

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: P188660

Luminaire Tested: **24SR-LD2-48-C-UNV-L850-CD1-ST-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188660
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-LD2-48-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: 5047.0 lumens
Efficiency: N/A
Efficacy: 132.1 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

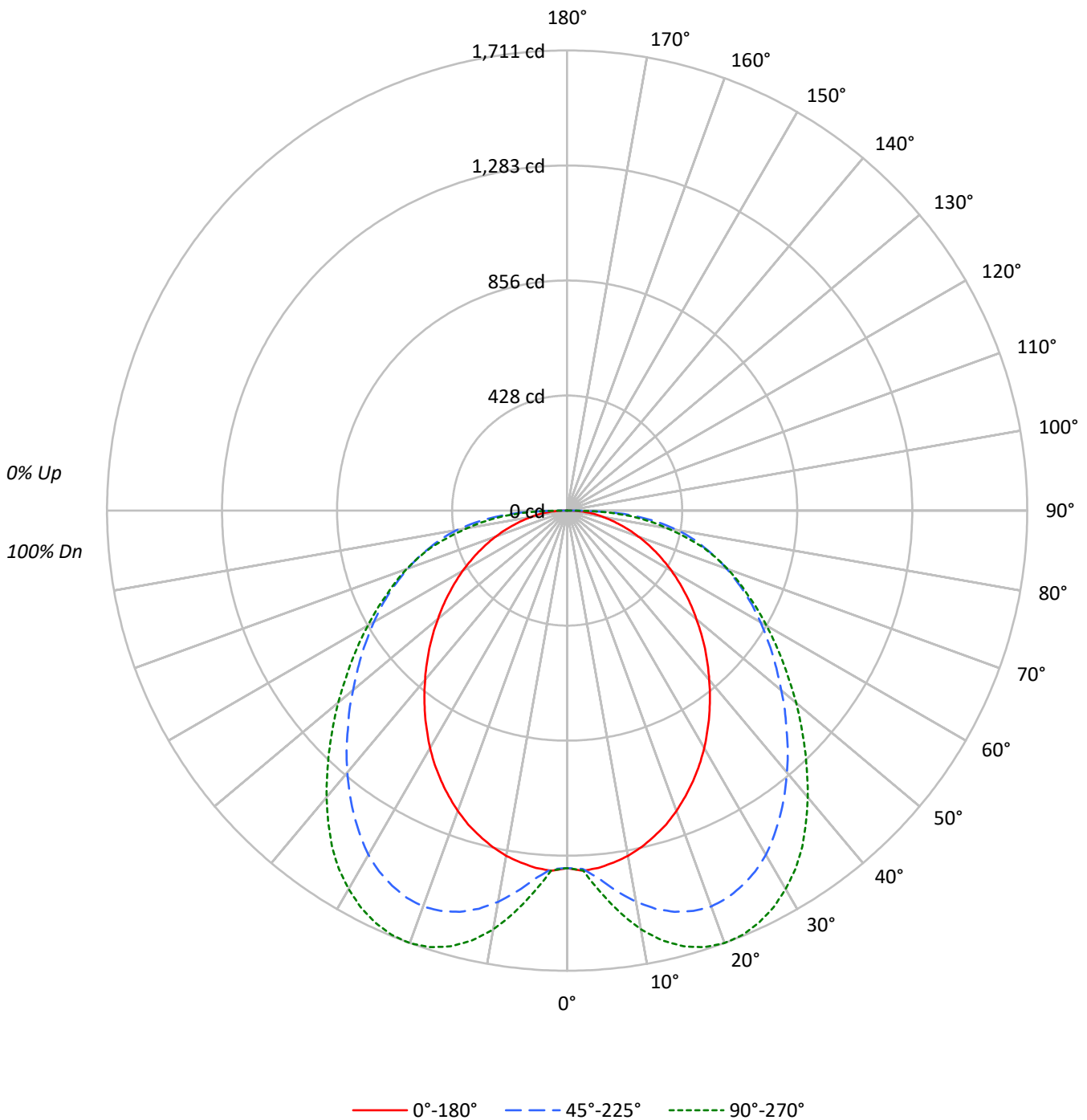
Input Watts (W): 38.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	1789	1789	1789
5°	1801	1856	1924
10°	1781	2018	2160
15°	1746	2152	2337
20°	1702	2243	2450
25°	1646	2285	2508
30°	1584	2297	2524
35°	1514	2270	2504
40°	1443	2233	2444
45°	1378	2195	2378
50°	1312	2176	2327
55°	1258	2188	2296
60°	1206	2233	2302
65°	1155	2328	2358
70°	1108	2482	2498
75°	1056	2738	2695
80°	1049	3231	2916
85°	1150	4159	3637



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	133.6	2.6
10°-20°	424.2	8.4
20°-30°	678.3	13.4
30°-40°	821.2	16.3
40°-50°	838.6	16.6
50°-60°	772.8	15.3
60°-70°	657.3	13.0
70°-80°	491.5	9.7
80°-90°	229.6	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°	1236.1	24.5
0°-40°	2057.3	40.8
0°-60°	3668.6	72.7
0°-90°	5047.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5047.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1329	1329	1329	1329	1329	
5°	1334	1326	1374	1409	1424	126
15°	1254	1366	1545	1642	1677	353
25°	1109	1318	1539	1649	1690	510
35°	922	1165	1382	1487	1524	576
45°	724	964	1153	1228	1250	559
55°	536	779	933	969	979	480
65°	363	617	731	736	740	360
75°	203	445	527	519	518	217
85°	74	235	269	239	236	78
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°	1329.4	1329.4	1329.4	1329.4	1329.4	1329.4	1329.4	1329.4	1329.4	1329.4	1329.4
2.5°	1340.3	1337.6	1333.5	1328.1	1326.7	1326.7	1325.4	1325.4	1328.1	1333.5	1341.6
5°	1333.5	1330.8	1326.7	1322.7	1324.0	1328.1	1336.2	1345.7	1359.2	1374.1	1390.4
7.5°	1320.0	1318.6	1315.9	1315.9	1326.7	1345.7	1364.6	1383.6	1405.3	1428.3	1452.6
10°	1303.7	1302.4	1301.0	1311.8	1336.2	1364.6	1391.7	1417.4	1447.2	1477.0	1505.4
12.5°	1280.7	1280.7	1284.8	1309.1	1343.0	1378.2	1412.0	1445.9	1481.1	1516.3	1547.4
15°	1253.6	1253.6	1267.2	1302.4	1345.7	1386.3	1426.9	1464.8	1505.4	1544.7	1577.2
