

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: P188640

Luminaire Tested: **24SR-LD2-29-C-UNV-L850-CD1-ST-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P188640  
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-LD2-29-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**

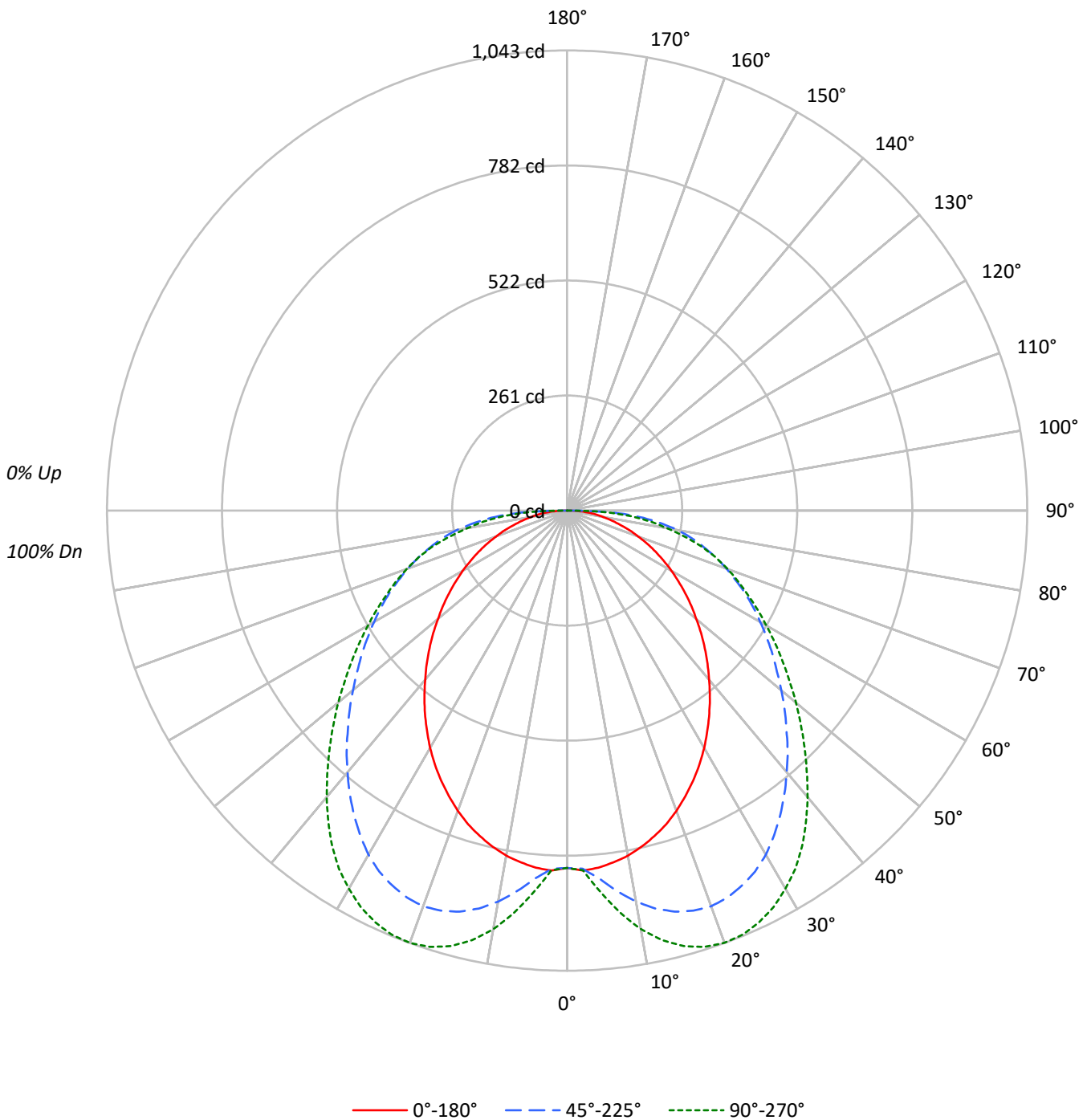
Lumens per Lamp: N/A  
Luminaire Lumens: 3075.0 lumens  
Efficiency: N/A  
Efficacy: 136.1 lumens/watt  
Spacing Criteria (0/90/45): 1.15 / 1.62 / 1.56  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 22.6  
Input Voltage (V): NR  
Input Current (Ain): NR  
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°	1090	1090	1090
5°	1097	1131	1172
10°	1085	1229	1316
15°	1064	1311	1424
20°	1037	1366	1493
25°	1003	1392	1528
30°	965	1399	1538
35°	923	1383	1526
40°	879	1360	1489
45°	840	1337	1449
50°	799	1326	1418
55°	766	1333	1399
60°	735	1361	1403
65°	704	1418	1436
70°	675	1512	1522
75°	643	1668	1642
80°	639	1969	1777
85°	701	2533	2215



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	81.4	2.6
10°-20°	258.5	8.4
20°-30°	413.3	13.4
30°-40°	500.3	16.3
40°-50°	510.9	16.6
50°-60°	470.8	15.3
60°-70°	400.5	13.0
70°-80°	299.4	9.7
80°-90°	139.9	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°	753.1	24.5
0°-40°	1253.4	40.8
0°-60°	2235.2	72.7
0°-90°	3075.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3075.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	810	810	810	810	810	
5°	812	808	837	859	868	77
15°	764	832	941	1000	1022	215
25°	676	803	938	1005	1029	311
35°	562	710	842	906	929	351
45°	441	587	703	748	761	341
55°	327	475	568	590	596	292
65°	221	376	445	448	451	219
75°	124	271	321	316	316	132
85°	45	143	164	146	144	48
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°	810.0	810.0	810.0	810.0	810.0	810.0	810.0	810.0	810.0	810.0	810.0
2.5°	816.6	814.9	812.5	809.2	808.3	808.3	807.5	807.5	809.2	812.5	817.4
5°	812.5	810.8	808.3	805.9	806.7	809.2	814.1	819.9	828.1	837.2	847.1
7.5°	804.2	803.4	801.7	801.7	808.3	819.9	831.4	843.0	856.2	870.2	885.1
10°	794.3	793.5	792.7	799.3	814.1	831.4	847.9	863.6	881.8	899.9	917.2
