

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: P188483

Luminaire Tested: **24SR-LD2-34-C-UNV-L835-CD1-MR-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188483
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-L835-CD1-MR-U
Description: METALUX 2X4 SKYRIDGE LED FIXTURE WITH MEDIUM RED SKYTRIM.

Light Source: EATON LED 3500K
Ballast/Driver: OSRAM ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2093.0 lumens
Efficiency: N/A
Efficacy: 76.9 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

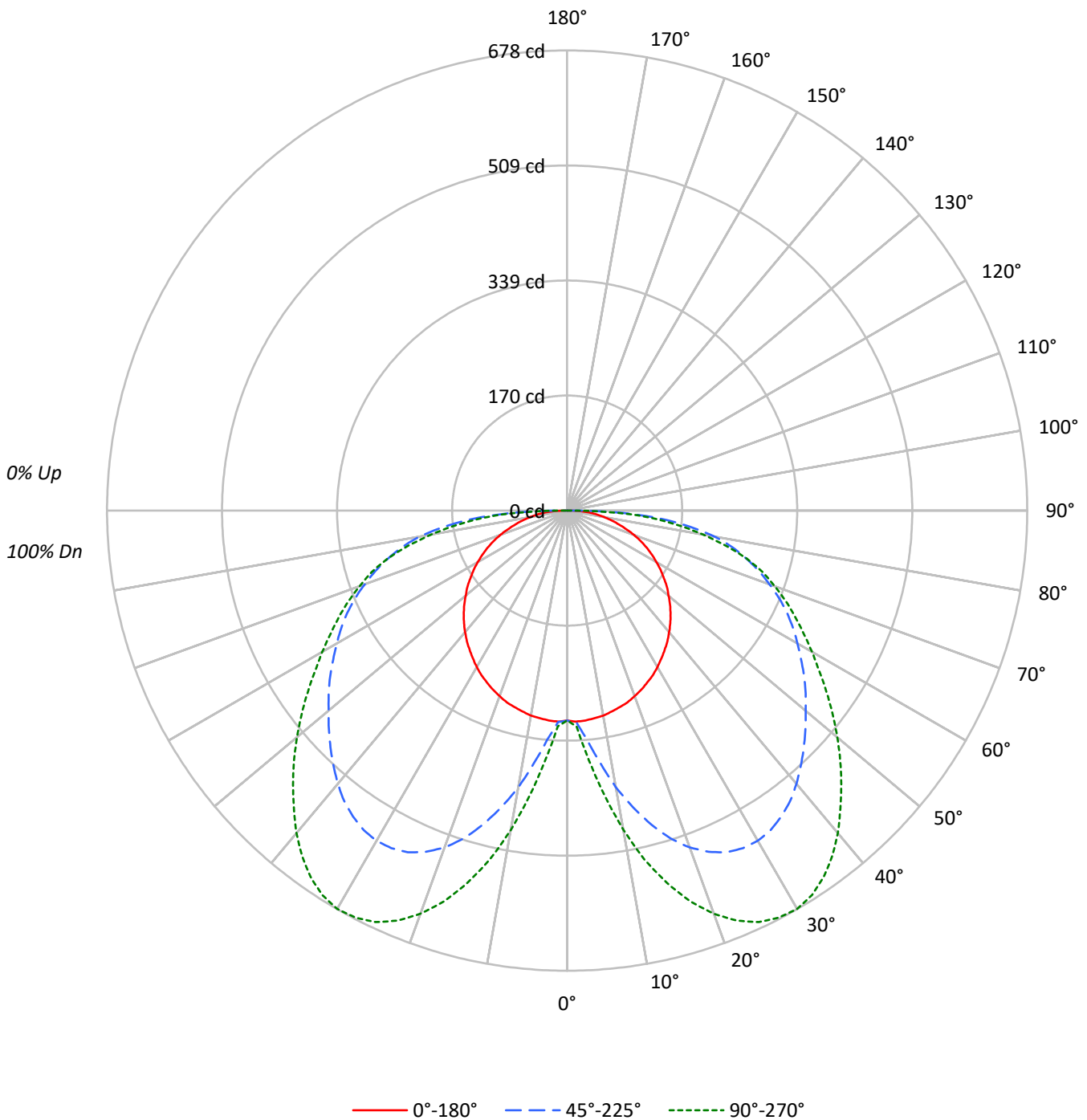
Input Watts (W): 27.2
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	416	416	416
5°	419	458	499
10°	419	566	652
15°	417	667	791
20°	417	756	905
25°	415	825	993
30°	414	873	1053
35°	411	904	1083
40°	411	923	1090
45°	410	938	1087
50°	408	960	1087
55°	408	1000	1095
60°	409	1055	1121
65°	411	1139	1181
70°	411	1248	1279
75°	411	1421	1425
80°	429	1709	1573
85°	502	2144	1941



