

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: P188468

Luminaire Tested: **24SR-LD2-59-C-UNV-L835-CD1-BR-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188468
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-LD2-59-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: 3657.0 lumens
Efficiency: N/A
Efficacy: 72.8 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

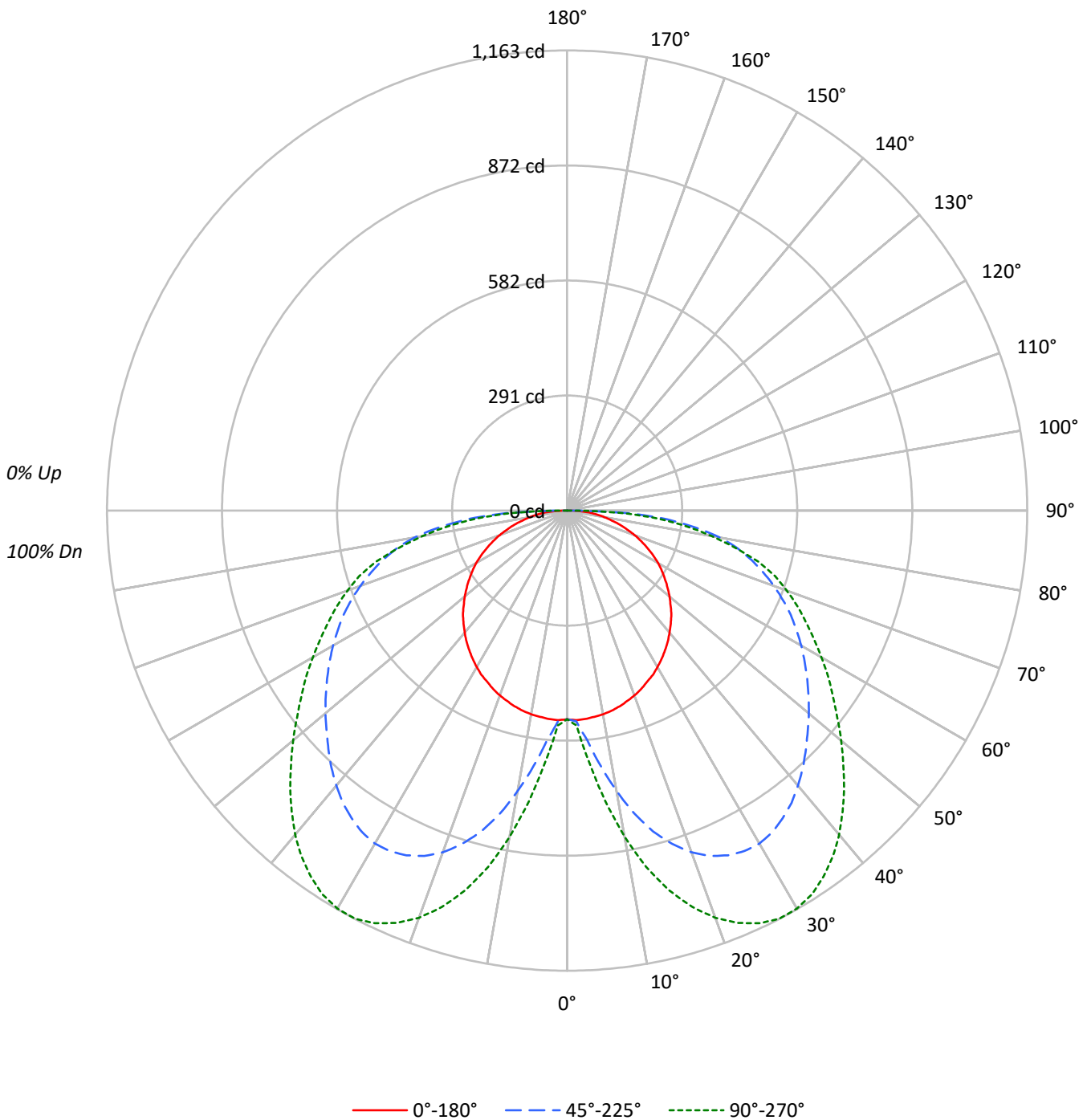
Input Watts (W): 50.2
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	709	709	709
5°	714	787	862
10°	714	983	1143
15°	713	1170	1383
20°	712	1316	1568
25°	709	1427	1708
30°	709	1510	1804
35°	708	1559	1855
40°	707	1593	1878
45°	709	1623	1884
50°	708	1670	1893
55°	708	1737	1924
60°	716	1839	1997
65°	713	1985	2118
70°	715	2186	2322
75°	718	2507	2600
80°	745	3037	2875
85°	858	3918	3548



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	59.2	1.6
10°-20°	226.1	6.2
20°-30°	413.4	11.3
30°-40°	549.7	15.0
40°-50°	605.3	16.6
50°-60°	599.9	16.4
60°-70°	549.2	15.0
70°-80°	442.2	12.1
80°-90°	212.1	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°	698.7	19.1
0°-40°	1248.4	34.1
0°-60°	2453.5	67.1
0°-90°	3657.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3657.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	527	527	527	527	527	
5°	529	533	583	623	638	50
15°	512	644	840	952	993	145
25°	478	716	961	1100	1151	221
35°	431	704	949	1083	1130	270
45°	372	635	853	956	990	287
55°	302	560	740	802	820	270
65°	224	484	623	650	665	222
75°	138	377	482	496	500	146
85°	56	206	254	233	230	57
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°	527.2	527.2	527.2	527.2	527.2	527.2	527.2	527.2	527.2	527.2	527.2
2.5°	530.2	530.2	528.7	528.7	528.7	528.7	528.7	528.7	530.2	533.2	534.7
5°	528.7	528.7	528.7	528.7	530.2	536.2	543.7	555.8	567.8	582.8	596.3
7.5°	525.7	525.7	525.7	530.2	543.7	564.8	584.3	606.8	629.4	651.9	669.9
10°	522.7	522.7	525.7	542.2	569.3	600.8	630.9	660.9	689.4	719.5	745.0
12.5°	518.2	518.2	527.2	557.3	596.3	635.4	674.4	710.5	746.5	784.1	812.6
15°	512.2	512.2	531.7	572.3	620.3	668.4	713.5	757.0	799.1	839.6	871.2
