

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: P236366

Luminaire Tested: **4SWLED-80HL-LW-UNV-L850-CD1-U**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P236366
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-L850-CD1-U
Description: METALUX SWLED LINEAR LUMINAIRE
4FT FIXTURE WITH 2 ROW LED, WIDE LENS
Light Source: (224) 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

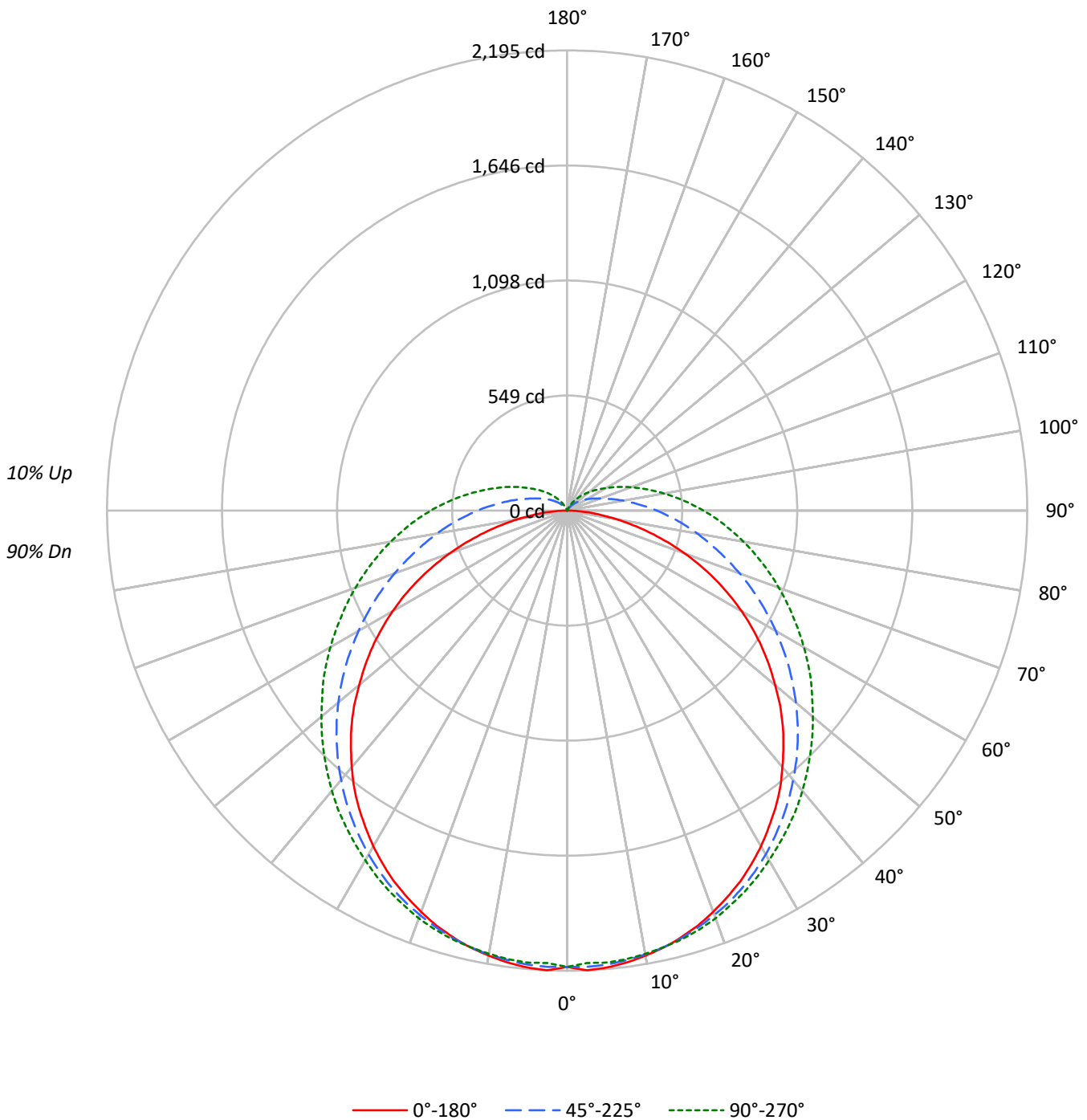
Lumens per Lamp: N/A
Luminaire Lumens: 8270.0 lumens
Efficiency: N/A
Efficacy: 100.4 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.32 / 1.42
Luminous Opening: Rectangular w/ Sides (W: 0.38' x L: 4' x H: 0.15')
CIE Type: Direct

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°	15618	15618	15618
5°	15709	15261	15076
10°	15609	14876	14638
15°	15499	14512	14243
20°	15351	14133	13845
25°	15203	13766	13439
30°	15006	13374	13033
35°	14796	12964	12668
40°	14522	12549	12328
45°	14247	12136	11989
50°	13855	11705	11671
55°	13484	11279	11423
60°	12993	10845	11184
65°	12314	10433	10992
70°	11351	10055	10898
75°	10018	9758	10886
80°	8256	9624	11006
85°	6085	9709	11342



