

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: P236312

Luminaire Tested: **4SWLED-48HL-LN-UNV-L850-CD1-U**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P236312
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-48HL-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

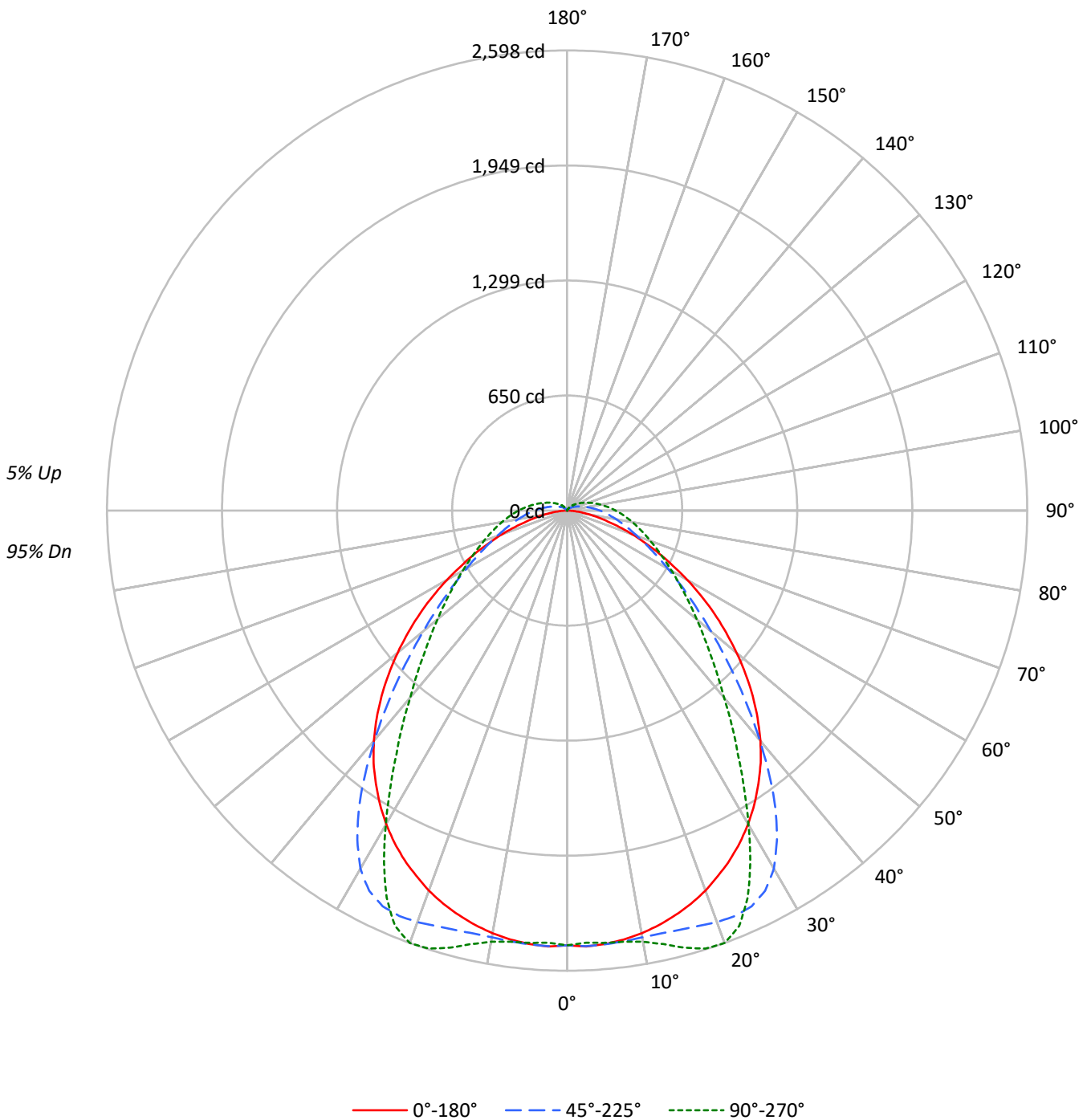
Lumens per Lamp: N/A
Luminaire Lumens: 6559.0 lumens
Efficiency: N/A
Efficacy: 147.1 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.21 / 1.28
Luminous Opening: Rectangular w/ Sides (W: 0.38' x L: 4' x H: 0.15')
CIE Type: Direct

Input Watts (W): 44.6
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	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°	17611	17611	17611
5°	17635	17251	17066
10°	17547	16926	16850
15°	17395	16847	17187
20°	17208	17017	17381
25°	16937	17115	16165
30°	16582	16486	13856
35°	16080	14840	11574
40°	15427	12644	9723
45°	14512	10532	8347
50°	13368	8701	7282
55°	12078	7280	6469
60°	10597	6189	5849
65°	9024	5407	5380
70°	7443	4835	5073
75°	5828	4479	4887
80°	4356	4286	4823
85°	2865	4245	4864