12.5°	780.3	780.3	782.8	797.6	818.2	839.7	860.3	880.9	902.4	923.8	942.8
15°	763.8	763.8	772.1	793.5	819.9	844.6	869.4	892.5	917.2	941.1	960.9
17.5°	745.7	744.8	760.5	786.9	816.6	845.5	873.5	899.1	924.6	951.0	971.7
20°	724.2	725.9	746.5	777.0	810.0	842.2	871.9	899.1	926.3	954.3	974.1
22.5°	700.3	703.6	729.2	763.0	800.1	833.1	864.4	893.3	921.3	949.4	969.2
25°	675.5	679.7	711.0	746.5	786.1	819.9	851.2	881.8	909.8	937.8	957.6
27.5°	649.1	654.9	690.4	727.5	767.1	802.6	833.9	865.3	893.3	922.2	940.3
30°	621.1	628.5	666.5	704.4	745.7	780.3	811.6	843.8	872.7	900.7	918.0
32.5°	591.4	600.5	639.3	680.5	720.9	754.7	786.1	819.1	846.3	872.7	890.0
35°	561.7	572.4	612.0	653.3	692.9	726.7	757.2	790.2	817.4	842.2	858.7
37.5°	531.2	544.4	584.0	624.4	663.2	697.0	728.3	758.9	786.1	809.2	825.7
40°	500.7	515.5	555.1	594.7	633.5	665.6	696.2	726.7	753.9	774.5	790.2
42.5°	471.0	485.8	526.2	565.8	601.3	634.3	664.8	694.5	719.3	739.9	753.9
45°	441.3	457.0	496.6	535.3	570.8	603.8	634.3	661.5	685.4	702.8	716.8
47.5°	411.6	428.1	467.7	506.5	540.3	572.4	603.8	628.5	651.6	668.9	680.5
50°	381.9	400.0	438.8	478.4	511.4	543.6	573.3	596.4	617.8	633.5	644.2
52.5°	354.7	372.0	411.6	451.2	484.2	516.4	544.4	566.7	585.6	599.7	610.4
55°	326.6	345.6	386.9	424.8	458.6	490.8	516.4	537.0	554.3	568.3	576.6
57.5°	299.4	320.9	361.3	399.2	433.9	464.4	489.1	508.9	524.6	536.1	543.6
60°	273.0	295.3	337.4	375.3	409.9	439.6	463.6	481.7	495.7	505.6	512.2
62.5°	246.6	272.2	313.4	353.0	386.0	414.9	437.2	453.7	466.9	475.9	480.1
65°	221.1	247.5	290.3	329.1	362.1	389.3	410.8	425.6	438.0	445.4	447.1
67.5°	196.3	224.4	267.2	306.0	338.2	363.8	384.4	398.4	409.1	414.1	415.7
70°	171.6	200.4	244.2	282.9	313.4	338.2	357.2	370.4	379.4	384.4	384.4
72.5°	148.5	177.3	221.1	259.0	287.0	311.8	329.1	341.5	349.7	353.0	352.2
75°	123.7	153.4	196.3	232.6	259.8	282.9	300.2	312.6	318.4	320.9	320.0
77.5°	102.3	130.3	171.6	205.4	234.3	253.2	270.5	282.1	287.9	289.5	288.7
80°	82.5	108.9	145.2	177.3	202.1	222.7	238.4	250.8	255.7	254.1	246.6
82.5°	63.5	87.4	119.6	147.6	170.7	189.7	206.2	213.6	214.5	210.3	203.7
85°	45.4	63.5	90.7	114.7	136.1	150.1	160.0	165.8	167.4	164.1	156.7
