

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: P188675

Luminaire Tested: **24SR-LD2-64-C-UNV-L850-CD1-ST-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188675
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-LD2-64-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: 6804.0 lumens
Efficiency: N/A
Efficacy: 122.6 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

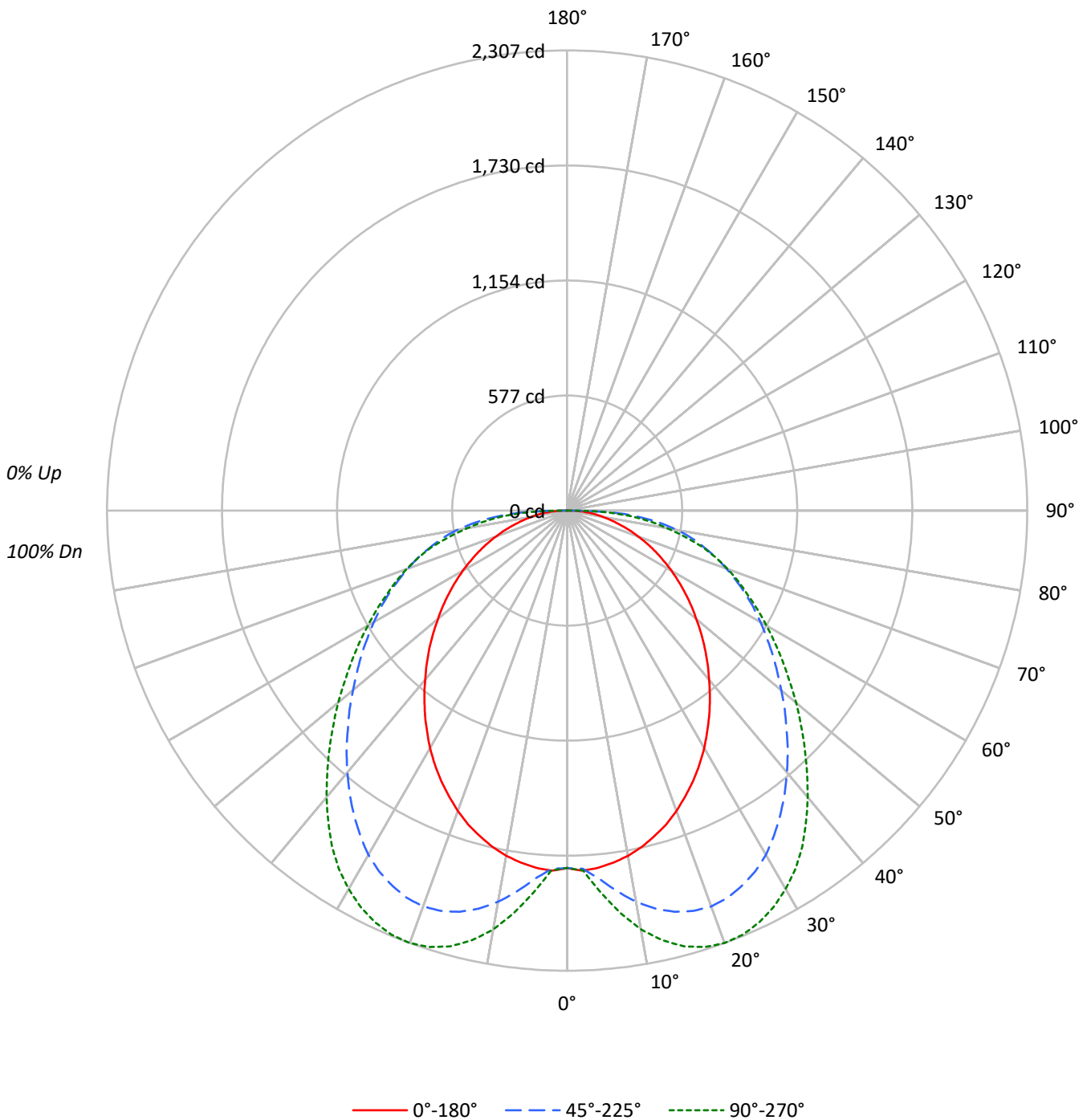
Input Watts (W): 55.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	2412	2412	2412
5°	2428	2502	2593
10°	2401	2720	2912
15°	2354	2901	3150
20°	2294	3024	3303
25°	2219	3081	3381
30°	2135	3096	3403
35°	2042	3061	3376
40°	1946	3010	3295
45°	1858	2959	3205
50°	1769	2934	3136
55°	1695	2950	3096
60°	1626	3011	3104
65°	1557	3138	3178
70°	1493	3346	3367
75°	1423	3691	3634
80°	1414	4355	3932
85°	1550	5607	4903



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	180.1	2.6
10°-20°	571.9	8.4
20°-30°	914.5	13.4
30°-40°	1107.0	16.3
40°-50°	1130.5	16.6
50°-60°	1041.8	15.3
60°-70°	886.1	13.0
70°-80°	662.6	9.7
80°-90°	309.5	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°	1666.4	24.5
0°-40°	2773.5	40.8
0°-60°	4945.8	72.7
0°-90°	6804.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6804.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1792	1792	1792	1792	1792	
5°	1798	1788	1852	1900	1920	170
15°	1690	1842	2082	2213	2261	476
25°	1495	1777	2075	2223	2278	688
35°	1243	1570	1863	2005	2055	777
45°	976	1300	1555	1655	1685	753
55°	723	1050	1258	1306	1320	647
65°	489	831	986	992	998	485
75°	274	600	710	699	699	293
85°	100	317	363	322	318	106
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°	1792.3	1792.3	1792.3	1792.3	1792.3	1792.3	1792.3	1792.3	1792.3	1792.3	1792.3
2.5°	1806.9	1803.2	1797.7	1790.4	1788.6	1788.6	1786.8	1786.8	1790.4	1797.7	1808.7
5°	1797.7	1794.1	1788.6	1783.1	1785.0	1790.4	1801.4	1814.2	1832.4	1852.5	1874.4
7.5°	1779.5	1777.7	1774.0	1774.0	1788.6	1814.2	1839.7	1865.3	1894.5	1925.5	1958.3
10°	1757.6	1755.8	1753.9	1768.5	1801.4	1839.7	1876.2	1910.9	1951.0	1991.2	2029.5
12.5°	1726.6	1726.6	1732.0	1764.9	1810.5	1858.0	1903.6	1949.2	1996.7	2044.1	2086.1
15°	1690.1	1690.1	1708.3	1755.8	1814.2	1868.9	1923.7	1974.8	2029.5	2082.5	2126.3
