

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: P188440

Luminaire Tested: **24SR-LD2-29-C-UNV-L850-CD1-BR-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P188440  
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-LD2-29-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: 2009.0 lumens  
Efficiency: N/A  
Efficacy: 88.9 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

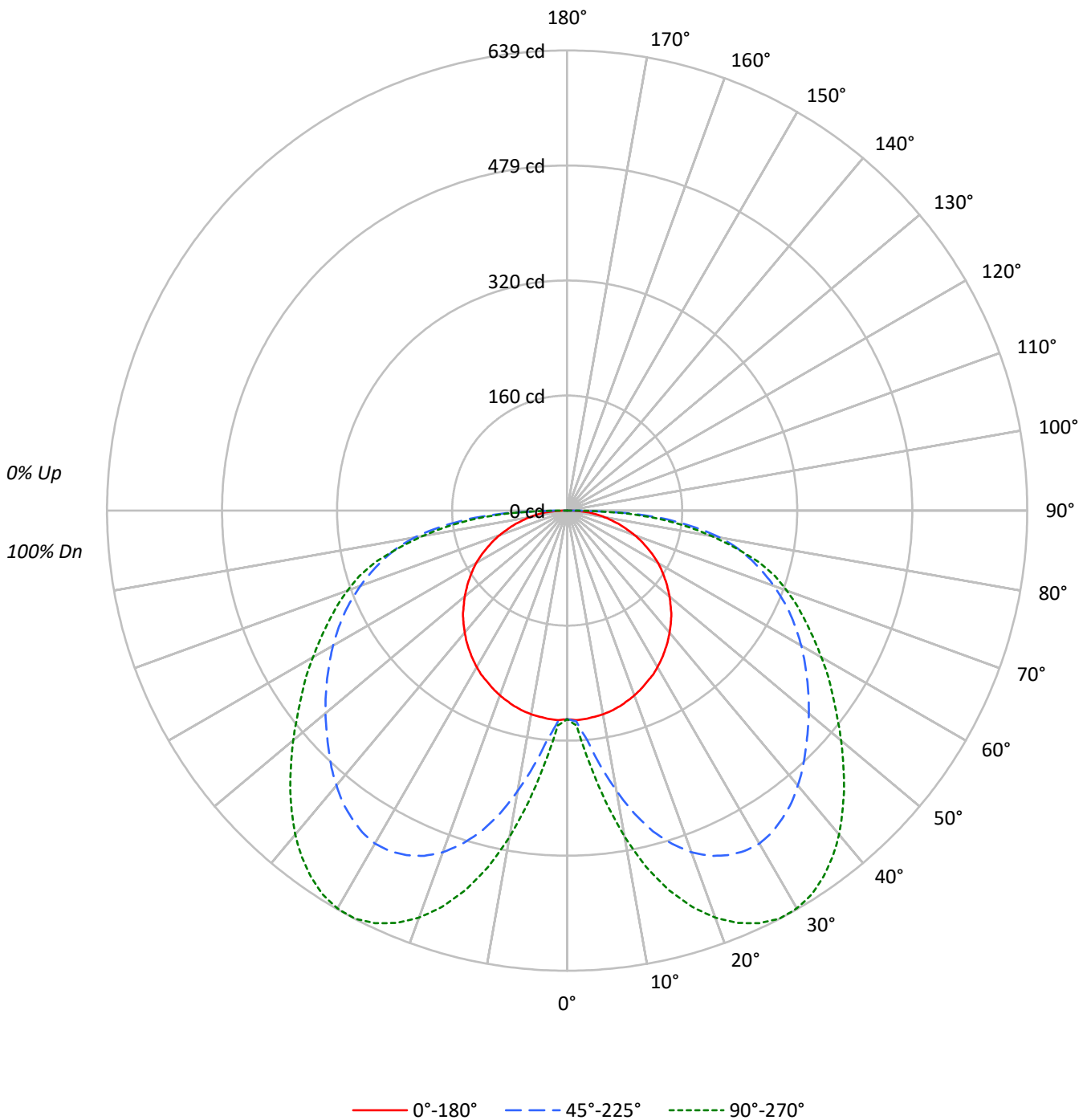
Input Watts (W): 22.6  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	390	390	390
5°	392	432	474
10°	392	540	628
15°	392	643	760
20°	391	723	861
25°	390	784	938
30°	390	829	991
35°	389	857	1019
40°	388	875	1032
45°	389	892	1035
50°	389	917	1040
55°	389	954	1057
60°	393	1010	1097
65°	391	1090	1164
70°	393	1201	1276
75°	395	1377	1429
80°	409	1669	1579
85°	471	2154	1950



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	32.5	1.6
10°-20°	124.2	6.2
20°-30°	227.1	11.3
30°-40°	302.0	15.0
40°-50°	332.5	16.6
50°-60°	329.5	16.4
60°-70°	301.7	15.0
70°-80°	242.9	12.1
80°-90°	116.5	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°	383.8	19.1
0°-40°	685.8	34.1
0°-60°	1347.9	67.1
0°-90°	2009.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2009.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	290	290	290	290	290	
5°	290	293	320	342	351	28
15°	281	354	461	523	545	79
25°	262	393	528	604	632	121
35°	237	387	522	595	620	148
45°	205	349	469	525	544	158
55°	166	307	407	441	450	148
65°	123	266	342	357	366	122
75°	76	207	265	272	275	80
85°	30	113	140	128	126	31
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°	289.6	289.6	289.6	289.6	289.6	289.6	289.6	289.6	289.6	289.6	289.6
2.5°	291.3	291.3	290.5	290.5	290.5	290.5	290.5	290.5	291.3	292.9	293.8
5°	290.5	290.5	290.5	290.5	291.3	294.6	298.7	305.3	311.9	320.2	327.6
7.5°	288.8	288.8	288.8	291.3	298.7	310.3	321.0	333.4	345.7	358.1	368.0
10°	287.2	287.2	288.8	297.9	312.7	330.1	346.6	363.1	378.8	395.3	409.3
12.5°	284.7	284.7	289.6	306.1	327.6	349.0	370.5	390.3	410.1	430.7	446.4
15°	281.4	281.4	292.1	314.4	340.8	367.2	392.0	415.9	439.0	461.3	478.6
