

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: P188680

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P188680  
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-LD2-29-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: 2146.0 lumens  
Efficiency: N/A  
Efficacy: 95.0 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

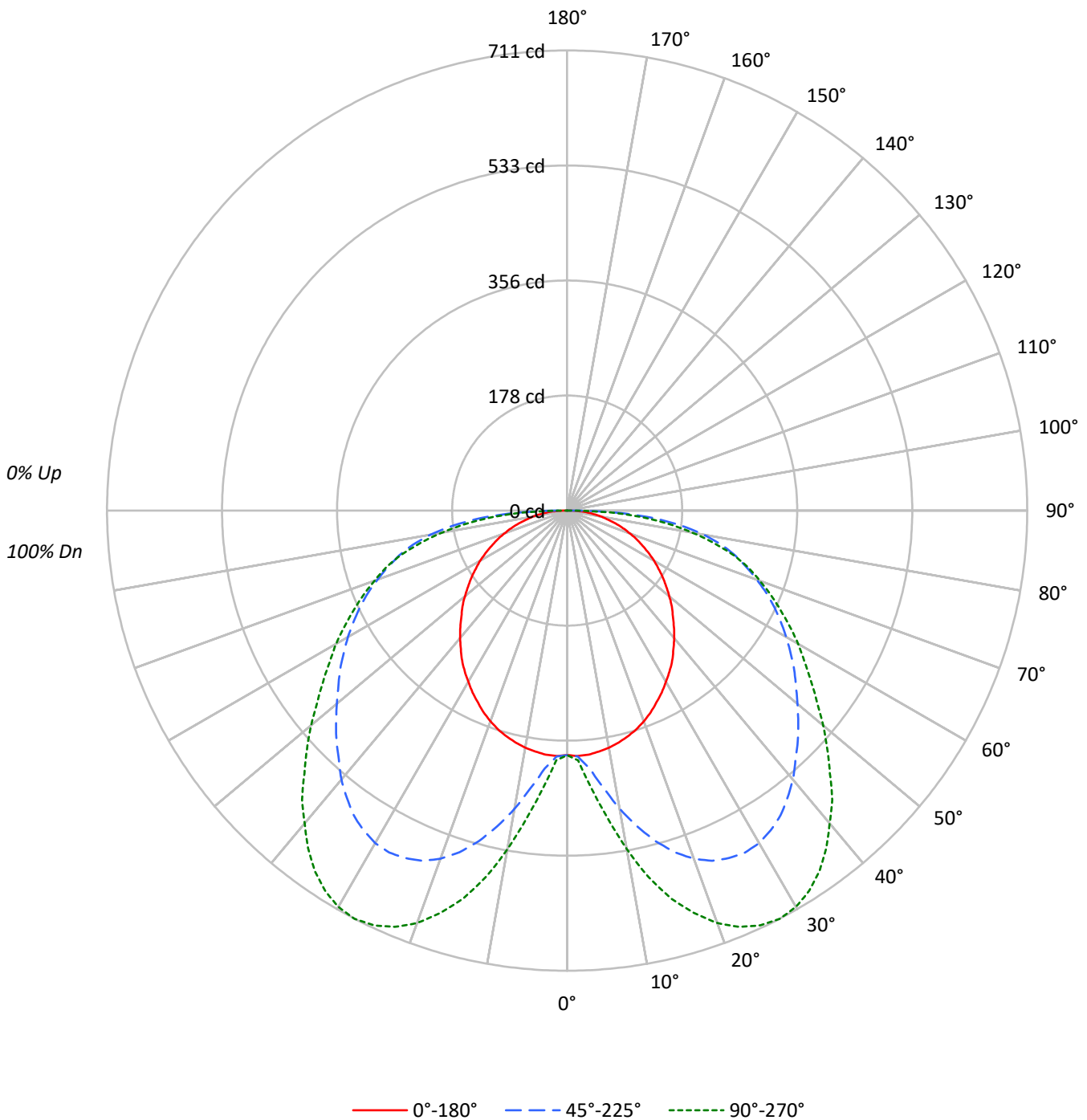
Input Watts (W): 22.6  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	508	508	508
5°	511	540	582
10°	508	639	726
15°	503	737	864
20°	496	820	971
25°	485	879	1050
30°	474	922	1098
35°	465	944	1117
40°	452	953	1108
45°	440	959	1093
50°	432	972	1081
55°	424	1004	1080
60°	417	1052	1110
65°	410	1124	1158
70°	406	1227	1246
75°	403	1398	1385
80°	415	1662	1521
85°	459	2062	1783



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	40.3	1.9
10°-20°	145.3	6.8
20°-30°	258.9	12.1
30°-40°	335.6	15.6
40°-50°	357.9	16.7
50°-60°	344.3	16.0
60°-70°	308.1	14.4
70°-80°	242.5	11.3
80°-90°	113.1	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°	444.4	20.7
0°-40°	780.1	36.4
0°-60°	1482.3	69.1
0°-90°	2146.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2146.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	378	378	378	378	378	
5°	379	383	400	422	431	36
15°	361	430	529	598	620	102
25°	327	457	592	681	707	151
35°	283	434	575	658	680	177
45°	231	379	504	563	574	179
55°	181	325	428	456	460	161
65°	129	276	353	360	364	128
75°	78	212	269	265	266	82
85°	30	113	134	119	116	31
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°	377.8	377.8	377.8	377.8	377.8	377.8	377.8	377.8	377.8	377.8	377.8
2.5°	379.5	379.5	378.7	378.7	379.5	379.5	379.5	379.5	380.3	380.3	381.1
5°	378.7	377.8	377.8	379.5	382.0	384.4	386.9	391.0	394.3	400.1	405.1
7.5°	375.4	375.4	377.0	381.1	386.9	395.2	404.2	414.1	423.2	432.3	443.0
10°	372.1	372.1	376.2	383.6	395.2	410.0	424.9	439.7	453.7	467.8	479.3
12.5°	367.1	367.9	374.5	387.7	406.7	427.3	446.3	465.3	484.3	499.9	517.3
15°	361.3	363.0	372.9	392.7	417.4	442.2	465.3	488.4	509.8	528.8	547.0