17.5°	1649.9	1648.1	1682.8	1741.2	1806.9	1870.7	1932.8	1989.4	2046.0	2104.4	2150.0
20°	1602.4	1606.1	1651.7	1719.3	1792.3	1863.4	1929.1	1989.4	2049.6	2111.7	2155.5
22.5°	1549.5	1556.8	1613.4	1688.2	1770.4	1843.4	1912.7	1976.6	2038.6	2100.7	2144.5
25°	1494.8	1503.9	1573.2	1651.7	1739.3	1814.2	1883.5	1951.0	2013.1	2075.2	2119.0
27.5°	1436.4	1449.1	1527.6	1609.7	1697.4	1775.8	1845.2	1914.5	1976.6	2040.5	2080.6
30°	1374.3	1390.7	1474.7	1558.6	1649.9	1726.6	1795.9	1867.1	1931.0	1993.0	2031.3
32.5°	1308.6	1328.7	1414.5	1505.7	1595.1	1670.0	1739.3	1812.3	1872.6	1931.0	1969.3
35°	1242.9	1266.6	1354.2	1445.5	1533.1	1607.9	1675.5	1748.5	1808.7	1863.4	1899.9
37.5°	1175.4	1204.6	1292.2	1381.6	1467.4	1542.2	1611.6	1679.1	1739.3	1790.4	1826.9
40°	1107.8	1140.7	1228.3	1315.9	1401.7	1472.9	1540.4	1607.9	1668.2	1713.8	1748.5
42.5°	1042.1	1075.0	1164.4	1252.0	1330.5	1403.5	1471.0	1536.7	1591.5	1637.1	1668.2
45°	976.4	1011.1	1098.7	1184.5	1263.0	1336.0	1403.5	1463.7	1516.7	1555.0	1586.0
47.5°	910.7	947.2	1034.8	1120.6	1195.4	1266.6	1336.0	1390.7	1441.8	1480.2	1505.7
50°	845.0	885.2	971.0	1058.6	1131.6	1202.7	1268.5	1319.6	1367.0	1401.7	1425.4
52.5°	784.8	823.1	910.7	998.3	1071.3	1142.5	1204.6	1253.9	1295.8	1326.9	1350.6
55°	722.7	764.7	856.0	939.9	1014.8	1085.9	1142.5	1188.1	1226.5	1257.5	1275.8
57.5°	662.5	710.0	799.4	883.4	960.0	1027.5	1082.3	1126.1	1160.8	1186.3	1202.7
60°	604.1	653.4	746.5	830.4	907.1	972.8	1025.7	1065.9	1096.9	1118.8	1133.4
62.5°	545.7	602.3	693.5	781.1	854.2	918.0	967.3	1003.8	1033.0	1053.1	1062.2
65°	489.1	547.5	642.4	728.2	801.2	861.5	908.9	941.8	969.1	985.6	989.2
67.5°	434.4	496.4	591.3	677.1	748.3	804.9	850.5	881.5	905.3	916.2	919.9
70°	379.6	443.5	540.2	626.0	693.5	748.3	790.3	819.5	839.6	850.5	850.5
72.5°	328.5	392.4	489.1	573.1	635.1	689.9	728.2	755.6	773.8	781.1	779.3
75°	273.8	339.5	434.4	514.7	574.9	626.0	664.3	691.7	704.5	710.0	708.1
77.5°	226.3	288.4	379.6	454.5	518.3	560.3	598.6	624.2	637.0	640.6	638.8
80°	182.5	240.9	321.2	392.4	447.2	492.8	527.5	554.8	565.8	562.1	545.7
82.5°	140.5	193.5	264.6	326.7	377.8	419.8	456.3	472.7	474.5	465.4	450.8
85°	100.4	140.5	200.8	253.7	301.1	332.2	354.1	366.8	370.5	363.2	346.8
87.5°	56.6	82.1	118.6	157.0	193.5	215.4	228.1	235.4	240.9	233.6	222.7
