

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: P236194

Luminaire Tested: **2SWLED-20SL-LN-UNV-L840-CD1-U**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P236194
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-L840-CD1-U
Description: METALUX SWLED LINEAR LUMINAIRE
2FT FIXTURE WITH 1 ROW LED, NARROW LENS
Light Source: (56) 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

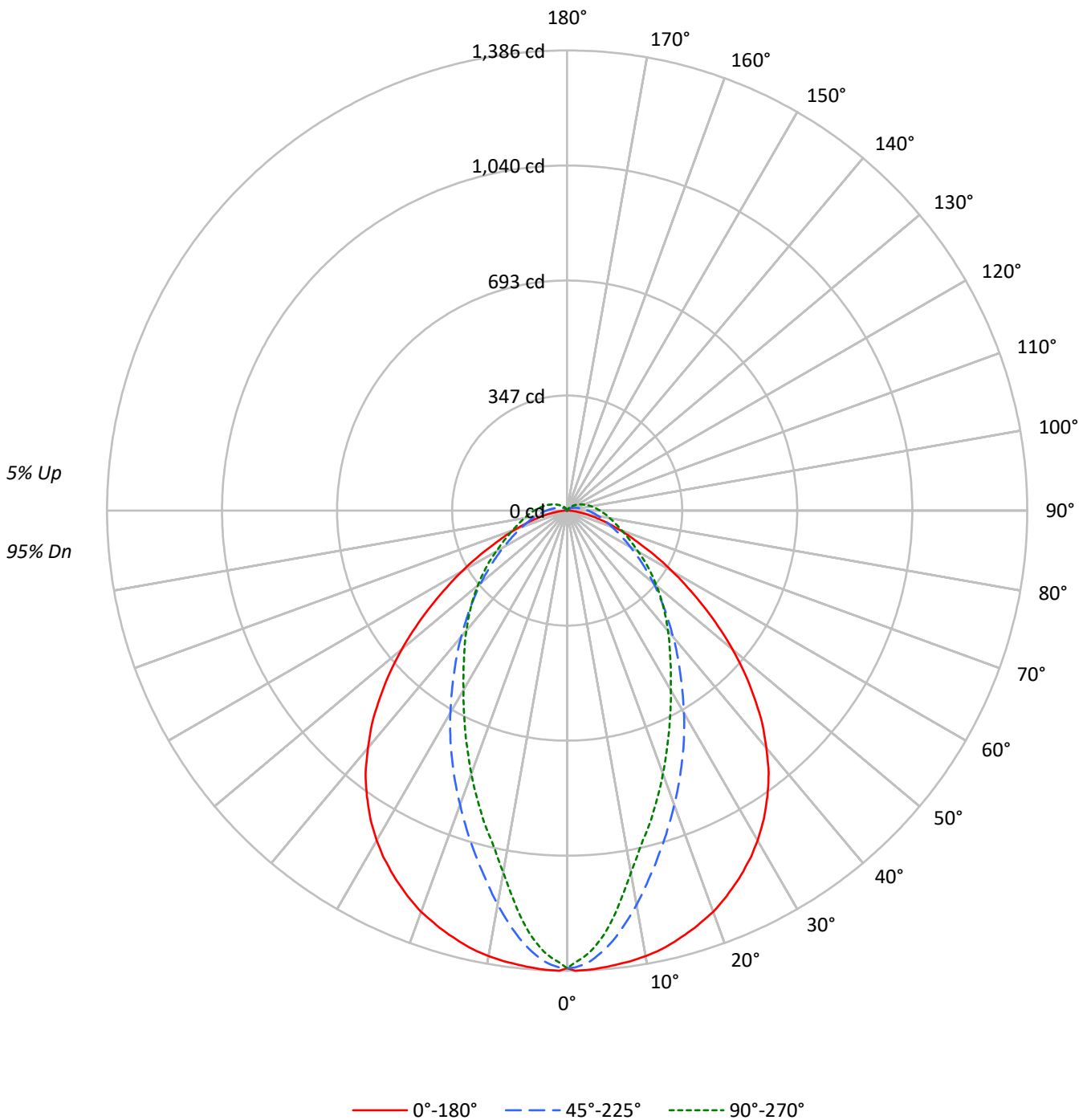
Lumens per Lamp: N/A
Luminaire Lumens: 2466.9 lumens
Efficiency: N/A
Efficacy: 119.8 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 0.74 / 0.96
Luminous Opening: Rectangular w/ Sides (W: 0.38' x L: 2' x H: 0.15')
CIE Type: Direct

Input Watts (W): 20.6
Input Voltage (V): 120
Input Current (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	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°	19783	19783	19783
5°	19747	18549	17852
10°	19603	16609	15101
15°	19387	14623	13043
20°	19138	12875	11281
25°	18735	11286	9748
30°	18245	9805	8448
35°	17524	8459	7451
40°	16476	7295	6669
45°	15081	6305	5993
50°	13357	5450	5357
55°	11333	4694	4779
60°	9305	4054	4238
65°	7315	3555	3835
70°	5768	3185	3570
75°	4359	2949	3393
80°	3040	2782	3352
85°	1796	2714	3448



