

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: P188625

Luminaire Tested: **24SR-LD2-53-C-UNV-L850-CD1-SO-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188625
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24785)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24SR-LD2-53-C-UNV-L850-CD1-SO-U
Description: METALUX 2X4 SKYRIDGE LED FIXTURE WITH STORARO ORANGE SKYTRIM.

Light Source: EATON LED 5000K
Ballast/Driver: OSRAM ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4334.0 lumens
Efficiency: N/A
Efficacy: 100.6 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.85 / 1.72
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

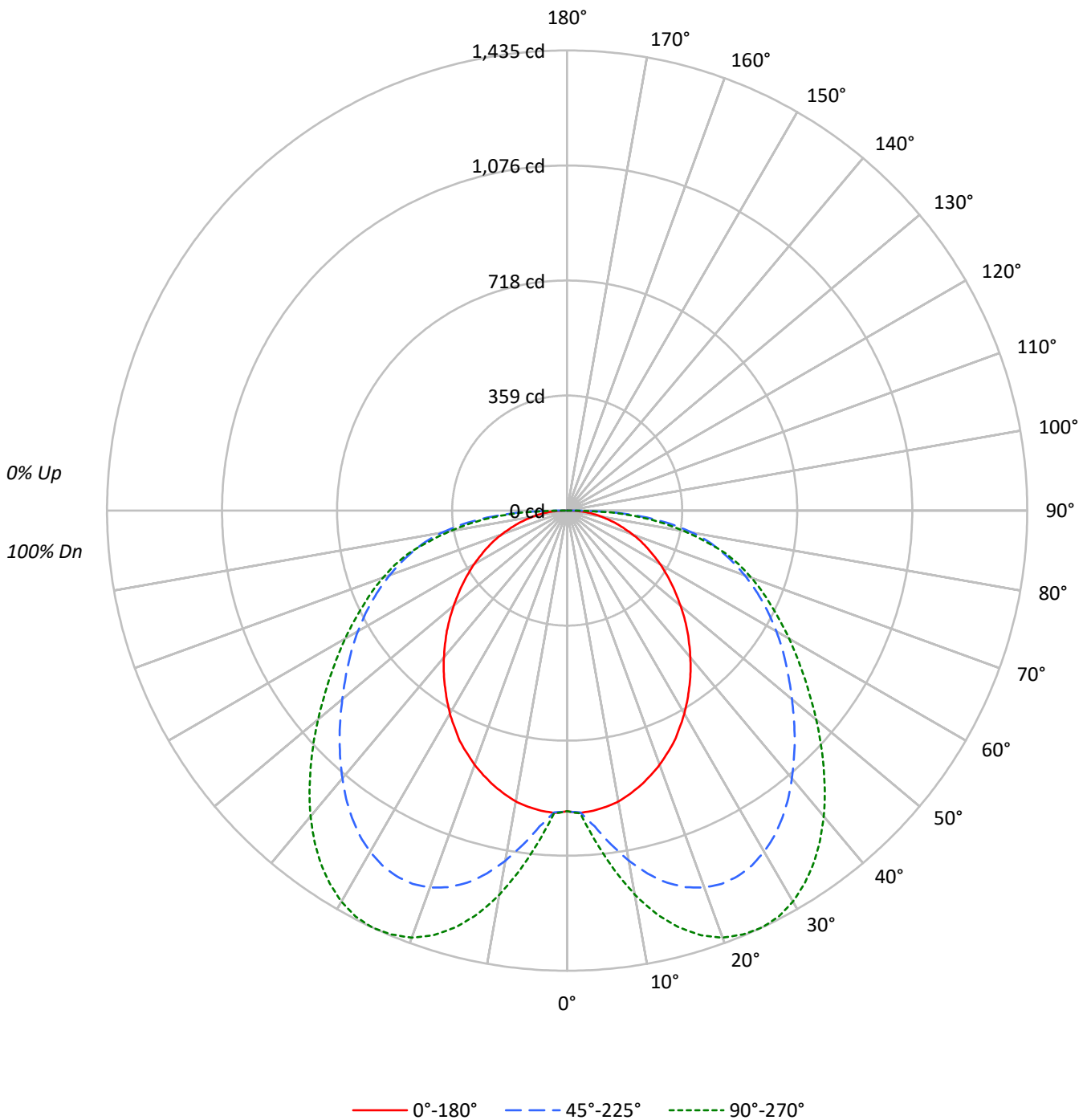
Input Watts (W): 43.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P188625

