

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: P236365

Luminaire Tested: **4SWLED-80HL-LW-UNV-L840-CD1-U**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P236365
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-80HL-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

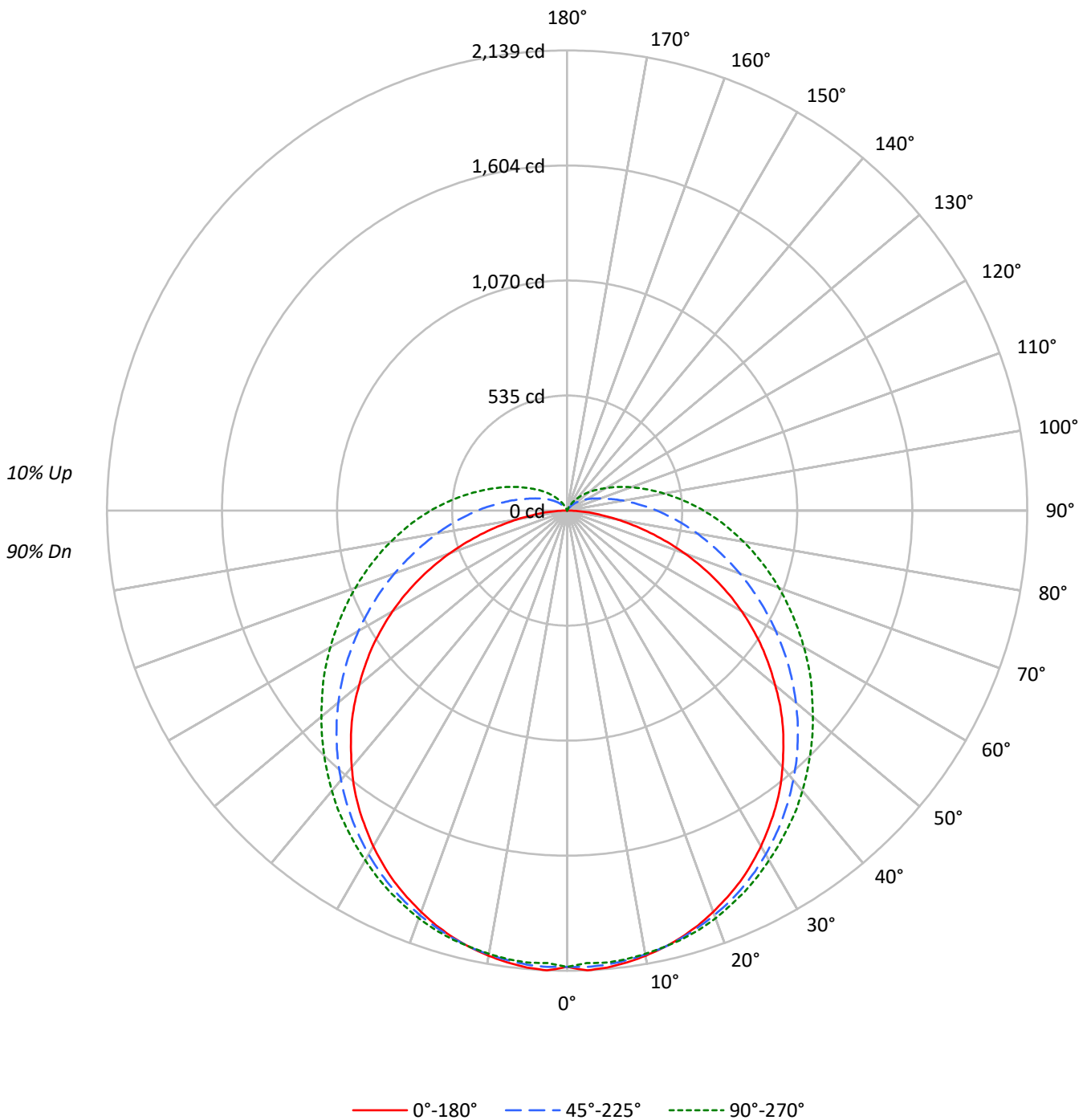
Lumens per Lamp: N/A
Luminaire Lumens: 8060.0 lumens
Efficiency: N/A
Efficacy: 97.8 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.32 / 1.42
Luminous Opening: Rectangular w/ Sides (W: 0.38' x L: 4' x H: 0.15')
CIE Type: Direct

Input Watts (W): 82.4
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°	15222	15222	15222
5°	15310	14874	14693
10°	15213	14498	14267
15°	15106	14143	13881
20°	14961	13774	13494
25°	14817	13417	13098
30°	14625	13034	12703
35°	14420	12635	12347
40°	14153	12230	12015
45°	13885	11828	11684
50°	13503	11408	11375
55°	13142	10993	11133
60°	12664	10569	10900
65°	12002	10168	10713
70°	11061	9800	10621
75°	9762	9511	10610
80°	8047	9379	10727
85°	5928	9462	11055



