

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: P188520

Luminaire Tested: **24SR-LD2-29-C-UNV-L850-CD1-PG-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188520
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-LD2-29-C-UNV-L850-CD1-PG-U
Description: METALUX 2X4 SKYRIDGE LED FIXTURE WITH PRIMARY GREEN SKYTRIM.

Light Source: EATON LED 5000K
Ballast/Driver: OSRAM ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2001.0 lumens
Efficiency: N/A
Efficacy: 88.5 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

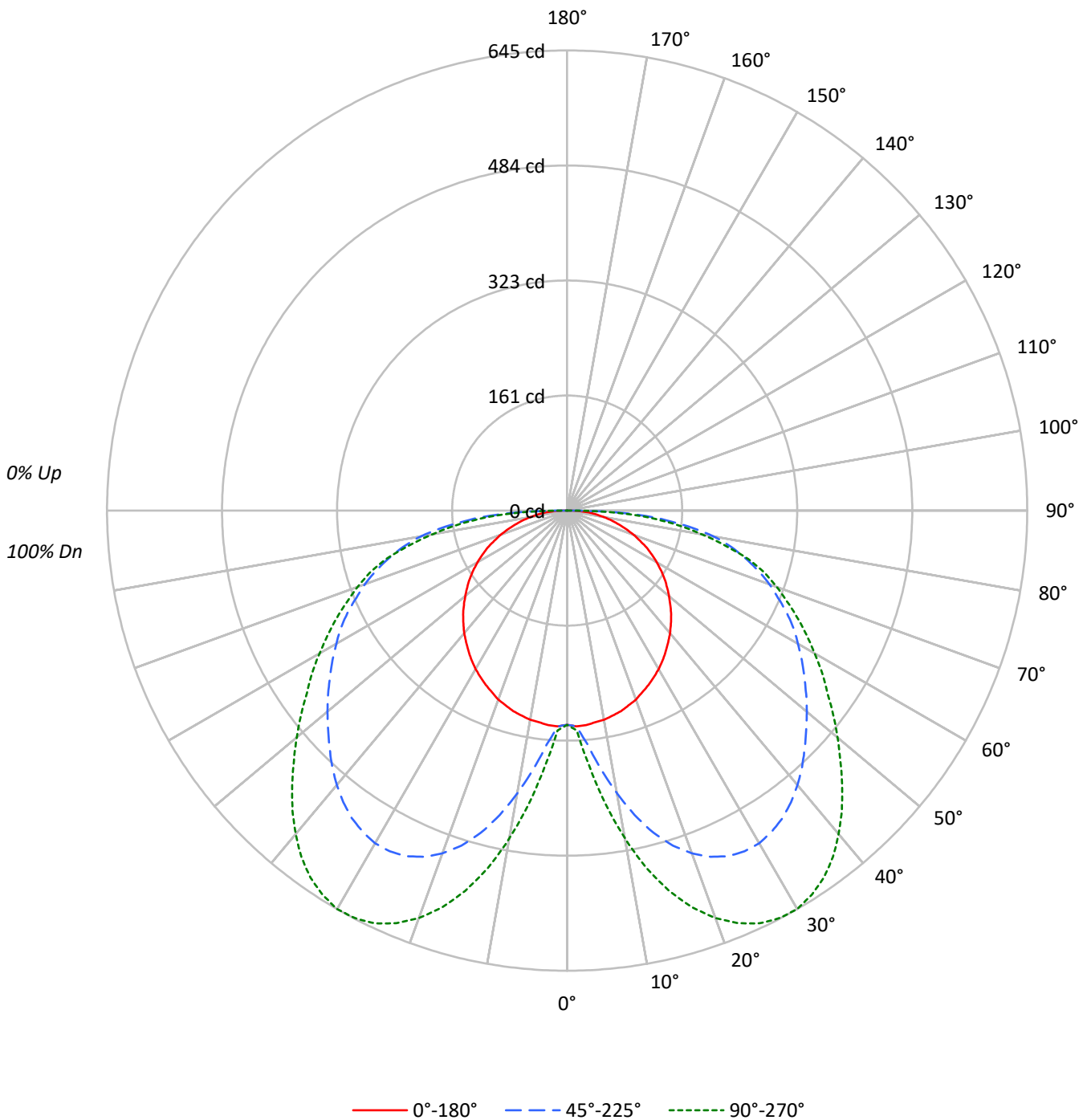
Input Watts (W): 22.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	404	404	404
5°	408	444	487
10°	407	550	638
15°	405	651	768
20°	404	732	870
25°	400	793	948
30°	399	837	1002
35°	396	864	1031
40°	394	882	1040
45°	392	896	1037
50°	390	918	1036
55°	391	952	1045
60°	390	1005	1079
65°	391	1082	1134
70°	389	1187	1230
75°	390	1346	1368
80°	403	1617	1489
85°	471	2012	1808



