

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: P188525

Luminaire Tested: **24SR-LD2-34-C-UNV-L850-CD1-PG-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188525
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-LD2-34-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: 2368.0 lumens
Efficiency: N/A
Efficacy: 87.1 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

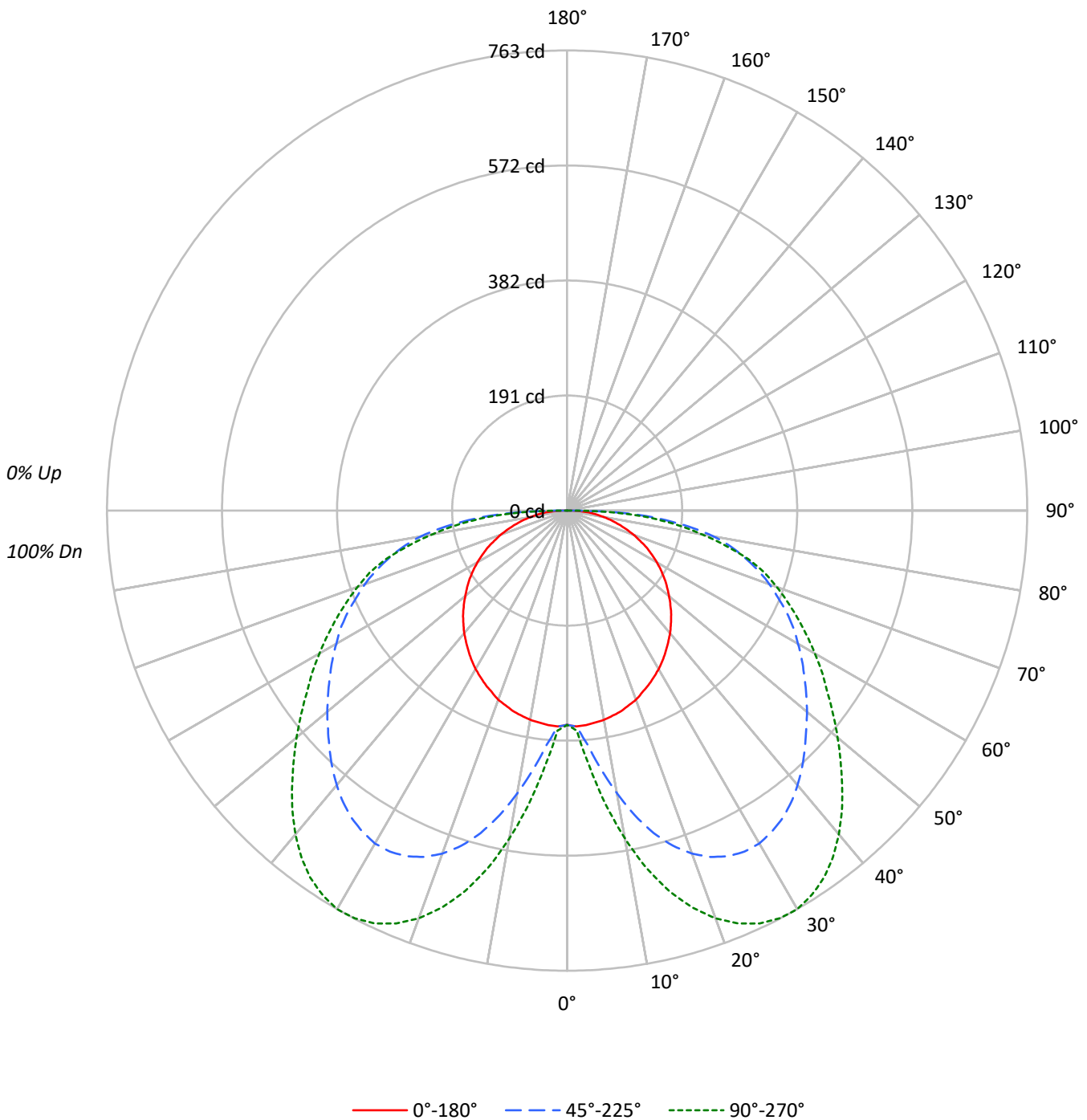
Input Watts (W): 27.2
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P188525

CATALOG NUMBER: 24SR-LD2-34-C-UNV-L850-CD1-PG-U

Luminous Intensity Polar Plot





TEST NUMBER: P188525

CATALOG NUMBER: 24SR-LD2-34-C-UNV-L850-CD1-PG-U

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°	478	478	478
5°	482	526	576
10°	481	651	755
15°	480	771	909
20°	478	866	1030
25°	474	939	1121
30°	472	990	1186
35°	468	1023	1220
40°	466	1044	1231
45°	464	1060	1228
50°	462	1087	1226
55°	462	1126	1236
60°	462	1190	1276
65°	463	1280	1342
70°	461	1405	1455
75°	462	1593	1618
80°	477	1913	1762
85°	557	2381	2140



