

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: P188439

Luminaire Tested: **24SR-LD2-29-C-UNV-L840-CD1-BR-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188439
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-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: 1846.0 lumens
Efficiency: N/A
Efficacy: 81.7 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

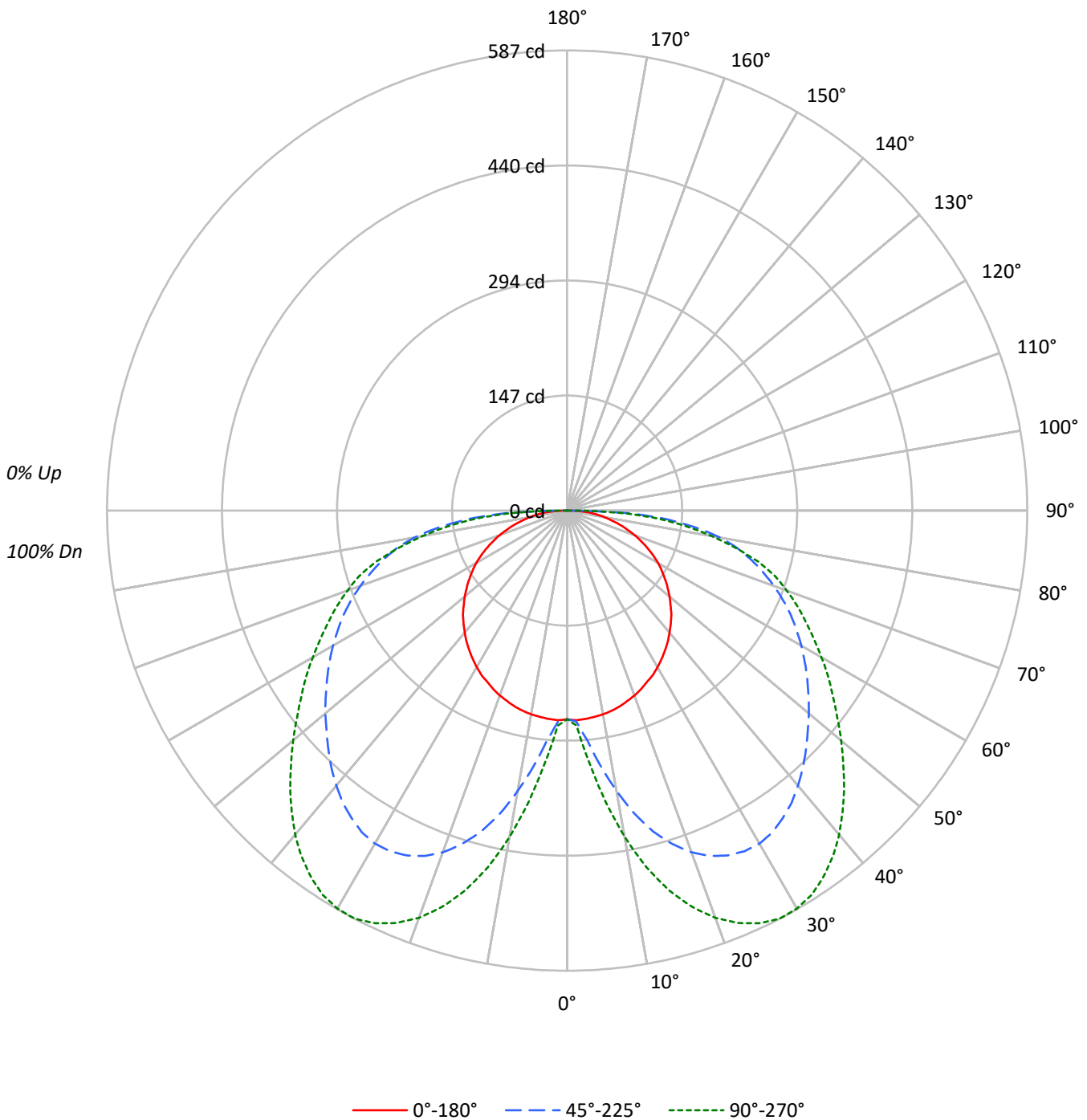
Input Watts (W): 22.6
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	358	358	358
5°	360	397	435
10°	361	496	577
15°	360	590	698
20°	359	664	791
25°	358	720	862
30°	358	762	911
35°	357	787	937
40°	357	804	948
45°	358	820	951
50°	357	843	955
55°	357	877	971
60°	361	928	1008
65°	360	1002	1069
70°	361	1103	1172
75°	363	1265	1313
80°	376	1533	1451
85°	434	1978	1791



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	29.9	1.6
10°-20°	114.1	6.2
20°-30°	208.7	11.3
30°-40°	277.5	15.0
40°-50°	305.5	16.6
50°-60°	302.8	16.4
60°-70°	277.2	15.0
70°-80°	223.2	12.1
80°-90°	107.1	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°	352.7	19.1
0°-40°	630.2	34.1
0°-60°	1238.5	67.1
0°-90°	1846.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1846.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	266	266	266	266	266	
5°	267	269	294	314	322	25
15°	259	325	424	480	501	73
25°	241	361	485	555	581	111
35°	218	355	479	547	570	136
45°	188	320	431	483	500	145
55°	152	282	374	405	414	136
65°	113	244	315	328	336	112
75°	70	190	243	250	252	74
85°	28	104	128	118	116	29
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°	266.1	266.1	266.1	266.1	266.1	266.1	266.1	266.1	266.1	266.1	266.1
2.5°	267.7	267.7	266.9	266.9	266.9	266.9	266.9	266.9	267.7	269.2	269.9
5°	266.9	266.9	266.9	266.9	267.7	270.7	274.5	280.5	286.6	294.2	301.0
7.5°	265.4	265.4	265.4	267.7	274.5	285.1	294.9	306.3	317.7	329.1	338.2
10°	263.9	263.9	265.4	273.7	287.4	303.3	318.5	333.6	348.0	363.2	376.1
12.5°	261.6	261.6	266.1	281.3	301.0	320.7	340.4	358.6	376.8	395.8	410.2
15°	258.6	258.6	268.4	288.9	313.1	337.4	360.2	382.1	403.4	423.8	439.8
