

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: P188550

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188550
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24780)
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-PG-U
Description: METALUX 2X4 SKYRIDGE LED FIXTURE WITH PRIMARY GREEN SKYTRIM.

Light Source: EATON LED 5000K
Ballast/Driver: OSRAM ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4044.0 lumens
Efficiency: N/A
Efficacy: 80.6 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 2.25 / 2.05
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

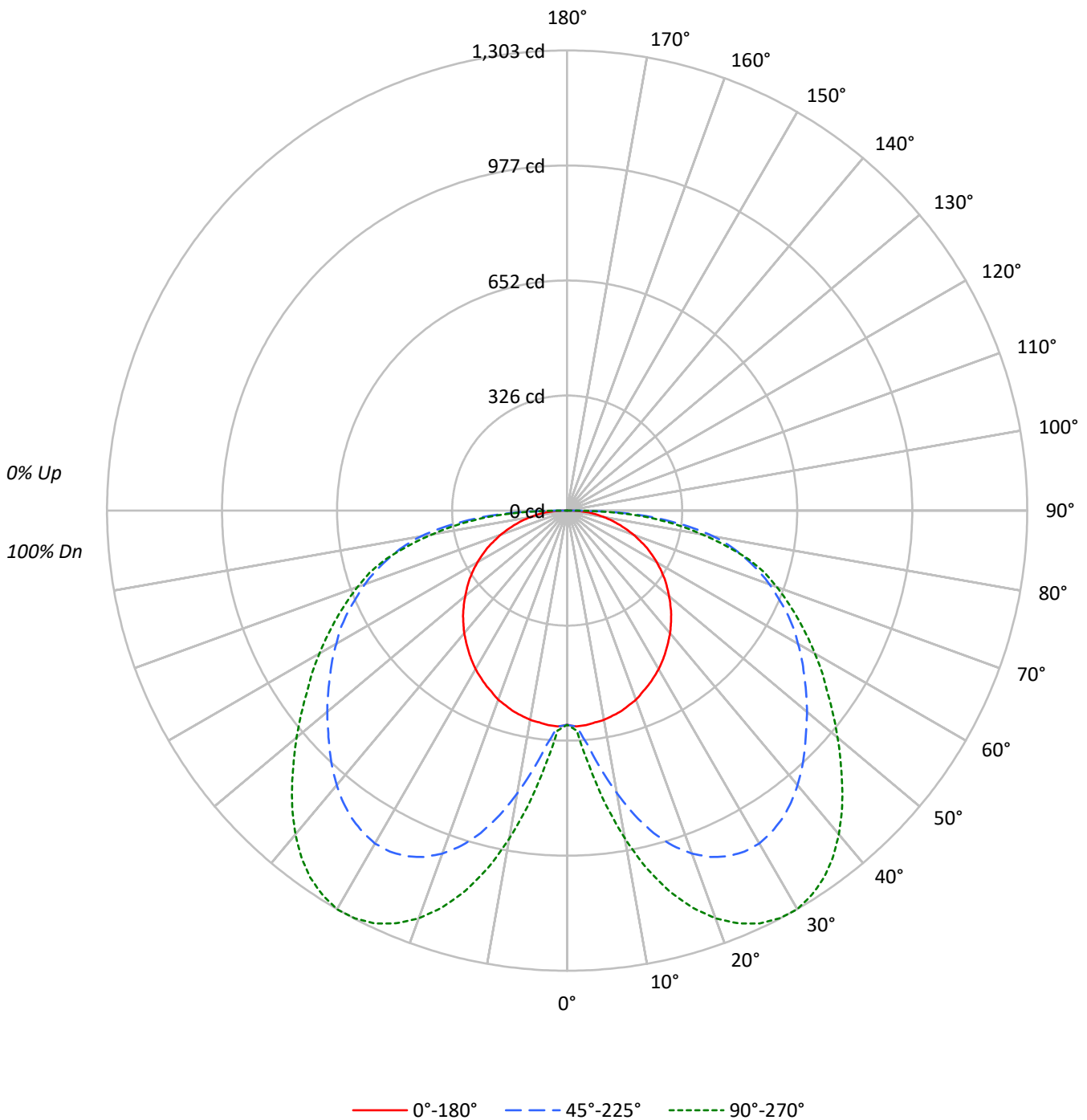
Input Watts (W): 50.2
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	106	100	95	90	103	98	93	88	93	89	86	89	86	83	86	83	80	78
2	95	85	77	70	92	83	76	69	80	73	68	76	71	66	73	69	65	62
3	86	73	64	57	83	72	63	56	69	61	55	66	59	54	63	58	53	51
4	78	64	54	47	75	63	54	46	60	52	46	58	51	45	55	49	44	42
5	71	57	47	39	69	56	46	39	53	45	39	51	44	38	49	43	38	35
6	65	51	41	34	63	50	40	34	48	39	33	46	39	33	44	38	33	30
7	60	46	36	29	58	45	36	29	43	35	29	42	34	29	40	33	28	26
8	56	41	32	26	54	41	32	26	39	31	25	38	31	25	37	30	25	23
9	52	38	29	23	50	37	29	23	36	28	23	35	28	23	34	27	22	20
10	49	34	26	20	47	34	26	20	33	25	20	32	25	20	31	25	20	18

