

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: P188600

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P188600  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24785)  
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-SO-U  
Description: METALUX 2X4 SKYRIDGE LED FIXTURE WITH STORARO ORANGE SKYTRIM.  
  
Light Source: EATON LED 5000K  
Ballast/Driver: OSRAM ELECTRONIC DRIVER

**Summary**

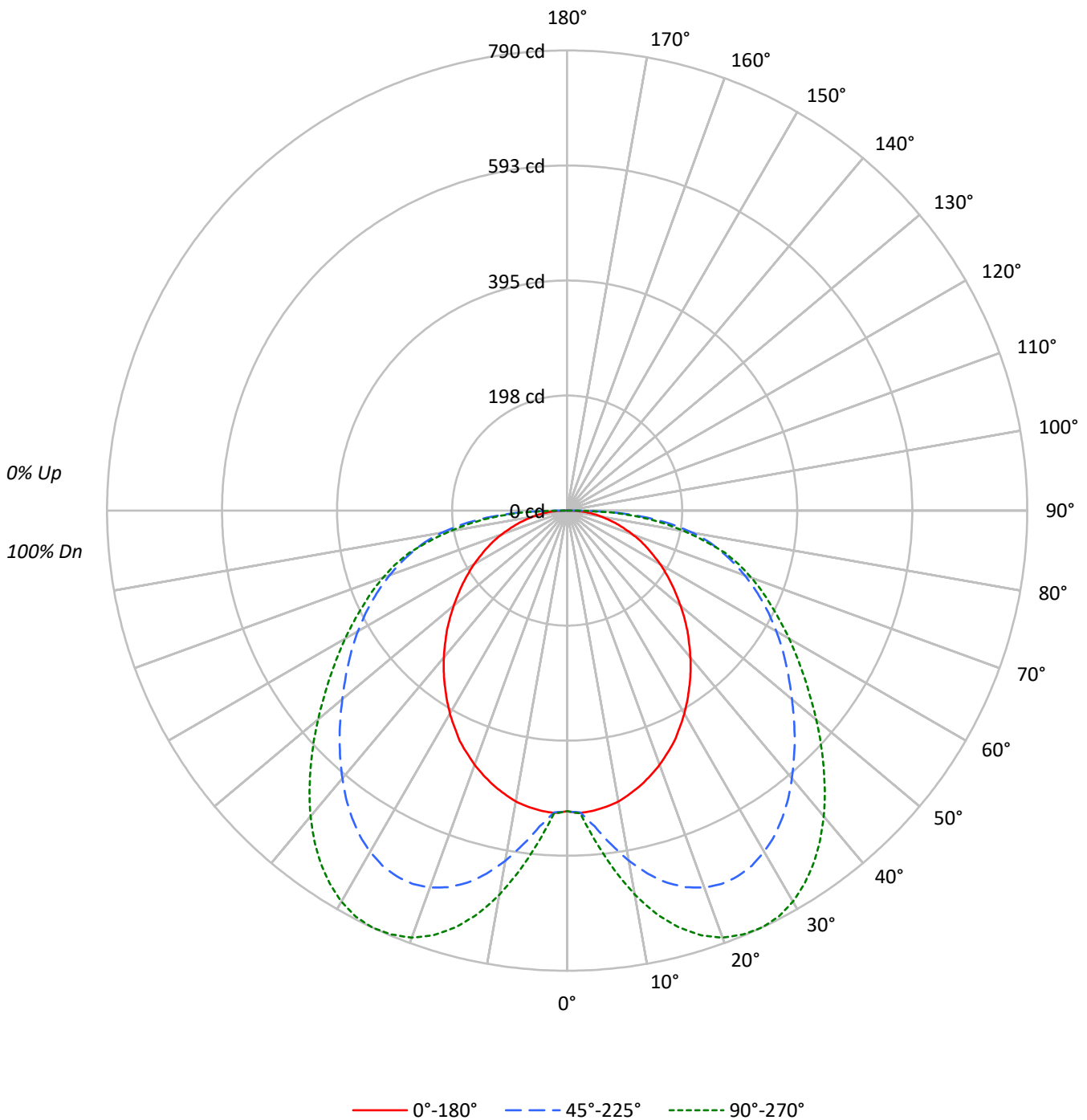
Lumens per Lamp: N/A  
Luminaire Lumens: 2386.0 lumens  
Efficiency: N/A  
Efficacy: 105.6 lumens/watt  
Spacing Criteria (0/90/45): 1.17 / 1.85 / 1.72  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 22.6  
Input Voltage (V): NR  
Input Current (Ain): NR  
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	101	96	91	104	99	94	90	94	90	87	90	87	84	87	84	82	79
2	96	87	79	72	93	85	77	71	81	75	70	78	73	68	74	70	66	64
3	87	75	66	59	84	74	65	58	70	63	57	68	61	56	65	60	55	53
4	79	66	56	49	77	65	56	49	62	54	48	60	53	47	57	52	47	44
5	72	59	49	42	70	57	48	42	55	47	41	53	46	41	51	45	40	38
6	67	53	43	36	65	52	43	36	50	42	36	48	41	35	46	40	35	33
7	62	47	38	32	60	47	38	32	45	37	31	43	36	31	42	36	31	29
8	57	43	34	28	56	42	34	28	41	33	28	40	33	28	39	32	27	25
9	53	39	31	25	52	39	31	25	38	30	25	37	30	25	35	29	24	23
10	50	36	28	23	49	36	28	22	35	27	22	34	27	22	33	27	22	20

