

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: P188457

Luminaire Tested: **24SR-LD2-48-C-UNV-L830-CD1-BR-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188457
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-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: 2880.0 lumens
Efficiency: N/A
Efficacy: 75.4 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

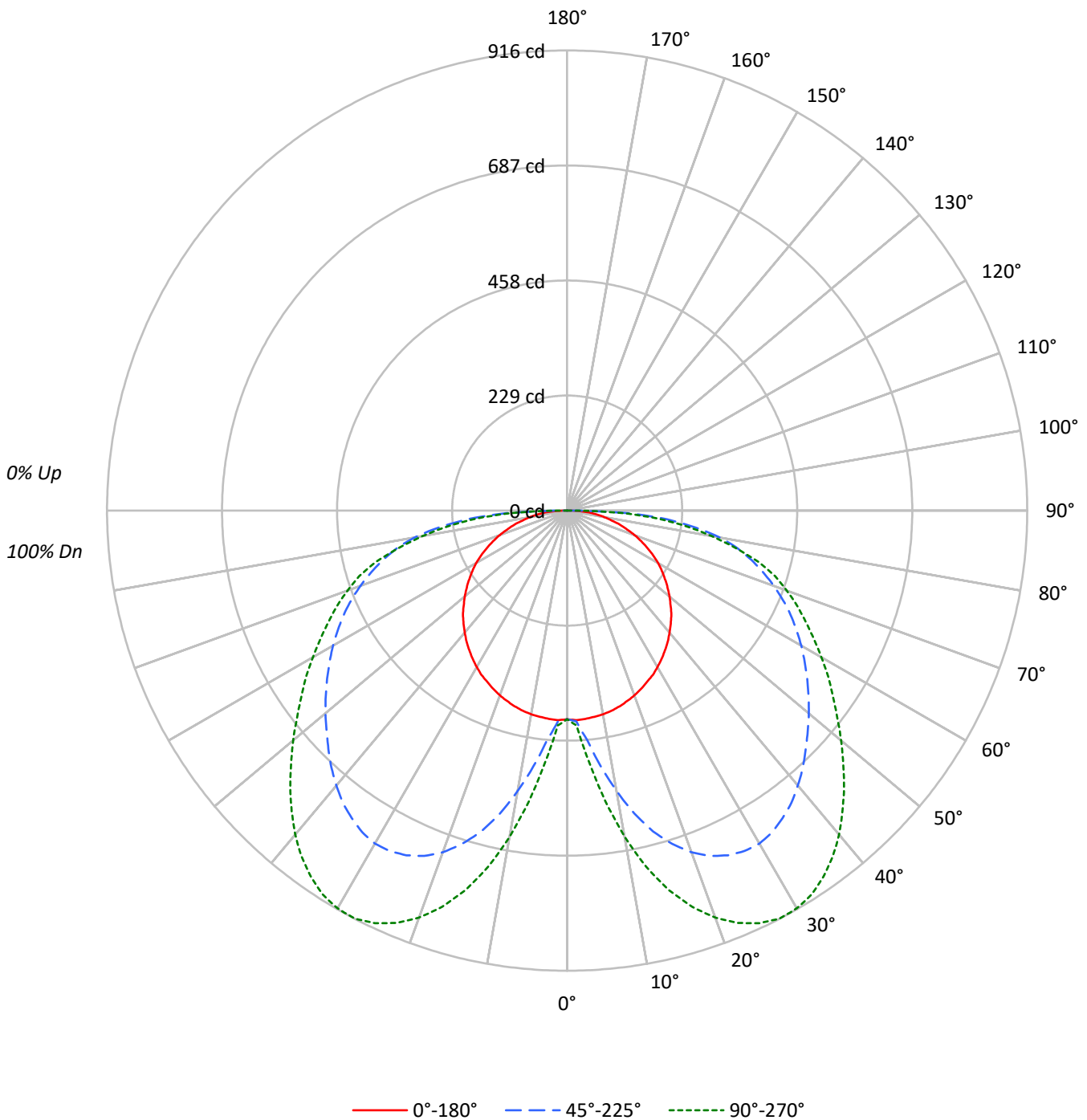
Input Watts (W): 38.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	559	559	559
5°	562	620	679
10°	562	774	900
15°	562	921	1089
20°	561	1037	1235
25°	559	1124	1345
30°	559	1189	1421
35°	558	1228	1461
40°	557	1255	1479
45°	558	1278	1483
50°	557	1315	1491
55°	558	1368	1515
60°	563	1448	1573
65°	561	1563	1668
70°	563	1722	1829
75°	566	1974	2048
80°	587	2392	2264
85°	676	3086	2794



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	46.6	1.6
10°-20°	178.1	6.2
20°-30°	325.5	11.3
30°-40°	432.9	15.0
40°-50°	476.7	16.6
50°-60°	472.4	16.4
60°-70°	432.5	15.0
70°-80°	348.2	12.1
80°-90°	167.1	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°	550.2	19.1
0°-40°	983.1	34.1
0°-60°	1932.2	67.1
0°-90°	2880.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2880.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	415	415	415	415	415	
5°	416	420	459	490	503	40
15°	403	507	661	749	782	114
25°	376	564	757	866	906	174
35°	340	554	748	853	890	213
45°	293	500	672	753	780	226
55°	238	441	583	632	646	213
65°	176	381	491	512	524	175
75°	109	297	380	390	394	115
85°	44	162	200	183	181	45
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°	415.2	415.2	415.2	415.2	415.2	415.2	415.2	415.2	415.2	415.2	415.2
2.5°	417.6	417.6	416.4	416.4	416.4	416.4	416.4	416.4	417.6	419.9	421.1
5°	416.4	416.4	416.4	416.4	417.6	422.3	428.2	437.7	447.1	459.0	469.6
7.5°	414.0	414.0	414.0	417.6	428.2	444.8	460.2	477.9	495.6	513.4	527.6
10°	411.7	411.7	414.0	427.0	448.3	473.2	496.8	520.5	543.0	566.6	586.7
12.5°	408.1	408.1	415.2	438.9	469.6	500.4	531.1	559.5	587.9	617.5	640.0
15°	403.4	403.4	418.8	450.7	488.5	526.4	561.9	596.2	629.3	661.2	686.1
