

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: P188632

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188632
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-LD2-64-C-UNV-L830-CD1-SO-U
Description: METALUX 2X4 SKYRIDGE LED FIXTURE WITH STORARO ORANGE SKYTRIM.

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

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4614.0 lumens
Efficiency: N/A
Efficacy: 83.1 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

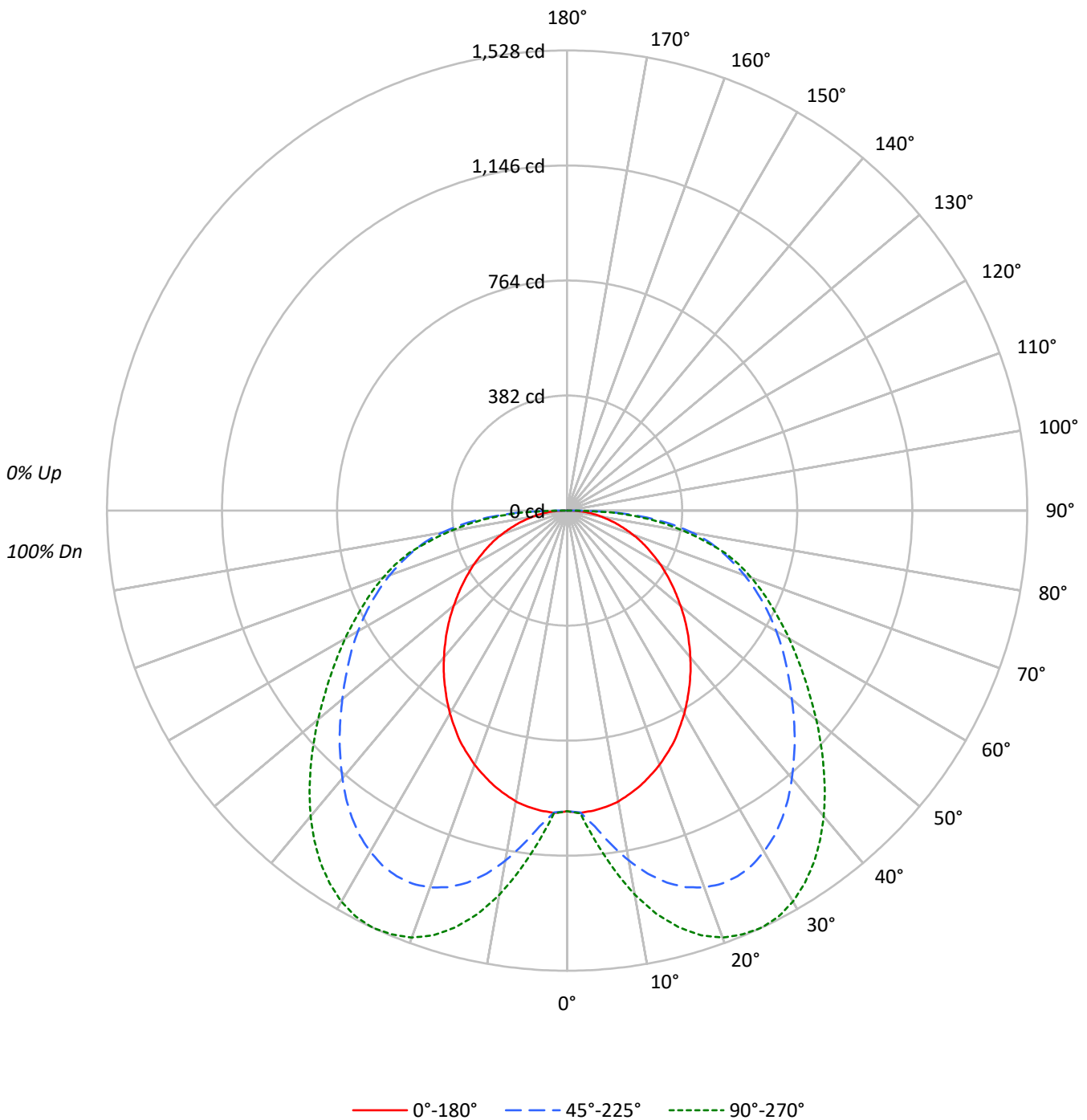
Input Watts (W): 55.5
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P188632

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

Luminous Intensity Polar Plot





TEST NUMBER: P188632

CATALOG NUMBER: 24SR-LD2-64-C-UNV-L830-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°	1343	1343	1343
5°	1351	1422	1493
10°	1340	1612	1769
15°	1315	1782	1995
20°	1286	1907	2160
25°	1253	1989	2268
30°	1209	2032	2329
35°	1163	2046	2345
40°	1118	2039	2328
45°	1074	2033	2291
50°	1028	2040	2260
55°	991	2080	2252
60°	961	2159	2292
65°	934	2280	2381
70°	910	2466	2560
75°	887	2769	2819
80°	890	3274	3064
85°	985	4111	3717



