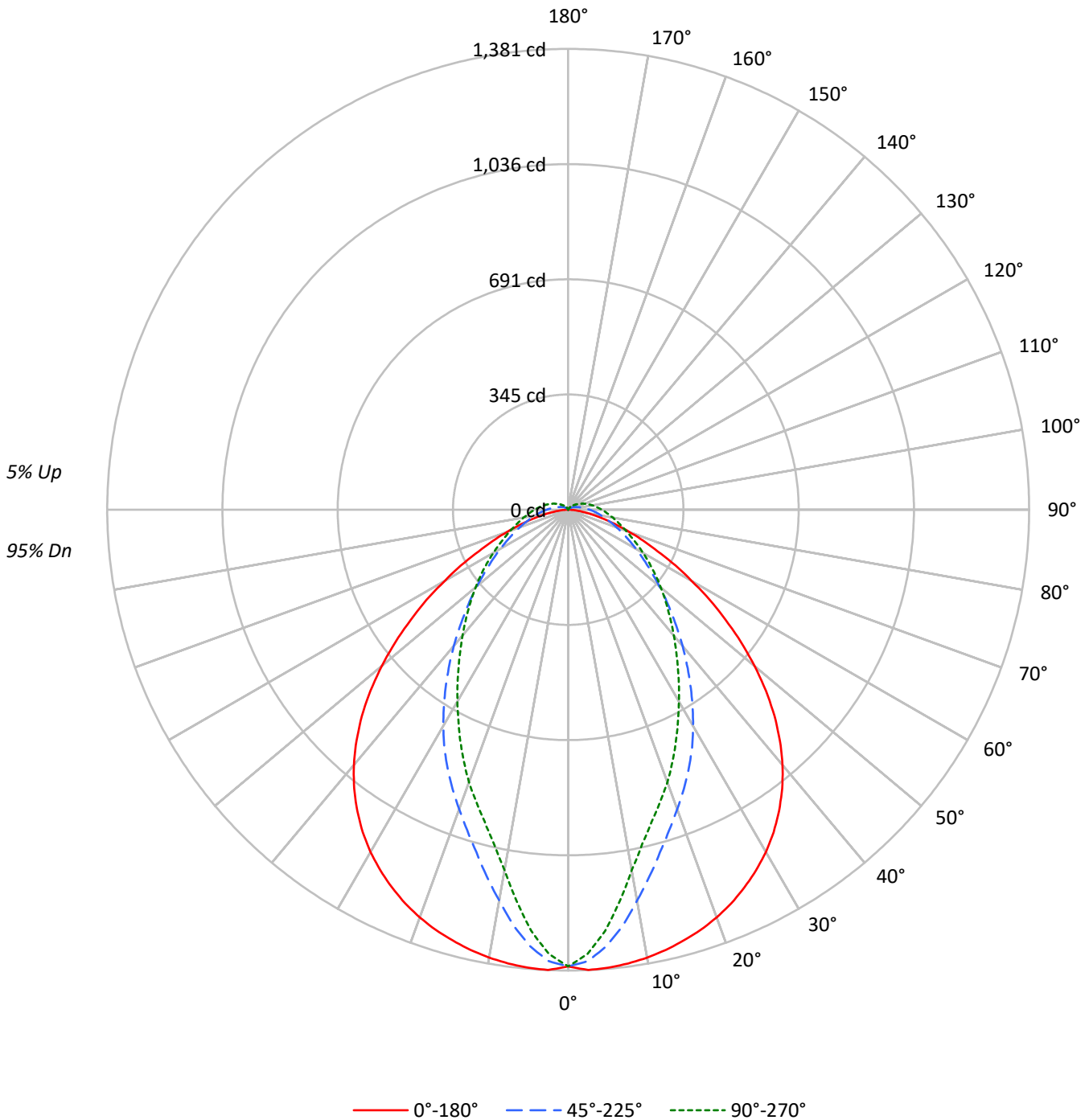
Lumens per Lamp: N/A
Luminaire Lumens: 2567.0 lumens
Efficiency: N/A
Efficacy: 145.9 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 0.78 / 1
Luminous Opening: Rectangular w/ Sides (W: 0.38' x L: 4' x H: 0.15')
CIE Type: Direct

Input Watts (W): 17.6
Input Voltage (V): 120
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	50	30	10	0	
RCR																						
0	118	118	118	118	115	115	115	115	108	108	108	103	103	103	98	98	98	95				
1	108	103	99	95	105	101	97	93	95	92	90	91	88	86	86	84	83	80				
2	99	91	85	79	96	89	83	78	85	80	75	81	77	73	77	74	71	68				
3	91	81	73	67	88	79	72	66	76	70	65	72	67	63	69	65	61	59				
4	84	73	65	58	81	71	63	58	68	61	56	65	60	55	63	58	54	52				
5	78	66	57	51	75	64	56	51	62	55	50	59	53	49	57	52	48	46				
6	72	60	51	45	70	59	51	45	56	49	44	54	48	43	52	47	43	41				
7	67	55	46	41	65	54	46	40	52	45	40	50	44	39	48	43	38	37				
8	63	50	42	37	61	49	42	36	48	41	36	46	40	35	45	39	35	33				
9	59	46	39	33	57	46	38	33	44	37	33	43	37	32	41	36	32	30				
10	56	43	36	31	54	42	35	30	41	35	30	40	34	30	39	33	29	28				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9821	9821	9821
5°	9893	9214	8824
10°	9868	8229	7480
15°	9834	7307	6510
20°	9799	6573	5812
25°	9724	5938	5123
30°	9613	5282	4490
35°	9409	4611	3937
40°	9081	3985	3476
45°	8557	3413	3085
50°	7798	2928	2761
55°	6841	2528	2471
60°	5762	2210	2221
65°	4654	1962	2014
70°	3702	1776	1866
75°	2797	1622	1777
80°	2014	1541	1744
85°	1238	1505	1756



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	122.0	4.8
10°-20°	310.1	12.1
20°-30°	420.4	16.4
30°-40°	446.6	17.4
40°-50°	399.3	15.6
50°-60°	309.4	12.1
60°-70°	213.8	8.3
70°-80°	136.7	5.3
80°-90°	83.7	3.3
90°-100°	52.0	2.0
100°-110°	32.7	1.3
110°-120°	20.0	0.8
120°-130°	11.4	0.4
130°-140°	5.8	0.2
140°-150°	2.4	0.1
150°-160°	0.8	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	852.4	33.2
0°-40°	1299.0	50.6
0°-60°	2007.6	78.2
0°-90°	2441.9	95.1
90°-120°	104.7	4.1
90°-150°	124.3	4.8
90°-180°	125.0	4.9
0°-180°	2567.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1369	1369	1369	1369	1369	
5°	1378	1344	1313	1277	1267	131
15°	1337	1205	1063	985	968	378
25°	1249	1015	855	783	764	575
35°	1102	803	637	581	572	688
45°	874	563	437	419	422	671
55°	575	347	289	300	307	515
65°	296	197	190	211	218	299
75°	115	99	124	151	157	126
85°	21	45	81	108	116	25
90°	0	29	64	92	101	2