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	233.5	3.6
10°-20°	694.0	10.6
20°-30°	1081.2	16.5
30°-40°	1192.3	18.2
40°-50°	1055.8	16.1
50°-60°	808.3	12.3
60°-70°	560.3	8.5
70°-80°	365.8	5.6
80°-90°	230.9	3.5
90°-100°	144.4	2.2
100°-110°	88.4	1.3
110°-120°	52.2	0.8
120°-130°	29.4	0.4
130°-140°	14.9	0.2
140°-150°	6.0	0.1
150°-160°	1.5	0.0
160°-170°	0.1	0.0
170°-180°	0.0	0.0
0°-30°	2008.7	30.6
0°-40°	3201.0	48.8
0°-60°	5065.0	77.2
0°-90°	6222.1	94.9
90°-120°	285.1	4.3
90°-150°	335.4	5.1
90°-180°	337.0	5.1
0°-180°	6559.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2454	2454	2454	2454	2454	
5°	2456	2439	2458	2449	2450	233
15°	2364	2366	2450	2521	2555	667
25°	2176	2247	2465	2455	2412	1001
35°	1882	2060	2051	1758	1681	1176
45°	1482	1646	1350	1162	1142	1140
55°	1016	1063	832	791	804	907
65°	573	582	524	559	581	571
75°	239	280	343	410	432	260
85°	49	123	229	300	322	56
90°	1	82	185	254	274	3
95°	0	53	145	210	231	0
105°	0	24	87	139	159	0
115°	0	13	52	90	105	0
125°	0	7	32	57	67	0
135°	1	2	19	34	40	0
145°	1	1	8	18	21	0
155°	1	1	1	5	8	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°	2454.2	2454.2	2454.2	2454.2	2454.2
2.5°	2463.5	2444.8	2461.7	2452.3	2441.7
5°	2456.0	2439.2	2457.9	2449.2	2449.8
7.5°	2442.9	2428.0	2452.9	2449.8	2455.4
10°	2423.6	2410.5	2446.1	2461.0	2471.0
12.5°	2396.8	2388.7	2445.4	2481.6	2507.2
15°	2364.4	2366.3	2450.4	2520.9	2554.6
17.5°	2327.0	2338.8	2459.8	2555.8	2593.2
20°	2283.3	2311.4	2472.3	2570.8	2598.2
22.5°	2230.3	2280.2	2477.2	2542.7	2539.0
25°	2175.5	2247.2	2464.8	2455.4	2411.8
27.5°	2113.1	2210.4	2420.5	2312.6	2239.7
30°	2043.3	2168.6	2335.1	2133.7	2047.6
32.5°	1966.6	2118.7	2204.8	1942.9	1858.1
35°	1882.4	2059.5	2050.8	1757.7	1681.0
37.5°	1795.1	1977.2	1872.4	1584.4	1527.0
40°	1697.2	1884.3	1690.4	1426.6	1376.7
42.5°	1591.8	1775.8	1515.1	1285.7	1254.5
45°	1482.1	1645.5	1349.9	1161.6	1142.3
47.5°	1366.8	1500.8	1196.5	1050.6	1043.1
50°	1249.5	1355.5	1058.7	953.4	954.6
52.5°	1130.4	1202.8	937.8	867.9	875.4
55°	1015.7	1063.1	831.8	790.6	804.3
57.5°	897.2	927.8	738.9	722.7	740.1
60°	785.0	801.8	655.9	662.2	682.1
62.5°	671.5	685.2	586.1	607.3	628.5
65°	573.0	581.7	523.8	559.3	581.1
67.5°	477.0	492.0	468.9	516.3	538.7
70°	390.3	410.9	420.9	478.2	500.1
72.5°	308.6	339.8	379.7	443.3	465.1
75°	238.8	280.0	342.9	410.3	432.1
77.5°	180.8	228.8	309.9	381.0	402.2
80°	127.2	186.4	280.6	352.9	374.1
82.5°	82.9	152.1	253.1	325.5	346.1
85°	49.3	122.8	228.8	299.9	321.7
87.5°	22.4	99.8	205.8	276.8	297.4
90°	0.6	81.7	184.6	253.8	273.7
92.5°	0.0	66.1	164.6	231.9	251.9
95°	0.0	53.0	145.3	210.1	230.7
97.5°	0.0	43.0	127.8	190.8	210.7
100°	0.0	35.5	112.9	172.7	192.7
102.5°	0.0	29.3	99.1	155.9	175.2
105°	0.0	24.3	87.3	139.0	159.0
107.5°	0.0	20.6	76.7	124.7	143.4
110°	0.0	17.5	67.3	111.6	129.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	15.6	59.2	100.4	116.6
115°	0.0	13.1	52.4	89.8	104.8
117.5°	0.0	11.8	46.1	80.4	94.2
120°	0.0	10.0	41.2	71.7	84.2
122.5°	0.0	8.7	36.2	63.6	74.8
125°	0.0	6.9	32.4	56.7	66.7
127.5°	0.0	5.6	28.7	50.5	59.2
130°	0.6	4.4	25.6	44.3	52.4
132.5°	0.6	3.1	21.8	39.3	45.5
135°	0.6	2.5	18.7	34.3	40.5
137.5°	0.6	1.2	15.6	29.9	34.9
140°	0.6	0.6	12.5	25.6	29.9
142.5°	0.6	0.6	10.0	21.8	25.6
145°	0.6	0.6	8.1	17.5	21.2
147.5°	0.6	0.6	5.6	13.7	17.5
150°	1.2	0.6	3.7	10.6	13.7
152.5°	1.2	0.6	2.5	7.5	10.6
155°	1.2	0.6	1.2	5.0	7.5
157.5°	1.2	1.2	0.6	3.1	4.4
160°	1.2	1.2	0.6	1.2	2.5
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)