17.5°	1223.8	1222.5	1248.2	1291.5	1340.3	1387.7	1433.7	1475.7	1517.6	1560.9	1594.8
20°	1188.6	1191.4	1225.2	1275.3	1329.4	1382.2	1431.0	1475.7	1520.3	1566.4	1598.9
22.5°	1149.4	1154.8	1196.8	1252.3	1313.2	1367.4	1418.8	1466.2	1512.2	1558.2	1590.7
25°	1108.8	1115.5	1167.0	1225.2	1290.2	1345.7	1397.1	1447.2	1493.3	1539.3	1571.8
27.5°	1065.5	1074.9	1133.1	1194.1	1259.0	1317.3	1368.7	1420.1	1466.2	1513.6	1543.3
30°	1019.4	1031.6	1093.9	1156.2	1223.8	1280.7	1332.2	1384.9	1432.3	1478.4	1506.8
32.5°	970.7	985.6	1049.2	1116.9	1183.2	1238.7	1290.2	1344.3	1389.0	1432.3	1460.8
35°	921.9	939.5	1004.5	1072.2	1137.2	1192.7	1242.8	1297.0	1341.6	1382.2	1409.3
37.5°	871.9	893.5	958.5	1024.8	1088.5	1144.0	1195.4	1245.5	1290.2	1328.1	1355.2
40°	821.8	846.1	911.1	976.1	1039.7	1092.5	1142.6	1192.7	1237.4	1271.2	1297.0
42.5°	773.0	797.4	863.7	928.7	986.9	1041.1	1091.2	1139.9	1180.5	1214.4	1237.4
45°	724.3	750.0	815.0	878.6	936.8	991.0	1041.1	1085.8	1125.0	1153.4	1176.5
47.5°	675.6	702.6	767.6	831.2	886.7	939.5	991.0	1031.6	1069.5	1097.9	1116.9
50°	626.8	656.6	720.2	785.2	839.4	892.2	940.9	978.8	1014.0	1039.7	1057.3
52.5°	582.1	610.6	675.6	740.5	794.7	847.5	893.5	930.1	961.2	984.2	1001.8
55°	536.1	567.2	634.9	697.2	752.7	805.5	847.5	881.3	909.8	932.8	946.3
57.5°	491.4	526.6	593.0	655.2	712.1	762.2	802.8	835.3	861.0	880.0	892.2
60°	448.1	484.7	553.7	616.0	672.8	721.6	760.8	790.6	813.6	829.9	840.7
62.5°	404.8	446.8	514.4	579.4	633.6	681.0	717.5	744.6	766.3	781.1	787.9
65°	362.8	406.1	476.5	540.2	594.3	639.0	674.2	698.6	718.9	731.1	733.8
67.5°	322.2	368.2	438.6	502.3	555.1	597.0	630.9	653.9	671.5	679.6	682.3
70°	281.6	329.0	400.7	464.4	514.4	555.1	586.2	607.9	622.8	630.9	630.9
72.5°	243.7	291.1	362.8	425.1	471.1	511.7	540.2	560.5	574.0	579.4	578.1
75°	203.1	251.8	322.2	381.8	426.5	464.4	492.8	513.1	522.6	526.6	525.3
77.5°	167.9	213.9	281.6	337.1	384.5	415.6	444.1	463.0	472.5	475.2	473.8
80°	135.4	178.7	238.3	291.1	331.7	365.5	391.3	411.6	419.7	417.0	404.8
82.5°	104.2	143.5	196.3	242.3	280.2	311.4	338.5	350.6	352.0	345.2	334.4
85°	74.5	104.2	148.9	188.2	223.4	246.4	262.6	272.1	274.8	269.4	257.2
87.5°	42.0	60.9	88.0	116.4	143.5	159.7	169.2	174.6	178.7	173.3	165.2
