

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: P188669

Luminaire Tested: **24SR-LD2-59-C-UNV-L840-CD1-ST-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P188669  
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-LD2-59-C-UNV-L840-CD1-ST-U  
Description: METALUX 2X4 SKYRIDGE LED FIXTURE WITH STRAW SKYTRIM.  
  
Light Source: EATON LED 4000K  
Ballast/Driver: OSRAM ELECTRONIC DRIVER

**Summary**

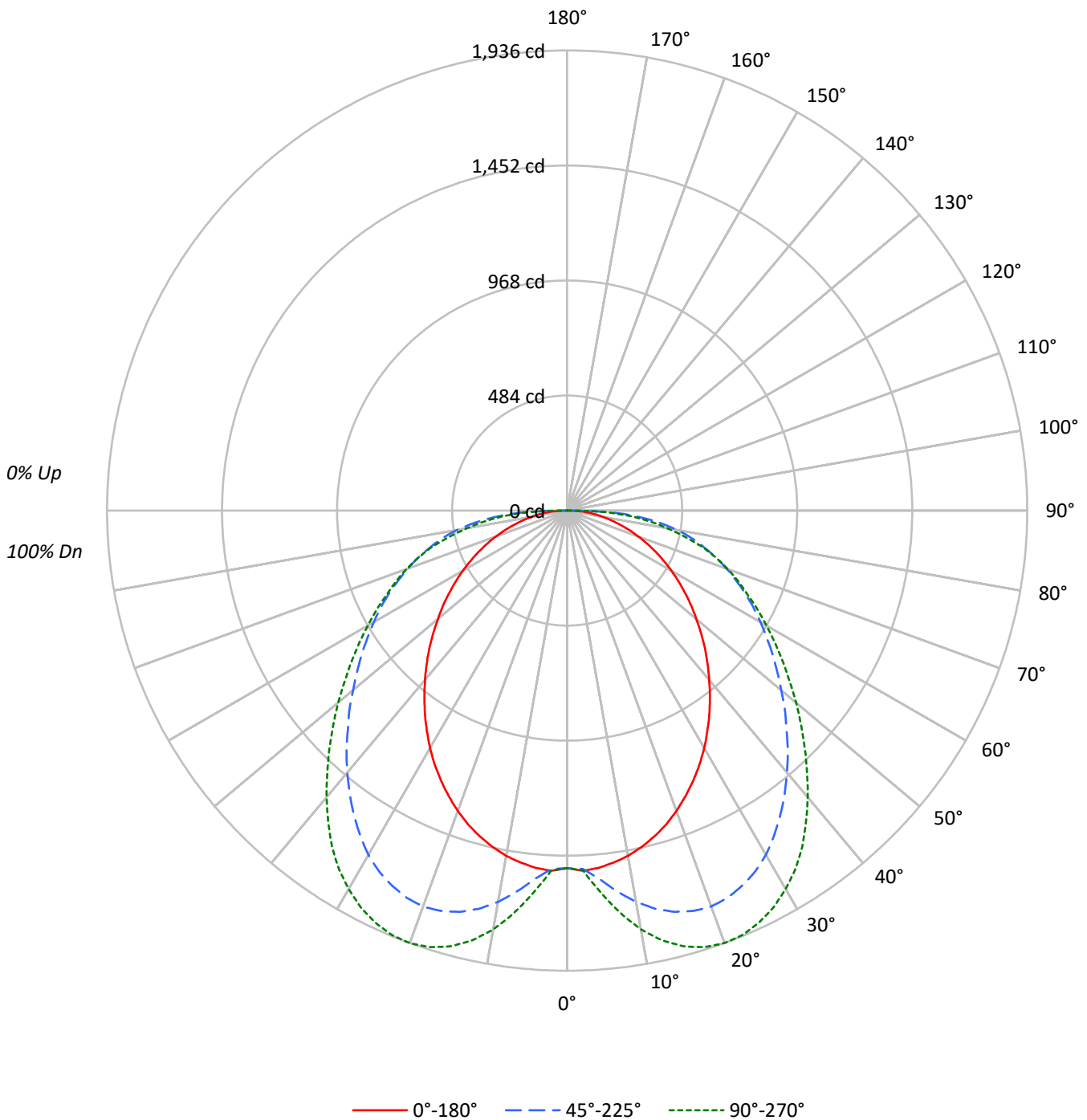
Lumens per Lamp: N/A  
Luminaire Lumens: 5711.0 lumens  
Efficiency: N/A  
Efficacy: 113.8 lumens/watt  
Spacing Criteria (0/90/45): 1.15 / 1.62 / 1.56  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 50.2  
Input Voltage (V): NR  
Input Current (Ain): NR  
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	50	30	10	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	107	102	97	92	104	99	95	91	95	91	88	91	88	85	87	85	83	80					80			
2	97	88	80	74	94	86	79	73	82	76	71	79	74	69	76	71	68	66					66			
3	88	76	68	61	85	75	67	60	72	65	59	69	63	58	66	61	57	54					54			
4	80	67	58	51	78	66	57	50	63	56	50	61	54	49	59	53	48	46					46			
5	74	60	50	43	71	59	50	43	57	49	43	55	48	42	53	47	42	40					40			
6	68	54	44	38	66	53	44	38	51	43	37	49	42	37	48	41	37	34					34			
7	63	49	40	33	61	48	39	33	46	39	33	45	38	33	43	37	32	30					30			
8	58	44	36	30	57	44	35	29	42	35	29	41	34	29	40	34	29	27					27			
9	55	41	32	26	53	40	32	26	39	31	26	38	31	26	37	31	26	24					24			
10	51	37	29	24	50	37	29	24	36	29	24	35	28	24	34	28	24	22					22			

