

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: P188657

Luminaire Tested: **24SR-LD2-48-C-UNV-L830-CD1-ST-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P188657  
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-L830-CD1-ST-U  
Description: METALUX 2X4 SKYRIDGE LED FIXTURE WITH STRAW SKYTRIM.  
  
Light Source: EATON LED 3000K  
Ballast/Driver: OSRAM ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4410.0 lumens  
Efficiency: N/A  
Efficacy: 115.4 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

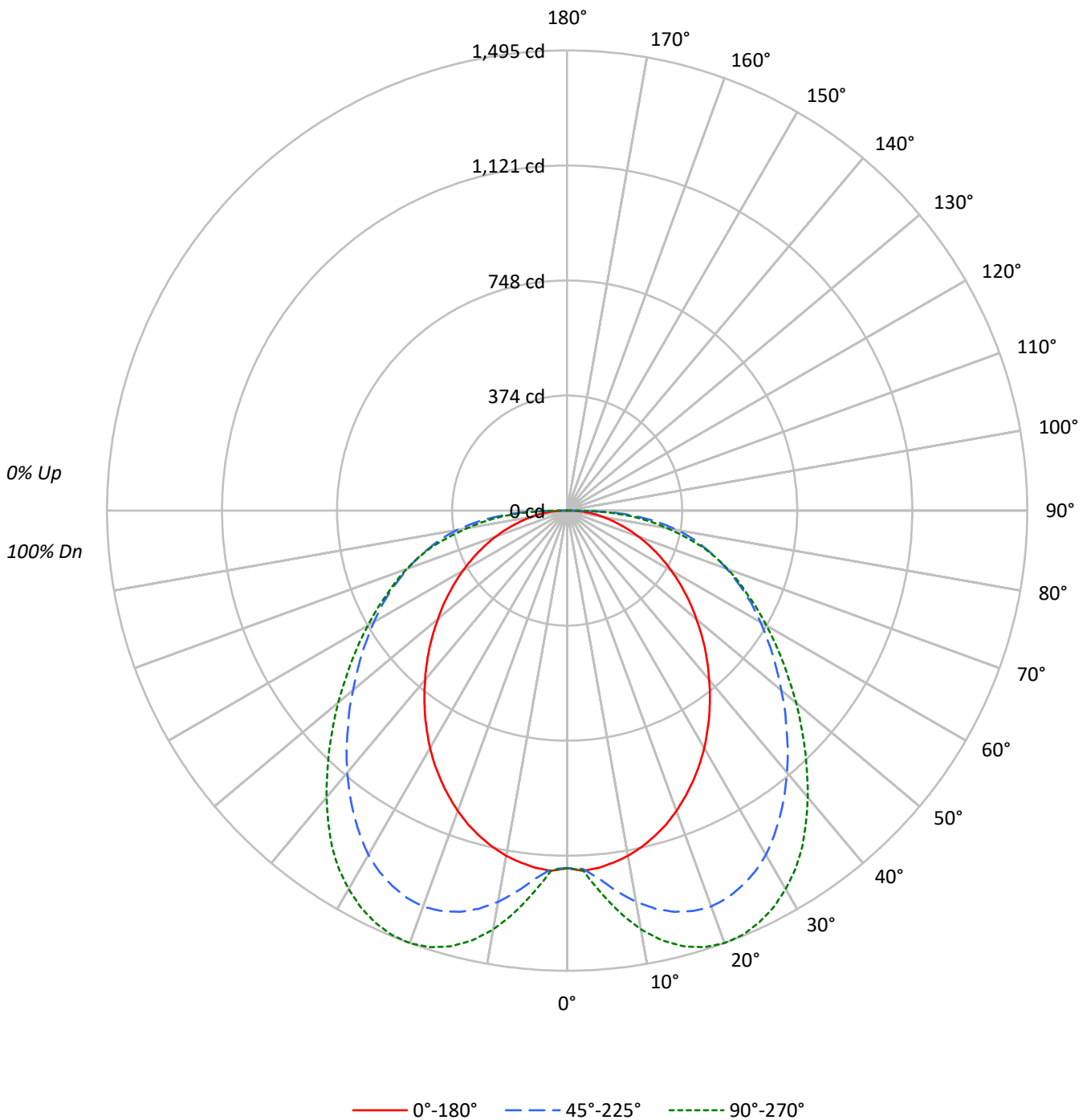
Input Watts (W): 38.2  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1563	1563	1563
5°	1574	1622	1681
10°	1556	1763	1888
15°	1526	1880	2042
20°	1487	1960	2141
25°	1438	1997	2192
30°	1384	2007	2205
35°	1323	1984	2188
40°	1261	1951	2136
45°	1204	1918	2078
50°	1146	1902	2033
55°	1099	1912	2006
60°	1054	1951	2012
65°	1009	2034	2060
70°	968	2169	2183
75°	922	2392	2355
80°	917	2823	2548
85°	1005	3634	3177



