

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: P188599

Luminaire Tested: **24SR-LD2-29-C-UNV-L840-CD1-SO-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188599
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-L840-CD1-SO-U
Description: METALUX 2X4 SKYRIDGE LED FIXTURE WITH STORARO ORANGE SKYTRIM.

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

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2193.0 lumens
Efficiency: N/A
Efficacy: 97.0 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

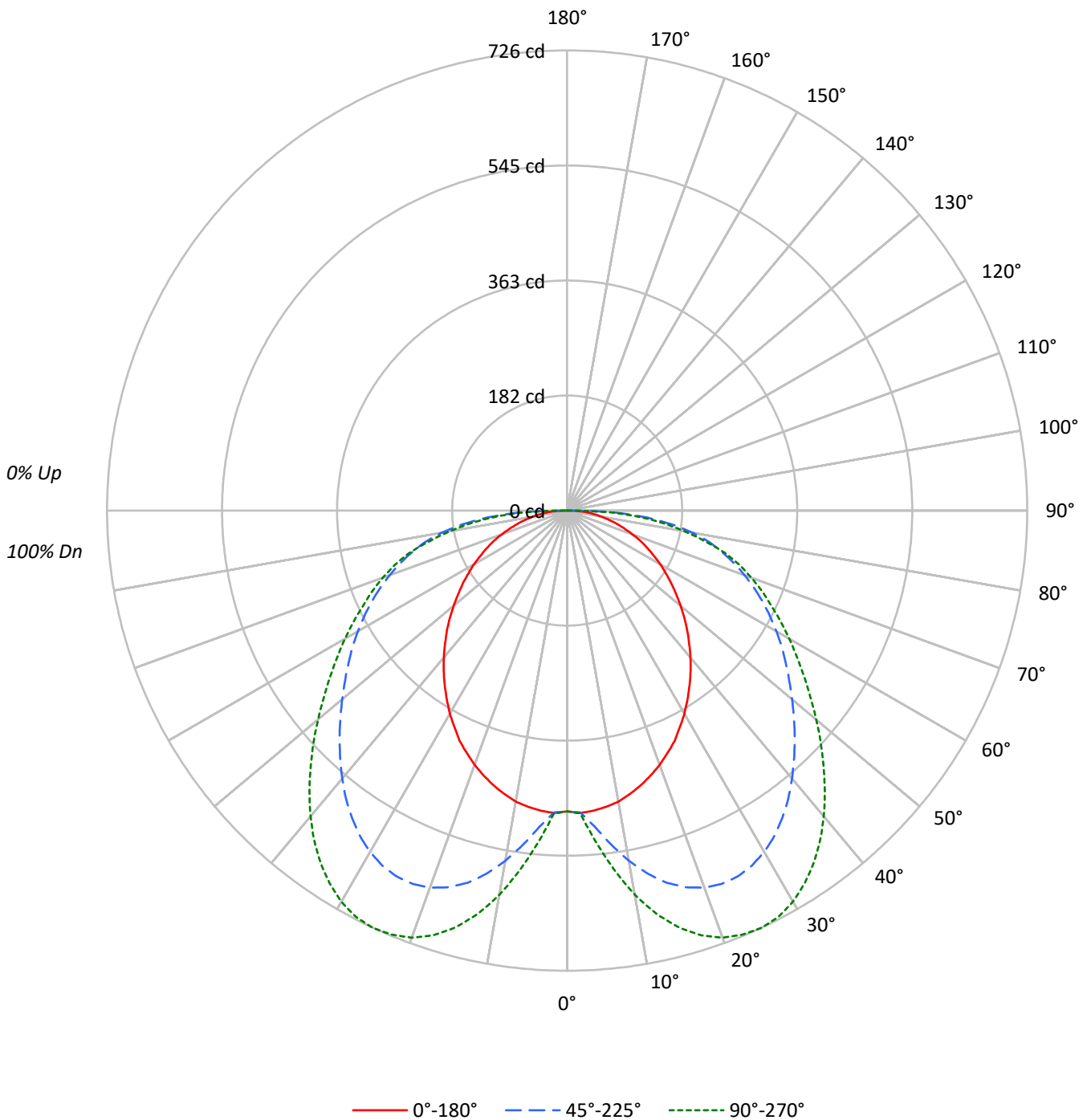
Input Watts (W): 22.6
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	638	638	638
5°	642	676	709
10°	637	766	841
15°	625	847	948
20°	611	906	1027
25°	595	945	1078
30°	575	966	1107
35°	553	972	1114
40°	531	969	1106
45°	511	966	1089
50°	489	970	1074
55°	471	989	1070
60°	457	1026	1089
65°	444	1084	1132
70°	432	1172	1217
75°	422	1316	1340
80°	423	1557	1457
85°	468	1954	1768



