

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: P188592

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188592
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24637)
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-PL-U
Description: METALUX 2X4 SKYRIDGE LED FIXTURE WITH PEARL SKYTRIM.

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

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6041.0 lumens
Efficiency: N/A
Efficacy: 108.8 lumens/watt
Spacing Criteria (0/90/45): 1.29 / 1.98 / 1.87
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

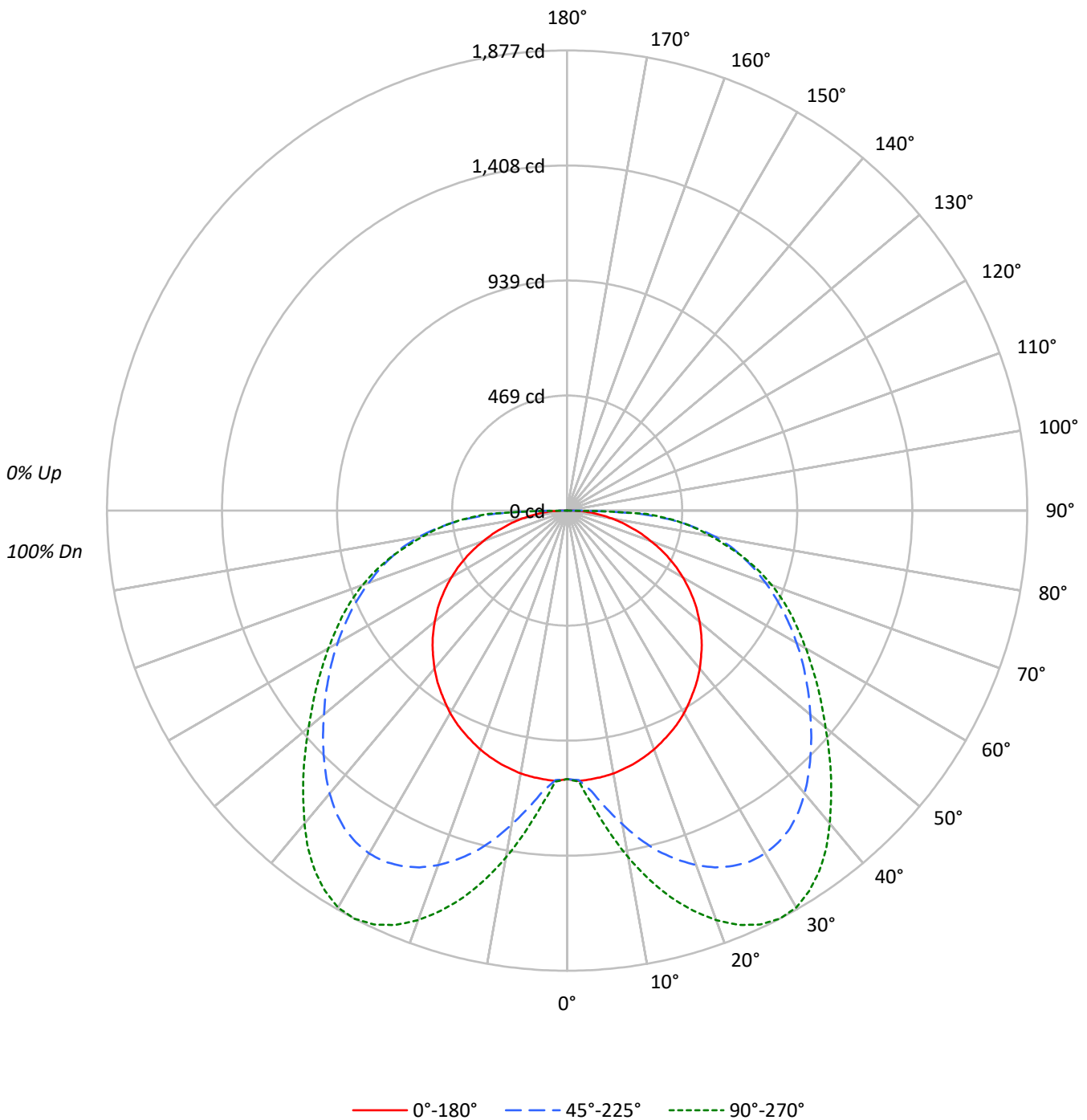
Input Watts (W): 55.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P188592