CATALOG NUMBER: 24SR-LD2-53-C-UNV-L850-CD1-SO-U

Luminous Intensity Polar Plot





TEST NUMBER: P188625

CATALOG NUMBER: 24SR-LD2-53-C-UNV-L850-CD1-SO-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	101	96	91	104	99	94	90	94	90	87	90	87	84	87	84	82	79
2	96	87	79	72	93	85	77	71	81	75	70	78	73	68	74	70	66	64
3	87	75	66	59	84	74	65	58	70	63	57	68	61	56	65	60	55	53
4	79	66	56	49	77	65	56	49	62	54	48	60	53	47	57	52	47	44
5	72	59	49	42	70	57	48	42	55	47	41	53	46	41	51	45	40	38
6	67	53	43	36	65	52	43	36	50	42	36	48	41	35	46	40	35	33
7	62	47	38	32	60	47	38	32	45	37	31	43	36	31	42	36	31	29
8	57	43	34	28	56	42	34	28	41	33	28	40	33	28	39	32	27	25
9	53	39	31	25	52	39	31	25	38	30	25	37	30	25	35	29	24	23
10	50	36	28	23	49	36	28	22	35	27	22	34	27	22	33	27	22	20

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1262	1262	1262
5°	1269	1335	1402
10°	1259	1515	1662
15°	1235	1674	1874
20°	1208	1791	2029
25°	1177	1868	2131
30°	1136	1908	2188
35°	1093	1922	2202
40°	1050	1916	2187
45°	1009	1910	2152
50°	966	1916	2123
55°	931	1954	2116
60°	903	2028	2153
65°	878	2141	2237
70°	854	2316	2404
75°	833	2601	2648
80°	836	3076	2879
85°	925	3863	3492



TEST NUMBER: P188625

CATALOG NUMBER: 24SR-LD2-53-C-UNV-L850-CD1-SO-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	97.3	2.2
10°-20°	327.7	7.6
20°-30°	548.7	12.7
30°-40°	687.0	15.9
40°-50°	720.8	16.6
50°-60°	681.1	15.7
60°-70°	596.2	13.8
70°-80°	460.4	10.6
80°-90°	214.8	5.0
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°	973.7	22.5
0°-40°	1660.7	38.3
0°-60°	3062.6	70.7
0°-90°	4334.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4334.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	938	938	938	938	938	
5°	939	939	989	1026	1038	89
15°	887	1011	1202	1310	1345	250
25°	792	1017	1258	1386	1435	364
35°	665	930	1170	1296	1341	416
45°	530	788	1004	1101	1131	409
55°	397	655	833	887	902	355
65°	276	536	673	691	703	273
75°	160	402	500	505	509	170
85°	60	211	250	231	226	63
90°	0	0	0	0	0	



