

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: P236228

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

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P236228
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-L850-CD1-U
Description: METALUX SWLED LINEAR LUMINAIRE
4FT FIXTURE WITH 1 ROW LED, CLEAR LENS
Light Source: (112) 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

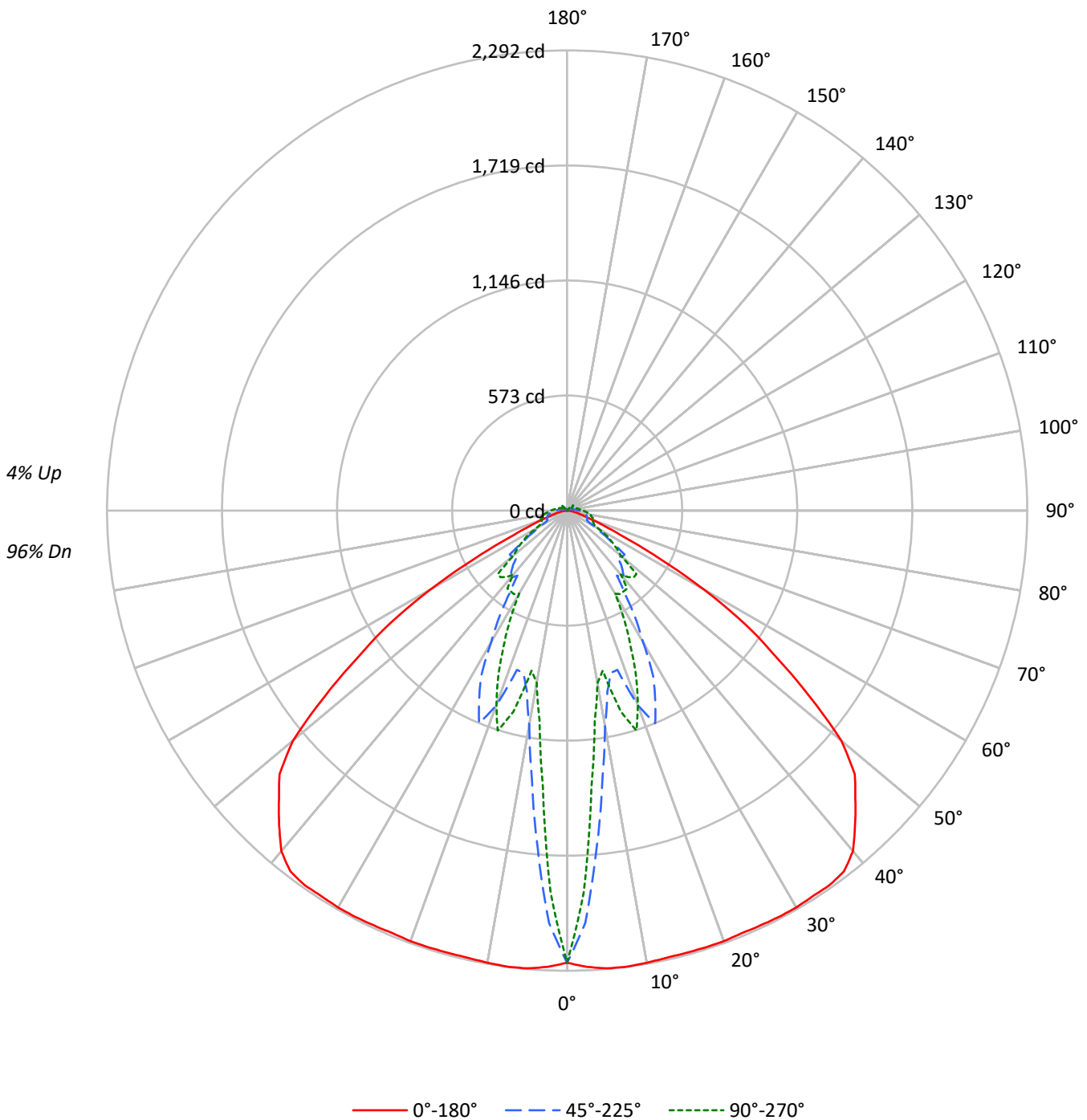
Lumens per Lamp: N/A
Luminaire Lumens: 2752.0 lumens
Efficiency: N/A
Efficacy: 156.4 lumens/watt
Spacing Criteria (0/90/45): 1.54 / 0.24 / 0.77
Luminous Opening: Rectangular w/ Sides (W: 0.38' x L: 4' x H: 0.15')
CIE Type: Direct

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16161	16161	16161
5°	16433	11845	9634
10°	16555	7525	5937
15°	16782	5759	6976
20°	17198	7116	6886
25°	17747	7200	5033
30°	18523	5342	3230
35°	19459	3583	3381
40°	20130	3287	2939
45°	19878	2958	3429
50°	19080	2936	2656
55°	15091	2319	2193
60°	10638	1411	1543
65°	4964	1120	1356
70°	2493	1211	1372
75°	1520	1310	1456
80°	990	1362	1542
85°	500	1410	1494



