

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: P236226

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

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P236226
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1709-316-16)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 4SWLED-20SL-LC-UNV-L835-CD1-U
Description: METALUX SWLED LINEAR LUMINAIRE
4FT FIXTURE WITH 1 ROW LED, CLEAR LENS
Light Source: (112) 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

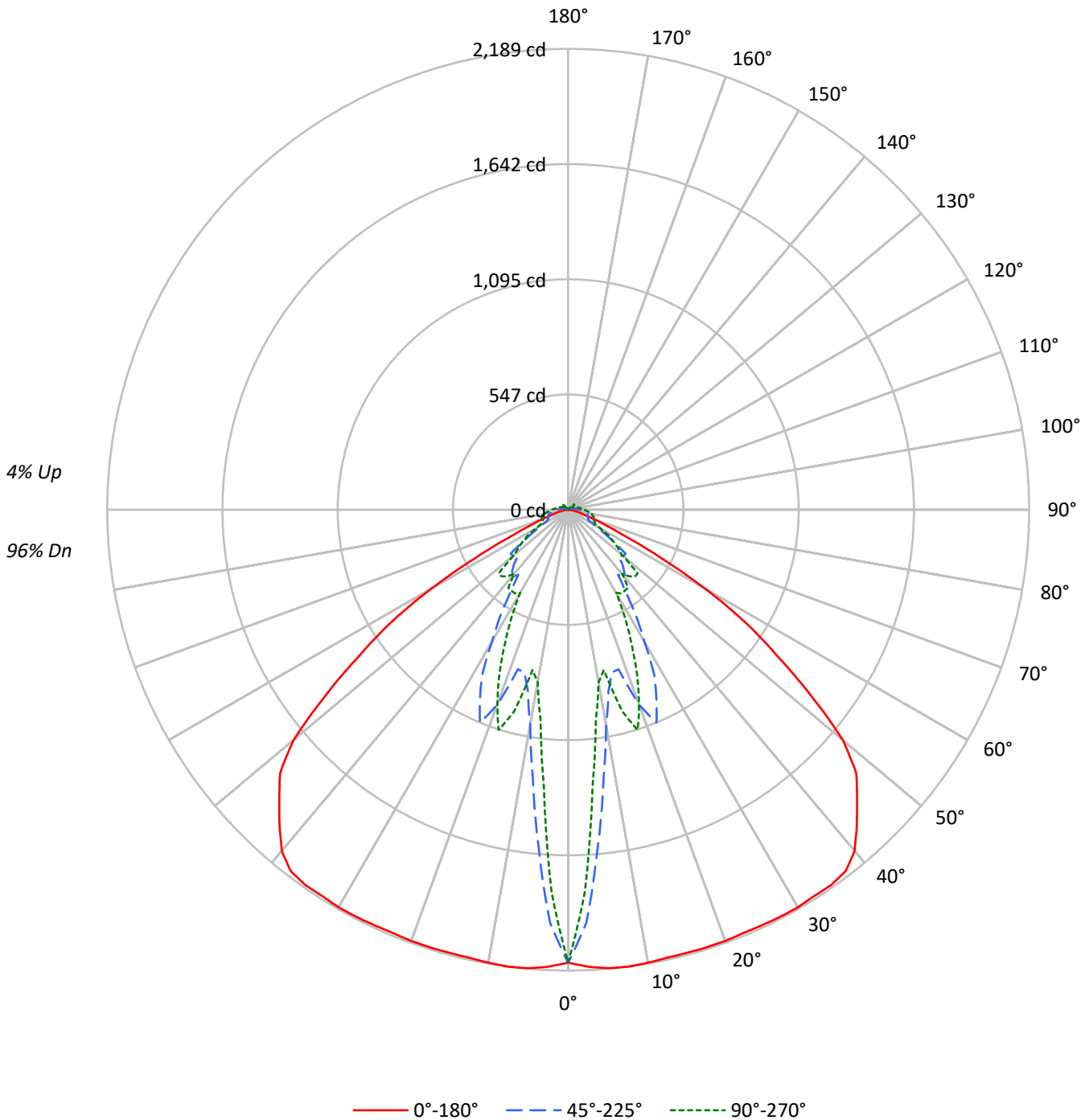
Lumens per Lamp: N/A
Luminaire Lumens: 2629.0 lumens
Efficiency: N/A
Efficacy: 149.4 lumens/watt
Spacing Criteria (0/90/45): 1.54 / 0.24 / 0.77
Luminous Opening: Rectangular w/ Sides (W: 0.38' x L: 4' x H: 0.15')
CIE Type: Direct