17.5°	254.8	256.3	270.7	296.5	323.8	351.8	376.8	401.9	424.6	445.8	464.8
20°	251.0	253.2	273.0	302.5	332.9	363.9	391.2	417.0	441.3	464.0	483.7
22.5°	246.4	249.5	274.5	307.1	339.7	372.3	401.1	428.4	454.2	476.9	497.4
25°	241.1	245.7	275.2	309.4	345.0	377.6	407.2	435.2	461.8	485.3	505.7
27.5°	236.6	242.6	274.5	310.9	347.3	380.6	411.0	439.0	466.3	489.8	511.0
30°	230.5	238.1	273.0	310.1	346.5	380.6	410.2	439.0	466.3	490.6	511.0
32.5°	224.4	233.5	269.2	307.1	344.2	376.8	407.2	436.0	462.5	486.8	506.5
35°	217.6	228.2	264.6	302.5	338.9	371.5	401.1	429.1	456.4	479.2	498.9
37.5°	210.8	222.2	258.6	296.5	332.1	363.9	392.8	420.8	446.6	470.1	488.3
40°	203.2	216.1	252.5	289.6	323.8	354.8	383.7	411.0	436.0	458.0	475.4
42.5°	195.6	209.3	245.7	282.1	315.4	345.0	373.8	399.6	423.8	445.1	461.0
45°	188.0	201.7	237.3	273.7	305.6	335.1	362.4	388.2	411.0	430.7	445.8
47.5°	178.9	194.1	229.7	264.6	295.7	325.3	351.8	376.1	398.8	416.3	430.7
50°	170.6	186.5	221.4	255.5	285.8	315.4	341.2	364.7	385.9	402.6	415.5
52.5°	161.5	178.2	213.1	247.2	277.5	305.6	331.3	353.3	372.3	388.2	400.3
55°	152.4	169.8	205.5	238.1	268.4	296.5	320.7	342.0	360.2	373.8	385.2
57.5°	143.3	161.5	197.1	230.5	260.1	287.4	310.9	329.8	347.3	359.4	369.3
60°	134.2	153.2	188.0	221.4	251.7	277.5	300.3	318.5	333.6	345.0	353.3
62.5°	123.6	144.1	179.7	212.3	241.9	266.9	288.9	305.6	320.0	329.8	336.6
65°	113.0	135.0	170.6	203.2	232.0	256.3	276.7	292.7	305.6	314.7	319.2
67.5°	102.4	125.9	161.5	194.1	221.4	244.1	263.9	279.0	290.4	298.0	301.8
70°	91.7	115.2	150.9	182.7	209.3	230.5	249.5	263.9	273.7	280.5	283.6
72.5°	80.4	104.6	139.5	170.6	195.6	216.8	234.3	247.9	257.0	262.3	264.6
75°	69.8	93.3	127.4	157.0	180.5	200.2	216.8	230.5	239.6	243.4	245.7
77.5°	58.4	81.9	114.5	141.8	163.8	182.0	197.9	210.8	219.1	222.9	225.2
80°	48.5	69.8	99.3	124.3	144.8	162.3	176.7	190.3	197.1	197.9	195.6
82.5°	37.9	57.6	83.4	105.4	122.8	139.5	153.2	162.3	165.3	165.3	163.0
85°	28.1	43.2	65.2	82.6	97.8	109.9	118.3	125.9	127.4	128.1	125.1
87.5°	15.9	24.3	38.7	50.0	59.1	67.5	73.5	77.3	77.3	78.1	76.6
