

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: P188447

Luminaire Tested: **24SR-LD2-39-C-UNV-L830-CD1-BR-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188447
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-L830-CD1-BR-U
Description: METALUX 2X4 SKYRIDGE LED FIXTURE WITH BELLADONNA ROSE

Light Source: EATON LED 3000K
Ballast/Driver: OSRAM ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2396.0 lumens
Efficiency: N/A
Efficacy: 75.1 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

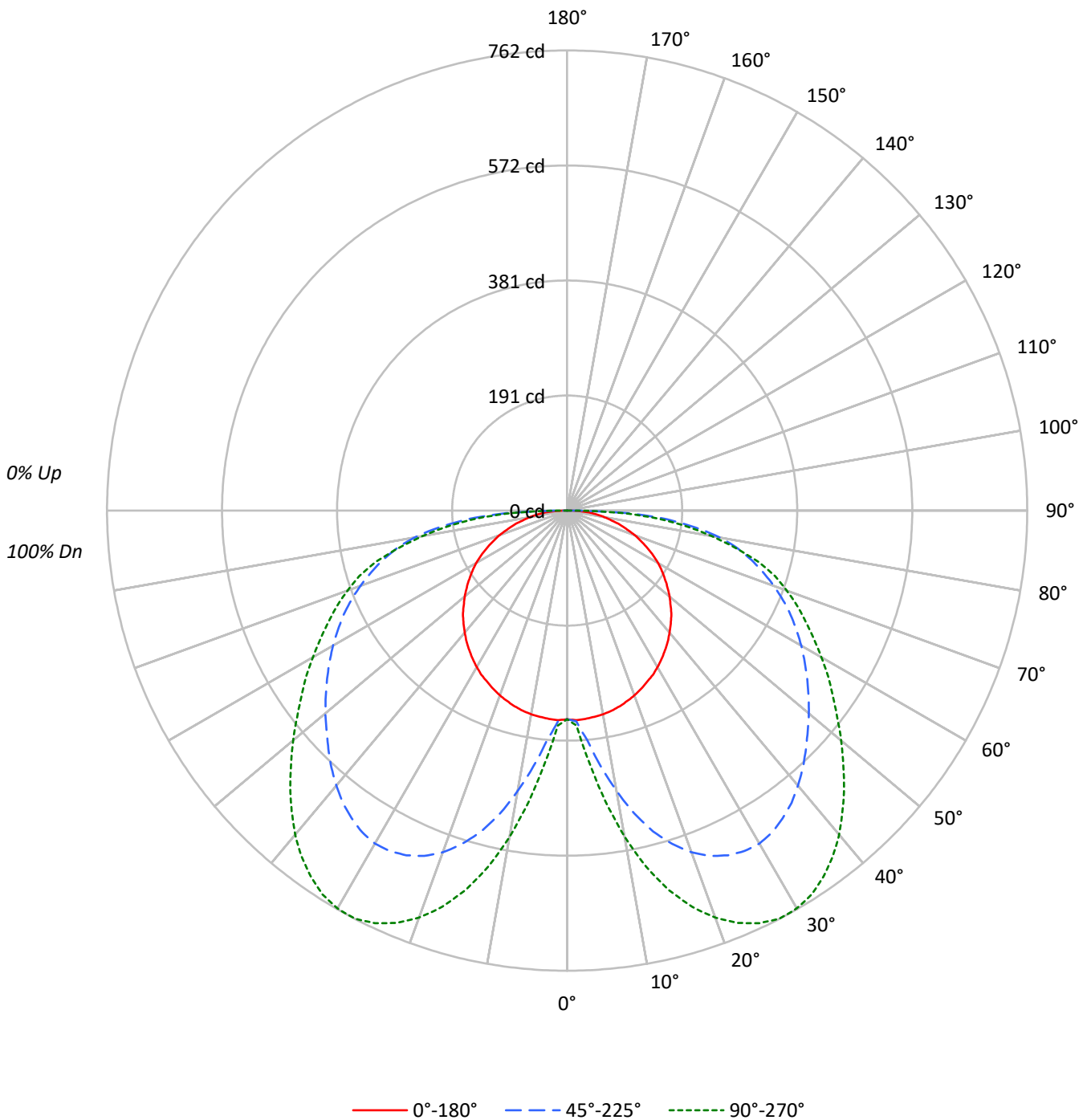
Input Watts (W): 31.9
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	465	465	465
5°	468	516	565
10°	468	644	749
15°	467	766	906
20°	466	862	1027
25°	465	935	1119
30°	465	989	1182
35°	464	1022	1216
40°	463	1044	1231
45°	464	1064	1234
50°	463	1094	1240
55°	464	1138	1260
60°	469	1205	1308
65°	467	1300	1388
70°	469	1432	1522
75°	470	1642	1704
80°	488	1991	1884
85°	562	2567	2325



