

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: P188469

Luminaire Tested: **24SR-LD2-59-C-UNV-L840-CD1-BR-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P188469  
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-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: 3730.0 lumens  
Efficiency: N/A  
Efficacy: 74.3 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

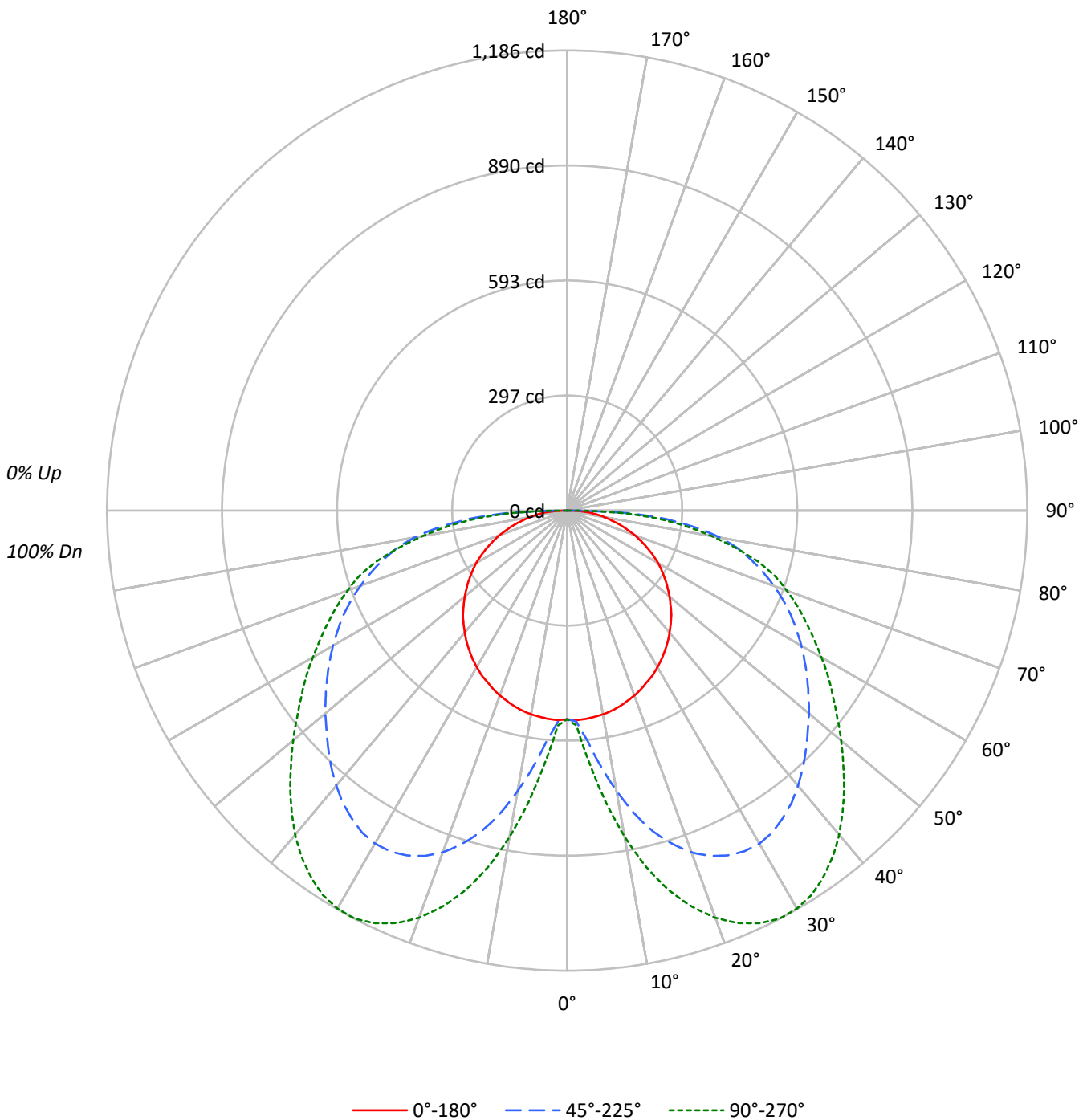
Input Watts (W): 50.2  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P188469

CATALOG NUMBER: 24SR-LD2-59-C-UNV-L840-CD1-BR-U

### Luminous Intensity Polar Plot





TEST NUMBER: P188469

CATALOG NUMBER: 24SR-LD2-59-C-UNV-L840-CD1-BR-U

**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°	723	723	723
5°	728	803	879
10°	728	1003	1166
15°	728	1193	1411
20°	726	1342	1599
25°	723	1456	1742
30°	724	1540	1840
35°	722	1590	1892
40°	721	1625	1916
45°	723	1656	1921
50°	722	1703	1931
55°	722	1772	1962
60°	730	1876	2037
65°	727	2024	2161
70°	729	2230	2369
75°	732	2557	2652
80°	760	3099	2932
85°	875	3997	3619