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	154.0	5.6
10°-20°	337.2	12.3
20°-30°	481.5	17.5
30°-40°	514.2	18.7
40°-50°	478.2	17.4
50°-60°	351.6	12.8
60°-70°	156.4	5.7
70°-80°	103.0	3.7
80°-90°	71.4	2.6
90°-100°	42.1	1.5
100°-110°	24.4	0.9
110°-120°	14.9	0.5
120°-130°	10.7	0.4
130°-140°	9.0	0.3
140°-150°	2.6	0.1
150°-160°	0.8	0.0
160°-170°	0.1	0.0
170°-180°	0.0	0.0
0°-30°	972.6	35.3
0°-40°	1486.8	54.0
0°-60°	2316.7	84.2
0°-90°	2647.5	96.2
90°-120°	81.3	3.0
90°-150°	103.7	3.8
90°-180°	104.0	3.8
0°-180°	2752.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2252	2252	2252	2252	2252	
5°	2289	2041	1688	1468	1383	218
15°	2281	1236	838	925	1037	647
25°	2280	797	1037	816	751	1056
35°	2278	960	495	503	491	1424
45°	2030	412	379	421	469	1563
55°	1269	246	265	268	273	1142
65°	315	95	108	137	146	367
75°	62	61	100	133	129	72
85°	9	36	76	95	99	11
90°	0	27	59	75	80	0
95°	0	19	43	56	65	0
105°	0	11	24	33	45	0
115°	0	6	15	23	29	0
125°	0	2	9	18	30	0
135°	0	1	8	25	30	0
145°	1	1	4	7	7	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°	2252.1	2252.1	2252.1	2252.1	2252.1
2.5°	2274.9	2176.1	2055.5	1949.1	1903.5
5°	2288.6	2041.3	1687.6	1468.1	1383.0
7.5°	2291.6	1852.3	1345.5	1103.8	1053.6
10°	2286.6	1630.3	1087.5	897.5	870.6
12.5°	2281.5	1424.0	923.3	829.1	816.4
15°	2281.0	1236.5	837.7	925.4	1036.9
17.5°	2282.0	1055.1	831.6	1151.4	1148.9
20°	2282.0	921.8	1033.8	1099.2	1029.3
22.5°	2277.5	827.6	1146.3	975.0	898.0
25°	2279.5	797.2	1036.9	815.9	751.0
27.5°	2282.0	838.2	927.4	682.6	618.8
30°	2282.5	954.3	756.6	552.4	477.4
32.5°	2277.0	1014.1	629.4	439.9	493.1
35°	2278.0	960.3	495.1	502.7	491.1
37.5°	2265.3	837.7	407.4	466.7	489.5
40°	2214.6	675.0	439.4	437.9	416.1
42.5°	2123.4	524.0	411.0	398.8	449.5
45°	2030.2	412.5	379.1	421.1	469.3
47.5°	1943.0	332.4	337.0	462.2	468.3
50°	1783.4	312.2	357.3	391.2	348.2
52.5°	1525.4	284.3	360.3	306.1	311.7
55°	1269.0	245.8	265.0	268.1	272.6
57.5°	1049.5	232.6	200.2	242.2	235.7
60°	788.0	202.7	149.5	190.5	179.9
62.5°	521.0	127.7	115.0	147.5	149.0
65°	315.2	95.3	108.5	137.3	146.5
67.5°	198.7	84.1	106.9	138.9	136.8
70°	130.7	76.0	105.4	138.9	135.3
72.5°	88.2	68.9	103.4	137.3	137.8
75°	62.3	61.3	100.3	132.8	128.7
77.5°	43.6	54.7	96.3	124.2	120.6
80°	28.9	48.1	89.2	115.0	119.6
82.5°	17.2	41.6	83.1	105.4	110.0
85°	8.6	36.0	76.0	95.3	98.8
87.5°	3.5	31.4	67.4	84.6	87.7
90°	0.0	26.9	58.8	75.0	79.6
92.5°	0.0	22.8	50.7	65.4	72.5
95°	0.0	19.3	43.1	56.3	65.4
97.5°	0.0	16.7	37.0	49.2	59.3
100°	0.0	14.2	31.9	42.6	54.2
102.5°	0.0	12.7	27.4	37.5	49.7
105°	0.0	10.6	24.3	33.4	45.1
107.5°	0.0	9.1	21.3	29.9	40.5
110°	0.0	8.1	18.8	27.4	36.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	7.1	17.2	24.8	32.4
115°	0.5	6.1	15.2	22.8	29.4
117.5°	0.5	5.1	13.7	20.8	27.4
120°	0.5	4.1	12.2	19.3	26.9
122.5°	0.5	3.0	10.6	18.2	27.9
125°	0.5	2.5	9.1	18.2	30.4
127.5°	0.5	2.0	7.6	20.3	35.0
130°	0.5	1.5	7.6	24.3	39.5
132.5°	0.5	1.0	7.6	26.9	38.0
135°	0.5	1.0	8.1	24.8	30.4
137.5°	0.5	1.0	8.1	19.3	21.8
140°	0.5	1.0	6.6	13.7	15.2
142.5°	0.5	1.0	4.6	9.6	10.1
145°	1.0	1.0	3.5	6.6	6.6
147.5°	1.0	1.0	2.5	4.6	4.6
150°	1.0	1.0	2.0	3.5	3.5
152.5°	1.0	1.0	1.5	3.0	2.5
155°	1.0	1.0	1.5	2.5	2.0
157.5°	1.0	1.0	1.0	2.0	1.5
160°	1.0	1.5	1.5	2.0	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)