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	38.8	1.6
10°-20°	148.1	6.2
20°-30°	270.8	11.3
30°-40°	360.2	15.0
40°-50°	396.6	16.6
50°-60°	393.0	16.4
60°-70°	359.8	15.0
70°-80°	289.7	12.1
80°-90°	139.0	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°	457.8	19.1
0°-40°	817.9	34.1
0°-60°	1607.5	67.1
0°-90°	2396.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2396.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	345	345	345	345	345	
5°	346	349	382	408	418	33
15°	336	422	550	623	650	95
25°	313	469	630	721	754	145
35°	282	461	622	710	740	177
45°	244	416	559	626	648	188
55°	198	367	485	526	537	177
65°	147	317	408	426	436	145
75°	90	247	316	325	328	95
85°	36	135	166	153	151	38
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°	345.4	345.4	345.4	345.4	345.4	345.4	345.4	345.4	345.4	345.4	345.4
2.5°	347.4	347.4	346.4	346.4	346.4	346.4	346.4	346.4	347.4	349.4	350.3
5°	346.4	346.4	346.4	346.4	347.4	351.3	356.3	364.1	372.0	381.8	390.7
7.5°	344.4	344.4	344.4	347.4	356.3	370.0	382.8	397.6	412.3	427.1	438.9
10°	342.5	342.5	344.4	355.3	373.0	393.6	413.3	433.0	451.7	471.4	488.1
12.5°	339.5	339.5	345.4	365.1	390.7	416.3	441.9	465.5	489.1	513.7	532.4
15°	335.6	335.6	348.4	374.9	406.4	437.9	467.5	496.0	523.6	550.1	570.8
17.5°	330.7	332.6	351.3	384.8	420.2	456.6	489.1	521.6	551.1	578.7	603.3
20°	325.7	328.7	354.3	392.7	432.0	472.4	507.8	541.3	572.8	602.3	627.9
22.5°	319.8	323.8	356.3	398.6	440.9	483.2	520.6	556.0	589.5	619.0	645.6
25°	312.9	318.9	357.2	401.5	447.8	490.1	528.5	564.9	599.3	629.8	656.4
27.5°	307.0	314.9	356.3	403.5	450.7	494.0	533.4	569.8	605.2	635.7	663.3
30°	299.2	309.0	354.3	402.5	449.7	494.0	532.4	569.8	605.2	636.7	663.3
32.5°	291.3	303.1	349.4	398.6	446.8	489.1	528.5	565.9	600.3	631.8	657.4
35°	282.4	296.2	343.5	392.7	439.9	482.2	520.6	557.0	592.4	622.0	647.6
37.5°	273.6	288.3	335.6	384.8	431.0	472.4	509.8	546.2	579.6	610.2	633.8
40°	263.7	280.5	327.7	375.9	420.2	460.6	498.0	533.4	565.9	594.4	617.0
42.5°	253.9	271.6	318.9	366.1	409.4	447.8	485.2	518.6	550.1	577.7	598.3
45°	244.1	261.8	308.0	355.3	396.6	435.0	470.4	503.9	533.4	559.0	578.7
47.5°	232.3	251.9	298.2	343.5	383.8	422.2	456.6	488.1	517.6	540.3	559.0
50°	221.4	242.1	287.4	331.6	371.0	409.4	442.9	473.4	500.9	522.6	539.3
52.5°	209.6	231.3	276.5	320.8	360.2	396.6	430.1	458.6	483.2	503.9	519.6
55°	197.8	220.4	266.7	309.0	348.4	384.8	416.3	443.8	467.5	485.2	499.9
57.5°	186.0	209.6	255.9	299.2	337.6	373.0	403.5	428.1	450.7	466.5	479.3
60°	174.2	198.8	244.1	287.4	326.7	360.2	389.7	413.3	433.0	447.8	458.6
62.5°	160.4	187.0	233.2	275.6	313.9	346.4	374.9	396.6	415.3	428.1	436.9
65°	146.6	175.2	221.4	263.7	301.1	332.6	359.2	379.9	396.6	408.4	414.3
