

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: P188645

Luminaire Tested: **24SR-LD2-34-C-UNV-L850-CD1-ST-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P188645  
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-LD2-34-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**

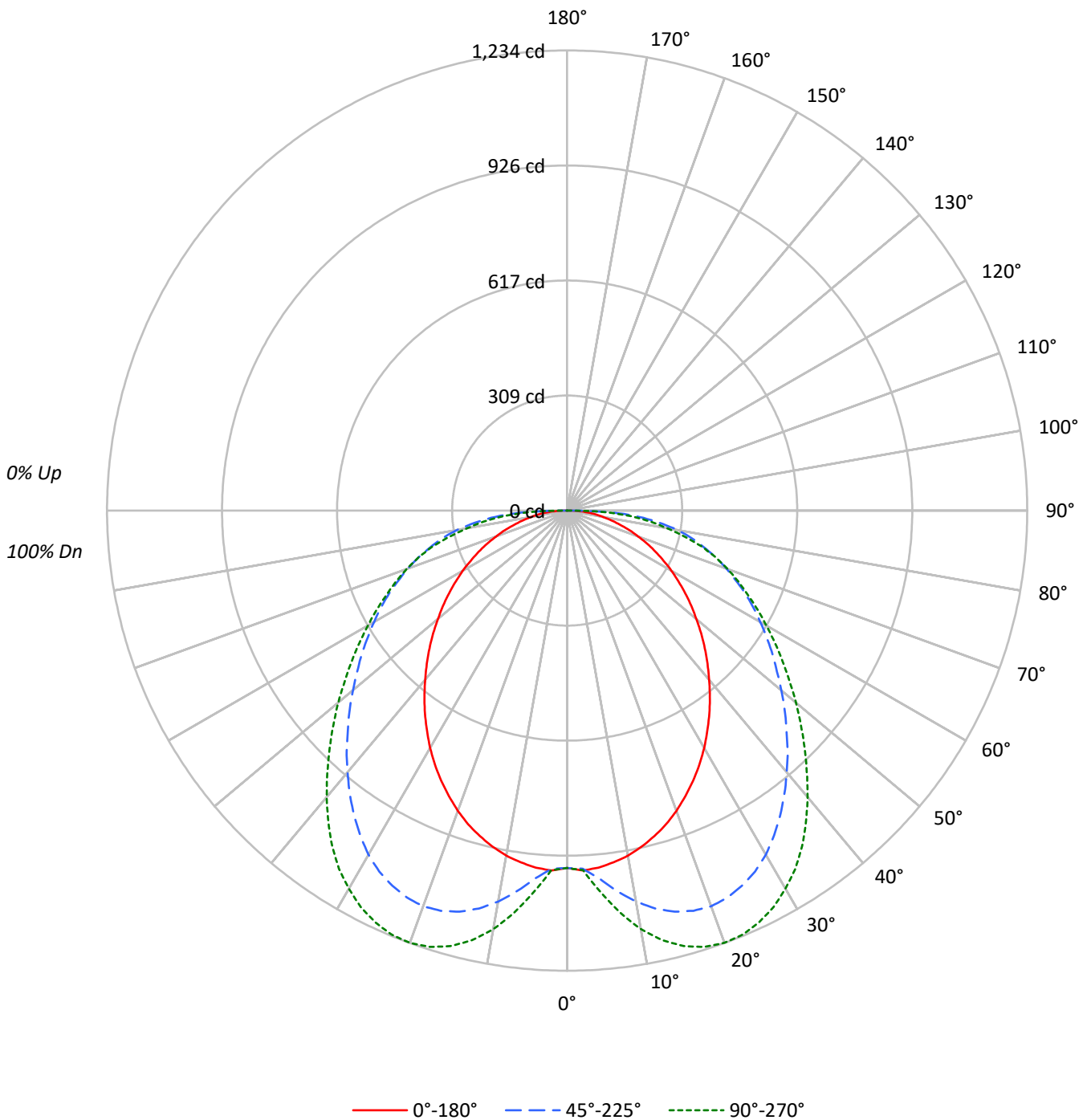
Lumens per Lamp: N/A  
Luminaire Lumens: 3638.0 lumens  
Efficiency: N/A  
Efficacy: 133.8 lumens/watt  
Spacing Criteria (0/90/45): 1.15 / 1.62 / 1.56  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 27.2  
Input Voltage (V): NR  
Input Current (Ain): NR  
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°	1289	1289	1289
5°	1298	1338	1387
10°	1284	1455	1557
15°	1259	1551	1684
20°	1227	1617	1766
25°	1186	1647	1808
30°	1142	1656	1819
35°	1092	1637	1805
40°	1040	1609	1762
45°	993	1582	1714
50°	946	1569	1677
55°	906	1577	1655
60°	869	1610	1660
65°	833	1678	1699
70°	799	1789	1801
75°	761	1973	1943
80°	756	2329	2102
85°	829	2998	2621



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	96.3	2.6
10°-20°	305.8	8.4
20°-30°	489.0	13.4
30°-40°	591.9	16.3
40°-50°	604.5	16.6
50°-60°	557.0	15.3
60°-70°	473.8	13.0
70°-80°	354.3	9.7
80°-90°	165.5	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°	891.0	24.5
0°-40°	1482.9	40.8
0°-60°	2644.4	72.7
0°-90°	3638.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3638.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	958	958	958	958	958	
5°	961	956	990	1016	1027	91
15°	904	985	1114	1183	1209	254
25°	799	950	1110	1189	1218	368
35°	665	840	996	1072	1099	415
45°	522	695	831	885	901	403
55°	386	562	672	698	706	346
65°	262	444	527	530	534	259
75°	146	321	380	374	374	157
85°	54	169	194	172	170	57
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°	958.3	958.3	958.3	958.3	958.3	958.3	958.3	958.3	958.3	958.3	958.3
2.5°	966.1	964.2	961.2	957.3	956.3	956.3	955.4	955.4	957.3	961.2	967.1
5°	961.2	959.3	956.3	953.4	954.4	957.3	963.2	970.0	979.8	990.5	1002.2
7.5°	951.5	950.5	948.5	948.5	956.3	970.0	983.7	997.3	1012.9	1029.5	1047.1
10°	939.8	938.8	937.8	945.6	963.2	983.7	1003.2	1021.7	1043.2	1064.7	1085.2
12.5°	923.2	923.2	926.1	943.7	968.1	993.4	1017.8	1042.2	1067.6	1093.0	1115.4
