

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: P188462

Luminaire Tested: **24SR-LD2-53-C-UNV-L830-CD1-BR-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188462
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-LD2-53-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: 3188.0 lumens
Efficiency: N/A
Efficacy: 74.0 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

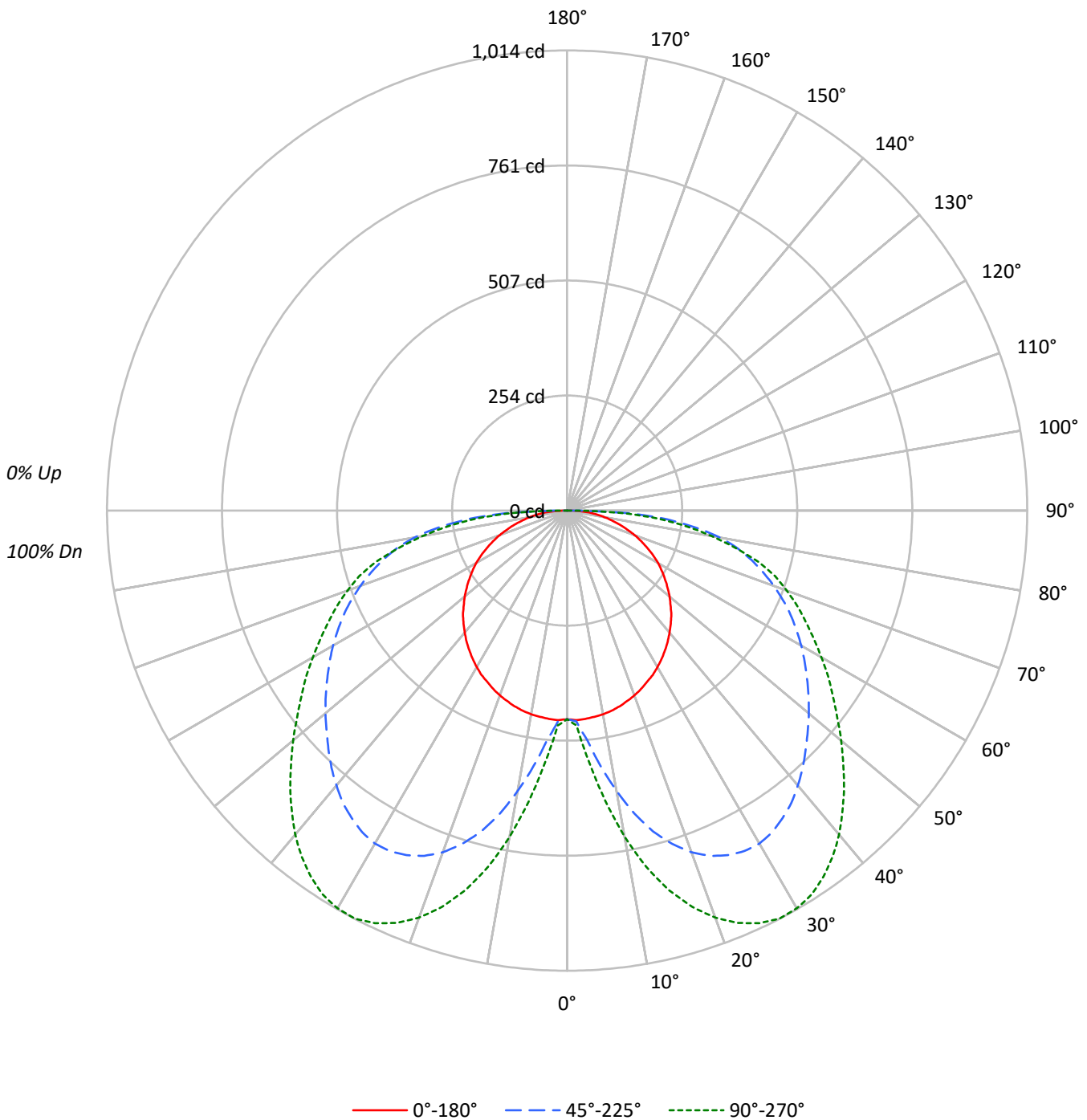
Input Watts (W): 43.1
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	618	618	618
5°	623	686	752
10°	623	857	996
15°	622	1020	1206
20°	621	1147	1367
25°	618	1244	1489
30°	619	1316	1573
35°	617	1359	1617
40°	616	1389	1638
45°	618	1415	1642
50°	617	1455	1650
55°	617	1514	1677
60°	624	1603	1741
65°	621	1730	1847
70°	623	1906	2024
75°	626	2185	2267
80°	649	2648	2506
85°	747	3416	3092



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	51.6	1.6
10°-20°	197.1	6.2
20°-30°	360.4	11.3
30°-40°	479.2	15.0
40°-50°	527.6	16.6
50°-60°	522.9	16.4
60°-70°	478.7	15.0
70°-80°	385.5	12.1
80°-90°	184.9	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°	609.1	19.1
0°-40°	1088.3	34.1
0°-60°	2138.9	67.1
0°-90°	3188.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3188.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	460	460	460	460	460	
5°	461	465	508	543	556	44
15°	446	562	732	830	866	126
25°	416	624	838	959	1003	192
35°	376	613	828	944	985	235
45°	325	553	744	833	863	250
55°	263	488	646	699	715	236
65°	195	422	543	567	580	193
75°	120	329	420	432	436	127
85°	48	179	221	203	200	50
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°	459.6	459.6	459.6	459.6	459.6	459.6	459.6	459.6	459.6	459.6	459.6
2.5°	462.2	462.2	460.9	460.9	460.9	460.9	460.9	460.9	462.2	464.8	466.2
5°	460.9	460.9	460.9	460.9	462.2	467.5	474.0	484.5	495.0	508.1	519.8
7.5°	458.3	458.3	458.3	462.2	474.0	492.3	509.4	529.0	548.6	568.3	584.0
10°	455.7	455.7	458.3	472.7	496.3	523.8	550.0	576.1	601.0	627.2	649.5
12.5°	451.8	451.8	459.6	485.8	519.8	553.9	587.9	619.4	650.8	683.5	708.4
15°	446.5	446.5	463.5	498.9	540.8	582.7	622.0	659.9	696.6	732.0	759.5
