

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: P236244

Luminaire Tested: **4SWLED-20SL-LN-UNV-L835-CD1-U**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P236244
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-L835-CD1-U
Description: METALUX SWLED LINEAR LUMINAIRE
4FT FIXTURE WITH 1 ROW LED, NARROW LENS
Light Source: (112) 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

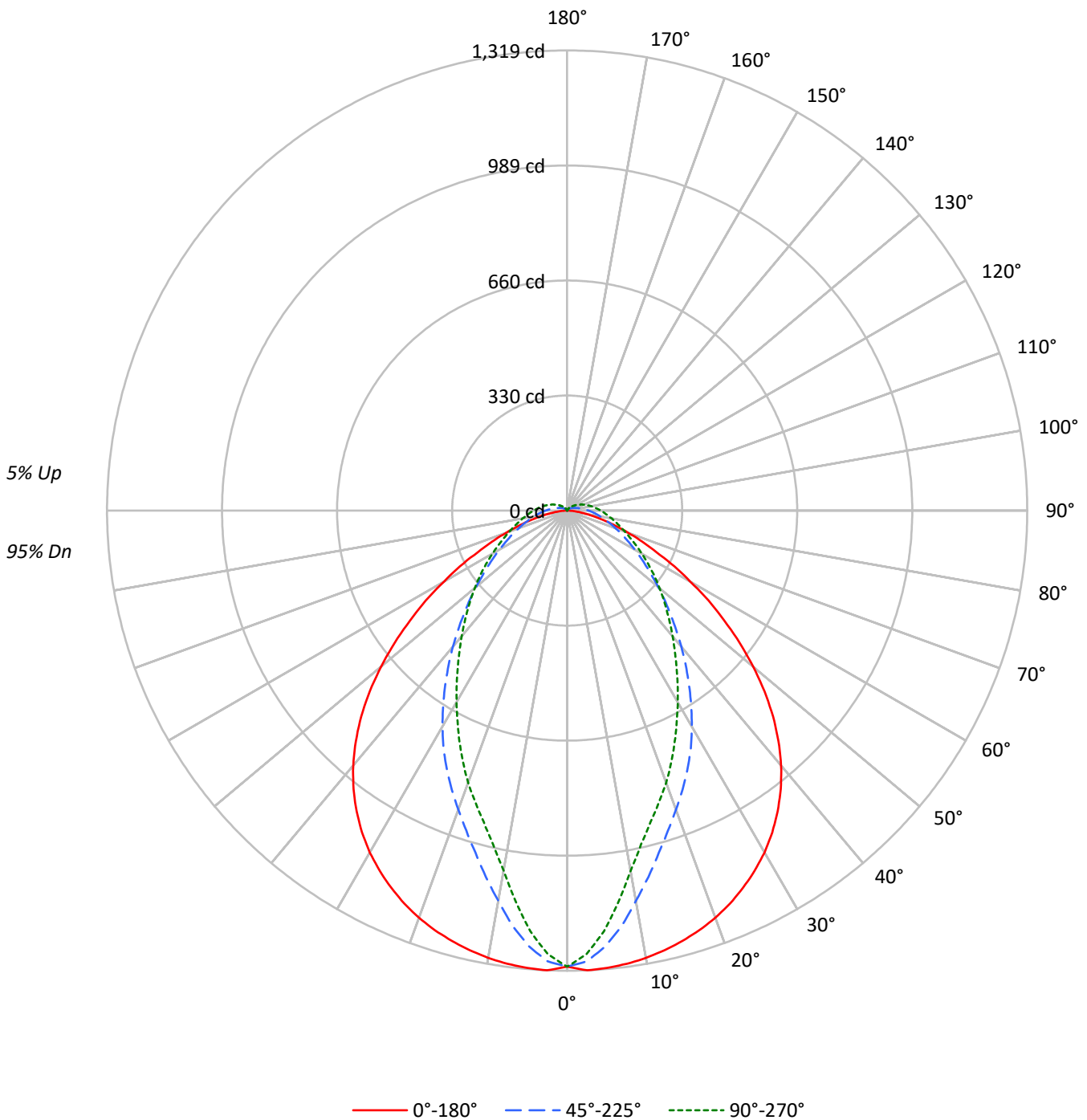
Lumens per Lamp: N/A
Luminaire Lumens: 2452.0 lumens
Efficiency: N/A
Efficacy: 139.3 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 0.78 / 1
Luminous Opening: Rectangular w/ Sides (W: 0.38' x L: 4' x H: 0.15')
CIE Type: Direct

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°	9381	9381	9381
5°	9449	8801	8429
10°	9427	7860	7145
15°	9394	6980	6219
20°	9360	6279	5552
25°	9288	5672	4893
30°	9182	5045	4289
35°	8987	4404	3761
40°	8674	3806	3320
45°	8173	3260	2947
50°	7449	2797	2637
55°	6534	2415	2360
60°	5504	2111	2122
65°	4446	1874	1923
70°	3536	1697	1783
75°	2670	1549	1698
80°	1925	1472	1667
85°	1180	1438	1677



