

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: P188450

Luminaire Tested: **24SR-LD2-39-C-UNV-L850-CD1-BR-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P188450  
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-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: 2742.0 lumens  
Efficiency: N/A  
Efficacy: 86.0 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

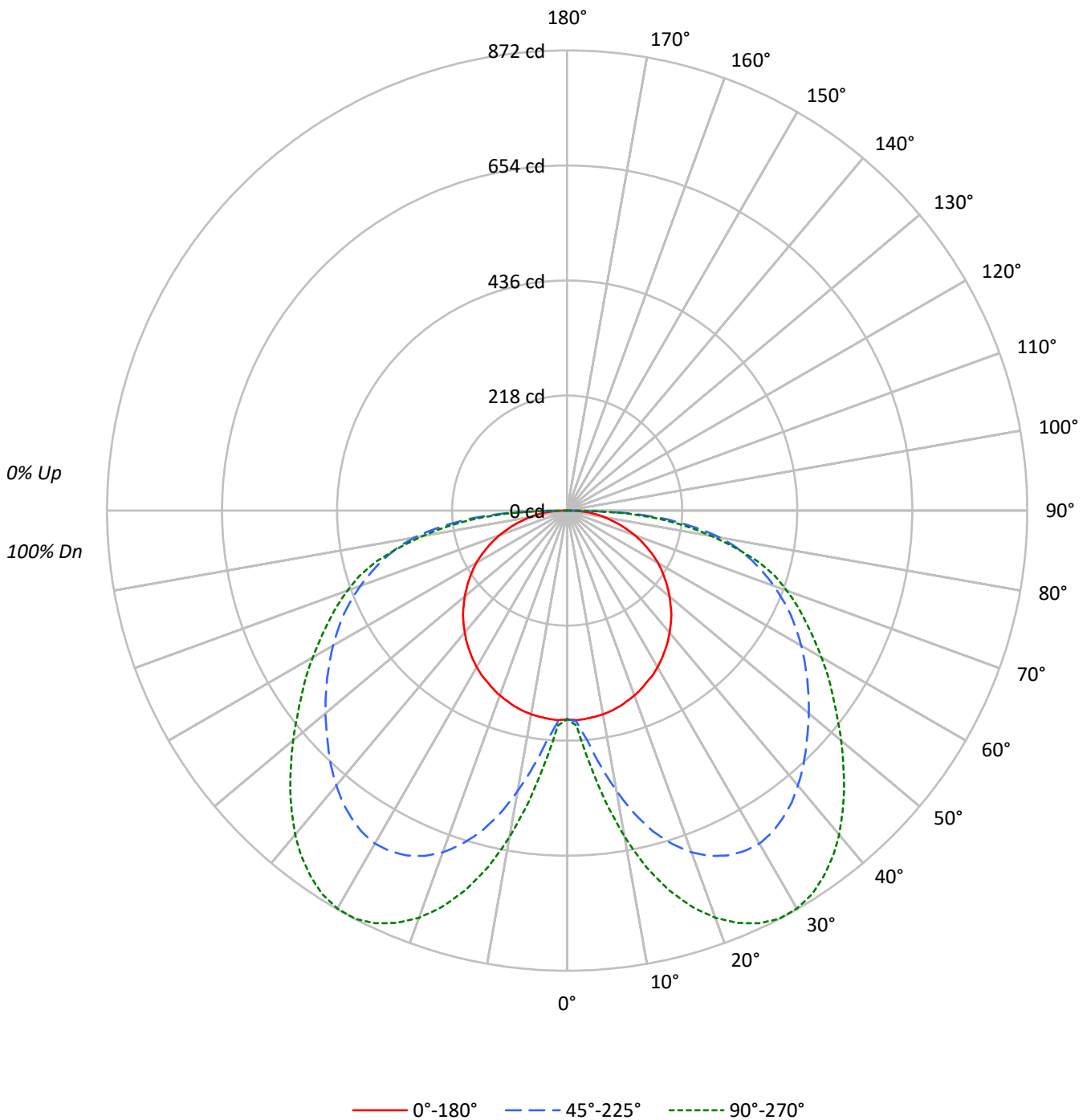
Input Watts (W): 31.9  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	532	532	532
5°	535	590	646
10°	535	737	857
15°	535	877	1037
20°	534	987	1176
25°	532	1070	1281
30°	532	1132	1353
35°	531	1169	1391
40°	530	1195	1408
45°	531	1217	1412
50°	530	1252	1419
55°	531	1302	1442
60°	536	1379	1497
65°	534	1488	1588
70°	536	1639	1741
75°	539	1879	1949
80°	559	2277	2156
85°	644	2938	2660



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	44.4	1.6
10°-20°	169.5	6.2
20°-30°	309.9	11.3
30°-40°	412.2	15.0
40°-50°	453.8	16.6
50°-60°	449.8	16.4
60°-70°	411.7	15.0
70°-80°	331.5	12.1
80°-90°	159.1	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°	523.9	19.1
0°-40°	936.0	34.1
0°-60°	1839.6	67.1
0°-90°	2742.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2742.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	395	395	395	395	395	
5°	396	400	437	467	479	38
15°	384	483	630	714	744	108
25°	358	537	721	825	863	165
35°	323	528	712	812	847	202
45°	279	476	640	717	742	215
55°	226	420	555	601	615	203
65°	168	363	467	488	499	166
75°	104	283	362	372	375	109
85°	42	154	190	175	172	43
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°	395.3	395.3	395.3	395.3	395.3	395.3	395.3	395.3	395.3	395.3	395.3
2.5°	397.6	397.6	396.4	396.4	396.4	396.4	396.4	396.4	397.6	399.8	400.9
5°	396.4	396.4	396.4	396.4	397.6	402.1	407.7	416.7	425.7	437.0	447.1
7.5°	394.2	394.2	394.2	397.6	407.7	423.5	438.1	455.0	471.9	488.8	502.3
10°	391.9	391.9	394.2	406.6	426.8	450.5	473.0	495.5	516.9	539.5	558.6
12.5°	388.6	388.6	395.3	417.8	447.1	476.4	505.7	532.7	559.7	587.9	609.3
15°	384.0	384.0	398.7	429.1	465.1	501.2	535.0	567.6	599.2	629.6	653.2
