

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: P236359

Luminaire Tested: **4SWLED-72HL-LW-UNV-L840-CD1-U**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P236359
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-72HL-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

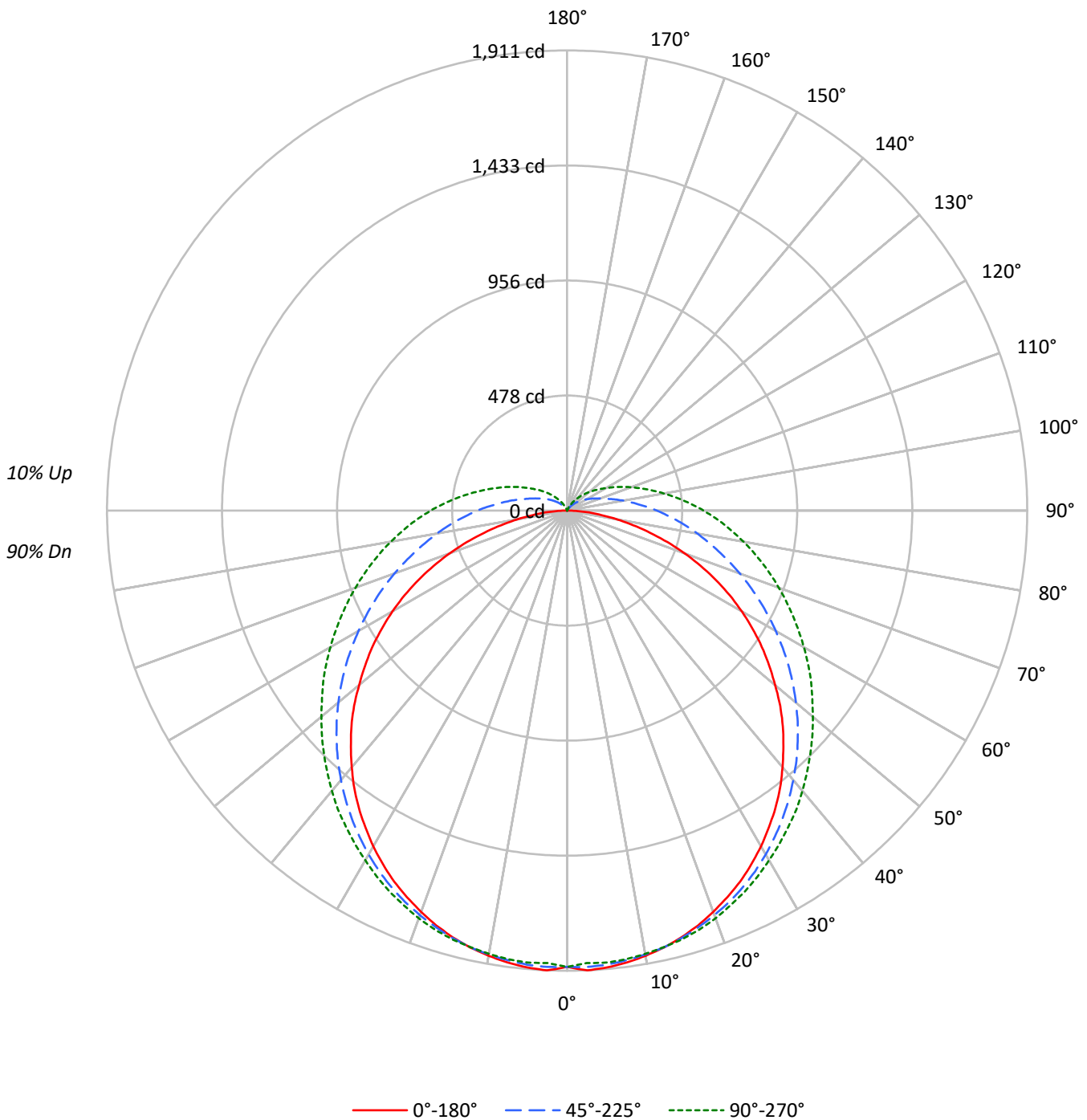
Lumens per Lamp: N/A
Luminaire Lumens: 7201.0 lumens
Efficiency: N/A
Efficacy: 100.7 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.32 / 1.42
Luminous Opening: Rectangular w/ Sides (W: 0.38' x L: 4' x H: 0.15')
CIE Type: Direct

Input Watts (W): 71.5
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	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°	13599	13599	13599
5°	13678	13288	13127
10°	13591	12953	12746
15°	13496	12636	12402
20°	13367	12306	12056
25°	13238	11987	11702
30°	13066	11645	11349
35°	12883	11289	11030
40°	12645	10927	10734
45°	12406	10568	10439
50°	12064	10192	10162
55°	11741	9821	9947
60°	11314	9443	9738
65°	10722	9084	9571
70°	9882	8756	9489
75°	8722	8497	9479
80°	7191	8379	9584
85°	5294	8455	9876



