

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: P188529

Luminaire Tested: **24SR-LD2-39-C-UNV-L840-CD1-PG-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188529
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24780)
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-L840-CD1-PG-U
Description: METALUX 2X4 SKYRIDGE LED FIXTURE WITH PRIMARY GREEN SKYTRIM.

Light Source: EATON LED 4000K
Ballast/Driver: OSRAM ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2510.0 lumens
Efficiency: N/A
Efficacy: 78.7 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 2.25 / 2.05
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

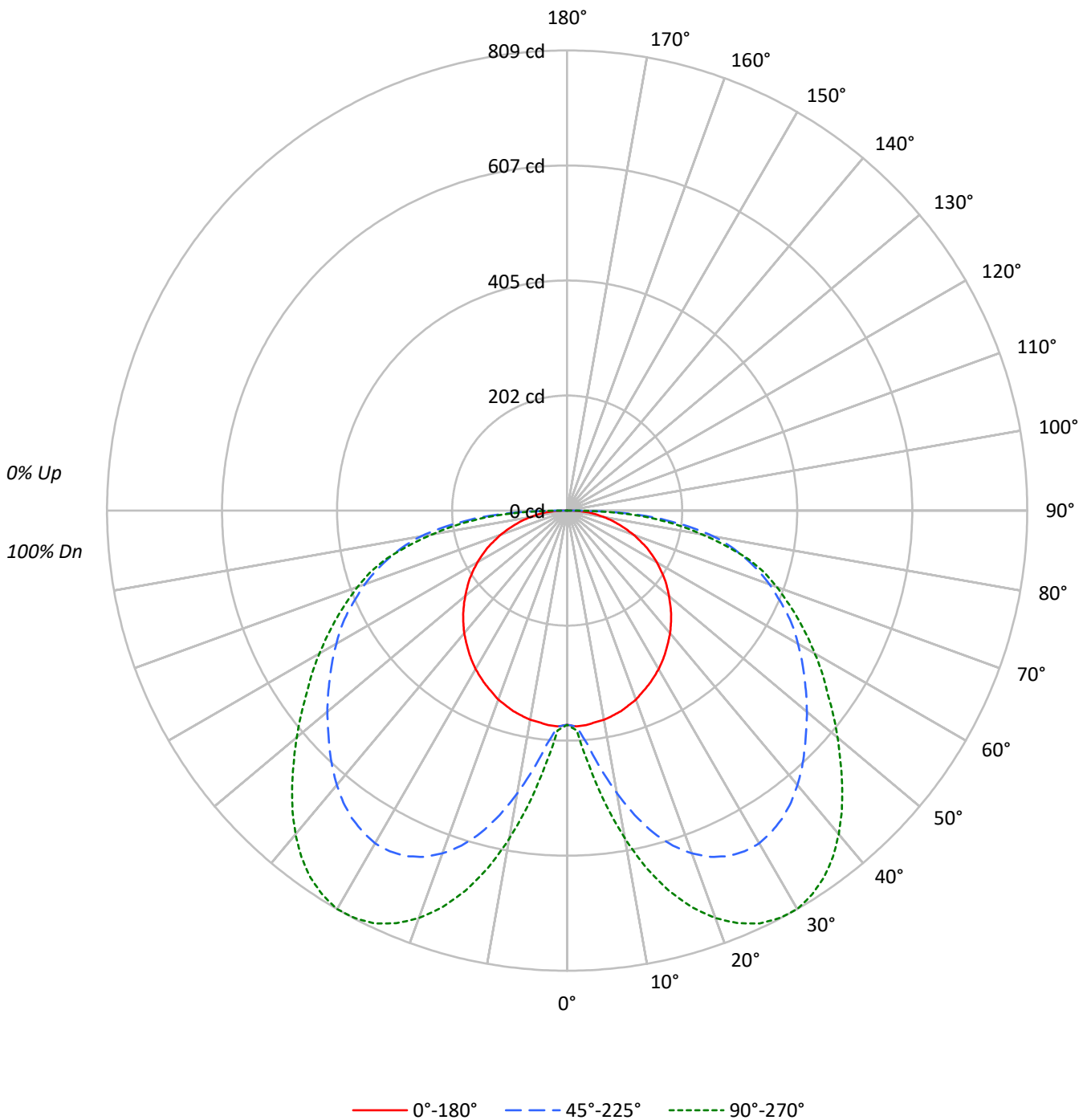
Input Watts (W): 31.9
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	86	89	86	83	86	83	80	78
2	95	85	77	70	92	83	76	69	80	73	68	76	71	66	73	69	65	62
3	86	73	64	57	83	72	63	56	69	61	55	66	59	54	63	58	53	51
4	78	64	54	47	75	63	54	46	60	52	46	58	51	45	55	49	44	42
5	71	57	47	39	69	56	46	39	53	45	39	51	44	38	49	43	38	35
6	65	51	41	34	63	50	40	34	48	39	33	46	39	33	44	38	33	30
7	60	46	36	29	58	45	36	29	43	35	29	42	34	29	40	33	28	26
8	56	41	32	26	54	41	32	26	39	31	25	38	31	25	37	30	25	23
9	52	38	29	23	50	37	29	23	36	28	23	35	28	23	34	27	22	20
10	49	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°	507	507	507
5°	511	558	611
10°	510	690	800
15°	509	817	964
20°	507	918	1092
25°	502	995	1189
30°	500	1049	1257
35°	496	1084	1293
40°	494	1107	1305
45°	492	1124	1301
50°	489	1152	1299
55°	490	1194	1310
60°	490	1261	1353
65°	491	1357	1423
70°	488	1489	1543
75°	489	1688	1716
80°	505	2028	1867
85°	591	2523	2268