17.5°	277.3	278.9	294.6	322.6	352.3	382.9	410.1	437.3	462.1	485.2	505.8
20°	273.1	275.6	297.1	329.2	362.2	396.1	425.8	453.8	480.2	505.0	526.5
22.5°	268.2	271.5	298.7	334.2	369.7	405.2	436.5	466.2	494.3	519.0	541.3
25°	262.4	267.4	299.5	336.7	375.5	410.9	443.1	473.6	502.5	528.1	550.4
27.5°	257.5	264.1	298.7	338.3	377.9	414.2	447.2	477.8	507.5	533.1	556.2
30°	250.9	259.1	297.1	337.5	377.1	414.2	446.4	477.8	507.5	533.9	556.2
32.5°	244.2	254.2	292.9	334.2	374.6	410.1	443.1	474.5	503.4	529.8	551.2
35°	236.8	248.4	288.0	329.2	368.8	404.3	436.5	467.0	496.7	521.5	543.0
37.5°	229.4	241.8	281.4	322.6	361.4	396.1	427.4	458.0	486.0	511.6	531.4
40°	221.1	235.2	274.8	315.2	352.3	386.2	417.5	447.2	474.5	498.4	517.4
42.5°	212.9	227.7	267.4	307.0	343.3	375.5	406.8	434.9	461.3	484.4	501.7
45°	204.6	219.5	258.3	297.9	332.5	364.7	394.4	422.5	447.2	468.7	485.2
47.5°	194.7	211.2	250.0	288.0	321.8	354.0	382.9	409.3	434.0	453.0	468.7
50°	185.7	203.0	240.9	278.1	311.1	343.3	371.3	396.9	420.0	438.2	452.2
52.5°	175.8	193.9	231.9	269.0	302.0	332.5	360.6	384.5	405.2	422.5	435.7
55°	165.9	184.8	223.6	259.1	292.1	322.6	349.0	372.1	392.0	406.8	419.2
57.5°	156.0	175.8	214.5	250.9	283.0	312.7	338.3	358.9	377.9	391.1	401.9
60°	146.1	166.7	204.6	240.9	274.0	302.0	326.8	346.6	363.1	375.5	384.5
62.5°	134.5	156.8	195.6	231.0	263.2	290.5	314.4	332.5	348.2	358.9	366.4
65°	122.9	146.9	185.7	221.1	252.5	278.9	301.2	318.5	332.5	342.4	347.4
67.5°	111.4	137.0	175.8	211.2	240.9	265.7	287.2	303.7	316.0	324.3	328.4
70°	99.8	125.4	164.2	198.9	227.7	250.9	271.5	287.2	297.9	305.3	308.6
72.5°	87.5	113.9	151.8	185.7	212.9	236.0	255.0	269.8	279.7	285.5	288.0
75°	75.9	101.5	138.6	170.8	196.4	217.8	236.0	250.9	260.8	264.9	267.4
77.5°	63.5	89.1	124.6	154.3	178.2	198.0	215.4	229.4	238.5	242.6	245.1
80°	52.8	75.9	108.1	135.3	157.6	176.6	192.3	207.1	214.5	215.4	212.9
82.5°	41.3	62.7	90.8	114.7	133.7	151.8	166.7	176.6	179.9	179.9	177.4
85°	30.5	47.0	71.0	89.9	106.4	119.6	128.7	137.0	138.6	139.5	136.2