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	123.1	5.0
10°-20°	310.7	12.6
20°-30°	408.6	16.6
30°-40°	424.4	17.2
40°-50°	377.0	15.3
50°-60°	289.9	11.8
60°-70°	197.9	8.0
70°-80°	128.2	5.2
80°-90°	80.4	3.3
90°-100°	51.2	2.1
100°-110°	33.2	1.3
110°-120°	20.9	0.8
120°-130°	12.1	0.5
130°-140°	6.1	0.2
140°-150°	2.6	0.1
150°-160°	0.7	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	842.4	34.1
0°-40°	1266.8	51.3
0°-60°	1933.6	78.4
0°-90°	2340.1	94.9
90°-120°	105.3	4.3
90°-150°	126.0	5.1
90°-180°	127.0	5.1
0°-180°	2466.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1378	1378	1378	1378	1378	
5°	1379	1361	1324	1291	1281	131
15°	1330	1223	1070	987	969	375
25°	1223	1013	821	744	727	563
35°	1051	776	593	546	541	656
45°	797	531	412	405	410	614
55°	500	328	275	289	297	449
65°	249	184	178	199	207	253
75°	100	94	118	143	150	109
85°	20	42	78	105	114	23
90°	0	28	62	89	99	1
95°	0	18	49	76	86	0
105°	0	9	31	53	63	0
115°	0	5	20	37	44	0
125°	0	2	13	24	29	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



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1378.4	1378.4	1378.4	1378.4	1378.4
1°	1386.4	1383.4	1376.4	1365.4	1361.4
2°	1385.4	1380.4	1369.4	1354.4	1348.4
3°	1384.4	1375.4	1358.4	1337.3	1330.3
4°	1381.4	1369.4	1342.3	1316.3	1307.3
5°	1379.4	1361.4	1324.3	1291.3	1281.3
6°	1376.4	1352.4	1304.3	1262.3	1249.3
7°	1373.4	1342.3	1281.3	1231.3	1215.3
8°	1370.4	1331.3	1256.3	1197.3	1178.3
9°	1366.4	1319.3	1231.3	1164.3	1142.3
10°	1362.4	1306.3	1205.3	1131.3	1107.3
11°	1357.4	1292.3	1178.3	1098.3	1075.3
12°	1352.4	1276.3	1150.3	1068.3	1045.3
13°	1345.3	1259.3	1123.3	1040.3	1017.3
14°	1338.3	1242.3	1097.3	1013.3	994.3
15°	1330.3	1223.3	1070.3	987.3	969.3
16°	1322.3	1204.3	1045.3	961.2	943.2
17°	1314.3	1184.3	1019.3	936.2	918.2
18°	1304.3	1164.3	993.3	911.2	893.2
19°	1295.3	1144.3	968.3	887.2	868.2
20°	1286.3	1123.3	943.2	862.2	843.2
22.5°	1256.3	1070.3	882.2	802.2	783.2
25°	1223.3	1013.3	821.2	744.2	727.2
26°	1209.3	991.3	798.2	722.2	705.2
27°	1194.3	968.3	774.2	700.2	684.2
28°	1180.3	945.2	750.2	679.2	664.2
29°	1163.3	922.2	727.2	658.2	645.2
30°	1147.3	898.2	703.2	638.2	624.2
32.5°	1102.3	837.2	646.2	590.2	581.2
35°	1051.3	776.2	593.2	546.1	541.1
37.5°	997.3	714.2	544.1	509.1	506.1
40°	933.2	652.2	496.1	472.1	472.1
42.5°	870.2	590.2	452.1	438.1	440.1
45°	797.2	531.1	412.1	405.1	410.1
47.5°	726.2	474.1	374.1	374.1	380.1
50°	650.2	422.1	339.1	344.1	351.1
52.5°	574.1	373.1	305.1	316.1	324.1
55°	500.1	328.1	275.1	289.1	297.1
57.5°	430.1	287.1	246.1	264.1	272.1
60°	365.1	247.1	221.1	240.1	247.1
62.5°	306.1	214.1	198.1	218.1	226.1
65°	249.1	184.0	178.0	199.1	207.1
67.5°	205.1	158.0	160.0	183.0	190.0
70°	165.0	134.0	144.0	168.0	176.0
72.5°	131.0	113.0	130.0	155.0	162.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
75°	100.0	94.0	118.0	143.0	150.0
77.5°	74.0	78.0	106.0	132.0	140.0
80°	52.0	64.0	96.0	122.0	130.0
82.5°	34.0	52.0	86.0	113.0	122.0
85°	20.0	42.0	78.0	105.0	114.0
87.5°	9.0	34.0	70.0	97.0	106.0
90°	0.0	28.0	62.0	89.0	99.0
92.5°	0.0	22.0	56.0	82.0	92.0
95°	0.0	18.0	49.0	76.0	86.0
97.5°	0.0	15.0	44.0	70.0	79.0
100°	0.0	12.0	39.0	64.0	74.0
102.5°	0.0	10.0	35.0	58.0	68.0
105°	0.0	9.0	31.0	53.0	63.0
107.5°	0.0	7.0	28.0	49.0	58.0
110°	0.0	6.0	25.0	45.0	53.0
112.5°	0.0	6.0	22.0	40.0	48.0
115°	0.0	5.0	20.0	37.0	44.0
117.5°	0.0	4.0	18.0	33.0	40.0
120°	0.0	3.0	16.0	30.0	36.0
122.5°	0.0	3.0	14.0	27.0	32.0
125°	0.0	2.0	13.0	24.0	29.0
127.5°	0.0	2.0	11.0	21.0	25.0
130°	0.0	1.0	10.0	19.0	22.0
132.5°	0.0	1.0	9.0	16.0	19.0
135°	1.0	1.0	7.0	14.0	17.0
137.5°	0.0	1.0	6.0	12.0	14.0
140°	1.0	1.0	5.0	10.0	12.0
142.5°	1.0	1.0	4.0	9.0	10.0
145°	1.0	1.0	3.0	7.0	8.0
147.5°	1.0	1.0	2.0	6.0	7.0
150°	1.0	1.0	2.0	4.0	5.0
152.5°	1.0	1.0	1.0	3.0	4.0
155°	1.0	1.0	1.0	2.0	3.0
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)