TEST NUMBER: P188632

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

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	103.6	2.2
10°-20°	348.8	7.6
20°-30°	584.1	12.7
30°-40°	731.4	15.9
40°-50°	767.3	16.6
50°-60°	725.1	15.7
60°-70°	634.7	13.8
70°-80°	490.2	10.6
80°-90°	228.7	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°	1036.6	22.5
0°-40°	1768.0	38.3
0°-60°	3260.4	70.7
0°-90°	4614.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4614.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	998	998	998	998	998	
5°	1000	999	1053	1092	1105	95
15°	944	1077	1279	1395	1432	266
25°	844	1083	1340	1476	1528	388
35°	708	990	1246	1380	1427	443
45°	565	839	1069	1172	1204	435
55°	423	697	887	944	960	378
65°	294	571	716	736	748	291
75°	171	427	533	538	542	181
85°	64	225	266	246	241	67
90°	0	0	0	0	0	



TEST NUMBER: P188632

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

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	998.4	998.4	998.4	998.4	998.4	998.4	998.4	998.4	998.4	998.4	998.4
2.5°	1004.8	1003.2	1001.6	998.4	996.8	996.8	996.8	996.8	998.4	1003.2	1006.4
5°	1000.0	1000.0	996.8	995.2	996.8	1001.6	1009.6	1022.3	1035.1	1052.6	1067.0
7.5°	992.0	990.4	988.8	990.4	1004.8	1025.5	1046.2	1070.2	1092.5	1118.0	1138.7
10°	980.9	979.3	980.9	993.6	1022.3	1055.8	1086.1	1116.4	1146.7	1180.2	1208.9
12.5°	963.3	963.3	969.7	998.4	1038.3	1079.7	1119.6	1157.9	1196.2	1234.4	1267.9
15°	944.2	945.8	961.7	1003.2	1052.6	1100.5	1146.7	1191.4	1236.0	1279.1	1315.8
17.5°	921.8	925.0	952.1	1003.2	1059.0	1114.8	1167.5	1216.9	1264.7	1311.0	1349.3
20°	897.9	901.1	941.0	1000.0	1062.2	1122.8	1178.6	1232.8	1283.9	1331.7	1371.6
22.5°	870.8	875.6	926.6	990.4	1059.0	1124.4	1181.8	1237.6	1290.3	1341.3	1381.2
25°	843.7	850.1	909.1	977.7	1049.4	1116.4	1177.0	1232.8	1288.7	1339.7	1379.6
27.5°	810.2	821.4	888.4	958.5	1035.1	1102.1	1162.7	1221.7	1277.5	1328.5	1368.4
30°	778.3	792.7	862.8	936.2	1014.3	1081.3	1141.9	1200.9	1256.8	1307.8	1347.7
32.5°	743.2	760.8	834.1	910.7	987.2	1052.6	1114.8	1173.8	1229.7	1280.7	1319.0
35°	708.1	728.9	803.8	882.0	956.9	1022.3	1082.9	1141.9	1196.2	1245.6	1282.3
37.5°	673.0	695.4	770.3	850.1	921.8	985.6	1046.2	1103.7	1159.5	1205.7	1242.4
40°	636.4	661.9	736.8	813.4	885.2	947.4	1008.0	1063.8	1116.4	1161.1	1196.2
42.5°	599.7	628.4	703.3	778.3	846.9	907.5	968.1	1022.3	1071.8	1114.8	1148.3
45°	564.6	593.3	666.7	741.6	808.6	869.2	928.2	980.9	1028.7	1068.6	1100.5
47.5°	527.9	559.8	633.2	706.5	770.3	830.9	888.4	937.8	984.0	1020.7	1051.0
50°	491.2	526.3	598.1	669.9	735.2	794.3	850.1	897.9	941.0	974.5	1003.2
52.5°	456.1	492.8	566.2	636.4	700.2	759.2	813.4	859.6	899.5	929.8	955.3
55°	422.6	460.9	534.3	602.9	668.3	725.7	776.7	821.4	858.0	886.8	909.1
57.5°	389.2	430.6	504.0	574.2	636.4	693.8	743.2	784.7	818.2	845.3	864.4
60°	357.3	400.3	475.3	543.9	606.1	661.9	709.7	748.0	779.9	802.2	816.6
62.5°	323.8	370.0	445.0	515.1	577.3	630.0	676.2	712.9	740.0	759.2	771.9
65°	293.5	339.7	416.3	486.4	545.5	596.5	639.5	674.6	700.2	716.1	724.1
67.5°	263.2	311.0	387.6	456.1	513.6	563.0	602.9	636.4	658.7	671.4	677.8
70°	231.3	282.3	357.3	424.2	480.1	526.3	566.2	594.9	615.6	626.8	630.0
72.5°	199.4	252.0	327.0	392.3	445.0	489.6	526.3	553.4	572.6	580.5	582.1
75°	170.7	220.1	293.5	355.7	406.7	448.2	484.8	510.4	524.7	532.7	534.3
77.5°	141.9	189.8	260.0	319.0	363.6	403.5	438.6	462.5	476.9	483.3	483.3
80°	114.8	159.5	223.3	275.9	319.0	355.7	387.6	411.5	424.2	422.6	416.3
82.5°	89.3	130.8	185.0	231.3	269.5	303.0	334.9	349.3	354.1	349.3	344.5
85°	63.8	97.3	140.3	178.6	212.1	237.6	258.4	269.5	271.1	266.3	261.6
87.5°	36.7	54.2	79.7	108.5	126.0	141.9	159.5	165.9	165.9	169.1	159.5
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: P188632