CATALOG NUMBER: 24SR-LD2-64-C-UNV-L830-CD1-PL-U

Luminous Intensity Polar Plot





TEST NUMBER: P188592

CATALOG NUMBER: 24SR-LD2-64-C-UNV-L830-CD1-PL-U

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	106	100	95	90	103	98	93	88	93	89	85	89	86	83	86	83	80	78
2	95	85	77	70	92	83	76	70	80	73	68	76	71	66	73	69	65	62
3	86	74	64	57	83	72	63	56	69	61	55	66	60	54	63	58	53	51
4	78	64	55	47	75	63	54	47	60	52	46	58	51	45	56	50	45	42
5	71	57	47	40	69	56	47	40	54	45	39	52	44	39	50	43	38	36
6	65	51	41	34	63	50	41	34	48	40	34	46	39	33	45	38	33	31
7	60	46	36	30	59	45	36	30	43	35	29	42	35	29	40	34	29	27
8	56	42	32	26	54	41	32	26	39	32	26	38	31	26	37	30	26	23
9	52	38	29	23	51	37	29	23	36	28	23	35	28	23	34	27	23	21
10	49	35	26	21	48	34	26	21	33	26	21	32	25	21	31	25	20	19

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1474	1474	1474
5°	1486	1553	1633
10°	1488	1776	1963
15°	1486	2004	2275
20°	1484	2203	2546
25°	1482	2375	2765
30°	1482	2510	2904
35°	1477	2601	2947
40°	1479	2647	2927
45°	1478	2673	2895
50°	1476	2710	2881
55°	1474	2787	2925
60°	1468	2910	3025
65°	1457	3097	3214
70°	1430	3388	3495
75°	1409	3872	3896
80°	1421	4745	4597
85°	1551	6573	6697



TEST NUMBER: P188592

CATALOG NUMBER: 24SR-LD2-64-C-UNV-L830-CD1-PL-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	113.9	1.9
10°-20°	395.7	6.5
20°-30°	701.3	11.6
30°-40°	922.9	15.3
40°-50°	1000.8	16.6
50°-60°	974.2	16.1
60°-70°	875.3	14.5
70°-80°	693.4	11.5
80°-90°	363.4	6.0
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°	1210.9	20.0
0°-40°	2133.9	35.3
0°-60°	4108.9	68.0
0°-90°	6041.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6041.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1096	1096	1096	1096	1096	
5°	1100	1100	1150	1194	1209	105
15°	1067	1206	1438	1583	1633	301
25°	998	1271	1600	1793	1863	460
35°	899	1238	1584	1745	1794	563
45°	777	1124	1405	1498	1521	599
55°	628	977	1188	1230	1247	561
65°	458	819	973	991	1010	452
75°	271	616	745	746	750	288
85°	100	327	426	427	434	107
90°	0	0	0	0	0	



