

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: P188459

Luminaire Tested: **24SR-LD2-48-C-UNV-L840-CD1-BR-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188459
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-LD2-48-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: 3029.0 lumens
Efficiency: N/A
Efficacy: 79.3 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

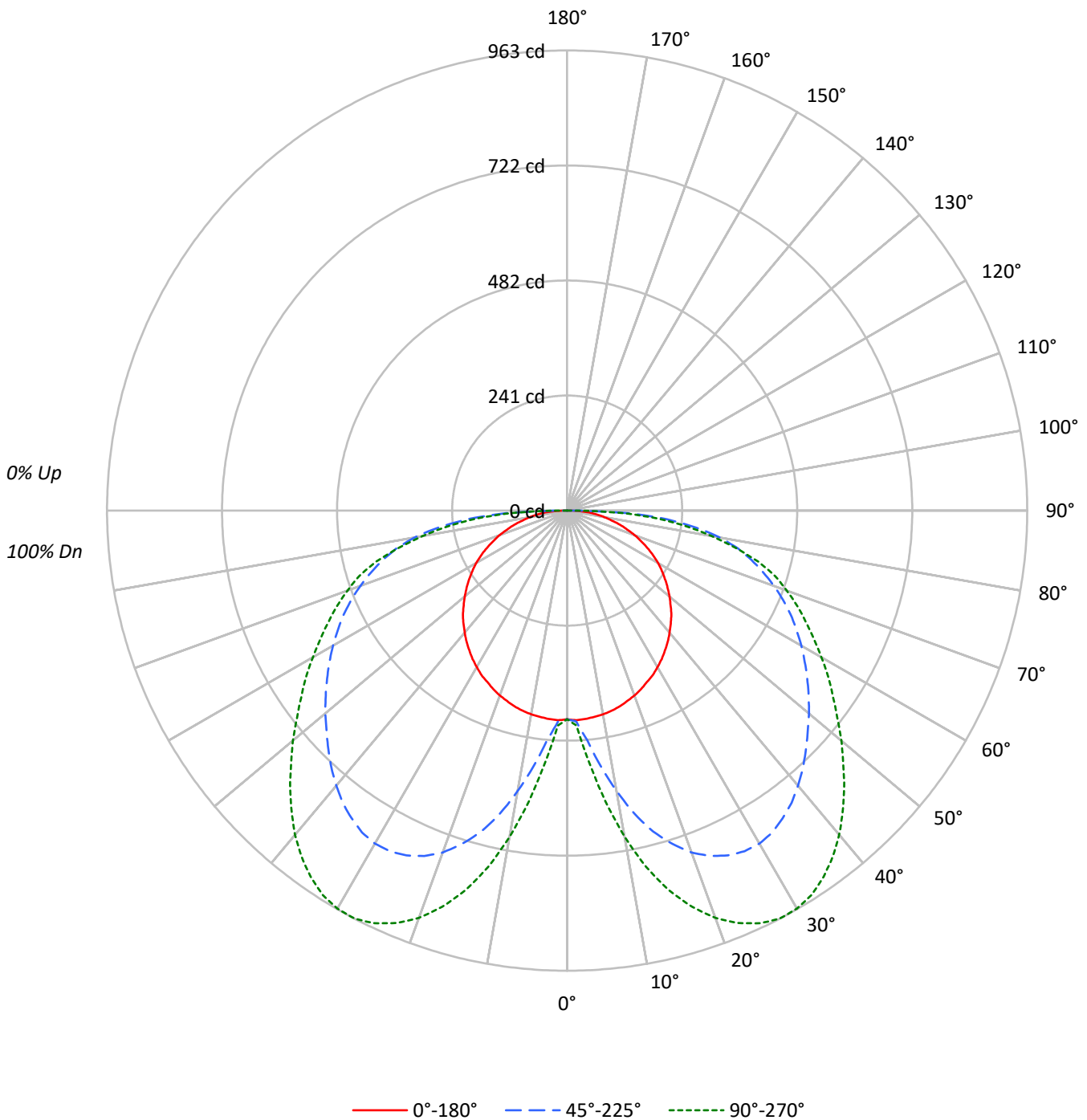
Input Watts (W): 38.2
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	588	588	588
5°	591	652	714
10°	592	814	947
15°	591	969	1146
20°	590	1090	1299
25°	587	1182	1415
30°	588	1251	1494
35°	587	1292	1537
40°	586	1320	1556
45°	587	1345	1560
50°	586	1383	1568
55°	587	1439	1593
60°	593	1523	1654
65°	590	1644	1755
70°	592	1811	1923
75°	595	2076	2154
80°	617	2516	2381
85°	710	3247	2938



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	49.0	1.6
10°-20°	187.3	6.2
20°-30°	342.4	11.3
30°-40°	455.3	15.0
40°-50°	501.3	16.6
50°-60°	496.9	16.4
60°-70°	454.8	15.0
70°-80°	366.2	12.1
80°-90°	175.7	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°	578.7	19.1
0°-40°	1034.0	34.1
0°-60°	2032.2	67.1
0°-90°	3029.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3029.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	437	437	437	437	437	
5°	438	442	483	516	529	42
15°	424	534	696	788	822	120
25°	396	593	796	911	953	183
35°	357	583	786	897	936	224
45°	308	526	707	792	820	238
55°	250	463	613	664	679	224
65°	185	401	516	539	551	184
75°	114	312	399	411	414	121
85°	46	170	210	193	190	47
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°	436.7	436.7	436.7	436.7	436.7	436.7	436.7	436.7	436.7	436.7	436.7
2.5°	439.2	439.2	437.9	437.9	437.9	437.9	437.9	437.9	439.2	441.7	442.9
5°	437.9	437.9	437.9	437.9	439.2	444.1	450.4	460.3	470.3	482.7	493.9
7.5°	435.4	435.4	435.4	439.2	450.4	467.8	484.0	502.6	521.3	539.9	554.9
10°	433.0	433.0	435.4	449.1	471.5	497.6	522.5	547.4	571.0	595.9	617.1
12.5°	429.2	429.2	436.7	461.6	493.9	526.3	558.6	588.5	618.3	649.4	673.1
15°	424.2	424.2	440.4	474.0	513.8	553.6	591.0	627.0	661.9	695.5	721.6