17.5°	354.7	357.2	371.2	396.8	425.7	453.7	482.6	509.0	532.1	553.6	574.2
20°	346.5	350.6	369.6	400.1	432.3	464.5	495.0	523.0	549.4	572.5	595.6
22.5°	337.4	342.4	366.3	400.9	436.4	471.1	504.9	533.8	561.8	585.7	609.7
25°	326.7	334.1	363.0	400.1	438.1	475.2	509.8	539.5	568.4	592.3	618.7
27.5°	316.8	325.0	357.2	396.8	436.4	475.2	509.8	541.2	570.9	595.6	621.2
30°	305.2	316.0	351.4	391.9	432.3	471.1	506.5	537.9	566.8	593.2	619.6
32.5°	294.5	306.1	342.4	383.6	424.9	463.6	499.9	530.5	559.3	585.7	611.3
35°	283.0	294.5	332.5	375.4	415.0	453.7	488.4	519.7	547.8	575.0	598.9
37.5°	269.8	283.0	321.7	363.8	402.6	441.4	475.2	505.7	533.8	559.3	582.4
40°	257.4	271.4	309.4	351.4	390.2	427.3	460.3	489.2	516.4	542.8	563.5
42.5°	244.2	259.0	297.8	338.2	376.2	411.7	443.0	472.7	499.1	522.2	542.8
45°	231.0	247.5	285.4	325.0	361.3	396.8	428.2	455.4	481.0	504.1	521.4
47.5°	219.4	235.9	272.2	311.8	348.1	382.0	412.5	438.9	463.6	484.3	501.6
50°	206.2	222.7	259.9	298.6	334.1	367.9	396.8	422.4	445.5	464.5	481.0
52.5°	193.0	211.2	247.5	286.3	321.7	353.9	382.8	407.5	428.2	445.5	459.5
55°	180.7	198.8	235.9	273.9	309.4	341.5	368.8	392.7	412.5	428.2	438.9
57.5°	167.5	187.3	225.2	263.2	297.8	328.3	355.6	377.8	396.0	409.2	418.3
60°	155.1	175.7	214.5	251.6	286.3	316.8	342.4	363.8	379.5	391.0	398.5
62.5°	141.9	164.2	202.9	240.1	273.9	304.4	328.3	348.1	363.0	372.1	377.0
65°	128.7	152.6	191.4	228.5	261.5	290.4	313.5	331.6	344.8	353.1	357.2
67.5°	116.3	141.1	179.8	216.1	248.3	275.5	297.8	315.1	326.7	333.3	334.9
70°	103.1	128.7	167.5	202.9	234.3	259.9	281.3	296.2	306.9	311.8	313.5
72.5°	90.7	116.3	154.3	188.9	218.6	242.5	263.2	278.0	287.1	290.4	290.4
75°	77.5	103.1	140.2	173.2	200.5	224.4	243.4	256.6	264.8	268.9	267.3
77.5°	64.3	89.9	125.4	155.9	180.7	202.1	221.1	233.5	241.7	244.2	242.5
80°	53.6	76.7	108.1	136.1	159.2	179.0	196.3	208.7	216.1	214.5	210.4
82.5°	41.2	62.7	89.9	113.8	134.5	153.4	169.9	179.8	181.5	178.2	173.2
85°	29.7	46.2	68.5	87.4	105.6	119.6	131.2	137.8	137.8	133.6	130.3
87.5°	17.3	27.2	39.6	52.8	61.0	70.1	79.2	80.8	80.8	80.8	76.7
