

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: P188448

Luminaire Tested: **24SR-LD2-39-C-UNV-L835-CD1-BR-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P188448  
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-LD2-39-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: 2470.0 lumens  
Efficiency: N/A  
Efficacy: 77.4 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

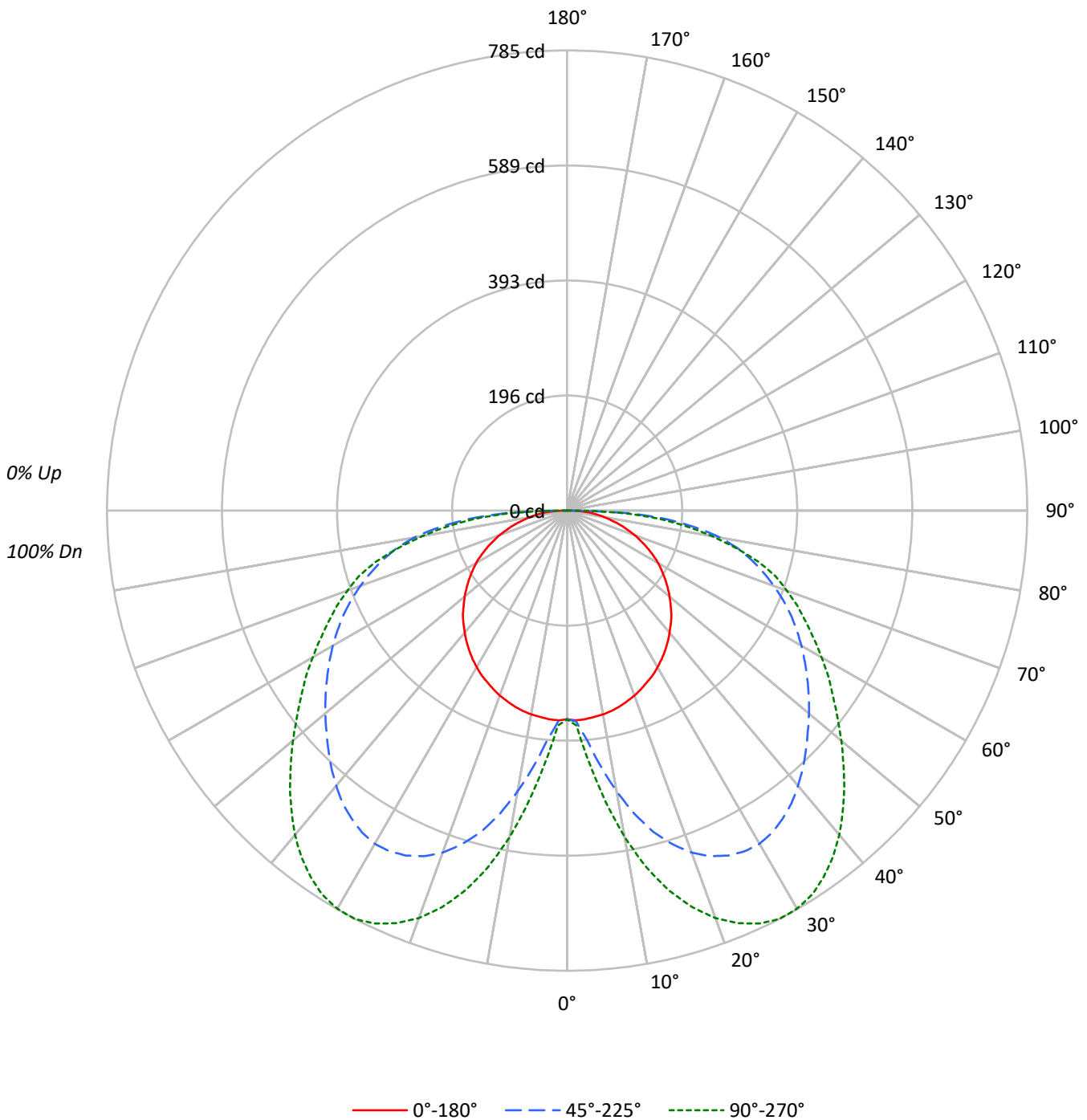
Input Watts (W): 31.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	479	479	479
5°	482	532	582
10°	482	664	772
15°	482	790	934
20°	481	889	1059
25°	479	964	1154
30°	479	1020	1218
35°	478	1053	1253
40°	478	1076	1269
45°	479	1096	1272
50°	478	1128	1278
55°	478	1173	1299
60°	483	1242	1349
65°	481	1340	1431
70°	483	1477	1568
75°	485	1693	1756
80°	503	2052	1942
85°	579	2648	2396



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	40.0	1.6
10°-20°	152.7	6.2
20°-30°	279.2	11.3
30°-40°	371.3	15.0
40°-50°	408.8	16.6
50°-60°	405.2	16.4
60°-70°	370.9	15.0
70°-80°	298.7	12.1
80°-90°	143.3	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°	471.9	19.1
0°-40°	843.2	34.1
0°-60°	1657.1	67.1
0°-90°	2470.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2470.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	356	356	356	356	356	
5°	357	360	394	421	431	34
15°	346	435	567	643	671	98
25°	323	483	649	743	777	149
35°	291	475	641	732	763	182
45°	252	429	576	646	669	194
55°	204	378	500	542	554	183
65°	151	327	421	439	449	150
75°	93	255	326	335	338	98
85°	38	139	172	157	155	39
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°	356.1	356.1	356.1	356.1	356.1	356.1	356.1	356.1	356.1	356.1	356.1
2.5°	358.1	358.1	357.1	357.1	357.1	357.1	357.1	357.1	358.1	360.2	361.2
5°	357.1	357.1	357.1	357.1	358.1	362.2	367.3	375.4	383.5	393.6	402.8
7.5°	355.1	355.1	355.1	358.1	367.3	381.5	394.6	409.9	425.1	440.3	452.5
10°	353.1	353.1	355.1	366.2	384.5	405.8	426.1	446.4	465.7	486.0	503.2
12.5°	350.0	350.0	356.1	376.4	402.8	429.1	455.5	479.9	504.2	529.6	548.9
15°	345.9	345.9	359.1	386.5	419.0	451.5	481.9	511.3	539.7	567.1	588.4
