

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: P188667

Luminaire Tested: **24SR-LD2-59-C-UNV-L830-CD1-ST-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188667
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-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: 5431.0 lumens
Efficiency: N/A
Efficacy: 108.2 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

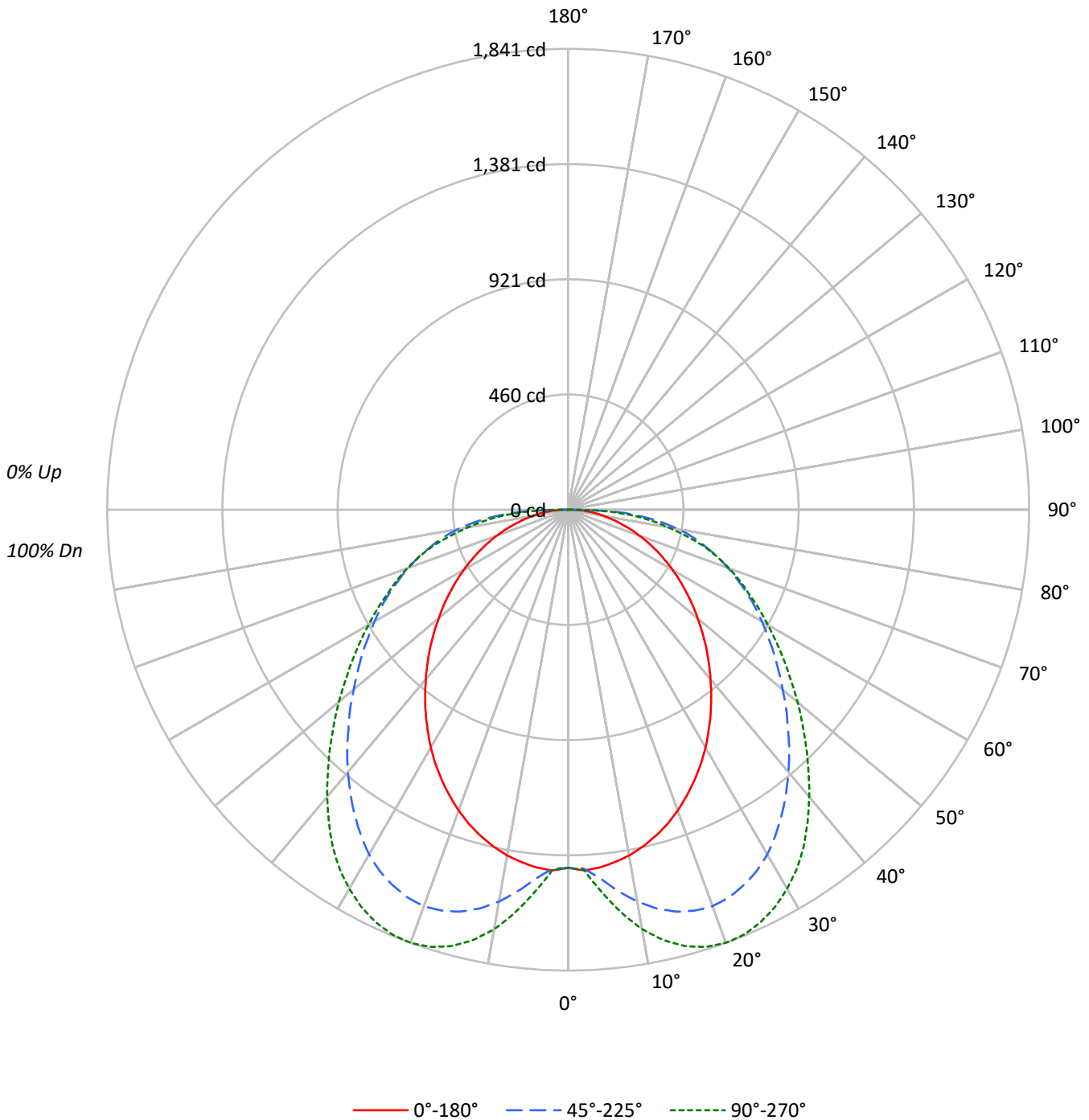
Input Watts (W): 50.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	1925	1925	1925
5°	1938	1997	2070
10°	1917	2172	2325
15°	1879	2315	2514
20°	1831	2413	2637
25°	1771	2459	2699
30°	1704	2472	2716
35°	1630	2443	2694
40°	1553	2403	2630
45°	1483	2362	2559
50°	1412	2342	2503
55°	1353	2354	2471
60°	1298	2403	2478
65°	1243	2505	2537
70°	1192	2671	2688
75°	1136	2946	2901
80°	1129	3477	3138
85°	1237	4475	3913



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	143.8	2.6
10°-20°	456.5	8.4
20°-30°	729.9	13.4
30°-40°	883.6	16.3
40°-50°	902.4	16.6
50°-60°	831.6	15.3
60°-70°	707.3	13.0
70°-80°	528.9	9.7
80°-90°	247.1	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°	1330.2	24.5
0°-40°	2213.8	40.8
0°-60°	3947.8	72.7
0°-90°	5431.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5431.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1431	1431	1431	1431	1431	
5°	1435	1427	1479	1517	1533	136
15°	1349	1470	1662	1766	1805	380
25°	1193	1418	1656	1774	1818	549
35°	992	1254	1487	1600	1640	620
45°	779	1037	1241	1321	1345	601
55°	577	838	1004	1042	1053	517
65°	390	664	787	792	797	387
75°	218	479	567	558	558	234
85°	80	253	290	257	254	84
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°	1430.6	1430.6	1430.6	1430.6	1430.6	1430.6	1430.6	1430.6	1430.6	1430.6	1430.6
2.5°	1442.2	1439.3	1435.0	1429.1	1427.7	1427.7	1426.2	1426.2	1429.1	1435.0	1443.7
5°	1435.0	1432.1	1427.7	1423.3	1424.8	1429.1	1437.9	1448.1	1462.6	1478.7	1496.2
7.5°	1420.4	1418.9	1416.0	1416.0	1427.7	1448.1	1468.5	1488.9	1512.2	1536.9	1563.2
10°	1402.9	1401.5	1400.0	1411.7	1437.9	1468.5	1497.6	1525.3	1557.3	1589.4	1620.0
12.5°	1378.1	1378.1	1382.5	1408.7	1445.2	1483.0	1519.5	1555.9	1593.8	1631.6	1665.1
15°	1349.0	1349.0	1363.6	1401.5	1448.1	1491.8	1535.5	1576.3	1620.0	1662.2	1697.2
