

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: P188672

Luminaire Tested: **24SR-LD2-64-C-UNV-L830-CD1-ST-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188672
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-L830-CD1-ST-U
Description: METALUX 2X4 SKYRIDGE LED FIXTURE WITH STRAW SKYTRIM.

Light Source: EATON LED 3000K
Ballast/Driver: OSRAM ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5946.0 lumens
Efficiency: N/A
Efficacy: 107.1 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

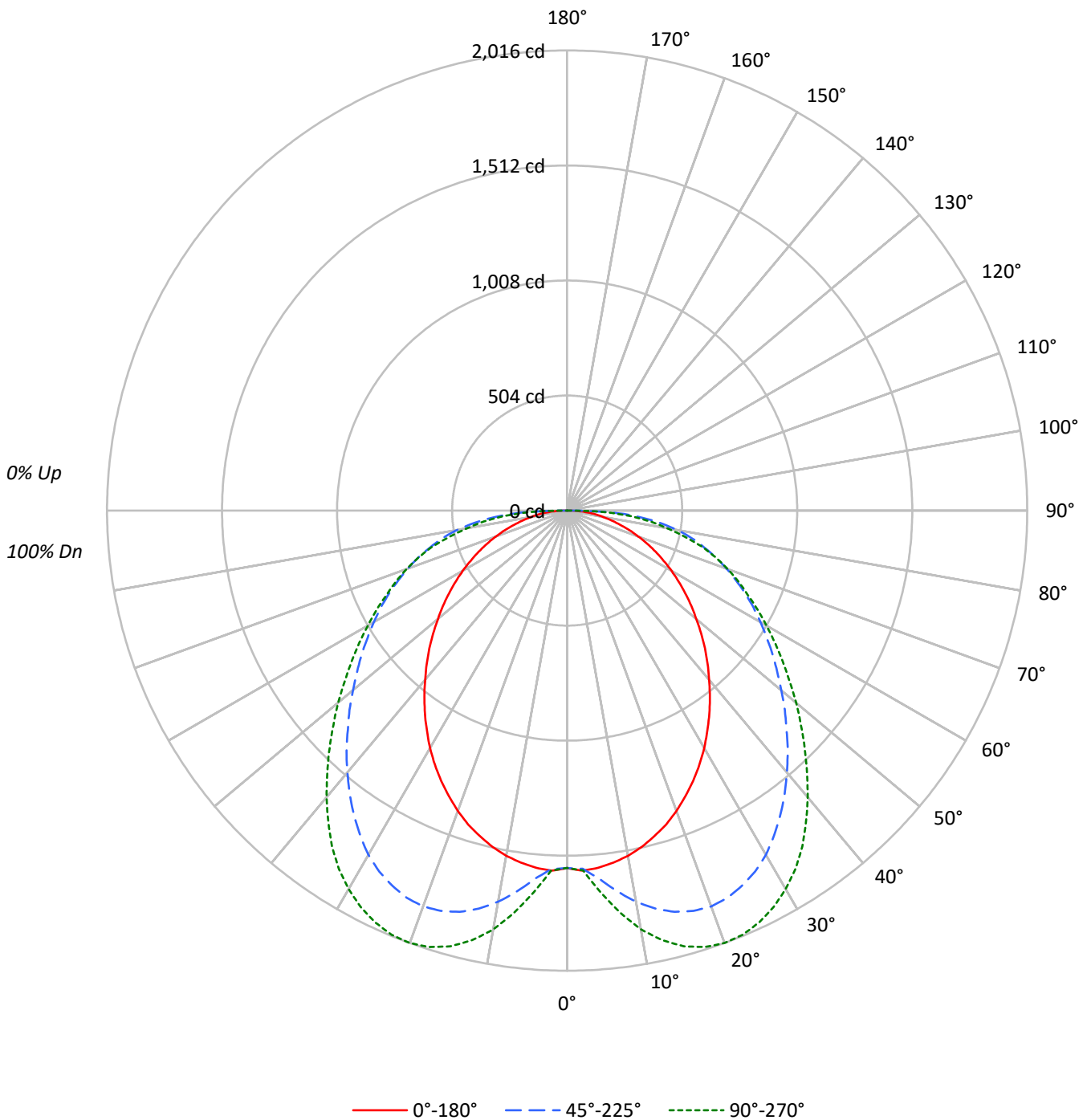
Input Watts (W): 55.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	2107	2107	2107
5°	2122	2187	2266
10°	2098	2377	2545
15°	2057	2535	2753
20°	2005	2642	2887
25°	1939	2692	2955
30°	1866	2706	2974
35°	1784	2675	2950
40°	1700	2631	2880
45°	1624	2586	2801
50°	1546	2564	2741
55°	1482	2578	2705
60°	1421	2631	2713
65°	1361	2742	2777
70°	1305	2924	2943
75°	1243	3225	3176
80°	1236	3806	3436
85°	1354	4900	4284



