

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: P236193

Luminaire Tested: **2SWLED-20SL-LN-UNV-L835-CD1-U**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P236193
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-L835-CD1-U
Description: METALUX SWLED LINEAR LUMINAIRE
2FT FIXTURE WITH 1 ROW LED, NARROW LENS
Light Source: (56) 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

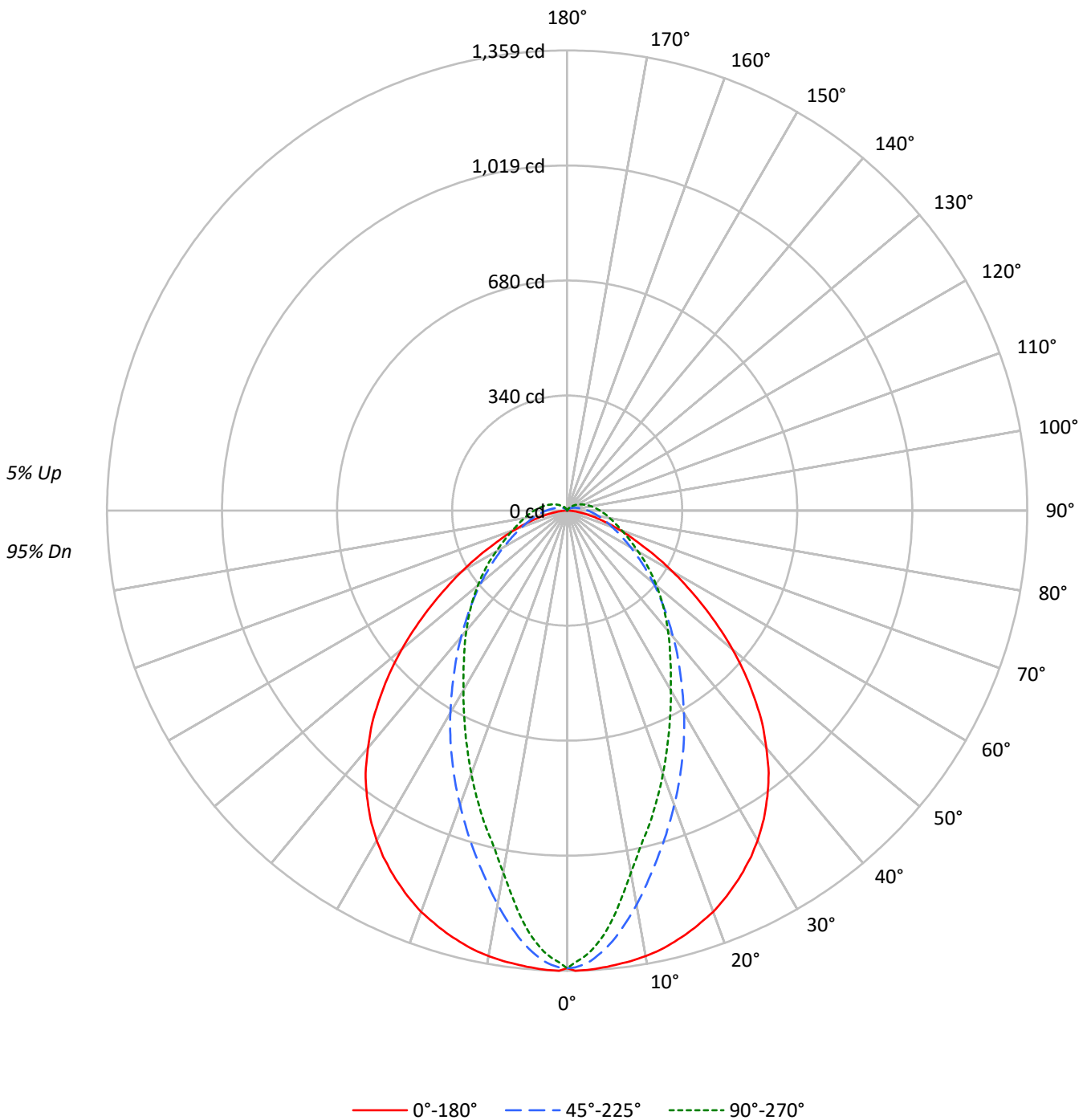
Lumens per Lamp: N/A
Luminaire Lumens: 2419.0 lumens
Efficiency: N/A
Efficacy: 117.4 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 0.74 / 0.96
Luminous Opening: Rectangular w/ Sides (W: 0.38' x L: 2' x H: 0.15')
CIE Type: Direct