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°	1329.4	1329.4	1329.4	1329.4	1329.4	1329.4	1329.4	1329.4
2.5°	1333.5	1337.6	1336.2	1338.9	1340.3	1340.3	1336.2	1338.9
5°	1391.7	1399.8	1405.3	1413.4	1418.8	1418.8	1420.1	1424.2
7.5°	1455.3	1468.9	1481.1	1490.5	1497.3	1500.0	1504.1	1508.1
10°	1514.9	1531.2	1544.7	1556.9	1565.0	1570.4	1574.5	1581.3
12.5°	1560.9	1579.9	1594.8	1608.3	1619.2	1627.3	1631.3	1636.8
15°	1594.8	1616.5	1634.1	1648.9	1658.4	1667.9	1672.0	1677.4
17.5°	1615.1	1636.8	1655.7	1670.6	1681.4	1690.9	1696.3	1701.7
20°	1620.5	1642.2	1662.5	1677.4	1688.2	1700.4	1705.8	1711.2
22.5°	1612.4	1634.1	1655.7	1672.0	1684.1	1696.3	1701.7	1707.2
25°	1596.1	1619.2	1640.8	1657.1	1667.9	1680.1	1686.9	1689.6
27.5°	1570.4	1593.4	1615.1	1630.0	1642.2	1654.4	1661.1	1662.5
30°	1533.9	1556.9	1578.5	1593.4	1607.0	1617.8	1624.6	1624.6
32.5°	1489.2	1510.9	1533.9	1547.4	1559.6	1570.4	1577.2	1579.9
35°	1437.7	1459.4	1481.1	1493.3	1506.8	1514.9	1520.3	1524.4
37.5°	1382.2	1403.9	1421.5	1432.3	1447.2	1452.6	1460.8	1459.4
40°	1322.7	1340.3	1356.5	1366.0	1378.2	1384.9	1393.1	1391.7
42.5°	1260.4	1278.0	1291.5	1302.4	1309.1	1315.9	1321.3	1320.0
45°	1196.8	1213.0	1225.2	1230.6	1241.4	1244.2	1249.6	1249.6
47.5°	1133.1	1146.7	1157.5	1165.6	1171.0	1173.8	1179.2	1179.2
50°	1072.2	1084.4	1091.2	1097.9	1103.4	1107.4	1110.1	1111.5
52.5°	1012.7	1022.1	1027.5	1033.0	1038.4	1041.1	1043.8	1042.4
55°	955.8	962.6	966.6	970.7	974.7	978.8	978.8	978.8
57.5°	898.9	903.0	907.1	909.8	913.8	916.5	916.5	916.5
60°	843.4	847.5	848.8	851.5	855.6	857.0	858.3	855.6
62.5°	789.3	790.6	792.0	793.3	797.4	800.1	800.1	798.7
65°	733.8	733.8	735.1	736.5	739.2	741.9	743.2	740.5
67.5°	679.6	679.6	681.0	681.0	685.0	687.7	689.1	689.1
70°	626.8	625.5	628.2	629.5	632.2	632.2	634.9	634.9
72.5°	574.0	572.7	575.4	575.4	578.1	579.4	579.4	579.4
75°	522.6	518.5	519.9	517.2	519.9	519.9	518.5	518.5
77.5°	467.1	457.6	454.9	449.5	449.5	449.5	446.8	446.8
80°	396.7	387.2	383.1	379.1	379.1	377.7	376.4	376.4
82.5°	326.3	318.1	314.1	310.0	312.7	308.7	310.0	311.4
85°	250.5	243.7	241.0	236.9	235.6	235.6	236.9	235.6
87.5°	162.5	155.7	155.7	151.6	154.3	150.3	146.2	148.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)