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	49.2	2.2
10°-20°	165.8	7.6
20°-30°	277.6	12.7
30°-40°	347.6	15.9
40°-50°	364.7	16.6
50°-60°	344.6	15.7
60°-70°	301.7	13.8
70°-80°	233.0	10.6
80°-90°	108.7	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°	492.7	22.5
0°-40°	840.3	38.3
0°-60°	1549.6	70.7
0°-90°	2193.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2193.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	474	474	474	474	474	
5°	475	475	500	519	525	45
15°	449	512	608	663	681	126
25°	401	515	637	702	726	184
35°	337	470	592	656	678	211
45°	268	399	508	557	572	207
55°	201	331	422	449	456	180
65°	140	271	340	350	356	138
75°	81	203	253	255	258	86
85°	30	107	127	117	114	32
90°	0	0	0	0	0	



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CATALOG NUMBER: 24SR-LD2-29-C-UNV-L840-CD1-SO-U

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	474.5	474.5	474.5	474.5	474.5	474.5	474.5	474.5	474.5	474.5	474.5
2.5°	477.6	476.8	476.0	474.5	473.8	473.8	473.8	473.8	474.5	476.8	478.3
5°	475.3	475.3	473.8	473.0	473.8	476.0	479.8	485.9	492.0	500.3	507.1
7.5°	471.5	470.7	470.0	470.7	477.6	487.4	497.3	508.6	519.3	531.4	541.2
10°	466.2	465.4	466.2	472.3	485.9	501.8	516.2	530.6	545.0	560.9	574.6
12.5°	457.9	457.9	460.9	474.5	493.5	513.2	532.1	550.3	568.5	586.7	602.6
15°	448.8	449.5	457.1	476.8	500.3	523.0	545.0	566.3	587.5	607.9	625.4
17.5°	438.1	439.7	452.5	476.8	503.3	529.9	554.9	578.4	601.1	623.1	641.3
20°	426.8	428.3	447.2	475.3	504.9	533.7	560.2	586.0	610.2	633.0	651.9
22.5°	413.9	416.2	440.4	470.7	503.3	534.4	561.7	588.2	613.3	637.5	656.5
25°	401.0	404.0	432.1	464.7	498.8	530.6	559.4	586.0	612.5	636.8	655.7
27.5°	385.1	390.4	422.2	455.6	492.0	523.8	552.6	580.7	607.2	631.4	650.4
30°	369.9	376.7	410.1	445.0	482.1	513.9	542.8	570.8	597.3	621.6	640.5
32.5°	353.2	361.6	396.5	432.8	469.2	500.3	529.9	557.9	584.4	608.7	626.9
35°	336.6	346.4	382.1	419.2	454.8	485.9	514.7	542.8	568.5	592.0	609.5
37.5°	319.9	330.5	366.1	404.0	438.1	468.5	497.3	524.6	551.1	573.1	590.5
40°	302.5	314.6	350.2	386.6	420.7	450.3	479.1	505.6	530.6	551.9	568.5
42.5°	285.0	298.7	334.3	369.9	402.5	431.3	460.1	485.9	509.4	529.9	545.8
45°	268.3	282.0	316.9	352.5	384.3	413.1	441.2	466.2	488.9	507.9	523.0
47.5°	250.9	266.1	300.9	335.8	366.1	394.9	422.2	445.7	467.7	485.1	499.5
50°	233.5	250.2	284.3	318.4	349.5	377.5	404.0	426.8	447.2	463.2	476.8
52.5°	216.8	234.2	269.1	302.5	332.8	360.8	386.6	408.6	427.5	441.9	454.1
55°	200.9	219.1	253.9	286.5	317.6	344.9	369.2	390.4	407.8	421.5	432.1
57.5°	185.0	204.7	239.5	272.9	302.5	329.7	353.2	373.0	388.9	401.8	410.9
60°	169.8	190.3	225.9	258.5	288.1	314.6	337.3	355.5	370.7	381.3	388.1
62.5°	153.9	175.9	211.5	244.8	274.4	299.4	321.4	338.8	351.7	360.8	366.9