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	41.9	1.7
10°-20°	158.4	6.3
20°-30°	288.3	11.5
30°-40°	382.4	15.2
40°-50°	418.9	16.7
50°-60°	411.8	16.4
60°-70°	373.5	14.9
70°-80°	296.0	11.8
80°-90°	138.7	5.5
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°	488.6	19.5
0°-40°	871.0	34.7
0°-60°	1701.7	67.8
0°-90°	2510.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2510.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	377	377	377	377	377	
5°	379	381	413	442	452	36
15°	365	454	587	666	692	103
25°	338	500	670	766	801	156
35°	302	489	660	754	787	189
45°	259	440	591	662	684	199
55°	209	386	509	549	559	187
65°	154	333	426	439	447	152
75°	94	258	325	325	330	99
85°	38	139	163	147	147	39
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°	376.6	376.6	376.6	376.6	376.6	376.6	376.6	376.6	376.6	376.6	376.6
2.5°	379.7	378.6	378.6	378.6	377.6	377.6	377.6	378.6	378.6	379.7	381.7
5°	378.6	377.6	377.6	377.6	379.7	382.8	389.0	396.2	404.5	412.8	422.1
7.5°	375.5	375.5	375.5	378.6	387.9	400.3	415.9	431.4	444.8	459.3	472.8
10°	373.5	373.5	375.5	385.9	404.5	425.2	445.9	466.6	485.2	504.8	523.5
12.5°	369.3	369.3	375.5	395.2	421.0	447.9	473.8	499.7	524.5	548.3	569.0
15°	365.2	365.2	378.6	406.6	437.6	469.7	500.7	530.7	559.7	586.6	610.3
17.5°	359.0	360.0	380.7	414.8	452.1	488.3	522.4	556.6	587.6	617.6	642.4
20°	353.8	355.9	382.8	422.1	463.5	503.8	542.1	577.2	610.3	641.4	668.3
22.5°	345.5	349.7	383.8	427.2	471.7	515.2	554.5	591.7	626.9	659.0	685.9
25°	338.3	343.5	382.8	429.3	477.9	522.4	562.8	601.0	637.2	670.3	698.3
27.5°	330.0	338.3	381.7	430.3	480.0	525.5	566.9	606.2	642.4	675.5	704.5
30°	321.7	332.1	378.6	429.3	479.0	524.5	565.9	606.2	642.4	675.5	703.5
32.5°	312.4	323.8	372.4	424.1	474.8	519.3	560.7	600.0	637.2	669.3	697.2
35°	302.1	315.5	365.2	416.9	466.6	511.0	551.4	590.7	626.9	660.0	686.9
37.5°	291.7	307.2	356.9	408.6	457.2	500.7	540.0	579.3	614.5	646.6	672.4
40°	281.4	297.9	347.6	398.3	445.9	488.3	527.6	565.9	599.0	630.0	653.8
42.5°	270.0	288.6	337.2	386.9	432.4	473.8	513.1	550.3	582.4	611.4	634.1
45°	258.6	277.2	325.9	374.5	420.0	459.3	497.6	533.8	563.8	590.7	612.4
47.5°	246.2	266.9	315.5	362.1	405.5	445.9	483.1	516.2	546.2	570.0	590.7
50°	233.8	255.5	303.1	349.7	392.1	431.4	467.6	499.7	527.6	550.3	567.9
52.5°	221.4	244.1	291.7	337.2	379.7	417.9	453.1	483.1	509.0	529.7	547.2
55°	209.0	232.8	280.3	324.8	367.2	404.5	438.6	466.6	491.4	509.0	523.5
57.5°	195.5	221.4	269.0	313.4	354.8	392.1	424.1	451.0	473.8	489.3	501.7
60°	182.1	209.0	256.6	302.1	342.4	378.6	409.7	435.5	455.2	468.6	480.0
62.5°	167.6	196.6	245.2	289.7	330.0	365.2	394.1	416.9	436.6	449.0	455.2
65°	154.1	184.1	232.8	277.2	316.6	349.7	377.6	399.3	415.9	426.2	431.4