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	116.7	2.6
10°-20°	370.7	8.4
20°-30°	592.7	13.4
30°-40°	717.5	16.3
40°-50°	732.8	16.6
50°-60°	675.2	15.3
60°-70°	574.3	13.0
70°-80°	429.4	9.7
80°-90°	200.6	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°	1080.1	24.5
0°-40°	1797.6	40.8
0°-60°	3205.6	72.7
0°-90°	4410.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4410.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1162	1162	1162	1162	1162	
5°	1165	1159	1201	1231	1244	110
15°	1095	1194	1350	1434	1466	308
25°	969	1152	1345	1441	1476	446
35°	806	1018	1208	1299	1332	504
45°	633	842	1008	1073	1092	488
55°	468	681	815	846	855	419
65°	317	539	639	643	647	314
75°	177	389	460	453	453	190
85°	65	205	235	209	206	69
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°	1161.6	1161.6	1161.6	1161.6	1161.6	1161.6	1161.6	1161.6	1161.6	1161.6	1161.6
2.5°	1171.1	1168.7	1165.2	1160.5	1159.3	1159.3	1158.1	1158.1	1160.5	1165.2	1172.3
5°	1165.2	1162.8	1159.3	1155.7	1156.9	1160.5	1167.6	1175.8	1187.7	1200.7	1214.9
7.5°	1153.4	1152.2	1149.8	1149.8	1159.3	1175.8	1192.4	1209.0	1227.9	1248.0	1269.3
10°	1139.2	1138.0	1136.8	1146.3	1167.6	1192.4	1216.1	1238.5	1264.6	1290.6	1315.4
12.5°	1119.1	1119.1	1122.6	1143.9	1173.5	1204.2	1233.8	1263.4	1294.1	1324.9	1352.1
15°	1095.4	1095.4	1107.2	1138.0	1175.8	1211.3	1246.8	1279.9	1315.4	1349.7	1378.1
17.5°	1069.4	1068.2	1090.7	1128.5	1171.1	1212.5	1252.7	1289.4	1326.1	1363.9	1393.5
20°	1038.6	1041.0	1070.6	1114.3	1161.6	1207.8	1250.4	1289.4	1328.4	1368.7	1397.1
22.5°	1004.3	1009.1	1045.7	1094.2	1147.5	1194.8	1239.7	1281.1	1321.3	1361.6	1390.0
25°	968.8	974.7	1019.7	1070.6	1127.3	1175.8	1220.8	1264.6	1304.8	1345.0	1373.4
27.5°	931.0	939.3	990.1	1043.4	1100.1	1151.0	1196.0	1240.9	1281.1	1322.5	1348.6
30°	890.8	901.4	955.8	1010.2	1069.4	1119.1	1164.0	1210.2	1251.6	1291.8	1316.6
32.5°	848.2	861.2	916.8	975.9	1033.9	1082.4	1127.3	1174.7	1213.7	1251.6	1276.4
35°	805.6	821.0	877.7	936.9	993.7	1042.2	1085.9	1133.3	1172.3	1207.8	1231.4
37.5°	761.8	780.7	837.5	895.5	951.1	999.6	1044.5	1088.3	1127.3	1160.5	1184.1
40°	718.0	739.3	796.1	852.9	908.5	954.6	998.4	1042.2	1081.2	1110.8	1133.3
42.5°	675.5	696.8	754.7	811.5	862.4	909.7	953.5	996.0	1031.5	1061.1	1081.2
45°	632.9	655.4	712.1	767.7	818.6	865.9	909.7	948.7	983.0	1007.9	1028.0
47.5°	590.3	613.9	670.7	726.3	774.8	821.0	865.9	901.4	934.5	959.4	975.9
50°	547.7	573.7	629.3	686.1	733.4	779.6	822.1	855.3	886.0	908.5	923.9
52.5°	508.7	533.5	590.3	647.1	694.4	740.5	780.7	812.7	839.9	860.0	875.4
55°	468.4	495.7	554.8	609.2	657.7	703.9	740.5	770.1	794.9	815.0	826.9
57.5°	429.4	460.2	518.1	572.5	622.2	666.0	701.5	729.9	752.4	768.9	779.6
60°	391.6	423.5	483.8	538.2	587.9	630.5	664.8	690.8	710.9	725.1	734.6
62.5°	353.7	390.4	449.5	506.3	553.6	595.0	627.0	650.6	669.5	682.6	688.5
65°	317.0	354.9	416.4	472.0	519.3	558.3	589.1	610.4	628.1	638.8	641.2
