

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: P188443

Luminaire Tested: **24SR-LD2-34-C-UNV-L835-CD1-BR-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188443
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-LD2-34-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: 2141.0 lumens
Efficiency: N/A
Efficacy: 78.7 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

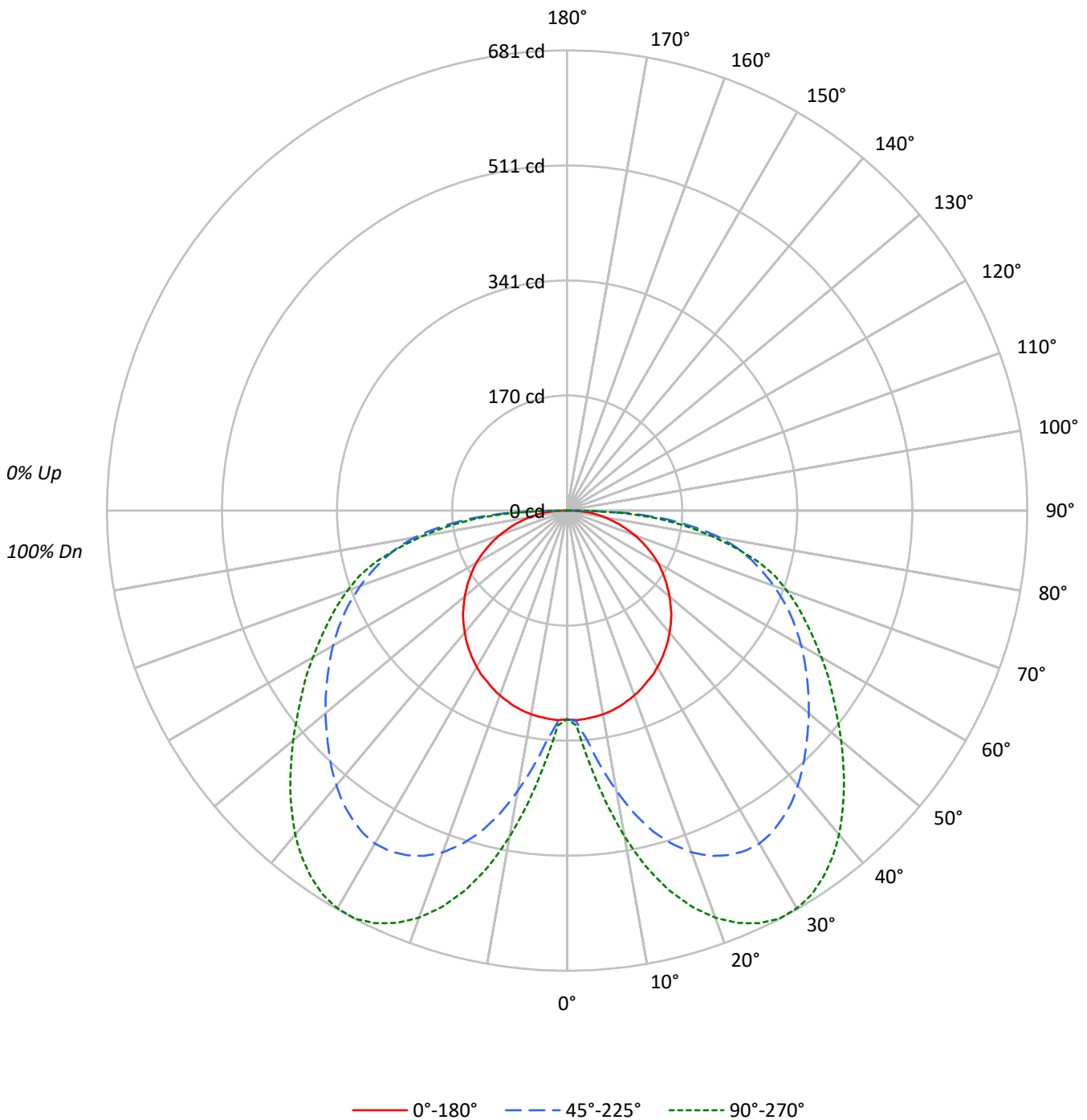
Input Watts (W): 27.2
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	415	415	415
5°	418	461	505
10°	418	575	669
15°	418	685	810
20°	417	771	918
25°	415	836	1000
30°	415	884	1056
35°	415	913	1086
40°	414	933	1100
45°	415	950	1103
50°	414	978	1108
55°	415	1017	1126
60°	419	1077	1169
65°	417	1162	1240
70°	419	1280	1360
75°	421	1468	1522
80°	436	1778	1683
85°	502	2294	2076



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	34.7	1.6
10°-20°	132.4	6.2
20°-30°	242.0	11.3
30°-40°	321.8	15.0
40°-50°	354.4	16.6
50°-60°	351.2	16.4
60°-70°	321.5	15.0
70°-80°	258.9	12.1
80°-90°	124.2	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°	409.0	19.1
0°-40°	730.9	34.1
0°-60°	1436.4	67.1
0°-90°	2141.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2141.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	309	309	309	309	309	
5°	310	312	341	364	374	29
15°	300	377	492	557	581	85
25°	280	419	563	644	674	129
35°	252	412	556	634	661	158
45°	218	372	500	560	580	168
55°	177	328	434	470	480	158
65°	131	283	365	381	390	130
75°	81	221	282	290	293	85
85°	32	120	149	136	134	34
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°	308.7	308.7	308.7	308.7	308.7	308.7	308.7	308.7	308.7	308.7	308.7
2.5°	310.4	310.4	309.5	309.5	309.5	309.5	309.5	309.5	310.4	312.2	313.1
5°	309.5	309.5	309.5	309.5	310.4	313.9	318.3	325.4	332.4	341.2	349.1
7.5°	307.8	307.8	307.8	310.4	318.3	330.6	342.1	355.3	368.5	381.7	392.2
10°	306.0	306.0	307.8	317.5	333.3	351.8	369.3	386.9	403.6	421.2	436.2
12.5°	303.4	303.4	308.7	326.3	349.1	372.0	394.8	415.9	437.1	459.0	475.7
15°	299.9	299.9	311.3	335.0	363.2	391.3	417.7	443.2	467.8	491.6	510.0