17.5°	504.7	507.7	536.2	587.3	641.4	697.0	746.5	796.1	841.2	883.2	920.8
20°	497.2	501.7	540.7	599.3	659.4	721.0	775.1	826.1	874.2	919.3	958.3
22.5°	488.2	494.2	543.7	608.3	672.9	737.5	794.6	848.7	899.7	944.8	985.3
25°	477.7	486.7	545.2	612.8	683.4	748.0	806.6	862.2	914.8	961.3	1001.9
27.5°	468.6	480.7	543.7	615.8	687.9	754.0	814.1	869.7	923.8	970.3	1012.4
30°	456.6	471.6	540.7	614.3	686.4	754.0	812.6	869.7	923.8	971.8	1012.4
32.5°	444.6	462.6	533.2	608.3	681.9	746.5	806.6	863.7	916.3	964.3	1003.4
35°	431.1	452.1	524.2	599.3	671.4	736.0	794.6	850.2	904.2	949.3	988.4
37.5°	417.6	440.1	512.2	587.3	657.9	721.0	778.1	833.6	884.7	931.3	967.3
40°	402.6	428.1	500.2	573.8	641.4	703.0	760.0	814.1	863.7	907.2	941.8
42.5°	387.5	414.6	486.7	558.8	624.9	683.4	740.5	791.6	839.6	881.7	913.2
45°	372.5	399.5	470.1	542.2	605.3	663.9	718.0	769.1	814.1	853.2	883.2
47.5°	354.5	384.5	455.1	524.2	585.8	644.4	697.0	745.0	790.1	824.6	853.2
50°	338.0	369.5	438.6	506.2	566.3	624.9	675.9	722.5	764.5	797.6	823.1
52.5°	319.9	353.0	422.1	489.7	549.8	605.3	656.4	700.0	737.5	769.1	793.1
55°	301.9	336.5	407.1	471.6	531.7	587.3	635.4	677.4	713.5	740.5	763.0
57.5°	283.9	319.9	390.5	456.6	515.2	569.3	615.8	653.4	687.9	712.0	731.5
60°	265.9	303.4	372.5	438.6	498.7	549.8	594.8	630.9	660.9	683.4	700.0
62.5°	244.8	285.4	356.0	420.6	479.2	528.7	572.3	605.3	633.9	653.4	666.9
65°	223.8	267.4	338.0	402.6	459.6	507.7	548.3	579.8	605.3	623.4	632.4
67.5°	202.8	249.3	319.9	384.5	438.6	483.7	522.7	552.8	575.3	590.3	597.8
70°	181.7	228.3	298.9	362.0	414.6	456.6	494.2	522.7	542.2	555.8	561.8
72.5°	159.2	207.3	276.4	338.0	387.5	429.6	464.1	491.2	509.2	519.7	524.2
75°	138.2	184.8	252.3	310.9	357.5	396.5	429.6	456.6	474.6	482.2	486.7
77.5°	115.7	162.2	226.8	280.9	324.4	360.5	392.0	417.6	434.1	441.6	446.1
80°	96.1	138.2	196.8	246.3	286.9	321.4	350.0	377.0	390.5	392.0	387.5
82.5°	75.1	114.2	165.2	208.8	243.3	276.4	303.4	321.4	327.4	327.4	322.9
85°	55.6	85.6	129.2	163.7	193.8	217.8	234.3	249.3	252.3	253.8	247.8
87.5°	31.5	48.1	76.6	99.1	117.2	133.7	145.7	153.2	153.2	154.7	151.7
