

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: P188470

Luminaire Tested: **24SR-LD2-59-C-UNV-L850-CD1-BR-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188470
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-L850-CD1-BR-U
Description: METALUX 2X4 SKYRIDGE LED FIXTURE WITH BELLADONNA ROSE

Light Source: EATON LED 5000K
Ballast/Driver: OSRAM ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4059.0 lumens
Efficiency: N/A
Efficacy: 80.9 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

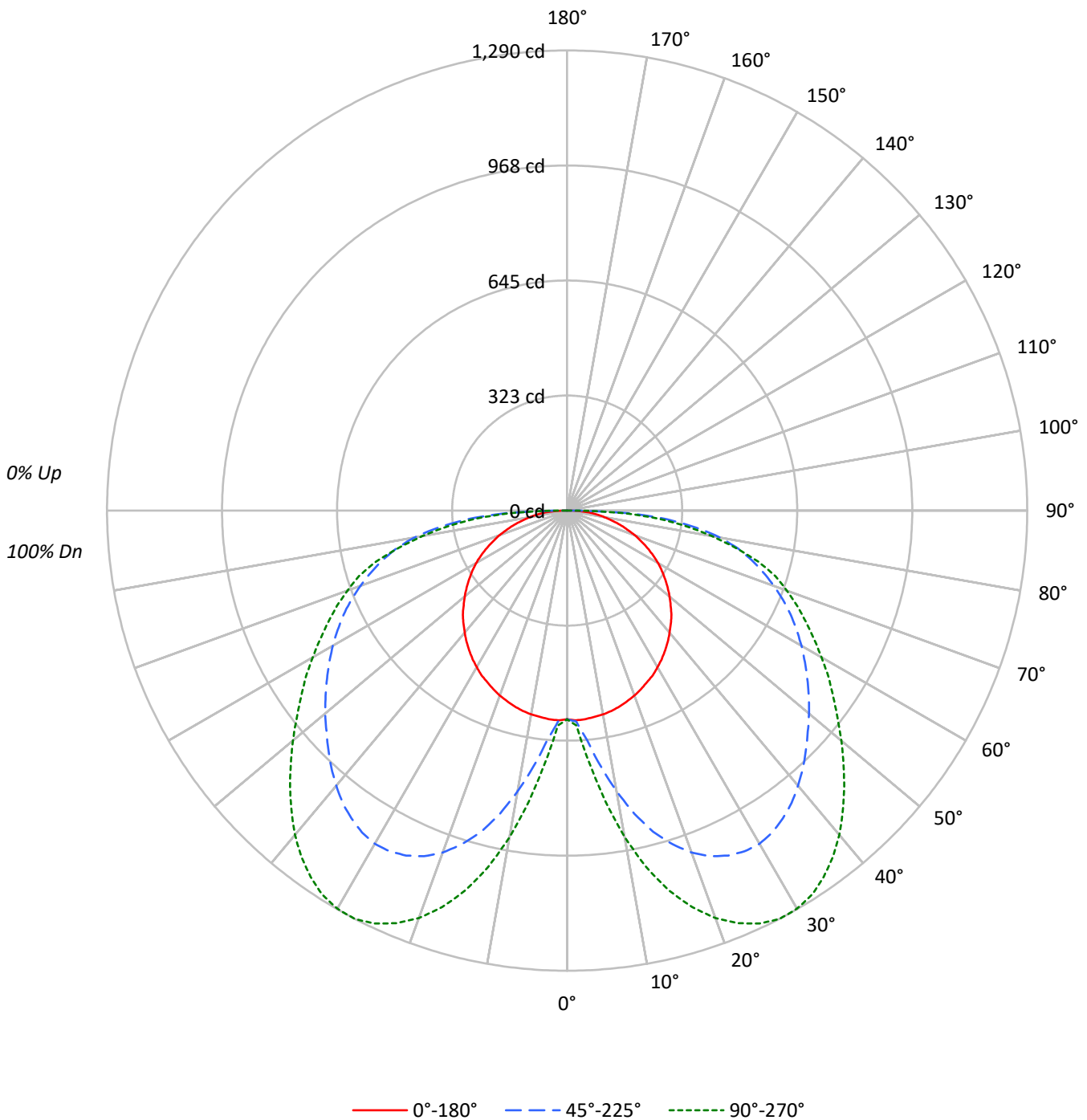
Input Watts (W): 50.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	787	787	787
5°	793	874	957
10°	793	1091	1269
15°	792	1298	1535
20°	790	1461	1740
25°	787	1584	1896
30°	787	1676	2002
35°	786	1731	2059
40°	785	1769	2085
45°	787	1802	2091
50°	785	1853	2101
55°	786	1928	2135
60°	794	2041	2216
65°	791	2203	2351
70°	793	2427	2578
75°	797	2782	2886
80°	827	3371	3191
85°	953	4350	3938