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	206.4	2.5
10°-20°	594.7	7.2
20°-30°	910.3	11.0
30°-40°	1115.9	13.5
40°-50°	1194.3	14.4
50°-60°	1145.5	13.9
60°-70°	988.0	11.9
70°-80°	761.2	9.2
80°-90°	527.7	6.4
90°-100°	343.6	4.2
100°-110°	218.3	2.6
110°-120°	133.3	1.6
120°-130°	76.2	0.9
130°-140°	37.6	0.5
140°-150°	14.2	0.2
150°-160°	2.7	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1711.4	20.7
0°-40°	2827.3	34.2
0°-60°	5167.1	62.5
0°-90°	7444.0	90.0
90°-120°	695.2	8.4
90°-150°	823.2	10.0
90°-180°	826.0	10.0
0°-180°	8270.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2176	2176	2176	2176	2176	
5°	2188	2167	2174	2164	2164	208
15°	2107	2092	2111	2113	2117	594
25°	1953	1944	1982	1992	2005	899
35°	1732	1734	1792	1818	1840	1083
45°	1455	1477	1556	1609	1641	1121
55°	1134	1182	1289	1376	1420	1012
65°	782	858	1011	1133	1187	773
75°	410	539	747	902	962	436
85°	105	285	523	688	750	113
90°	2	194	428	591	651	7
95°	0	130	342	499	555	0
105°	0	65	212	344	392	0
115°	0	36	136	227	266	0
125°	1	17	84	148	173	1
135°	1	4	45	88	105	1
145°	1	1	17	42	52	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°	2176.4	2176.4	2176.4	2176.4	2176.4
2.5°	2194.9	2173.4	2178.5	2170.3	2160.0
5°	2187.7	2167.2	2174.4	2164.1	2164.1
7.5°	2174.4	2155.9	2163.1	2156.9	2158.0
10°	2155.9	2137.5	2149.8	2144.6	2146.7
12.5°	2134.4	2115.9	2133.3	2129.2	2132.3
15°	2106.7	2092.3	2110.8	2112.8	2116.9
17.5°	2074.9	2062.5	2083.1	2089.2	2095.4
20°	2036.9	2027.7	2053.3	2059.5	2069.7
22.5°	1995.8	1987.6	2020.5	2025.6	2036.9
25°	1952.7	1944.5	1982.5	1991.7	2005.1
27.5°	1902.5	1899.4	1940.4	1953.8	1967.1
30°	1849.1	1847.1	1894.3	1909.6	1926.1
32.5°	1790.6	1792.7	1844.0	1864.5	1884.0
35°	1732.1	1734.2	1791.6	1818.3	1839.9
37.5°	1668.5	1674.7	1736.2	1768.0	1795.7
40°	1597.7	1612.1	1677.7	1716.7	1745.5
42.5°	1526.9	1546.4	1618.2	1663.4	1693.1
45°	1455.1	1476.6	1555.6	1609.0	1640.8
47.5°	1378.1	1405.8	1491.0	1551.5	1586.4
50°	1295.0	1333.0	1424.3	1495.1	1530.0
52.5°	1215.0	1258.0	1356.6	1436.6	1473.5
55°	1133.9	1182.1	1288.8	1376.1	1420.2
57.5°	1048.7	1101.0	1219.1	1314.5	1362.7
60°	962.5	1022.0	1149.3	1255.0	1304.2
62.5°	873.2	941.0	1079.5	1193.4	1245.7
65°	781.9	857.9	1010.7	1132.9	1187.2
67.5°	689.6	775.8	943.0	1075.4	1130.8
70°	595.2	694.7	875.3	1016.9	1074.4
72.5°	502.8	615.7	809.6	957.4	1017.9
75°	410.5	538.7	747.0	902.0	962.5
77.5°	322.2	465.9	685.5	847.6	908.1
80°	241.1	399.2	630.1	793.2	853.7
82.5°	166.2	339.7	575.7	740.9	800.4
85°	104.7	285.3	523.3	688.5	750.1
87.5°	50.3	237.0	473.1	639.3	699.8
90°	2.1	193.9	427.9	591.1	650.6
92.5°	0.0	159.1	383.8	543.9	602.3
95°	0.0	130.3	341.7	498.7	555.1
97.5°	0.0	107.7	304.8	456.6	511.0
100°	0.0	88.2	271.9	416.6	468.9
102.5°	0.0	74.9	241.1	378.6	428.9
105°	0.0	64.6	212.4	343.8	392.0
107.5°	0.0	55.4	189.8	311.9	357.1
110°	0.0	47.2	169.3	281.2	325.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	1.0	41.0	150.8	254.5	294.5
115°	0.0	35.9	135.5	226.8	265.8
117.5°	0.0	29.8	121.1	204.2	239.1
120°	0.0	25.7	107.7	183.7	214.5
122.5°	1.0	21.5	95.4	165.2	192.9
125°	1.0	17.4	84.1	147.8	173.4
127.5°	1.0	13.3	73.9	131.3	154.9
130°	1.0	10.3	63.6	116.0	136.5
132.5°	1.0	7.2	54.4	101.6	121.1
135°	1.0	4.1	45.2	88.2	104.7
137.5°	1.0	2.1	36.9	74.9	90.3
140°	1.0	1.0	29.8	63.6	77.0
142.5°	1.0	0.0	22.6	53.4	63.6
145°	1.0	1.0	17.4	42.1	52.3
147.5°	1.0	1.0	12.3	32.8	42.1
150°	1.0	1.0	7.2	23.6	31.8
152.5°	1.0	1.0	3.1	16.4	23.6
155°	1.0	1.0	1.0	10.3	15.4
157.5°	1.0	1.0	0.0	4.1	8.2
160°	2.1	1.0	0.0	0.0	2.1
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)