17.5°	340.9	342.9	362.2	396.7	433.2	470.7	504.2	537.7	568.1	596.5	621.9
20°	335.8	338.8	365.2	404.8	445.4	487.0	523.5	558.0	590.4	620.9	647.3
22.5°	329.7	333.8	367.3	410.9	454.5	498.1	536.7	573.2	607.7	638.1	665.5
25°	322.6	328.7	368.3	413.9	461.6	505.2	544.8	582.3	617.8	649.3	676.7
27.5°	316.5	324.6	367.3	416.0	464.6	509.3	549.9	587.4	623.9	655.4	683.8
30°	308.4	318.6	365.2	414.9	463.6	509.3	548.9	587.4	623.9	656.4	683.8
32.5°	300.3	312.5	360.2	410.9	460.6	504.2	544.8	583.3	618.9	651.3	677.7
35°	291.2	305.4	354.1	404.8	453.5	497.1	536.7	574.2	610.7	641.2	667.6
37.5°	282.0	297.3	345.9	396.7	444.4	487.0	525.5	563.1	597.5	629.0	653.3
40°	271.9	289.1	337.8	387.5	433.2	474.8	513.3	549.9	583.3	612.8	636.1
42.5°	261.7	280.0	328.7	377.4	422.0	461.6	500.2	534.6	567.1	595.5	616.8
45°	251.6	269.9	317.5	366.2	408.8	448.4	484.9	519.4	549.9	576.2	596.5
47.5°	239.4	259.7	307.4	354.1	395.7	435.2	470.7	503.2	533.6	557.0	576.2
50°	228.3	249.6	296.2	341.9	382.5	422.0	456.5	488.0	516.4	538.7	556.0
52.5°	216.1	238.4	285.1	330.7	371.3	408.8	443.3	472.8	498.1	519.4	535.7
55°	203.9	227.3	274.9	318.6	359.1	396.7	429.1	457.5	481.9	500.2	515.4
57.5°	191.7	216.1	263.8	308.4	348.0	384.5	416.0	441.3	464.6	480.9	494.1
60°	179.6	204.9	251.6	296.2	336.8	371.3	401.7	426.1	446.4	461.6	472.8
62.5°	165.4	192.8	240.4	284.1	323.6	357.1	386.5	408.8	428.1	441.3	450.4
65°	151.2	180.6	228.3	271.9	310.4	342.9	370.3	391.6	408.8	421.0	427.1
67.5°	137.0	168.4	216.1	259.7	296.2	326.7	353.1	373.3	388.6	398.7	403.8
70°	122.8	154.2	201.9	244.5	280.0	308.4	333.8	353.1	366.2	375.4	379.4
72.5°	107.5	140.0	186.7	228.3	261.7	290.2	313.5	331.7	343.9	351.0	354.1
75°	93.3	124.8	170.4	210.0	241.5	267.8	290.2	308.4	320.6	325.7	328.7
77.5°	78.1	109.6	153.2	189.7	219.1	243.5	264.8	282.0	293.2	298.3	301.3
80°	64.9	93.3	132.9	166.4	193.8	217.1	236.4	254.6	263.8	264.8	261.7
82.5°	50.7	77.1	111.6	141.0	164.4	186.7	204.9	217.1	221.2	221.2	218.1
85°	37.5	57.8	87.2	110.6	130.9	147.1	158.3	168.4	170.4	171.5	167.4