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

	0°	45°	90°
0°	2024	2024	2024
5°	2038	2100	2177
10°	2015	2283	2445
15°	1976	2435	2644
20°	1926	2538	2773
25°	1863	2586	2838
30°	1792	2599	2856
35°	1713	2569	2833
40°	1633	2527	2766
45°	1560	2484	2691
50°	1485	2463	2633
55°	1423	2476	2598
60°	1365	2527	2605
65°	1307	2634	2668
70°	1253	2808	2827
75°	1195	3098	3050
80°	1187	3656	3300
85°	1301	4707	4116



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	151.2	2.6
10°-20°	480.0	8.4
20°-30°	767.6	13.4
30°-40°	929.2	16.3
40°-50°	948.9	16.6
50°-60°	874.4	15.3
60°-70°	743.8	13.0
70°-80°	556.1	9.7
80°-90°	259.8	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°	1398.7	24.5
0°-40°	2327.9	40.8
0°-60°	4151.3	72.7
0°-90°	5711.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5711.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1504	1504	1504	1504	1504	
5°	1509	1500	1555	1595	1612	143
15°	1419	1546	1748	1857	1898	399
25°	1255	1491	1742	1866	1912	577
35°	1043	1318	1564	1683	1725	652
45°	820	1091	1305	1389	1414	632
55°	607	882	1056	1096	1108	543
65°	411	698	827	833	838	407
75°	230	504	596	587	587	246
85°	84	266	305	270	267	89
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°	1504.3	1504.3	1504.3	1504.3	1504.3	1504.3	1504.3	1504.3	1504.3	1504.3	1504.3
2.5°	1516.6	1513.5	1508.9	1502.8	1501.3	1501.3	1499.8	1499.8	1502.8	1508.9	1518.1
5°	1508.9	1505.9	1501.3	1496.7	1498.2	1502.8	1512.0	1522.7	1538.1	1554.9	1573.3
7.5°	1493.6	1492.1	1489.0	1489.0	1501.3	1522.7	1544.2	1565.6	1590.1	1616.2	1643.8
10°	1475.2	1473.7	1472.2	1484.4	1512.0	1544.2	1574.8	1603.9	1637.6	1671.3	1703.5
12.5°	1449.2	1449.2	1453.8	1481.4	1519.7	1559.5	1597.8	1636.1	1675.9	1715.8	1751.0
15°	1418.6	1418.6	1433.9	1473.7	1522.7	1568.7	1614.6	1657.5	1703.5	1747.9	1784.7
17.5°	1384.9	1383.3	1412.4	1461.5	1516.6	1570.2	1622.3	1669.8	1717.3	1766.3	1804.6
20°	1345.0	1348.1	1386.4	1443.1	1504.3	1564.1	1619.2	1669.8	1720.4	1772.4	1809.2
22.5°	1300.6	1306.7	1354.2	1417.0	1486.0	1547.2	1605.5	1659.1	1711.2	1763.2	1800.0