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	816	816	816
5°	824	898	984
10°	822	1111	1289
15°	820	1316	1553
20°	816	1480	1759
25°	809	1603	1915
30°	805	1691	2025
35°	799	1747	2083
40°	796	1783	2102
45°	793	1811	2096
50°	789	1856	2093
55°	790	1924	2111
60°	789	2032	2180
65°	791	2186	2292
70°	787	2400	2485
75°	789	2721	2764
80°	814	3267	3009
85°	953	4065	3654



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	67.5	1.7
10°-20°	255.3	6.3
20°-30°	464.5	11.5
30°-40°	616.1	15.2
40°-50°	675.0	16.7
50°-60°	663.4	16.4
60°-70°	601.8	14.9
70°-80°	476.9	11.8
80°-90°	223.5	5.5
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°	787.2	19.5
0°-40°	1403.4	34.7
0°-60°	2741.8	67.8
0°-90°	4044.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4044.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	607	607	607	607	607	
5°	610	614	665	712	728	58
15°	588	731	945	1073	1115	166
25°	545	806	1080	1233	1290	251
35°	487	788	1063	1214	1268	305
45°	417	708	952	1067	1102	321
55°	337	622	820	884	900	301
65°	248	537	687	707	720	245
75°	152	415	523	524	532	160
85°	62	223	263	237	237	63
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°	606.7	606.7	606.7	606.7	606.7	606.7	606.7	606.7	606.7	606.7	606.7
2.5°	611.7	610.0	610.0	610.0	608.4	608.4	608.4	610.0	610.0	611.7	615.0
5°	610.0	608.4	608.4	608.4	611.7	616.7	626.7	638.4	651.7	665.0	680.0
7.5°	605.0	605.0	605.0	610.0	625.0	645.0	670.0	695.0	716.7	740.0	761.7
10°	601.7	601.7	605.0	621.7	651.7	685.0	718.4	751.7	781.7	813.4	843.4
12.5°	595.0	595.0	605.0	636.7	678.4	721.7	763.4	805.0	845.0	883.4	916.7
15°	588.4	588.4	610.0	655.0	705.0	756.7	806.7	855.0	901.7	945.0	983.4
17.5°	578.4	580.0	613.4	668.4	728.4	786.7	841.7	896.7	946.7	995.0	1035.0
20°	570.0	573.4	616.7	680.0	746.7	811.7	873.4	930.0	983.4	1033.4	1076.7
22.5°	556.7	563.4	618.4	688.4	760.0	830.0	893.4	953.4	1010.0	1061.7	1105.0
25°	545.0	553.4	616.7	691.7	770.0	841.7	906.7	968.4	1026.7	1080.0	1125.0
27.5°	531.7	545.0	615.0	693.4	773.4	846.7	913.4	976.7	1035.0	1088.4	1135.0
30°	518.4	535.0	610.0	691.7	771.7	845.0	911.7	976.7	1035.0	1088.4	1133.4
32.5°	503.3	521.7	600.0	683.4	765.0	836.7	903.4	966.7	1026.7	1078.4	1123.4
35°	486.7	508.4	588.4	671.7	751.7	823.4	888.4	951.7	1010.0	1063.4	1106.7
37.5°	470.0	495.0	575.0	658.4	736.7	806.7	870.0	933.4	990.0	1041.7	1083.4
40°	453.3	480.0	560.0	641.7	718.4	786.7	850.0	911.7	965.0	1015.0	1053.4
42.5°	435.0	465.0	543.4	623.4	696.7	763.4	826.7	886.7	938.4	985.0	1021.7
45°	416.7	446.7	525.0	603.4	676.7	740.0	801.7	860.0	908.4	951.7	986.7
47.5°	396.7	430.0	508.4	583.4	653.4	718.4	778.4	831.7	880.0	918.4	951.7
50°	376.7	411.7	488.3	563.4	631.7	695.0	753.4	805.0	850.0	886.7	915.0
52.5°	356.7	393.3	470.0	543.4	611.7	673.4	730.0	778.4	820.0	853.4	881.7
55°	336.7	375.0	451.7	523.4	591.7	651.7	706.7	751.7	791.7	820.0	843.4
57.5°	315.0	356.7	433.3	505.0	571.7	631.7	683.4	726.7	763.4	788.4	808.4
60°	293.3	336.7	413.3	486.7	551.7	610.0	660.0	701.7	733.4	755.0	773.4
