

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: P236337

Luminaire Tested: **4SWLED-44HL-LW-UNV-L835-CD1-U**

Issue Date: 3/3/2020



**Test Information**

Test Method: LM-79-08  
Report Number: P236337  
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-L835-CD1-U  
Description: METALUX SWLED LINEAR LUMINAIRE  
4FT FIXTURE WITH 2 ROW LED, WIDE LENS  
Light Source: (224) 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

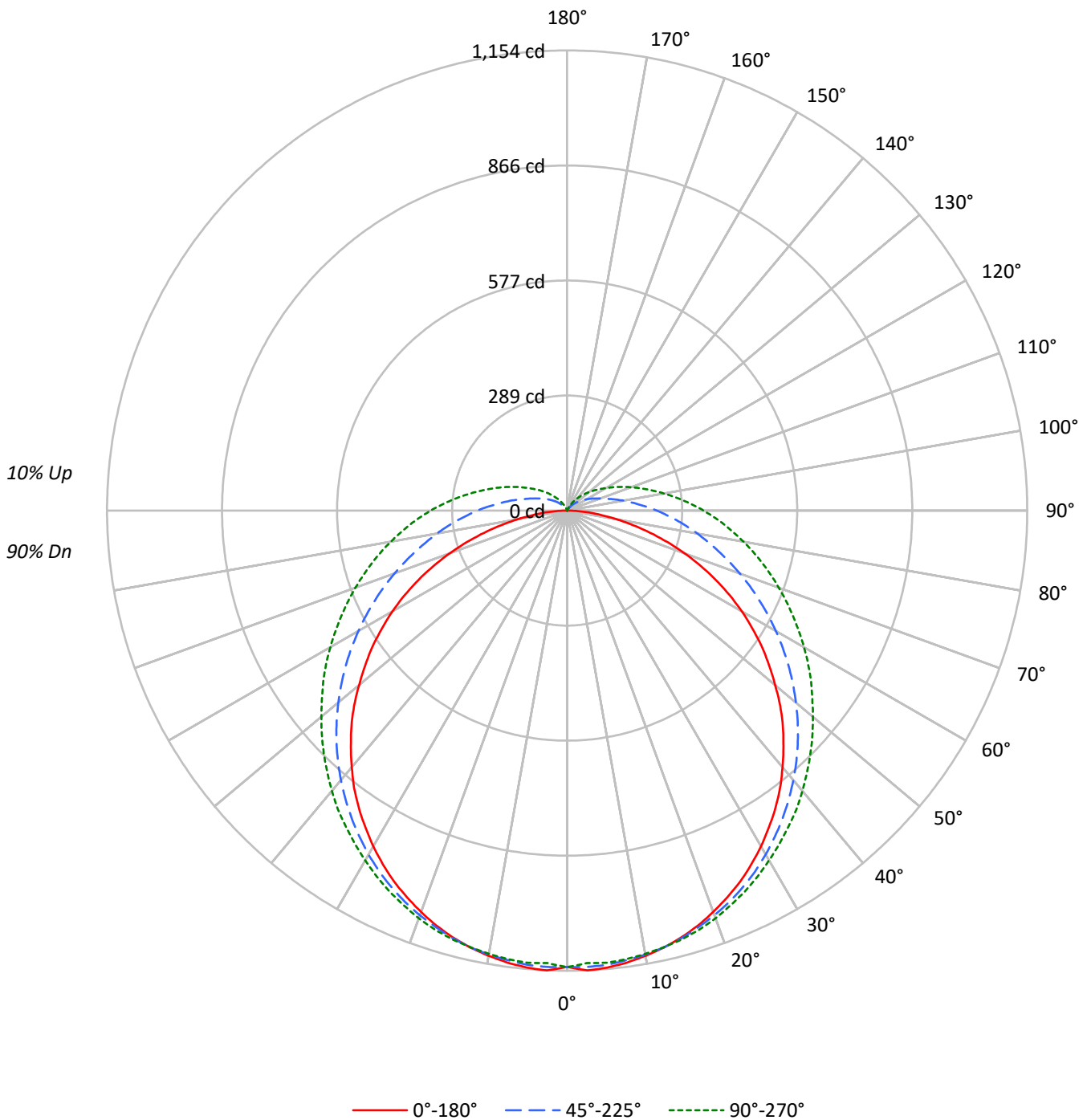
Lumens per Lamp: N/A  
Luminaire Lumens: 4349.0 lumens  
Efficiency: N/A  
Efficacy: 109.5 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.32 / 1.42  
Luminous Opening: Rectangular w/ Sides (W: 0.38' x L: 4' x H: 0.15')  
CIE Type: Direct

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	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°	8213	8213	8213
5°	8261	8026	7928
10°	8208	7823	7698
15°	8150	7631	7490
20°	8073	7432	7281
25°	7995	7240	7067
30°	7891	7033	6854
35°	7781	6818	6662
40°	7637	6599	6483
45°	7492	6383	6305
50°	7286	6155	6138
55°	7091	5932	6007
60°	6833	5703	5882
65°	6476	5486	5780
70°	5969	5288	5731
75°	5267	5131	5725
80°	4342	5060	5788
85°	3196	5106	5965



