

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: P188487

Luminaire Tested: **24SR-LD2-39-C-UNV-L830-CD1-MR-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P188487  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24779)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24SR-LD2-39-C-UNV-L830-CD1-MR-U  
Description: METALUX 2X4 SKYRIDGE LED FIXTURE WITH MEDIUM RED SKYTRIM.  
  
Light Source: EATON LED 3000K  
Ballast/Driver: OSRAM ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2343.0 lumens  
Efficiency: N/A  
Efficacy: 73.4 lumens/watt  
Spacing Criteria (0/90/45): 1.28 / 2.27 / 2.06  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

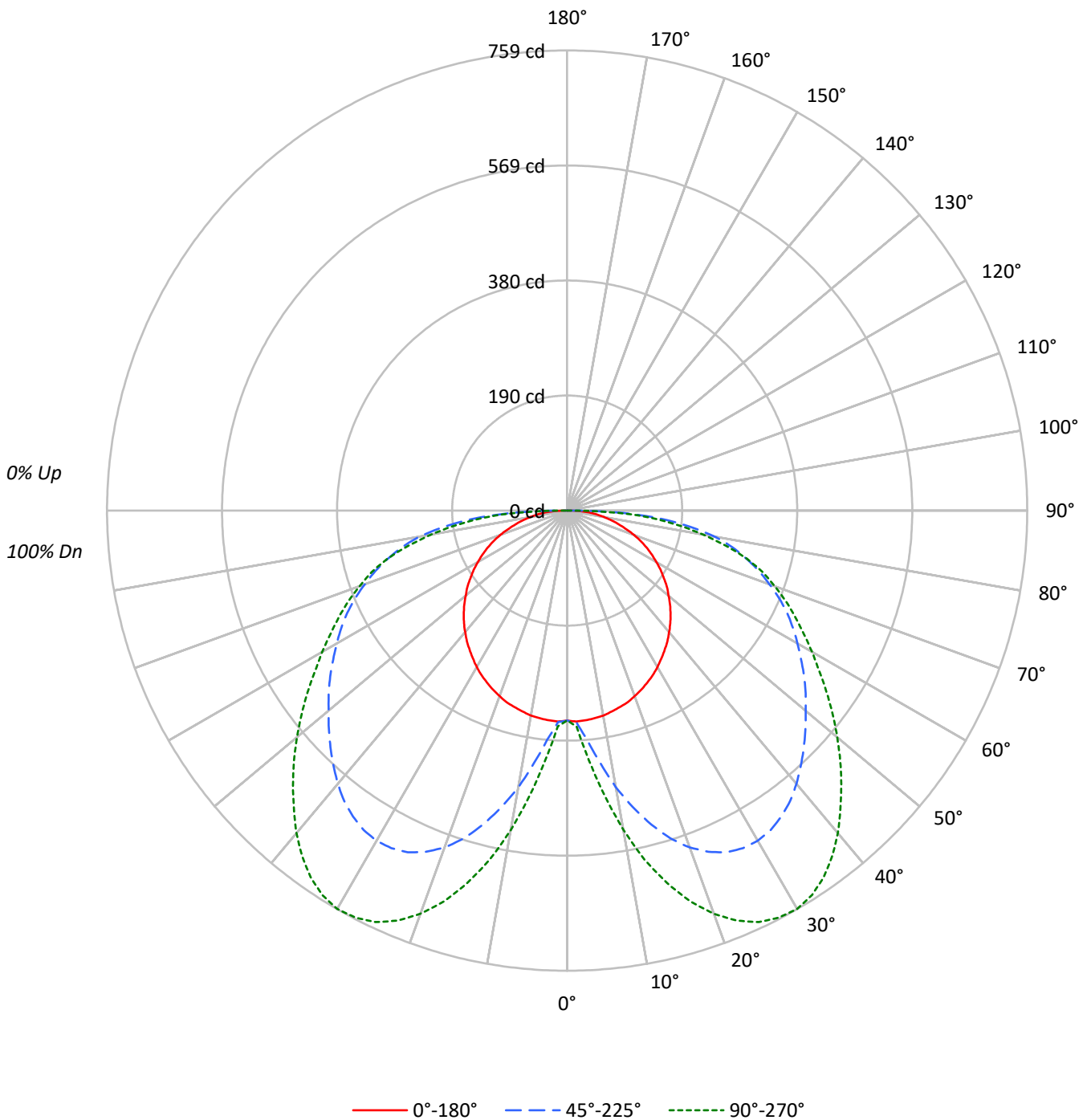
Input Watts (W): 31.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	90	103	98	93	88	93	89	85	89	86	83	86	83	80	78
2	95	85	77	70	92	83	76	69	79	73	68	76	71	66	73	68	64	62
3	85	73	64	56	83	72	63	56	69	61	55	66	59	54	63	58	53	50
4	78	64	54	47	75	63	53	46	60	52	46	58	51	45	55	49	44	42
5	71	57	47	39	69	55	46	39	53	45	39	51	44	38	49	43	38	35
6	65	50	41	34	63	49	40	33	48	39	33	46	38	33	44	38	32	30
7	60	45	36	29	58	45	35	29	43	35	29	41	34	29	40	33	28	26
8	56	41	32	26	54	40	32	26	39	31	25	38	30	25	36	30	25	23
9	52	38	29	23	50	37	28	23	36	28	23	35	27	22	33	27	22	20
10	48	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°	466	466	466
5°	469	513	558
10°	469	633	730
15°	467	747	885
20°	466	847	1013
25°	465	923	1112
30°	463	977	1179
35°	461	1012	1212
40°	460	1033	1220
45°	459	1050	1217
50°	457	1075	1217
55°	457	1119	1226
60°	458	1181	1255
65°	460	1275	1322
70°	461	1397	1432
75°	461	1591	1596
80°	480	1914	1761
85°	562	2401	2172