62.5°	270.0	316.7	395.0	466.7	531.7	588.4	635.0	671.7	703.4	723.4	733.4
65°	248.3	296.7	375.0	446.7	510.0	563.4	608.4	643.4	670.0	686.7	695.0
67.5°	223.3	275.0	353.3	425.0	485.0	536.7	578.4	611.7	635.0	646.7	653.4
70°	200.0	253.3	330.0	400.0	456.7	506.7	546.7	578.4	598.4	610.0	611.7
72.5°	175.0	230.0	306.7	373.3	428.3	475.0	513.4	541.7	558.4	568.4	570.0
75°	151.7	205.0	278.3	341.7	393.3	436.7	473.3	500.0	516.7	523.4	523.4
77.5°	128.3	178.3	248.3	308.3	356.7	396.7	430.0	456.7	470.0	476.7	476.7
80°	105.0	153.3	216.7	271.7	315.0	351.7	385.0	408.3	421.7	421.7	411.7
82.5°	83.3	125.0	180.0	230.0	266.7	300.0	331.7	346.7	350.0	346.7	338.3
85°	61.7	95.0	140.0	178.3	211.7	235.0	255.0	265.0	266.7	263.3	256.7
87.5°	35.0	55.0	80.0	105.0	126.7	138.3	155.0	158.3	158.3	163.3	155.0
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°	606.7	606.7	606.7	606.7	606.7	606.7	606.7	606.7
2.5°	616.7	618.4	618.4	623.4	623.4	625.0	623.4	623.4
5°	690.0	696.7	706.7	716.7	720.0	726.7	725.0	728.4
7.5°	778.4	791.7	806.7	820.0	826.7	833.4	835.0	840.0
10°	866.7	883.4	901.7	920.0	930.0	935.0	941.7	943.4
12.5°	943.4	968.4	986.7	1006.7	1020.0	1026.7	1033.4	1036.7
15°	1013.4	1038.4	1061.7	1083.4	1096.7	1106.7	1113.4	1115.0
17.5°	1066.7	1095.0	1120.0	1143.4	1156.7	1168.4	1175.0	1178.4
20°	1108.4	1140.0	1165.0	1188.4	1203.4	1216.7	1226.7	1228.4
22.5°	1138.4	1170.0	1198.4	1221.7	1240.0	1253.4	1261.7	1265.0
25°	1160.0	1193.4	1221.7	1245.0	1263.4	1278.4	1286.7	1290.0
27.5°	1170.0	1205.0	1235.0	1256.7	1275.0	1290.0	1300.0	1301.7
30°	1171.7	1205.0	1235.0	1258.4	1276.7	1291.7	1300.0	1303.4
32.5°	1160.0	1195.0	1225.0	1246.7	1265.0	1280.0	1288.4	1290.0
35°	1143.4	1175.0	1203.4	1225.0	1243.4	1256.7	1265.0	1268.4
37.5°	1118.4	1148.4	1175.0	1195.0	1211.7	1225.0	1233.4	1236.7
40°	1088.4	1116.7	1141.7	1160.0	1175.0	1186.7	1193.4	1196.7
42.5°	1053.4	1080.0	1103.4	1118.4	1133.4	1143.4	1148.4	1151.7
45°	1016.7	1041.7	1060.0	1073.4	1086.7	1095.0	1100.0	1101.7
47.5°	978.4	1000.0	1015.0	1026.7	1036.7	1045.0	1050.0	1050.0
50°	940.0	958.4	970.0	981.7	990.0	995.0	998.4	1000.0
52.5°	901.7	916.7	925.0	935.0	941.7	946.7	950.0	950.0
55°	861.7	873.4	880.0	888.4	895.0	898.4	901.7	900.0
57.5°	823.4	831.7	836.7	843.4	848.4	851.7	855.0	856.7
60°	783.4	790.0	791.7	798.4	803.4	806.7	808.4	810.0
62.5°	741.7	746.7	750.0	753.4	758.4	761.7	763.4	765.0
65°	700.0	703.4	703.4	710.0	715.0	716.7	718.4	720.0
67.5°	656.7	658.4	660.0	665.0	670.0	671.7	675.0	675.0
70°	613.4	613.4	615.0	620.0	625.0	626.7	630.0	631.7
72.5°	568.4	570.0	570.0	575.0	580.0	583.4	585.0	586.7
75°	521.7	521.7	523.4	525.0	526.7	528.4	528.4	531.7
77.5°	471.7	465.0	461.7	458.3	460.0	460.0	458.3	460.0
80°	401.7	393.3	388.3	386.7	388.3	386.7	386.7	388.3
82.5°	330.0	320.0	316.7	315.0	315.0	315.0	313.3	316.7
85°	248.3	241.7	238.3	235.0	236.7	236.7	235.0	236.7
87.5°	150.0	146.7	143.3	140.0	141.7	140.0	138.3	143.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)