

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: P188674

Luminaire Tested: **24SR-LD2-64-C-UNV-L840-CD1-ST-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188674
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-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: 6252.0 lumens
Efficiency: N/A
Efficacy: 112.6 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

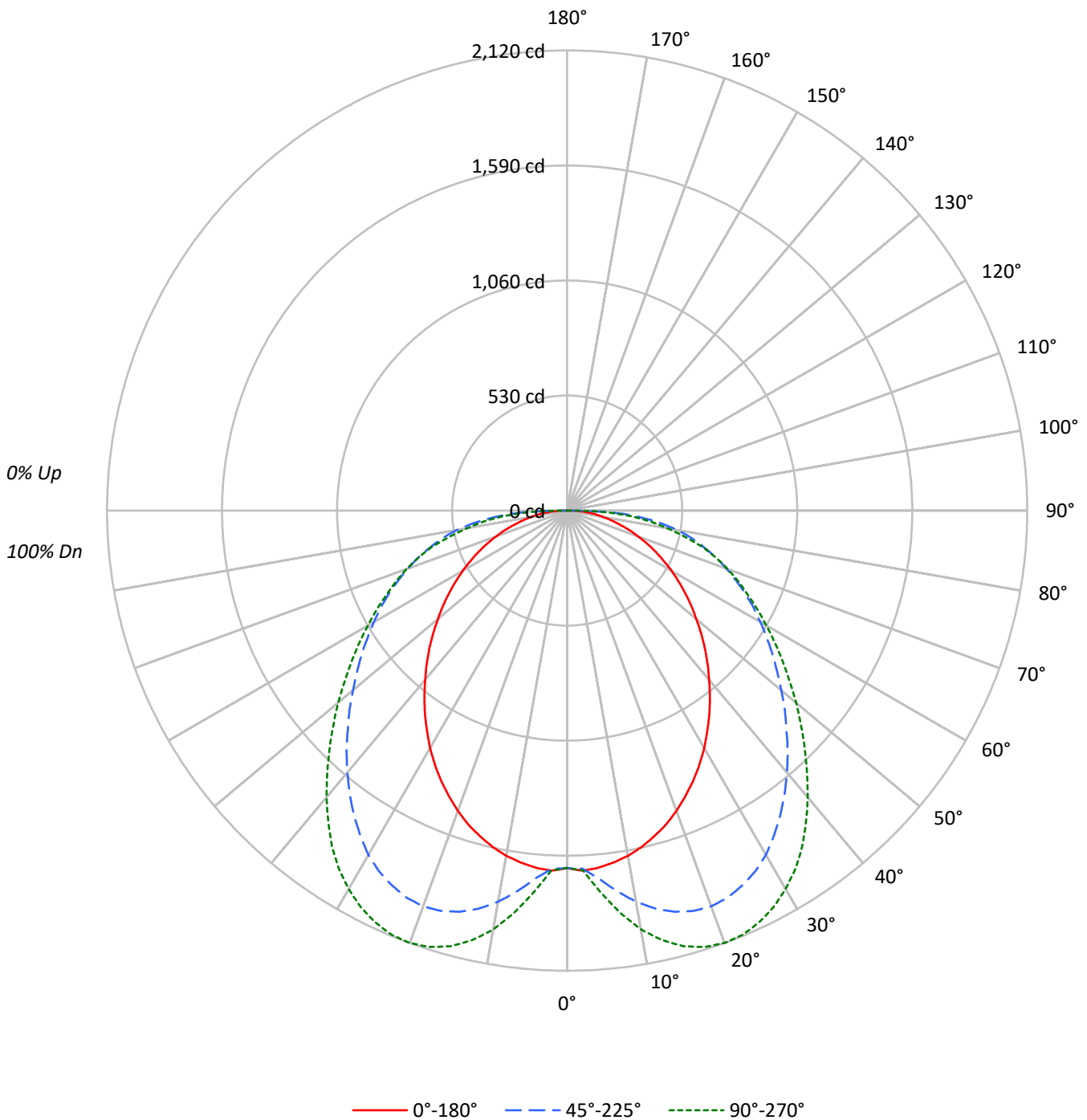
Input Watts (W): 55.5
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2216	2216	2216
5°	2231	2299	2383
10°	2206	2500	2676
15°	2163	2665	2894
20°	2108	2778	3035
25°	2039	2831	3107
30°	1962	2845	3127
35°	1876	2813	3102
40°	1788	2766	3028
45°	1707	2719	2945
50°	1625	2696	2882
55°	1558	2711	2844
60°	1494	2766	2852
65°	1431	2883	2920
70°	1372	3074	3094
75°	1308	3392	3339
80°	1299	4002	3612
85°	1423	5152	4505