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	33.4	1.7
10°-20°	126.3	6.3
20°-30°	229.8	11.5
30°-40°	304.9	15.2
40°-50°	334.0	16.7
50°-60°	328.3	16.4
60°-70°	297.8	14.9
70°-80°	236.0	11.8
80°-90°	110.6	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°	389.5	19.5
0°-40°	694.4	34.7
0°-60°	1356.6	67.8
0°-90°	2001.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2001.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	300	300	300	300	300	
5°	302	304	329	352	360	29
15°	291	362	468	531	552	82
25°	270	399	534	610	638	124
35°	241	390	526	601	628	151
45°	206	350	471	528	545	159
55°	167	308	406	438	445	149
65°	123	266	340	350	356	121
75°	75	205	259	259	263	79
85°	30	110	130	117	117	31
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°	300.2	300.2	300.2	300.2	300.2	300.2	300.2	300.2	300.2	300.2	300.2
2.5°	302.7	301.8	301.8	301.8	301.0	301.0	301.0	301.8	301.8	302.7	304.3
5°	301.8	301.0	301.0	301.0	302.7	305.1	310.1	315.9	322.5	329.1	336.5
7.5°	299.4	299.4	299.4	301.8	309.3	319.2	331.5	343.9	354.6	366.2	376.9
10°	297.7	297.7	299.4	307.6	322.5	339.0	355.4	371.9	386.8	402.5	417.3
12.5°	294.4	294.4	299.4	315.0	335.7	357.1	377.7	398.3	418.1	437.1	453.6
15°	291.1	291.1	301.8	324.1	348.9	374.4	399.2	423.1	446.2	467.6	486.6
17.5°	286.2	287.0	303.5	330.7	360.4	389.3	416.5	443.7	468.4	492.3	512.1
20°	282.0	283.7	305.1	336.5	369.5	401.6	432.1	460.2	486.6	511.3	532.8
22.5°	275.5	278.8	306.0	340.6	376.1	410.7	442.0	471.7	499.8	525.3	546.8
25°	269.7	273.8	305.1	342.3	381.0	416.5	448.6	479.2	508.0	534.4	556.7
27.5°	263.1	269.7	304.3	343.1	382.7	419.0	451.9	483.3	512.1	538.5	561.6
30°	256.5	264.7	301.8	342.3	381.8	418.1	451.1	483.3	512.1	538.5	560.8
32.5°	249.1	258.1	296.9	338.1	378.5	414.0	447.0	478.3	508.0	533.6	555.9
35°	240.8	251.5	291.1	332.4	371.9	407.4	439.6	470.9	499.8	526.2	547.6
37.5°	232.6	244.9	284.5	325.8	364.5	399.2	430.5	461.8	489.9	515.4	536.1
40°	224.3	237.5	277.1	317.5	355.4	389.3	420.6	451.1	477.5	502.2	521.2
42.5°	215.2	230.1	268.9	308.4	344.7	377.7	409.1	438.7	464.3	487.4	505.5
45°	206.2	221.0	259.8	298.5	334.8	366.2	396.7	425.5	449.5	470.9	488.2
47.5°	196.3	212.8	251.5	288.6	323.3	355.4	385.1	411.5	435.4	454.4	470.9
50°	186.4	203.7	241.6	278.8	312.6	343.9	372.8	398.3	420.6	438.7	452.8
52.5°	176.5	194.6	232.6	268.9	302.7	333.2	361.2	385.1	405.8	422.2	436.3
55°	166.6	185.6	223.5	259.0	292.8	322.5	349.7	371.9	391.7	405.8	417.3
57.5°	155.9	176.5	214.4	249.9	282.9	312.6	338.1	359.6	377.7	390.1	400.0
60°	145.1	166.6	204.5	240.8	273.0	301.8	326.6	347.2	362.9	373.6	382.7
62.5°	133.6	156.7	195.5	230.9	263.1	291.1	314.2	332.4	348.0	357.9	362.9
65°	122.9	146.8	185.6	221.0	252.4	278.8	301.0	318.3	331.5	339.8	343.9
