

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: P188464

Luminaire Tested: **24SR-LD2-53-C-UNV-L840-CD1-BR-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188464
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-L840-CD1-BR-U
Description: METALUX 2X4 SKYRIDGE LED FIXTURE WITH BELLADONNA ROSE

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

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3352.0 lumens
Efficiency: N/A
Efficacy: 77.8 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

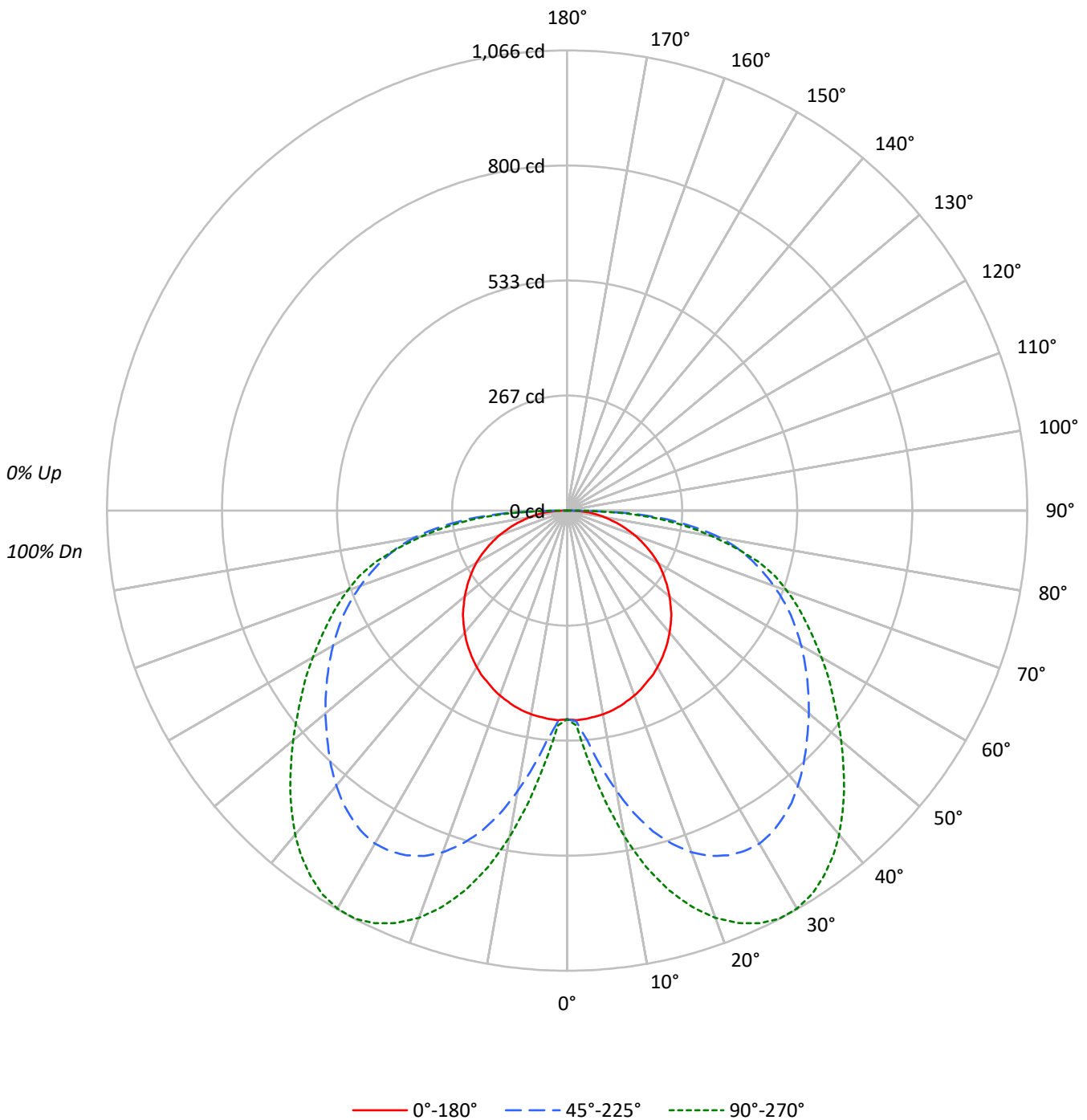
Input Watts (W): 43.1
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	650	650	650
5°	655	722	790
10°	655	901	1048
15°	654	1072	1268
20°	652	1206	1437
25°	650	1308	1566
30°	650	1384	1654
35°	649	1429	1701
40°	648	1461	1722
45°	650	1488	1726
50°	648	1530	1735
55°	649	1592	1763
60°	656	1686	1830
65°	653	1819	1942
70°	655	2004	2129
75°	659	2297	2384
80°	683	2784	2635
85°	786	3592	3251



