

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: P188655

Luminaire Tested: **24SR-LD2-45-C-UNV-L850-CD1-ST-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188655
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-LD2-45-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: 4739.0 lumens
Efficiency: N/A
Efficacy: 129.1 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

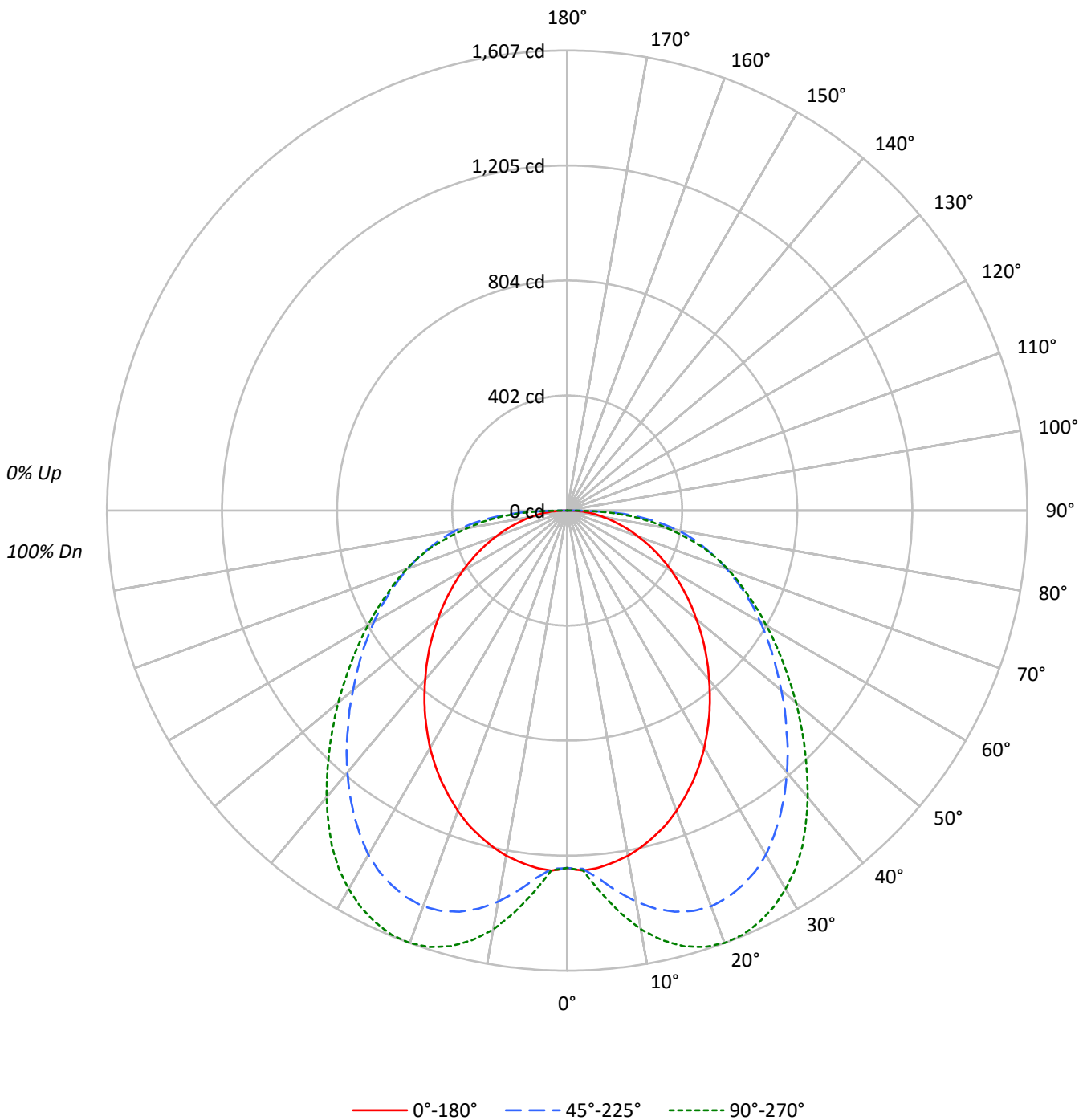
Input Watts (W): 36.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P188655

CATALOG NUMBER: 24SR-LD2-45-C-UNV-L850-CD1-ST-U

Luminous Intensity Polar Plot





TEST NUMBER: P188655

CATALOG NUMBER: 24SR-LD2-45-C-UNV-L850-CD1-ST-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	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°	1680	1680	1680
5°	1691	1743	1806
10°	1673	1895	2029
15°	1640	2020	2194
20°	1598	2106	2301
25°	1546	2146	2355
30°	1487	2157	2370
35°	1422	2132	2351
40°	1355	2097	2295
45°	1294	2061	2233
50°	1232	2044	2185
55°	1181	2055	2156
60°	1132	2097	2162
65°	1085	2185	2214
70°	1040	2330	2345
75°	991	2571	2531
80°	985	3033	2738
85°	1079	3906	3415