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

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	998.4	998.4	998.4	998.4	998.4	998.4	998.4	998.4
2.5°	1004.8	1006.4	1006.4	1009.6	1011.2	1011.2	1009.6	1006.4
5°	1071.8	1081.3	1087.7	1097.3	1102.1	1106.9	1108.4	1105.3
7.5°	1149.9	1164.3	1177.0	1191.4	1197.8	1202.5	1208.9	1204.1
10°	1224.9	1244.0	1260.0	1275.9	1285.5	1291.9	1296.6	1295.0
12.5°	1288.7	1311.0	1328.5	1344.5	1357.2	1366.8	1371.6	1371.6
15°	1338.1	1363.6	1386.0	1403.5	1416.3	1425.8	1432.2	1432.2
17.5°	1376.4	1401.9	1425.8	1443.4	1456.1	1468.9	1475.3	1478.5
20°	1398.7	1425.8	1449.8	1468.9	1483.2	1497.6	1504.0	1508.8
22.5°	1409.9	1437.0	1462.5	1483.2	1499.2	1512.0	1519.9	1523.1
25°	1409.9	1438.6	1465.7	1486.4	1502.4	1516.7	1524.7	1527.9
27.5°	1400.3	1430.6	1457.7	1476.9	1494.4	1508.8	1516.7	1519.9
30°	1381.2	1411.5	1438.6	1457.7	1475.3	1488.0	1496.0	1499.2
32.5°	1350.9	1382.8	1408.3	1427.4	1445.0	1457.7	1465.7	1467.3
35°	1315.8	1346.1	1370.0	1389.1	1406.7	1417.9	1424.2	1427.4
37.5°	1272.7	1301.4	1325.4	1342.9	1358.8	1371.6	1378.0	1379.6
40°	1226.5	1253.6	1274.3	1290.3	1306.2	1317.4	1323.8	1325.4
42.5°	1177.0	1202.5	1221.7	1236.0	1250.4	1260.0	1264.7	1266.3
45°	1126.0	1148.3	1165.9	1178.6	1191.4	1199.4	1204.1	1204.1
47.5°	1075.0	1095.7	1110.0	1119.6	1130.8	1138.7	1143.5	1141.9
50°	1023.9	1041.5	1052.6	1062.2	1071.8	1076.5	1081.3	1079.7
52.5°	972.9	988.8	995.2	1003.2	1011.2	1015.9	1020.7	1017.5
55°	923.4	934.6	941.0	947.4	953.7	958.5	961.7	960.1
57.5°	875.6	883.6	888.4	894.7	899.5	902.7	905.9	904.3
60°	824.6	830.9	834.1	840.5	845.3	848.5	851.7	851.7
62.5°	776.7	781.5	783.1	789.5	792.7	795.8	800.6	799.0
65°	725.7	730.5	733.6	738.4	741.6	744.8	749.6	748.0
67.5°	677.8	682.6	684.2	689.0	693.8	698.6	700.2	700.2
70°	630.0	633.2	634.8	641.1	642.7	647.5	650.7	650.7
72.5°	582.1	583.7	586.9	591.7	594.9	598.1	601.3	599.7
75°	531.1	534.3	535.9	539.1	539.1	542.3	542.3	542.3
77.5°	478.5	473.7	472.1	470.5	468.9	468.9	468.9	467.3
80°	406.7	401.9	400.3	397.1	397.1	397.1	397.1	395.5
82.5°	336.5	330.1	327.0	325.4	323.8	323.8	323.8	322.2
85°	255.2	248.8	247.2	245.6	245.6	244.0	242.4	240.8
87.5°	157.9	153.1	151.5	148.3	149.9	146.7	146.7	146.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)