15°	903.6	903.6	913.4	938.8	970.0	999.3	1028.6	1055.9	1085.2	1113.5	1136.9
17.5°	882.2	881.2	899.7	931.0	966.1	1000.3	1033.4	1063.7	1093.9	1125.2	1149.6
20°	856.8	858.8	883.2	919.3	958.3	996.4	1031.5	1063.7	1095.9	1129.1	1152.5
22.5°	828.5	832.4	862.7	902.7	946.6	985.6	1022.7	1056.9	1090.0	1123.2	1146.6
25°	799.2	804.1	841.2	883.2	930.0	970.0	1007.1	1043.2	1076.4	1109.6	1133.0
27.5°	768.0	774.8	816.8	860.7	907.6	949.5	986.6	1023.7	1056.9	1091.0	1112.5
30°	734.8	743.6	788.5	833.4	882.2	923.2	960.2	998.3	1032.5	1065.6	1086.1
32.5°	699.7	710.4	756.3	805.1	852.9	892.9	930.0	969.0	1001.2	1032.5	1053.0
35°	664.6	677.2	724.1	772.9	819.7	859.7	895.8	934.9	967.1	996.4	1015.9
37.5°	628.5	644.1	690.9	738.7	784.6	824.6	861.7	897.8	930.0	957.3	976.8
40°	592.3	609.9	656.8	703.6	749.5	787.5	823.6	859.7	891.9	916.3	934.9
42.5°	557.2	574.8	622.6	669.4	711.4	750.4	786.5	821.7	851.0	875.3	891.9
45°	522.1	540.6	587.5	633.3	675.3	714.3	750.4	782.6	810.9	831.4	848.0
47.5°	487.0	506.5	553.3	599.2	639.2	677.2	714.3	743.6	770.9	791.4	805.1
50°	451.8	473.3	519.2	566.0	605.0	643.1	678.2	705.5	730.9	749.5	762.1
52.5°	419.6	440.1	487.0	533.8	572.8	610.9	644.1	670.4	692.9	709.5	722.1
55°	386.4	408.9	457.7	502.6	542.6	580.6	610.9	635.3	655.8	672.4	682.1
57.5°	354.2	379.6	427.4	472.3	513.3	549.4	578.7	602.1	620.6	634.3	643.1
60°	323.0	349.4	399.1	444.0	485.0	520.1	548.4	569.9	586.5	598.2	606.0
62.5°	291.8	322.0	370.8	417.7	456.7	490.9	517.2	536.7	552.3	563.1	568.0
65°	261.5	292.8	343.5	389.4	428.4	460.6	486.0	503.5	518.2	527.0	528.9
67.5°	232.3	265.4	316.2	362.0	400.1	430.4	454.8	471.3	484.0	489.9	491.8
70°	203.0	237.1	288.9	334.7	370.8	400.1	422.5	438.2	448.9	454.8	454.8
72.5°	175.7	209.8	261.5	306.4	339.6	368.9	389.4	404.0	413.8	417.7	416.7
75°	146.4	181.5	232.3	275.2	307.4	334.7	355.2	369.9	376.7	379.6	378.6
77.5°	121.0	154.2	203.0	243.0	277.1	299.6	320.1	333.7	340.6	342.5	341.6
80°	97.6	128.8	171.8	209.8	239.1	263.5	282.0	296.7	302.5	300.6	291.8
82.5°	75.1	103.4	141.5	174.7	202.0	224.4	244.0	252.7	253.7	248.8	241.0
85°	53.7	75.1	107.3	135.6	161.0	177.6	189.3	196.1	198.1	194.2	185.4