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	38.4	1.6
10°-20°	145.6	6.2
20°-30°	267.8	11.4
30°-40°	357.0	15.2
40°-50°	391.1	16.7
50°-60°	384.6	16.4
60°-70°	349.0	14.9
70°-80°	277.8	11.9
80°-90°	131.7	5.6
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°	451.8	19.3
0°-40°	808.8	34.5
0°-60°	1584.5	67.6
0°-90°	2343.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2343.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	346	346	346	346	346	
5°	347	350	380	404	413	33
15°	336	416	536	611	636	95
25°	313	460	622	715	749	144
35°	280	453	616	707	738	176
45°	241	408	552	619	640	186
55°	195	361	477	513	522	174
65°	145	312	400	409	415	143
75°	89	244	306	304	307	94
85°	36	131	156	141	141	38
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°	346.4	346.4	346.4	346.4	346.4	346.4	346.4	346.4	346.4	346.4	346.4
2.5°	348.3	348.3	347.3	347.3	347.3	346.4	346.4	347.3	348.3	349.3	350.3
5°	347.3	347.3	347.3	347.3	348.3	352.3	357.2	364.1	370.0	379.8	384.7
7.5°	345.4	345.4	346.4	349.3	357.2	368.0	380.8	395.5	407.4	420.1	432.0
10°	343.4	343.4	345.4	355.2	370.9	389.6	408.3	427.0	443.8	463.4	478.2
12.5°	339.5	339.5	345.4	363.1	386.7	410.3	433.9	458.5	480.2	500.8	521.5
15°	335.5	335.5	347.3	371.9	401.5	430.0	457.5	486.1	511.7	536.3	557.9
17.5°	331.6	332.6	350.3	381.8	414.2	447.7	480.2	510.7	539.2	566.8	591.4
20°	325.7	327.7	352.3	388.7	425.1	462.5	496.9	530.3	561.8	591.4	616.9
22.5°	319.8	323.7	353.2	393.6	433.9	474.3	510.7	545.1	578.6	609.1	635.6
25°	312.9	317.8	354.2	396.5	439.8	481.2	519.5	555.9	590.4	621.9	648.4
27.5°	306.0	312.9	352.3	396.5	441.8	485.1	523.5	560.9	597.3	627.8	656.3
30°	298.1	307.0	349.3	395.5	441.8	484.1	523.5	561.8	597.3	628.7	656.3
32.5°	289.3	301.1	344.4	391.6	437.9	481.2	520.5	557.9	593.3	624.8	651.4
35°	280.4	293.2	338.5	385.7	432.0	474.3	512.6	550.0	584.5	616.0	642.5
37.5°	271.6	286.3	331.6	378.8	423.1	464.4	502.8	540.2	573.6	604.1	628.7
40°	261.7	277.5	322.7	369.0	413.3	452.6	491.0	526.4	558.9	588.4	612.0
42.5°	251.9	268.6	312.9	359.1	401.5	440.8	478.2	512.6	544.1	570.7	592.3
45°	241.1	258.8	303.1	347.3	388.7	428.0	464.4	496.9	527.4	552.0	571.7
47.5°	230.2	248.9	292.2	336.5	376.9	415.2	450.6	482.1	509.7	533.3	552.0
50°	218.4	238.1	281.4	324.7	365.0	402.4	436.9	466.4	493.0	513.6	531.3
52.5°	207.6	228.3	270.6	313.9	353.2	390.6	424.1	451.6	476.2	495.9	510.7
55°	194.8	217.5	260.7	303.1	342.4	378.8	410.3	436.9	459.5	477.2	490.0
57.5°	183.0	206.6	249.9	292.2	330.6	367.0	396.5	422.1	441.8	457.5	469.3
60°	170.2	195.8	239.1	281.4	319.8	355.2	383.7	407.4	426.1	438.8	448.7
62.5°	157.4	184.0	229.3	270.6	308.0	341.4	369.0	390.6	407.4	420.1	426.1
65°	144.6	172.2	217.5	259.8	296.2	327.7	354.2	374.9	389.6	400.5	404.4
