

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: P188597

Luminaire Tested: **24SR-LD2-29-C-UNV-L830-CD1-SO-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188597
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-L830-CD1-SO-U
Description: METALUX 2X4 SKYRIDGE LED FIXTURE WITH STORARO ORANGE SKYTRIM.

Light Source: EATON LED 3000K
Ballast/Driver: OSRAM ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2085.0 lumens
Efficiency: N/A
Efficacy: 92.3 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

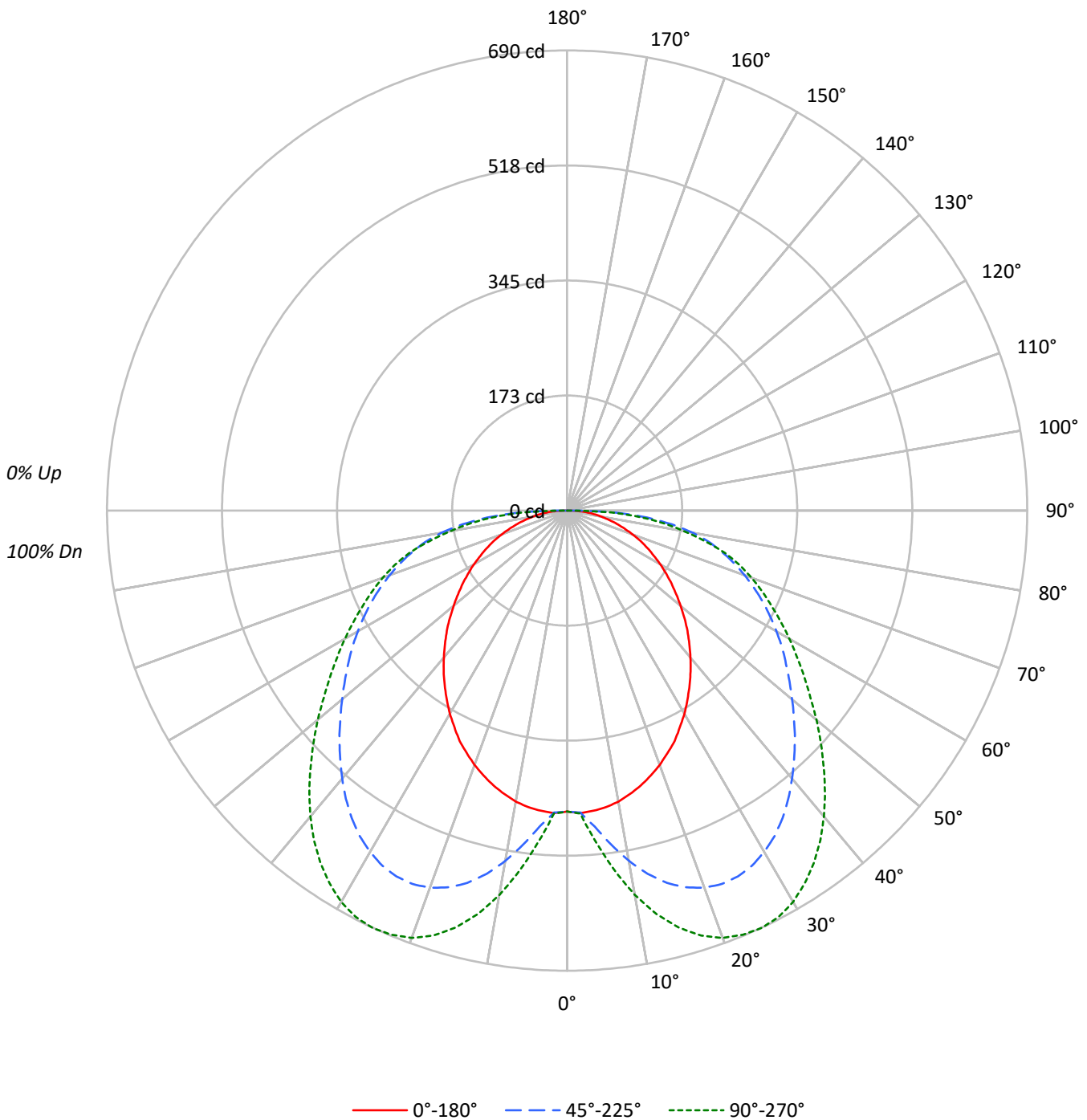
Input Watts (W): 22.6
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	607	607	607
5°	610	642	675
10°	606	729	800
15°	594	805	902
20°	581	862	976
25°	566	899	1025
30°	546	918	1053
35°	526	925	1059
40°	505	922	1052
45°	485	919	1035
50°	465	922	1021
55°	448	940	1018
60°	434	975	1036
65°	422	1030	1076
70°	411	1114	1157
75°	401	1251	1274
80°	402	1480	1385
85°	445	1859	1680