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	157.4	2.6
10°-20°	499.8	8.4
20°-30°	799.1	13.4
30°-40°	967.4	16.3
40°-50°	988.0	16.6
50°-60°	910.4	15.3
60°-70°	774.4	13.0
70°-80°	579.0	9.7
80°-90°	270.5	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°	1456.3	24.5
0°-40°	2423.7	40.8
0°-60°	4322.1	72.7
0°-90°	5946.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5946.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1566	1566	1566	1566	1566	
5°	1571	1562	1619	1660	1678	149
15°	1477	1609	1820	1934	1976	416
25°	1306	1553	1814	1943	1990	601
35°	1086	1372	1628	1752	1796	679
45°	853	1136	1359	1447	1472	658
55°	632	918	1099	1141	1153	566
65°	427	726	861	867	872	424
75°	239	525	620	611	611	256
85°	88	277	317	282	278	92
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°	1566.3	1566.3	1566.3	1566.3	1566.3	1566.3	1566.3	1566.3	1566.3	1566.3	1566.3
2.5°	1579.0	1575.8	1571.0	1564.7	1563.1	1563.1	1561.5	1561.5	1564.7	1571.0	1580.6
5°	1571.0	1567.8	1563.1	1558.3	1559.9	1564.7	1574.2	1585.4	1601.3	1618.9	1638.0
7.5°	1555.1	1553.5	1550.3	1550.3	1563.1	1585.4	1607.7	1630.1	1655.6	1682.7	1711.4
10°	1535.9	1534.4	1532.8	1545.5	1574.2	1607.7	1639.6	1669.9	1705.0	1740.1	1773.6
12.5°	1508.8	1508.8	1513.6	1542.3	1582.2	1623.7	1663.5	1703.4	1744.9	1786.4	1823.0
15°	1476.9	1476.9	1492.9	1534.4	1585.4	1633.2	1681.1	1725.7	1773.6	1819.9	1858.1
17.5°	1441.8	1440.2	1470.6	1521.6	1579.0	1634.8	1689.1	1738.5	1788.0	1839.0	1878.9
20°	1400.4	1403.6	1443.4	1502.5	1566.3	1628.5	1685.9	1738.5	1791.1	1845.4	1883.6
22.5°	1354.1	1360.5	1409.9	1475.3	1547.1	1610.9	1671.5	1727.3	1781.6	1835.8	1874.1
25°	1306.3	1314.2	1374.9	1443.4	1520.0	1585.4	1646.0	1705.0	1759.2	1813.5	1851.7
27.5°	1255.2	1266.4	1335.0	1406.8	1483.3	1551.9	1612.5	1673.1	1727.3	1783.2	1818.3
30°	1201.0	1215.4	1288.7	1362.1	1441.8	1508.8	1569.4	1631.6	1687.5	1741.7	1775.2
32.5°	1143.6	1161.1	1236.1	1315.8	1394.0	1459.4	1520.0	1583.8	1636.4	1687.5	1721.0
35°	1086.2	1106.9	1183.5	1263.2	1339.8	1405.2	1464.2	1528.0	1580.6	1628.5	1660.4
37.5°	1027.2	1052.7	1129.2	1207.4	1282.3	1347.7	1408.4	1467.4	1520.0	1564.7	1596.6
40°	968.1	996.9	1073.4	1150.0	1224.9	1287.1	1346.1	1405.2	1457.8	1497.7	1528.0
42.5°	910.7	939.4	1017.6	1094.1	1162.7	1226.5	1285.5	1343.0	1390.8	1430.7	1457.8
45°	853.3	883.6	960.2	1035.1	1103.7	1167.5	1226.5	1279.2	1325.4	1358.9	1386.0
47.5°	795.9	827.8	904.3	979.3	1044.7	1106.9	1167.5	1215.4	1260.0	1293.5	1315.8
50°	738.5	773.6	848.5	925.1	988.9	1051.1	1108.5	1153.2	1194.6	1224.9	1245.7
52.5°	685.8	719.3	795.9	872.4	936.2	998.4	1052.7	1095.7	1132.4	1159.5	1180.3
55°	631.6	668.3	748.0	821.4	886.8	949.0	998.4	1038.3	1071.8	1098.9	1114.9
57.5°	579.0	620.4	698.6	772.0	838.9	898.0	945.8	984.1	1014.4	1036.7	1051.1
60°	527.9	571.0	652.3	725.7	792.7	850.1	896.4	931.5	958.6	977.7	990.5
62.5°	476.9	526.3	606.1	682.6	746.4	802.3	845.3	877.2	902.7	920.3	928.3