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	165.5	2.6
10°-20°	525.5	8.4
20°-30°	840.3	13.4
30°-40°	1017.2	16.3
40°-50°	1038.8	16.6
50°-60°	957.3	15.3
60°-70°	814.3	13.0
70°-80°	608.8	9.7
80°-90°	284.4	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°	1531.2	24.5
0°-40°	2548.5	40.8
0°-60°	4544.5	72.7
0°-90°	6252.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6252.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1647	1647	1647	1647	1647	
5°	1652	1643	1702	1746	1764	156
15°	1553	1692	1914	2033	2078	437
25°	1374	1633	1907	2043	2093	632
35°	1142	1443	1712	1842	1888	714
45°	897	1194	1429	1521	1548	692
55°	664	965	1156	1200	1212	595
65°	449	764	906	911	917	446
75°	252	552	652	642	642	269
85°	92	291	334	296	292	97
90°	0	0	0	0	0	



TEST NUMBER: P188674

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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1646.9	1646.9	1646.9	1646.9	1646.9	1646.9	1646.9	1646.9	1646.9	1646.9	1646.9
2.5°	1660.3	1656.9	1651.9	1645.2	1643.5	1643.5	1641.8	1641.8	1645.2	1651.9	1661.9
5°	1651.9	1648.5	1643.5	1638.5	1640.1	1645.2	1655.2	1667.0	1683.8	1702.2	1722.3
7.5°	1635.1	1633.4	1630.1	1630.1	1643.5	1667.0	1690.5	1713.9	1740.8	1769.3	1799.5
10°	1615.0	1613.3	1611.6	1625.1	1655.2	1690.5	1724.0	1755.9	1792.8	1829.7	1864.9
12.5°	1586.5	1586.5	1591.5	1621.7	1663.6	1707.2	1749.2	1791.1	1834.7	1878.3	1916.9
15°	1552.9	1552.9	1569.7	1613.3	1667.0	1717.3	1767.6	1814.6	1864.9	1913.5	1953.8
17.5°	1516.0	1514.4	1546.2	1599.9	1660.3	1719.0	1776.0	1828.0	1880.0	1933.6	1975.6
20°	1472.4	1475.8	1517.7	1579.8	1646.9	1712.3	1772.6	1828.0	1883.3	1940.3	1980.6
22.5°	1423.8	1430.5	1482.5	1551.3	1626.7	1693.8	1757.5	1816.2	1873.3	1930.3	1970.5
25°	1373.5	1381.9	1445.6	1517.7	1598.2	1667.0	1730.7	1792.8	1849.8	1906.8	1947.0
27.5°	1319.8	1331.6	1403.7	1479.2	1559.6	1631.8	1695.5	1759.2	1816.2	1874.9	1911.8
30°	1262.8	1277.9	1355.1	1432.2	1516.0	1586.5	1650.2	1715.6	1774.3	1831.3	1866.5
32.5°	1202.4	1220.9	1299.7	1383.6	1465.7	1534.5	1598.2	1665.3	1720.6	1774.3	1809.5
35°	1142.1	1163.9	1244.4	1328.2	1408.7	1477.5	1539.5	1606.6	1661.9	1712.3	1745.8
37.5°	1080.0	1106.8	1187.3	1269.5	1348.3	1417.1	1480.8	1542.9	1598.2	1645.2	1678.7
40°	1018.0	1048.2	1128.6	1209.1	1288.0	1353.4	1415.4	1477.5	1532.8	1574.7	1606.6
42.5°	957.6	987.8	1070.0	1150.5	1222.6	1289.6	1351.7	1412.1	1462.4	1504.3	1532.8
45°	897.2	929.1	1009.6	1088.4	1160.5	1227.6	1289.6	1345.0	1393.6	1428.8	1457.4
47.5°	836.8	870.4	950.9	1029.7	1098.5	1163.9	1227.6	1277.9	1324.9	1360.1	1383.6
50°	776.5	813.4	892.2	972.7	1039.8	1105.2	1165.5	1212.5	1256.1	1288.0	1309.8
52.5°	721.1	756.3	836.8	917.3	984.4	1049.8	1106.8	1152.1	1190.7	1219.2	1241.0
55°	664.1	702.7	786.5	863.7	932.4	997.8	1049.8	1091.8	1127.0	1155.5	1172.3
57.5°	608.8	652.4	734.5	811.7	882.1	944.2	994.5	1034.7	1066.6	1090.1	1105.2
60°	555.1	600.4	685.9	763.1	833.5	893.9	942.5	979.4	1007.9	1028.0	1041.4
62.5°	501.4	553.4	637.3	717.8	784.9	843.6	888.8	922.4	949.2	967.7	976.0
65°	449.4	503.1	590.3	669.1	736.2	791.6	835.2	865.4	890.5	905.6	909.0
67.5°	399.1	456.2	543.4	622.2	687.6	739.6	781.5	810.0	831.8	841.9	845.2
70°	348.8	407.5	496.4	575.2	637.3	687.6	726.2	753.0	771.4	781.5	781.5
72.5°	301.9	360.6	449.4	526.6	583.6	633.9	669.1	694.3	711.1	717.8	716.1
75°	251.6	311.9	399.1	472.9	528.3	575.2	610.4	635.6	647.3	652.4	650.7
77.5°	208.0	265.0	348.8	417.6	476.3	514.9	550.1	573.5	585.3	588.6	587.0
80°	167.7	221.4	295.2	360.6	410.9	452.8	484.7	509.8	519.9	516.5	501.4
82.5°	129.1	177.8	243.2	300.2	347.1	385.7	419.3	434.4	436.0	427.6	414.2
85°	92.2	129.1	184.5	233.1	276.7	305.2	325.3	337.1	340.4	333.7	318.6
87.5°	52.0	75.5	109.0	144.2	177.8	197.9	209.6	216.3	221.4	214.7	204.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P188674

