

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: P236309

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

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P236309
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1709-316-29)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 4SWLED-44HL-LN-UNV-L850-CD1-U
Description: METALUX SWLED LINEAR LUMINAIRE
4FT FIXTURE WITH 2 ROW LED, NARROW LENS
Light Source: (224) 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

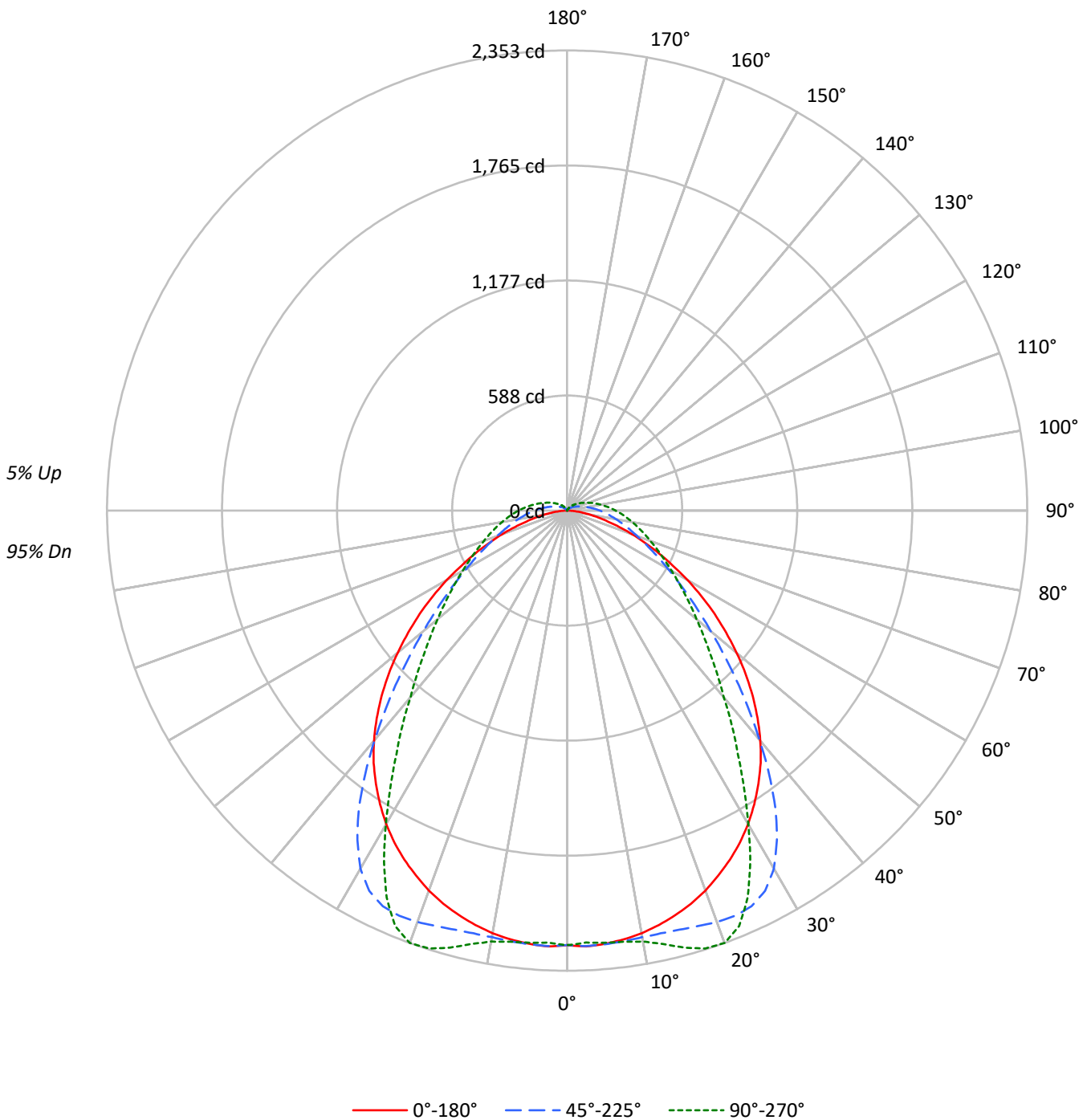
Lumens per Lamp: N/A
Luminaire Lumens: 5939.0 lumens
Efficiency: N/A
Efficacy: 149.6 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.21 / 1.28
Luminous Opening: Rectangular w/ Sides (W: 0.38' x L: 4' x H: 0.15')
CIE Type: Direct

