

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: P188482

Luminaire Tested: **24SR-LD2-34-C-UNV-L830-CD1-MR-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188482
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-LD2-34-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: 2031.0 lumens
Efficiency: N/A
Efficacy: 74.7 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

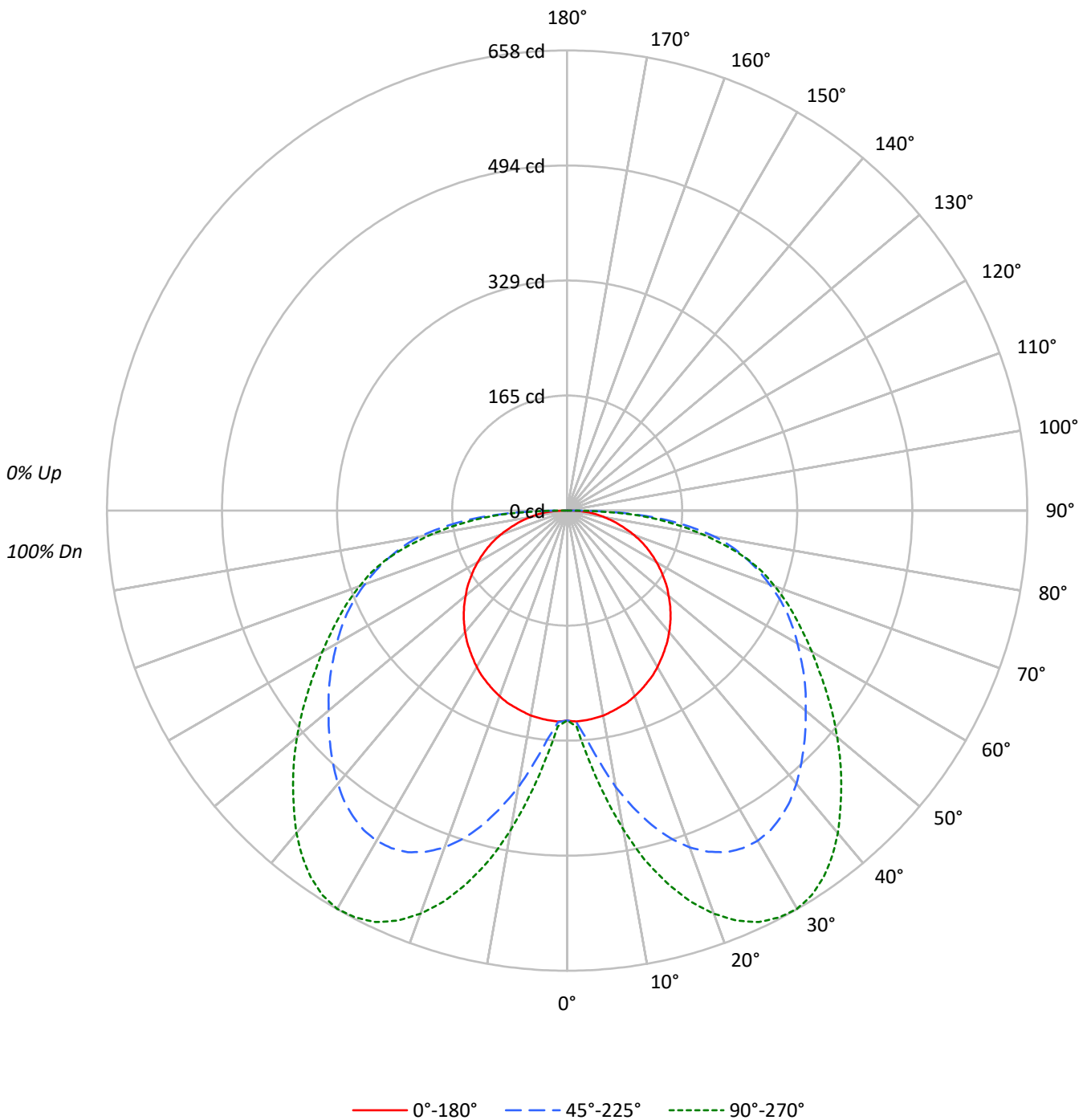
Input Watts (W): 27.2
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	404	404	404
5°	407	445	484
10°	407	549	633
15°	405	647	768
20°	404	734	878
25°	403	800	964
30°	401	847	1022
35°	399	877	1051
40°	399	896	1058
45°	398	910	1055
50°	396	932	1055
55°	396	970	1062
60°	397	1024	1088
65°	399	1105	1146
70°	399	1211	1242
75°	399	1379	1383
80°	416	1659	1526
85°	488	2081	1883