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	46.8	2.2
10°-20°	157.6	7.6
20°-30°	264.0	12.7
30°-40°	330.5	15.9
40°-50°	346.8	16.6
50°-60°	327.7	15.7
60°-70°	286.8	13.8
70°-80°	221.5	10.6
80°-90°	103.4	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°	468.4	22.5
0°-40°	798.9	38.3
0°-60°	1473.3	70.7
0°-90°	2085.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2085.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	451	451	451	451	451	
5°	452	452	476	494	499	43
15°	427	486	578	630	647	120
25°	381	489	605	667	690	175
35°	320	447	563	623	645	200
45°	255	379	483	530	544	197
55°	191	315	401	427	434	171
65°	133	258	324	333	338	131
75°	77	193	241	243	245	82
85°	29	102	120	111	109	30
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°	451.2	451.2	451.2	451.2	451.2	451.2	451.2	451.2	451.2	451.2	451.2
2.5°	454.0	453.3	452.6	451.2	450.4	450.4	450.4	450.4	451.2	453.3	454.8
5°	451.9	451.9	450.4	449.7	450.4	452.6	456.2	462.0	467.7	475.7	482.2
7.5°	448.3	447.6	446.8	447.6	454.0	463.4	472.8	483.6	493.7	505.2	514.6
10°	443.2	442.5	443.2	449.0	462.0	477.1	490.8	504.5	518.2	533.3	546.3
12.5°	435.3	435.3	438.2	451.2	469.2	487.9	505.9	523.2	540.5	557.8	573.0
15°	426.7	427.4	434.6	453.3	475.7	497.3	518.2	538.4	558.5	578.0	594.6
17.5°	416.6	418.0	430.3	453.3	478.5	503.8	527.6	549.9	571.5	592.4	609.7
20°	405.8	407.2	425.2	451.9	480.0	507.4	532.6	557.1	580.2	601.8	619.8
22.5°	393.5	395.7	418.7	447.6	478.5	508.1	534.0	559.3	583.1	606.1	624.1
25°	381.3	384.1	410.8	441.8	474.2	504.5	531.9	557.1	582.3	605.4	623.4
27.5°	366.1	371.2	401.4	433.1	467.7	498.0	525.4	552.1	577.3	600.3	618.4
30°	351.7	358.2	389.9	423.1	458.4	488.6	516.0	542.7	567.9	591.0	609.0
32.5°	335.8	343.8	376.9	411.5	446.1	475.7	503.8	530.4	555.7	578.7	596.0
35°	320.0	329.4	363.2	398.6	432.4	462.0	489.4	516.0	540.5	562.9	579.4
37.5°	304.1	314.2	348.1	384.1	416.6	445.4	472.8	498.7	524.0	544.9	561.4
40°	287.6	299.1	333.0	367.6	400.0	428.1	455.5	480.7	504.5	524.7	540.5
42.5°	271.0	284.0	317.8	351.7	382.7	410.1	437.5	462.0	484.3	503.8	518.9
45°	255.1	268.1	301.3	335.1	365.4	392.8	419.5	443.2	464.9	482.9	497.3
47.5°	238.6	253.0	286.1	319.3	348.1	375.5	401.4	423.8	444.7	461.3	474.9
50°	222.0	237.8	270.3	302.7	332.2	358.9	384.1	405.8	425.2	440.4	453.3
52.5°	206.1	222.7	255.9	287.6	316.4	343.1	367.6	388.5	406.5	420.2	431.7
55°	191.0	208.3	241.4	272.4	302.0	327.9	351.0	371.2	387.7	400.7	410.8
57.5°	175.9	194.6	227.7	259.5	287.6	313.5	335.8	354.6	369.7	382.0	390.6
60°	161.4	180.9	214.8	245.8	273.9	299.1	320.7	338.0	352.4	362.5	369.0
62.5°	146.3	167.2	201.1	232.8	260.9	284.7	305.6	322.2	334.4	343.1	348.8
65°	132.6	153.5	188.1	219.8	246.5	269.5	289.0	304.9	316.4	323.6	327.2