TEST NUMBER: P188625

CATALOG NUMBER: 24SR-LD2-53-C-UNV-L850-CD1-SO-U

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	937.8	937.8	937.8	937.8	937.8	937.8	937.8	937.8	937.8	937.8	937.8
2.5°	943.8	942.3	940.8	937.8	936.3	936.3	936.3	936.3	937.8	942.3	945.3
5°	939.3	939.3	936.3	934.8	936.3	940.8	948.3	960.3	972.3	988.7	1002.2
7.5°	931.8	930.3	928.8	930.3	943.8	963.3	982.8	1005.2	1026.2	1050.2	1069.6
10°	921.3	919.8	921.3	933.3	960.3	991.7	1020.2	1048.7	1077.1	1108.6	1135.6
12.5°	904.9	904.9	910.8	937.8	975.3	1014.2	1051.7	1087.6	1123.6	1159.5	1191.0
15°	886.9	888.4	903.4	942.3	988.7	1033.7	1077.1	1119.1	1161.0	1201.5	1235.9
17.5°	865.9	868.9	894.4	942.3	994.7	1047.2	1096.6	1143.1	1188.0	1231.4	1267.4
20°	843.4	846.4	883.9	939.3	997.7	1054.7	1107.1	1158.0	1206.0	1250.9	1288.4
22.5°	818.0	822.5	870.4	930.3	994.7	1056.2	1110.1	1162.5	1212.0	1259.9	1297.4
25°	792.5	798.5	853.9	918.3	985.7	1048.7	1105.6	1158.0	1210.5	1258.4	1295.9
27.5°	761.0	771.5	834.4	900.4	972.3	1035.2	1092.1	1147.5	1200.0	1247.9	1285.4
30°	731.1	744.6	810.5	879.4	952.8	1015.7	1072.6	1128.1	1180.5	1228.4	1265.9
32.5°	698.1	714.6	783.5	855.4	927.3	988.7	1047.2	1102.6	1155.0	1203.0	1238.9
35°	665.2	684.6	755.0	828.4	898.9	960.3	1017.2	1072.6	1123.6	1170.0	1204.5
37.5°	632.2	653.2	723.6	798.5	865.9	925.8	982.8	1036.7	1089.1	1132.6	1167.0
40°	597.7	621.7	692.1	764.0	831.4	889.9	946.8	999.2	1048.7	1090.6	1123.6
42.5°	563.3	590.3	660.7	731.1	795.5	852.4	909.3	960.3	1006.7	1047.2	1078.6
45°	530.3	557.3	626.2	696.6	759.5	816.5	871.9	921.3	966.3	1003.7	1033.7
47.5°	495.9	525.8	594.7	663.7	723.6	780.5	834.4	880.9	924.3	958.8	987.2
50°	461.4	494.4	561.8	629.2	690.6	746.1	798.5	843.4	883.9	915.3	942.3
52.5°	428.5	462.9	531.8	597.7	657.7	713.1	764.0	807.5	844.9	873.4	897.4
55°	397.0	433.0	501.9	566.3	627.7	681.6	729.6	771.5	806.0	832.9	853.9
57.5°	365.5	404.5	473.4	539.3	597.7	651.7	698.1	737.1	768.5	794.0	812.0
60°	335.6	376.0	446.4	510.9	569.3	621.7	666.7	702.6	732.6	753.5	767.0
62.5°	304.1	347.6	418.0	483.9	542.3	591.7	635.2	669.7	695.1	713.1	725.1
65°	275.7	319.1	391.0	456.9	512.4	560.3	600.7	633.7	657.7	672.6	680.1
67.5°	247.2	292.1	364.0	428.5	482.4	528.8	566.3	597.7	618.7	630.7	636.7
70°	217.2	265.2	335.6	398.5	450.9	494.4	531.8	558.8	578.3	588.8	591.7
72.5°	187.3	236.7	307.1	368.5	418.0	459.9	494.4	519.8	537.8	545.3	546.8
75°	160.3	206.7	275.7	334.1	382.0	421.0	455.4	479.4	492.9	500.4	501.9
77.5°	133.3	178.3	244.2	299.6	341.6	379.0	412.0	434.4	447.9	453.9	453.9
80°	107.9	149.8	209.7	259.2	299.6	334.1	364.0	386.5	398.5	397.0	391.0
82.5°	83.9	122.8	173.8	217.2	253.2	284.6	314.6	328.1	332.6	328.1	323.6
85°	59.9	91.4	131.8	167.8	199.2	223.2	242.7	253.2	254.7	250.2	245.7
87.5°	34.5	50.9	74.9	101.9	118.3	133.3	149.8	155.8	155.8	158.8	149.8
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: P188625

