

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: P236339

Luminaire Tested: **4SWLED-44HL-LW-UNV-L850-CD1-U**

Issue Date: 3/3/2020



**Test Information**

Test Method: LM-79-08  
Report Number: P236339  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1709-316-27)  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 4SWLED-44HL-LW-UNV-L850-CD1-U  
Description: METALUX SWLED LINEAR LUMINAIRE  
4FT FIXTURE WITH 2 ROW LED, WIDE LENS  
Light Source: (224) 5000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

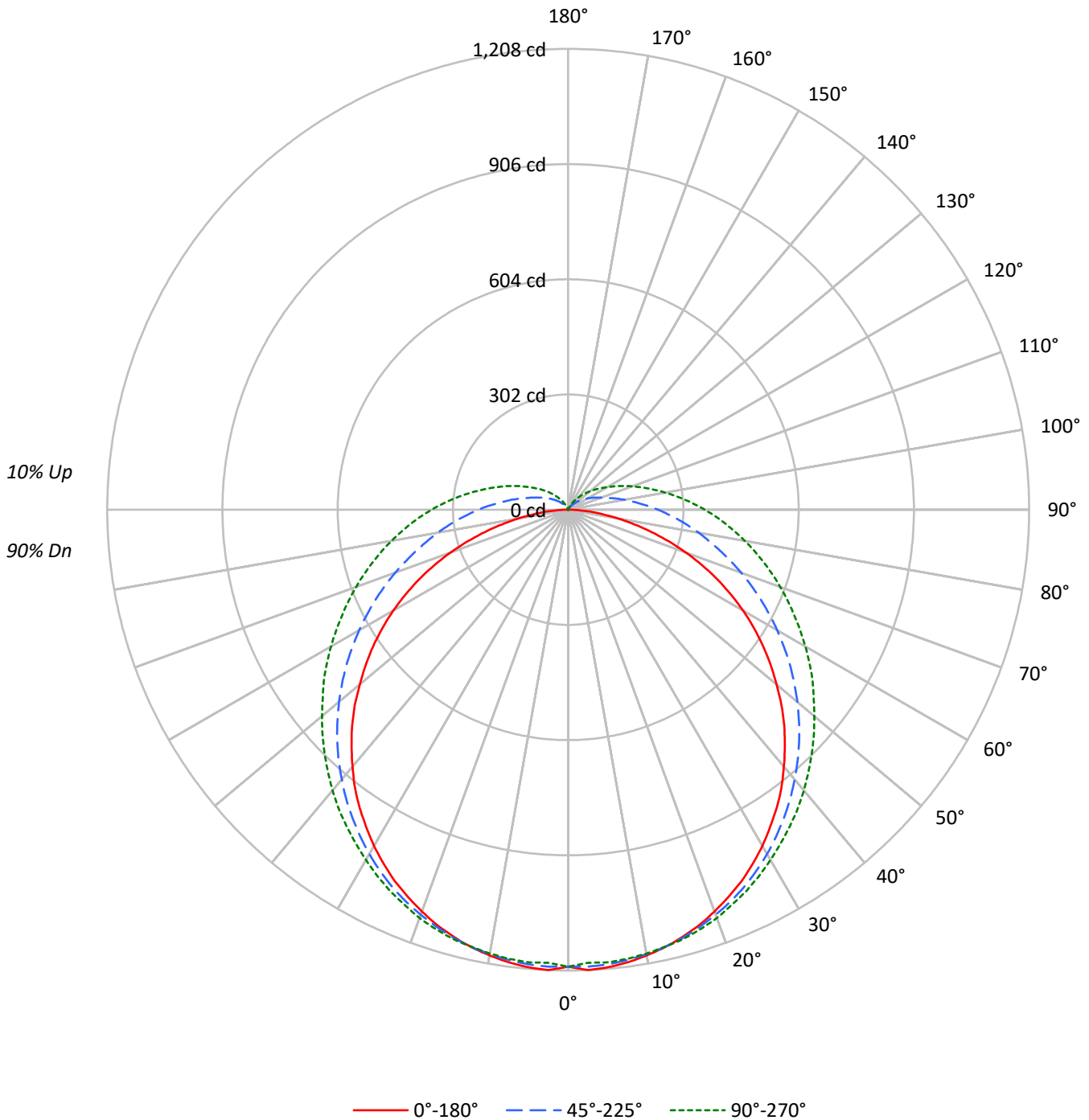
Lumens per Lamp: N/A  
Luminaire Lumens: 4551.0 lumens  
Efficiency: N/A  
Efficacy: 114.6 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.32 / 1.42  
Luminous Opening: Rectangular w/ Sides (W: 0.38' x L: 4' x H: 0.15')  
CIE Type: Direct