67.5°	130.9	160.4	205.6	246.0	282.4	312.9	337.5	357.2	370.0	378.8	380.8
70°	117.1	146.6	191.9	232.2	266.7	295.2	319.8	336.5	349.3	355.2	357.2
72.5°	102.3	132.8	178.1	216.5	248.9	277.5	299.1	316.8	327.7	331.6	331.6
75°	88.6	118.1	162.4	198.8	230.2	256.8	277.5	293.2	303.1	306.0	305.0
77.5°	74.8	104.3	145.6	180.1	208.6	233.2	252.9	267.6	276.5	279.4	278.5
80°	62.0	89.5	125.9	158.4	184.0	206.6	224.3	240.1	248.0	247.0	241.1
82.5°	49.2	72.8	105.3	133.8	156.4	177.1	194.8	204.7	207.6	204.7	198.8
85°	36.4	55.1	81.7	104.3	123.0	139.7	150.5	157.4	158.4	155.5	150.5
87.5°	21.6	32.5	48.2	62.0	75.8	83.6	89.5	94.5	95.4	92.5	90.5
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°	346.4	346.4	346.4	346.4	346.4	346.4	346.4	346.4
2.5°	351.3	352.3	353.2	355.2	354.2	355.2	355.2	356.2
5°	391.6	397.5	401.5	407.4	407.4	410.3	411.3	413.3
7.5°	440.8	448.7	457.5	466.4	467.4	472.3	474.3	474.3
10°	491.0	501.8	512.6	522.5	525.4	531.3	534.3	534.3
12.5°	536.3	548.1	562.8	573.6	577.6	584.5	588.4	589.4
15°	575.6	590.4	605.1	616.9	623.8	630.7	634.6	635.6
17.5°	609.1	626.8	642.5	654.3	662.2	670.1	675.0	676.0
20°	635.6	655.3	671.1	683.8	692.7	702.5	706.5	707.5
22.5°	656.3	675.0	692.7	706.5	716.3	726.2	731.1	732.1
25°	670.1	689.7	707.5	722.2	733.0	741.9	746.8	748.8
27.5°	677.9	698.6	716.3	730.1	740.9	750.8	755.7	756.7
30°	678.9	699.6	717.3	731.1	741.9	751.7	756.7	758.6
32.5°	674.0	694.7	711.4	725.2	736.0	744.8	749.8	751.7
35°	664.2	683.8	700.6	713.4	723.2	731.1	737.0	738.0
37.5°	650.4	669.1	683.8	695.7	705.5	713.4	718.3	718.3
40°	631.7	649.4	662.2	673.0	682.9	688.8	694.7	694.7
42.5°	611.0	627.8	639.6	649.4	656.3	663.2	667.1	667.1
45°	589.4	603.2	615.0	622.8	629.7	634.6	639.6	639.6
47.5°	567.7	579.5	588.4	596.3	602.2	607.1	611.0	611.0
50°	545.1	555.9	562.8	569.7	574.6	578.6	581.5	581.5
52.5°	522.5	531.3	536.3	542.2	546.1	550.0	552.0	552.0
55°	500.8	506.7	510.7	515.6	518.5	520.5	522.5	522.5
57.5°	477.2	481.2	485.1	488.0	490.0	492.0	493.9	493.0
60°	453.6	456.6	459.5	461.5	463.4	465.4	466.4	466.4
62.5°	430.0	431.0	432.0	435.9	437.9	438.8	439.8	439.8
65°	406.4	406.4	407.4	410.3	412.3	414.2	415.2	415.2
67.5°	380.8	381.8	382.8	385.7	386.7	388.7	390.6	390.6
70°	355.2	356.2	356.2	359.1	360.1	362.1	364.1	364.1
72.5°	330.6	330.6	330.6	332.6	334.5	336.5	338.5	338.5
75°	303.1	303.1	303.1	305.0	305.0	306.0	308.0	307.0
77.5°	273.5	270.6	267.6	266.7	266.7	267.6	268.6	268.6
80°	235.2	231.2	229.3	227.3	226.3	227.3	228.3	227.3
82.5°	194.8	189.9	187.0	186.0	186.0	186.0	187.0	185.0
85°	147.6	142.7	140.7	140.7	139.7	139.7	139.7	140.7
87.5°	88.6	85.6	82.7	83.6	82.7	81.7	82.7	84.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)