

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: P236258

Luminaire Tested: **4SWLED-40SL-LN-UNV-L850-CD1-U**

Issue Date: 3/3/2020



**Test Information**

Test Method: LM-79-08  
Report Number: P236258  
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-40SL-LN-UNV-L850-CD1-U  
Description: METALUX SWLED LINEAR LUMINAIRE  
4FT FIXTURE WITH 1 ROW LED, NARROW LENS  
Light Source: (112) 5000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

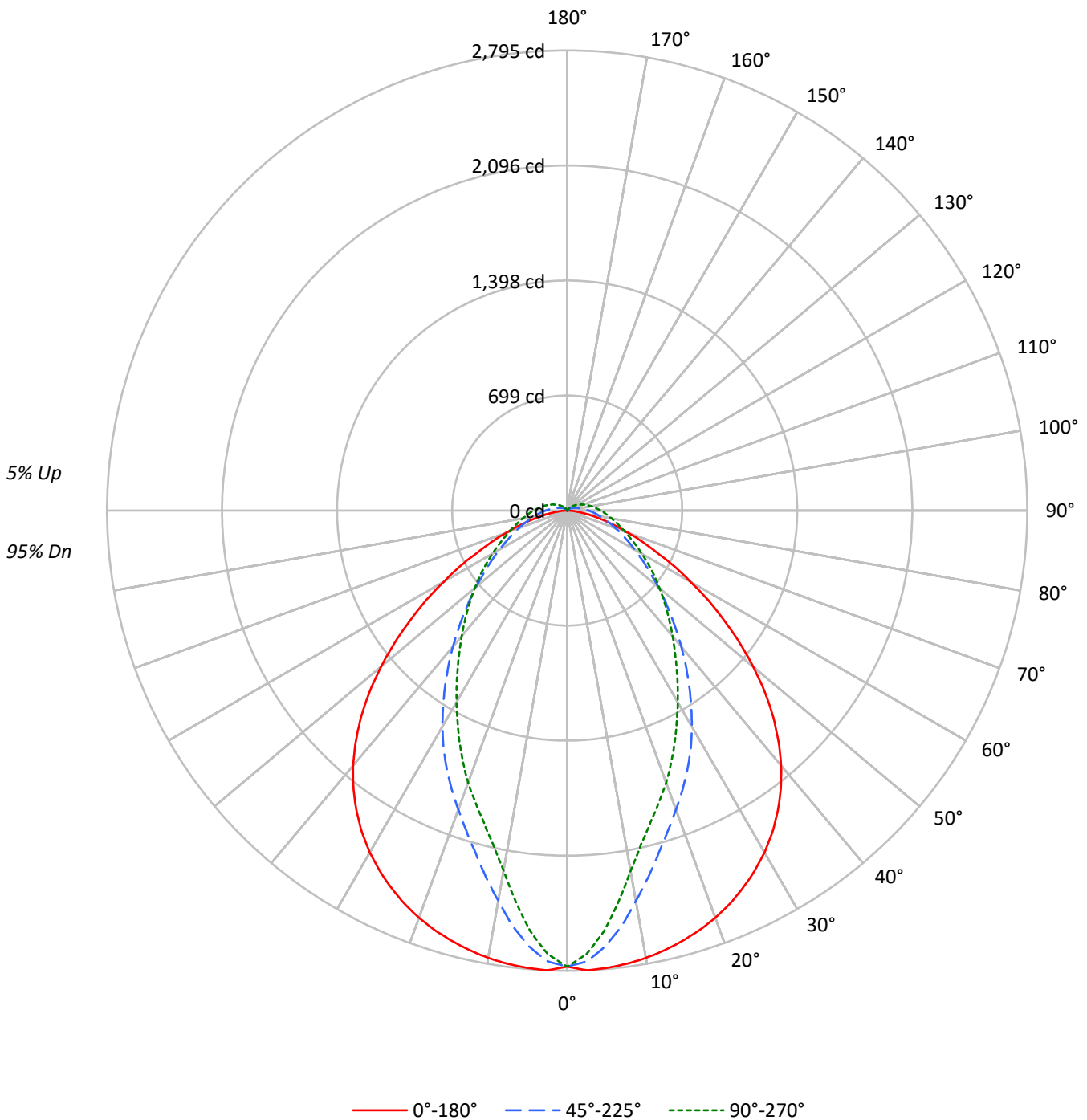
Lumens per Lamp: N/A  
Luminaire Lumens: 5196.0 lumens  
Efficiency: N/A  
Efficacy: 137.1 lumens/watt  
Spacing Criteria (0/90/45): 1.28 / 0.78 / 1  
Luminous Opening: Rectangular w/ Sides (W: 0.38' x L: 4' x H: 0.15')  
CIE Type: Direct

Input Watts (W): 37.9  
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	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°	19879	19879	19879
5°	20024	18651	17862
10°	19975	16656	15140
15°	19906	14792	13178
20°	19834	13305	11764
25°	19682	12019	10370
30°	19459	10692	9088
35°	19045	9333	7968
40°	18382	8066	7037
45°	17319	6908	6245
50°	15785	5928	5589
55°	13848	5118	5001
60°	11662	4473	4496
65°	9421	3972	4076
70°	7495	3595	3777
75°	5660	3284	3598
80°	4075	3119	3531
85°	2505	3046	3553