17.5°	397.5	399.8	422.3	462.5	505.1	548.9	587.9	626.9	662.4	695.6	725.1
20°	391.5	395.1	425.8	472.0	519.3	567.8	610.4	650.6	688.5	723.9	754.7
22.5°	384.4	389.2	428.2	479.1	529.9	580.8	625.8	668.3	708.6	744.1	776.0
25°	376.2	383.3	429.4	482.6	538.2	589.1	635.2	679.0	720.4	757.1	789.0
27.5°	369.1	378.5	428.2	485.0	541.8	593.8	641.1	684.9	727.5	764.2	797.3
30°	359.6	371.4	425.8	483.8	540.6	593.8	640.0	684.9	727.5	765.3	797.3
32.5°	350.1	364.3	419.9	479.1	537.0	587.9	635.2	680.2	721.6	759.4	790.2
35°	339.5	356.1	412.8	472.0	528.8	579.6	625.8	669.5	712.1	747.6	778.4
37.5°	328.9	346.6	403.4	462.5	518.1	567.8	612.7	656.5	696.7	733.4	761.8
40°	317.0	337.1	393.9	451.9	505.1	553.6	598.6	641.1	680.2	714.5	741.7
42.5°	305.2	326.5	383.3	440.0	492.1	538.2	583.2	623.4	661.2	694.4	719.2
45°	293.4	314.7	370.3	427.0	476.7	522.8	565.4	605.7	641.1	671.9	695.6
47.5°	279.2	302.8	358.4	412.8	461.3	507.5	548.9	586.7	622.2	649.4	671.9
50°	266.2	291.0	345.4	398.6	446.0	492.1	532.3	569.0	602.1	628.1	648.2
52.5°	252.0	278.0	332.4	385.6	432.9	476.7	516.9	551.2	580.8	605.7	624.6
55°	237.8	265.0	320.6	371.4	418.8	462.5	500.4	533.5	561.9	583.2	600.9
57.5°	223.6	252.0	307.6	359.6	405.7	448.3	485.0	514.6	541.8	560.7	576.1
60°	209.4	238.9	293.4	345.4	392.7	432.9	468.4	496.8	520.5	538.2	551.2
62.5°	192.8	224.8	280.4	331.2	377.3	416.4	450.7	476.7	499.2	514.6	525.2
65°	176.3	210.6	266.2	317.0	362.0	399.8	431.8	456.6	476.7	490.9	498.0
67.5°	159.7	196.4	252.0	302.8	345.4	380.9	411.7	435.3	453.1	464.9	470.8
70°	143.1	179.8	235.4	285.1	326.5	359.6	389.2	411.7	427.0	437.7	442.4
72.5°	125.4	163.2	217.7	266.2	305.2	338.3	365.5	386.8	401.0	409.3	412.8
75°	108.8	145.5	198.7	244.9	281.5	312.3	338.3	359.6	373.8	379.7	383.3
77.5°	91.1	127.8	178.6	221.2	255.5	283.9	308.7	328.9	341.9	347.8	351.3
80°	75.7	108.8	155.0	194.0	225.9	253.1	275.6	296.9	307.6	308.7	305.2
82.5°	59.1	89.9	130.1	164.4	191.6	217.7	238.9	253.1	257.9	257.9	254.3
85°	43.8	67.4	101.7	128.9	152.6	171.5	184.5	196.4	198.7	199.9	195.2
87.5°	24.8	37.9	60.3	78.1	92.3	105.3	114.7	120.7	120.7	121.8	119.5