TEST NUMBER: P188592

CATALOG NUMBER: 24SR-LD2-64-C-UNV-L830-CD1-PL-U

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1095.6	1095.6	1095.6	1095.6	1095.6	1095.6	1095.6	1095.6	1095.6	1095.6	1095.6
2.5°	1103.6	1102.0	1100.4	1098.8	1097.2	1095.6	1095.6	1095.6	1097.2	1100.4	1105.2
5°	1100.4	1098.8	1097.2	1097.2	1098.8	1102.0	1111.6	1122.7	1133.9	1149.8	1167.4
7.5°	1095.6	1094.0	1094.0	1097.2	1110.0	1129.1	1151.4	1175.3	1199.3	1224.8	1248.7
10°	1089.2	1087.6	1089.2	1103.6	1132.3	1164.2	1197.7	1231.2	1263.1	1299.7	1333.2
12.5°	1078.1	1078.1	1086.0	1114.7	1156.2	1199.3	1242.3	1287.0	1328.4	1373.1	1411.4
15°	1066.9	1066.9	1084.4	1127.5	1180.1	1231.2	1285.4	1338.0	1387.4	1438.5	1483.1
17.5°	1052.5	1052.5	1082.8	1137.1	1197.7	1259.9	1322.1	1381.1	1436.9	1492.7	1540.5
20°	1036.6	1039.8	1079.7	1145.0	1213.6	1283.8	1350.8	1416.2	1478.3	1538.9	1591.6
22.5°	1017.5	1023.8	1074.9	1148.2	1226.4	1299.7	1373.1	1443.3	1508.6	1575.6	1628.3
25°	998.3	1007.9	1068.5	1148.2	1231.2	1310.9	1387.4	1460.8	1531.0	1599.5	1657.0
27.5°	977.6	990.3	1058.9	1143.4	1232.8	1314.1	1393.8	1470.4	1543.7	1613.9	1672.9
30°	953.7	969.6	1044.6	1133.9	1226.4	1309.3	1392.2	1472.0	1545.3	1615.5	1672.9
32.5°	926.6	947.3	1027.0	1119.5	1213.6	1298.1	1381.1	1460.8	1535.8	1604.3	1658.6
35°	899.4	925.0	1007.9	1102.0	1196.1	1280.6	1363.5	1444.9	1518.2	1583.6	1631.4
37.5°	872.3	899.4	984.0	1078.1	1172.2	1256.7	1341.2	1419.3	1489.5	1550.1	1593.2
40°	842.0	872.3	956.9	1052.5	1145.0	1229.6	1312.5	1387.4	1451.2	1507.1	1546.9
42.5°	808.5	842.0	928.2	1023.8	1114.7	1197.7	1277.4	1347.6	1408.2	1457.6	1491.1
45°	776.7	811.7	897.9	993.5	1082.8	1164.2	1240.7	1306.1	1360.3	1405.0	1433.7
47.5°	741.6	778.2	867.6	960.0	1047.8	1127.5	1200.9	1259.9	1312.5	1350.8	1376.3
50°	704.9	744.8	834.1	926.6	1012.7	1090.8	1161.0	1215.2	1263.1	1294.9	1318.9
52.5°	668.2	709.7	799.0	891.5	977.6	1052.5	1119.5	1172.2	1213.6	1242.3	1263.1
55°	628.3	674.6	763.9	856.4	939.3	1014.3	1078.1	1125.9	1164.2	1188.1	1207.2
57.5°	586.9	636.3	728.8	821.3	904.2	976.0	1036.6	1081.3	1114.7	1135.5	1149.8
60°	545.4	598.0	690.5	783.0	864.4	936.1	993.5	1035.0	1065.3	1081.3	1092.4
62.5°	502.4	558.2	652.3	744.8	827.7	894.7	948.9	987.2	1014.3	1027.0	1038.2
65°	457.7	516.7	612.4	704.9	787.8	850.0	902.6	937.7	961.6	972.8	979.2
67.5°	411.4	473.6	570.9	663.4	743.2	803.8	853.2	888.3	907.4	917.0	921.8
70°	363.6	429.0	526.3	618.8	695.3	752.7	800.6	832.5	851.6	861.2	862.8
72.5°	319.0	382.7	481.6	570.9	644.3	700.1	744.8	778.2	797.4	805.4	805.4
75°	271.1	334.9	432.2	518.3	588.5	642.7	687.3	719.2	736.8	744.8	744.8
77.5°	229.6	288.7	379.6	462.5	527.9	580.5	623.6	657.0	676.2	684.2	684.2
80°	183.4	240.8	325.3	401.9	462.5	510.3	555.0	590.1	609.2	612.4	607.6
82.5°	141.9	194.6	266.3	334.9	390.7	435.4	480.0	508.7	523.1	526.3	524.7
85°	100.5	143.5	204.1	259.9	306.2	347.7	379.6	406.7	421.0	425.8	429.0
87.5°	59.0	82.9	121.2	164.3	199.3	226.5	245.6	269.5	283.9	293.4	303.0
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: P188592

