

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: P188453

Luminaire Tested: **24SR-LD2-45-C-UNV-L835-CD1-BR-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P188453  
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-LD2-45-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: 2789.0 lumens  
Efficiency: N/A  
Efficacy: 76.0 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

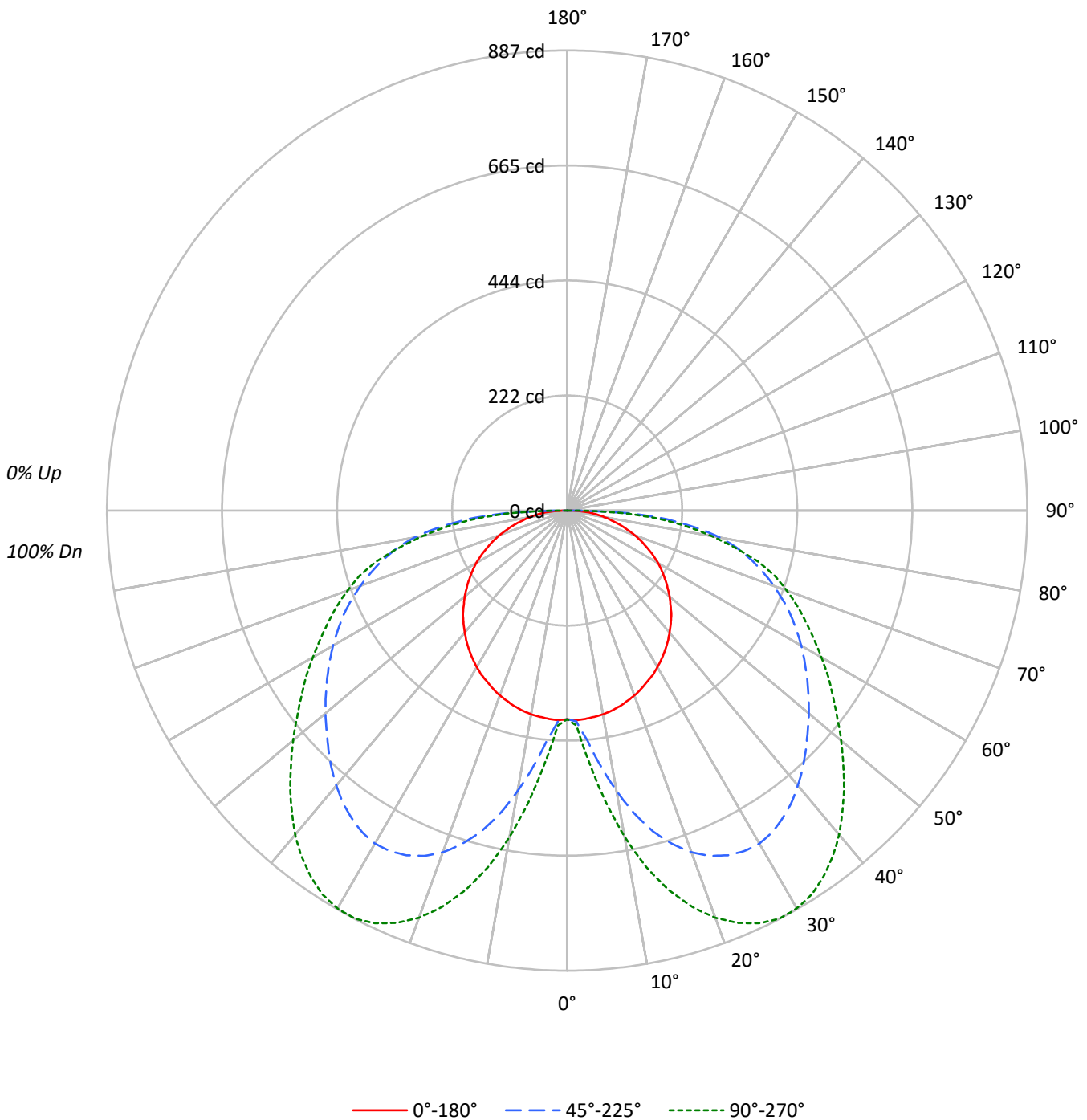
Input Watts (W): 36.7  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	541	541	541
5°	545	600	658
10°	545	750	872
15°	544	892	1055
20°	543	1004	1196
25°	541	1088	1303
30°	541	1152	1376
35°	540	1189	1415
40°	539	1215	1433
45°	541	1238	1436
50°	539	1273	1443
55°	540	1325	1467
60°	546	1403	1523
65°	543	1514	1616
70°	545	1667	1771
75°	548	1912	1983
80°	568	2317	2192
85°	655	2989	2706



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	45.1	1.6
10°-20°	172.4	6.2
20°-30°	315.3	11.3
30°-40°	419.2	15.0
40°-50°	461.6	16.6
50°-60°	457.5	16.4
60°-70°	418.8	15.0
70°-80°	337.2	12.1
80°-90°	161.8	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°	532.8	19.1
0°-40°	952.1	34.1
0°-60°	1871.2	67.1
0°-90°	2789.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2789.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	402	402	402	402	402	
5°	403	407	444	475	487	38
15°	391	491	640	726	757	110
25°	364	546	733	839	878	168
35°	329	537	724	826	861	206
45°	284	484	651	729	755	219
55°	230	427	565	612	626	206
65°	171	369	475	496	508	169
75°	105	288	368	378	382	111
85°	42	157	194	178	175	44
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°	402.1	402.1	402.1	402.1	402.1	402.1	402.1	402.1	402.1	402.1	402.1
2.5°	404.4	404.4	403.2	403.2	403.2	403.2	403.2	403.2	404.4	406.7	407.8
5°	403.2	403.2	403.2	403.2	404.4	409.0	414.7	423.8	433.0	444.5	454.8
7.5°	400.9	400.9	400.9	404.4	414.7	430.7	445.6	462.8	480.0	497.2	510.9
10°	398.6	398.6	400.9	413.5	434.2	458.2	481.1	504.0	525.8	548.7	568.2
12.5°	395.2	395.2	402.1	425.0	454.8	484.6	514.3	541.8	569.3	598.0	619.7