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	54.3	1.6
10°-20°	207.2	6.2
20°-30°	378.9	11.3
30°-40°	503.9	15.0
40°-50°	554.8	16.6
50°-60°	549.8	16.4
60°-70°	503.4	15.0
70°-80°	405.3	12.1
80°-90°	194.5	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°	640.4	19.1
0°-40°	1144.3	34.1
0°-60°	2248.9	67.1
0°-90°	3352.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3352.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	483	483	483	483	483	
5°	485	489	534	571	585	46
15°	470	591	770	872	910	132
25°	438	656	881	1008	1055	202
35°	395	645	870	993	1035	247
45°	341	582	782	876	907	263
55°	277	513	679	735	752	248
65°	205	443	571	596	610	203
75°	127	346	442	454	458	134
85°	51	189	233	213	211	52
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°	483.3	483.3	483.3	483.3	483.3	483.3	483.3	483.3	483.3	483.3	483.3
2.5°	486.0	486.0	484.6	484.6	484.6	484.6	484.6	484.6	486.0	488.8	490.1
5°	484.6	484.6	484.6	484.6	486.0	491.5	498.4	509.4	520.4	534.2	546.6
7.5°	481.9	481.9	481.9	486.0	498.4	517.7	535.6	556.2	576.9	597.5	614.0
10°	479.1	479.1	481.9	497.0	521.8	550.7	578.2	605.8	631.9	659.5	682.9
12.5°	475.0	475.0	483.3	510.8	546.6	582.4	618.2	651.2	684.3	718.7	744.8
15°	469.5	469.5	487.4	524.6	568.6	612.7	654.0	693.9	732.4	769.6	798.5
17.5°	462.6	465.4	491.5	538.3	587.9	638.8	684.3	729.7	771.0	809.5	844.0
20°	455.7	459.8	495.6	549.3	604.4	660.9	710.4	757.2	801.3	842.6	878.4
22.5°	447.5	453.0	498.4	557.6	616.8	676.0	728.3	777.9	824.7	866.0	903.2
25°	437.8	446.1	499.8	561.7	626.4	685.6	739.3	790.3	838.5	881.1	918.3
27.5°	429.6	440.6	498.4	564.5	630.6	691.1	746.2	797.2	846.7	889.4	928.0
30°	418.5	432.3	495.6	563.1	629.2	691.1	744.8	797.2	846.7	890.8	928.0
32.5°	407.5	424.0	488.8	557.6	625.1	684.3	739.3	791.6	839.8	883.9	919.7
35°	395.1	414.4	480.5	549.3	615.4	674.6	728.3	779.3	828.8	870.1	905.9
37.5°	382.7	403.4	469.5	538.3	603.0	660.9	713.2	764.1	810.9	853.6	886.6
40°	369.0	392.4	458.5	525.9	587.9	644.3	696.7	746.2	791.6	831.6	863.2
42.5°	355.2	380.0	446.1	512.2	572.7	626.4	678.8	725.6	769.6	808.2	837.1
45°	341.4	366.2	430.9	497.0	554.8	608.5	658.1	704.9	746.2	782.0	809.5
47.5°	324.9	352.5	417.2	480.5	536.9	590.6	638.8	682.9	724.2	755.9	782.0
50°	309.8	338.7	402.0	464.0	519.0	572.7	619.6	662.2	700.8	731.1	754.5
52.5°	293.3	323.5	386.9	448.8	503.9	554.8	601.7	641.6	676.0	704.9	726.9
55°	276.7	308.4	373.1	432.3	487.4	538.3	582.4	620.9	654.0	678.8	699.4
57.5°	260.2	293.3	358.0	418.5	472.2	521.8	564.5	598.9	630.6	652.6	670.5
60°	243.7	278.1	341.4	402.0	457.1	503.9	545.2	578.2	605.8	626.4	641.6
62.5°	224.4	261.6	326.3	385.5	439.2	484.6	524.6	554.8	581.0	598.9	611.3
65°	205.1	245.1	309.8	369.0	421.3	465.4	502.5	531.4	554.8	571.4	579.6