67.5°	118.9	140.5	175.1	206.1	232.1	254.4	272.4	287.6	297.7	303.4	306.3
70°	104.5	127.6	161.4	191.7	216.9	237.8	255.9	268.8	278.2	283.2	284.7
72.5°	90.1	113.9	147.7	177.3	201.1	221.3	237.8	250.1	258.7	262.3	263.1
75°	77.1	99.5	132.6	160.7	183.8	202.5	219.1	230.6	237.1	240.7	241.4
77.5°	64.1	85.8	117.5	144.1	164.3	182.3	198.2	209.0	215.5	218.4	218.4
80°	51.9	72.1	100.9	124.7	144.1	160.7	175.1	185.9	191.7	191.0	188.1
82.5°	40.4	59.1	83.6	104.5	121.8	136.9	151.3	157.8	160.0	157.8	155.7
85°	28.8	44.0	63.4	80.7	95.9	107.4	116.8	121.8	122.5	120.4	118.2
87.5°	16.6	24.5	36.0	49.0	56.9	64.1	72.1	75.0	75.0	76.4	72.1
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°	451.2	451.2	451.2	451.2	451.2	451.2	451.2	451.2
2.5°	454.0	454.8	454.8	456.2	456.9	456.9	456.2	454.8
5°	484.3	488.6	491.5	495.8	498.0	500.2	500.9	499.4
7.5°	519.6	526.1	531.9	538.4	541.3	543.4	546.3	544.1
10°	553.5	562.2	569.4	576.6	580.9	583.8	585.9	585.2
12.5°	582.3	592.4	600.3	607.6	613.3	617.6	619.8	619.8
15°	604.7	616.2	626.3	634.2	640.0	644.3	647.2	647.2
17.5°	622.0	633.5	644.3	652.2	658.0	663.8	666.7	668.1
20°	632.1	644.3	655.1	663.8	670.3	676.7	679.6	681.8
22.5°	637.1	649.4	660.9	670.3	677.5	683.2	686.8	688.3
25°	637.1	650.1	662.3	671.7	678.9	685.4	689.0	690.4
27.5°	632.8	646.5	658.7	667.4	675.3	681.8	685.4	686.8
30°	624.1	637.8	650.1	658.7	666.7	672.4	676.0	677.5
32.5°	610.4	624.9	636.4	645.0	653.0	658.7	662.3	663.0
35°	594.6	608.3	619.1	627.7	635.7	640.7	643.6	645.0
37.5°	575.1	588.1	598.9	606.8	614.0	619.8	622.7	623.4
40°	554.2	566.5	575.8	583.1	590.3	595.3	598.2	598.9
42.5°	531.9	543.4	552.1	558.5	565.0	569.4	571.5	572.2
45°	508.8	518.9	526.8	532.6	538.4	542.0	544.1	544.1
47.5°	485.8	495.1	501.6	505.9	511.0	514.6	516.7	516.0
50°	462.7	470.6	475.7	480.0	484.3	486.5	488.6	487.9
52.5°	439.6	446.8	449.7	453.3	456.9	459.1	461.3	459.8
55°	417.3	422.3	425.2	428.1	431.0	433.1	434.6	433.9
57.5°	395.7	399.3	401.4	404.3	406.5	407.9	409.4	408.6
60°	372.6	375.5	376.9	379.8	382.0	383.4	384.9	384.9
62.5°	351.0	353.1	353.9	356.7	358.2	359.6	361.8	361.1
65°	327.9	330.1	331.5	333.7	335.1	336.6	338.7	338.0
67.5°	306.3	308.5	309.2	311.3	313.5	315.7	316.4	316.4
70°	284.7	286.1	286.8	289.7	290.4	292.6	294.0	294.0
72.5°	263.1	263.8	265.2	267.4	268.8	270.3	271.7	271.0
75°	240.0	241.4	242.2	243.6	243.6	245.0	245.0	245.0
77.5°	216.2	214.0	213.3	212.6	211.9	211.9	211.9	211.2
80°	183.8	181.6	180.9	179.5	179.5	179.5	179.5	178.7
82.5°	152.1	149.2	147.7	147.0	146.3	146.3	146.3	145.6
85°	115.3	112.4	111.7	111.0	111.0	110.3	109.5	108.8
87.5°	71.3	69.2	68.5	67.0	67.7	66.3	66.3	66.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)