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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CATALOG NUMBER: 2SWLED-20SL-LN-UNV-L835-CD1-U

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	19397	19397	19397
5°	19362	18189	17505
10°	19220	16286	14807
15°	19011	14339	12789
20°	18766	12625	11062
25°	18370	11066	9558
30°	17890	9614	8283
35°	17183	8294	7307
40°	16156	7154	6539
45°	14788	6183	5876
50°	13096	5344	5253
55°	11113	4602	4686
60°	9124	3975	4156
65°	7171	3487	3759
70°	5656	3123	3501
75°	4276	2892	3328
80°	2982	2730	3287
85°	1760	2662	3381



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	120.7	5.0
10°-20°	304.7	12.6
20°-30°	400.6	16.6
30°-40°	416.1	17.2
40°-50°	369.6	15.3
50°-60°	284.3	11.8
60°-70°	194.0	8.0
70°-80°	125.7	5.2
80°-90°	78.9	3.3
90°-100°	50.2	2.1
100°-110°	32.6	1.3
110°-120°	20.5	0.8
120°-130°	11.8	0.5
130°-140°	6.0	0.2
140°-150°	2.5	0.1
150°-160°	0.7	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	826.0	34.1
0°-40°	1242.1	51.3
0°-60°	1896.0	78.4
0°-90°	2294.7	94.9
90°-120°	103.3	4.3
90°-150°	123.6	5.1
90°-180°	124.0	5.1
0°-180°	2419.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1352	1352	1352	1352	1352	
5°	1352	1335	1299	1266	1256	129
15°	1304	1200	1050	968	950	368
25°	1200	994	805	730	713	552
35°	1031	761	582	536	531	643
45°	782	521	404	397	402	602
55°	490	322	270	284	291	440
65°	244	180	175	195	203	248
75°	98	92	116	140	147	107
85°	20	41	76	103	112	23
90°	0	28	61	87	97	1
95°	0	18	48	74	84	0
105°	0	9	30	52	62	0
115°	0	5	20	36	43	0
125°	0	2	13	24	28	0
135°	1	1	7	14	17	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



