

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: P236307

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

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P236307
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-L835-CD1-U
Description: METALUX SWLED LINEAR LUMINAIRE
4FT FIXTURE WITH 2 ROW LED, NARROW LENS
Light Source: (224) 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

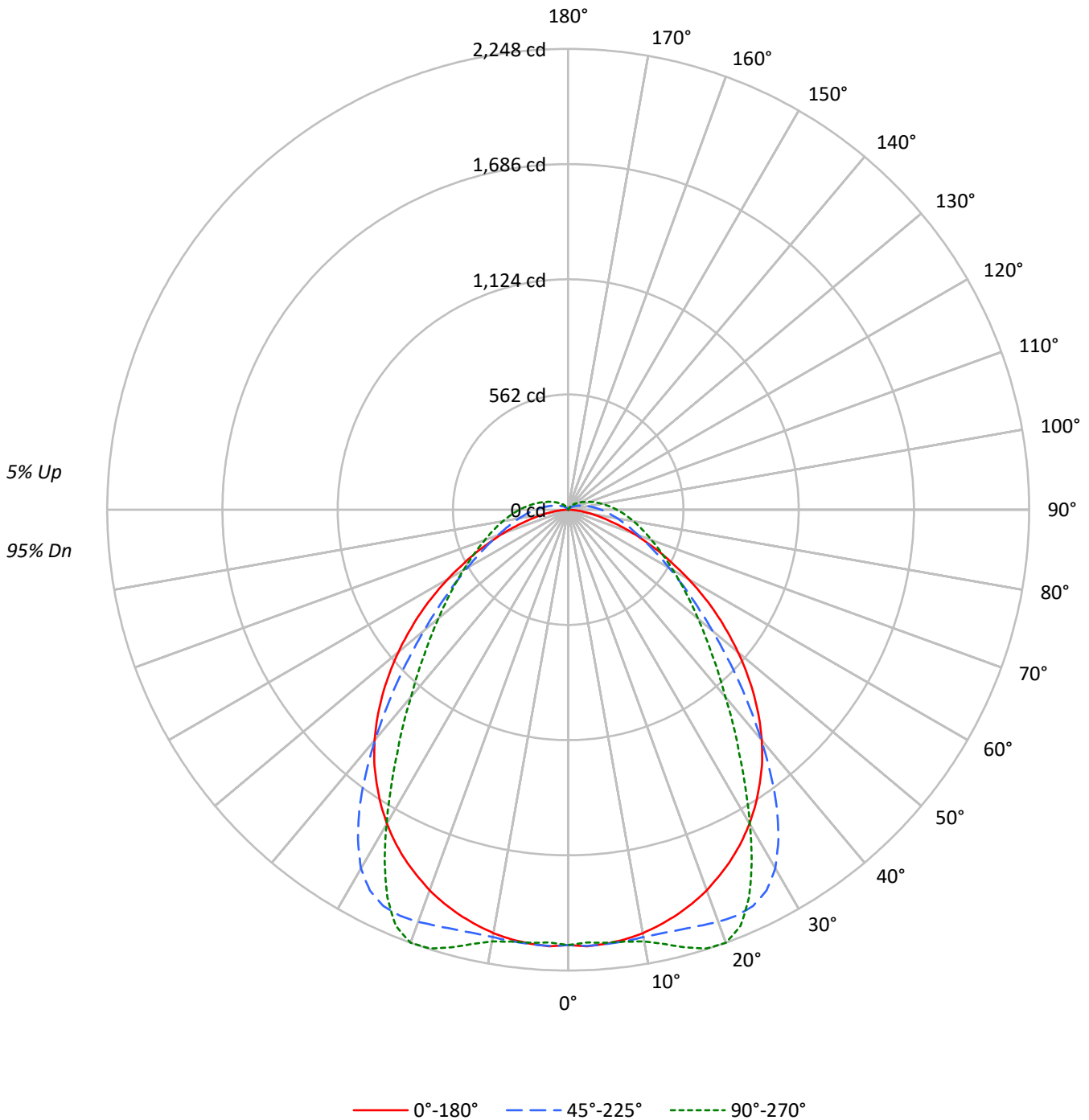
Lumens per Lamp: N/A
Luminaire Lumens: 5676.0 lumens
Efficiency: N/A
Efficacy: 143.0 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.21 / 1.28
Luminous Opening: Rectangular w/ Sides (W: 0.38' x L: 4' x H: 0.15')
CIE Type: Direct

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

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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	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°	15240	15240	15240
5°	15261	14929	14769
10°	15185	14648	14581
15°	15054	14578	14874
20°	14891	14725	15041
25°	14657	14811	13988
30°	14349	14266	11991
35°	13915	12842	10016
40°	13350	10941	8415
45°	12558	9114	7223
50°	11569	7529	6302
55°	10453	6299	5599
60°	9170	5356	5062
65°	7810	4678	4656
70°	6442	4184	4389
75°	5045	3877	4229
80°	3770	3708	4173
85°	2476	3674	4210