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.7	1.6
10°-20°	251.0	6.2
20°-30°	458.8	11.3
30°-40°	610.1	15.0
40°-50°	671.8	16.6
50°-60°	665.8	16.4
60°-70°	609.5	15.0
70°-80°	490.8	12.1
80°-90°	235.5	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°	775.5	19.1
0°-40°	1385.6	34.1
0°-60°	2723.2	67.1
0°-90°	4059.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4059.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	585	585	585	585	585	
5°	587	592	647	691	708	56
15°	568	715	932	1056	1102	160
25°	530	794	1067	1221	1277	245
35°	478	781	1054	1202	1254	300
45°	414	704	947	1061	1099	318
55°	335	621	822	890	910	300
65°	248	537	692	722	739	246
75°	153	418	535	550	555	162
85°	62	228	282	258	255	64
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°	585.2	585.2	585.2	585.2	585.2	585.2	585.2	585.2	585.2	585.2	585.2
2.5°	588.5	588.5	586.8	586.8	586.8	586.8	586.8	586.8	588.5	591.8	593.5
5°	586.8	586.8	586.8	586.8	588.5	595.2	603.5	616.9	630.2	646.9	661.9
7.5°	583.5	583.5	583.5	588.5	603.5	626.9	648.5	673.5	698.5	723.6	743.6
10°	580.2	580.2	583.5	601.8	631.9	666.9	700.2	733.6	765.2	798.6	826.9
12.5°	575.2	575.2	585.2	618.5	661.9	705.2	748.6	788.6	828.6	870.3	901.9
15°	568.5	568.5	590.2	635.2	688.5	741.9	791.9	840.3	886.9	931.9	967.0
17.5°	560.2	563.5	595.2	651.9	711.9	773.6	828.6	883.6	933.6	980.3	1022.0
20°	551.8	556.8	600.2	665.2	731.9	800.2	860.3	916.9	970.3	1020.3	1063.7
22.5°	541.8	548.5	603.5	675.2	746.9	818.6	881.9	942.0	998.6	1048.7	1093.7
25°	530.2	540.2	605.2	680.2	758.6	830.3	895.3	957.0	1015.3	1067.0	1112.0
27.5°	520.2	533.5	603.5	683.5	763.6	836.9	903.6	965.3	1025.3	1077.0	1123.7
30°	506.8	523.5	600.2	681.9	761.9	836.9	901.9	965.3	1025.3	1078.7	1123.7
32.5°	493.5	513.5	591.8	675.2	756.9	828.6	895.3	958.6	1017.0	1070.3	1113.7
35°	478.5	501.8	581.8	665.2	745.2	816.9	881.9	943.6	1003.6	1053.7	1097.0
37.5°	463.5	488.5	568.5	651.9	730.2	800.2	863.6	925.3	982.0	1033.6	1073.7
40°	446.8	475.1	555.2	636.9	711.9	780.2	843.6	903.6	958.6	1007.0	1045.3
42.5°	430.1	460.1	540.2	620.2	693.5	758.6	821.9	878.6	931.9	978.6	1013.6
45°	413.5	443.5	521.8	601.8	671.9	736.9	796.9	853.6	903.6	947.0	980.3
47.5°	393.5	426.8	505.2	581.8	650.2	715.2	773.6	826.9	876.9	915.3	947.0
50°	375.1	410.1	486.8	561.8	628.5	693.5	750.2	801.9	848.6	885.3	913.6
52.5°	355.1	391.8	468.5	543.5	610.2	671.9	728.6	776.9	818.6	853.6	880.3
55°	335.1	373.4	451.8	523.5	590.2	651.9	705.2	751.9	791.9	821.9	846.9
57.5°	315.1	355.1	433.5	506.8	571.8	631.9	683.5	725.2	763.6	790.2	811.9
60°	295.1	336.8	413.5	486.8	553.5	610.2	660.2	700.2	733.6	758.6	776.9
62.5°	271.7	316.8	395.1	466.8	531.8	586.8	635.2	671.9	703.5	725.2	740.2
65°	248.4	296.8	375.1	446.8	510.2	563.5	608.5	643.5	671.9	691.9	701.9