25°	1254.6	1262.3	1320.5	1386.4	1459.9	1522.7	1580.9	1637.6	1689.7	1741.8	1778.6
27.5°	1205.6	1216.3	1282.2	1351.2	1424.7	1490.6	1548.8	1607.0	1659.1	1712.7	1746.4
30°	1153.5	1167.3	1237.8	1308.3	1384.9	1449.2	1507.4	1567.2	1620.8	1672.9	1705.0
32.5°	1098.4	1115.2	1187.2	1263.8	1338.9	1401.7	1459.9	1521.2	1571.8	1620.8	1652.9
35°	1043.2	1063.2	1136.7	1213.3	1286.8	1349.6	1406.3	1467.6	1518.1	1564.1	1594.7
37.5°	986.6	1011.1	1084.6	1159.7	1231.7	1294.5	1352.7	1409.4	1459.9	1502.8	1533.5
40°	929.9	957.5	1031.0	1104.5	1176.5	1236.3	1292.9	1349.6	1400.2	1438.5	1467.6
42.5°	874.7	902.3	977.4	1050.9	1116.8	1178.0	1234.7	1289.9	1335.8	1374.1	1400.2
45°	819.6	848.7	922.2	994.2	1060.1	1121.4	1178.0	1228.6	1273.0	1305.2	1331.2
47.5°	764.4	795.1	868.6	940.6	1003.4	1063.2	1121.4	1167.3	1210.2	1242.4	1263.8
50°	709.3	743.0	815.0	888.5	949.8	1009.5	1064.7	1107.6	1147.4	1176.5	1196.4
52.5°	658.7	690.9	764.4	838.0	899.2	959.0	1011.1	1052.4	1087.7	1113.7	1133.6
55°	606.6	641.9	718.5	788.9	851.7	911.5	959.0	997.3	1029.5	1055.5	1070.8
57.5°	556.1	595.9	671.0	741.5	805.8	862.5	908.4	945.2	974.3	995.8	1009.5
60°	507.1	548.4	626.6	697.0	761.4	816.5	860.9	894.6	920.7	939.1	951.3
62.5°	458.0	505.5	582.1	655.7	716.9	770.6	811.9	842.6	867.1	883.9	891.6
65°	410.6	459.6	539.2	611.2	672.5	723.1	762.9	790.5	813.5	827.2	830.3
67.5°	364.6	416.7	496.3	568.3	628.1	675.6	713.9	739.9	759.8	769.0	772.1
70°	318.6	372.3	453.4	525.5	582.1	628.1	663.3	687.8	704.7	713.9	713.9
72.5°	275.7	329.4	410.6	481.0	533.1	579.1	611.2	634.2	649.5	655.7	654.1
75°	229.8	284.9	364.6	432.0	482.6	525.5	557.6	580.6	591.3	595.9	594.4
77.5°	190.0	242.0	318.6	381.4	435.1	470.3	502.5	523.9	534.6	537.7	536.2
80°	153.2	202.2	269.6	329.4	375.3	413.6	442.7	465.7	474.9	471.8	458.0
82.5°	118.0	162.4	222.1	274.2	317.1	352.3	383.0	396.8	398.3	390.6	378.4
85°	84.3	118.0	168.5	212.9	252.8	278.8	297.2	307.9	311.0	304.9	291.1
87.5°	47.5	68.9	99.6	131.7	162.4	180.8	191.5	197.6	202.2	196.1	186.9
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°	1504.3	1504.3	1504.3	1504.3	1504.3	1504.3	1504.3	1504.3
2.5°	1508.9	1513.5	1512.0	1515.1	1516.6	1516.6	1512.0	1515.1
