

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: P188665

Luminaire Tested: **24SR-LD2-53-C-UNV-L850-CD1-ST-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P188665  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24808)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24SR-LD2-53-C-UNV-L850-CD1-ST-U  
Description: METALUX 2X4 SKYRIDGE LED FIXTURE WITH STRAW SKYTRIM.  
  
Light Source: EATON LED 5000K  
Ballast/Driver: OSRAM ELECTRONIC DRIVER

**Summary**

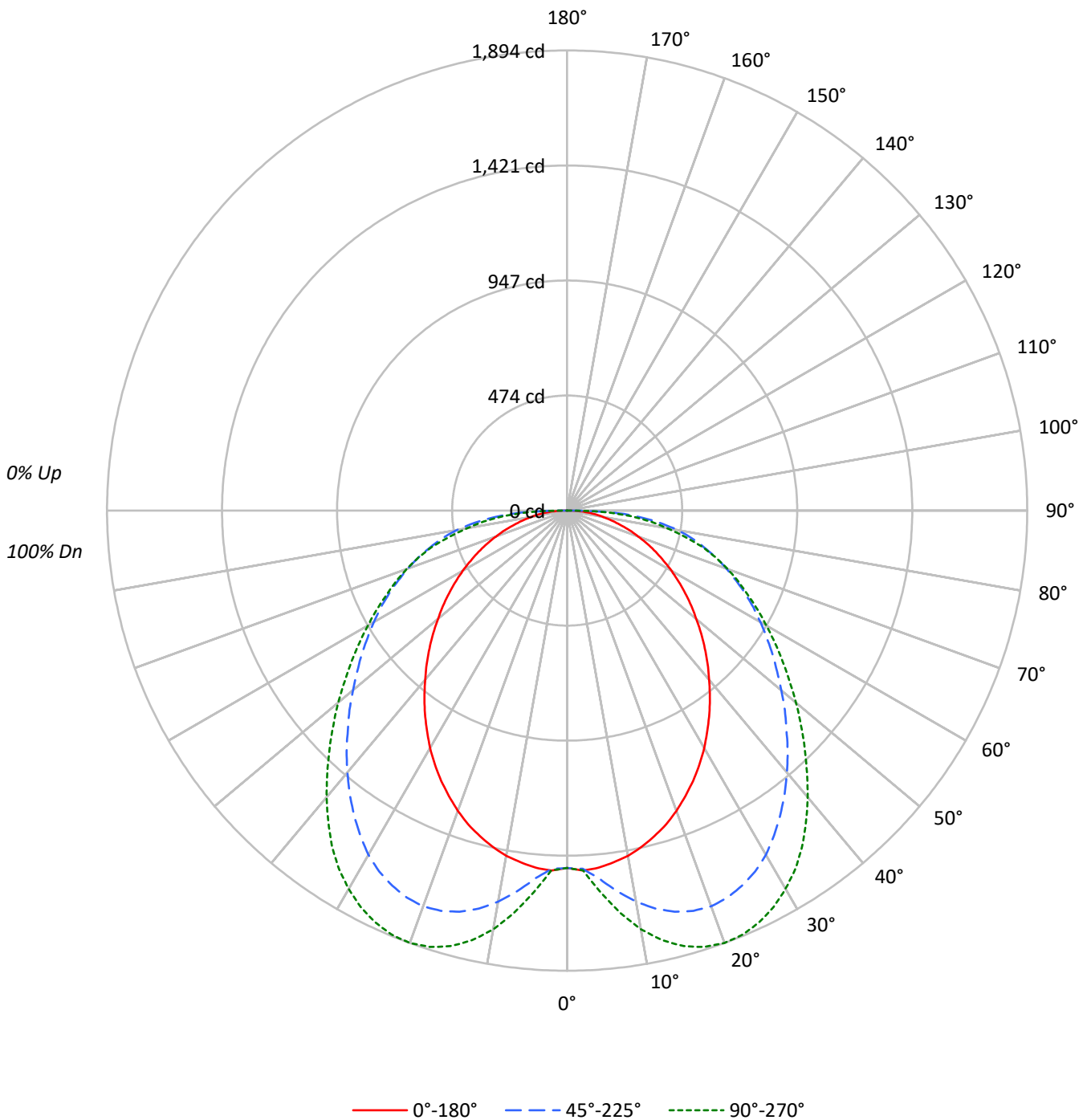
Lumens per Lamp: N/A  
Luminaire Lumens: 5585.0 lumens  
Efficiency: N/A  
Efficacy: 129.6 lumens/watt  
Spacing Criteria (0/90/45): 1.15 / 1.62 / 1.56  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 43.1  
Input Voltage (V): NR  
Input Current (Ain): NR  
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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				
1	107	102	97	92	104	99	95	91	95	91	88	91	88	85	87	85	83	80				
2	97	88	80	74	94	86	79	73	82	76	71	79	74	69	76	71	68	66				
3	88	76	68	61	85	75	67	60	72	65	59	69	63	58	66	61	57	54				
4	80	67	58	51	78	66	57	50	63	56	50	61	54	49	59	53	48	46				
5	74	60	50	43	71	59	50	43	57	49	43	55	48	42	53	47	42	40				
6	68	54	44	38	66	53	44	38	51	43	37	49	42	37	48	41	37	34				
7	63	49	40	33	61	48	39	33	46	39	33	45	38	33	43	37	32	30				
8	58	44	36	30	57	44	35	29	42	35	29	41	34	29	40	34	29	27				
9	55	41	32	26	53	40	32	26	39	31	26	38	31	26	37	31	26	24				
10	51	37	29	24	50	37	29	24	36	29	24	35	28	24	34	28	24	22				