15°	390.6	390.6	405.5	436.4	473.1	509.8	544.1	577.4	609.4	640.4	664.4
17.5°	384.9	387.2	409.0	447.9	489.1	531.5	569.3	607.1	641.5	673.6	702.2
20°	379.2	382.6	412.4	457.1	502.9	549.9	591.1	630.0	666.7	701.1	730.9
22.5°	372.3	376.9	414.7	463.9	513.2	562.5	606.0	647.2	686.2	720.5	751.5
25°	364.3	371.2	415.8	467.4	521.2	570.5	615.2	657.5	697.6	733.1	764.1
27.5°	357.4	366.6	414.7	469.7	524.7	575.1	620.9	663.3	704.5	740.0	772.1
30°	348.2	359.7	412.4	468.5	523.5	575.1	619.7	663.3	704.5	741.2	772.1
32.5°	339.1	352.8	406.7	463.9	520.1	569.3	615.2	658.7	698.8	735.4	765.2
35°	328.8	344.8	399.8	457.1	512.1	561.3	606.0	648.4	689.6	724.0	753.8
37.5°	318.5	335.6	390.6	447.9	501.7	549.9	593.4	635.8	674.7	710.2	737.7
40°	307.0	326.5	381.5	437.6	489.1	536.1	579.6	620.9	658.7	691.9	718.3
42.5°	295.5	316.2	371.2	426.1	476.5	521.2	564.8	603.7	640.4	672.4	696.5
45°	284.1	304.7	358.6	413.5	461.7	506.3	547.6	586.5	620.9	650.7	673.6
47.5°	270.3	293.3	347.1	399.8	446.8	491.4	531.5	568.2	602.6	628.9	650.7
50°	257.7	281.8	334.5	386.0	431.9	476.5	515.5	551.0	583.1	608.3	627.8
52.5°	244.0	269.2	321.9	373.4	419.3	461.7	500.6	533.8	562.5	586.5	604.8
55°	230.3	256.6	310.4	359.7	405.5	447.9	484.6	516.6	544.1	564.8	581.9
57.5°	216.5	244.0	297.8	348.2	392.9	434.2	469.7	498.3	524.7	543.0	557.9
60°	202.8	231.4	284.1	334.5	380.3	419.3	453.6	481.1	504.0	521.2	533.8
62.5°	186.7	217.7	271.5	320.8	365.4	403.2	436.4	461.7	483.4	498.3	508.6
65°	170.7	203.9	257.7	307.0	350.5	387.2	418.1	442.2	461.7	475.4	482.3
67.5°	154.6	190.2	244.0	293.3	334.5	368.9	398.6	421.6	438.7	450.2	455.9
70°	138.6	174.1	228.0	276.1	316.2	348.2	376.9	398.6	413.5	423.8	428.4
72.5°	121.4	158.1	210.8	257.7	295.5	327.6	354.0	374.6	388.3	396.4	399.8
75°	105.4	140.9	192.5	237.1	272.6	302.4	327.6	348.2	362.0	367.7	371.2
77.5°	88.2	123.7	173.0	214.2	247.4	274.9	299.0	318.5	331.1	336.8	340.2
80°	73.3	105.4	150.1	187.9	218.8	245.1	266.9	287.5	297.8	299.0	295.5
82.5°	57.3	87.1	126.0	159.2	185.6	210.8	231.4	245.1	249.7	249.7	246.3
85°	42.4	65.3	98.5	124.9	147.8	166.1	178.7	190.2	192.5	193.6	189.0
