

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: P188690

Luminaire Tested: **24SR-LD2-39-C-UNV-L850-CD1-TB-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P188690  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33587)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24SR-LD2-39-C-UNV-L850-CD1-TB-U  
Description: METALUX 2X4 SKYRIDGE LED FIXTURE WITH TAHITIAN BLUE SKYTRIM.  
  
Light Source: EATON LED 5000K  
Ballast/Driver: OSRAM ELECTRONIC DRIVER

**Summary**

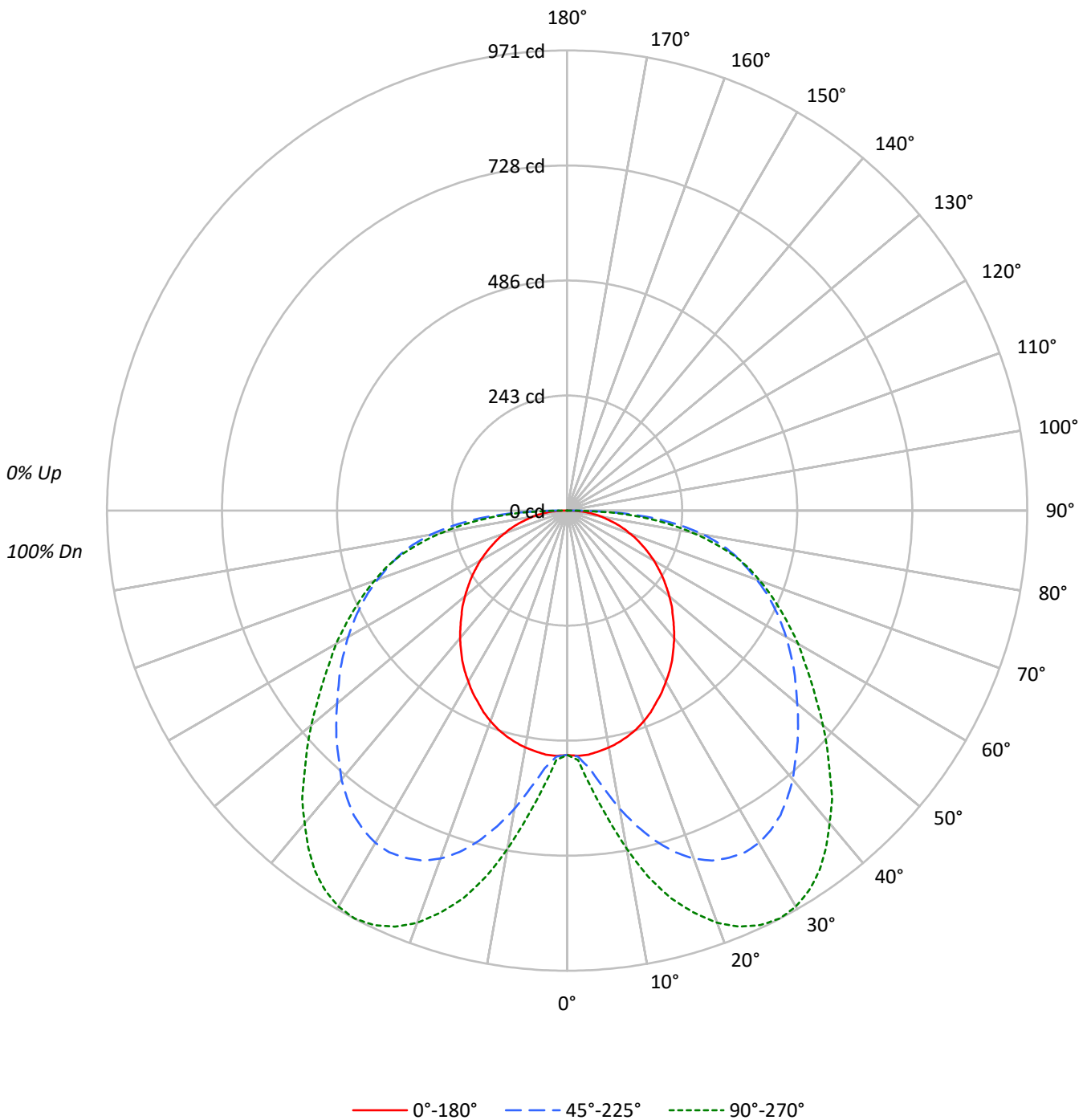
Lumens per Lamp: N/A  
Luminaire Lumens: 2929.0 lumens  
Efficiency: N/A  
Efficacy: 91.8 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 2.07 / 1.9  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 31.9  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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