17.5°	295.5	297.2	313.9	343.8	375.5	408.0	437.1	466.1	492.5	517.1	539.1
20°	291.1	293.7	316.6	350.9	386.0	422.1	453.8	483.7	511.8	538.2	561.0
22.5°	285.8	289.3	318.3	356.1	394.0	431.8	465.2	496.9	526.7	553.1	576.9
25°	279.6	284.9	319.2	358.8	400.1	437.9	472.2	504.8	535.5	562.8	586.5
27.5°	274.4	281.4	318.3	360.5	402.8	441.4	476.6	509.2	540.8	568.1	592.7
30°	267.3	276.1	316.6	359.7	401.9	441.4	475.7	509.2	540.8	569.0	592.7
32.5°	260.3	270.8	312.2	356.1	399.2	437.1	472.2	505.6	536.4	564.6	587.4
35°	252.4	264.7	306.9	350.9	393.1	430.9	465.2	497.7	529.4	555.8	578.6
37.5°	244.5	257.7	299.9	343.8	385.2	422.1	455.5	488.1	518.0	545.2	566.3
40°	235.7	250.6	292.8	335.9	375.5	411.6	445.0	476.6	505.6	531.1	551.4
42.5°	226.9	242.7	284.9	327.1	365.8	400.1	433.5	463.4	491.6	516.2	534.7
45°	218.1	233.9	275.2	317.5	354.4	388.7	420.3	450.2	476.6	499.5	517.1
47.5°	207.5	225.1	266.5	306.9	343.0	377.3	408.0	436.2	462.6	482.8	499.5
50°	197.9	216.3	256.8	296.4	331.5	365.8	395.7	423.0	447.6	467.0	481.9
52.5°	187.3	206.7	247.1	286.7	321.9	354.4	384.3	409.8	431.8	450.2	464.3
55°	176.8	197.0	238.3	276.1	311.3	343.8	372.0	396.6	417.7	433.5	446.7
57.5°	166.2	187.3	228.6	267.3	301.6	333.3	360.5	382.5	402.8	416.8	428.3
60°	155.7	177.6	218.1	256.8	292.0	321.9	348.2	369.3	386.9	400.1	409.8
62.5°	143.3	167.1	208.4	246.2	280.5	309.5	335.0	354.4	371.1	382.5	390.4
65°	131.0	156.5	197.9	235.7	269.1	297.2	321.0	339.4	354.4	364.9	370.2
67.5°	118.7	146.0	187.3	225.1	256.8	283.2	306.0	323.6	336.8	345.6	350.0
70°	106.4	133.7	175.0	211.9	242.7	267.3	289.3	306.0	317.5	325.4	328.9
72.5°	93.2	121.4	161.8	197.9	226.9	251.5	271.7	287.6	298.1	304.3	306.9
75°	80.9	108.2	147.7	182.0	209.3	232.2	251.5	267.3	277.9	282.3	284.9
77.5°	67.7	95.0	132.8	164.4	189.9	211.1	229.5	244.5	254.1	258.5	261.2
80°	56.3	80.9	115.2	144.2	168.0	188.2	204.9	220.7	228.6	229.5	226.9
82.5°	44.0	66.8	96.7	122.2	142.5	161.8	177.6	188.2	191.7	191.7	189.1
85°	32.5	50.1	75.6	95.9	113.4	127.5	137.2	146.0	147.7	148.6	145.1
