

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: P188444

Luminaire Tested: **24SR-LD2-34-C-UNV-L840-CD1-BR-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188444
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-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: 2184.0 lumens
Efficiency: N/A
Efficacy: 80.3 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

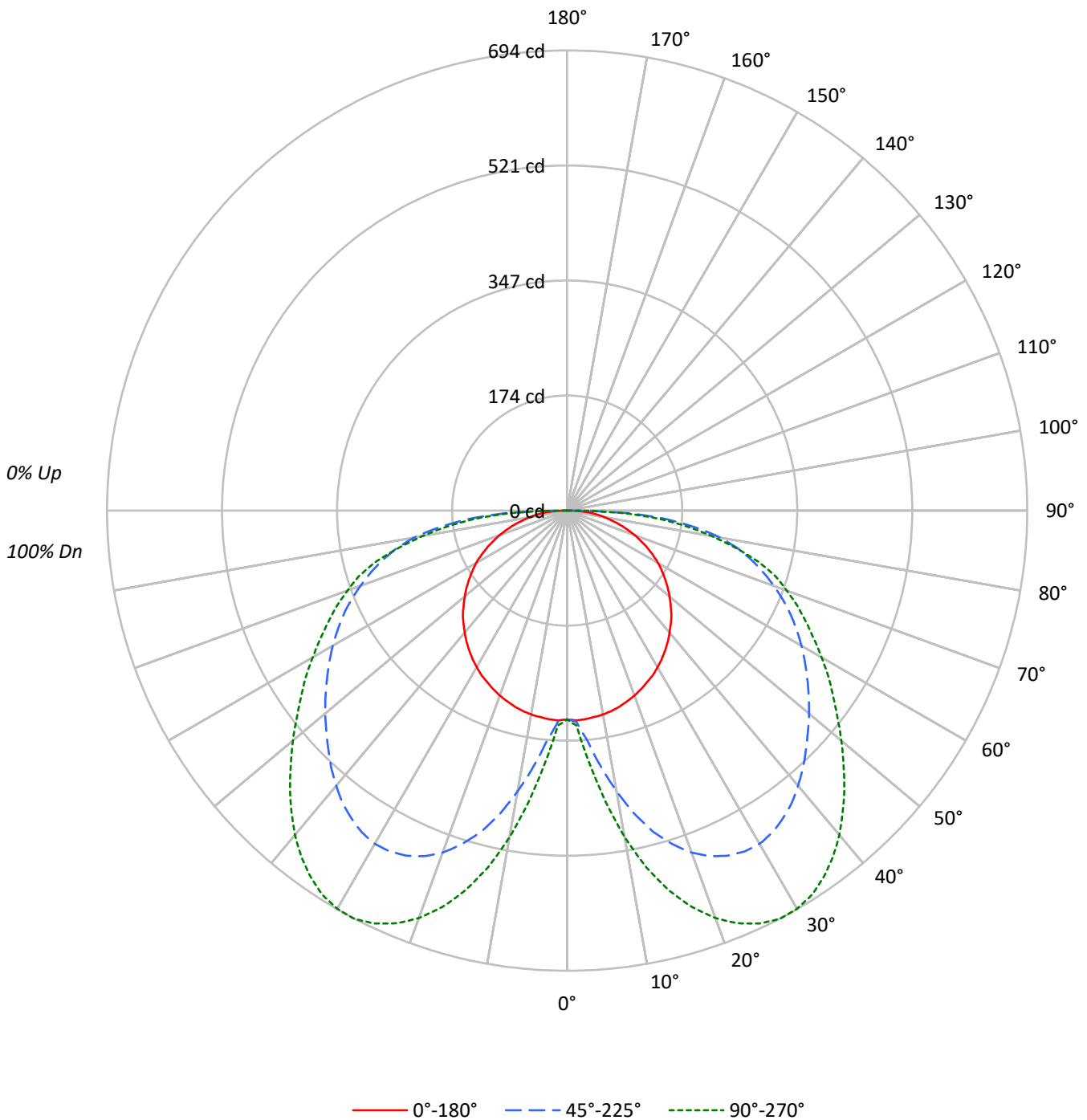
Input Watts (W): 27.2
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	424	424	424
5°	427	470	515
10°	427	587	683
15°	426	698	826
20°	425	786	936
25°	424	852	1020
30°	424	902	1077
35°	423	931	1108
40°	422	952	1122
45°	423	969	1125
50°	422	997	1130
55°	423	1037	1149
60°	427	1098	1192
65°	426	1185	1265
70°	427	1306	1387
75°	429	1497	1553
80°	445	1814	1717
85°	513	2340	2118



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	35.4	1.6
10°-20°	135.0	6.2
20°-30°	246.9	11.3
30°-40°	328.3	15.0
40°-50°	361.5	16.6
50°-60°	358.2	16.4
60°-70°	328.0	15.0
70°-80°	264.1	12.1
80°-90°	126.7	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°	417.2	19.1
0°-40°	745.5	34.1
0°-60°	1465.3	67.1
0°-90°	2184.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2184.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	315	315	315	315	315	
5°	316	318	348	372	381	30
15°	306	385	501	568	593	86
25°	285	427	574	657	687	132
35°	258	420	567	647	675	161
45°	222	379	510	571	591	171
55°	180	334	442	479	490	161
65°	134	289	372	388	397	132
75°	82	225	288	296	299	87
85°	33	123	152	139	137	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°	314.9	314.9	314.9	314.9	314.9	314.9	314.9	314.9	314.9	314.9	314.9
2.5°	316.7	316.7	315.8	315.8	315.8	315.8	315.8	315.8	316.7	318.5	319.3
5°	315.8	315.8	315.8	315.8	316.7	320.2	324.7	331.9	339.1	348.1	356.1
7.5°	314.0	314.0	314.0	316.7	324.7	337.3	349.0	362.4	375.9	389.3	400.1
10°	312.2	312.2	314.0	323.8	340.0	358.8	376.8	394.7	411.7	429.7	444.9
12.5°	309.5	309.5	314.9	332.8	356.1	379.4	402.8	424.3	445.8	468.3	485.3
15°	305.9	305.9	317.6	341.8	370.5	399.2	426.1	452.1	477.2	501.4	520.3
