

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: P188463

Luminaire Tested: **24SR-LD2-53-C-UNV-L835-CD1-BR-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188463
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-LD2-53-C-UNV-L835-CD1-BR-U
Description: METALUX 2X4 SKYRIDGE LED FIXTURE WITH BELLADONNA ROSE

Light Source: EATON LED 3500K
Ballast/Driver: OSRAM ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3287.0 lumens
Efficiency: N/A
Efficacy: 76.3 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

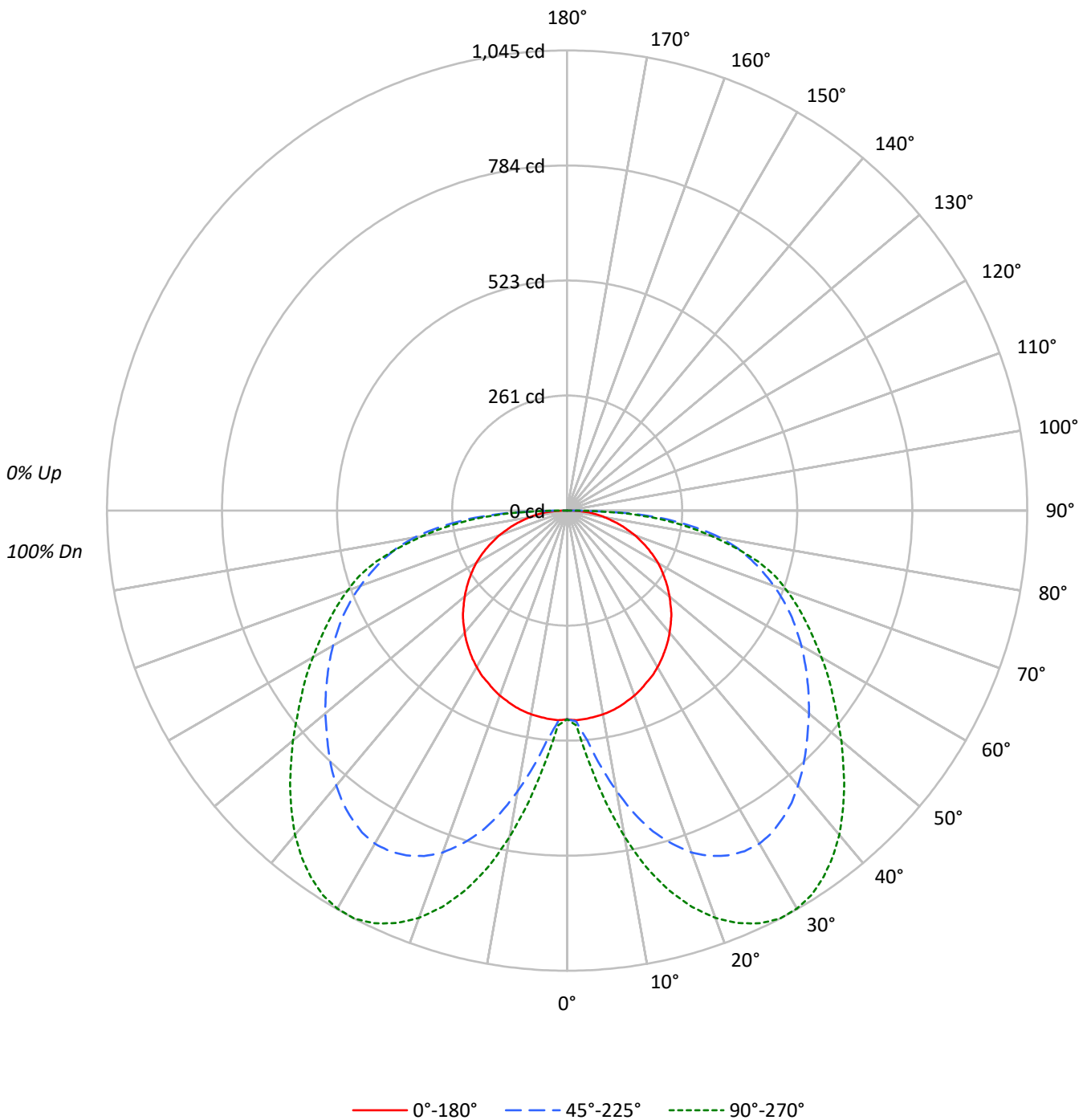
Input Watts (W): 43.1
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	638	638	638
5°	642	707	775
10°	642	884	1027
15°	641	1051	1243
20°	640	1183	1409
25°	637	1283	1535
30°	638	1357	1621
35°	636	1402	1668
40°	635	1432	1688
45°	637	1459	1693
50°	636	1501	1701
55°	637	1561	1729
60°	643	1653	1795
65°	641	1784	1904
70°	643	1965	2087
75°	646	2253	2337
80°	669	2731	2584
85°	772	3523	3189