87.5°	25.6	37.1	53.6	70.9	87.4	97.3	103.1	106.4	108.9	105.6	100.6
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°	810.0	810.0	810.0	810.0	810.0	810.0	810.0	810.0
2.5°	812.5	814.9	814.1	815.8	816.6	816.6	814.1	815.8
5°	847.9	852.9	856.2	861.1	864.4	864.4	865.3	867.7
7.5°	886.7	895.0	902.4	908.1	912.3	913.9	916.4	918.9
10°	923.0	932.9	941.1	948.6	953.5	956.8	959.3	963.4
12.5°	951.0	962.6	971.7	979.9	986.5	991.5	993.9	997.2
15°	971.7	984.9	995.6	1004.7	1010.4	1016.2	1018.7	1022.0
17.5°	984.0	997.2	1008.8	1017.9	1024.5	1030.2	1033.5	1036.8
20°	987.3	1000.5	1012.9	1022.0	1028.6	1036.0	1039.3	1042.6
22.5°	982.4	995.6	1008.8	1018.7	1026.1	1033.5	1036.8	1040.1
25°	972.5	986.5	999.7	1009.6	1016.2	1023.6	1027.8	1029.4
27.5°	956.8	970.8	984.0	993.1	1000.5	1008.0	1012.1	1012.9
30°	934.5	948.6	961.8	970.8	979.1	985.7	989.8	989.8
32.5°	907.3	920.5	934.5	942.8	950.2	956.8	960.9	962.6
35°	876.0	889.2	902.4	909.8	918.0	923.0	926.3	928.8
37.5°	842.2	855.4	866.1	872.7	881.8	885.1	890.0	889.2
40°	805.9	816.6	826.5	832.3	839.7	843.8	848.8	847.9
42.5°	767.9	778.6	786.9	793.5	797.6	801.7	805.0	804.2
45°	729.2	739.1	746.5	749.8	756.4	758.0	761.3	761.3
47.5°	690.4	698.6	705.2	710.2	713.5	715.1	718.4	718.4
50°	653.3	660.7	664.8	668.9	672.2	674.7	676.4	677.2
52.5°	617.0	622.8	626.1	629.4	632.7	634.3	636.0	635.1
55°	582.3	586.5	588.9	591.4	593.9	596.4	596.4	596.4
57.5°	547.7	550.2	552.6	554.3	556.8	558.4	558.4	558.4
60°	513.9	516.4	517.2	518.8	521.3	522.1	522.9	521.3
62.5°	480.9	481.7	482.5	483.4	485.8	487.5	487.5	486.7
65°	447.1	447.1	447.9	448.7	450.4	452.0	452.8	451.2
67.5°	414.1	414.1	414.9	414.9	417.4	419.0	419.8	419.8
70°	381.9	381.1	382.7	383.6	385.2	385.2	386.9	386.9
72.5°	349.7	348.9	350.6	350.6	352.2	353.0	353.0	353.0
75°	318.4	315.9	316.7	315.1	316.7	316.7	315.9	315.9
77.5°	284.6	278.8	277.1	273.8	273.8	273.8	272.2	272.2
80°	241.7	235.9	233.4	231.0	231.0	230.1	229.3	229.3
82.5°	198.8	193.8	191.4	188.9	190.5	188.1	188.9	189.7
85°	152.6	148.5	146.8	144.3	143.5	143.5	144.3	143.5
87.5°	99.0	94.9	94.9	92.4	94.0	91.6	89.1	90.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)