65°	427.4	478.5	561.4	636.4	700.2	752.8	794.3	823.0	846.9	861.3	864.5
67.5°	379.6	433.8	516.8	591.7	653.9	703.4	743.3	770.4	791.1	800.7	803.9
70°	331.8	387.6	472.1	547.1	606.1	653.9	690.6	716.1	733.7	743.3	743.3
72.5°	287.1	342.9	427.4	500.8	555.0	602.9	636.4	660.3	676.3	682.6	681.0
75°	239.2	296.7	379.6	449.8	502.4	547.1	580.6	604.5	615.7	620.4	618.8
77.5°	197.8	252.0	331.8	397.1	453.0	489.7	523.1	545.5	556.6	559.8	558.2
80°	159.5	210.5	280.7	342.9	390.8	430.6	460.9	484.9	494.4	491.2	476.9
82.5°	122.8	169.1	231.3	285.5	330.2	366.8	398.7	413.1	414.7	406.7	394.0
85°	87.7	122.8	175.4	221.7	263.2	290.3	309.4	320.6	323.8	317.4	303.0
87.5°	49.4	71.8	103.7	137.2	169.1	188.2	199.4	205.7	210.5	204.2	194.6
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°	1566.3	1566.3	1566.3	1566.3	1566.3	1566.3	1566.3	1566.3
2.5°	1571.0	1575.8	1574.2	1577.4	1579.0	1579.0	1574.2	1577.4
5°	1639.6	1649.2	1655.6	1665.1	1671.5	1671.5	1673.1	1677.9
7.5°	1714.6	1730.5	1744.9	1756.1	1764.0	1767.2	1772.0	1776.8
10°	1784.8	1803.9	1819.9	1834.2	1843.8	1850.2	1854.9	1862.9
12.5°	1839.0	1861.3	1878.9	1894.8	1907.6	1917.1	1921.9	1928.3
15°	1878.9	1904.4	1925.1	1942.7	1953.8	1965.0	1969.8	1976.2
17.5°	1902.8	1928.3	1950.6	1968.2	1980.9	1992.1	1998.5	2004.9
20°	1909.2	1934.7	1958.6	1976.2	1988.9	2003.3	2009.7	2016.0
22.5°	1899.6	1925.1	1950.6	1969.8	1984.1	1998.5	2004.9	2011.2
25°	1880.5	1907.6	1933.1	1952.2	1965.0	1979.3	1987.3	1990.5
27.5°	1850.2	1877.3	1902.8	1920.3	1934.7	1949.0	1957.0	1958.6
30°	1807.1	1834.2	1859.7	1877.3	1893.2	1906.0	1914.0	1914.0
32.5°	1754.5	1780.0	1807.1	1823.0	1837.4	1850.2	1858.1	1861.3
35°	1693.8	1719.4	1744.9	1759.2	1775.2	1784.8	1791.1	1795.9
37.5°	1628.5	1654.0	1674.7	1687.5	1705.0	1711.4	1721.0	1719.4
40°	1558.3	1579.0	1598.2	1609.3	1623.7	1631.6	1641.2	1639.6
42.5°	1484.9	1505.6	1521.6	1534.4	1542.3	1550.3	1556.7	1555.1
45°	1409.9	1429.1	1443.4	1449.8	1462.6	1465.8	1472.1	1472.1
47.5°	1335.0	1350.9	1363.7	1373.3	1379.6	1382.8	1389.2	1389.2
50°	1263.2	1277.6	1285.5	1293.5	1299.9	1304.7	1307.9	1309.5
52.5°	1193.0	1204.2	1210.6	1217.0	1223.3	1226.5	1229.7	1228.1
55°	1126.0	1134.0	1138.8	1143.6	1148.4	1153.2	1153.2	1153.2
57.5°	1059.1	1063.8	1068.6	1071.8	1076.6	1079.8	1079.8	1079.8
60°	993.7	998.4	1000.0	1003.2	1008.0	1009.6	1011.2	1008.0
62.5°	929.9	931.5	933.1	934.6	939.4	942.6	942.6	941.0
65°	864.5	864.5	866.1	867.7	870.8	874.0	875.6	872.4
67.5°	800.7	800.7	802.3	802.3	807.1	810.2	811.8	811.8
70°	738.5	736.9	740.1	741.7	744.8	744.8	748.0	748.0
72.5°	676.3	674.7	677.9	677.9	681.0	682.6	682.6	682.6
75°	615.7	610.9	612.5	609.3	612.5	612.5	610.9	610.9
77.5°	550.3	539.1	535.9	529.5	529.5	529.5	526.3	526.3
80°	467.3	456.2	451.4	446.6	446.6	445.0	443.4	443.4
82.5°	384.4	374.8	370.0	365.2	368.4	363.7	365.2	366.8
85°	295.1	287.1	283.9	279.1	277.5	277.5	279.1	277.5
87.5°	191.4	183.4	183.4	178.6	181.8	177.0	172.3	175.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)