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°	266.1	266.1	266.1	266.1	266.1	266.1	266.1	266.1
2.5°	269.9	271.4	271.4	273.0	273.7	273.7	274.5	274.5
5°	304.0	310.1	312.4	316.2	318.5	321.5	323.0	322.2
7.5°	345.0	354.1	358.6	363.9	370.0	371.5	373.8	373.8
10°	385.9	396.5	403.4	409.4	416.3	419.3	422.3	422.3
12.5°	423.1	433.7	442.8	450.4	457.2	461.8	464.8	465.5
15°	453.4	467.1	476.2	484.5	492.1	496.6	500.4	501.2
17.5°	478.4	491.3	503.5	512.6	519.4	526.2	528.5	530.0
20°	498.1	511.8	524.7	533.8	541.4	548.2	551.2	552.7
22.5°	512.6	527.0	539.8	549.7	557.3	564.1	567.9	569.4
25°	521.7	536.8	550.5	560.3	568.7	575.5	579.3	580.8
27.5°	527.7	542.9	555.8	565.6	574.0	580.8	584.6	586.9
30°	527.7	542.9	555.8	565.6	574.0	580.8	584.6	586.1
32.5°	523.2	538.3	551.2	560.3	568.7	575.5	579.3	580.8
35°	514.8	530.0	542.1	551.2	559.6	565.6	569.4	570.2
37.5°	503.5	517.9	529.2	538.3	545.9	552.0	555.8	556.5
40°	490.6	504.2	514.8	523.2	530.0	535.3	539.1	539.8
42.5°	475.4	488.3	497.4	505.7	511.8	517.1	520.9	520.1
45°	459.5	471.6	479.2	486.0	492.8	496.6	499.7	499.7
47.5°	443.6	453.4	460.2	466.3	471.6	475.4	477.7	477.7
50°	426.9	435.2	441.3	446.6	451.1	454.2	456.4	456.4
52.5°	410.2	417.8	422.3	426.9	430.7	432.9	435.2	434.5
55°	393.5	399.6	402.6	407.2	410.2	413.2	414.7	414.0
57.5°	376.8	380.6	383.7	387.4	390.5	393.5	394.3	395.0
60°	358.6	362.4	364.7	368.5	371.5	373.8	375.3	374.6
62.5°	341.2	343.5	345.7	348.8	351.1	354.1	354.8	354.8
65°	322.2	324.5	326.8	329.8	332.1	335.1	336.6	335.9
67.5°	304.0	306.3	308.6	310.9	313.9	316.9	317.7	317.7
70°	285.1	287.4	288.9	291.9	294.2	297.2	298.0	298.0
72.5°	266.9	268.4	269.9	273.0	274.5	276.7	278.3	278.3
75°	246.4	247.9	249.5	251.0	251.7	252.5	253.2	252.5
77.5°	223.7	222.2	220.6	220.6	219.1	219.9	220.6	219.9
80°	192.6	191.1	189.6	188.8	187.3	187.3	188.0	187.3
82.5°	160.0	157.0	155.4	154.7	153.2	153.2	153.2	153.2
85°	120.6	119.0	118.3	116.8	115.2	114.5	115.2	116.0
87.5°	75.1	73.5	72.0	70.5	69.8	69.0	70.5	68.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)