87.5°	17.3	26.4	42.1	54.5	64.4	73.4	80.0	84.2	84.2	85.0	83.3
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°	289.6	289.6	289.6	289.6	289.6	289.6	289.6	289.6
2.5°	293.8	295.4	295.4	297.1	297.9	297.9	298.7	298.7
5°	330.9	337.5	340.0	344.1	346.6	349.9	351.5	350.7
7.5°	375.5	385.4	390.3	396.1	402.7	404.3	406.8	406.8
10°	420.0	431.6	439.0	445.6	453.0	456.3	459.6	459.6
12.5°	460.4	472.0	481.9	490.1	497.6	502.5	505.8	506.7
15°	493.4	508.3	518.2	527.3	535.5	540.5	544.6	545.4
17.5°	520.7	534.7	547.9	557.8	565.2	572.7	575.1	576.8
20°	542.1	557.0	571.0	580.9	589.2	596.6	599.9	601.5
22.5°	557.8	573.5	587.5	598.2	606.5	613.9	618.0	619.7
25°	567.7	584.2	599.1	609.8	618.9	626.3	630.4	632.1
27.5°	574.3	590.8	604.8	615.6	624.7	632.1	636.2	638.7
30°	574.3	590.8	604.8	615.6	624.7	632.1	636.2	637.9
32.5°	569.4	585.9	599.9	609.8	618.9	626.3	630.4	632.1
35°	560.3	576.8	590.0	599.9	609.0	615.6	619.7	620.5
37.5°	547.9	563.6	576.0	585.9	594.1	600.7	604.8	605.7
40°	533.9	548.7	560.3	569.4	576.8	582.6	586.7	587.5
42.5°	517.4	531.4	541.3	550.4	557.0	562.8	566.9	566.1
45°	500.1	513.3	521.5	528.9	536.4	540.5	543.8	543.8
47.5°	482.7	493.4	500.9	507.5	513.3	517.4	519.9	519.9
50°	464.6	473.6	480.2	486.0	491.0	494.3	496.7	496.7
52.5°	446.4	454.7	459.6	464.6	468.7	471.2	473.6	472.8
55°	428.3	434.9	438.2	443.1	446.4	449.7	451.4	450.5
57.5°	410.1	414.2	417.5	421.7	425.0	428.3	429.1	429.9
60°	390.3	394.4	396.9	401.0	404.3	406.8	408.5	407.6
62.5°	371.3	373.8	376.3	379.6	382.1	385.4	386.2	386.2
65°	350.7	353.2	355.6	358.9	361.4	364.7	366.4	365.5
67.5°	330.9	333.4	335.8	338.3	341.6	344.9	345.7	345.7
70°	310.3	312.7	314.4	317.7	320.2	323.5	324.3	324.3
72.5°	290.5	292.1	293.8	297.1	298.7	301.2	302.8	302.8
75°	268.2	269.8	271.5	273.1	274.0	274.8	275.6	274.8
77.5°	243.4	241.8	240.1	240.1	238.5	239.3	240.1	239.3
80°	209.6	207.9	206.3	205.5	203.8	203.8	204.6	203.8
82.5°	174.1	170.8	169.2	168.3	166.7	166.7	166.7	166.7
85°	131.2	129.6	128.7	127.1	125.4	124.6	125.4	126.3
87.5°	81.7	80.0	78.4	76.7	75.9	75.1	76.7	74.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)