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°	415.2	415.2	415.2	415.2	415.2	415.2	415.2	415.2
2.5°	421.1	423.5	423.5	425.8	427.0	427.0	428.2	428.2
5°	474.3	483.8	487.4	493.3	496.8	501.6	503.9	502.7
7.5°	538.2	552.4	559.5	567.8	577.3	579.6	583.2	583.2
10°	602.1	618.7	629.3	638.8	649.4	654.2	658.9	658.9
12.5°	660.1	676.6	690.8	702.7	713.3	720.4	725.1	726.3
15°	707.4	728.7	742.9	755.9	767.7	774.8	780.7	781.9
17.5°	746.4	766.5	785.5	799.7	810.3	820.9	824.5	826.9
20°	777.2	798.5	818.6	832.8	844.6	855.2	860.0	862.3
22.5°	799.7	822.1	842.2	857.6	869.4	880.1	886.0	888.4
25°	813.8	837.5	858.8	874.2	887.2	897.8	903.7	906.1
27.5°	823.3	847.0	867.1	882.5	895.5	906.1	912.0	915.6
30°	823.3	847.0	867.1	882.5	895.5	906.1	912.0	914.4
32.5°	816.2	839.9	860.0	874.2	887.2	897.8	903.7	906.1
35°	803.2	826.9	845.8	860.0	873.0	882.5	888.4	889.6
37.5°	785.5	807.9	825.7	839.9	851.7	861.2	867.1	868.3
40°	765.3	786.6	803.2	816.2	826.9	835.1	841.1	842.2
42.5°	741.7	761.8	776.0	789.0	798.5	806.7	812.7	811.5
45°	716.8	735.8	747.6	758.2	768.9	774.8	779.5	779.5
47.5°	692.0	707.4	718.0	727.5	735.8	741.7	745.2	745.2
50°	666.0	679.0	688.5	696.7	703.8	708.6	712.1	712.1
52.5°	640.0	651.8	658.9	666.0	671.9	675.4	679.0	677.8
55°	613.9	623.4	628.1	635.2	640.0	644.7	647.1	645.9
57.5°	587.9	593.8	598.6	604.5	609.2	613.9	615.1	616.3
60°	559.5	565.4	569.0	574.9	579.6	583.2	585.5	584.4
62.5°	532.3	535.9	539.4	544.1	547.7	552.4	553.6	553.6
65°	502.7	506.3	509.8	514.6	518.1	522.8	525.2	524.0
67.5°	474.3	477.9	481.4	485.0	489.7	494.5	495.6	495.6
70°	444.8	448.3	450.7	455.4	459.0	463.7	464.9	464.9
72.5°	416.4	418.8	421.1	425.8	428.2	431.8	434.1	434.1
75°	384.4	386.8	389.2	391.5	392.7	393.9	395.1	393.9
77.5°	349.0	346.6	344.2	344.2	341.9	343.0	344.2	343.0
80°	300.5	298.1	295.7	294.5	292.2	292.2	293.4	292.2
82.5°	249.6	244.9	242.5	241.3	238.9	238.9	238.9	238.9
85°	188.1	185.7	184.5	182.2	179.8	178.6	179.8	181.0
87.5°	117.1	114.7	112.4	110.0	108.8	107.6	110.0	106.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)