17.5°	1317.0	1315.5	1343.2	1389.8	1442.2	1493.2	1542.8	1587.9	1633.1	1679.7	1716.1
20°	1279.1	1282.0	1318.4	1372.3	1430.6	1487.4	1539.9	1587.9	1636.0	1685.5	1720.5
22.5°	1236.8	1242.7	1287.8	1347.6	1413.1	1471.4	1526.7	1577.7	1627.3	1676.8	1711.8
25°	1193.1	1200.4	1255.8	1318.4	1388.3	1448.1	1503.4	1557.3	1606.9	1656.4	1691.4
27.5°	1146.5	1156.7	1219.4	1284.9	1354.8	1417.5	1472.8	1528.2	1577.7	1628.7	1660.8
30°	1097.0	1110.1	1177.1	1244.1	1317.0	1378.1	1433.5	1490.3	1541.3	1590.8	1621.4
32.5°	1044.5	1060.6	1129.0	1201.9	1273.3	1333.0	1388.3	1446.6	1494.7	1541.3	1571.9
35°	992.1	1011.0	1081.0	1153.8	1223.7	1283.5	1337.4	1395.6	1443.7	1487.4	1516.5
37.5°	938.2	961.5	1031.4	1102.8	1171.3	1231.0	1286.4	1340.3	1388.3	1429.1	1458.3
40°	884.3	910.5	980.4	1050.4	1118.8	1175.7	1229.6	1283.5	1331.5	1368.0	1395.6
42.5°	831.8	858.1	929.4	999.4	1062.0	1120.3	1174.2	1226.6	1270.3	1306.8	1331.5
45°	779.4	807.1	877.0	945.5	1008.1	1066.4	1120.3	1168.4	1210.6	1241.2	1266.0
47.5°	727.0	756.1	826.0	894.5	954.2	1011.0	1066.4	1110.1	1150.9	1181.5	1201.9
50°	674.5	706.6	775.0	845.0	903.2	960.0	1012.5	1053.3	1091.2	1118.8	1137.8
52.5°	626.4	657.0	727.0	796.9	855.2	912.0	961.5	1000.8	1034.3	1059.1	1078.0
55°	576.9	610.4	683.2	750.3	810.0	866.8	912.0	948.4	979.0	1003.7	1018.3
57.5°	528.8	566.7	638.1	705.1	766.3	820.2	863.9	898.9	926.5	946.9	960.0
60°	482.2	521.5	595.8	662.9	724.0	776.5	818.7	850.8	875.5	893.0	904.7
62.5°	435.6	480.7	553.6	623.5	681.8	732.8	772.1	801.2	824.6	840.6	847.9
65°	390.4	437.0	512.8	581.3	639.5	687.6	725.5	751.7	773.6	786.7	789.6
67.5°	346.7	396.3	472.0	540.5	597.3	642.5	678.9	703.6	722.6	731.3	734.2
70°	303.0	354.0	431.2	499.7	553.6	597.3	630.8	654.1	670.1	678.9	678.9
72.5°	262.2	313.2	390.4	457.4	507.0	550.7	581.3	603.1	617.7	623.5	622.1
75°	218.5	271.0	346.7	410.8	458.9	499.7	530.3	552.1	562.3	566.7	565.2
77.5°	180.6	230.2	303.0	362.7	413.7	447.2	477.8	498.2	508.4	511.3	509.9
80°	145.7	192.3	256.4	313.2	356.9	393.3	421.0	442.9	451.6	448.7	435.6
82.5°	112.2	154.4	211.2	260.8	301.6	335.1	364.2	377.3	378.8	371.5	359.8
85°	80.1	112.2	160.2	202.5	240.4	265.1	282.6	292.8	295.7	289.9	276.8
87.5°	45.2	65.6	94.7	125.3	154.4	171.9	182.1	187.9	192.3	186.5	177.7