17.5°	418.0	420.5	444.1	486.4	531.2	577.3	618.3	659.4	696.7	731.5	762.6
20°	411.8	415.5	447.9	496.4	546.2	597.2	642.0	684.3	724.1	761.4	793.7
22.5°	404.3	409.3	450.4	503.9	557.4	610.9	658.1	702.9	745.2	782.5	816.1
25°	395.6	403.1	451.6	507.6	566.1	619.6	668.1	714.1	757.7	796.2	829.8
27.5°	388.2	398.1	450.4	510.1	569.8	624.5	674.3	720.3	765.1	803.7	838.5
30°	378.2	390.7	447.9	508.8	568.6	624.5	673.1	720.3	765.1	804.9	838.5
32.5°	368.3	383.2	441.7	503.9	564.8	618.3	668.1	715.4	758.9	798.7	831.1
35°	357.1	374.5	434.2	496.4	556.1	609.6	658.1	704.2	749.0	786.3	818.6
37.5°	345.9	364.5	424.2	486.4	544.9	597.2	644.5	690.5	732.8	771.4	801.2
40°	333.4	354.6	414.3	475.3	531.2	582.2	629.5	674.3	715.4	751.4	780.1
42.5°	321.0	343.4	403.1	462.8	517.6	566.1	613.3	655.6	695.5	730.3	756.4
45°	308.5	330.9	389.4	449.1	501.4	549.9	594.7	637.0	674.3	706.7	731.5
47.5°	293.6	318.5	377.0	434.2	485.2	533.7	577.3	617.1	654.4	683.0	706.7
50°	279.9	306.1	363.3	419.3	469.0	517.6	559.9	598.4	633.3	660.6	681.8
52.5°	265.0	292.4	349.6	405.6	455.3	501.4	543.7	579.8	610.9	637.0	656.9
55°	250.1	278.7	337.2	390.7	440.4	486.4	526.3	561.1	591.0	613.3	632.0
57.5°	235.1	265.0	323.5	378.2	426.7	471.5	510.1	541.2	569.8	589.7	605.9
60°	220.2	251.3	308.5	363.3	413.0	455.3	492.7	522.5	547.4	566.1	579.8
62.5°	202.8	236.4	294.9	348.4	396.9	437.9	474.0	501.4	525.0	541.2	552.4
65°	185.4	221.5	279.9	333.4	380.7	420.5	454.1	480.2	501.4	516.3	523.8
67.5°	168.0	206.5	265.0	318.5	363.3	400.6	433.0	457.8	476.5	488.9	495.2
70°	150.5	189.1	247.6	299.8	343.4	378.2	409.3	433.0	449.1	460.3	465.3
72.5°	131.9	171.7	228.9	279.9	321.0	355.8	384.4	406.8	421.8	430.5	434.2
75°	114.5	153.0	209.0	257.5	296.1	328.4	355.8	378.2	393.1	399.4	403.1
77.5°	95.8	134.4	187.9	232.6	268.7	298.6	324.7	345.9	359.5	365.8	369.5
80°	79.6	114.5	163.0	204.0	237.6	266.2	289.9	312.3	323.5	324.7	321.0
82.5°	62.2	94.6	136.9	172.9	201.5	228.9	251.3	266.2	271.2	271.2	267.5
85°	46.0	70.9	107.0	135.6	160.5	180.4	194.1	206.5	209.0	210.3	205.3