Input Watts (W): 39.7  
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	117	117	117	117	113	113	113	113	106	106	106		99	99	99		93	93	93	90
1	104	98	93	88	100	95	90	86	89	85	82		83	80	77		78	75	73	70
2	94	84	77	70	90	82	75	69	76	71	66		72	67	63		67	63	60	57
3	85	73	65	57	82	71	63	56	67	60	54		62	57	52		59	54	50	47
4	78	65	55	48	74	63	54	47	59	51	45		55	49	44		52	47	42	40
5	71	58	48	41	68	56	47	40	52	45	39		49	43	38		47	41	36	34
6	65	52	42	36	63	50	41	35	47	40	34		45	38	33		42	36	32	29
7	61	47	38	31	58	45	37	31	43	35	30		41	34	29		38	32	28	26
8	56	42	34	28	54	41	33	27	39	32	27		37	31	26		35	29	25	23
9	53	39	30	25	51	38	30	24	36	29	24		34	28	23		32	27	22	21
10	49	36	28	22	47	35	27	22	33	26	21		32	25	21		30	24	20	19

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	8595	8595	8595
5°	8645	8399	8296
10°	8590	8186	8055
15°	8529	7986	7838
20°	8448	7777	7619
25°	8366	7576	7395
30°	8258	7359	7172
35°	8142	7134	6971
40°	7991	6906	6784
45°	7840	6679	6597
50°	7624	6441	6422
55°	7420	6207	6286
60°	7151	5968	6155
65°	6777	5741	6049
70°	6246	5534	5997
75°	5513	5370	5991
80°	4544	5295	6057
85°	3348	5343	6242



