

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: P236338

Luminaire Tested: **4SWLED-44HL-LW-UNV-L840-CD1-U**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P236338
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-L840-CD1-U
Description: METALUX SWLED LINEAR LUMINAIRE
4FT FIXTURE WITH 2 ROW LED, WIDE LENS
Light Source: (224) 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

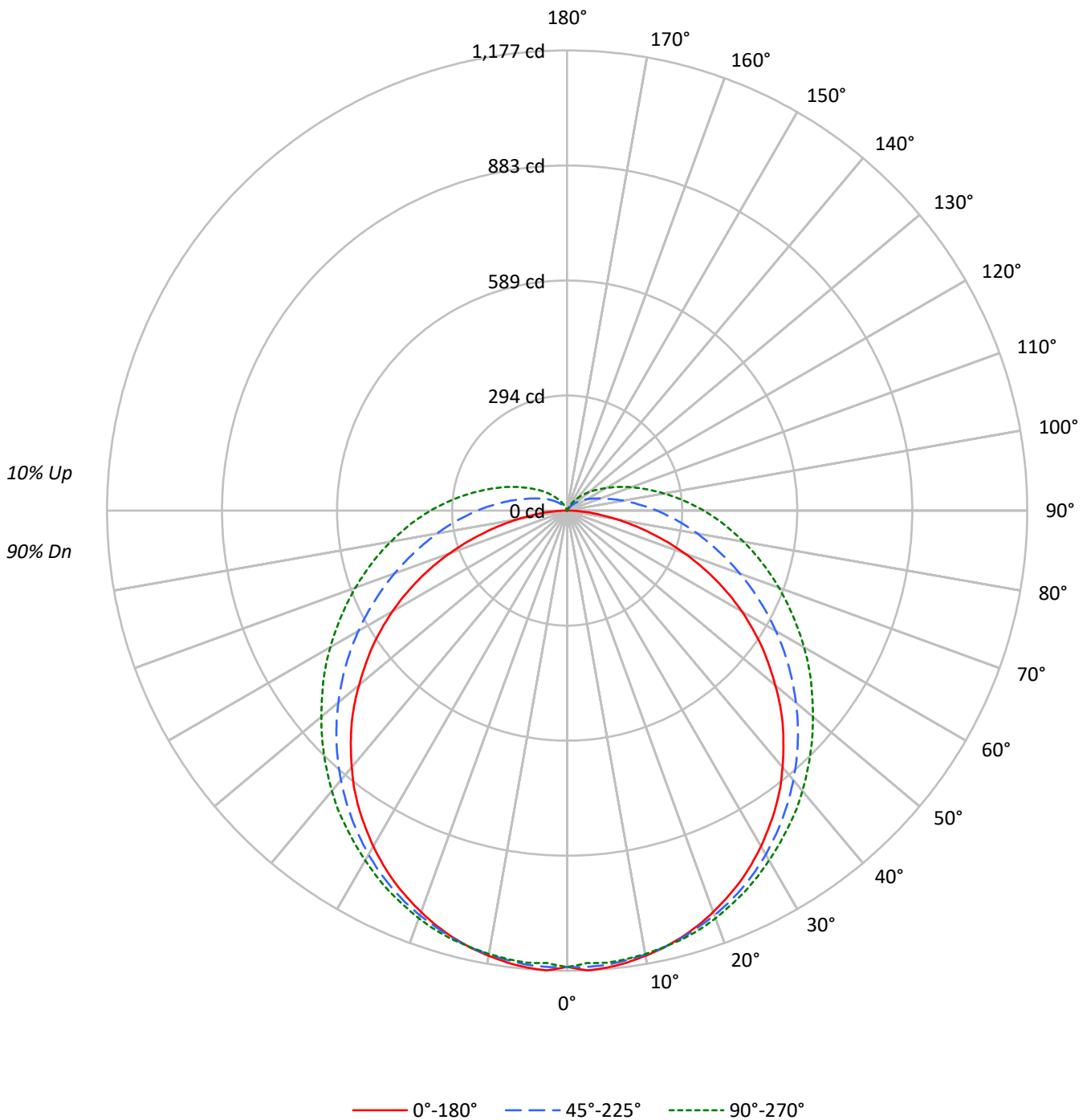
Lumens per Lamp: N/A
Luminaire Lumens: 4436.0 lumens
Efficiency: N/A
Efficacy: 111.7 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.32 / 1.42
Luminous Opening: Rectangular w/ Sides (W: 0.38' x L: 4' x H: 0.15')
CIE Type: Direct

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°	8377	8377	8377
5°	8426	8186	8087
10°	8372	7979	7852
15°	8314	7784	7640
20°	8234	7581	7427
25°	8154	7384	7208
30°	8050	7174	6991
35°	7937	6954	6795
40°	7790	6731	6613
45°	7642	6510	6431
50°	7431	6279	6261
55°	7233	6050	6128
60°	6970	5817	5999
65°	6605	5597	5896
70°	6087	5394	5846
75°	5374	5234	5840
80°	4428	5162	5903
85°	3260	5208	6085