87.5°	18.5	28.1	44.8	58.0	68.6	78.3	85.3	89.7	89.7	90.6	88.8
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°	308.7	308.7	308.7	308.7	308.7	308.7	308.7	308.7
2.5°	313.1	314.8	314.8	316.6	317.5	317.5	318.3	318.3
5°	352.6	359.7	362.3	366.7	369.3	372.9	374.6	373.7
7.5°	400.1	410.7	415.9	422.1	429.1	430.9	433.5	433.5
10°	447.6	459.9	467.8	474.9	482.8	486.3	489.8	489.8
12.5°	490.7	503.0	513.6	522.4	530.3	535.5	539.1	539.9
15°	525.9	541.7	552.3	561.9	570.7	576.0	580.4	581.3
17.5°	554.9	569.8	583.9	594.5	602.4	610.3	612.9	614.7
20°	577.8	593.6	608.5	619.1	627.9	635.8	639.3	641.1
22.5°	594.5	611.2	626.1	637.6	646.3	654.3	658.7	660.4
25°	605.0	622.6	638.4	649.9	659.5	667.5	671.8	673.6
27.5°	612.0	629.6	644.6	656.0	665.7	673.6	678.0	680.6
30°	612.0	629.6	644.6	656.0	665.7	673.6	678.0	679.8
32.5°	606.8	624.4	639.3	649.9	659.5	667.5	671.8	673.6
35°	597.1	614.7	628.8	639.3	649.0	656.0	660.4	661.3
37.5°	583.9	600.6	613.8	624.4	633.2	640.2	644.6	645.5
40°	569.0	584.8	597.1	606.8	614.7	620.8	625.2	626.1
42.5°	551.4	566.3	576.9	586.5	593.6	599.7	604.1	603.3
45°	532.9	547.0	555.8	563.7	571.6	576.0	579.5	579.5
47.5°	514.4	525.9	533.8	540.8	547.0	551.4	554.0	554.0
50°	495.1	504.8	511.8	518.0	523.2	526.7	529.4	529.4
52.5°	475.7	484.5	489.8	495.1	499.5	502.1	504.8	503.9
55°	456.4	463.4	467.0	472.2	475.7	479.3	481.0	480.1
57.5°	437.1	441.4	445.0	449.4	452.9	456.4	457.3	458.2
60°	415.9	420.3	423.0	427.4	430.9	433.5	435.3	434.4
62.5°	395.7	398.4	401.0	404.5	407.2	410.7	411.6	411.6
65°	373.7	376.4	379.0	382.5	385.2	388.7	390.4	389.6
67.5°	352.6	355.3	357.9	360.5	364.1	367.6	368.5	368.5
70°	330.6	333.3	335.0	338.6	341.2	344.7	345.6	345.6
72.5°	309.5	311.3	313.1	316.6	318.3	321.0	322.7	322.7
75°	285.8	287.6	289.3	291.1	292.0	292.8	293.7	292.8
77.5°	259.4	257.7	255.9	255.9	254.1	255.0	255.9	255.0
80°	223.4	221.6	219.8	219.0	217.2	217.2	218.1	217.2
82.5°	185.5	182.0	180.3	179.4	177.6	177.6	177.6	177.6
85°	139.8	138.1	137.2	135.4	133.7	132.8	133.7	134.5
87.5°	87.1	85.3	83.5	81.8	80.9	80.0	81.8	79.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)