TEST NUMBER: P188525

CATALOG NUMBER: 24SR-LD2-34-C-UNV-L850-CD1-PG-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	39.5	1.7
10°-20°	149.5	6.3
20°-30°	272.0	11.5
30°-40°	360.8	15.2
40°-50°	395.2	16.7
50°-60°	388.5	16.4
60°-70°	352.4	14.9
70°-80°	279.3	11.8
80°-90°	130.9	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°	461.0	19.5
0°-40°	821.8	34.7
0°-60°	1605.5	67.8
0°-90°	2368.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2368.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	355	355	355	355	355	
5°	357	360	389	417	426	34
15°	344	428	553	628	653	97
25°	319	472	632	722	755	147
35°	285	461	623	711	743	178
45°	244	415	557	625	645	188
55°	197	364	480	518	527	176
65°	145	314	402	414	422	143
75°	89	243	306	307	311	94
85°	36	131	154	139	139	37
90°	0	0	0	0	0	



TEST NUMBER: P188525

CATALOG NUMBER: 24SR-LD2-34-C-UNV-L850-CD1-PG-U

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	355.3	355.3	355.3	355.3	355.3	355.3	355.3	355.3	355.3	355.3	355.3
2.5°	358.2	357.2	357.2	357.2	356.2	356.2	356.2	357.2	357.2	358.2	360.1
5°	357.2	356.2	356.2	356.2	358.2	361.1	367.0	373.8	381.6	389.4	398.2
7.5°	354.3	354.3	354.3	357.2	366.0	377.7	392.3	407.0	419.7	433.3	446.0
10°	352.3	352.3	354.3	364.0	381.6	401.1	420.6	440.2	457.7	476.3	493.8
12.5°	348.4	348.4	354.3	372.8	397.2	422.6	447.0	471.4	494.8	517.3	536.8
15°	344.5	344.5	357.2	383.6	412.8	443.1	472.4	500.7	528.0	553.4	575.8
17.5°	338.7	339.6	359.2	391.4	426.5	460.7	492.9	525.1	554.3	582.7	606.1
20°	333.8	335.7	361.1	398.2	437.2	475.3	511.4	544.6	575.8	605.1	630.5
22.5°	326.0	329.9	362.1	403.1	445.0	486.0	523.1	558.3	591.4	621.7	647.1
25°	319.1	324.0	361.1	405.0	450.9	492.9	530.9	567.0	601.2	632.4	658.8
27.5°	311.3	319.1	360.1	406.0	452.8	495.8	534.8	571.9	606.1	637.3	664.6
30°	303.5	313.3	357.2	405.0	451.9	494.8	533.9	571.9	606.1	637.3	663.7
32.5°	294.7	305.5	351.3	400.1	448.0	489.9	529.0	566.1	601.2	631.4	657.8
35°	285.0	297.7	344.5	393.3	440.2	482.1	520.2	557.3	591.4	622.7	648.0
37.5°	275.2	289.9	336.7	385.5	431.4	472.4	509.5	546.5	579.7	610.0	634.4
40°	265.5	281.1	327.9	375.7	420.6	460.7	497.7	533.9	565.1	594.4	616.8
42.5°	254.7	272.3	318.2	365.0	408.0	447.0	484.1	519.2	549.5	576.8	598.3
45°	244.0	261.6	307.4	353.3	396.2	433.3	469.4	503.6	531.9	557.3	577.8
47.5°	232.3	251.8	297.7	341.6	382.6	420.6	455.8	487.0	515.3	537.8	557.3
50°	220.6	241.1	286.0	329.9	369.9	407.0	441.1	471.4	497.7	519.2	535.8
52.5°	208.9	230.3	275.2	318.2	358.2	394.3	427.5	455.8	480.2	499.7	516.3
55°	197.1	219.6	264.5	306.5	346.5	381.6	413.8	440.2	463.6	480.2	493.8
57.5°	184.5	208.9	253.8	295.7	334.8	369.9	400.1	425.5	447.0	461.6	473.3
60°	171.8	197.1	242.0	285.0	323.0	357.2	386.5	410.9	429.4	442.1	452.8
62.5°	158.1	185.4	231.3	273.3	311.3	344.5	371.8	393.3	411.9	423.6	429.4
65°	145.4	173.7	219.6	261.6	298.6	329.9	356.2	376.7	392.3	402.1	407.0
67.5°	130.8	161.0	206.9	248.9	284.0	314.3	338.7	358.2	371.8	378.7	382.6
70°	117.1	148.3	193.2	234.2	267.4	296.7	320.1	338.7	350.4	357.2	358.2
72.5°	102.5	134.7	179.6	218.6	250.8	278.1	300.6	317.2	326.9	332.8	333.8
75°	88.8	120.0	163.0	200.1	230.3	255.7	277.2	292.8	302.5	306.5	306.5
77.5°	75.1	104.4	145.4	180.6	208.9	232.3	251.8	267.4	275.2	279.1	279.1
80°	61.5	89.8	126.9	159.1	184.5	205.9	225.4	239.1	246.9	246.9	241.1
82.5°	48.8	73.2	105.4	134.7	156.2	175.7	194.2	203.0	205.0	203.0	198.1
85°	36.1	55.6	82.0	104.4	123.9	137.6	149.3	155.2	156.2	154.2	150.3
87.5°	20.5	32.2	46.8	61.5	74.2	81.0	90.8	92.7	92.7	95.6	90.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P188525