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	34.3	1.6
10°-20°	130.1	6.2
20°-30°	239.2	11.4
30°-40°	318.9	15.2
40°-50°	349.4	16.7
50°-60°	343.5	16.4
60°-70°	311.8	14.9
70°-80°	248.2	11.9
80°-90°	117.6	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°	403.6	19.3
0°-40°	722.5	34.5
0°-60°	1415.4	67.6
0°-90°	2093.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2093.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	309	309	309	309	309	
5°	310	313	339	361	369	29
15°	300	371	479	546	568	85
25°	280	411	556	639	669	129
35°	250	405	550	632	659	157
45°	215	365	493	553	571	166
55°	174	322	426	458	467	156
65°	129	279	358	365	371	128
75°	79	218	273	272	274	84
85°	32	117	139	126	126	34
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°	309.4	309.4	309.4	309.4	309.4	309.4	309.4	309.4	309.4	309.4	309.4
2.5°	311.2	311.2	310.3	310.3	310.3	309.4	309.4	310.3	311.2	312.0	312.9
5°	310.3	310.3	310.3	310.3	311.2	314.7	319.1	325.2	330.5	339.3	343.7
7.5°	308.5	308.5	309.4	312.0	319.1	328.7	340.2	353.3	363.9	375.3	385.9
10°	306.8	306.8	308.5	317.3	331.4	348.1	364.8	381.5	396.4	414.0	427.2
12.5°	303.2	303.2	308.5	324.3	345.4	366.5	387.6	409.6	428.9	447.4	465.8
15°	299.7	299.7	310.3	332.2	358.6	384.1	408.7	434.2	457.1	479.0	498.4
17.5°	296.2	297.1	312.9	341.0	370.0	399.9	428.9	456.2	481.7	506.3	528.3
20°	290.9	292.7	314.7	347.2	379.7	413.1	443.9	473.8	501.9	528.3	551.1
22.5°	285.7	289.2	315.5	351.6	387.6	423.7	456.2	486.9	516.8	544.1	567.8
25°	279.5	283.9	316.4	354.2	392.9	429.8	464.1	496.6	527.4	555.5	579.2
27.5°	273.4	279.5	314.7	354.2	394.7	433.3	467.6	501.0	533.5	560.8	586.3
30°	266.3	274.2	312.0	353.3	394.7	432.4	467.6	501.9	533.5	561.7	586.3
32.5°	258.4	269.0	307.6	349.8	391.1	429.8	465.0	498.4	530.0	558.1	581.9
35°	250.5	261.9	302.4	344.6	385.9	423.7	457.9	491.3	522.1	550.2	574.0
37.5°	242.6	255.8	296.2	338.4	378.0	414.9	449.1	482.5	512.4	539.7	561.7
40°	233.8	247.9	288.3	329.6	369.2	404.3	438.6	470.2	499.3	525.6	546.7
42.5°	225.0	240.0	279.5	320.8	358.6	393.8	427.2	457.9	486.1	509.8	529.1
45°	215.3	231.2	270.7	310.3	347.2	382.3	414.9	443.9	471.1	493.1	510.7
47.5°	205.7	222.4	261.1	300.6	336.6	370.9	402.6	430.7	455.3	476.4	493.1
50°	195.1	212.7	251.4	290.1	326.1	359.5	390.3	416.6	440.4	458.8	474.6
52.5°	185.5	203.9	241.7	280.4	315.5	348.9	378.8	403.4	425.4	443.0	456.2
55°	174.0	194.3	232.9	270.7	305.9	338.4	366.5	390.3	410.5	426.3	437.7
57.5°	163.5	184.6	223.3	261.1	295.3	327.9	354.2	377.1	394.7	408.7	419.3
60°	152.1	174.9	213.6	251.4	285.7	317.3	342.8	363.9	380.6	392.0	400.8
62.5°	140.6	164.4	204.8	241.7	275.1	305.0	329.6	348.9	363.9	375.3	380.6
65°	129.2	153.8	194.3	232.0	264.6	292.7	316.4	334.9	348.1	357.7	361.3