CATALOG NUMBER: 24SR-LD2-53-C-UNV-L850-CD1-SO-U

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	937.8	937.8	937.8	937.8	937.8	937.8	937.8	937.8
2.5°	943.8	945.3	945.3	948.3	949.8	949.8	948.3	945.3
5°	1006.7	1015.7	1021.7	1030.7	1035.2	1039.7	1041.2	1038.2
7.5°	1080.1	1093.6	1105.6	1119.1	1125.1	1129.6	1135.6	1131.1
10°	1150.5	1168.5	1183.5	1198.5	1207.5	1213.5	1218.0	1216.5
12.5°	1210.5	1231.4	1247.9	1262.9	1274.9	1283.9	1288.4	1288.4
15°	1256.9	1280.9	1301.8	1318.3	1330.3	1339.3	1345.3	1345.3
17.5°	1292.9	1316.8	1339.3	1355.8	1367.8	1379.8	1385.7	1388.7
20°	1313.8	1339.3	1361.8	1379.8	1393.2	1406.7	1412.7	1417.2
22.5°	1324.3	1349.8	1373.8	1393.2	1408.2	1420.2	1427.7	1430.7
25°	1324.3	1351.3	1376.8	1396.2	1411.2	1424.7	1432.2	1435.2
27.5°	1315.3	1343.8	1369.3	1387.2	1403.7	1417.2	1424.7	1427.7
30°	1297.4	1325.8	1351.3	1369.3	1385.7	1397.7	1405.2	1408.2
32.5°	1268.9	1298.9	1322.8	1340.8	1357.3	1369.3	1376.8	1378.3
35°	1235.9	1264.4	1286.9	1304.8	1321.3	1331.8	1337.8	1340.8
37.5°	1195.5	1222.4	1244.9	1261.4	1276.4	1288.4	1294.4	1295.9
40°	1152.0	1177.5	1197.0	1212.0	1226.9	1237.4	1243.4	1244.9
42.5°	1105.6	1129.6	1147.5	1161.0	1174.5	1183.5	1188.0	1189.5
45°	1057.7	1078.6	1095.1	1107.1	1119.1	1126.6	1131.1	1131.1
47.5°	1009.7	1029.2	1042.7	1051.7	1062.2	1069.6	1074.1	1072.6
50°	961.8	978.3	988.7	997.7	1006.7	1011.2	1015.7	1014.2
52.5°	913.8	928.8	934.8	942.3	949.8	954.3	958.8	955.8
55°	867.4	877.9	883.9	889.9	895.9	900.4	903.4	901.9
57.5°	822.5	829.9	834.4	840.4	844.9	847.9	850.9	849.4
60°	774.5	780.5	783.5	789.5	794.0	797.0	800.0	800.0
62.5°	729.6	734.1	735.6	741.6	744.6	747.6	752.0	750.5
65°	681.6	686.1	689.1	693.6	696.6	699.6	704.1	702.6
67.5°	636.7	641.2	642.7	647.2	651.7	656.2	657.7	657.7
70°	591.7	594.7	596.2	602.2	603.7	608.2	611.2	611.2
72.5°	546.8	548.3	551.3	555.8	558.8	561.8	564.8	563.3
75°	498.9	501.9	503.4	506.4	506.4	509.4	509.4	509.4
77.5°	449.4	444.9	443.4	441.9	440.4	440.4	440.4	438.9
80°	382.0	377.5	376.0	373.0	373.0	373.0	373.0	371.5
82.5°	316.1	310.1	307.1	305.6	304.1	304.1	304.1	302.6
85°	239.7	233.7	232.2	230.7	230.7	229.2	227.7	226.2
87.5°	148.3	143.8	142.3	139.3	140.8	137.8	137.8	137.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)