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	246.9	4.8
10°-20°	627.6	12.1
20°-30°	850.9	16.4
30°-40°	903.9	17.4
40°-50°	808.3	15.6
50°-60°	626.2	12.1
60°-70°	432.8	8.3
70°-80°	276.7	5.3
80°-90°	169.4	3.3
90°-100°	105.4	2.0
100°-110°	66.1	1.3
110°-120°	40.5	0.8
120°-130°	23.0	0.4
130°-140°	11.7	0.2
140°-150°	4.9	0.1
150°-160°	1.6	0.0
160°-170°	0.1	0.0
170°-180°	0.0	0.0
0°-30°	1725.4	33.2
0°-40°	2629.3	50.6
0°-60°	4063.8	78.2
0°-90°	4942.7	95.1
90°-120°	212.0	4.1
90°-150°	251.6	4.8
90°-180°	253.0	4.9
0°-180°	5196.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2770	2770	2770	2770	2770	
5°	2789	2721	2657	2586	2564	265
15°	2706	2440	2152	1995	1959	764
25°	2528	2055	1731	1585	1547	1165
35°	2230	1626	1290	1177	1157	1392
45°	1769	1140	886	848	855	1358
55°	1164	702	585	606	622	1043
65°	598	398	385	427	440	606
75°	232	201	251	306	318	255
85°	43	90	164	218	235	52
90°	1	58	130	186	204	3
95°	0	37	102	156	175	0
105°	0	16	60	107	126	0
115°	0	9	38	71	86	0
125°	0	5	24	45	54	1
135°	1	2	14	27	32	1
145°	1	1	6	14	16	1
155°	2	1	2	5	6	1
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°	2770.2	2770.2	2770.2	2770.2	2770.2
2.5°	2794.9	2749.7	2740.5	2713.8	2696.4
5°	2788.7	2721.0	2657.4	2585.6	2564.0
7.5°	2776.4	2671.7	2543.5	2422.4	2394.7
10°	2759.0	2605.1	2407.0	2258.3	2220.3
12.5°	2735.4	2527.1	2278.8	2114.6	2076.7
15°	2705.6	2439.9	2151.6	1994.6	1958.7
17.5°	2672.8	2350.6	2037.7	1887.9	1856.1
20°	2631.7	2251.1	1933.0	1785.3	1758.6
22.5°	2584.5	2156.7	1832.5	1683.7	1652.9
25°	2528.1	2055.1	1730.9	1585.2	1547.2
27.5°	2466.5	1952.5	1626.2	1478.5	1442.6
30°	2397.8	1848.9	1514.4	1370.8	1343.1
32.5°	2318.8	1740.1	1401.5	1271.2	1247.6
35°	2229.5	1626.2	1289.7	1176.8	1157.3
37.5°	2132.1	1507.2	1182.0	1085.5	1073.2
40°	2022.3	1385.1	1078.3	1001.4	996.3
42.5°	1900.2	1263.0	977.8	923.4	923.4
45°	1768.8	1139.9	885.5	848.5	854.7
47.5°	1626.2	1017.8	800.3	781.8	792.1
50°	1475.4	903.9	721.3	719.2	732.6
52.5°	1321.5	798.2	648.4	660.8	676.1
55°	1164.5	701.8	584.8	606.4	621.8
57.5°	1017.8	613.6	527.4	557.1	571.5
60°	863.9	534.6	474.0	509.9	524.3
62.5°	734.6	461.7	428.9	465.8	480.2
65°	598.2	398.1	384.8	426.8	440.2
67.5°	493.5	340.6	346.8	391.9	404.2
70°	393.0	288.3	312.9	360.1	372.4
72.5°	310.9	240.1	282.2	331.4	343.7
75°	231.9	201.1	251.4	305.8	318.1
77.5°	169.3	167.2	226.7	282.2	295.5
80°	119.0	136.5	204.2	258.6	273.9
82.5°	77.0	110.8	183.7	237.0	252.4
85°	43.1	90.3	164.2	218.5	235.0
87.5°	20.5	72.8	146.7	202.1	219.6
90°	1.0	58.5	130.3	185.7	204.2
92.5°	0.0	46.2	115.9	170.3	189.8
95°	0.0	36.9	101.6	156.0	175.4
97.5°	0.0	29.8	89.3	142.6	162.1
100°	0.0	23.6	79.0	129.3	149.8
102.5°	0.0	19.5	68.7	118.0	138.5
105°	0.0	16.4	60.5	106.7	126.2
107.5°	0.0	14.4	53.4	96.4	115.9
110°	0.0	12.3	48.2	87.2	105.7



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	11.3	42.1	79.0	96.4
115°	0.0	9.2	38.0	70.8	86.2
117.5°	0.0	8.2	33.9	63.6	78.0
120°	0.0	7.2	29.8	57.5	69.8
122.5°	0.0	6.2	26.7	50.3	61.6
125°	0.0	5.1	23.6	45.1	54.4
127.5°	1.0	4.1	21.5	40.0	47.2
130°	1.0	3.1	18.5	34.9	42.1
132.5°	1.0	3.1	16.4	30.8	35.9
135°	1.0	2.1	14.4	26.7	31.8
137.5°	1.0	2.1	12.3	23.6	26.7
140°	1.0	1.0	10.3	19.5	23.6
142.5°	1.0	1.0	8.2	16.4	19.5
145°	1.0	1.0	6.2	14.4	16.4
147.5°	1.0	1.0	5.1	11.3	13.3
150°	1.0	1.0	4.1	9.2	10.3
152.5°	1.0	1.0	3.1	7.2	8.2
155°	2.1	1.0	2.1	5.1	6.2
157.5°	2.1	2.1	2.1	4.1	4.1
160°	2.1	2.1	2.1	2.1	3.1
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)