

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: P188445

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188445
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24786)
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-BR-U
Description: METALUX 2X4 SKYRIDGE LED FIXTURE WITH BELLADONNA ROSE

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

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2376.0 lumens
Efficiency: N/A
Efficacy: 87.4 lumens/watt
Spacing Criteria (0/90/45): 1.29 / 2.29 / 2.08
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

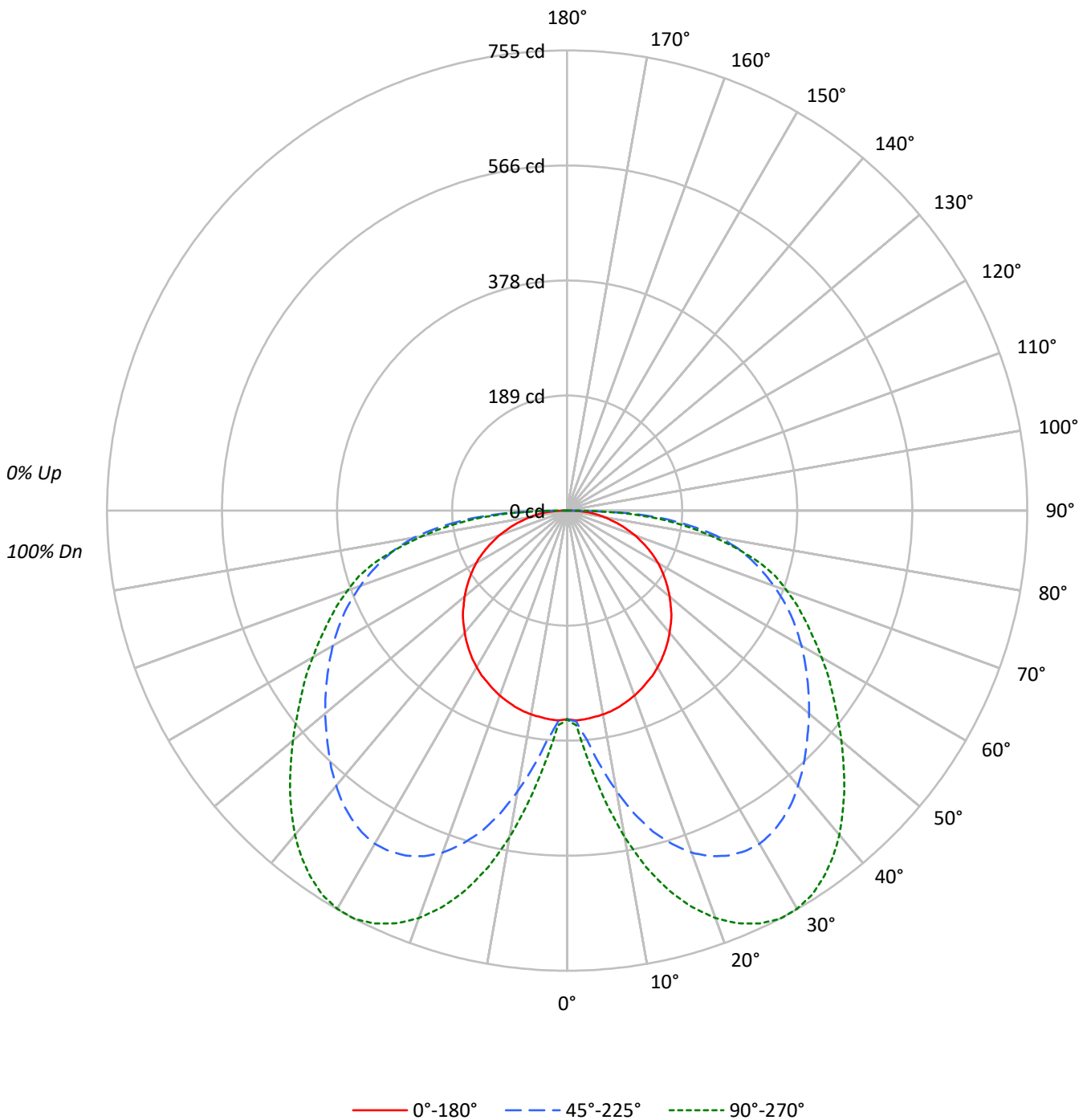
Input Watts (W): 27.2
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	94	90	103	97	93	88	93	89	85	89	86	83	85	83	80	78
2	95	85	77	70	92	83	75	69	79	73	67	76	70	66	73	68	64	62
3	85	73	64	56	83	71	63	56	68	61	55	65	59	54	63	57	53	50
4	77	64	54	46	75	62	53	46	60	52	45	57	50	45	55	49	44	41
5	71	56	46	39	68	55	46	39	53	45	38	51	44	38	49	42	37	35
6	65	50	40	33	63	49	40	33	47	39	33	46	38	33	44	37	32	30
7	60	45	36	29	58	44	35	29	43	35	29	41	34	28	40	33	28	26
8	56	41	32	25	54	40	31	25	39	31	25	38	30	25	36	30	25	23
9	52	37	29	23	50	37	28	22	36	28	22	34	27	22	33	27	22	20
10	48	34	26	20	47	34	26	20	33	25	20	32	25	20	31	24	20	18