67.5°	116.9	143.3	183.7	219.7	252.3	279.5	301.5	319.1	330.5	338.4	340.2
70°	104.6	131.0	171.4	207.4	238.2	263.7	285.7	300.6	312.0	317.3	319.1
72.5°	91.4	118.7	159.1	193.4	222.4	247.9	267.2	283.0	292.7	296.2	296.2
75°	79.1	105.5	145.0	177.6	205.7	229.4	247.9	261.9	270.7	273.4	272.5
77.5°	66.8	93.2	130.1	160.8	186.3	208.3	225.9	239.1	247.0	249.6	248.7
80°	55.4	80.0	112.5	141.5	164.4	184.6	200.4	214.5	221.5	220.6	215.3
82.5°	43.9	65.0	94.0	119.5	139.8	158.2	174.0	182.8	185.5	182.8	177.6
85°	32.5	49.2	73.0	93.2	109.9	124.8	134.5	140.6	141.5	138.9	134.5
87.5°	19.3	29.0	43.1	55.4	67.7	74.7	80.0	84.4	85.3	82.6	80.9
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°	309.4	309.4	309.4	309.4	309.4	309.4	309.4	309.4
2.5°	313.8	314.7	315.5	317.3	316.4	317.3	317.3	318.2
5°	349.8	355.1	358.6	363.9	363.9	366.5	367.4	369.2
7.5°	393.8	400.8	408.7	416.6	417.5	421.9	423.7	423.7
10°	438.6	448.3	457.9	466.7	469.4	474.6	477.3	477.3
12.5°	479.0	489.6	502.8	512.4	516.0	522.1	525.6	526.5
15°	514.2	527.4	540.6	551.1	557.3	563.4	566.9	567.8
17.5°	544.1	559.9	574.0	584.5	591.5	598.6	603.0	603.8
20°	567.8	585.4	599.5	610.9	618.8	627.6	631.1	632.0
22.5°	586.3	603.0	618.8	631.1	639.9	648.7	653.1	653.9
25°	598.6	616.2	632.0	645.2	654.8	662.7	667.1	668.9
27.5°	605.6	624.1	639.9	652.2	661.9	670.6	675.0	675.9
30°	606.5	624.9	640.8	653.1	662.7	671.5	675.9	677.7
32.5°	602.1	620.5	635.5	647.8	657.5	665.4	669.8	671.5
35°	593.3	610.9	625.8	637.2	646.0	653.1	658.3	659.2
37.5°	581.0	597.7	610.9	621.4	630.2	637.2	641.6	641.6
40°	564.3	580.1	591.5	601.2	610.0	615.3	620.5	620.5
42.5°	545.8	560.8	571.3	580.1	586.3	592.4	595.9	595.9
45°	526.5	538.8	549.4	556.4	562.5	566.9	571.3	571.3
47.5°	507.2	517.7	525.6	532.7	537.9	542.3	545.8	545.8
50°	486.9	496.6	502.8	508.9	513.3	516.8	519.5	519.5
52.5°	466.7	474.6	479.0	484.3	487.8	491.3	493.1	493.1
55°	447.4	452.7	456.2	460.6	463.2	465.0	466.7	466.7
57.5°	426.3	429.8	433.3	436.0	437.7	439.5	441.2	440.4
60°	405.2	407.8	410.5	412.2	414.0	415.7	416.6	416.6
62.5°	384.1	385.0	385.9	389.4	391.1	392.0	392.9	392.9
65°	363.0	363.0	363.9	366.5	368.3	370.0	370.9	370.9
67.5°	340.2	341.0	341.9	344.6	345.4	347.2	348.9	348.9
70°	317.3	318.2	318.2	320.8	321.7	323.5	325.2	325.2
72.5°	295.3	295.3	295.3	297.1	298.8	300.6	302.4	302.4
75°	270.7	270.7	270.7	272.5	272.5	273.4	275.1	274.2
77.5°	244.4	241.7	239.1	238.2	238.2	239.1	240.0	240.0
80°	210.1	206.6	204.8	203.0	202.2	203.0	203.9	203.0
82.5°	174.0	169.6	167.0	166.1	166.1	166.1	167.0	165.2
85°	131.8	127.4	125.7	125.7	124.8	124.8	124.8	125.7
87.5°	79.1	76.5	73.8	74.7	73.8	73.0	73.8	75.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)