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°	527.2	527.2	527.2	527.2	527.2	527.2	527.2	527.2
2.5°	534.7	537.7	537.7	540.7	542.2	542.2	543.7	543.7
5°	602.3	614.3	618.8	626.4	630.9	636.9	639.9	638.4
7.5°	683.4	701.5	710.5	721.0	733.0	736.0	740.5	740.5
10°	764.5	785.6	799.1	811.1	824.6	830.6	836.6	836.6
12.5°	838.1	859.2	877.2	892.2	905.7	914.8	920.8	922.3
15°	898.2	925.3	943.3	959.8	974.8	983.8	991.4	992.9
17.5°	947.8	973.3	997.4	1015.4	1028.9	1042.4	1046.9	1049.9
20°	986.9	1013.9	1039.4	1057.4	1072.5	1086.0	1092.0	1095.0
22.5°	1015.4	1043.9	1069.5	1089.0	1104.0	1117.5	1125.0	1128.0
25°	1033.4	1063.5	1090.5	1110.0	1126.5	1140.1	1147.6	1150.6
27.5°	1045.4	1075.5	1101.0	1120.5	1137.1	1150.6	1158.1	1162.6
30°	1045.4	1075.5	1101.0	1120.5	1137.1	1150.6	1158.1	1161.1
32.5°	1036.4	1066.5	1092.0	1110.0	1126.5	1140.1	1147.6	1150.6
35°	1019.9	1049.9	1074.0	1092.0	1108.5	1120.5	1128.0	1129.5
37.5°	997.4	1025.9	1048.4	1066.5	1081.5	1093.5	1101.0	1102.5
40°	971.8	998.9	1019.9	1036.4	1049.9	1060.5	1068.0	1069.5
42.5°	941.8	967.3	985.3	1001.9	1013.9	1024.4	1031.9	1030.4
45°	910.2	934.3	949.3	962.8	976.3	983.8	989.9	989.9
47.5°	878.7	898.2	911.7	923.8	934.3	941.8	946.3	946.3
50°	845.7	862.2	874.2	884.7	893.7	899.7	904.2	904.2
52.5°	812.6	827.6	836.6	845.7	853.2	857.7	862.2	860.7
55°	779.6	791.6	797.6	806.6	812.6	818.6	821.6	820.1
57.5°	746.5	754.0	760.0	767.6	773.6	779.6	781.1	782.6
60°	710.5	718.0	722.5	730.0	736.0	740.5	743.5	742.0
62.5°	675.9	680.4	684.9	690.9	695.5	701.5	703.0	703.0
65°	638.4	642.9	647.4	653.4	657.9	663.9	666.9	665.4
67.5°	602.3	606.8	611.3	615.8	621.9	627.9	629.4	629.4
70°	564.8	569.3	572.3	578.3	582.8	588.8	590.3	590.3
72.5°	528.7	531.7	534.7	540.7	543.7	548.3	551.3	551.3
75°	488.2	491.2	494.2	497.2	498.7	500.2	501.7	500.2
77.5°	443.1	440.1	437.1	437.1	434.1	435.6	437.1	435.6
80°	381.5	378.5	375.5	374.0	371.0	371.0	372.5	371.0
82.5°	316.9	310.9	307.9	306.4	303.4	303.4	303.4	303.4
85°	238.8	235.8	234.3	231.3	228.3	226.8	228.3	229.8
87.5°	148.7	145.7	142.7	139.7	138.2	136.7	139.7	135.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)