17.5°	378.4	380.7	402.1	440.4	480.9	522.6	559.7	596.9	630.7	662.2	690.4
20°	372.8	376.2	405.4	449.4	494.4	540.6	581.1	619.4	655.5	689.3	718.5
22.5°	366.0	370.5	407.7	456.1	504.6	553.0	595.8	636.3	674.6	708.4	738.8
25°	358.1	364.9	408.8	459.5	512.4	560.9	604.8	646.5	685.9	720.8	751.2
27.5°	351.4	360.4	407.7	461.8	515.8	565.4	610.4	652.1	692.6	727.5	759.1
30°	342.4	353.6	405.4	460.6	514.7	565.4	609.3	652.1	692.6	728.7	759.1
32.5°	333.4	346.9	399.8	456.1	511.3	559.7	604.8	647.6	687.0	723.0	752.3
35°	323.2	339.0	393.1	449.4	503.4	551.9	595.8	637.4	678.0	711.8	741.1
37.5°	313.1	330.0	384.0	440.4	493.3	540.6	583.4	625.1	663.4	698.3	725.3
40°	301.8	321.0	375.0	430.2	480.9	527.1	569.9	610.4	647.6	680.2	706.1
42.5°	290.6	310.8	364.9	419.0	468.5	512.4	555.2	593.5	629.6	661.1	684.7
45°	279.3	299.6	352.5	406.6	453.9	497.8	538.3	576.6	610.4	639.7	662.2
47.5°	265.8	288.3	341.2	393.1	439.2	483.2	522.6	558.6	592.4	618.3	639.7
50°	253.4	277.1	328.9	379.5	424.6	468.5	506.8	541.7	573.3	598.0	617.2
52.5°	239.9	264.7	316.5	367.2	412.2	453.9	492.2	524.8	553.0	576.6	594.7
55°	226.4	252.3	305.2	353.6	398.7	440.4	476.4	507.9	535.0	555.2	572.1
57.5°	212.9	239.9	292.8	342.4	386.3	426.8	461.8	489.9	515.8	533.8	548.5
60°	199.3	227.5	279.3	328.9	373.9	412.2	446.0	473.0	495.5	512.4	524.8
62.5°	183.6	214.0	266.9	315.3	359.3	396.4	429.1	453.9	475.3	489.9	500.0
65°	167.8	200.5	253.4	301.8	344.6	380.7	411.1	434.7	453.9	467.4	474.1
67.5°	152.0	187.0	239.9	288.3	328.9	362.6	391.9	414.5	431.3	442.6	448.2
70°	136.3	171.2	224.1	271.4	310.8	342.4	370.5	391.9	406.6	416.7	421.2
72.5°	119.4	155.4	207.2	253.4	290.6	322.1	348.0	368.3	381.8	389.7	393.1
75°	103.6	138.5	189.2	233.1	268.0	297.3	322.1	342.4	355.9	361.5	364.9
77.5°	86.7	121.6	170.1	210.6	243.3	270.3	293.9	313.1	325.5	331.1	334.5
80°	72.1	103.6	147.5	184.7	215.1	241.0	262.4	282.7	292.8	293.9	290.6
82.5°	56.3	85.6	123.9	156.5	182.4	207.2	227.5	241.0	245.5	245.5	242.1
85°	41.7	64.2	96.9	122.8	145.3	163.3	175.7	187.0	189.2	190.3	185.8