TEST NUMBER: P188469

CATALOG NUMBER: 24SR-LD2-59-C-UNV-L840-CD1-BR-U

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	60.4	1.6
10°-20°	230.6	6.2
20°-30°	421.6	11.3
30°-40°	560.7	15.0
40°-50°	617.3	16.6
50°-60°	611.8	16.4
60°-70°	560.1	15.0
70°-80°	451.0	12.1
80°-90°	216.4	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°	712.6	19.1
0°-40°	1273.3	34.1
0°-60°	2502.5	67.1
0°-90°	3730.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3730.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	538	538	538	538	538	
5°	539	544	594	635	651	51
15°	522	657	856	971	1013	147
25°	487	730	980	1122	1174	225
35°	440	718	968	1105	1152	275
45°	380	647	870	975	1010	293
55°	308	571	755	818	836	276
65°	228	493	636	663	679	226
75°	141	385	492	506	510	149
85°	57	210	259	237	234	58
90°	0	0	0	0	0	



TEST NUMBER: P188469

CATALOG NUMBER: 24SR-LD2-59-C-UNV-L840-CD1-BR-U

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	537.7	537.7	537.7	537.7	537.7	537.7	537.7	537.7	537.7	537.7	537.7
2.5°	540.8	540.8	539.3	539.3	539.3	539.3	539.3	539.3	540.8	543.9	545.4
5°	539.3	539.3	539.3	539.3	540.8	546.9	554.6	566.9	579.1	594.4	608.2
7.5°	536.2	536.2	536.2	540.8	554.6	576.0	596.0	618.9	641.9	664.9	683.3
10°	533.1	533.1	536.2	553.1	580.6	612.8	643.5	674.1	703.2	733.8	759.9
12.5°	528.6	528.6	537.7	568.4	608.2	648.1	687.9	724.7	761.4	799.7	828.8
15°	522.4	522.4	542.3	583.7	632.7	681.8	727.7	772.1	815.0	856.4	888.6
17.5°	514.8	517.8	546.9	599.0	654.2	710.9	761.4	812.0	857.9	900.8	939.1
20°	507.1	511.7	551.5	611.3	672.6	735.4	790.5	842.6	891.6	937.6	977.4
22.5°	497.9	504.0	554.6	620.5	686.4	752.2	810.4	865.6	917.7	963.7	1005.0
25°	487.2	496.4	556.1	625.1	697.1	763.0	822.7	879.4	933.0	980.5	1021.9
27.5°	478.0	490.3	554.6	628.1	701.7	769.1	830.4	887.1	942.2	989.7	1032.6
30°	465.7	481.1	551.5	626.6	700.1	769.1	828.8	887.1	942.2	991.2	1032.6
32.5°	453.5	471.9	543.9	620.5	695.5	761.4	822.7	880.9	934.5	983.6	1023.4
35°	439.7	461.1	534.7	611.3	684.8	750.7	810.4	867.1	922.3	968.2	1008.1
37.5°	425.9	448.9	522.4	599.0	671.0	735.4	793.6	850.3	902.4	949.9	986.6
40°	410.6	436.6	510.2	585.2	654.2	717.0	775.2	830.4	880.9	925.4	960.6
42.5°	395.3	422.8	496.4	569.9	637.3	697.1	755.3	807.4	856.4	899.3	931.5
45°	379.9	407.5	479.5	553.1	617.4	677.2	732.3	784.4	830.4	870.2	900.8
47.5°	361.6	392.2	464.2	534.7	597.5	657.2	710.9	759.9	805.9	841.1	870.2
50°	344.7	376.9	447.4	516.3	577.6	637.3	689.4	736.9	779.8	813.5	839.6
52.5°	326.3	360.0	430.5	499.4	560.7	617.4	669.5	713.9	752.2	784.4	808.9
55°	307.9	343.2	415.2	481.1	542.3	599.0	648.1	690.9	727.7	755.3	778.3
57.5°	289.6	326.3	398.3	465.7	525.5	580.6	628.1	666.4	701.7	726.2	746.1
60°	271.2	309.5	379.9	447.4	508.6	560.7	606.7	643.5	674.1	697.1	713.9
62.5°	249.7	291.1	363.1	429.0	488.7	539.3	583.7	617.4	646.5	666.4	680.2
65°	228.3	272.7	344.7	410.6	468.8	517.8	559.2	591.4	617.4	635.8	645.0
67.5°	206.8	254.3	326.3	392.2	447.4	493.3	533.1	563.8	586.8	602.1	609.8
70°	185.4	232.9	304.9	369.2	422.8	465.7	504.0	533.1	553.1	566.9	573.0
72.5°	162.4	211.4	281.9	344.7	395.3	438.2	473.4	501.0	519.4	530.1	534.7
75°	140.9	188.4	257.4	317.1	364.6	404.5	438.2	465.7	484.1	491.8	496.4
77.5°	118.0	165.5	231.3	286.5	330.9	367.7	399.9	425.9	442.8	450.4	455.0
80°	98.1	140.9	200.7	251.3	292.6	327.9	357.0	384.5	398.3	399.9	395.3
82.5°	76.6	116.4	168.5	213.0	248.2	281.9	309.5	327.9	334.0	334.0	329.4
85°	56.7	87.3	131.8	167.0	197.6	222.1	239.0	254.3	257.4	258.9	252.8
87.5°	32.2	49.0	78.1	101.1	119.5	136.4	148.6	156.3	156.3	157.8	154.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P188469