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	202.1	3.6
10°-20°	600.5	10.6
20°-30°	935.6	16.5
30°-40°	1031.7	18.2
40°-50°	913.6	16.1
50°-60°	699.5	12.3
60°-70°	484.9	8.5
70°-80°	316.6	5.6
80°-90°	199.8	3.5
90°-100°	125.0	2.2
100°-110°	76.5	1.3
110°-120°	45.2	0.8
120°-130°	25.5	0.4
130°-140°	12.9	0.2
140°-150°	5.2	0.1
150°-160°	1.3	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1738.3	30.6
0°-40°	2770.0	48.8
0°-60°	4383.1	77.2
0°-90°	5384.4	94.9
90°-120°	246.7	4.3
90°-150°	290.2	5.1
90°-180°	292.0	5.1
0°-180°	5676.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2124	2124	2124	2124	2124	
5°	2125	2111	2127	2120	2120	202
15°	2046	2048	2120	2182	2211	577
25°	1883	1945	2133	2125	2087	867
35°	1629	1782	1775	1521	1455	1018
45°	1283	1424	1168	1005	988	987
55°	879	920	720	684	696	785
65°	496	503	453	484	503	494
75°	207	242	297	355	374	225
85°	43	106	198	260	278	49
90°	0	71	160	220	237	3
95°	0	46	126	182	200	0
105°	0	21	76	120	138	0
115°	0	11	45	78	91	0
125°	0	6	28	49	58	0
135°	0	2	16	30	35	0
145°	0	0	7	15	18	0
155°	1	0	1	4	6	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°	2123.8	2123.8	2123.8	2123.8	2123.8
2.5°	2131.9	2115.7	2130.3	2122.2	2113.0
5°	2125.4	2110.8	2127.0	2119.5	2120.0
7.5°	2114.1	2101.1	2122.7	2120.0	2124.9
10°	2097.3	2086.0	2116.8	2129.7	2138.3
12.5°	2074.1	2067.1	2116.2	2147.5	2169.6
15°	2046.1	2047.7	2120.5	2181.5	2210.7
17.5°	2013.7	2024.0	2128.6	2211.7	2244.1
20°	1975.9	2000.2	2139.4	2224.7	2248.4
22.5°	1930.1	1973.2	2143.7	2200.4	2197.2
25°	1882.6	1944.6	2133.0	2124.9	2087.1
27.5°	1828.6	1912.8	2094.6	2001.3	1938.2
30°	1768.2	1876.7	2020.7	1846.4	1772.0
32.5°	1701.8	1833.5	1907.9	1681.3	1607.9
35°	1629.0	1782.2	1774.7	1521.1	1454.7
37.5°	1553.4	1711.0	1620.4	1371.1	1321.4
40°	1468.7	1630.6	1462.8	1234.6	1191.4
42.5°	1377.5	1536.7	1311.2	1112.6	1085.6
45°	1282.6	1423.9	1168.2	1005.2	988.5
47.5°	1182.8	1298.8	1035.4	909.2	902.7
50°	1081.3	1173.0	916.2	825.0	826.1
52.5°	978.3	1040.8	811.5	751.1	757.6
55°	879.0	920.0	719.8	684.2	696.1
57.5°	776.5	802.9	639.4	625.4	640.5
60°	679.3	693.9	567.6	573.0	590.3
62.5°	581.1	593.0	507.2	525.5	543.9
65°	495.9	503.4	453.2	484.0	502.9
67.5°	412.8	425.7	405.8	446.8	466.2
70°	337.8	355.6	364.2	413.9	432.7
72.5°	267.1	294.1	328.6	383.6	402.5
75°	206.7	242.3	296.8	355.0	373.9
77.5°	156.5	198.0	268.2	329.7	348.0
80°	110.1	161.3	242.8	305.4	323.7
82.5°	71.8	131.7	219.1	281.7	299.5
85°	42.6	106.3	198.0	259.5	278.4
87.5°	19.4	86.3	178.1	239.6	257.4
90°	0.5	70.7	159.7	219.6	236.9
92.5°	0.0	57.2	142.4	200.7	218.0
95°	0.0	45.9	125.7	181.8	199.6
97.5°	0.0	37.2	110.6	165.1	182.4
100°	0.0	30.8	97.7	149.5	166.7
102.5°	0.0	25.4	85.8	134.9	151.6
105°	0.0	21.0	75.5	120.3	137.6
107.5°	0.0	17.8	66.4	107.9	124.1
110°	0.0	15.1	58.3	96.6	111.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	13.5	51.3	86.9	100.9
115°	0.0	11.3	45.3	77.7	90.6
117.5°	0.0	10.3	39.9	69.6	81.5
120°	0.0	8.6	35.6	62.1	72.8
122.5°	0.0	7.6	31.3	55.0	64.7
125°	0.0	5.9	28.1	49.1	57.7
127.5°	0.0	4.9	24.8	43.7	51.3
130°	0.5	3.8	22.1	38.3	45.3
132.5°	0.5	2.7	18.9	34.0	39.4
135°	0.5	2.2	16.2	29.7	35.1
137.5°	0.5	1.1	13.5	25.9	30.2
140°	0.5	0.5	10.8	22.1	25.9
142.5°	0.5	0.5	8.6	18.9	22.1
145°	0.5	0.5	7.0	15.1	18.3
147.5°	0.5	0.5	4.9	11.9	15.1
150°	1.1	0.5	3.2	9.2	11.9
152.5°	1.1	0.5	2.2	6.5	9.2
155°	1.1	0.5	1.1	4.3	6.5
157.5°	1.1	1.1	0.5	2.7	3.8
160°	1.1	1.1	0.5	1.1	2.2
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)