17.5°	301.4	303.2	320.2	350.7	383.0	416.2	445.8	475.4	502.3	527.5	549.9
20°	296.9	299.6	322.9	357.9	393.8	430.6	462.9	493.4	522.1	549.0	572.3
22.5°	291.5	295.1	324.7	363.3	401.9	440.4	474.5	506.8	537.3	564.2	588.5
25°	285.3	290.6	325.6	366.0	408.2	446.7	481.7	514.9	546.3	574.1	598.3
27.5°	279.9	287.1	324.7	367.8	410.8	450.3	486.2	519.4	551.7	579.5	604.6
30°	272.7	281.7	322.9	366.9	409.9	450.3	485.3	519.4	551.7	580.4	604.6
32.5°	265.5	276.3	318.5	363.3	407.3	445.8	481.7	515.8	547.2	575.9	599.2
35°	257.5	270.0	313.1	357.9	401.0	439.6	474.5	507.7	540.0	566.9	590.3
37.5°	249.4	262.8	305.9	350.7	392.9	430.6	464.7	497.9	528.4	556.2	577.7
40°	240.4	255.7	298.7	342.7	383.0	419.8	453.9	486.2	515.8	541.8	562.4
42.5°	231.4	247.6	290.6	333.7	373.2	408.2	442.2	472.7	501.4	526.6	545.4
45°	222.5	238.6	280.8	323.8	361.5	396.5	428.8	459.3	486.2	509.5	527.5
47.5°	211.7	229.6	271.8	313.1	349.8	384.8	416.2	444.9	471.8	492.5	509.5
50°	201.8	220.7	261.9	302.3	338.2	373.2	403.7	431.5	456.6	476.3	491.6
52.5°	191.1	210.8	252.1	292.4	328.3	361.5	392.0	418.0	440.4	459.3	473.6
55°	180.3	200.9	243.1	281.7	317.6	350.7	379.4	404.6	426.1	442.2	455.7
57.5°	169.5	191.1	233.2	272.7	307.7	340.0	367.8	390.2	410.8	425.2	436.9
60°	158.8	181.2	222.5	261.9	297.8	328.3	355.2	376.8	394.7	408.2	418.0
62.5°	146.2	170.4	212.6	251.2	286.2	315.8	341.8	361.5	378.6	390.2	398.3
65°	133.7	159.7	201.8	240.4	274.5	303.2	327.4	346.3	361.5	372.3	377.7
67.5°	121.1	148.9	191.1	229.6	261.9	288.8	312.2	330.1	343.6	352.5	357.0
70°	108.5	136.4	178.5	216.2	247.6	272.7	295.1	312.2	323.8	331.9	335.5
72.5°	95.1	123.8	165.1	201.8	231.4	256.6	277.2	293.3	304.1	310.4	313.1
75°	82.5	110.3	150.7	185.7	213.5	236.8	256.6	272.7	283.5	288.0	290.6
77.5°	69.1	96.9	135.5	167.7	193.8	215.3	234.1	249.4	259.2	263.7	266.4
80°	57.4	82.5	117.5	147.1	171.3	192.0	209.0	225.2	233.2	234.1	231.4
82.5°	44.9	68.2	98.7	124.7	145.3	165.1	181.2	192.0	195.6	195.6	192.9
85°	33.2	51.1	77.1	97.8	115.7	130.1	139.9	148.9	150.7	151.6	148.0
87.5°	18.8	28.7	45.7	59.2	70.0	79.8	87.0	91.5	91.5	92.4	90.6