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	53.2	1.6
10°-20°	203.2	6.2
20°-30°	371.5	11.3
30°-40°	494.1	15.0
40°-50°	544.0	16.6
50°-60°	539.2	16.4
60°-70°	493.6	15.0
70°-80°	397.4	12.1
80°-90°	190.7	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°	628.0	19.1
0°-40°	1122.1	34.1
0°-60°	2205.3	67.1
0°-90°	3287.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3287.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	474	474	474	474	474	
5°	475	479	524	560	574	45
15°	460	579	755	855	892	130
25°	429	643	864	989	1034	198
35°	388	632	853	973	1015	243
45°	335	570	767	859	890	258
55°	271	503	666	721	737	243
65°	201	435	560	585	598	199
75°	124	339	433	446	450	131
85°	50	185	228	209	207	51
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°	473.9	473.9	473.9	473.9	473.9	473.9	473.9	473.9	473.9	473.9	473.9
2.5°	476.6	476.6	475.2	475.2	475.2	475.2	475.2	475.2	476.6	479.3	480.6
5°	475.2	475.2	475.2	475.2	476.6	482.0	488.7	499.5	510.3	523.8	536.0
7.5°	472.5	472.5	472.5	476.6	488.7	507.6	525.2	545.4	565.7	585.9	602.1
10°	469.8	469.8	472.5	487.4	511.7	540.0	567.0	594.0	619.7	646.7	669.6
12.5°	465.8	465.8	473.9	500.9	536.0	571.1	606.2	638.6	671.0	704.7	730.4
15°	460.4	460.4	477.9	514.4	557.6	600.8	641.3	680.4	718.2	754.7	783.0
17.5°	453.6	456.3	482.0	527.9	576.5	626.4	671.0	715.5	756.0	793.8	827.6
20°	446.9	450.9	486.0	538.7	592.7	648.0	696.6	742.5	785.7	826.3	861.4
22.5°	438.8	444.2	488.7	546.8	604.8	662.9	714.2	762.8	808.7	849.2	885.7
25°	429.3	437.4	490.1	550.8	614.3	672.3	725.0	774.9	822.2	864.1	900.5
27.5°	421.2	432.0	488.7	553.5	618.3	677.7	731.7	781.7	830.3	872.2	910.0
30°	410.4	423.9	486.0	552.2	617.0	677.7	730.4	781.7	830.3	873.5	910.0
32.5°	399.6	415.8	479.3	546.8	612.9	671.0	725.0	776.3	823.6	866.8	901.9
35°	387.5	406.4	471.2	538.7	603.5	661.5	714.2	764.1	812.8	853.3	888.4
37.5°	375.3	395.6	460.4	527.9	591.3	648.0	699.3	749.3	795.2	837.1	869.5
40°	361.8	384.8	449.6	515.7	576.5	631.8	683.1	731.7	776.3	815.5	846.5
42.5°	348.3	372.6	437.4	502.2	561.6	614.3	665.6	711.5	754.7	792.5	820.9
45°	334.8	359.1	422.6	487.4	544.1	596.7	645.3	691.2	731.7	766.8	793.8
47.5°	318.6	345.6	409.1	471.2	526.5	579.2	626.4	669.6	710.1	741.2	766.8
50°	303.8	332.1	394.2	455.0	509.0	561.6	607.5	649.4	687.2	716.9	739.8
52.5°	287.6	317.3	379.4	440.1	494.1	544.1	590.0	629.1	662.9	691.2	712.8
55°	271.4	302.4	365.9	423.9	477.9	527.9	571.1	608.9	641.3	665.6	685.8
57.5°	255.2	287.6	351.0	410.4	463.1	511.7	553.5	587.3	618.3	639.9	657.5
60°	239.0	272.7	334.8	394.2	448.2	494.1	534.6	567.0	594.0	614.3	629.1
62.5°	220.1	256.5	320.0	378.0	430.7	475.2	514.4	544.1	569.7	587.3	599.4
65°	201.2	240.3	303.8	361.8	413.1	456.3	492.8	521.1	544.1	560.3	568.4