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	33.3	1.6
10°-20°	126.2	6.2
20°-30°	232.1	11.4
30°-40°	309.5	15.2
40°-50°	339.0	16.7
50°-60°	333.4	16.4
60°-70°	302.5	14.9
70°-80°	240.8	11.9
80°-90°	114.2	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°	391.6	19.3
0°-40°	701.1	34.5
0°-60°	1373.5	67.6
0°-90°	2031.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2031.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	300	300	300	300	300	
5°	301	304	329	351	358	29
15°	291	360	465	530	551	82
25°	271	399	539	620	649	125
35°	243	393	534	613	640	152
45°	209	354	478	536	554	161
55°	169	313	414	445	453	151
65°	125	270	347	354	360	124
75°	77	211	265	264	266	81
85°	32	114	135	122	122	33
90°	0	0	0	0	0	



TEST NUMBER: P188482

CATALOG NUMBER: 24SR-LD2-34-C-UNV-L830-CD1-MR-U

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	300.2	300.2	300.2	300.2	300.2	300.2	300.2	300.2	300.2	300.2	300.2
2.5°	301.9	301.9	301.1	301.1	301.1	300.2	300.2	301.1	301.9	302.8	303.6
5°	301.1	301.1	301.1	301.1	301.9	305.3	309.6	315.6	320.7	329.2	333.5
7.5°	299.4	299.4	300.2	302.8	309.6	319.0	330.1	342.9	353.1	364.2	374.4
10°	297.7	297.7	299.4	307.9	321.6	337.8	354.0	370.2	384.7	401.7	414.5
12.5°	294.3	294.3	299.4	314.7	335.2	355.7	376.1	397.5	416.2	434.1	452.0
15°	290.8	290.8	301.1	322.4	348.0	372.7	396.6	421.3	443.5	464.8	483.6
17.5°	287.4	288.3	303.6	330.9	359.1	388.1	416.2	442.7	467.4	491.3	512.6
20°	282.3	284.0	305.3	336.9	368.5	400.9	430.7	459.7	487.0	512.6	534.8
22.5°	277.2	280.6	306.2	341.2	376.1	411.1	442.7	472.5	501.5	528.0	551.0
25°	271.2	275.5	307.1	343.7	381.3	417.1	450.3	481.9	511.8	539.0	562.1
27.5°	265.3	271.2	305.3	343.7	383.0	420.5	453.8	486.2	517.7	544.2	568.9
30°	258.4	266.1	302.8	342.9	383.0	419.6	453.8	487.0	517.7	545.0	568.9
32.5°	250.8	261.0	298.5	339.5	379.6	417.1	451.2	483.6	514.3	541.6	564.6
35°	243.1	254.2	293.4	334.3	374.4	411.1	444.4	476.8	506.6	533.9	557.0
37.5°	235.4	248.2	287.4	328.4	366.8	402.6	435.8	468.3	497.3	523.7	545.0
40°	226.9	240.5	279.8	319.8	358.2	392.3	425.6	456.3	484.5	510.0	530.5
42.5°	218.3	232.8	271.2	311.3	348.0	382.1	414.5	444.4	471.7	494.7	513.5
45°	209.0	224.3	262.7	301.1	336.9	371.0	402.6	430.7	457.2	478.5	495.5
47.5°	199.6	215.8	253.3	291.7	326.7	359.9	390.6	417.9	441.8	462.3	478.5
50°	189.3	206.4	243.9	281.5	316.4	348.8	378.7	404.3	427.3	445.2	460.6
52.5°	180.0	197.9	234.6	272.1	306.2	338.6	367.6	391.5	412.8	429.9	442.7
55°	168.9	188.5	226.0	262.7	296.8	328.4	355.7	378.7	398.3	413.7	424.8
57.5°	158.6	179.1	216.6	253.3	286.6	318.1	343.7	365.9	383.0	396.6	406.8
60°	147.6	169.7	207.3	243.9	277.2	307.9	332.6	353.1	369.3	380.4	388.9
62.5°	136.5	159.5	198.7	234.6	267.0	296.0	319.8	338.6	353.1	364.2	369.3
65°	125.4	149.3	188.5	225.2	256.7	284.0	307.1	325.0	337.8	347.1	350.6
67.5°	113.4	139.0	178.3	213.2	244.8	271.2	292.6	309.6	320.7	328.4	330.1
70°	101.5	127.1	166.3	201.3	231.1	255.9	277.2	291.7	302.8	307.9	309.6
72.5°	88.7	115.1	154.4	187.6	215.8	240.5	259.3	274.6	284.0	287.4	287.4
75°	76.8	102.4	140.7	172.3	199.6	222.6	240.5	254.2	262.7	265.3	264.4
77.5°	64.8	90.4	126.2	156.1	180.8	202.1	219.2	232.0	239.7	242.2	241.4
80°	53.7	77.6	109.2	137.3	159.5	179.1	194.5	208.1	214.9	214.1	209.0
82.5°	42.6	63.1	91.3	116.0	135.6	153.5	168.9	177.4	180.0	177.4	172.3
85°	31.6	47.8	70.8	90.4	106.6	121.1	130.5	136.5	137.3	134.8	130.5
87.5°	18.8	28.1	41.8	53.7	65.7	72.5	77.6	81.9	82.7	80.2	78.5
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: P188482

