

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: P188630

Luminaire Tested: **24SR-LD2-59-C-UNV-L850-CD1-SO-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P188630  
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-LD2-59-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: 4823.0 lumens  
Efficiency: N/A  
Efficacy: 96.1 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

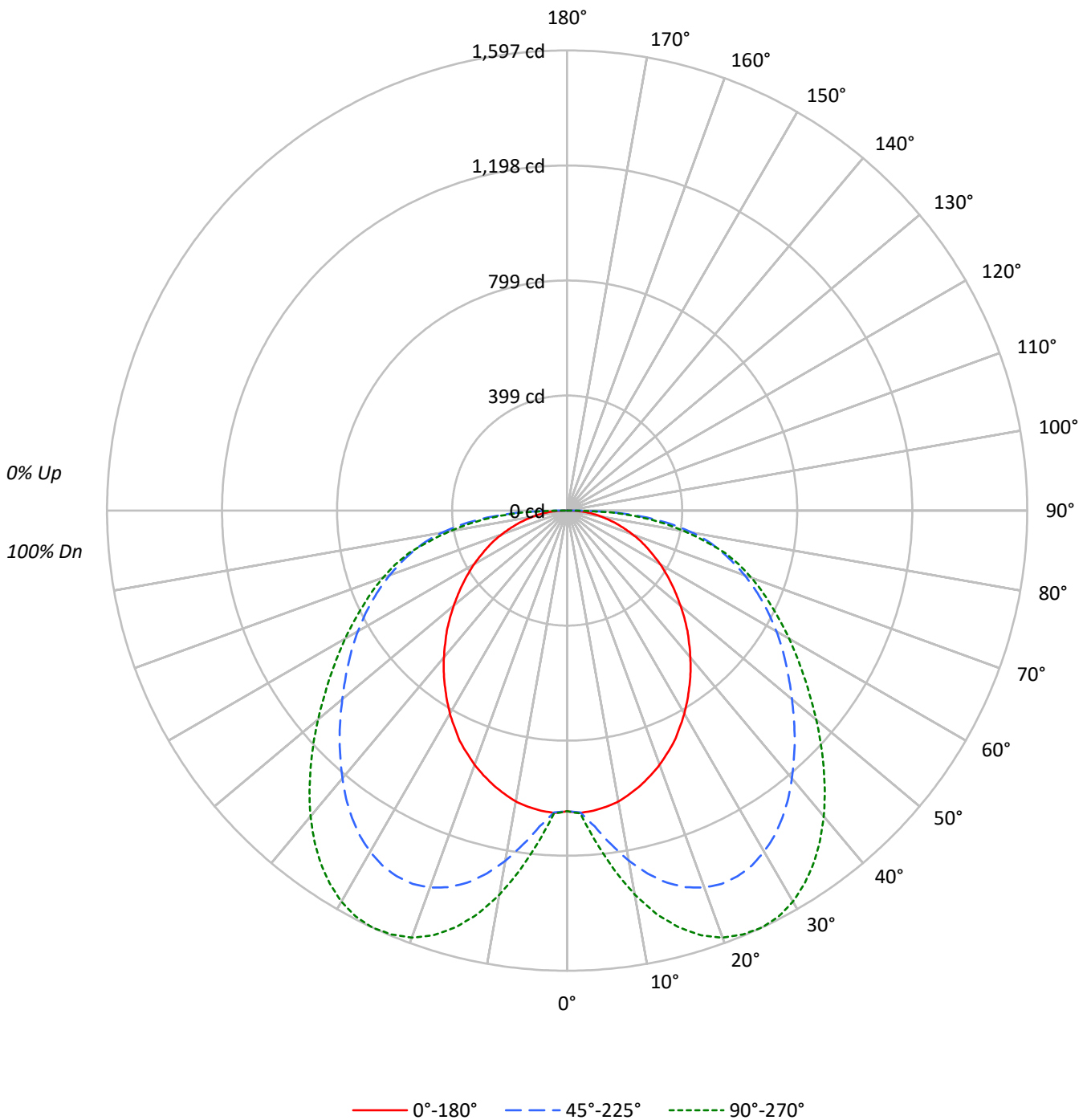
Input Watts (W): 50.2  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	1404	1404	1404
5°	1412	1486	1560
10°	1401	1686	1849
15°	1375	1862	2085
20°	1344	1993	2258
25°	1309	2079	2371
30°	1264	2124	2435
35°	1216	2139	2451
40°	1168	2132	2433
45°	1123	2125	2395
50°	1075	2132	2362
55°	1036	2174	2354
60°	1005	2257	2396
65°	977	2383	2489
70°	951	2578	2676
75°	927	2895	2947
80°	930	3423	3203
85°	1030	4298	3886



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	108.3	2.2
10°-20°	364.6	7.6
20°-30°	610.6	12.7
30°-40°	764.6	15.9
40°-50°	802.1	16.6
50°-60°	757.9	15.7
60°-70°	663.4	13.8
70°-80°	512.4	10.6
80°-90°	239.1	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°	1083.5	22.5
0°-40°	1848.1	38.3
0°-60°	3408.1	70.7
0°-90°	4823.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4823.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1044	1044	1044	1044	1044	
5°	1045	1044	1100	1142	1155	99
15°	987	1125	1337	1458	1497	278
25°	882	1132	1400	1543	1597	405
35°	740	1034	1302	1442	1492	463
45°	590	877	1117	1225	1259	455
55°	442	728	927	987	1004	396
65°	307	597	748	769	782	304
75°	178	447	557	562	567	189
85°	67	235	278	258	252	70
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°	1043.6	1043.6	1043.6	1043.6	1043.6	1043.6	1043.6	1043.6	1043.6	1043.6	1043.6
2.5°	1050.3	1048.6	1047.0	1043.6	1042.0	1042.0	1042.0	1042.0	1043.6	1048.6	1052.0
5°	1045.3	1045.3	1042.0	1040.3	1042.0	1047.0	1055.3	1068.6	1082.0	1100.3	1115.3
7.5°	1037.0	1035.3	1033.6	1035.3	1050.3	1072.0	1093.6	1118.6	1142.0	1168.7	1190.3
10°	1025.3	1023.6	1025.3	1038.6	1068.6	1103.6	1135.3	1167.0	1198.7	1233.7	1263.7
12.5°	1006.9	1006.9	1013.6	1043.6	1085.3	1128.6	1170.3	1210.3	1250.3	1290.4	1325.4
15°	986.9	988.6	1005.3	1048.6	1100.3	1150.3	1198.7	1245.3	1292.0	1337.0	1375.4