67.5°	182.3	224.1	287.6	345.6	394.2	434.7	469.8	496.8	517.1	530.6	537.3
70°	163.4	205.2	268.7	325.4	372.6	410.4	444.2	469.8	487.4	499.5	504.9
72.5°	143.1	186.3	248.4	303.8	348.3	386.1	417.2	441.5	457.7	467.1	471.2
75°	124.2	166.1	226.8	279.5	321.3	356.4	386.1	410.4	426.6	433.4	437.4
77.5°	104.0	145.8	203.9	252.5	291.6	324.0	352.4	375.3	390.2	396.9	401.0
80°	86.4	124.2	176.9	221.4	257.9	288.9	314.6	338.9	351.0	352.4	348.3
82.5°	67.5	102.6	148.5	187.7	218.7	248.4	272.7	288.9	294.3	294.3	290.3
85°	50.0	77.0	116.1	147.2	174.2	195.8	210.6	224.1	226.8	228.2	222.8
87.5°	28.4	43.2	68.9	89.1	105.3	120.2	131.0	137.7	137.7	139.1	136.4
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°	473.9	473.9	473.9	473.9	473.9	473.9	473.9	473.9
2.5°	480.6	483.3	483.3	486.0	487.4	487.4	488.7	488.7
5°	541.4	552.2	556.2	563.0	567.0	572.4	575.1	573.8
7.5°	614.3	630.5	638.6	648.0	658.8	661.5	665.6	665.6
10°	687.2	706.1	718.2	729.0	741.2	746.6	752.0	752.0
12.5°	753.3	772.2	788.4	801.9	814.1	822.2	827.6	829.0
15°	807.4	831.7	847.9	862.7	876.2	884.3	891.1	892.4
17.5°	851.9	874.9	896.5	912.7	924.8	937.0	941.0	943.7
20°	887.0	911.3	934.3	950.5	964.0	976.1	981.5	984.2
22.5°	912.7	938.3	961.3	978.8	992.3	1004.5	1011.2	1013.9
25°	928.9	955.9	980.2	997.7	1012.6	1024.7	1031.5	1034.2
27.5°	939.7	966.7	989.6	1007.2	1022.0	1034.2	1040.9	1045.0
30°	939.7	966.7	989.6	1007.2	1022.0	1034.2	1040.9	1043.6
32.5°	931.6	958.6	981.5	997.7	1012.6	1024.7	1031.5	1034.2
35°	916.7	943.7	965.3	981.5	996.4	1007.2	1013.9	1015.3
37.5°	896.5	922.1	942.4	958.6	972.1	982.9	989.6	991.0
40°	873.5	897.8	916.7	931.6	943.7	953.2	959.9	961.3
42.5°	846.5	869.5	885.7	900.5	911.3	920.8	927.5	926.2
45°	818.2	839.8	853.3	865.4	877.6	884.3	889.7	889.7
47.5°	789.8	807.4	819.5	830.3	839.8	846.5	850.6	850.6
50°	760.1	774.9	785.7	795.2	803.3	808.7	812.8	812.8
52.5°	730.4	743.9	752.0	760.1	766.8	770.9	774.9	773.6
55°	700.7	711.5	716.9	725.0	730.4	735.8	738.5	737.1
57.5°	671.0	677.7	683.1	689.9	695.3	700.7	702.0	703.4
60°	638.6	645.3	649.4	656.1	661.5	665.6	668.3	666.9
62.5°	607.5	611.6	615.6	621.0	625.1	630.5	631.8	631.8
65°	573.8	577.8	581.9	587.3	591.3	596.7	599.4	598.1
67.5°	541.4	545.4	549.5	553.5	558.9	564.3	565.7	565.7
70°	507.6	511.7	514.4	519.8	523.8	529.2	530.6	530.6
72.5°	475.2	477.9	480.6	486.0	488.7	492.8	495.5	495.5
75°	438.8	441.5	444.2	446.9	448.2	449.6	450.9	449.6
77.5°	398.3	395.6	392.9	392.9	390.2	391.5	392.9	391.5
80°	342.9	340.2	337.5	336.2	333.5	333.5	334.8	333.5
82.5°	284.9	279.5	276.8	275.4	272.7	272.7	272.7	272.7
85°	214.7	212.0	210.6	207.9	205.2	203.9	205.2	206.6
87.5°	133.7	131.0	128.3	125.6	124.2	122.9	125.6	121.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)