67.5°	281.5	321.8	383.3	438.9	485.0	521.7	551.3	571.4	586.7	593.8	596.2
70°	246.1	287.5	350.2	405.7	449.5	485.0	512.2	531.1	544.2	551.3	551.3
72.5°	212.9	254.3	317.0	371.4	411.7	447.2	472.0	489.7	501.6	506.3	505.1
75°	177.4	220.0	281.5	333.6	372.6	405.7	430.6	448.3	456.6	460.2	459.0
77.5°	146.7	186.9	246.1	294.6	336.0	363.2	388.0	404.6	412.8	415.2	414.0
80°	118.3	156.1	208.2	254.3	289.8	319.4	341.9	359.6	366.7	364.3	353.7
82.5°	91.1	125.4	171.5	211.7	244.9	272.1	295.7	306.4	307.6	301.7	292.2
85°	65.1	91.1	130.1	164.4	195.2	215.3	229.5	237.8	240.1	235.4	224.8
87.5°	36.7	53.2	76.9	101.7	125.4	139.6	147.9	152.6	156.1	151.4	144.3
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°	1161.6	1161.6	1161.6	1161.6	1161.6	1161.6	1161.6	1161.6
2.5°	1165.2	1168.7	1167.6	1169.9	1171.1	1171.1	1167.6	1169.9
5°	1216.1	1223.2	1227.9	1235.0	1239.7	1239.7	1240.9	1244.5
7.5°	1271.7	1283.5	1294.1	1302.4	1308.3	1310.7	1314.2	1317.8
10°	1323.7	1337.9	1349.7	1360.4	1367.5	1372.2	1375.8	1381.7
12.5°	1363.9	1380.5	1393.5	1405.3	1414.8	1421.9	1425.4	1430.2
15°	1393.5	1412.4	1427.8	1440.8	1449.1	1457.4	1460.9	1465.7
17.5°	1411.3	1430.2	1446.7	1459.8	1469.2	1477.5	1482.2	1487.0
20°	1416.0	1434.9	1452.7	1465.7	1475.1	1485.8	1490.5	1495.2
22.5°	1408.9	1427.8	1446.7	1460.9	1471.6	1482.2	1487.0	1491.7
25°	1394.7	1414.8	1433.7	1447.9	1457.4	1468.0	1473.9	1476.3
27.5°	1372.2	1392.3	1411.3	1424.3	1434.9	1445.6	1451.5	1452.7
30°	1340.3	1360.4	1379.3	1392.3	1404.2	1413.6	1419.5	1419.5
32.5°	1301.2	1320.2	1340.3	1352.1	1362.8	1372.2	1378.1	1380.5
35°	1256.3	1275.2	1294.1	1304.8	1316.6	1323.7	1328.4	1332.0
37.5°	1207.8	1226.7	1242.1	1251.6	1264.6	1269.3	1276.4	1275.2
40°	1155.7	1171.1	1185.3	1193.6	1204.2	1210.2	1217.2	1216.1
42.5°	1101.3	1116.7	1128.5	1138.0	1143.9	1149.8	1154.6	1153.4
45°	1045.7	1059.9	1070.6	1075.3	1084.8	1087.1	1091.9	1091.9
47.5°	990.1	1002.0	1011.4	1018.5	1023.2	1025.6	1030.3	1030.3
50°	936.9	947.5	953.5	959.4	964.1	967.6	970.0	971.2
52.5°	884.8	893.1	897.9	902.6	907.3	909.7	912.0	910.9
55°	835.2	841.1	844.6	848.2	851.7	855.3	855.3	855.3
57.5°	785.5	789.0	792.6	794.9	798.5	800.9	800.9	800.9
60°	737.0	740.5	741.7	744.1	747.6	748.8	750.0	747.6
62.5°	689.7	690.8	692.0	693.2	696.8	699.1	699.1	697.9
65°	641.2	641.2	642.3	643.5	645.9	648.3	649.4	647.1
67.5°	593.8	593.8	595.0	595.0	598.6	600.9	602.1	602.1
70°	547.7	546.5	548.9	550.1	552.4	552.4	554.8	554.8
72.5°	501.6	500.4	502.8	502.8	505.1	506.3	506.3	506.3
75°	456.6	453.1	454.3	451.9	454.3	454.3	453.1	453.1
77.5°	408.1	399.8	397.5	392.7	392.7	392.7	390.4	390.4
80°	346.6	338.3	334.8	331.2	331.2	330.0	328.9	328.9
82.5°	285.1	278.0	274.4	270.9	273.3	269.7	270.9	272.1
85°	218.8	212.9	210.6	207.0	205.8	205.8	207.0	205.8
87.5°	142.0	136.0	136.0	132.5	134.9	131.3	127.8	130.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)