TEST NUMBER: P188655

CATALOG NUMBER: 24SR-LD2-45-C-UNV-L850-CD1-ST-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	125.4	2.6
10°-20°	398.3	8.4
20°-30°	636.9	13.4
30°-40°	771.0	16.3
40°-50°	787.4	16.6
50°-60°	725.6	15.3
60°-70°	617.2	13.0
70°-80°	461.5	9.7
80°-90°	215.6	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°	1160.7	24.5
0°-40°	1931.7	40.8
0°-60°	3444.7	72.7
0°-90°	4739.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4739.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1248	1248	1248	1248	1248	
5°	1252	1245	1290	1323	1337	119
15°	1177	1283	1450	1541	1575	331
25°	1041	1238	1445	1548	1586	479
35°	866	1094	1298	1396	1431	541
45°	680	905	1083	1153	1173	525
55°	503	732	876	910	919	451
65°	341	579	686	691	695	338
75°	191	418	494	487	487	204
85°	70	221	253	224	221	74
90°	0	0	0	0	0	



TEST NUMBER: P188655

CATALOG NUMBER: 24SR-LD2-45-C-UNV-L850-CD1-ST-U

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1248.3	1248.3	1248.3	1248.3	1248.3	1248.3	1248.3	1248.3	1248.3	1248.3	1248.3
2.5°	1258.5	1255.9	1252.1	1247.0	1245.8	1245.8	1244.5	1244.5	1247.0	1252.1	1259.8
5°	1252.1	1249.6	1245.8	1242.0	1243.2	1247.0	1254.7	1263.6	1276.3	1290.3	1305.5
7.5°	1239.4	1238.1	1235.6	1235.6	1245.8	1263.6	1281.4	1299.2	1319.5	1341.1	1364.0
10°	1224.2	1222.9	1221.6	1231.8	1254.7	1281.4	1306.8	1330.9	1358.9	1386.9	1413.6
12.5°	1202.5	1202.5	1206.4	1229.2	1261.0	1294.1	1325.9	1357.6	1390.7	1423.7	1453.0
15°	1177.1	1177.1	1189.8	1222.9	1263.6	1301.7	1339.8	1375.4	1413.6	1450.4	1480.9
17.5°	1149.2	1147.9	1172.0	1212.7	1258.5	1303.0	1346.2	1385.6	1425.0	1465.7	1497.5
20°	1116.1	1118.7	1150.4	1197.5	1248.3	1297.9	1343.7	1385.6	1427.6	1470.8	1501.3
22.5°	1079.2	1084.3	1123.7	1175.9	1233.1	1283.9	1332.2	1376.7	1419.9	1463.1	1493.7
25°	1041.1	1047.5	1095.8	1150.4	1211.4	1263.6	1311.9	1358.9	1402.1	1445.3	1475.9
27.5°	1000.4	1009.3	1064.0	1121.2	1182.2	1236.9	1285.2	1333.5	1376.7	1421.2	1449.2
30°	957.2	968.6	1027.1	1085.6	1149.2	1202.5	1250.9	1300.4	1344.9	1388.1	1414.8
32.5°	911.4	925.4	985.2	1048.7	1111.0	1163.1	1211.4	1262.3	1304.2	1344.9	1371.6
35°	865.7	882.2	943.2	1006.8	1067.8	1119.9	1167.0	1217.8	1259.8	1297.9	1323.3
37.5°	818.6	839.0	900.0	962.3	1022.0	1074.2	1122.5	1169.5	1211.4	1247.0	1272.5
40°	771.6	794.5	855.5	916.5	976.3	1025.9	1072.9	1119.9	1161.9	1193.7	1217.8
42.5°	725.9	748.7	811.0	872.0	926.7	977.5	1024.6	1070.3	1108.5	1140.3	1161.9
45°	680.1	704.2	765.3	825.0	879.7	930.5	977.5	1019.5	1056.4	1083.1	1104.7
47.5°	634.3	659.7	720.8	780.5	832.6	882.2	930.5	968.6	1004.2	1030.9	1048.7
50°	588.6	616.5	676.3	737.3	788.1	837.7	883.5	919.1	952.1	976.3	992.8
52.5°	546.6	573.3	634.3	695.3	746.2	795.8	839.0	873.3	902.5	924.2	940.7
55°	503.4	532.6	596.2	654.7	706.8	756.4	795.8	827.5	854.2	875.9	888.6
57.5°	461.4	494.5	556.8	615.3	668.6	715.7	753.8	784.3	808.5	826.3	837.7
60°	420.8	455.1	519.9	578.4	631.8	677.5	714.4	742.4	764.0	779.2	789.4
62.5°	380.1	419.5	483.1	544.1	594.9	639.4	673.7	699.2	719.5	733.5	739.8
65°	340.7	381.4	447.5	507.2	558.1	600.0	633.1	655.9	675.0	686.4	689.0
67.5°	302.5	345.8	411.9	471.6	521.2	560.6	592.4	614.0	630.5	638.1	640.7
70°	264.4	308.9	376.3	436.0	483.1	521.2	550.4	570.8	584.7	592.4	592.4
72.5°	228.8	273.3	340.7	399.2	442.4	480.5	507.2	526.3	539.0	544.1	542.8
75°	190.7	236.4	302.5	358.5	400.4	436.0	462.7	481.8	490.7	494.5	493.2
77.5°	157.6	200.8	264.4	316.5	361.0	390.3	417.0	434.7	443.6	446.2	444.9
80°	127.1	167.8	223.7	273.3	311.4	343.2	367.4	386.4	394.1	391.5	380.1
82.5°	97.9	134.7	184.3	227.5	263.1	292.4	317.8	329.2	330.5	324.2	314.0
85°	69.9	97.9	139.8	176.7	209.7	231.4	246.6	255.5	258.1	253.0	241.5
87.5°	39.4	57.2	82.6	109.3	134.7	150.0	158.9	164.0	167.8	162.7	155.1
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: P188655