17.5°	963.6	966.9	995.3	1048.6	1107.0	1165.3	1220.3	1272.0	1322.0	1370.4	1410.4
20°	938.6	941.9	983.6	1045.3	1110.3	1173.7	1232.0	1288.7	1342.0	1392.1	1433.7
22.5°	910.3	915.3	968.6	1035.3	1107.0	1175.3	1235.3	1293.7	1348.7	1402.1	1443.7
25°	881.9	888.6	950.3	1022.0	1097.0	1167.0	1230.3	1288.7	1347.0	1400.4	1442.1
27.5°	846.9	858.6	928.6	1001.9	1082.0	1152.0	1215.3	1277.0	1335.4	1388.7	1430.4
30°	813.6	828.6	901.9	978.6	1060.3	1130.3	1193.7	1255.3	1313.7	1367.0	1408.7
32.5°	776.9	795.2	871.9	951.9	1032.0	1100.3	1165.3	1227.0	1285.4	1338.7	1378.7
35°	740.2	761.9	840.2	921.9	1000.3	1068.6	1132.0	1193.7	1250.3	1302.0	1340.4
37.5°	703.5	726.9	805.2	888.6	963.6	1030.3	1093.6	1153.7	1212.0	1260.3	1298.7
40°	665.2	691.9	770.2	850.2	925.3	990.3	1053.6	1112.0	1167.0	1213.7	1250.3
42.5°	626.8	656.8	735.2	813.6	885.2	948.6	1011.9	1068.6	1120.3	1165.3	1200.3
45°	590.2	620.2	696.9	775.2	845.2	908.6	970.3	1025.3	1075.3	1117.0	1150.3
47.5°	551.8	585.2	661.9	738.5	805.2	868.6	928.6	980.3	1028.6	1067.0	1098.6
50°	513.5	550.2	625.2	700.2	768.5	830.2	888.6	938.6	983.6	1018.6	1048.6
52.5°	476.8	515.1	591.8	665.2	731.9	793.6	850.2	898.6	940.3	971.9	998.6
55°	441.8	481.8	558.5	630.2	698.5	758.5	811.9	858.6	896.9	926.9	950.3
57.5°	406.8	450.1	526.8	600.2	665.2	725.2	776.9	820.2	855.2	883.6	903.6
60°	373.4	418.4	496.8	568.5	633.5	691.9	741.9	781.9	815.2	838.6	853.6
62.5°	338.4	386.8	465.1	538.5	603.5	658.5	706.9	745.2	773.5	793.6	806.9
65°	306.8	355.1	435.1	508.5	570.2	623.5	668.5	705.2	731.9	748.5	756.9
67.5°	275.1	325.1	405.1	476.8	536.8	588.5	630.2	665.2	688.5	701.9	708.5
70°	241.7	295.1	373.4	443.5	501.8	550.2	591.8	621.8	643.5	655.2	658.5
72.5°	208.4	263.4	341.8	410.1	465.1	511.8	550.2	578.5	598.5	606.8	608.5
75°	178.4	230.1	306.8	371.8	425.1	468.5	506.8	533.5	548.5	556.8	558.5
77.5°	148.4	198.4	271.7	333.4	380.1	421.8	458.5	483.5	498.5	505.1	505.1
80°	120.0	166.7	233.4	288.4	333.4	371.8	405.1	430.1	443.5	441.8	435.1
82.5°	93.4	136.7	193.4	241.7	281.7	316.8	350.1	365.1	370.1	365.1	360.1
85°	66.7	101.7	146.7	186.7	221.7	248.4	270.1	281.7	283.4	278.4	273.4
87.5°	38.3	56.7	83.4	113.4	131.7	148.4	166.7	173.4	173.4	176.7	166.7