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°	314.9	314.9	314.9	314.9	314.9	314.9	314.9	314.9
2.5°	319.3	321.1	321.1	322.9	323.8	323.8	324.7	324.7
5°	359.7	366.9	369.6	374.1	376.8	380.3	382.1	381.2
7.5°	408.2	418.9	424.3	430.6	437.8	439.6	442.2	442.2
10°	456.6	469.2	477.2	484.4	492.5	496.1	499.7	499.7
12.5°	500.6	513.1	523.9	532.8	540.9	546.3	549.9	550.8
15°	536.4	552.6	563.3	573.2	582.2	587.6	592.0	592.9
17.5°	566.0	581.3	595.6	606.4	614.5	622.5	625.2	627.0
20°	589.4	605.5	620.8	631.5	640.5	648.6	652.2	653.9
22.5°	606.4	623.4	638.7	650.4	659.3	667.4	671.9	673.7
25°	617.2	635.1	651.3	662.9	672.8	680.9	685.3	687.1
27.5°	624.3	642.3	657.5	669.2	679.1	687.1	691.6	694.3
30°	624.3	642.3	657.5	669.2	679.1	687.1	691.6	693.4
32.5°	619.0	636.9	652.2	662.9	672.8	680.9	685.3	687.1
35°	609.1	627.0	641.4	652.2	662.0	669.2	673.7	674.6
37.5°	595.6	612.7	626.1	636.9	645.9	653.0	657.5	658.4
40°	580.4	596.5	609.1	619.0	627.0	633.3	637.8	638.7
42.5°	562.4	577.7	588.5	598.3	605.5	611.8	616.3	615.4
45°	543.6	558.0	566.9	575.0	583.1	587.6	591.2	591.2
47.5°	524.8	536.4	544.5	551.7	558.0	562.4	565.1	565.1
50°	505.0	514.9	522.1	528.4	533.7	537.3	540.0	540.0
52.5°	485.3	494.3	499.7	505.0	509.5	512.2	514.9	514.0
55°	465.6	472.7	476.3	481.7	485.3	488.9	490.7	489.8
57.5°	445.8	450.3	453.9	458.4	462.0	465.6	466.5	467.4
60°	424.3	428.8	431.5	436.0	439.6	442.2	444.0	443.1
62.5°	403.7	406.4	409.1	412.6	415.3	418.9	419.8	419.8
65°	381.2	383.9	386.6	390.2	392.9	396.5	398.3	397.4
67.5°	359.7	362.4	365.1	367.8	371.4	375.0	375.9	375.9
70°	337.3	340.0	341.8	345.4	348.1	351.6	352.5	352.5
72.5°	315.8	317.6	319.3	322.9	324.7	327.4	329.2	329.2
75°	291.5	293.3	295.1	296.9	297.8	298.7	299.6	298.7
77.5°	264.6	262.8	261.0	261.0	259.2	260.1	261.0	260.1
80°	227.8	226.1	224.3	223.4	221.6	221.6	222.5	221.6
82.5°	189.3	185.7	183.9	183.0	181.2	181.2	181.2	181.2
85°	142.6	140.8	139.9	138.1	136.4	135.5	136.4	137.2
87.5°	88.8	87.0	85.2	83.4	82.5	81.6	83.4	80.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)