87.5°	24.1	36.7	58.4	75.6	89.4	102.0	111.1	116.8	116.8	118.0	115.7
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°	402.1	402.1	402.1	402.1	402.1	402.1	402.1	402.1
2.5°	407.8	410.1	410.1	412.4	413.5	413.5	414.7	414.7
5°	459.4	468.5	472.0	477.7	481.1	485.7	488.0	486.9
7.5°	521.2	535.0	541.8	549.9	559.0	561.3	564.8	564.8
10°	583.1	599.1	609.4	618.6	628.9	633.5	638.1	638.1
12.5°	639.2	655.2	669.0	680.4	690.8	697.6	702.2	703.4
15°	685.0	705.7	719.4	732.0	743.5	750.3	756.1	757.2
17.5°	722.8	742.3	760.6	774.4	784.7	795.0	798.4	800.7
20°	752.6	773.2	792.7	806.5	817.9	828.2	832.8	835.1
22.5°	774.4	796.1	815.6	830.5	842.0	852.3	858.0	860.3
25°	788.1	811.0	831.7	846.6	859.2	869.5	875.2	877.5
27.5°	797.3	820.2	839.7	854.6	867.2	877.5	883.2	886.6
30°	797.3	820.2	839.7	854.6	867.2	877.5	883.2	885.5
32.5°	790.4	813.3	832.8	846.6	859.2	869.5	875.2	877.5
35°	777.8	800.7	819.1	832.8	845.4	854.6	860.3	861.4
37.5°	760.6	782.4	799.6	813.3	824.8	834.0	839.7	840.8
40°	741.2	761.8	777.8	790.4	800.7	808.7	814.5	815.6
42.5°	718.3	737.7	751.5	764.1	773.2	781.3	787.0	785.8
45°	694.2	712.5	724.0	734.3	744.6	750.3	754.9	754.9
47.5°	670.1	685.0	695.3	704.5	712.5	718.3	721.7	721.7
50°	644.9	657.5	666.7	674.7	681.6	686.2	689.6	689.6
52.5°	619.7	631.2	638.1	644.9	650.7	654.1	657.5	656.4
55°	594.5	603.7	608.3	615.2	619.7	624.3	626.6	625.5
57.5°	569.3	575.1	579.6	585.4	590.0	594.5	595.7	596.8
60°	541.8	547.6	551.0	556.7	561.3	564.8	567.0	565.9
62.5°	515.5	518.9	522.4	526.9	530.4	535.0	536.1	536.1
65°	486.9	490.3	493.7	498.3	501.7	506.3	508.6	507.5
67.5°	459.4	462.8	466.2	469.7	474.3	478.8	480.0	480.0
70°	430.7	434.2	436.4	441.0	444.5	449.1	450.2	450.2
72.5°	403.2	405.5	407.8	412.4	414.7	418.1	420.4	420.4
75°	372.3	374.6	376.9	379.2	380.3	381.5	382.6	381.5
77.5°	337.9	335.6	333.4	333.4	331.1	332.2	333.4	332.2
80°	291.0	288.7	286.4	285.2	282.9	282.9	284.1	282.9
82.5°	241.7	237.1	234.8	233.7	231.4	231.4	231.4	231.4
85°	182.1	179.8	178.7	176.4	174.1	173.0	174.1	175.3
87.5°	113.4	111.1	108.8	106.5	105.4	104.2	106.5	103.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)