5°	1574.8	1584.0	1590.1	1599.3	1605.5	1605.5	1607.0	1611.6
7.5°	1646.8	1662.1	1675.9	1686.6	1694.3	1697.4	1702.0	1706.6
10°	1714.2	1732.6	1747.9	1761.7	1770.9	1777.0	1781.6	1789.3
12.5°	1766.3	1787.8	1804.6	1819.9	1832.2	1841.4	1846.0	1852.1
15°	1804.6	1829.1	1849.0	1865.9	1876.6	1887.3	1891.9	1898.1
17.5°	1827.6	1852.1	1873.5	1890.4	1902.6	1913.4	1919.5	1925.6
20°	1833.7	1858.2	1881.2	1898.1	1910.3	1924.1	1930.2	1936.4
22.5°	1824.5	1849.0	1873.5	1891.9	1905.7	1919.5	1925.6	1931.8
25°	1806.1	1832.2	1856.7	1875.1	1887.3	1901.1	1908.8	1911.8
27.5°	1777.0	1803.1	1827.6	1844.4	1858.2	1872.0	1879.7	1881.2
30°	1735.7	1761.7	1786.2	1803.1	1818.4	1830.6	1838.3	1838.3
32.5°	1685.1	1709.6	1735.7	1751.0	1764.8	1777.0	1784.7	1787.8
35°	1626.9	1651.4	1675.9	1689.7	1705.0	1714.2	1720.4	1724.9
37.5°	1564.1	1588.6	1608.5	1620.8	1637.6	1643.8	1652.9	1651.4
40°	1496.7	1516.6	1535.0	1545.7	1559.5	1567.2	1576.4	1574.8
42.5°	1426.2	1446.1	1461.5	1473.7	1481.4	1489.0	1495.2	1493.6
45°	1354.2	1372.6	1386.4	1392.5	1404.8	1407.8	1414.0	1414.0
47.5°	1282.2	1297.5	1309.8	1319.0	1325.1	1328.2	1334.3	1334.3
50°	1213.3	1227.1	1234.7	1242.4	1248.5	1253.1	1256.2	1257.7
52.5°	1145.9	1156.6	1162.7	1168.9	1175.0	1178.0	1181.1	1179.6
55°	1081.5	1089.2	1093.8	1098.4	1103.0	1107.6	1107.6	1107.6
57.5°	1017.2	1021.8	1026.4	1029.5	1034.0	1037.1	1037.1	1037.1
60°	954.4	959.0	960.5	963.6	968.2	969.7	971.2	968.2
62.5°	893.1	894.6	896.2	897.7	902.3	905.4	905.4	903.8
65°	830.3	830.3	831.8	833.4	836.4	839.5	841.0	838.0
67.5°	769.0	769.0	770.6	770.6	775.2	778.2	779.7	779.7
70°	709.3	707.7	710.8	712.3	715.4	715.4	718.5	718.5
72.5°	649.5	648.0	651.1	651.1	654.1	655.7	655.7	655.7
75°	591.3	586.7	588.3	585.2	588.3	588.3	586.7	586.7
77.5°	528.5	517.8	514.7	508.6	508.6	508.6	505.5	505.5
80°	448.9	438.1	433.5	428.9	428.9	427.4	425.9	425.9
82.5°	369.2	360.0	355.4	350.8	353.9	349.3	350.8	352.3
85°	283.4	275.7	272.7	268.1	266.6	266.6	268.1	266.6
87.5°	183.8	176.2	176.2	171.6	174.6	170.0	165.4	168.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)