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	1979	1979	1979
5°	1993	2054	2129
10°	1971	2233	2391
15°	1932	2381	2586
20°	1883	2482	2711
25°	1822	2529	2776
30°	1753	2542	2793
35°	1676	2512	2771
40°	1597	2471	2705
45°	1525	2429	2631
50°	1452	2408	2575
55°	1392	2421	2541
60°	1334	2471	2548
65°	1278	2576	2609
70°	1226	2746	2764
75°	1168	3030	2983
80°	1161	3575	3227
85°	1272	4602	4025



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	147.8	2.6
10°-20°	469.4	8.4
20°-30°	750.6	13.4
30°-40°	908.7	16.3
40°-50°	928.0	16.6
50°-60°	855.1	15.3
60°-70°	727.4	13.0
70°-80°	543.9	9.7
80°-90°	254.1	4.5
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1367.9	24.5
0°-40°	2276.6	40.8
0°-60°	4059.7	72.7
0°-90°	5585.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5585.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1471	1471	1471	1471	1471	
5°	1476	1467	1521	1560	1576	140
15°	1387	1512	1709	1816	1856	391
25°	1227	1458	1703	1825	1870	564
35°	1020	1289	1530	1646	1687	638
45°	802	1067	1276	1359	1383	618
55°	593	862	1032	1072	1083	531
65°	402	682	809	814	820	398
75°	225	493	583	574	574	240
85°	82	260	298	264	261	87
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1471.2	1471.2	1471.2	1471.2	1471.2	1471.2	1471.2	1471.2	1471.2	1471.2	1471.2
2.5°	1483.1	1480.1	1475.7	1469.7	1468.2	1468.2	1466.7	1466.7	1469.7	1475.7	1484.6
5°	1475.7	1472.7	1468.2	1463.7	1465.2	1469.7	1478.7	1489.1	1504.1	1520.6	1538.6
7.5°	1460.7	1459.2	1456.2	1456.2	1468.2	1489.1	1510.1	1531.1	1555.1	1580.5	1607.5
10°	1442.7	1441.2	1439.7	1451.7	1478.7	1510.1	1540.1	1568.5	1601.5	1634.5	1665.9
12.5°	1417.2	1417.2	1421.7	1448.7	1486.1	1525.1	1562.5	1600.0	1638.9	1677.9	1712.4
15°	1387.3	1387.3	1402.2	1441.2	1489.1	1534.1	1579.0	1621.0	1665.9	1709.4	1745.3
17.5°	1354.3	1352.8	1381.3	1429.2	1483.1	1535.6	1586.5	1633.0	1679.4	1727.3	1764.8
20°	1315.4	1318.4	1355.8	1411.2	1471.2	1529.6	1583.5	1633.0	1682.4	1733.3	1769.3
22.5°	1271.9	1277.9	1324.3	1385.8	1453.2	1513.1	1570.0	1622.5	1673.4	1724.3	1760.3
25°	1227.0	1234.5	1291.4	1355.8	1427.7	1489.1	1546.1	1601.5	1652.4	1703.4	1739.3