CATALOG NUMBER: 24SR-LD2-64-C-UNV-L830-CD1-PL-U

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1095.6	1095.6	1095.6	1095.6	1095.6	1095.6	1095.6	1095.6
2.5°	1103.6	1105.2	1106.8	1106.8	1106.8	1108.4	1106.8	1106.8
5°	1173.7	1183.3	1191.3	1196.1	1200.9	1208.8	1207.2	1208.8
7.5°	1261.5	1277.4	1294.9	1304.5	1310.9	1320.5	1323.7	1323.7
10°	1352.4	1374.7	1395.4	1409.8	1419.3	1433.7	1435.3	1436.9
12.5°	1438.5	1465.6	1489.5	1505.5	1519.8	1532.6	1538.9	1540.5
15°	1511.8	1545.3	1572.4	1593.2	1607.5	1621.9	1629.8	1633.0
17.5°	1577.2	1612.3	1642.6	1666.5	1684.1	1698.4	1708.0	1711.2
20°	1628.3	1666.5	1700.0	1725.5	1746.3	1762.2	1775.0	1778.2
22.5°	1669.7	1709.6	1744.7	1773.4	1794.1	1813.2	1824.4	1829.2
25°	1700.0	1743.1	1779.8	1806.9	1829.2	1846.7	1857.9	1862.7
27.5°	1717.6	1760.6	1795.7	1822.8	1845.1	1861.1	1872.3	1877.0
30°	1717.6	1759.0	1794.1	1819.6	1840.4	1856.3	1864.3	1869.1
32.5°	1700.0	1739.9	1771.8	1794.1	1813.2	1829.2	1835.6	1838.8
35°	1671.3	1706.4	1735.1	1754.2	1770.2	1784.5	1790.9	1794.1
37.5°	1629.8	1661.7	1684.1	1701.6	1714.4	1728.7	1733.5	1736.7
40°	1577.2	1607.5	1623.5	1639.4	1650.6	1663.3	1666.5	1666.5
42.5°	1519.8	1545.3	1561.3	1572.4	1580.4	1588.4	1593.2	1593.2
45°	1459.2	1481.5	1492.7	1502.3	1510.2	1516.6	1521.4	1521.4
47.5°	1398.6	1416.2	1425.7	1432.1	1438.5	1444.9	1448.0	1448.0
50°	1338.0	1350.8	1358.7	1363.5	1369.9	1374.7	1377.9	1376.3
52.5°	1277.4	1287.0	1293.4	1298.1	1301.3	1306.1	1307.7	1309.3
55°	1216.8	1223.2	1228.0	1231.2	1237.5	1242.3	1243.9	1247.1
57.5°	1157.8	1161.0	1167.4	1169.0	1175.3	1180.1	1181.7	1183.3
60°	1097.2	1100.4	1105.2	1108.4	1116.3	1119.5	1121.1	1124.3
62.5°	1038.2	1039.8	1046.2	1052.5	1058.9	1062.1	1063.7	1065.3
65°	979.2	984.0	988.8	993.5	999.9	1004.7	1006.3	1009.5
67.5°	921.8	925.0	931.3	936.1	940.9	945.7	948.9	950.5
70°	862.8	866.0	870.7	873.9	878.7	883.5	888.3	888.3
72.5°	805.4	805.4	808.5	811.7	816.5	819.7	821.3	821.3
75°	743.2	741.6	744.8	746.3	746.3	746.3	747.9	749.5
77.5°	676.2	669.8	666.6	666.6	668.2	665.0	666.6	668.2
80°	599.6	593.3	591.7	591.7	593.3	591.7	593.3	593.3
82.5°	518.3	518.3	513.5	515.1	516.7	513.5	516.7	519.9
85°	424.2	425.8	424.2	429.0	429.0	429.0	430.6	433.8
87.5°	304.6	314.2	311.0	317.4	315.8	317.4	319.0	323.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)