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	461	461	461
5°	464	511	560
10°	464	639	743
15°	464	760	899
20°	462	855	1019
25°	461	927	1110
30°	461	981	1172
35°	460	1013	1205
40°	459	1035	1220
45°	460	1055	1224
50°	460	1085	1230
55°	460	1129	1250
60°	465	1195	1297
65°	463	1289	1376
70°	465	1421	1509
75°	467	1629	1690
80°	484	1974	1867
85°	557	2546	2305



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	38.5	1.6
10°-20°	146.9	6.2
20°-30°	268.6	11.3
30°-40°	357.2	15.0
40°-50°	393.2	16.6
50°-60°	389.7	16.4
60°-70°	356.8	15.0
70°-80°	287.3	12.1
80°-90°	137.8	5.8
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°	453.9	19.1
0°-40°	811.1	34.1
0°-60°	1594.1	67.1
0°-90°	2376.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2376.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	342	342	342	342	342	
5°	344	346	379	405	415	33
15°	333	419	546	618	645	94
25°	310	465	625	715	748	143
35°	280	457	617	704	734	175
45°	242	412	554	621	643	186
55°	196	364	481	521	533	176
65°	145	314	405	423	432	144
75°	90	245	313	322	325	95
85°	36	134	165	151	149	37
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°	342.5	342.5	342.5	342.5	342.5	342.5	342.5	342.5	342.5	342.5	342.5
2.5°	344.5	344.5	343.5	343.5	343.5	343.5	343.5	343.5	344.5	346.4	347.4
5°	343.5	343.5	343.5	343.5	344.5	348.4	353.3	361.1	368.9	378.7	387.4
7.5°	341.6	341.6	341.6	344.5	353.3	366.9	379.6	394.3	408.9	423.5	435.3
10°	339.6	339.6	341.6	352.3	369.9	390.4	409.9	429.4	447.9	467.5	484.0
12.5°	336.7	336.7	342.5	362.1	387.4	412.8	438.2	461.6	485.0	509.4	528.0
15°	332.8	332.8	345.5	371.8	403.0	434.3	463.6	491.9	519.2	545.5	566.0
17.5°	327.9	329.9	348.4	381.6	416.7	452.8	485.0	517.2	546.5	573.8	598.2
20°	323.0	326.0	351.3	389.4	428.4	468.4	503.6	536.7	568.0	597.3	622.6
22.5°	317.2	321.1	353.3	395.2	437.2	479.2	516.3	551.4	584.6	613.8	640.2
25°	310.3	316.2	354.3	398.2	444.0	486.0	524.1	560.2	594.3	624.6	650.9
27.5°	304.5	312.3	353.3	400.1	447.0	489.9	528.9	565.0	600.2	630.4	657.8
30°	296.7	306.4	351.3	399.1	446.0	489.9	528.0	565.0	600.2	631.4	657.8
32.5°	288.9	300.6	346.4	395.2	443.1	485.0	524.1	561.1	595.3	626.5	651.9
35°	280.1	293.7	340.6	389.4	436.2	478.2	516.3	552.4	587.5	616.8	642.1
37.5°	271.3	285.9	332.8	381.6	427.4	468.4	505.5	541.6	574.8	605.1	628.5
40°	261.5	278.1	325.0	372.8	416.7	456.7	493.8	528.9	561.1	589.4	611.9
42.5°	251.8	269.3	316.2	363.0	406.0	444.0	481.1	514.3	545.5	572.9	593.4
45°	242.0	259.6	305.5	352.3	393.3	431.3	466.5	499.7	528.9	554.3	573.8
47.5°	230.3	249.8	295.7	340.6	380.6	418.7	452.8	484.0	513.3	535.8	554.3
50°	219.6	240.1	285.0	328.9	367.9	406.0	439.2	469.4	496.7	518.2	534.8
52.5°	207.9	229.3	274.2	318.1	357.2	393.3	426.5	454.8	479.2	499.7	515.3
55°	196.2	218.6	264.5	306.4	345.5	381.6	412.8	440.1	463.6	481.1	495.8
57.5°	184.4	207.9	253.7	296.7	334.7	369.9	400.1	424.5	447.0	462.6	475.3