CATALOG NUMBER: 24SR-LD2-45-C-UNV-L850-CD1-ST-U

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1248.3	1248.3	1248.3	1248.3	1248.3	1248.3	1248.3	1248.3
2.5°	1252.1	1255.9	1254.7	1257.2	1258.5	1258.5	1254.7	1257.2
5°	1306.8	1314.4	1319.5	1327.1	1332.2	1332.2	1333.5	1337.3
7.5°	1366.5	1379.2	1390.7	1399.6	1405.9	1408.5	1412.3	1416.1
10°	1422.5	1437.7	1450.4	1461.9	1469.5	1474.6	1478.4	1484.8
12.5°	1465.7	1483.5	1497.5	1510.2	1520.3	1528.0	1531.8	1536.9
15°	1497.5	1517.8	1534.3	1548.3	1557.2	1566.1	1569.9	1575.0
17.5°	1516.5	1536.9	1554.7	1568.7	1578.8	1587.7	1592.8	1597.9
20°	1521.6	1542.0	1561.0	1575.0	1585.2	1596.6	1601.7	1606.8
22.5°	1514.0	1534.3	1554.7	1569.9	1581.4	1592.8	1597.9	1603.0
25°	1498.7	1520.3	1540.7	1555.9	1566.1	1577.6	1583.9	1586.5
27.5°	1474.6	1496.2	1516.5	1530.5	1542.0	1553.4	1559.8	1561.0
30°	1440.3	1461.9	1482.2	1496.2	1508.9	1519.1	1525.4	1525.4
32.5°	1398.3	1418.7	1440.3	1453.0	1464.4	1474.6	1480.9	1483.5
35°	1350.0	1370.3	1390.7	1402.1	1414.8	1422.5	1427.6	1431.4
37.5°	1297.9	1318.2	1334.8	1344.9	1358.9	1364.0	1371.6	1370.3
40°	1242.0	1258.5	1273.7	1282.6	1294.1	1300.4	1308.1	1306.8
42.5°	1183.5	1200.0	1212.7	1222.9	1229.2	1235.6	1240.7	1239.4
45°	1123.7	1139.0	1150.4	1155.5	1165.7	1168.2	1173.3	1173.3
47.5°	1064.0	1076.7	1086.9	1094.5	1099.6	1102.1	1107.2	1107.2
50°	1006.8	1018.2	1024.6	1030.9	1036.0	1039.8	1042.4	1043.7
52.5°	950.9	959.8	964.8	969.9	975.0	977.5	980.1	978.8
55°	897.5	903.8	907.6	911.4	915.3	919.1	919.1	919.1
57.5°	844.1	847.9	851.7	854.2	858.1	860.6	860.6	860.6
60°	792.0	795.8	797.0	799.6	803.4	804.7	805.9	803.4
62.5°	741.1	742.4	743.6	744.9	748.7	751.3	751.3	750.0
65°	689.0	689.0	690.3	691.5	694.1	696.6	697.9	695.3
67.5°	638.1	638.1	639.4	639.4	643.2	645.8	647.0	647.0
70°	588.6	587.3	589.8	591.1	593.6	593.6	596.2	596.2
72.5°	539.0	537.7	540.3	540.3	542.8	544.1	544.1	544.1
75°	490.7	486.9	488.1	485.6	488.1	488.1	486.9	486.9
77.5°	438.6	429.7	427.1	422.0	422.0	422.0	419.5	419.5
80°	372.5	363.6	359.7	355.9	355.9	354.7	353.4	353.4
82.5°	306.4	298.7	294.9	291.1	293.6	289.8	291.1	292.4
85°	235.2	228.8	226.3	222.5	221.2	221.2	222.5	221.2
87.5°	152.5	146.2	146.2	142.4	144.9	141.1	137.3	139.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)