TEST NUMBER: P188690

CATALOG NUMBER: 24SR-LD2-39-C-UNV-L850-CD1-TB-U

### Luminous Intensity Polar Plot





TEST NUMBER: P188690

CATALOG NUMBER: 24SR-LD2-39-C-UNV-L850-CD1-TB-U

**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	91	103	98	93	89	94	90	86		90	86	83		86	83	81	79
2	95	86	78	71	93	84	77	70	80	74	69		77	72	67		74	69	65	63
3	86	74	65	58	83	73	64	57	69	62	56		67	60	55		64	59	54	52
4	78	65	55	48	76	64	54	47	61	53	47		59	52	46		56	50	45	43
5	72	58	48	40	69	56	47	40	54	46	40		52	45	39		50	44	39	36
6	66	51	42	35	64	50	41	35	49	40	34		47	39	34		45	39	34	31
7	61	46	37	30	59	45	37	30	44	36	30		42	35	30		41	34	29	27
8	56	42	33	27	55	41	33	27	40	32	26		39	31	26		37	31	26	24
9	53	38	30	24	51	38	29	24	37	29	24		35	28	23		34	28	23	21
10	49	35	27	21	48	35	27	21	34	26	21		33	26	21		32	25	21	19

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	694	694	694
5°	698	738	794
10°	694	872	991
15°	687	1005	1179
20°	677	1119	1325
25°	662	1200	1433
30°	647	1258	1499
35°	634	1289	1524
40°	617	1301	1513
45°	600	1309	1491
50°	589	1327	1476
55°	578	1371	1474
60°	570	1436	1515
65°	559	1534	1581
70°	554	1674	1701
75°	550	1908	1891
80°	567	2269	2077
85°	625	2816	2433



TEST NUMBER: P188690

CATALOG NUMBER: 24SR-LD2-39-C-UNV-L850-CD1-TB-U

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	55.0	1.9
10°-20°	198.3	6.8
20°-30°	353.3	12.1
30°-40°	458.1	15.6
40°-50°	488.5	16.7
50°-60°	469.9	16.0
60°-70°	420.5	14.4
70°-80°	331.0	11.3
80°-90°	154.4	5.3
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°	606.6	20.7
0°-40°	1064.7	36.4
0°-60°	2023.1	69.1
0°-90°	2929.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2929.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	516	516	516	516	516	
5°	517	523	546	575	588	49
15°	493	587	722	816	847	139
25°	446	623	808	930	965	206
35°	386	593	785	897	928	241
45°	315	517	688	768	784	244
55°	247	444	584	623	628	220
65°	176	377	482	492	497	174
75°	106	290	367	362	364	112
85°	40	154	182	162	158	43
90°	0	0	0	0	0	



TEST NUMBER: P188690

CATALOG NUMBER: 24SR-LD2-39-C-UNV-L850-CD1-TB-U

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	515.7	515.7	515.7	515.7	515.7	515.7	515.7	515.7	515.7	515.7	515.7
2.5°	517.9	517.9	516.8	516.8	517.9	517.9	517.9	517.9	519.1	519.1	520.2
5°	516.8	515.7	515.7	517.9	521.3	524.7	528.1	533.7	538.2	546.1	552.9
7.5°	512.3	512.3	514.6	520.2	528.1	539.3	551.7	565.2	577.6	590.0	604.6
10°	507.8	507.8	513.4	523.6	539.3	559.6	579.9	600.1	619.3	638.4	654.2
12.5°	501.1	502.2	511.2	529.2	555.1	583.3	609.1	635.0	660.9	682.3	706.0
15°	493.2	495.4	508.9	536.0	569.7	603.5	635.0	666.6	695.8	721.7	746.5
17.5°	484.2	487.5	506.7	541.6	581.0	619.3	658.7	694.7	726.2	755.5	783.7
20°	472.9	478.5	504.4	546.1	590.0	633.9	675.6	713.9	749.9	781.4	812.9
22.5°	460.5	467.3	499.9	547.2	595.6	642.9	689.1	728.5	766.8	799.4	832.1
25°	445.9	456.0	495.4	546.1	597.9	648.6	695.8	736.4	775.8	808.4	844.5
27.5°	432.4	443.6	487.5	541.6	595.6	648.6	695.8	738.6	779.2	812.9	847.9
30°	416.6	431.2	479.7	534.8	590.0	642.9	691.3	734.1	773.5	809.6	845.6
32.5°	402.0	417.7	467.3	523.6	579.9	632.8	682.3	724.0	763.4	799.4	834.3
35°	386.2	402.0	453.8	512.3	566.4	619.3	666.6	709.4	747.6	784.8	817.5
37.5°	368.2	386.2	439.1	496.6	549.5	602.4	648.6	690.2	728.5	763.4	794.9
40°	351.3	370.4	422.2	479.7	532.6	583.3	628.3	667.7	704.9	740.9	769.0
42.5°	333.3	353.6	406.5	461.6	513.4	561.9	604.6	645.2	681.2	712.7	740.9
45°	315.3	337.8	389.6	443.6	493.2	541.6	584.4	621.5	656.4	688.0	711.6
47.5°	299.5	322.0	371.6	425.6	475.2	521.3	563.0	599.0	632.8	660.9	684.6
50°	281.5	304.0	354.7	407.6	456.0	502.2	541.6	576.5	608.0	633.9	656.4
52.5°	263.5	288.2	337.8	390.7	439.1	483.0	522.4	556.2	584.4	608.0	627.2
55°	246.6	271.4	322.0	373.8	422.2	466.2	503.3	536.0	563.0	584.4	599.0
57.5°	228.6	255.6	307.4	359.2	406.5	448.1	485.3	515.7	540.5	558.5	570.9
60°	211.7	239.8	292.8	343.4	390.7	432.4	467.3	496.6	517.9	533.7	543.8
62.5°	193.7	224.1	277.0	327.7	373.8	415.5	448.1	475.2	495.4	507.8	514.6
65°	175.7	208.3	261.2	311.9	356.9	396.3	427.9	452.6	470.7	481.9	487.5
67.5°	158.8	192.5	245.5	295.0	338.9	376.1	406.5	430.1	445.9	454.9	457.1
70°	140.7	175.7	228.6	277.0	319.8	354.7	384.0	404.2	418.9	425.6	427.9
72.5°	123.9	158.8	210.6	257.8	298.4	331.0	359.2	379.5	391.8	396.3	396.3
75°	105.8	140.7	191.4	236.5	273.6	306.3	332.2	350.2	361.4	367.1	364.8
77.5°	87.8	122.7	171.1	212.8	246.6	275.9	301.8	318.6	329.9	333.3	331.0
80°	73.2	104.7	147.5	185.8	217.3	244.3	268.0	284.9	295.0	292.8	287.1
82.5°	56.3	85.6	122.7	155.4	183.5	209.4	231.9	245.5	247.7	243.2	236.5
85°	40.5	63.1	93.5	119.4	144.1	163.3	179.0	188.0	188.0	182.4	177.9
87.5°	23.6	37.2	54.0	72.1	83.3	95.7	108.1	110.3	110.3	110.3	104.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P188690