95°	0	18	50	77	87	0
105°	0	8	30	53	62	0
115°	0	5	19	35	43	0
125°	0	2	12	22	27	0
135°	0	1	7	13	16	0
145°	0	0	3	7	8	0
155°	1	0	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°	1368.6	1368.6	1368.6	1368.6	1368.6
2.5°	1380.8	1358.5	1353.9	1340.7	1332.1
5°	1377.7	1344.3	1312.8	1277.4	1266.7
7.5°	1371.6	1319.9	1256.6	1196.8	1183.1
10°	1363.0	1287.0	1189.2	1115.7	1096.9
12.5°	1351.4	1248.5	1125.8	1044.7	1025.9
15°	1336.7	1205.4	1062.9	985.4	967.6
17.5°	1320.4	1161.3	1006.7	932.7	917.0
20°	1300.2	1112.1	955.0	882.0	868.8
22.5°	1276.8	1065.5	905.3	831.8	816.6
25°	1249.0	1015.3	855.1	783.1	764.4
27.5°	1218.6	964.6	803.4	730.4	712.7
30°	1184.6	913.4	748.2	677.2	663.5
32.5°	1145.6	859.7	692.4	628.0	616.4
35°	1101.5	803.4	637.2	581.4	571.8
37.5°	1053.3	744.6	583.9	536.3	530.2
40°	999.1	684.3	532.7	494.7	492.2
42.5°	938.8	624.0	483.1	456.2	456.2
45°	873.9	563.2	437.4	419.2	422.2
47.5°	803.4	502.8	395.4	386.2	391.3
50°	728.9	446.6	356.3	355.3	361.9
52.5°	652.9	394.4	320.4	326.4	334.0
55°	575.3	346.7	288.9	299.6	307.2
57.5°	502.8	303.1	260.5	275.2	282.3
60°	426.8	264.1	234.2	251.9	259.0
62.5°	362.9	228.1	211.9	230.1	237.2
65°	295.5	196.7	190.1	210.9	217.5
67.5°	243.8	168.3	171.3	193.6	199.7
70°	194.1	142.4	154.6	177.9	184.0
72.5°	153.6	118.6	139.4	163.7	169.8
75°	114.6	99.3	124.2	151.1	157.1
77.5°	83.6	82.6	112.0	139.4	146.0
80°	58.8	67.4	100.9	127.7	135.3
82.5°	38.0	54.7	90.7	117.1	124.7
85°	21.3	44.6	81.1	108.0	116.1
87.5°	10.1	36.0	72.5	99.9	108.5
90°	0.5	28.9	64.4	91.7	100.9
92.5°	0.0	22.8	57.3	84.1	93.8
95°	0.0	18.2	50.2	77.0	86.7
97.5°	0.0	14.7	44.1	70.5	80.1
100°	0.0	11.7	39.0	63.9	74.0
102.5°	0.0	9.6	34.0	58.3	68.4
105°	0.0	8.1	29.9	52.7	62.3
107.5°	0.0	7.1	26.4	47.6	57.3
110°	0.0	6.1	23.8	43.1	52.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	5.6	20.8	39.0	47.6
115°	0.0	4.6	18.8	35.0	42.6
117.5°	0.0	4.1	16.7	31.4	38.5
120°	0.0	3.5	14.7	28.4	34.5
122.5°	0.0	3.0	13.2	24.8	30.4
125°	0.0	2.5	11.7	22.3	26.9
127.5°	0.5	2.0	10.6	19.8	23.3
130°	0.5	1.5	9.1	17.2	20.8
132.5°	0.5	1.5	8.1	15.2	17.7
135°	0.5	1.0	7.1	13.2	15.7
137.5°	0.5	1.0	6.1	11.7	13.2
140°	0.5	0.5	5.1	9.6	11.7
142.5°	0.5	0.5	4.1	8.1	9.6
145°	0.5	0.5	3.0	7.1	8.1
147.5°	0.5	0.5	2.5	5.6	6.6
150°	0.5	0.5	2.0	4.6	5.1
152.5°	0.5	0.5	1.5	3.5	4.1
155°	1.0	0.5	1.0	2.5	3.0
157.5°	1.0	1.0	1.0	2.0	2.0
160°	1.0	1.0	1.0	1.0	1.5
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)