67.5°	138.6	170.7	219.3	263.8	301.0	333.1	359.0	379.7	394.1	401.4	405.5
70°	124.1	157.2	204.8	248.3	283.4	314.5	339.3	359.0	371.4	378.6	379.7
72.5°	108.6	142.8	190.3	231.7	265.9	294.8	318.6	336.2	346.6	352.8	353.8
75°	94.1	127.2	172.8	212.1	244.1	271.0	293.8	310.3	320.7	324.8	324.8
77.5°	79.7	110.7	154.1	191.4	221.4	246.2	266.9	283.4	291.7	295.9	295.9
80°	65.2	95.2	134.5	168.6	195.5	218.3	239.0	253.4	261.7	261.7	255.5
82.5°	51.7	77.6	111.7	142.8	165.5	186.2	205.9	215.2	217.2	215.2	210.0
85°	38.3	59.0	86.9	110.7	131.4	145.9	158.3	164.5	165.5	163.4	159.3
87.5°	21.7	34.1	49.7	65.2	78.6	85.9	96.2	98.3	98.3	101.4	96.2
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°	376.6	376.6	376.6	376.6	376.6	376.6	376.6	376.6
2.5°	382.8	383.8	383.8	386.9	386.9	387.9	386.9	386.9
5°	428.3	432.4	438.6	444.8	446.9	451.0	450.0	452.1
7.5°	483.1	491.4	500.7	509.0	513.1	517.2	518.3	521.4
10°	537.9	548.3	559.7	571.0	577.2	580.3	584.5	585.5
12.5°	585.5	601.0	612.4	624.8	633.1	637.2	641.4	643.5
15°	629.0	644.5	659.0	672.4	680.7	686.9	691.0	692.1
17.5°	662.1	679.7	695.2	709.7	717.9	725.2	729.3	731.4
20°	687.9	707.6	723.1	737.6	746.9	755.2	761.4	762.4
22.5°	706.6	726.2	743.8	758.3	769.7	777.9	783.1	785.2
25°	720.0	740.7	758.3	772.8	784.1	793.5	798.6	800.7
27.5°	726.2	747.9	766.6	780.0	791.4	800.7	806.9	807.9
30°	727.2	747.9	766.6	781.0	792.4	801.7	806.9	809.0
32.5°	720.0	741.7	760.3	773.8	785.2	794.5	799.7	800.7
35°	709.7	729.3	746.9	760.3	771.7	780.0	785.2	787.2
37.5°	694.1	712.8	729.3	741.7	752.1	760.3	765.5	767.6
40°	675.5	693.1	708.6	720.0	729.3	736.6	740.7	742.8
42.5°	653.8	670.3	684.8	694.1	703.5	709.7	712.8	714.8
45°	631.0	646.6	657.9	666.2	674.5	679.7	682.8	683.8
47.5°	607.2	620.7	630.0	637.2	643.5	648.6	651.7	651.7
50°	583.5	594.8	602.1	609.3	614.5	617.6	619.7	620.7
52.5°	559.7	569.0	574.1	580.3	584.5	587.6	589.7	589.7
55°	534.8	542.1	546.2	551.4	555.5	557.6	559.7	558.6
57.5°	511.0	516.2	519.3	523.5	526.6	528.6	530.7	531.7
60°	486.2	490.3	491.4	495.5	498.6	500.7	501.7	502.8
62.5°	460.3	463.5	465.5	467.6	470.7	472.8	473.8	474.8
65°	434.5	436.6	436.6	440.7	443.8	444.8	445.9	446.9
67.5°	407.6	408.6	409.7	412.8	415.9	416.9	419.0	419.0
70°	380.7	380.7	381.7	384.8	387.9	389.0	391.0	392.1
72.5°	352.8	353.8	353.8	356.9	360.0	362.1	363.1	364.1
75°	323.8	323.8	324.8	325.9	326.9	327.9	327.9	330.0
77.5°	292.8	288.6	286.6	284.5	285.5	285.5	284.5	285.5
80°	249.3	244.1	241.0	240.0	241.0	240.0	240.0	241.0
82.5°	204.8	198.6	196.6	195.5	195.5	195.5	194.5	196.6
85°	154.1	150.0	147.9	145.9	146.9	146.9	145.9	146.9
87.5°	93.1	91.0	89.0	86.9	87.9	86.9	85.9	89.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)