CATALOG NUMBER: 24SR-LD2-59-C-UNV-L840-CD1-BR-U

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	537.7	537.7	537.7	537.7	537.7	537.7	537.7	537.7
2.5°	545.4	548.5	548.5	551.5	553.1	553.1	554.6	554.6
5°	614.3	626.6	631.2	638.9	643.5	649.6	652.6	651.1
7.5°	697.1	715.5	724.7	735.4	747.6	750.7	755.3	755.3
10°	779.8	801.3	815.0	827.3	841.1	847.2	853.3	853.3
12.5°	854.9	876.3	894.7	910.0	923.8	933.0	939.1	940.7
15°	916.2	943.7	962.1	979.0	994.3	1003.5	1011.1	1012.7
17.5°	966.7	992.8	1017.3	1035.7	1049.4	1063.2	1067.8	1070.9
20°	1006.5	1034.1	1060.2	1078.6	1093.9	1107.7	1113.8	1116.9
22.5°	1035.7	1064.8	1090.8	1110.7	1126.0	1139.8	1147.5	1150.6
25°	1054.0	1084.7	1112.3	1132.2	1149.0	1162.8	1170.5	1173.5
27.5°	1066.3	1096.9	1123.0	1142.9	1159.8	1173.5	1181.2	1185.8
30°	1066.3	1096.9	1123.0	1142.9	1159.8	1173.5	1181.2	1184.3
32.5°	1057.1	1087.7	1113.8	1132.2	1149.0	1162.8	1170.5	1173.5
35°	1040.3	1070.9	1095.4	1113.8	1130.6	1142.9	1150.6	1152.1
37.5°	1017.3	1046.4	1069.4	1087.7	1103.1	1115.3	1123.0	1124.5
40°	991.2	1018.8	1040.3	1057.1	1070.9	1081.6	1089.3	1090.8
42.5°	960.6	986.6	1005.0	1021.9	1034.1	1044.9	1052.5	1051.0
45°	928.4	952.9	968.2	982.0	995.8	1003.5	1009.6	1009.6
47.5°	896.2	916.2	929.9	942.2	952.9	960.6	965.2	965.2
50°	862.5	879.4	891.6	902.4	911.6	917.7	922.3	922.3
52.5°	828.8	844.2	853.3	862.5	870.2	874.8	879.4	877.9
55°	795.1	807.4	813.5	822.7	828.8	835.0	838.0	836.5
57.5°	761.4	769.1	775.2	782.9	789.0	795.1	796.7	798.2
60°	724.7	732.3	736.9	744.6	750.7	755.3	758.4	756.8
62.5°	689.4	694.0	698.6	704.7	709.3	715.5	717.0	717.0
65°	651.1	655.7	660.3	666.4	671.0	677.2	680.2	678.7
67.5°	614.3	618.9	623.5	628.1	634.3	640.4	641.9	641.9
70°	576.0	580.6	583.7	589.8	594.4	600.6	602.1	602.1
72.5°	539.3	542.3	545.4	551.5	554.6	559.2	562.3	562.3
75°	497.9	501.0	504.0	507.1	508.6	510.2	511.7	510.2
77.5°	452.0	448.9	445.8	445.8	442.8	444.3	445.8	444.3
80°	389.1	386.1	383.0	381.5	378.4	378.4	379.9	378.4
82.5°	323.3	317.1	314.1	312.5	309.5	309.5	309.5	309.5
85°	243.6	240.5	239.0	235.9	232.9	231.3	232.9	234.4
87.5°	151.7	148.6	145.5	142.5	140.9	139.4	142.5	137.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)