87.5°	21.3	32.5	51.7	67.0	79.1	90.3	98.4	103.5	103.5	104.5	102.5
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°	356.1	356.1	356.1	356.1	356.1	356.1	356.1	356.1
2.5°	361.2	363.2	363.2	365.2	366.2	366.2	367.3	367.3
5°	406.8	414.9	418.0	423.1	426.1	430.2	432.2	431.2
7.5°	461.6	473.8	479.9	487.0	495.1	497.1	500.2	500.2
10°	516.4	530.6	539.7	547.8	557.0	561.0	565.1	565.1
12.5°	566.1	580.3	592.5	602.6	611.8	617.8	621.9	622.9
15°	606.7	624.9	637.1	648.3	658.4	664.5	669.6	670.6
17.5°	640.2	657.4	673.6	685.8	694.9	704.1	707.1	709.1
20°	666.5	684.8	702.0	714.2	724.4	733.5	737.6	739.6
22.5°	685.8	705.1	722.3	735.5	745.7	754.8	759.9	761.9
25°	698.0	718.3	736.5	749.7	760.9	770.0	775.1	777.1
27.5°	706.1	726.4	743.6	756.8	768.0	777.1	782.2	785.2
30°	706.1	726.4	743.6	756.8	768.0	777.1	782.2	784.2
32.5°	700.0	720.3	737.6	749.7	760.9	770.0	775.1	777.1
35°	688.9	709.1	725.4	737.6	748.7	756.8	761.9	762.9
37.5°	673.6	692.9	708.1	720.3	730.4	738.6	743.6	744.7
40°	656.4	674.7	688.9	700.0	709.1	716.2	721.3	722.3
42.5°	636.1	653.3	665.5	676.7	684.8	691.9	697.0	696.0
45°	614.8	631.0	641.2	650.3	659.4	664.5	668.6	668.6
47.5°	593.5	606.7	615.8	623.9	631.0	636.1	639.1	639.1
50°	571.2	582.3	590.4	597.5	603.6	607.7	610.7	610.7
52.5°	548.9	559.0	565.1	571.2	576.2	579.3	582.3	581.3
55°	526.5	534.6	538.7	544.8	548.9	552.9	554.9	553.9
57.5°	504.2	509.3	513.3	518.4	522.5	526.5	527.5	528.6
60°	479.9	484.9	488.0	493.1	497.1	500.2	502.2	501.2
62.5°	456.5	459.6	462.6	466.7	469.7	473.8	474.8	474.8
65°	431.2	434.2	437.3	441.3	444.4	448.4	450.4	449.4
67.5°	406.8	409.9	412.9	416.0	420.0	424.1	425.1	425.1
70°	381.5	384.5	386.5	390.6	393.6	397.7	398.7	398.7
72.5°	357.1	359.1	361.2	365.2	367.3	370.3	372.3	372.3
75°	329.7	331.7	333.8	335.8	336.8	337.8	338.8	337.8
77.5°	299.3	297.3	295.2	295.2	293.2	294.2	295.2	294.2
80°	257.7	255.7	253.6	252.6	250.6	250.6	251.6	250.6
82.5°	214.1	210.0	208.0	207.0	204.9	204.9	204.9	204.9
85°	161.3	159.3	158.3	156.2	154.2	153.2	154.2	155.2
87.5°	100.4	98.4	96.4	94.3	93.3	92.3	94.3	91.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)