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	109	109	109	104	104	104	99	99	99	99	99	99	96	
1	109	105	101	97	106	102	99	95	97	94	92	93	90	88	89	87	85	89	87	85	83	
2	100	93	87	82	98	91	85	81	87	82	78	83	79	76	80	77	74	80	77	74	72	
3	93	83	76	70	90	82	75	69	78	72	68	75	70	66	72	68	65	72	68	65	62	
4	86	75	67	61	83	73	66	61	71	64	59	68	63	58	65	61	57	65	61	57	55	
5	80	68	60	54	77	67	59	53	64	58	52	62	56	52	60	55	51	60	55	51	49	
6	74	62	54	48	72	61	53	47	59	52	47	57	51	46	55	50	45	55	50	45	44	
7	69	57	49	43	67	56	48	43	54	47	42	52	46	42	51	45	41	51	45	41	39	
8	65	52	44	39	63	51	44	39	50	43	38	48	42	38	47	41	37	47	41	37	36	
9	61	48	41	35	59	47	40	35	46	39	35	45	39	34	44	38	34	44	38	34	32	
10	57	45	37	32	56	44	37	32	43	36	32	42	36	32	41	35	31	41	35	31	30	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	15439	15439	15439
5°	15699	11315	9204
10°	15815	7189	5671
15°	16032	5502	6664
20°	16430	6798	6578
25°	16954	6878	4809
30°	17695	5103	3086
35°	18589	3423	3230
40°	19230	3139	2807
45°	18989	2825	3276
50°	18227	2805	2537
55°	14416	2216	2095
60°	10162	1347	1474
65°	4742	1069	1295
70°	2382	1157	1312
75°	1452	1253	1391
80°	945	1301	1474
85°	477	1347	1427