67.5°	185.9	228.5	293.3	352.5	402.0	443.3	479.1	506.7	527.3	541.1	548.0
70°	166.6	209.3	274.0	331.8	380.0	418.5	453.0	479.1	497.0	509.4	514.9
72.5°	145.9	190.0	253.3	309.8	355.2	393.8	425.4	450.2	466.7	476.4	480.5
75°	126.7	169.3	231.3	285.0	327.7	363.5	393.8	418.5	435.1	441.9	446.1
77.5°	106.0	148.7	207.9	257.5	297.4	330.4	359.3	382.7	397.9	404.8	408.9
80°	88.1	126.7	180.4	225.8	263.0	294.6	320.8	345.6	358.0	359.3	355.2
82.5°	68.8	104.6	151.4	191.4	223.0	253.3	278.1	294.6	300.1	300.1	296.0
85°	50.9	78.5	118.4	150.1	177.6	199.6	214.8	228.5	231.3	232.7	227.2
87.5°	28.9	44.1	70.2	90.9	107.4	122.5	133.5	140.4	140.4	141.8	139.1
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°	483.3	483.3	483.3	483.3	483.3	483.3	483.3	483.3
2.5°	490.1	492.9	492.9	495.6	497.0	497.0	498.4	498.4
5°	552.1	563.1	567.2	574.1	578.2	583.8	586.5	585.1
7.5°	626.4	643.0	651.2	660.9	671.9	674.6	678.8	678.8
10°	700.8	720.1	732.4	743.5	755.9	761.4	766.9	766.9
12.5°	768.2	787.5	804.0	817.8	830.2	838.5	844.0	845.3
15°	823.3	848.1	864.6	879.8	893.5	901.8	908.7	910.1
17.5°	868.7	892.2	914.2	930.7	943.1	955.5	959.6	962.4
20°	904.5	929.3	952.7	969.3	983.0	995.4	1000.9	1003.7
22.5°	930.7	956.9	980.3	998.2	1011.9	1024.3	1031.2	1034.0
25°	947.2	974.8	999.5	1017.4	1032.6	1045.0	1051.9	1054.6
27.5°	958.2	985.8	1009.2	1027.1	1042.2	1054.6	1061.5	1065.6
30°	958.2	985.8	1009.2	1027.1	1042.2	1054.6	1061.5	1064.3
32.5°	950.0	977.5	1000.9	1017.4	1032.6	1045.0	1051.9	1054.6
35°	934.8	962.4	984.4	1000.9	1016.1	1027.1	1034.0	1035.3
37.5°	914.2	940.3	961.0	977.5	991.3	1002.3	1009.2	1010.6
40°	890.8	915.6	934.8	950.0	962.4	972.0	978.9	980.3
42.5°	863.2	886.6	903.2	918.3	929.3	939.0	945.8	944.5
45°	834.3	856.4	870.1	882.5	894.9	901.8	907.3	907.3
47.5°	805.4	823.3	835.7	846.7	856.4	863.2	867.4	867.4
50°	775.1	790.3	801.3	810.9	819.2	824.7	828.8	828.8
52.5°	744.8	758.6	766.9	775.1	782.0	786.1	790.3	788.9
55°	714.5	725.6	731.1	739.3	744.8	750.3	753.1	751.7
57.5°	684.3	691.1	696.7	703.5	709.0	714.5	715.9	717.3
60°	651.2	658.1	662.2	669.1	674.6	678.8	681.5	680.1
62.5°	619.6	623.7	627.8	633.3	637.4	643.0	644.3	644.3
65°	585.1	589.3	593.4	598.9	603.0	608.5	611.3	609.9
67.5°	552.1	556.2	560.4	564.5	570.0	575.5	576.9	576.9
70°	517.7	521.8	524.6	530.1	534.2	539.7	541.1	541.1
72.5°	484.6	487.4	490.1	495.6	498.4	502.5	505.3	505.3
75°	447.5	450.2	453.0	455.7	457.1	458.5	459.8	458.5
77.5°	406.2	403.4	400.6	400.6	397.9	399.3	400.6	399.3
80°	349.7	346.9	344.2	342.8	340.1	340.1	341.4	340.1
82.5°	290.5	285.0	282.2	280.9	278.1	278.1	278.1	278.1
85°	218.9	216.2	214.8	212.0	209.3	207.9	209.3	210.6
87.5°	136.3	133.5	130.8	128.0	126.7	125.3	128.0	123.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)