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

TEST NUMBER: P236309

CATALOG NUMBER: 4SWLED-44HL-LN-UNV-L850-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P236309

CATALOG NUMBER: 4SWLED-44HL-LN-UNV-L850-CD1-U

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	114	114	114	114	108	108	108	103	103	103	97	97	97	95
1	108	103	99	95	104	100	96	93	95	92	89	90	88	85	86	84	82	79
2	98	90	84	78	95	88	82	77	84	79	74	80	76	72	76	73	70	67
3	90	80	72	66	87	78	71	65	75	68	63	71	66	62	68	64	60	58
4	83	72	63	57	80	70	62	56	67	60	55	64	58	54	61	56	52	50
5	77	64	56	50	74	63	55	49	60	53	48	58	52	47	56	50	46	44
6	71	58	50	44	69	57	49	43	55	48	43	53	47	42	51	45	41	39
7	66	53	45	39	64	52	44	39	50	43	38	48	42	37	47	41	37	35
8	62	49	41	35	60	48	40	35	46	39	34	44	38	34	43	37	33	31
9	58	45	37	32	56	44	37	31	43	36	31	41	35	31	40	34	30	28
10	54	41	34	29	53	41	33	29	39	33	28	38	32	28	37	32	28	26

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	15946	15946	15946
5°	15969	15621	15453
10°	15888	15326	15257
15°	15751	15254	15563
20°	15582	15408	15738
25°	15336	15497	14637
30°	15014	14927	12546
35°	14560	13437	10480
40°	13969	11449	8805
45°	13140	9536	7557
50°	12105	7879	6594
55°	10937	6591	5858
60°	9595	5604	5296
65°	8170	4895	4872
70°	6740	4378	4593
75°	5276	4056	4426
80°	3945	3881	4366
85°	2592	3844	4405



TEST NUMBER: P236309

CATALOG NUMBER: 4SWLED-44HL-LN-UNV-L850-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	211.5	3.6
10°-20°	628.4	10.6
20°-30°	979.0	16.5
30°-40°	1079.5	18.2
40°-50°	956.0	16.1
50°-60°	731.9	12.3
60°-70°	507.4	8.5
70°-80°	331.2	5.6
80°-90°	209.1	3.5
90°-100°	130.8	2.2
100°-110°	80.1	1.3
110°-120°	47.3	0.8
120°-130°	26.7	0.4
130°-140°	13.5	0.2
140°-150°	5.4	0.1
150°-160°	1.3	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1818.8	30.6
0°-40°	2898.4	48.8
0°-60°	4586.2	77.2
0°-90°	5633.9	94.9
90°-120°	258.1	4.3
90°-150°	303.7	5.1
90°-180°	305.0	5.1
0°-180°	5939.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2222	2222	2222	2222	2222	
5°	2224	2209	2226	2218	2218	211
15°	2141	2143	2219	2283	2313	604
25°	1970	2035	2232	2223	2184	907
35°	1704	1865	1857	1592	1522	1065
45°	1342	1490	1222	1052	1034	1033
55°	920	963	753	716	728	821
65°	519	527	474	506	526	517
75°	216	254	310	372	391	235
85°	45	111	207	272	291	51
90°	1	74	167	230	248	3
95°	0	48	132	190	209	0
105°	0	22	79	126	144	0
115°	0	12	47	81	95	0
125°	0	6	29	51	60	0
135°	1	2	17	31	37	0
145°	1	1	7	16	19	0
155°	1	1	1	4	7	1
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