60°	172.7	197.1	242.0	285.0	324.0	357.2	386.5	409.9	429.4	444.0	454.8
62.5°	159.1	185.4	231.3	273.3	311.3	343.5	371.8	393.3	411.8	424.5	433.3
65°	145.4	173.7	219.6	261.5	298.6	329.9	356.2	376.7	393.3	405.0	410.9
67.5°	131.7	162.0	207.9	249.8	285.0	314.2	339.6	359.1	373.8	383.5	388.4
70°	118.1	148.3	194.2	235.2	269.3	296.7	321.1	339.6	352.3	361.1	365.0
72.5°	103.4	134.7	179.6	219.6	251.8	279.1	301.6	319.1	330.8	337.7	340.6
75°	89.8	120.0	164.0	202.0	232.3	257.6	279.1	296.7	308.4	313.3	316.2
77.5°	75.1	105.4	147.4	182.5	210.8	234.2	254.7	271.3	282.0	286.9	289.8
80°	62.5	89.8	127.8	160.0	186.4	208.8	227.4	245.0	253.7	254.7	251.8
82.5°	48.8	74.2	107.3	135.7	158.1	179.6	197.1	208.8	212.7	212.7	209.8
85°	36.1	55.6	83.9	106.4	125.9	141.5	152.2	162.0	164.0	164.9	161.0
87.5°	20.5	31.2	49.8	64.4	76.1	86.9	94.7	99.5	99.5	100.5	98.6
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°	342.5	342.5	342.5	342.5	342.5	342.5	342.5	342.5
2.5°	347.4	349.4	349.4	351.3	352.3	352.3	353.3	353.3
5°	391.3	399.1	402.1	407.0	409.9	413.8	415.7	414.8
7.5°	444.0	455.7	461.6	468.4	476.2	478.2	481.1	481.1
10°	496.7	510.4	519.2	527.0	535.8	539.7	543.6	543.6
12.5°	544.6	558.2	569.9	579.7	588.5	594.3	598.2	599.2
15°	583.6	601.2	612.9	623.6	633.4	639.2	644.1	645.1
17.5°	615.8	632.4	648.0	659.7	668.5	677.3	680.2	682.2
20°	641.2	658.7	675.3	687.0	696.8	705.6	709.5	711.4
22.5°	659.7	678.3	694.8	707.5	717.3	726.1	731.0	732.9
25°	671.4	690.9	708.5	721.2	731.9	740.7	745.6	747.5
27.5°	679.2	698.7	715.3	728.0	738.8	747.5	752.4	755.4
30°	679.2	698.7	715.3	728.0	738.8	747.5	752.4	754.4
32.5°	673.4	692.9	709.5	721.2	731.9	740.7	745.6	747.5
35°	662.6	682.2	697.8	709.5	720.2	728.0	732.9	733.9
37.5°	648.0	666.5	681.2	692.9	702.7	710.5	715.3	716.3
40°	631.4	649.0	662.6	673.4	682.2	689.0	693.9	694.8
42.5°	611.9	628.5	640.2	650.9	658.7	665.6	670.4	669.5
45°	591.4	607.0	616.8	625.6	634.3	639.2	643.1	643.1
47.5°	570.9	583.6	592.4	600.2	607.0	611.9	614.8	614.8
50°	549.4	560.2	568.0	574.8	580.7	584.6	587.5	587.5
52.5°	528.0	537.7	543.6	549.4	554.3	557.2	560.2	559.2
55°	506.5	514.3	518.2	524.1	528.0	531.9	533.8	532.8
57.5°	485.0	489.9	493.8	498.7	502.6	506.5	507.5	508.4
60°	461.6	466.5	469.4	474.3	478.2	481.1	483.1	482.1
62.5°	439.2	442.1	445.0	448.9	451.8	455.7	456.7	456.7
65°	414.8	417.7	420.6	424.5	427.4	431.3	433.3	432.3
67.5°	391.3	394.3	397.2	400.1	404.0	407.9	408.9	408.9
70°	366.9	369.9	371.8	375.7	378.7	382.6	383.5	383.5
72.5°	343.5	345.5	347.4	351.3	353.3	356.2	358.2	358.2
75°	317.2	319.1	321.1	323.0	324.0	325.0	326.0	325.0
77.5°	287.9	285.9	284.0	284.0	282.0	283.0	284.0	283.0
80°	247.9	245.9	244.0	243.0	241.0	241.0	242.0	241.0
82.5°	205.9	202.0	200.1	199.1	197.1	197.1	197.1	197.1
85°	155.2	153.2	152.2	150.3	148.3	147.4	148.3	149.3
87.5°	96.6	94.7	92.7	90.8	89.8	88.8	90.8	87.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)