TEST NUMBER: P236193

CATALOG NUMBER: 2SWLED-20SL-LN-UNV-L835-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1351.5	1351.5	1351.5	1351.5	1351.5
1°	1359.4	1356.4	1349.6	1338.8	1334.9
2°	1358.4	1353.5	1342.7	1328.0	1322.1
3°	1357.4	1348.6	1331.9	1311.3	1304.5
4°	1354.5	1342.7	1316.2	1290.7	1281.9
5°	1352.5	1334.9	1298.6	1266.2	1256.4
6°	1349.6	1326.0	1279.0	1237.8	1225.0
7°	1346.6	1316.2	1256.4	1207.4	1191.7
8°	1343.7	1305.4	1231.9	1174.0	1155.4
9°	1339.8	1293.7	1207.4	1141.6	1120.1
10°	1335.8	1280.9	1181.9	1109.3	1085.7
11°	1330.9	1267.2	1155.4	1076.9	1054.4
12°	1326.0	1251.5	1127.9	1047.5	1024.9
13°	1319.2	1234.8	1101.4	1020.0	997.5
14°	1312.3	1218.2	1075.9	993.5	974.9
15°	1304.5	1199.5	1049.5	968.0	950.4
16°	1296.6	1180.9	1024.9	942.5	924.9
17°	1288.8	1161.3	999.4	918.0	900.4
18°	1279.0	1141.6	973.9	893.5	875.9
19°	1270.1	1122.0	949.4	870.0	851.3
20°	1261.3	1101.4	924.9	845.4	826.8
22.5°	1231.9	1049.5	865.1	786.6	768.0
25°	1199.5	993.5	805.2	729.7	713.0
26°	1185.8	972.0	782.7	708.1	691.5
27°	1171.1	949.4	759.1	686.6	670.9
28°	1157.3	926.9	735.6	666.0	651.2
29°	1140.7	904.3	713.0	645.4	632.6
30°	1125.0	880.8	689.5	625.7	612.0
32.5°	1080.8	820.9	633.6	578.7	569.8
35°	1030.8	761.1	581.6	535.5	530.6
37.5°	977.9	700.3	533.6	499.2	496.3
40°	915.1	639.5	486.5	462.9	462.9
42.5°	853.3	578.7	443.3	429.6	431.6
45°	781.7	520.8	404.1	397.2	402.1
47.5°	712.1	464.9	366.8	366.8	372.7
50°	637.5	413.9	332.5	337.4	344.3
52.5°	563.0	365.8	299.1	309.9	317.8
55°	490.4	321.7	269.7	283.5	291.3
57.5°	421.7	281.5	241.3	258.9	266.8
60°	358.0	242.3	216.8	235.4	242.3
62.5°	300.1	209.9	194.2	213.8	221.7
65°	244.2	180.5	174.6	195.2	203.0
67.5°	201.1	155.0	156.9	179.5	186.4
70°	161.8	131.4	141.2	164.8	172.6
72.5°	128.5	110.8	127.5	152.0	158.9



TEST NUMBER: P236193

CATALOG NUMBER: 2SWLED-20SL-LN-UNV-L835-CD1-U

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
75°	98.1	92.2	115.7	140.3	147.1
77.5°	72.6	76.5	104.0	129.5	137.3
80°	51.0	62.8	94.2	119.7	127.5
82.5°	33.3	51.0	84.3	110.8	119.7
85°	19.6	41.2	76.5	103.0	111.8
87.5°	8.8	33.3	68.7	95.1	104.0
90°	0.0	27.5	60.8	87.3	97.1
92.5°	0.0	21.6	54.9	80.4	90.2
95°	0.0	17.7	48.1	74.5	84.3
97.5°	0.0	14.7	43.2	68.7	77.5
100°	0.0	11.8	38.3	62.8	72.6
102.5°	0.0	9.8	34.3	56.9	66.7
105°	0.0	8.8	30.4	52.0	61.8
107.5°	0.0	6.9	27.5	48.1	56.9
110°	0.0	5.9	24.5	44.1	52.0
112.5°	0.0	5.9	21.6	39.2	47.1
115°	0.0	4.9	19.6	36.3	43.2
117.5°	0.0	3.9	17.7	32.4	39.2
120°	0.0	2.9	15.7	29.4	35.3
122.5°	0.0	2.9	13.7	26.5	31.4
125°	0.0	2.0	12.8	23.5	28.4
127.5°	0.0	2.0	10.8	20.6	24.5
130°	0.0	1.0	9.8	18.6	21.6
132.5°	0.0	1.0	8.8	15.7	18.6
135°	1.0	1.0	6.9	13.7	16.7
137.5°	0.0	1.0	5.9	11.8	13.7
140°	1.0	1.0	4.9	9.8	11.8
142.5°	1.0	1.0	3.9	8.8	9.8
145°	1.0	1.0	2.9	6.9	7.8
147.5°	1.0	1.0	2.0	5.9	6.9
150°	1.0	1.0	2.0	3.9	4.9
152.5°	1.0	1.0	1.0	2.9	3.9
155°	1.0	1.0	1.0	2.0	2.9
157.5°	1.0	1.0	1.0	1.0	2.0
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)