27.5°	1179.0	1189.5	1253.9	1321.3	1393.3	1457.7	1514.6	1571.5	1622.5	1674.9	1707.9
30°	1128.1	1141.6	1210.5	1279.4	1354.3	1417.2	1474.2	1532.6	1585.0	1636.0	1667.4
32.5°	1074.2	1090.6	1161.0	1236.0	1309.4	1370.8	1427.7	1487.6	1537.1	1585.0	1616.5
35°	1020.2	1039.7	1111.6	1186.5	1258.4	1319.8	1375.3	1435.2	1484.6	1529.6	1559.5
37.5°	964.8	988.8	1060.7	1134.1	1204.5	1265.9	1322.8	1378.3	1427.7	1469.7	1499.6
40°	909.4	936.3	1008.2	1080.1	1150.6	1209.0	1264.4	1319.8	1369.3	1406.7	1435.2
42.5°	855.4	882.4	955.8	1027.7	1092.1	1152.1	1207.5	1261.4	1306.4	1343.8	1369.3
45°	801.5	830.0	901.9	972.3	1036.7	1096.6	1152.1	1201.5	1244.9	1276.4	1301.9
47.5°	747.6	777.5	849.4	919.8	981.3	1039.7	1096.6	1141.6	1183.5	1215.0	1236.0
50°	693.6	726.6	797.0	868.9	928.8	987.3	1041.2	1083.1	1122.1	1150.6	1170.0
52.5°	644.2	675.7	747.6	819.5	879.4	937.8	988.8	1029.2	1063.7	1089.1	1108.6
55°	593.3	627.7	702.6	771.5	833.0	891.4	937.8	975.3	1006.7	1032.2	1047.2
57.5°	543.8	582.8	656.2	725.1	788.0	843.4	888.4	924.3	952.8	973.8	987.3
60°	495.9	536.3	612.7	681.6	744.6	798.5	841.9	874.9	900.4	918.4	930.3
62.5°	447.9	494.4	569.3	641.2	701.1	753.6	794.0	824.0	847.9	864.4	871.9
65°	401.5	449.4	527.3	597.8	657.7	707.1	746.1	773.0	795.5	809.0	812.0
67.5°	356.6	407.5	485.4	555.8	614.2	660.7	698.1	723.6	743.1	752.1	755.1
70°	311.6	364.0	443.4	513.9	569.3	614.2	648.7	672.7	689.1	698.1	698.1
72.5°	269.7	322.1	401.5	470.4	521.3	566.3	597.8	620.2	635.2	641.2	639.7
75°	224.7	278.7	356.6	422.5	471.9	513.9	545.3	567.8	578.3	582.8	581.3
77.5°	185.8	236.7	311.6	373.0	425.5	459.9	491.4	512.4	522.8	525.8	524.3
80°	149.8	197.8	263.7	322.1	367.0	404.5	433.0	455.4	464.4	461.4	447.9
82.5°	115.4	158.8	217.2	268.2	310.1	344.6	374.5	388.0	389.5	382.0	370.0
85°	82.4	115.4	164.8	208.2	247.2	272.7	290.6	301.1	304.1	298.1	284.6
87.5°	46.4	67.4	97.4	128.8	158.8	176.8	187.3	193.3	197.8	191.8	182.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1471.2	1471.2	1471.2	1471.2	1471.2	1471.2	1471.2	1471.2
2.5°	1475.7	1480.1	1478.7	1481.6	1483.1	1483.1	1478.7	1481.6