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	116.5	4.8
10°-20°	296.2	12.1
20°-30°	401.5	16.4
30°-40°	426.6	17.4
40°-50°	381.4	15.6
50°-60°	295.5	12.1
60°-70°	204.3	8.3
70°-80°	130.6	5.3
80°-90°	80.0	3.3
90°-100°	49.7	2.0
100°-110°	31.2	1.3
110°-120°	19.1	0.8
120°-130°	10.9	0.4
130°-140°	5.5	0.2
140°-150°	2.3	0.1
150°-160°	0.8	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	814.2	33.2
0°-40°	1240.8	50.6
0°-60°	1917.7	78.2
0°-90°	2332.5	95.1
90°-120°	100.0	4.1
90°-150°	118.7	4.8
90°-180°	120.0	4.9
0°-180°	2452.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1307	1307	1307	1307	1307	
5°	1316	1284	1254	1220	1210	125
15°	1277	1151	1015	941	924	361
25°	1193	970	817	748	730	550
35°	1052	767	609	555	546	657
45°	835	538	418	400	403	641
55°	550	331	276	286	293	492
65°	282	188	182	201	208	286
75°	109	95	119	144	150	120
85°	20	43	78	103	111	24
90°	0	28	62	88	96	1
95°	0	17	48	74	83	0
105°	0	8	29	50	60	0
115°	0	4	18	33	41	0
125°	0	2	11	21	26	0
135°	0	1	7	13	15	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°	1307.3	1307.3	1307.3	1307.3	1307.3
2.5°	1318.9	1297.6	1293.2	1280.7	1272.4
5°	1316.0	1284.0	1254.0	1220.1	1210.0
7.5°	1310.2	1260.8	1200.3	1143.1	1130.1
10°	1302.0	1229.3	1135.9	1065.7	1047.8
12.5°	1290.8	1192.5	1075.4	997.9	980.0
15°	1276.8	1151.4	1015.3	941.2	924.3
17.5°	1261.3	1109.3	961.6	890.9	875.9
20°	1241.9	1062.3	912.2	842.5	829.9
22.5°	1219.6	1017.7	864.7	794.5	780.0
25°	1193.0	969.8	816.8	748.1	730.1
27.5°	1164.0	921.4	767.4	697.7	680.8
30°	1131.5	872.5	714.6	646.9	633.8
32.5°	1094.2	821.2	661.4	599.9	588.8
35°	1052.1	767.4	608.6	555.4	546.2
37.5°	1006.1	711.3	557.8	512.3	506.5
40°	954.3	653.6	508.9	472.6	470.1
42.5°	896.7	596.0	461.4	435.8	435.8
45°	834.7	537.9	417.8	400.4	403.3
47.5°	767.4	480.3	377.7	368.9	373.8
50°	696.2	426.6	340.4	339.4	345.7
52.5°	623.6	376.7	306.0	311.8	319.1
55°	549.5	331.2	276.0	286.1	293.4
57.5°	480.3	289.5	248.9	262.9	269.7
60°	407.7	252.3	223.7	240.6	247.4
62.5°	346.7	217.9	202.4	219.8	226.6
65°	282.3	187.9	181.6	201.4	207.7
67.5°	232.9	160.7	163.7	185.0	190.8
70°	185.4	136.1	147.7	169.9	175.8
72.5°	146.7	113.3	133.1	156.4	162.2
75°	109.4	94.9	118.6	144.3	150.1
77.5°	79.9	78.9	107.0	133.1	139.4
80°	56.2	64.4	96.4	122.0	129.3
82.5°	36.3	52.3	86.7	111.8	119.1
85°	20.3	42.6	77.5	103.1	110.9
87.5°	9.7	34.4	69.2	95.4	103.6
90°	0.5	27.6	61.5	87.6	96.4
92.5°	0.0	21.8	54.7	80.4	89.6
95°	0.0	17.4	47.9	73.6	82.8
97.5°	0.0	14.0	42.1	67.3	76.5
100°	0.0	11.1	37.3	61.0	70.7
102.5°	0.0	9.2	32.4	55.7	65.4
105°	0.0	7.7	28.6	50.4	59.6
107.5°	0.0	6.8	25.2	45.5	54.7
110°	0.0	5.8	22.8	41.2	49.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	5.3	19.9	37.3	45.5
115°	0.0	4.4	17.9	33.4	40.7
117.5°	0.0	3.9	16.0	30.0	36.8
120°	0.0	3.4	14.0	27.1	32.9
122.5°	0.0	2.9	12.6	23.7	29.1
125°	0.0	2.4	11.1	21.3	25.7
127.5°	0.5	1.9	10.2	18.9	22.3
130°	0.5	1.5	8.7	16.5	19.9
132.5°	0.5	1.5	7.7	14.5	16.9
135°	0.5	1.0	6.8	12.6	15.0
137.5°	0.5	1.0	5.8	11.1	12.6
140°	0.5	0.5	4.8	9.2	11.1
142.5°	0.5	0.5	3.9	7.7	9.2
145°	0.5	0.5	2.9	6.8	7.7
147.5°	0.5	0.5	2.4	5.3	6.3
150°	0.5	0.5	1.9	4.4	4.8
152.5°	0.5	0.5	1.5	3.4	3.9
155°	1.0	0.5	1.0	2.4	2.9
157.5°	1.0	1.0	1.0	1.9	1.9
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)