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

	0°	45°	90°
0°	695	695	695
5°	698	735	772
10°	693	834	915
15°	680	921	1032
20°	665	986	1117
25°	648	1029	1173
30°	625	1051	1205
35°	601	1058	1213
40°	578	1055	1204
45°	556	1051	1185
50°	532	1055	1169
55°	513	1076	1165
60°	497	1116	1185
65°	483	1179	1231
70°	471	1275	1324
75°	459	1432	1458
80°	460	1694	1585
85°	509	2126	1922



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	53.6	2.2
10°-20°	180.4	7.6
20°-30°	302.1	12.7
30°-40°	378.2	15.9
40°-50°	396.8	16.6
50°-60°	374.9	15.7
60°-70°	328.2	13.8
70°-80°	253.5	10.6
80°-90°	118.3	5.0
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°	536.0	22.5
0°-40°	914.3	38.3
0°-60°	1686.0	70.7
0°-90°	2386.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2386.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	516	516	516	516	516	
5°	517	517	544	565	572	49
15°	488	557	661	721	741	137
25°	436	560	693	763	790	200
35°	366	512	644	713	738	229
45°	292	434	553	606	623	225
55°	219	360	459	488	496	196
65°	152	295	370	381	387	150
75°	88	221	276	278	280	93
85°	33	116	138	127	124	35
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°	516.3	516.3	516.3	516.3	516.3	516.3	516.3	516.3	516.3	516.3	516.3
2.5°	519.6	518.8	517.9	516.3	515.5	515.5	515.5	515.5	516.3	518.8	520.4
5°	517.1	517.1	515.5	514.6	515.5	517.9	522.1	528.7	535.3	544.3	551.8
7.5°	513.0	512.2	511.3	512.2	519.6	530.3	541.0	553.4	565.0	578.1	588.9
10°	507.2	506.4	507.2	513.8	528.7	546.0	561.7	577.3	593.0	610.3	625.2
12.5°	498.1	498.1	501.4	516.3	536.9	558.4	579.0	598.8	618.6	638.4	655.7
15°	488.3	489.1	497.3	518.8	544.3	569.1	593.0	616.1	639.2	661.4	680.4
17.5°	476.7	478.4	492.4	518.8	547.6	576.5	603.7	629.3	654.0	677.9	697.7
20°	464.3	466.0	486.6	517.1	549.3	580.6	609.5	637.5	663.9	688.7	709.3
22.5°	450.3	452.8	479.2	512.2	547.6	581.4	611.1	640.0	667.2	693.6	714.2
25°	436.3	439.6	470.1	505.6	542.7	577.3	608.7	637.5	666.4	692.8	713.4
27.5°	419.0	424.7	459.4	495.7	535.3	569.9	601.2	631.8	660.6	687.0	707.6
30°	402.5	409.9	446.2	484.1	524.5	559.2	590.5	621.0	649.9	676.3	696.9
32.5°	384.3	393.4	431.3	470.9	510.5	544.3	576.5	607.0	635.9	662.3	682.1
35°	366.2	376.9	415.7	456.1	494.9	528.7	560.0	590.5	618.6	644.1	663.1
37.5°	348.0	359.6	398.4	439.6	476.7	509.7	541.0	570.7	599.6	623.5	642.5
40°	329.1	342.3	381.0	420.6	457.7	489.9	521.2	550.1	577.3	600.4	618.6
42.5°	310.1	325.0	363.7	402.5	437.9	469.3	500.6	528.7	554.2	576.5	593.8
45°	292.0	306.8	344.7	383.5	418.1	449.5	480.0	507.2	532.0	552.6	569.1
47.5°	273.0	289.5	327.4	365.4	398.4	429.7	459.4	485.0	508.9	527.8	543.5
50°	254.0	272.2	309.3	346.4	380.2	410.7	439.6	464.3	486.6	503.9	518.8
52.5°	235.9	254.8	292.8	329.1	362.1	392.6	420.6	444.5	465.2	480.8	494.0
55°	218.6	238.4	276.3	311.8	345.6	375.3	401.7	424.7	443.7	458.6	470.1
57.5°	201.2	222.7	260.6	296.9	329.1	358.8	384.3	405.8	423.1	437.1	447.0