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°	377.8	377.8	377.8	377.8	377.8	377.8	377.8	377.8
2.5°	383.6	384.4	385.3	386.1	386.9	386.9	386.9	386.1
5°	410.0	415.0	419.1	424.0	425.7	427.3	429.0	430.6
7.5°	452.1	458.7	465.3	471.9	476.0	481.0	479.3	479.3
10°	492.5	504.9	512.3	520.6	524.7	529.6	532.1	531.3
12.5°	532.1	546.1	556.9	564.3	570.9	575.8	577.5	580.0
15°	565.9	580.0	593.2	602.2	610.5	615.4	618.7	620.4
17.5°	594.0	608.0	622.9	634.4	641.8	648.4	650.1	651.7
20°	614.6	632.7	646.8	659.1	667.4	674.0	677.3	678.1
22.5°	631.1	648.4	664.1	676.5	685.5	693.0	696.3	696.3
25°	640.2	658.3	674.8	688.0	697.1	703.7	707.0	707.0
27.5°	643.5	662.4	678.1	691.3	701.2	707.8	710.3	711.1
30°	641.0	660.0	675.6	688.0	697.9	703.7	706.2	707.0
32.5°	632.7	651.7	666.6	678.1	687.2	693.8	696.3	696.3
35°	619.6	636.9	651.7	663.3	671.5	676.5	679.8	679.8
37.5°	602.2	619.6	632.7	642.6	650.1	655.8	657.5	657.5
40°	582.4	597.3	609.7	619.6	626.1	630.3	631.9	631.1
42.5°	560.2	574.2	584.1	592.3	598.1	602.2	604.7	606.4
45°	537.1	550.3	559.3	565.9	570.1	572.5	575.0	574.2
47.5°	516.4	524.7	532.9	537.9	542.0	544.5	545.3	545.3
50°	492.5	499.9	506.5	510.7	513.1	514.8	514.8	516.4
52.5°	468.6	475.2	480.1	484.3	485.9	486.7	487.6	486.7
55°	447.1	451.3	454.6	457.9	459.5	460.3	462.0	460.3
57.5°	424.9	428.2	432.3	433.1	434.8	434.8	435.6	434.8
60°	402.6	405.1	406.7	407.5	410.0	410.8	410.8	412.5
62.5°	380.3	381.1	383.6	384.4	385.3	386.9	388.6	387.7
65°	358.0	358.9	359.7	361.3	363.0	364.6	364.6	363.8
67.5°	334.9	335.8	336.6	338.2	339.9	339.9	340.7	340.7
70°	312.7	312.7	313.5	314.3	316.0	316.8	317.6	316.8
72.5°	289.6	289.6	289.6	290.4	291.2	292.9	293.7	293.7
75°	265.6	265.6	265.6	264.8	265.6	267.3	266.5	266.5
77.5°	239.2	236.8	234.3	232.6	233.5	232.6	232.6	232.6
80°	206.2	202.1	198.8	197.2	196.3	197.2	196.3	196.3
82.5°	169.9	165.8	162.5	160.0	160.9	159.2	160.0	158.4
85°	126.2	122.9	119.6	118.0	118.8	118.8	118.0	115.5
87.5°	74.2	70.1	69.3	68.5	69.3	68.5	66.0	66.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)