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	113.6	2.5
10°-20°	327.3	7.2
20°-30°	500.9	11.0
30°-40°	614.1	13.5
40°-50°	657.2	14.4
50°-60°	630.4	13.9
60°-70°	543.7	11.9
70°-80°	418.9	9.2
80°-90°	290.4	6.4
90°-100°	189.1	4.2
100°-110°	120.2	2.6
110°-120°	73.3	1.6
120°-130°	42.0	0.9
130°-140°	20.7	0.5
140°-150°	7.8	0.2
150°-160°	1.5	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	941.8	20.7
0°-40°	1555.9	34.2
0°-60°	2843.5	62.5
0°-90°	4096.4	90.0
90°-120°	382.6	8.4
90°-150°	453.1	10.0
90°-180°	455.0	10.0
0°-180°	4551.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1198	1198	1198	1198	1198	
5°	1204	1193	1197	1191	1191	114
15°	1159	1151	1162	1163	1165	327
25°	1075	1070	1091	1096	1103	495
35°	953	954	986	1001	1012	596
45°	801	813	856	885	903	617
55°	624	650	709	757	782	557
65°	430	472	556	623	653	425
75°	226	296	411	496	530	240
85°	58	157	288	379	413	62
90°	1	107	236	325	358	4
95°	0	72	188	274	306	0
105°	0	36	117	189	216	0
115°	0	20	74	125	146	0
125°	1	10	46	81	95	0
135°	1	2	25	49	58	0
145°	1	1	10	23	29	0
155°	1	1	1	6	8	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°	1197.7	1197.7	1197.7	1197.7	1197.7
2.5°	1207.9	1196.0	1198.8	1194.3	1188.7
5°	1203.9	1192.6	1196.6	1190.9	1190.9
7.5°	1196.6	1186.4	1190.4	1187.0	1187.5
10°	1186.4	1176.2	1183.0	1180.2	1181.3
12.5°	1174.6	1164.4	1174.0	1171.7	1173.4
15°	1159.3	1151.4	1161.6	1162.7	1165.0
17.5°	1141.8	1135.0	1146.3	1149.7	1153.1
20°	1120.9	1115.8	1129.9	1133.3	1139.0
22.5°	1098.3	1093.8	1111.9	1114.7	1120.9
25°	1074.6	1070.1	1091.0	1096.1	1103.4
27.5°	1046.9	1045.2	1067.8	1075.2	1082.5
30°	1017.6	1016.4	1042.4	1050.9	1059.9
32.5°	985.4	986.5	1014.7	1026.0	1036.8
35°	953.2	954.3	985.9	1000.6	1012.5
37.5°	918.2	921.6	955.5	973.0	988.2
40°	879.2	887.1	923.3	944.7	960.5
42.5°	840.3	851.0	890.5	915.4	931.7
45°	800.7	812.6	856.1	885.4	902.9
47.5°	758.4	773.6	820.5	853.8	873.0
50°	712.6	733.5	783.8	822.8	841.9
52.5°	668.6	692.3	746.5	790.6	810.9
55°	624.0	650.5	709.2	757.2	781.5
57.5°	577.1	605.9	670.8	723.4	749.9
60°	529.7	562.4	632.5	690.6	717.7
62.5°	480.5	517.8	594.1	656.7	685.5
65°	430.3	472.1	556.2	623.4	653.3
67.5°	379.5	426.9	518.9	591.8	622.3
70°	327.5	382.3	481.7	559.6	591.2
72.5°	276.7	338.8	445.5	526.9	560.2
75°	225.9	296.5	411.1	496.4	529.7
77.5°	177.3	256.4	377.2	466.4	499.7
80°	132.7	219.7	346.7	436.5	469.8
82.5°	91.5	186.9	316.8	407.7	440.5
85°	57.6	157.0	288.0	378.9	412.8
87.5°	27.7	130.4	260.3	351.8	385.1
90°	1.1	106.7	235.5	325.3	358.0
92.5°	0.0	87.5	211.2	299.3	331.5
95°	0.0	71.7	188.0	274.4	305.5
97.5°	0.0	59.3	167.7	251.3	281.2
100°	0.0	48.6	149.6	229.3	258.1
102.5°	0.0	41.2	132.7	208.4	236.0
105°	0.0	35.6	116.9	189.2	215.7
107.5°	0.0	30.5	104.5	171.7	196.5
110°	0.0	26.0	93.2	154.7	179.0



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	0.6	22.6	83.0	140.0	162.1
115°	0.0	19.8	74.5	124.8	146.3
117.5°	0.0	16.4	66.6	112.4	131.6
120°	0.0	14.1	59.3	101.1	118.0
122.5°	0.6	11.9	52.5	90.9	106.2
125°	0.6	9.6	46.3	81.3	95.4
127.5°	0.6	7.3	40.7	72.3	85.3
130°	0.6	5.6	35.0	63.8	75.1
132.5°	0.6	4.0	29.9	55.9	66.6
135°	0.6	2.3	24.8	48.6	57.6
137.5°	0.6	1.1	20.3	41.2	49.7
140°	0.6	0.6	16.4	35.0	42.4
142.5°	0.6	0.0	12.4	29.4	35.0
145°	0.6	0.6	9.6	23.2	28.8
147.5°	0.6	0.6	6.8	18.1	23.2
150°	0.6	0.6	4.0	13.0	17.5
152.5°	0.6	0.6	1.7	9.0	13.0
155°	0.6	0.6	0.6	5.6	8.5
157.5°	0.6	0.6	0.0	2.3	4.5
160°	1.1	0.6	0.0	0.0	1.1
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)