17.5°	440.0	442.6	467.5	512.0	559.1	607.6	650.8	694.0	733.3	769.9	802.7
20°	433.4	437.3	471.4	522.5	574.8	628.5	675.7	720.2	762.1	801.4	835.4
22.5°	425.6	430.8	474.0	530.3	586.6	642.9	692.7	739.8	784.3	823.6	859.0
25°	416.4	424.3	475.3	534.2	595.8	652.1	703.2	751.6	797.4	838.0	873.4
27.5°	408.5	419.0	474.0	536.9	599.7	657.3	709.7	758.2	805.3	845.9	882.5
30°	398.1	411.2	471.4	535.6	598.4	657.3	708.4	758.2	805.3	847.2	882.5
32.5°	387.6	403.3	464.8	530.3	594.5	650.8	703.2	752.9	798.7	840.6	874.7
35°	375.8	394.1	457.0	522.5	585.3	641.6	692.7	741.1	788.3	827.6	861.6
37.5°	364.0	383.7	446.5	512.0	573.5	628.5	678.3	726.7	771.2	811.8	843.3
40°	350.9	373.2	436.0	500.2	559.1	612.8	662.6	709.7	752.9	790.9	821.0
42.5°	337.8	361.4	424.3	487.1	544.7	595.8	645.5	690.1	732.0	768.6	796.1
45°	324.7	348.3	409.8	472.7	527.7	578.8	625.9	670.4	709.7	743.8	769.9
47.5°	309.0	335.2	396.8	457.0	510.7	561.7	607.6	649.5	688.8	718.9	743.8
50°	294.6	322.1	382.4	441.3	493.7	544.7	589.2	629.8	666.5	695.3	717.6
52.5°	278.9	307.7	367.9	426.9	479.2	527.7	572.2	610.2	642.9	670.4	691.4
55°	263.2	293.3	354.9	411.2	463.5	512.0	553.9	590.5	622.0	645.5	665.2
57.5°	247.5	278.9	340.4	398.1	449.1	496.3	536.9	569.6	599.7	620.7	637.7
60°	231.8	264.5	324.7	382.4	434.7	479.2	518.5	550.0	576.1	595.8	610.2
62.5°	213.4	248.8	310.3	366.6	417.7	460.9	498.9	527.7	552.6	569.6	581.4
65°	195.1	233.1	294.6	350.9	400.7	442.6	477.9	505.4	527.7	543.4	551.3
67.5°	176.8	217.4	278.9	335.2	382.4	421.6	455.7	481.9	501.5	514.6	521.1
70°	158.4	199.0	260.6	315.6	361.4	398.1	430.8	455.7	472.7	484.5	489.7
72.5°	138.8	180.7	240.9	294.6	337.8	374.5	404.6	428.2	443.9	453.1	457.0
75°	120.5	161.1	220.0	271.1	311.6	345.7	374.5	398.1	413.8	420.3	424.3
77.5°	100.8	141.4	197.7	244.9	282.8	314.3	341.8	364.0	378.4	385.0	388.9
80°	83.8	120.5	171.5	214.7	250.1	280.2	305.1	328.7	340.4	341.8	337.8
82.5°	65.5	99.5	144.0	182.0	212.1	240.9	264.5	280.2	285.5	285.5	281.5
85°	48.4	74.6	112.6	142.7	168.9	189.9	204.3	217.4	220.0	221.3	216.1
87.5°	27.5	41.9	66.8	86.4	102.1	116.5	127.0	133.6	133.6	134.9	132.3