5°	1540.1	1549.1	1555.1	1564.0	1570.0	1570.0	1571.5	1576.0
7.5°	1610.5	1625.5	1638.9	1649.4	1656.9	1659.9	1664.4	1668.9
10°	1676.4	1694.4	1709.4	1722.8	1731.8	1737.8	1742.3	1749.8
12.5°	1727.3	1748.3	1764.8	1779.8	1791.8	1800.7	1805.2	1811.2
15°	1764.8	1788.8	1808.2	1824.7	1835.2	1845.7	1850.2	1856.2
17.5°	1787.3	1811.2	1832.2	1848.7	1860.7	1871.2	1877.2	1883.1
20°	1793.3	1817.2	1839.7	1856.2	1868.2	1881.6	1887.6	1893.6
22.5°	1784.3	1808.2	1832.2	1850.2	1863.7	1877.2	1883.1	1889.1
25°	1766.3	1791.8	1815.7	1833.7	1845.7	1859.2	1866.7	1869.7
27.5°	1737.8	1763.3	1787.3	1803.7	1817.2	1830.7	1838.2	1839.7
30°	1697.4	1722.8	1746.8	1763.3	1778.3	1790.3	1797.8	1797.8
32.5°	1647.9	1671.9	1697.4	1712.4	1725.8	1737.8	1745.3	1748.3
35°	1591.0	1615.0	1638.9	1652.4	1667.4	1676.4	1682.4	1686.9
37.5°	1529.6	1553.6	1573.0	1585.0	1601.5	1607.5	1616.5	1615.0
40°	1463.7	1483.1	1501.1	1511.6	1525.1	1532.6	1541.6	1540.1
42.5°	1394.8	1414.2	1429.2	1441.2	1448.7	1456.2	1462.2	1460.7
45°	1324.3	1342.3	1355.8	1361.8	1373.8	1376.8	1382.8	1382.8
47.5°	1253.9	1268.9	1280.9	1289.9	1295.9	1298.9	1304.9	1304.9
50°	1186.5	1200.0	1207.5	1215.0	1221.0	1225.5	1228.5	1230.0
52.5°	1120.6	1131.1	1137.1	1143.1	1149.1	1152.1	1155.1	1153.6
55°	1057.7	1065.2	1069.7	1074.2	1078.7	1083.1	1083.1	1083.1
57.5°	994.8	999.2	1003.7	1006.7	1011.2	1014.2	1014.2	1014.2
60°	933.3	937.8	939.3	942.3	946.8	948.3	949.8	946.8
62.5°	873.4	874.9	876.4	877.9	882.4	885.4	885.4	883.9
65°	812.0	812.0	813.5	815.0	818.0	821.0	822.5	819.5
67.5°	752.1	752.1	753.6	753.6	758.1	761.0	762.5	762.5
70°	693.6	692.1	695.1	696.6	699.6	699.6	702.6	702.6
72.5°	635.2	633.7	636.7	636.7	639.7	641.2	641.2	641.2
75°	578.3	573.8	575.3	572.3	575.3	575.3	573.8	573.8
77.5°	516.9	506.4	503.4	497.4	497.4	497.4	494.4	494.4
80°	439.0	428.5	424.0	419.5	419.5	418.0	416.5	416.5
82.5°	361.0	352.1	347.6	343.1	346.1	341.6	343.1	344.6
85°	277.2	269.7	266.7	262.2	260.7	260.7	262.2	260.7
87.5°	179.8	172.3	172.3	167.8	170.8	166.3	161.8	164.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)