CATALOG NUMBER: 24SR-LD2-34-C-UNV-L850-CD1-PG-U

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	355.3	355.3	355.3	355.3	355.3	355.3	355.3	355.3
2.5°	361.1	362.1	362.1	365.0	365.0	366.0	365.0	365.0
5°	404.0	408.0	413.8	419.7	421.6	425.5	424.5	426.5
7.5°	455.8	463.6	472.4	480.2	484.1	488.0	489.0	491.9
10°	507.5	517.3	528.0	538.7	544.6	547.5	551.4	552.4
12.5°	552.4	567.0	577.8	589.5	597.3	601.2	605.1	607.0
15°	593.4	608.0	621.7	634.4	642.2	648.0	651.9	652.9
17.5°	624.6	641.2	655.8	669.5	677.3	684.2	688.1	690.0
20°	649.0	667.6	682.2	695.9	704.6	712.5	718.3	719.3
22.5°	666.6	685.1	701.7	715.4	726.1	733.9	738.8	740.8
25°	679.3	698.8	715.4	729.0	739.8	748.6	753.4	755.4
27.5°	685.1	705.6	723.2	735.9	746.6	755.4	761.3	762.2
30°	686.1	705.6	723.2	736.9	747.6	756.4	761.3	763.2
32.5°	679.3	699.8	717.3	730.0	740.8	749.5	754.4	755.4
35°	669.5	688.1	704.6	717.3	728.1	735.9	740.8	742.7
37.5°	654.9	672.4	688.1	699.8	709.5	717.3	722.2	724.2
40°	637.3	653.9	668.5	679.3	688.1	694.9	698.8	700.7
42.5°	616.8	632.4	646.1	654.9	663.7	669.5	672.4	674.4
45°	595.3	610.0	620.7	628.5	636.3	641.2	644.1	645.1
47.5°	572.9	585.6	594.4	601.2	607.0	611.9	614.9	614.9
50°	550.4	561.2	568.0	574.8	579.7	582.7	584.6	585.6
52.5°	528.0	536.8	541.7	547.5	551.4	554.3	556.3	556.3
55°	504.6	511.4	515.3	520.2	524.1	526.0	528.0	527.0
57.5°	482.1	487.0	489.9	493.8	496.8	498.7	500.7	501.6
60°	458.7	462.6	463.6	467.5	470.4	472.4	473.3	474.3
62.5°	434.3	437.2	439.2	441.1	444.1	446.0	447.0	448.0
65°	409.9	411.9	411.9	415.8	418.7	419.7	420.6	421.6
67.5°	384.5	385.5	386.5	389.4	392.3	393.3	395.3	395.3
70°	359.2	359.2	360.1	363.1	366.0	367.0	368.9	369.9
72.5°	332.8	333.8	333.8	336.7	339.6	341.6	342.6	343.5
75°	305.5	305.5	306.5	307.4	308.4	309.4	309.4	311.3
77.5°	276.2	272.3	270.3	268.4	269.4	269.4	268.4	269.4
80°	235.2	230.3	227.4	226.4	227.4	226.4	226.4	227.4
82.5°	193.2	187.4	185.4	184.5	184.5	184.5	183.5	185.4
85°	145.4	141.5	139.6	137.6	138.6	138.6	137.6	138.6
87.5°	87.8	85.9	83.9	82.0	83.0	82.0	81.0	83.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)