60°	184.7	207.0	245.8	281.2	313.4	342.3	367.0	386.8	403.3	414.8	422.3
62.5°	167.4	191.3	230.1	266.4	298.6	325.8	349.7	368.7	382.7	392.6	399.2
65°	151.8	175.7	215.3	251.5	282.1	308.5	330.7	348.9	362.1	370.3	374.4
67.5°	136.1	160.8	200.4	235.9	265.6	291.1	311.8	329.1	340.6	347.2	350.5
70°	119.6	146.0	184.7	219.4	248.2	272.2	292.8	307.6	318.4	324.1	325.8
72.5°	103.1	130.3	169.1	202.9	230.1	253.2	272.2	286.2	296.1	300.2	301.0
75°	88.2	113.8	151.8	183.9	210.3	231.8	250.7	263.9	271.3	275.5	276.3
77.5°	73.4	98.1	134.4	165.0	188.0	208.7	226.8	239.2	246.6	249.9	249.9
80°	59.4	82.5	115.5	142.7	165.0	183.9	200.4	212.8	219.4	218.6	215.3
82.5°	46.2	67.6	95.7	119.6	139.4	156.7	173.2	180.6	183.1	180.6	178.1
85°	33.0	50.3	72.6	92.4	109.7	122.9	133.6	139.4	140.2	137.7	135.3
87.5°	19.0	28.0	41.2	56.1	65.2	73.4	82.5	85.8	85.8	87.4	82.5
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°	516.3	516.3	516.3	516.3	516.3	516.3	516.3	516.3
2.5°	519.6	520.4	520.4	522.1	522.9	522.9	522.1	520.4
5°	554.2	559.2	562.5	567.4	569.9	572.4	573.2	571.6
7.5°	594.6	602.1	608.7	616.1	619.4	621.9	625.2	622.7
10°	633.4	643.3	651.6	659.8	664.7	668.0	670.5	669.7
12.5°	666.4	677.9	687.0	695.3	701.9	706.8	709.3	709.3
15°	692.0	705.2	716.7	725.8	732.4	737.3	740.6	740.6
17.5°	711.8	725.0	737.3	746.4	753.0	759.6	762.9	764.5
20°	723.3	737.3	749.7	759.6	767.0	774.4	777.7	780.2
22.5°	729.1	743.1	756.3	767.0	775.3	781.9	786.0	787.6
25°	729.1	743.9	757.9	768.7	776.9	784.3	788.5	790.1
27.5°	724.1	739.8	753.8	763.7	772.8	780.2	784.3	786.0
30°	714.2	729.9	743.9	753.8	762.9	769.5	773.6	775.3
32.5°	698.6	715.1	728.3	738.2	747.2	753.8	757.9	758.8
35°	680.4	696.1	708.5	718.4	727.4	733.2	736.5	738.2
37.5°	658.2	673.0	685.4	694.4	702.7	709.3	712.6	713.4
40°	634.2	648.3	659.0	667.2	675.5	681.2	684.5	685.4
42.5°	608.7	621.9	631.8	639.2	646.6	651.6	654.0	654.9
45°	582.3	593.8	602.9	609.5	616.1	620.2	622.7	622.7
47.5°	555.9	566.6	574.0	579.0	584.7	588.9	591.3	590.5
50°	529.5	538.6	544.3	549.3	554.2	556.7	559.2	558.4
52.5°	503.1	511.3	514.6	518.8	522.9	525.4	527.8	526.2
55°	477.5	483.3	486.6	489.9	493.2	495.7	497.3	496.5
57.5°	452.8	456.9	459.4	462.7	465.2	466.8	468.5	467.6
60°	426.4	429.7	431.3	434.6	437.1	438.8	440.4	440.4
62.5°	401.7	404.1	405.0	408.3	409.9	411.6	414.0	413.2
65°	375.3	377.7	379.4	381.9	383.5	385.2	387.6	386.8
67.5°	350.5	353.0	353.8	356.3	358.8	361.2	362.1	362.1
70°	325.8	327.4	328.3	331.5	332.4	334.8	336.5	336.5
72.5°	301.0	301.9	303.5	306.0	307.6	309.3	310.9	310.1
75°	274.6	276.3	277.1	278.8	278.8	280.4	280.4	280.4
77.5°	247.4	245.0	244.1	243.3	242.5	242.5	242.5	241.7
80°	210.3	207.8	207.0	205.4	205.4	205.4	205.4	204.5
82.5°	174.0	170.7	169.1	168.2	167.4	167.4	167.4	166.6
85°	132.0	128.7	127.8	127.0	127.0	126.2	125.4	124.5
87.5°	81.7	79.2	78.4	76.7	77.5	75.9	75.9	75.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)