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	201.1	2.5
10°-20°	579.6	7.2
20°-30°	887.2	11.0
30°-40°	1087.5	13.5
40°-50°	1163.9	14.4
50°-60°	1116.5	13.9
60°-70°	962.9	11.9
70°-80°	741.8	9.2
80°-90°	514.3	6.4
90°-100°	334.8	4.2
100°-110°	212.8	2.6
110°-120°	129.9	1.6
120°-130°	74.3	0.9
130°-140°	36.7	0.5
140°-150°	13.8	0.2
150°-160°	2.7	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1668.0	20.7
0°-40°	2755.5	34.2
0°-60°	5035.9	62.5
0°-90°	7255.0	90.0
90°-120°	677.5	8.4
90°-150°	802.3	10.0
90°-180°	805.0	10.0
0°-180°	8060.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2121	2121	2121	2121	2121	
5°	2132	2112	2119	2109	2109	202
15°	2053	2039	2057	2059	2063	579
25°	1903	1895	1932	1941	1954	877
35°	1688	1690	1746	1772	1793	1055
45°	1418	1439	1516	1568	1599	1093
55°	1105	1152	1256	1341	1384	987
65°	762	836	985	1104	1157	753
75°	400	525	728	879	938	425
85°	102	278	510	671	731	110
90°	2	189	417	576	634	7
95°	0	127	333	486	541	0
105°	0	63	207	335	382	0
115°	0	35	132	221	259	0
125°	1	17	82	144	169	1
135°	1	4	44	86	102	1
145°	1	1	17	41	51	1
155°	1	1	1	10	15	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°	2121.2	2121.2	2121.2	2121.2	2121.2
2.5°	2139.2	2118.2	2123.2	2115.2	2105.2
5°	2132.2	2112.2	2119.2	2109.2	2109.2
7.5°	2119.2	2101.2	2108.2	2102.2	2103.2
10°	2101.2	2083.2	2095.2	2090.2	2092.2
12.5°	2080.2	2062.2	2079.2	2075.2	2078.2
15°	2053.2	2039.2	2057.2	2059.2	2063.2
17.5°	2022.2	2010.2	2030.2	2036.2	2042.2
20°	1985.2	1976.2	2001.2	2007.2	2017.2
22.5°	1945.2	1937.2	1969.2	1974.2	1985.2
25°	1903.2	1895.2	1932.2	1941.2	1954.2
27.5°	1854.2	1851.2	1891.2	1904.2	1917.2
30°	1802.2	1800.2	1846.2	1861.2	1877.2
32.5°	1745.1	1747.1	1797.2	1817.2	1836.2
35°	1688.1	1690.1	1746.1	1772.1	1793.2
37.5°	1626.1	1632.1	1692.1	1723.1	1750.1
40°	1557.1	1571.1	1635.1	1673.1	1701.1
42.5°	1488.1	1507.1	1577.1	1621.1	1650.1
45°	1418.1	1439.1	1516.1	1568.1	1599.1
47.5°	1343.1	1370.1	1453.1	1512.1	1546.1
50°	1262.1	1299.1	1388.1	1457.1	1491.1
52.5°	1184.1	1226.1	1322.1	1400.1	1436.1
55°	1105.1	1152.1	1256.1	1341.1	1384.1
57.5°	1022.1	1073.1	1188.1	1281.1	1328.1
60°	938.1	996.1	1120.1	1223.1	1271.1
62.5°	851.1	917.1	1052.1	1163.1	1214.1
65°	762.1	836.1	985.1	1104.1	1157.1
67.5°	672.1	756.1	919.1	1048.1	1102.1
70°	580.0	677.1	853.1	991.1	1047.1
72.5°	490.0	600.1	789.1	933.1	992.1
75°	400.0	525.0	728.1	879.1	938.1
77.5°	314.0	454.0	668.1	826.1	885.1
80°	235.0	389.0	614.1	773.1	832.1
82.5°	162.0	331.0	561.0	722.1	780.1
85°	102.0	278.0	510.0	671.1	731.1
87.5°	49.0	231.0	461.0	623.1	682.1
90°	2.0	189.0	417.0	576.0	634.1
92.5°	0.0	155.0	374.0	530.0	587.0
95°	0.0	127.0	333.0	486.0	541.0
97.5°	0.0	105.0	297.0	445.0	498.0
100°	0.0	86.0	265.0	406.0	457.0
102.5°	0.0	73.0	235.0	369.0	418.0
105°	0.0	63.0	207.0	335.0	382.0
107.5°	0.0	54.0	185.0	304.0	348.0
110°	0.0	46.0	165.0	274.0	317.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	1.0	40.0	147.0	248.0	287.0
115°	0.0	35.0	132.0	221.0	259.0
117.5°	0.0	29.0	118.0	199.0	233.0
120°	0.0	25.0	105.0	179.0	209.0
122.5°	1.0	21.0	93.0	161.0	188.0
125°	1.0	17.0	82.0	144.0	169.0
127.5°	1.0	13.0	72.0	128.0	151.0
130°	1.0	10.0	62.0	113.0	133.0
132.5°	1.0	7.0	53.0	99.0	118.0
135°	1.0	4.0	44.0	86.0	102.0
137.5°	1.0	2.0	36.0	73.0	88.0
140°	1.0	1.0	29.0	62.0	75.0
142.5°	1.0	0.0	22.0	52.0	62.0
145°	1.0	1.0	17.0	41.0	51.0
147.5°	1.0	1.0	12.0	32.0	41.0
150°	1.0	1.0	7.0	23.0	31.0
152.5°	1.0	1.0	3.0	16.0	23.0
155°	1.0	1.0	1.0	10.0	15.0
157.5°	1.0	1.0	0.0	4.0	8.0
160°	2.0	1.0	0.0	0.0	2.0
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)