67.5°	225.1	276.8	355.1	426.8	486.8	536.8	580.2	613.5	638.5	655.2	663.5
70°	201.7	253.4	331.8	401.8	460.1	506.8	548.5	580.2	601.8	616.9	623.5
72.5°	176.7	230.1	306.8	375.1	430.1	476.8	515.2	545.2	565.2	576.8	581.8
75°	153.4	205.1	280.1	345.1	396.8	440.1	476.8	506.8	526.8	535.2	540.2
77.5°	128.4	180.1	251.7	311.8	360.1	400.1	435.1	463.5	481.8	490.1	495.1
80°	106.7	153.4	218.4	273.4	318.4	356.8	388.5	418.5	433.5	435.1	430.1
82.5°	83.4	126.7	183.4	231.7	270.1	306.8	336.8	356.8	363.4	363.4	358.4
85°	61.7	95.0	143.4	181.7	215.1	241.7	260.1	276.8	280.1	281.8	275.1
87.5°	35.0	53.3	85.0	110.0	130.0	148.4	161.7	170.1	170.1	171.7	168.4
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°	585.2	585.2	585.2	585.2	585.2	585.2	585.2	585.2
2.5°	593.5	596.8	596.8	600.2	601.8	601.8	603.5	603.5
5°	668.5	681.9	686.9	695.2	700.2	706.9	710.2	708.5
7.5°	758.6	778.6	788.6	800.2	813.6	816.9	821.9	821.9
10°	848.6	871.9	886.9	900.3	915.3	921.9	928.6	928.6
12.5°	930.3	953.6	973.6	990.3	1005.3	1015.3	1022.0	1023.6
15°	997.0	1027.0	1047.0	1065.3	1082.0	1092.0	1100.3	1102.0
17.5°	1052.0	1080.3	1107.0	1127.0	1142.0	1157.0	1162.0	1165.4
20°	1095.3	1125.3	1153.7	1173.7	1190.4	1205.4	1212.0	1215.4
22.5°	1127.0	1158.7	1187.0	1208.7	1225.4	1240.4	1248.7	1252.0
25°	1147.0	1180.4	1210.4	1232.0	1250.4	1265.4	1273.7	1277.1
27.5°	1160.4	1193.7	1222.0	1243.7	1262.0	1277.1	1285.4	1290.4
30°	1160.4	1193.7	1222.0	1243.7	1262.0	1277.1	1285.4	1288.7
32.5°	1150.3	1183.7	1212.0	1232.0	1250.4	1265.4	1273.7	1277.1
35°	1132.0	1165.4	1192.0	1212.0	1230.4	1243.7	1252.0	1253.7
37.5°	1107.0	1138.7	1163.7	1183.7	1200.4	1213.7	1222.0	1223.7
40°	1078.7	1108.7	1132.0	1150.3	1165.4	1177.0	1185.4	1187.0
42.5°	1045.3	1073.7	1093.7	1112.0	1125.3	1137.0	1145.3	1143.7
45°	1010.3	1037.0	1053.7	1068.7	1083.7	1092.0	1098.7	1098.7
47.5°	975.3	997.0	1012.0	1025.3	1037.0	1045.3	1050.3	1050.3
50°	938.6	957.0	970.3	982.0	992.0	998.6	1003.6	1003.6
52.5°	901.9	918.6	928.6	938.6	947.0	952.0	957.0	955.3
55°	865.3	878.6	885.3	895.3	901.9	908.6	911.9	910.3
57.5°	828.6	836.9	843.6	851.9	858.6	865.3	866.9	868.6
60°	788.6	796.9	801.9	810.2	816.9	821.9	825.2	823.6
62.5°	750.2	755.2	760.2	766.9	771.9	778.6	780.2	780.2
65°	708.5	713.5	718.6	725.2	730.2	736.9	740.2	738.6
67.5°	668.5	673.5	678.5	683.5	690.2	696.9	698.5	698.5
70°	626.9	631.9	635.2	641.9	646.9	653.5	655.2	655.2
72.5°	586.8	590.2	593.5	600.2	603.5	608.5	611.9	611.9
75°	541.8	545.2	548.5	551.8	553.5	555.2	556.8	555.2
77.5°	491.8	488.5	485.1	485.1	481.8	483.5	485.1	483.5
80°	423.5	420.1	416.8	415.1	411.8	411.8	413.5	411.8
82.5°	351.8	345.1	341.8	340.1	336.8	336.8	336.8	336.8
85°	265.1	261.7	260.1	256.7	253.4	251.7	253.4	255.1
87.5°	165.0	161.7	158.4	155.0	153.4	151.7	155.0	150.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)