87.5°	23.7	36.0	57.4	74.3	87.8	100.2	109.2	114.9	114.9	116.0	113.7
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°	395.3	395.3	395.3	395.3	395.3	395.3	395.3	395.3
2.5°	400.9	403.2	403.2	405.4	406.6	406.6	407.7	407.7
5°	451.6	460.6	464.0	469.6	473.0	477.5	479.8	478.6
7.5°	512.4	526.0	532.7	540.6	549.6	551.9	555.2	555.2
10°	573.3	589.0	599.2	608.2	618.3	622.8	627.3	627.3
12.5°	628.4	644.2	657.7	669.0	679.1	685.9	690.4	691.5
15°	673.5	693.8	707.3	719.7	730.9	737.7	743.3	744.4
17.5°	710.7	729.8	747.8	761.3	771.5	781.6	785.0	787.2
20°	739.9	760.2	779.4	792.9	804.1	814.3	818.8	821.0
22.5°	761.3	782.7	801.9	816.5	827.8	837.9	843.5	845.8
25°	774.8	797.4	817.6	832.3	844.7	854.8	860.4	862.7
27.5°	783.9	806.4	825.5	840.2	852.6	862.7	868.3	871.7
30°	783.9	806.4	825.5	840.2	852.6	862.7	868.3	870.6
32.5°	777.1	799.6	818.8	832.3	844.7	854.8	860.4	862.7
35°	764.7	787.2	805.3	818.8	831.2	840.2	845.8	846.9
37.5°	747.8	769.2	786.1	799.6	810.9	819.9	825.5	826.7
40°	728.7	748.9	764.7	777.1	787.2	795.1	800.8	801.9
42.5°	706.1	725.3	738.8	751.2	760.2	768.1	773.7	772.6
45°	682.5	700.5	711.8	721.9	732.1	737.7	742.2	742.2
47.5°	658.8	673.5	683.6	692.6	700.5	706.1	709.5	709.5
50°	634.1	646.5	655.5	663.4	670.1	674.6	678.0	678.0
52.5°	609.3	620.6	627.3	634.1	639.7	643.1	646.5	645.3
55°	584.5	593.5	598.0	604.8	609.3	613.8	616.0	614.9
57.5°	559.7	565.4	569.9	575.5	580.0	584.5	585.6	586.8
60°	532.7	538.3	541.7	547.3	551.9	555.2	557.5	556.4
62.5°	506.8	510.2	513.6	518.1	521.4	526.0	527.1	527.1
65°	478.6	482.0	485.4	489.9	493.3	497.8	500.0	498.9
67.5°	451.6	455.0	458.4	461.8	466.3	470.8	471.9	471.9
70°	423.5	426.8	429.1	433.6	437.0	441.5	442.6	442.6
72.5°	396.4	398.7	400.9	405.4	407.7	411.1	413.3	413.3
75°	366.0	368.3	370.5	372.8	373.9	375.0	376.2	375.0
77.5°	332.2	330.0	327.7	327.7	325.5	326.6	327.7	326.6
80°	286.1	283.8	281.6	280.4	278.2	278.2	279.3	278.2
82.5°	237.6	233.1	230.9	229.8	227.5	227.5	227.5	227.5
85°	179.1	176.8	175.7	173.4	171.2	170.1	171.2	172.3
87.5°	111.5	109.2	107.0	104.7	103.6	102.5	104.7	101.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)