67.5°	110.5	136.1	174.8	210.3	240.0	265.6	286.2	302.7	314.2	320.0	323.3
70°	99.0	125.4	163.3	197.9	226.0	250.7	270.5	286.2	296.1	301.8	302.7
72.5°	86.6	113.8	151.7	184.7	211.9	235.0	254.0	268.0	276.3	281.2	282.0
75°	75.0	101.4	137.7	169.1	194.6	216.1	234.2	247.4	255.7	259.0	259.0
77.5°	63.5	88.2	122.9	152.6	176.5	196.3	212.8	226.0	232.6	235.9	235.9
80°	52.0	75.9	107.2	134.4	155.9	174.0	190.5	202.1	208.7	208.7	203.7
82.5°	41.2	61.9	89.1	113.8	132.0	148.4	164.1	171.5	173.2	171.5	167.4
85°	30.5	47.0	69.3	88.2	104.7	116.3	126.2	131.1	132.0	130.3	127.0
87.5°	17.3	27.2	39.6	52.0	62.7	68.5	76.7	78.3	78.3	80.8	76.7
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°	300.2	300.2	300.2	300.2	300.2	300.2	300.2	300.2
2.5°	305.1	306.0	306.0	308.4	308.4	309.3	308.4	308.4
5°	341.4	344.7	349.7	354.6	356.3	359.6	358.7	360.4
7.5°	385.1	391.7	399.2	405.8	409.1	412.4	413.2	415.7
10°	428.8	437.1	446.2	455.2	460.2	462.7	466.0	466.8
12.5°	466.8	479.2	488.2	498.1	504.7	508.0	511.3	513.0
15°	501.4	513.8	525.3	536.1	542.7	547.6	550.9	551.7
17.5°	527.8	541.8	554.2	565.7	572.3	578.1	581.4	583.1
20°	548.4	564.1	576.5	588.0	595.4	602.0	607.0	607.8
22.5°	563.3	578.9	593.0	604.5	613.6	620.2	624.3	626.0
25°	574.0	590.5	604.5	616.1	625.1	632.5	636.7	638.3
27.5°	578.9	596.3	611.1	621.8	630.9	638.3	643.3	644.1
30°	579.8	596.3	611.1	622.7	631.7	639.1	643.3	644.9
32.5°	574.0	591.3	606.2	616.9	626.0	633.4	637.5	638.3
35°	565.7	581.4	595.4	606.2	615.2	621.8	626.0	627.6
37.5°	553.4	568.2	581.4	591.3	599.6	606.2	610.3	611.9
40°	538.5	552.6	564.9	574.0	581.4	587.2	590.5	592.1
42.5°	521.2	534.4	546.0	553.4	560.8	565.7	568.2	569.9
45°	503.1	515.4	524.5	531.1	537.7	541.8	544.3	545.1
47.5°	484.1	494.8	502.2	508.0	513.0	517.1	519.6	519.6
50°	465.1	474.2	480.0	485.8	489.9	492.3	494.0	494.8
52.5°	446.2	453.6	457.7	462.7	466.0	468.4	470.1	470.1
55°	426.4	432.1	435.4	439.6	442.9	444.5	446.2	445.3
57.5°	407.4	411.5	414.0	417.3	419.8	421.4	423.1	423.9
60°	387.6	390.9	391.7	395.0	397.5	399.2	400.0	400.8
62.5°	367.0	369.5	371.1	372.8	375.2	376.9	377.7	378.5
65°	346.4	348.0	348.0	351.3	353.8	354.6	355.4	356.3
67.5°	324.9	325.8	326.6	329.1	331.5	332.4	334.0	334.0
70°	303.5	303.5	304.3	306.8	309.3	310.1	311.7	312.6
72.5°	281.2	282.0	282.0	284.5	287.0	288.6	289.5	290.3
75°	258.1	258.1	259.0	259.8	260.6	261.4	261.4	263.1
77.5°	233.4	230.1	228.4	226.8	227.6	227.6	226.8	227.6
80°	198.8	194.6	192.2	191.3	192.2	191.3	191.3	192.2
82.5°	163.3	158.3	156.7	155.9	155.9	155.9	155.0	156.7
85°	122.9	119.6	117.9	116.3	117.1	117.1	116.3	117.1
87.5°	74.2	72.6	70.9	69.3	70.1	69.3	68.5	70.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)