CATALOG NUMBER: 24SR-LD2-39-C-UNV-L850-CD1-TB-U

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	515.7	515.7	515.7	515.7	515.7	515.7	515.7	515.7
2.5°	523.6	524.7	525.8	527.0	528.1	528.1	528.1	527.0
5°	559.6	566.4	572.0	578.7	581.0	583.3	585.5	587.8
7.5°	617.0	626.0	635.0	644.1	649.7	656.4	654.2	654.2
10°	672.2	689.1	699.2	710.5	716.1	722.9	726.2	725.1
12.5°	726.2	745.4	760.0	770.2	779.2	785.9	788.2	791.6
15°	772.4	791.6	809.6	822.0	833.2	840.0	844.5	846.7
17.5°	810.7	829.8	850.1	865.9	876.0	885.0	887.3	889.5
20°	838.8	863.6	882.8	899.6	910.9	919.9	924.4	925.5
22.5°	861.4	885.0	906.4	923.3	935.7	945.8	950.3	950.3
25°	873.8	898.5	921.0	939.1	951.4	960.5	965.0	965.0
27.5°	878.3	904.2	925.5	943.6	957.1	966.1	969.5	970.6
30°	874.9	900.8	922.2	939.1	952.6	960.5	963.8	965.0
32.5°	863.6	889.5	909.8	925.5	937.9	946.9	950.3	950.3
35°	845.6	869.2	889.5	905.3	916.5	923.3	927.8	927.8
37.5°	822.0	845.6	863.6	877.1	887.3	895.1	897.4	897.4
40°	794.9	815.2	832.1	845.6	854.6	860.2	862.5	861.4
42.5°	764.5	783.7	797.2	808.4	816.3	822.0	825.3	827.6
45°	733.0	751.0	763.4	772.4	778.0	781.4	784.8	783.7
47.5°	704.9	716.1	727.4	734.1	739.8	743.1	744.3	744.3
50°	672.2	682.3	691.3	697.0	700.4	702.6	702.6	704.9
52.5°	639.6	648.6	655.3	660.9	663.2	664.3	665.4	664.3
55°	610.3	615.9	620.4	624.9	627.2	628.3	630.5	628.3
57.5°	579.9	584.4	590.0	591.1	593.4	593.4	594.5	593.4
60°	549.5	552.9	555.1	556.2	559.6	560.7	560.7	563.0
62.5°	519.1	520.2	523.6	524.7	525.8	528.1	530.3	529.2
65°	488.7	489.8	490.9	493.2	495.4	497.7	497.7	496.6
67.5°	457.1	458.3	459.4	461.6	463.9	463.9	465.0	465.0
70°	426.7	426.7	427.9	429.0	431.2	432.4	433.5	432.4
72.5°	395.2	395.2	395.2	396.3	397.5	399.7	400.8	400.8
75°	362.6	362.6	362.6	361.4	362.6	364.8	363.7	363.7
77.5°	326.5	323.2	319.8	317.5	318.6	317.5	317.5	317.5
80°	281.5	275.9	271.4	269.1	268.0	269.1	268.0	268.0
82.5°	231.9	226.3	221.8	218.4	219.6	217.3	218.4	216.2
85°	172.3	167.8	163.3	161.0	162.1	162.1	161.0	157.6
87.5°	101.3	95.7	94.6	93.5	94.6	93.5	90.1	91.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)