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°	1792.3	1792.3	1792.3	1792.3	1792.3	1792.3	1792.3	1792.3
2.5°	1797.7	1803.2	1801.4	1805.0	1806.9	1806.9	1801.4	1805.0
5°	1876.2	1887.2	1894.5	1905.4	1912.7	1912.7	1914.5	1920.0
7.5°	1962.0	1980.2	1996.7	2009.4	2018.6	2022.2	2027.7	2033.2
10°	2042.3	2064.2	2082.5	2098.9	2109.8	2117.1	2122.6	2131.7
12.5°	2104.4	2129.9	2150.0	2168.2	2182.8	2193.8	2199.3	2206.6
15°	2150.0	2179.2	2202.9	2223.0	2235.8	2248.5	2254.0	2261.3
17.5°	2177.4	2206.6	2232.1	2252.2	2266.8	2279.6	2286.9	2294.2
20°	2184.7	2213.9	2241.2	2261.3	2275.9	2292.3	2299.6	2306.9
22.5°	2173.7	2202.9	2232.1	2254.0	2270.4	2286.9	2294.2	2301.5
25°	2151.8	2182.8	2212.0	2233.9	2248.5	2265.0	2274.1	2277.7
27.5°	2117.1	2148.2	2177.4	2197.4	2213.9	2230.3	2239.4	2241.2
30°	2067.9	2098.9	2128.1	2148.2	2166.4	2181.0	2190.1	2190.1
32.5°	2007.6	2036.8	2067.9	2086.1	2102.5	2117.1	2126.3	2129.9
35°	1938.3	1967.5	1996.7	2013.1	2031.3	2042.3	2049.6	2055.1
37.5°	1863.4	1892.6	1916.4	1931.0	1951.0	1958.3	1969.3	1967.5
40°	1783.1	1806.9	1828.8	1841.5	1858.0	1867.1	1878.0	1876.2
42.5°	1699.2	1722.9	1741.2	1755.8	1764.9	1774.0	1781.3	1779.5
45°	1613.4	1635.3	1651.7	1659.0	1673.6	1677.3	1684.6	1684.6
47.5°	1527.6	1545.9	1560.5	1571.4	1578.7	1582.4	1589.7	1589.7
50°	1445.5	1461.9	1471.0	1480.2	1487.5	1492.9	1496.6	1498.4
52.5°	1365.2	1378.0	1385.3	1392.6	1399.9	1403.5	1407.2	1405.3
55°	1288.5	1297.7	1303.1	1308.6	1314.1	1319.6	1319.6	1319.6
57.5°	1211.9	1217.3	1222.8	1226.5	1232.0	1235.6	1235.6	1235.6
60°	1137.0	1142.5	1144.3	1148.0	1153.5	1155.3	1157.1	1153.5
62.5°	1064.0	1065.9	1067.7	1069.5	1075.0	1078.6	1078.6	1076.8
65°	989.2	989.2	991.0	992.9	996.5	1000.2	1002.0	998.3
67.5°	916.2	916.2	918.0	918.0	923.5	927.2	929.0	929.0
70°	845.0	843.2	846.9	848.7	852.3	852.3	856.0	856.0
72.5°	773.8	772.0	775.7	775.7	779.3	781.1	781.1	781.1
75°	704.5	699.0	700.8	697.2	700.8	700.8	699.0	699.0
77.5°	629.7	616.9	613.2	605.9	605.9	605.9	602.3	602.3
80°	534.8	522.0	516.5	511.0	511.0	509.2	507.4	507.4
82.5°	439.9	428.9	423.4	418.0	421.6	416.1	418.0	419.8
85°	337.6	328.5	324.9	319.4	317.6	317.6	319.4	317.6
87.5°	219.0	209.9	209.9	204.4	208.1	202.6	197.1	200.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)