65°	139.5	161.5	197.8	231.2	259.2	283.5	304.0	320.6	332.8	340.4	344.1
67.5°	125.1	147.8	184.2	216.8	244.1	267.6	286.5	302.5	313.1	319.1	322.2
70°	109.9	134.2	169.8	201.6	228.2	250.2	269.1	282.7	292.6	297.9	299.4
72.5°	94.8	119.8	155.4	186.5	211.5	232.7	250.2	263.0	272.1	275.9	276.7
75°	81.1	104.6	139.5	169.0	193.3	213.0	230.4	242.6	249.4	253.2	253.9
77.5°	67.5	90.2	123.6	151.6	172.8	191.8	208.5	219.8	226.7	229.7	229.7
80°	54.6	75.8	106.1	131.1	151.6	169.0	184.2	195.6	201.6	200.9	197.8
82.5°	42.5	62.2	87.9	109.9	128.1	144.0	159.2	166.0	168.3	166.0	163.7
85°	30.3	46.2	66.7	84.9	100.8	112.9	122.8	128.1	128.9	126.6	124.3
87.5°	17.4	25.8	37.9	51.5	59.9	67.5	75.8	78.8	78.8	80.4	75.8
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°	474.5	474.5	474.5	474.5	474.5	474.5	474.5	474.5
2.5°	477.6	478.3	478.3	479.8	480.6	480.6	479.8	478.3
5°	509.4	513.9	517.0	521.5	523.8	526.1	526.8	525.3
7.5°	546.5	553.4	559.4	566.3	569.3	571.6	574.6	572.3
10°	582.2	591.3	598.8	606.4	611.0	614.0	616.3	615.5
12.5°	612.5	623.1	631.4	639.0	645.1	649.6	651.9	651.9
15°	636.0	648.1	658.7	667.1	673.1	677.7	680.7	680.7
17.5°	654.2	666.3	677.7	686.0	692.1	698.2	701.2	702.7
20°	664.8	677.7	689.1	698.2	705.0	711.8	714.8	717.1
22.5°	670.1	683.0	695.1	705.0	712.6	718.6	722.4	723.9
25°	670.1	683.7	696.6	706.5	714.1	720.9	724.7	726.2
27.5°	665.6	680.0	692.8	701.9	710.3	717.1	720.9	722.4
30°	656.5	670.9	683.7	692.8	701.2	707.2	711.0	712.6
32.5°	642.1	657.2	669.3	678.4	686.8	692.8	696.6	697.4
35°	625.4	639.8	651.2	660.3	668.6	673.9	676.9	678.4
37.5°	604.9	618.6	629.9	638.3	645.8	651.9	654.9	655.7
40°	582.9	595.8	605.7	613.3	620.8	626.1	629.2	629.9
42.5°	559.4	571.6	580.7	587.5	594.3	598.8	601.1	601.9
45°	535.2	545.8	554.1	560.2	566.3	570.0	572.3	572.3
47.5°	510.9	520.8	527.6	532.1	537.4	541.2	543.5	542.8
50°	486.7	495.0	500.3	504.9	509.4	511.7	513.9	513.2
52.5°	462.4	470.0	473.0	476.8	480.6	482.9	485.1	483.6
55°	438.9	444.2	447.2	450.3	453.3	455.6	457.1	456.3
57.5°	416.2	420.0	422.2	425.3	427.5	429.0	430.6	429.8
60°	391.9	394.9	396.5	399.5	401.8	403.3	404.8	404.8
62.5°	369.2	371.4	372.2	375.2	376.7	378.3	380.5	379.8
65°	344.9	347.2	348.7	351.0	352.5	354.0	356.3	355.5
67.5°	322.2	324.4	325.2	327.5	329.7	332.0	332.8	332.8
70°	299.4	300.9	301.7	304.7	305.5	307.8	309.3	309.3
72.5°	276.7	277.4	279.0	281.2	282.7	284.3	285.8	285.0
75°	252.4	253.9	254.7	256.2	256.2	257.7	257.7	257.7
77.5°	227.4	225.1	224.4	223.6	222.9	222.9	222.9	222.1
80°	193.3	191.0	190.3	188.8	188.8	188.8	188.8	188.0
82.5°	159.9	156.9	155.4	154.6	153.9	153.9	153.9	153.1
85°	121.3	118.3	117.5	116.7	116.7	116.0	115.2	114.5
87.5°	75.0	72.8	72.0	70.5	71.3	69.7	69.7	69.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)