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°	459.6	459.6	459.6	459.6	459.6	459.6	459.6	459.6
2.5°	466.2	468.8	468.8	471.4	472.7	472.7	474.0	474.0
5°	525.1	535.6	539.5	546.0	550.0	555.2	557.8	556.5
7.5°	595.8	611.5	619.4	628.5	639.0	641.6	645.5	645.5
10°	666.5	684.8	696.6	707.1	718.9	724.1	729.3	729.3
12.5°	730.7	749.0	764.7	777.8	789.6	797.4	802.7	804.0
15°	783.0	806.6	822.3	836.7	849.8	857.7	864.2	865.5
17.5°	826.2	848.5	869.5	885.2	897.0	908.7	912.7	915.3
20°	860.3	883.9	906.1	921.8	934.9	946.7	951.9	954.6
22.5°	885.2	910.0	932.3	949.3	962.4	974.2	980.8	983.4
25°	900.9	927.1	950.6	967.7	982.1	993.9	1000.4	1003.0
27.5°	911.4	937.5	959.8	976.8	991.2	1003.0	1009.6	1013.5
30°	911.4	937.5	959.8	976.8	991.2	1003.0	1009.6	1012.2
32.5°	903.5	929.7	951.9	967.7	982.1	993.9	1000.4	1003.0
35°	889.1	915.3	936.2	951.9	966.4	976.8	983.4	984.7
37.5°	869.5	894.3	914.0	929.7	942.8	953.3	959.8	961.1
40°	847.2	870.8	889.1	903.5	915.3	924.5	931.0	932.3
42.5°	821.0	843.3	859.0	873.4	883.9	893.0	899.6	898.3
45°	793.5	814.5	827.6	839.3	851.1	857.7	862.9	862.9
47.5°	766.0	783.0	794.8	805.3	814.5	821.0	824.9	824.9
50°	737.2	751.6	762.1	771.2	779.1	784.3	788.3	788.3
52.5°	708.4	721.5	729.3	737.2	743.8	747.7	751.6	750.3
55°	679.6	690.1	695.3	703.2	708.4	713.6	716.3	714.9
57.5°	650.8	657.3	662.6	669.1	674.4	679.6	680.9	682.2
60°	619.4	625.9	629.8	636.4	641.6	645.5	648.2	646.9
62.5°	589.2	593.2	597.1	602.3	606.3	611.5	612.8	612.8
65°	556.5	560.4	564.4	569.6	573.5	578.8	581.4	580.1
67.5°	525.1	529.0	532.9	536.9	542.1	547.3	548.6	548.6
70°	492.3	496.3	498.9	504.1	508.1	513.3	514.6	514.6
72.5°	460.9	463.5	466.2	471.4	474.0	477.9	480.6	480.6
75°	425.6	428.2	430.8	433.4	434.7	436.0	437.3	436.0
77.5°	386.3	383.7	381.0	381.0	378.4	379.7	381.0	379.7
80°	332.6	330.0	327.4	326.0	323.4	323.4	324.7	323.4
82.5°	276.3	271.1	268.4	267.1	264.5	264.5	264.5	264.5
85°	208.2	205.6	204.3	201.7	199.0	197.7	199.0	200.3
87.5°	129.6	127.0	124.4	121.8	120.5	119.2	121.8	117.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)