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°	1430.6	1430.6	1430.6	1430.6	1430.6	1430.6	1430.6	1430.6
2.5°	1435.0	1439.3	1437.9	1440.8	1442.2	1442.2	1437.9	1440.8
5°	1497.6	1506.3	1512.2	1520.9	1526.7	1526.7	1528.2	1532.6
7.5°	1566.1	1580.6	1593.8	1604.0	1611.2	1614.2	1618.5	1622.9
10°	1630.2	1647.7	1662.2	1675.3	1684.1	1689.9	1694.3	1701.6
12.5°	1679.7	1700.1	1716.1	1730.7	1742.4	1751.1	1755.5	1761.3
15°	1716.1	1739.4	1758.4	1774.4	1784.6	1794.8	1799.2	1805.0
17.5°	1738.0	1761.3	1781.7	1797.7	1809.4	1819.6	1825.4	1831.2
20°	1743.8	1767.1	1789.0	1805.0	1816.7	1829.8	1835.6	1841.4
22.5°	1735.1	1758.4	1781.7	1799.2	1812.3	1825.4	1831.2	1837.0
25°	1717.6	1742.4	1765.7	1783.1	1794.8	1807.9	1815.2	1818.1
27.5°	1689.9	1714.7	1738.0	1754.0	1767.1	1780.2	1787.5	1789.0
30°	1650.6	1675.3	1698.6	1714.7	1729.2	1740.9	1748.2	1748.2
32.5°	1602.5	1625.8	1650.6	1665.1	1678.3	1689.9	1697.2	1700.1
35°	1547.1	1570.4	1593.8	1606.9	1621.4	1630.2	1636.0	1640.4
37.5°	1487.4	1510.7	1529.7	1541.3	1557.3	1563.2	1571.9	1570.4
40°	1423.3	1442.2	1459.7	1469.9	1483.0	1490.3	1499.1	1497.6
42.5°	1356.3	1375.2	1389.8	1401.5	1408.7	1416.0	1421.9	1420.4
45°	1287.8	1305.3	1318.4	1324.2	1335.9	1338.8	1344.6	1344.6
47.5°	1219.4	1233.9	1245.6	1254.3	1260.1	1263.1	1268.9	1268.9
50°	1153.8	1166.9	1174.2	1181.5	1187.3	1191.7	1194.6	1196.0
52.5°	1089.7	1099.9	1105.7	1111.6	1117.4	1120.3	1123.2	1121.7
55°	1028.5	1035.8	1040.2	1044.5	1048.9	1053.3	1053.3	1053.3
57.5°	967.3	971.7	976.1	979.0	983.4	986.3	986.3	986.3
60°	907.6	912.0	913.4	916.3	920.7	922.2	923.6	920.7
62.5°	849.3	850.8	852.2	853.7	858.1	861.0	861.0	859.5
65°	789.6	789.6	791.1	792.5	795.4	798.3	799.8	796.9
67.5°	731.3	731.3	732.8	732.8	737.1	740.1	741.5	741.5
70°	674.5	673.0	676.0	677.4	680.3	680.3	683.2	683.2
72.5°	617.7	616.2	619.1	619.1	622.1	623.5	623.5	623.5
75°	562.3	558.0	559.4	556.5	559.4	559.4	558.0	558.0
77.5°	502.6	492.4	489.5	483.7	483.7	483.7	480.7	480.7
80°	426.8	416.6	412.3	407.9	407.9	406.5	405.0	405.0
82.5°	351.1	342.4	338.0	333.6	336.5	332.2	333.6	335.1
85°	269.5	262.2	259.3	254.9	253.5	253.5	254.9	253.5
87.5°	174.8	167.5	167.5	163.2	166.1	161.7	157.3	160.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)