CATALOG NUMBER: 24SR-LD2-34-C-UNV-L830-CD1-MR-U

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	300.2	300.2	300.2	300.2	300.2	300.2	300.2	300.2
2.5°	304.5	305.3	306.2	307.9	307.1	307.9	307.9	308.8
5°	339.5	344.6	348.0	353.1	353.1	355.7	356.5	358.2
7.5°	382.1	388.9	396.6	404.3	405.1	409.4	411.1	411.1
10°	425.6	435.0	444.4	452.9	455.5	460.6	463.1	463.1
12.5°	464.8	475.1	487.9	497.3	500.7	506.6	510.0	510.9
15°	499.0	511.8	524.5	534.8	540.8	546.7	550.1	551.0
17.5°	528.0	543.3	557.0	567.2	574.0	580.8	585.1	586.0
20°	551.0	568.0	581.7	592.8	600.5	609.0	612.4	613.3
22.5°	568.9	585.1	600.5	612.4	620.9	629.5	633.7	634.6
25°	580.8	597.9	613.3	626.0	635.4	643.1	647.4	649.1
27.5°	587.7	605.6	620.9	632.9	642.3	650.8	655.0	655.9
30°	588.5	606.4	621.8	633.7	643.1	651.6	655.9	657.6
32.5°	584.3	602.2	616.7	628.6	638.0	645.7	649.9	651.6
35°	575.7	592.8	607.3	618.4	626.9	633.7	638.8	639.7
37.5°	563.8	580.0	592.8	603.0	611.5	618.4	622.6	622.6
40°	547.6	562.9	574.0	583.4	591.9	597.0	602.2	602.2
42.5°	529.7	544.2	554.4	562.9	568.9	574.9	578.3	578.3
45°	510.9	522.8	533.1	539.9	545.9	550.1	554.4	554.4
47.5°	492.1	502.4	510.0	516.9	522.0	526.3	529.7	529.7
50°	472.5	481.9	487.9	493.8	498.1	501.5	504.1	504.1
52.5°	452.9	460.6	464.8	470.0	473.4	476.8	478.5	478.5
55°	434.1	439.3	442.7	446.9	449.5	451.2	452.9	452.9
57.5°	413.7	417.1	420.5	423.1	424.8	426.5	428.2	427.3
60°	393.2	395.8	398.3	400.0	401.7	403.4	404.3	404.3
62.5°	372.7	373.6	374.4	377.8	379.6	380.4	381.3	381.3
65°	352.3	352.3	353.1	355.7	357.4	359.1	359.9	359.9
67.5°	330.1	330.9	331.8	334.3	335.2	336.9	338.6	338.6
70°	307.9	308.8	308.8	311.3	312.2	313.9	315.6	315.6
72.5°	286.6	286.6	286.6	288.3	290.0	291.7	293.4	293.4
75°	262.7	262.7	262.7	264.4	264.4	265.3	267.0	266.1
77.5°	237.1	234.6	232.0	231.1	231.1	232.0	232.8	232.8
80°	203.8	200.4	198.7	197.0	196.2	197.0	197.9	197.0
82.5°	168.9	164.6	162.1	161.2	161.2	161.2	162.1	160.3
85°	127.9	123.7	122.0	122.0	121.1	121.1	121.1	122.0
87.5°	76.8	74.2	71.6	72.5	71.6	70.8	71.6	73.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)