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	108.5	2.5
10°-20°	312.8	7.2
20°-30°	478.7	11.0
30°-40°	586.8	13.5
40°-50°	628.1	14.4
50°-60°	602.4	13.9
60°-70°	519.6	11.9
70°-80°	400.3	9.2
80°-90°	277.5	6.4
90°-100°	180.7	4.2
100°-110°	114.8	2.6
110°-120°	70.1	1.6
120°-130°	40.1	0.9
130°-140°	19.8	0.5
140°-150°	7.4	0.2
150°-160°	1.4	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	900.0	20.7
0°-40°	1486.8	34.2
0°-60°	2717.3	62.5
0°-90°	3914.6	90.0
90°-120°	365.6	8.4
90°-150°	432.9	10.0
90°-180°	434.0	10.0
0°-180°	4349.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1144	1144	1144	1144	1144	
5°	1150	1140	1144	1138	1138	109
15°	1108	1100	1110	1111	1113	313
25°	1027	1023	1043	1047	1054	473
35°	911	912	942	956	968	569
45°	765	776	818	846	863	590
55°	596	622	678	724	747	532
65°	411	451	532	596	624	406
75°	216	283	393	474	506	229
85°	55	150	275	362	394	60
90°	1	102	225	311	342	4
95°	0	68	180	262	292	0
105°	0	34	112	181	206	0
115°	0	19	71	119	140	0
125°	0	9	44	78	91	0
135°	0	2	24	46	55	0
145°	0	0	9	22	28	0
155°	0	0	0	5	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°	1144.5	1144.5	1144.5	1144.5	1144.5
2.5°	1154.3	1142.9	1145.6	1141.3	1135.9
5°	1150.5	1139.7	1143.5	1138.1	1138.1
7.5°	1143.5	1133.7	1137.5	1134.3	1134.8
10°	1133.7	1124.0	1130.5	1127.8	1128.9
12.5°	1122.4	1112.7	1121.9	1119.7	1121.3
15°	1107.8	1100.3	1110.0	1111.1	1113.2
17.5°	1091.1	1084.6	1095.4	1098.7	1101.9
20°	1071.2	1066.3	1079.8	1083.0	1088.4
22.5°	1049.6	1045.3	1062.5	1065.2	1071.2
25°	1026.9	1022.6	1042.6	1047.4	1054.4
27.5°	1000.5	998.8	1020.4	1027.4	1034.5
30°	972.4	971.3	996.1	1004.2	1012.9
32.5°	941.6	942.7	969.7	980.5	990.7
35°	910.9	912.0	942.2	956.2	967.5
37.5°	877.4	880.7	913.0	929.8	944.3
40°	840.2	847.7	882.3	902.8	917.9
42.5°	803.0	813.2	851.0	874.7	890.4
45°	765.2	776.5	818.1	846.1	862.9
47.5°	724.7	739.3	784.1	815.9	834.3
50°	681.0	701.0	749.0	786.2	804.6
52.5°	638.9	661.6	713.4	755.5	774.9
55°	596.3	621.6	677.8	723.6	746.8
57.5°	551.5	579.0	641.1	691.3	716.6
60°	506.2	537.5	604.4	660.0	685.9
62.5°	459.2	494.8	567.7	627.6	655.1
65°	411.2	451.1	531.5	595.7	624.3
67.5°	362.6	408.0	495.9	565.5	594.7
70°	313.0	365.3	460.3	534.8	565.0
72.5°	264.4	323.8	425.8	503.5	535.3
75°	215.8	283.3	392.8	474.3	506.2
77.5°	169.4	245.0	360.5	445.7	477.6
80°	126.8	209.9	331.3	417.1	449.0
82.5°	87.4	178.6	302.7	389.6	420.9
85°	55.0	150.0	275.2	362.1	394.5
87.5°	26.4	124.7	248.8	336.2	368.0
90°	1.1	102.0	225.0	310.8	342.1
92.5°	0.0	83.6	201.8	286.0	316.8
95°	0.0	68.5	179.7	262.3	291.9
97.5°	0.0	56.7	160.3	240.1	268.7
100°	0.0	46.4	143.0	219.1	246.6
102.5°	0.0	39.4	126.8	199.1	225.6
105°	0.0	34.0	111.7	180.8	206.1
107.5°	0.0	29.1	99.8	164.0	187.8
110°	0.0	24.8	89.0	147.9	171.1



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	0.5	21.6	79.3	133.8	154.9
115°	0.0	18.9	71.2	119.3	139.8
117.5°	0.0	15.6	63.7	107.4	125.7
120°	0.0	13.5	56.7	96.6	112.8
122.5°	0.5	11.3	50.2	86.9	101.4
125°	0.5	9.2	44.2	77.7	91.2
127.5°	0.5	7.0	38.9	69.1	81.5
130°	0.5	5.4	33.5	61.0	71.8
132.5°	0.5	3.8	28.6	53.4	63.7
135°	0.5	2.2	23.7	46.4	55.0
137.5°	0.5	1.1	19.4	39.4	47.5
140°	0.5	0.5	15.6	33.5	40.5
142.5°	0.5	0.0	11.9	28.1	33.5
145°	0.5	0.5	9.2	22.1	27.5
147.5°	0.5	0.5	6.5	17.3	22.1
150°	0.5	0.5	3.8	12.4	16.7
152.5°	0.5	0.5	1.6	8.6	12.4
155°	0.5	0.5	0.5	5.4	8.1
157.5°	0.5	0.5	0.0	2.2	4.3
160°	1.1	0.5	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)