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	179.7	2.5
10°-20°	517.9	7.2
20°-30°	792.6	11.0
30°-40°	971.6	13.5
40°-50°	1039.9	14.4
50°-60°	997.5	13.9
60°-70°	860.3	11.9
70°-80°	662.8	9.2
80°-90°	459.5	6.4
90°-100°	299.2	4.2
100°-110°	190.1	2.6
110°-120°	116.0	1.6
120°-130°	66.4	0.9
130°-140°	32.8	0.5
140°-150°	12.3	0.2
150°-160°	2.4	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1490.2	20.7
0°-40°	2461.8	34.2
0°-60°	4499.2	62.5
0°-90°	6481.8	90.0
90°-120°	605.3	8.4
90°-150°	716.8	10.0
90°-180°	719.0	10.0
0°-180°	7201.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1895	1895	1895	1895	1895	
5°	1905	1887	1893	1884	1884	181
15°	1834	1822	1838	1840	1843	518
25°	1700	1693	1726	1734	1746	783
35°	1508	1510	1560	1583	1602	943
45°	1267	1286	1354	1401	1429	976
55°	987	1029	1122	1198	1237	882
65°	681	747	880	986	1034	673
75°	357	469	650	785	838	380
85°	91	248	456	600	653	99
90°	2	169	373	515	566	6
95°	0	114	298	434	483	0
105°	0	56	185	299	341	0
115°	0	31	118	198	231	0
125°	1	15	73	129	151	1
135°	1	4	39	77	91	1
145°	1	1	15	37	46	1
155°	1	1	1	9	13	0
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°	1895.1	1895.1	1895.1	1895.1	1895.1
2.5°	1911.2	1892.4	1896.9	1889.8	1880.8
5°	1904.9	1887.1	1893.3	1884.4	1884.4
7.5°	1893.3	1877.2	1883.5	1878.1	1879.0
10°	1877.2	1861.2	1871.9	1867.4	1869.2
12.5°	1858.5	1842.4	1857.6	1854.0	1856.7
15°	1834.4	1821.8	1837.9	1839.7	1843.3
17.5°	1806.7	1795.9	1813.8	1819.2	1824.5
20°	1773.6	1765.6	1787.9	1793.3	1802.2
22.5°	1737.9	1730.7	1759.3	1763.8	1773.6
25°	1700.3	1693.2	1726.2	1734.3	1745.9
27.5°	1656.5	1653.9	1689.6	1701.2	1712.8
30°	1610.1	1608.3	1649.4	1662.8	1677.1
32.5°	1559.2	1560.9	1605.6	1623.5	1640.5
35°	1508.2	1510.0	1560.1	1583.3	1602.0
37.5°	1452.8	1458.2	1511.8	1539.5	1563.6
40°	1391.2	1403.7	1460.9	1494.8	1519.8
42.5°	1329.5	1346.5	1409.0	1448.4	1474.3
45°	1267.0	1285.7	1354.5	1401.0	1428.7
47.5°	1200.0	1224.1	1298.3	1351.0	1381.4
50°	1127.6	1160.7	1240.2	1301.8	1332.2
52.5°	1057.9	1095.4	1181.2	1250.9	1283.1
55°	987.3	1029.3	1122.2	1198.2	1236.6
57.5°	913.2	958.7	1061.5	1144.6	1186.6
60°	838.1	889.9	1000.7	1092.8	1135.6
62.5°	760.4	819.3	940.0	1039.1	1084.7
65°	680.8	747.0	880.1	986.4	1033.8
67.5°	600.4	675.5	821.1	936.4	984.6
70°	518.2	604.9	762.2	885.5	935.5
72.5°	437.8	536.1	705.0	833.6	886.4
75°	357.4	469.1	650.5	785.4	838.1
77.5°	280.6	405.6	596.9	738.0	790.7
80°	210.0	347.6	548.6	690.7	743.4
82.5°	144.7	295.7	501.3	645.1	696.9
85°	91.1	248.4	455.7	599.5	653.1
87.5°	43.8	206.4	411.9	556.7	609.4
90°	1.8	168.9	372.6	514.7	566.5
92.5°	0.0	138.5	334.2	473.6	524.5
95°	0.0	113.5	297.5	434.2	483.4
97.5°	0.0	93.8	265.4	397.6	445.0
100°	0.0	76.8	236.8	362.8	408.3
102.5°	0.0	65.2	210.0	329.7	373.5
105°	0.0	56.3	185.0	299.3	341.3
107.5°	0.0	48.2	165.3	271.6	310.9
110°	0.0	41.1	147.4	244.8	283.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.9	35.7	131.3	221.6	256.4
115°	0.0	31.3	117.9	197.5	231.4
117.5°	0.0	25.9	105.4	177.8	208.2
120°	0.0	22.3	93.8	159.9	186.7
122.5°	0.9	18.8	83.1	143.9	168.0
125°	0.9	15.2	73.3	128.7	151.0
127.5°	0.9	11.6	64.3	114.4	134.9
130°	0.9	8.9	55.4	101.0	118.8
132.5°	0.9	6.3	47.4	88.5	105.4
135°	0.9	3.6	39.3	76.8	91.1
137.5°	0.9	1.8	32.2	65.2	78.6
140°	0.9	0.9	25.9	55.4	67.0
142.5°	0.9	0.0	19.7	46.5	55.4
145°	0.9	0.9	15.2	36.6	45.6
147.5°	0.9	0.9	10.7	28.6	36.6
150°	0.9	0.9	6.3	20.6	27.7
152.5°	0.9	0.9	2.7	14.3	20.6
155°	0.9	0.9	0.9	8.9	13.4
157.5°	0.9	0.9	0.0	3.6	7.1
160°	1.8	0.9	0.0	0.0	1.8
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)