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	110.7	2.5
10°-20°	319.0	7.2
20°-30°	488.3	11.0
30°-40°	598.6	13.5
40°-50°	640.6	14.4
50°-60°	614.5	13.9
60°-70°	530.0	11.9
70°-80°	408.3	9.2
80°-90°	283.1	6.4
90°-100°	184.3	4.2
100°-110°	117.1	2.6
110°-120°	71.5	1.6
120°-130°	40.9	0.9
130°-140°	20.2	0.5
140°-150°	7.6	0.2
150°-160°	1.5	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	918.0	20.7
0°-40°	1516.5	34.2
0°-60°	2771.6	62.5
0°-90°	3992.9	90.0
90°-120°	372.9	8.4
90°-150°	441.6	10.0
90°-180°	443.0	10.0
0°-180°	4436.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1167	1167	1167	1167	1167	
5°	1174	1162	1166	1161	1161	111
15°	1130	1122	1132	1133	1136	319
25°	1047	1043	1063	1068	1076	482
35°	929	930	961	975	987	581
45°	780	792	834	863	880	601
55°	608	634	691	738	762	543
65°	419	460	542	608	637	415
75°	220	289	401	484	516	234
85°	56	153	281	369	402	61
90°	1	104	230	317	349	4
95°	0	70	183	268	298	0
105°	0	35	114	184	210	0
115°	0	19	73	122	143	0
125°	1	9	45	79	93	0
135°	1	2	24	47	56	0
145°	1	1	9	23	28	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°	1167.4	1167.4	1167.4	1167.4	1167.4
2.5°	1177.3	1165.8	1168.5	1164.1	1158.6
5°	1173.5	1162.5	1166.3	1160.8	1160.8
7.5°	1166.3	1156.4	1160.3	1157.0	1157.5
10°	1156.4	1146.5	1153.1	1150.4	1151.5
12.5°	1144.9	1135.0	1144.3	1142.1	1143.8
15°	1130.0	1122.3	1132.2	1133.3	1135.5
17.5°	1112.9	1106.3	1117.3	1120.7	1124.0
20°	1092.6	1087.6	1101.4	1104.7	1110.2
22.5°	1070.6	1066.2	1083.8	1086.5	1092.6
25°	1047.4	1043.0	1063.4	1068.4	1075.5
27.5°	1020.5	1018.8	1040.8	1048.0	1055.2
30°	991.9	990.8	1016.1	1024.3	1033.1
32.5°	960.5	961.6	989.1	1000.1	1010.6
35°	929.1	930.2	961.0	975.3	986.9
37.5°	895.0	898.3	931.3	948.4	963.2
40°	857.0	864.7	899.9	920.9	936.3
42.5°	819.0	829.5	868.0	892.2	908.2
45°	780.5	792.1	834.4	863.1	880.1
47.5°	739.2	754.1	799.8	832.2	850.9
50°	694.6	715.0	764.0	802.0	820.7
52.5°	651.7	674.8	727.7	770.6	790.4
55°	608.2	634.1	691.3	738.1	761.8
57.5°	562.5	590.6	653.9	705.1	731.0
60°	516.3	548.2	616.5	673.2	699.6
62.5°	468.4	504.7	579.0	640.1	668.2
65°	419.4	460.2	542.2	607.7	636.8
67.5°	369.9	416.1	505.8	576.8	606.6
70°	319.2	372.6	469.5	545.5	576.3
72.5°	269.7	330.3	434.3	513.5	546.0
75°	220.2	289.0	400.7	483.8	516.3
77.5°	172.8	249.9	367.7	454.6	487.1
80°	129.3	214.1	338.0	425.5	457.9
82.5°	89.2	182.2	308.8	397.4	429.3
85°	56.1	153.0	280.7	369.3	402.4
87.5°	27.0	127.1	253.7	342.9	375.4
90°	1.1	104.0	229.5	317.0	349.0
92.5°	0.0	85.3	205.9	291.7	323.1
95°	0.0	69.9	183.3	267.5	297.8
97.5°	0.0	57.8	163.5	244.9	274.1
100°	0.0	47.3	145.9	223.5	251.5
102.5°	0.0	40.2	129.3	203.1	230.1
105°	0.0	34.7	113.9	184.4	210.3
107.5°	0.0	29.7	101.8	167.3	191.5
110°	0.0	25.3	90.8	150.8	174.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.6	22.0	80.9	136.5	158.0
115°	0.0	19.3	72.7	121.6	142.6
117.5°	0.0	16.0	64.9	109.5	128.2
120°	0.0	13.8	57.8	98.5	115.0
122.5°	0.6	11.6	51.2	88.6	103.5
125°	0.6	9.4	45.1	79.3	93.0
127.5°	0.6	7.2	39.6	70.5	83.1
130°	0.6	5.5	34.1	62.2	73.2
132.5°	0.6	3.9	29.2	54.5	64.9
135°	0.6	2.2	24.2	47.3	56.1
137.5°	0.6	1.1	19.8	40.2	48.4
140°	0.6	0.6	16.0	34.1	41.3
142.5°	0.6	0.0	12.1	28.6	34.1
145°	0.6	0.6	9.4	22.6	28.1
147.5°	0.6	0.6	6.6	17.6	22.6
150°	0.6	0.6	3.9	12.7	17.1
152.5°	0.6	0.6	1.7	8.8	12.7
155°	0.6	0.6	0.6	5.5	8.3
157.5°	0.6	0.6	0.0	2.2	4.4
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)