TEST NUMBER: P236309

CATALOG NUMBER: 4SWLED-44HL-LN-UNV-L850-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2222.2	2222.2	2222.2	2222.2	2222.2
2.5°	2230.7	2213.7	2229.0	2220.5	2210.9
5°	2223.9	2208.6	2225.6	2217.7	2218.2
7.5°	2212.0	2198.5	2221.1	2218.2	2223.3
10°	2194.5	2182.7	2214.8	2228.4	2237.4
12.5°	2170.2	2162.9	2214.3	2247.0	2270.2
15°	2140.9	2142.6	2218.8	2282.6	2313.1
17.5°	2107.0	2117.7	2227.3	2314.2	2348.1
20°	2067.5	2092.9	2238.6	2327.8	2352.6
22.5°	2019.5	2064.7	2243.1	2302.4	2299.0
25°	1969.8	2034.7	2231.8	2223.3	2183.8
27.5°	1913.4	2001.4	2191.7	2094.0	2028.0
30°	1850.1	1963.6	2114.3	1932.0	1854.1
32.5°	1780.7	1918.4	1996.4	1759.2	1682.4
35°	1704.5	1864.8	1856.9	1591.5	1522.1
37.5°	1625.4	1790.3	1695.4	1434.6	1382.7
40°	1536.8	1706.2	1530.6	1291.8	1246.6
42.5°	1441.4	1607.9	1371.9	1164.2	1135.9
45°	1342.0	1489.9	1222.3	1051.8	1034.3
47.5°	1237.6	1358.9	1083.4	951.3	944.5
50°	1131.4	1227.4	958.7	863.2	864.4
52.5°	1023.6	1089.1	849.1	785.9	792.7
55°	919.7	962.6	753.1	715.9	728.3
57.5°	812.4	840.1	669.0	654.3	670.2
60°	710.8	726.0	593.9	599.6	617.6
62.5°	608.1	620.5	530.7	549.9	569.1
65°	518.8	526.8	474.2	506.4	526.2
67.5°	431.9	445.5	424.6	467.5	487.8
70°	353.4	372.1	381.1	433.0	452.8
72.5°	279.5	307.7	343.8	401.4	421.2
75°	216.2	253.5	310.5	371.5	391.3
77.5°	163.7	207.2	280.6	345.0	364.2
80°	115.2	168.8	254.1	319.6	338.7
82.5°	75.1	137.8	229.2	294.7	313.3
85°	44.6	111.2	207.2	271.6	291.3
87.5°	20.3	90.3	186.3	250.7	269.3
90°	0.6	74.0	167.1	229.8	247.9
92.5°	0.0	59.8	149.0	210.0	228.1
95°	0.0	48.0	131.5	190.3	208.9
97.5°	0.0	39.0	115.7	172.8	190.8
100°	0.0	32.2	102.2	156.4	174.5
102.5°	0.0	26.5	89.8	141.1	158.6
105°	0.0	22.0	79.0	125.9	144.0
107.5°	0.0	18.6	69.4	112.9	129.9
110°	0.0	15.8	61.0	101.1	116.9



TEST NUMBER: P236309

CATALOG NUMBER: 4SWLED-44HL-LN-UNV-L850-CD1-U

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	14.1	53.6	90.9	105.6
115°	0.0	11.9	47.4	81.3	94.8
117.5°	0.0	10.7	41.8	72.8	85.3
120°	0.0	9.0	37.3	64.9	76.2
122.5°	0.0	7.9	32.7	57.6	67.7
125°	0.0	6.2	29.4	51.4	60.4
127.5°	0.0	5.1	26.0	45.7	53.6
130°	0.6	4.0	23.1	40.1	47.4
132.5°	0.6	2.8	19.8	35.6	41.2
135°	0.6	2.3	16.9	31.1	36.7
137.5°	0.6	1.1	14.1	27.1	31.6
140°	0.6	0.6	11.3	23.1	27.1
142.5°	0.6	0.6	9.0	19.8	23.1
145°	0.6	0.6	7.3	15.8	19.2
147.5°	0.6	0.6	5.1	12.4	15.8
150°	1.1	0.6	3.4	9.6	12.4
152.5°	1.1	0.6	2.3	6.8	9.6
155°	1.1	0.6	1.1	4.5	6.8
157.5°	1.1	1.1	0.6	2.8	4.0
160°	1.1	1.1	0.6	1.1	2.3
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)