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	147.1	5.6
10°-20°	322.2	12.3
20°-30°	459.9	17.5
30°-40°	491.2	18.7
40°-50°	456.9	17.4
50°-60°	335.9	12.8
60°-70°	149.4	5.7
70°-80°	98.4	3.7
80°-90°	68.2	2.6
90°-100°	40.2	1.5
100°-110°	23.3	0.9
110°-120°	14.2	0.5
120°-130°	10.2	0.4
130°-140°	8.6	0.3
140°-150°	2.5	0.1
150°-160°	0.8	0.0
160°-170°	0.1	0.0
170°-180°	0.0	0.0
0°-30°	929.2	35.3
0°-40°	1420.4	54.0
0°-60°	2213.1	84.2
0°-90°	2529.2	96.2
90°-120°	77.7	3.0
90°-150°	99.0	3.8
90°-180°	100.0	3.8
0°-180°	2629.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2152	2152	2152	2152	2152	
5°	2186	1950	1612	1402	1321	208
15°	2179	1181	800	884	990	618
25°	2178	762	990	779	718	1008
35°	2176	917	473	480	469	1360
45°	1939	394	362	402	448	1493
55°	1212	235	253	256	260	1091
65°	301	91	104	131	140	350
75°	60	59	96	127	123	69
85°	8	34	73	91	94	11
90°	0	26	56	72	76	0
95°	0	18	41	54	62	0
105°	0	10	23	32	43	0
115°	0	6	14	22	28	0
125°	0	2	9	17	29	0
135°	0	1	8	24	29	0
145°	1	1	3	6	6	1
155°	1	1	2	2	2	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°	2151.5	2151.5	2151.5	2151.5	2151.5
2.5°	2173.2	2078.8	1963.6	1862.0	1818.4
5°	2186.3	1950.1	1612.1	1402.5	1321.2
7.5°	2189.2	1769.5	1285.4	1054.4	1006.5
10°	2184.4	1557.4	1038.9	857.4	831.7
12.5°	2179.5	1360.4	882.1	792.0	779.9
15°	2179.1	1181.3	800.3	884.0	990.5
17.5°	2180.0	1008.0	794.5	1099.9	1097.5
20°	2180.0	880.6	987.6	1050.1	983.3
22.5°	2175.7	790.6	1095.1	931.5	857.9
25°	2177.6	761.5	990.5	779.4	717.5
27.5°	2180.0	800.7	886.0	652.1	591.1
30°	2180.5	911.6	722.8	527.7	456.0
32.5°	2175.2	968.7	601.3	420.2	471.1
35°	2176.2	917.4	473.0	480.3	469.1
37.5°	2164.0	800.3	389.2	445.9	467.7
40°	2115.6	644.9	419.7	418.3	397.5
42.5°	2028.5	500.6	392.6	381.0	429.4
45°	1939.4	394.1	362.1	402.3	448.3
47.5°	1856.1	317.6	321.9	441.5	447.3
50°	1703.6	298.2	341.3	373.7	332.6
52.5°	1457.2	271.6	344.2	292.4	297.7
55°	1212.3	234.8	253.2	256.1	260.5
57.5°	1002.6	222.2	191.2	231.4	225.1
60°	752.8	193.7	142.8	182.0	171.9
62.5°	497.7	122.0	109.9	140.9	142.3
65°	301.1	91.0	103.6	131.2	139.9
67.5°	189.8	80.4	102.2	132.7	130.7
70°	124.9	72.6	100.7	132.7	129.3
72.5°	84.2	65.8	98.8	131.2	131.7
75°	59.5	58.6	95.9	126.8	123.0
77.5°	41.6	52.3	92.0	118.6	115.2
80°	27.6	46.0	85.2	109.9	114.3
82.5°	16.5	39.7	79.4	100.7	105.1
85°	8.2	34.4	72.6	91.0	94.4
87.5°	3.4	30.0	64.4	80.8	83.8
90°	0.0	25.7	56.2	71.7	76.0
92.5°	0.0	21.8	48.4	62.5	69.2
95°	0.0	18.4	41.2	53.7	62.5
97.5°	0.0	16.0	35.3	47.0	56.6
100°	0.0	13.6	30.5	40.7	51.8
102.5°	0.0	12.1	26.1	35.8	47.4
105°	0.0	10.2	23.2	32.0	43.1
107.5°	0.0	8.7	20.3	28.6	38.7
110°	0.0	7.7	17.9	26.1	34.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	6.8	16.5	23.7	31.0
115°	0.5	5.8	14.5	21.8	28.1
117.5°	0.5	4.8	13.1	19.8	26.1
120°	0.5	3.9	11.6	18.4	25.7
122.5°	0.5	2.9	10.2	17.4	26.6
125°	0.5	2.4	8.7	17.4	29.0
127.5°	0.5	1.9	7.3	19.4	33.4
130°	0.5	1.5	7.3	23.2	37.8
132.5°	0.5	1.0	7.3	25.7	36.3
135°	0.5	1.0	7.7	23.7	29.0
137.5°	0.5	1.0	7.7	18.4	20.8
140°	0.5	1.0	6.3	13.1	14.5
142.5°	0.5	1.0	4.4	9.2	9.7
145°	1.0	1.0	3.4	6.3	6.3
147.5°	1.0	1.0	2.4	4.4	4.4
150°	1.0	1.0	1.9	3.4	3.4
152.5°	1.0	1.0	1.5	2.9	2.4
155°	1.0	1.0	1.5	2.4	1.9
157.5°	1.0	1.0	1.0	1.9	1.5
160°	1.0	1.5	1.5	1.9	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)