67.5°	132.9	163.4	209.6	251.9	287.4	316.9	342.5	362.2	376.9	386.8	391.7
70°	119.1	149.6	195.8	237.2	271.6	299.2	323.8	342.5	355.3	364.1	368.1
72.5°	104.3	135.8	181.1	221.4	253.9	281.5	304.1	321.8	333.6	340.5	343.5
75°	90.5	121.0	165.3	203.7	234.2	259.8	281.5	299.2	311.0	315.9	318.9
77.5°	75.8	106.3	148.6	184.0	212.6	236.2	256.9	273.6	284.4	289.3	292.3
80°	63.0	90.5	128.9	161.4	188.0	210.6	229.3	247.0	255.9	256.9	253.9
82.5°	49.2	74.8	108.3	136.8	159.4	181.1	198.8	210.6	214.5	214.5	211.6
85°	36.4	56.1	84.6	107.3	127.0	142.7	153.5	163.4	165.3	166.3	162.4
87.5°	20.7	31.5	50.2	65.0	76.8	87.6	95.5	100.4	100.4	101.4	99.4
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°	345.4	345.4	345.4	345.4	345.4	345.4	345.4	345.4
2.5°	350.3	352.3	352.3	354.3	355.3	355.3	356.3	356.3
5°	394.6	402.5	405.5	410.4	413.3	417.3	419.2	418.3
7.5°	447.8	459.6	465.5	472.4	480.3	482.2	485.2	485.2
10°	500.9	514.7	523.6	531.4	540.3	544.2	548.2	548.2
12.5°	549.1	562.9	574.7	584.6	593.4	599.3	603.3	604.2
15°	588.5	606.2	618.0	628.9	638.7	644.6	649.5	650.5
17.5°	621.0	637.7	653.5	665.3	674.1	683.0	685.9	687.9
20°	646.6	664.3	681.0	692.8	702.7	711.5	715.5	717.4
22.5°	665.3	684.0	700.7	713.5	723.3	732.2	737.1	739.1
25°	677.1	696.8	714.5	727.3	738.1	746.9	751.9	753.8
27.5°	684.9	704.6	721.4	734.2	745.0	753.8	758.8	761.7
30°	684.9	704.6	721.4	734.2	745.0	753.8	758.8	760.7
32.5°	679.0	698.7	715.5	727.3	738.1	746.9	751.9	753.8
35°	668.2	687.9	703.6	715.5	726.3	734.2	739.1	740.1
37.5°	653.5	672.2	686.9	698.7	708.6	716.4	721.4	722.3
40°	636.7	654.4	668.2	679.0	687.9	694.8	699.7	700.7
42.5°	617.0	633.8	645.6	656.4	664.3	671.2	676.1	675.1
45°	596.4	612.1	622.0	630.8	639.7	644.6	648.5	648.5
47.5°	575.7	588.5	597.4	605.2	612.1	617.0	620.0	620.0
50°	554.1	564.9	572.8	579.6	585.6	589.5	592.4	592.4
52.5°	532.4	542.2	548.2	554.1	559.0	561.9	564.9	563.9
55°	510.8	518.6	522.6	528.5	532.4	536.3	538.3	537.3
57.5°	489.1	494.0	498.0	502.9	506.8	510.8	511.7	512.7
60°	465.5	470.4	473.4	478.3	482.2	485.2	487.1	486.2
62.5°	442.9	445.8	448.8	452.7	455.6	459.6	460.6	460.6
65°	418.3	421.2	424.2	428.1	431.0	435.0	436.9	436.0
67.5°	394.6	397.6	400.5	403.5	407.4	411.4	412.3	412.3
70°	370.0	373.0	374.9	378.9	381.8	385.8	386.8	386.8
72.5°	346.4	348.4	350.3	354.3	356.3	359.2	361.2	361.2
75°	319.8	321.8	323.8	325.7	326.7	327.7	328.7	327.7
77.5°	290.3	288.3	286.4	286.4	284.4	285.4	286.4	285.4
80°	250.0	248.0	246.0	245.0	243.1	243.1	244.1	243.1
82.5°	207.6	203.7	201.7	200.8	198.8	198.8	198.8	198.8
85°	156.5	154.5	153.5	151.6	149.6	148.6	149.6	150.6
87.5°	97.4	95.5	93.5	91.5	90.5	89.6	91.5	88.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)