CATALOG NUMBER: 24SR-LD2-64-C-UNV-L840-CD1-ST-U

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1646.9	1646.9	1646.9	1646.9	1646.9	1646.9	1646.9	1646.9
2.5°	1651.9	1656.9	1655.2	1658.6	1660.3	1660.3	1655.2	1658.6
5°	1724.0	1734.1	1740.8	1750.8	1757.5	1757.5	1759.2	1764.2
7.5°	1802.8	1819.6	1834.7	1846.4	1854.8	1858.2	1863.2	1868.2
10°	1876.6	1896.7	1913.5	1928.6	1938.7	1945.4	1950.4	1958.8
12.5°	1933.6	1957.1	1975.6	1992.3	2005.7	2015.8	2020.8	2027.5
15°	1975.6	2002.4	2024.2	2042.6	2054.4	2066.1	2071.1	2077.9
17.5°	2000.7	2027.5	2051.0	2069.5	2082.9	2094.6	2101.3	2108.0
20°	2007.4	2034.3	2059.4	2077.9	2091.3	2106.4	2113.1	2119.8
22.5°	1997.4	2024.2	2051.0	2071.1	2086.2	2101.3	2108.0	2114.8
25°	1977.2	2005.7	2032.6	2052.7	2066.1	2081.2	2089.6	2092.9
27.5°	1945.4	1973.9	2000.7	2019.2	2034.3	2049.3	2057.7	2059.4
30°	1900.1	1928.6	1955.4	1973.9	1990.6	2004.1	2012.5	2012.5
32.5°	1844.7	1871.6	1900.1	1916.9	1932.0	1945.4	1953.8	1957.1
35°	1781.0	1807.9	1834.7	1849.8	1866.5	1876.6	1883.3	1888.3
37.5°	1712.3	1739.1	1760.9	1774.3	1792.8	1799.5	1809.5	1807.9
40°	1638.5	1660.3	1680.4	1692.1	1707.2	1715.6	1725.7	1724.0
42.5°	1561.3	1583.1	1599.9	1613.3	1621.7	1630.1	1636.8	1635.1
45°	1482.5	1502.6	1517.7	1524.4	1537.8	1541.2	1547.9	1547.9
47.5°	1403.7	1420.5	1433.9	1443.9	1450.6	1454.0	1460.7	1460.7
50°	1328.2	1343.3	1351.7	1360.1	1366.8	1371.8	1375.2	1376.9
52.5°	1254.4	1266.2	1272.9	1279.6	1286.3	1289.6	1293.0	1291.3
55°	1184.0	1192.4	1197.4	1202.4	1207.5	1212.5	1212.5	1212.5
57.5°	1113.6	1118.6	1123.6	1127.0	1132.0	1135.4	1135.4	1135.4
60°	1044.8	1049.8	1051.5	1054.9	1059.9	1061.6	1063.2	1059.9
62.5°	977.7	979.4	981.1	982.7	987.8	991.1	991.1	989.5
65°	909.0	909.0	910.6	912.3	915.7	919.0	920.7	917.3
67.5°	841.9	841.9	843.6	843.6	848.6	851.9	853.6	853.6
70°	776.5	774.8	778.1	779.8	783.2	783.2	786.5	786.5
72.5°	711.1	709.4	712.7	712.7	716.1	717.8	717.8	717.8
75°	647.3	642.3	644.0	640.6	644.0	644.0	642.3	642.3
77.5°	578.6	566.8	563.5	556.8	556.8	556.8	553.4	553.4
80°	491.4	479.6	474.6	469.6	469.6	467.9	466.2	466.2
82.5°	404.2	394.1	389.1	384.0	387.4	382.4	384.0	385.7
85°	310.3	301.9	298.5	293.5	291.8	291.8	293.5	291.8
87.5°	201.2	192.9	192.9	187.8	191.2	186.2	181.1	184.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)