87.5°	26.1	39.8	63.4	82.1	97.0	110.7	120.7	126.9	126.9	128.1	125.7
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°	436.7	436.7	436.7	436.7	436.7	436.7	436.7	436.7
2.5°	442.9	445.4	445.4	447.9	449.1	449.1	450.4	450.4
5°	498.9	508.8	512.6	518.8	522.5	527.5	530.0	528.7
7.5°	566.1	581.0	588.5	597.2	607.1	609.6	613.3	613.3
10°	633.3	650.7	661.9	671.8	683.0	688.0	693.0	693.0
12.5°	694.2	711.6	726.6	739.0	750.2	757.7	762.6	763.9
15°	744.0	766.4	781.3	795.0	807.4	814.9	821.1	822.4
17.5°	785.0	806.2	826.1	841.0	852.2	863.4	867.1	869.6
20°	817.4	839.8	860.9	875.9	888.3	899.5	904.5	907.0
22.5°	841.0	864.7	885.8	902.0	914.4	925.6	931.8	934.3
25°	856.0	880.8	903.2	919.4	933.1	944.3	950.5	953.0
27.5°	865.9	890.8	911.9	928.1	941.8	953.0	959.2	962.9
30°	865.9	890.8	911.9	928.1	941.8	953.0	959.2	961.7
32.5°	858.4	883.3	904.5	919.4	933.1	944.3	950.5	953.0
35°	844.8	869.6	889.5	904.5	918.2	928.1	934.3	935.6
37.5°	826.1	849.7	868.4	883.3	895.8	905.7	911.9	913.2
40°	804.9	827.3	844.8	858.4	869.6	878.3	884.6	885.8
42.5°	780.1	801.2	816.1	829.8	839.8	848.5	854.7	853.5
45°	753.9	773.8	786.3	797.5	808.7	814.9	819.9	819.9
47.5°	727.8	744.0	755.2	765.1	773.8	780.1	783.8	783.8
50°	700.4	714.1	724.1	732.8	740.2	745.2	749.0	749.0
52.5°	673.1	685.5	693.0	700.4	706.7	710.4	714.1	712.9
55°	645.7	655.6	660.6	668.1	673.1	678.0	680.5	679.3
57.5°	618.3	624.5	629.5	635.7	640.7	645.7	646.9	648.2
60°	588.5	594.7	598.4	604.6	609.6	613.3	615.8	614.6
62.5°	559.9	563.6	567.3	572.3	576.0	581.0	582.2	582.2
65°	528.7	532.5	536.2	541.2	544.9	549.9	552.4	551.1
67.5°	498.9	502.6	506.4	510.1	515.1	520.0	521.3	521.3
70°	467.8	471.5	474.0	479.0	482.7	487.7	488.9	488.9
72.5°	437.9	440.4	442.9	447.9	450.4	454.1	456.6	456.6
75°	404.3	406.8	409.3	411.8	413.0	414.3	415.5	414.3
77.5°	367.0	364.5	362.0	362.0	359.5	360.8	362.0	360.8
80°	316.0	313.5	311.0	309.8	307.3	307.3	308.5	307.3
82.5°	262.5	257.5	255.0	253.8	251.3	251.3	251.3	251.3
85°	197.8	195.3	194.1	191.6	189.1	187.9	189.1	190.3
87.5°	123.2	120.7	118.2	115.7	114.5	113.2	115.7	112.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)