87.5°	30.3	43.9	63.4	83.9	103.4	115.2	122.0	125.9	128.8	124.9	119.1
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°	958.3	958.3	958.3	958.3	958.3	958.3	958.3	958.3
2.5°	961.2	964.2	963.2	965.1	966.1	966.1	963.2	965.1
5°	1003.2	1009.0	1012.9	1018.8	1022.7	1022.7	1023.7	1026.6
7.5°	1049.1	1058.8	1067.6	1074.4	1079.3	1081.3	1084.2	1087.1
10°	1092.0	1103.7	1113.5	1122.2	1128.1	1132.0	1134.9	1139.8
12.5°	1125.2	1138.8	1149.6	1159.3	1167.1	1173.0	1175.9	1179.8
15°	1149.6	1165.2	1177.9	1188.6	1195.4	1202.3	1205.2	1209.1
17.5°	1164.2	1179.8	1193.5	1204.2	1212.0	1218.9	1222.8	1226.7
20°	1168.1	1183.7	1198.4	1209.1	1216.9	1225.7	1229.6	1233.5
22.5°	1162.3	1177.9	1193.5	1205.2	1214.0	1222.8	1226.7	1230.6
25°	1150.5	1167.1	1182.7	1194.5	1202.3	1211.0	1215.9	1217.9
27.5°	1132.0	1148.6	1164.2	1174.9	1183.7	1192.5	1197.4	1198.4
30°	1105.7	1122.2	1137.9	1148.6	1158.3	1166.2	1171.0	1171.0
32.5°	1073.4	1089.1	1105.7	1115.4	1124.2	1132.0	1136.9	1138.8
35°	1036.4	1052.0	1067.6	1076.4	1086.1	1092.0	1095.9	1098.8
37.5°	996.4	1012.0	1024.7	1032.5	1043.2	1047.1	1053.0	1052.0
40°	953.4	966.1	977.8	984.6	993.4	998.3	1004.2	1003.2
42.5°	908.5	921.2	931.0	938.8	943.7	948.5	952.4	951.5
45°	862.7	874.4	883.2	887.1	894.9	896.8	900.7	900.7
47.5°	816.8	826.6	834.4	840.2	844.1	846.1	850.0	850.0
50°	772.9	781.7	786.5	791.4	795.3	798.3	800.2	801.2
52.5°	729.9	736.8	740.7	744.6	748.5	750.4	752.4	751.4
55°	689.0	693.8	696.8	699.7	702.6	705.5	705.5	705.5
57.5°	648.0	650.9	653.8	655.8	658.7	660.7	660.7	660.7
60°	608.0	610.9	611.9	613.8	616.7	617.7	618.7	616.7
62.5°	568.9	569.9	570.9	571.9	574.8	576.7	576.7	575.8
65°	528.9	528.9	529.9	530.9	532.8	534.8	535.7	533.8
67.5°	489.9	489.9	490.9	490.9	493.8	495.7	496.7	496.7
70°	451.8	450.8	452.8	453.8	455.7	455.7	457.7	457.7
72.5°	413.8	412.8	414.7	414.7	416.7	417.7	417.7	417.7
75°	376.7	373.8	374.7	372.8	374.7	374.7	373.8	373.8
77.5°	336.7	329.8	327.9	324.0	324.0	324.0	322.0	322.0
80°	285.9	279.1	276.2	273.2	273.2	272.3	271.3	271.3
82.5°	235.2	229.3	226.4	223.5	225.4	222.5	223.5	224.4
85°	180.5	175.7	173.7	170.8	169.8	169.8	170.8	169.8
87.5°	117.1	112.2	112.2	109.3	111.2	108.3	105.4	107.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)