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°	1043.6	1043.6	1043.6	1043.6	1043.6	1043.6	1043.6	1043.6
2.5°	1050.3	1052.0	1052.0	1055.3	1057.0	1057.0	1055.3	1052.0
5°	1120.3	1130.3	1137.0	1147.0	1152.0	1157.0	1158.7	1155.3
7.5°	1202.0	1217.0	1230.3	1245.3	1252.0	1257.0	1263.7	1258.7
10°	1280.4	1300.4	1317.0	1333.7	1343.7	1350.4	1355.4	1353.7
12.5°	1347.0	1370.4	1388.7	1405.4	1418.7	1428.7	1433.7	1433.7
15°	1398.7	1425.4	1448.7	1467.1	1480.4	1490.4	1497.1	1497.1
17.5°	1438.7	1465.4	1490.4	1508.8	1522.1	1535.4	1542.1	1545.4
20°	1462.1	1490.4	1515.4	1535.4	1550.4	1565.4	1572.1	1577.1
22.5°	1473.7	1502.1	1528.8	1550.4	1567.1	1580.4	1588.8	1592.1
25°	1473.7	1503.8	1532.1	1553.8	1570.4	1585.4	1593.8	1597.1
27.5°	1463.7	1495.4	1523.8	1543.8	1562.1	1577.1	1585.4	1588.8
30°	1443.7	1475.4	1503.8	1523.8	1542.1	1555.4	1563.8	1567.1
32.5°	1412.1	1445.4	1472.1	1492.1	1510.4	1523.8	1532.1	1533.8
35°	1375.4	1407.1	1432.1	1452.1	1470.4	1482.1	1488.7	1492.1
37.5°	1330.4	1360.4	1385.4	1403.7	1420.4	1433.7	1440.4	1442.1
40°	1282.0	1310.4	1332.0	1348.7	1365.4	1377.0	1383.7	1385.4
42.5°	1230.3	1257.0	1277.0	1292.0	1307.0	1317.0	1322.0	1323.7
45°	1177.0	1200.3	1218.7	1232.0	1245.3	1253.7	1258.7	1258.7
47.5°	1123.6	1145.3	1160.3	1170.3	1182.0	1190.3	1195.3	1193.7
50°	1070.3	1088.6	1100.3	1110.3	1120.3	1125.3	1130.3	1128.6
52.5°	1016.9	1033.6	1040.3	1048.6	1057.0	1062.0	1067.0	1063.6
55°	965.3	976.9	983.6	990.3	996.9	1001.9	1005.3	1003.6
57.5°	915.3	923.6	928.6	935.3	940.3	943.6	946.9	945.3
60°	861.9	868.6	871.9	878.6	883.6	886.9	890.2	890.2
62.5°	811.9	816.9	818.6	825.2	828.6	831.9	836.9	835.2
65°	758.5	763.5	766.9	771.9	775.2	778.5	783.6	781.9
67.5°	708.5	713.5	715.2	720.2	725.2	730.2	731.9	731.9
70°	658.5	661.9	663.5	670.2	671.9	676.9	680.2	680.2
72.5°	608.5	610.2	613.5	618.5	621.8	625.2	628.5	626.8
75°	555.2	558.5	560.2	563.5	563.5	566.8	566.8	566.8
77.5°	500.1	495.1	493.5	491.8	490.1	490.1	490.1	488.5
80°	425.1	420.1	418.4	415.1	415.1	415.1	415.1	413.4
82.5°	351.8	345.1	341.8	340.1	338.4	338.4	338.4	336.8
85°	266.7	260.1	258.4	256.7	256.7	255.1	253.4	251.7
87.5°	165.0	160.0	158.4	155.0	156.7	153.4	153.4	153.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)