

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: P188474

Luminaire Tested: **24SR-LD2-64-C-UNV-L840-CD1-BR-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188474
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-LD2-64-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: 4084.0 lumens
Efficiency: N/A
Efficacy: 73.6 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

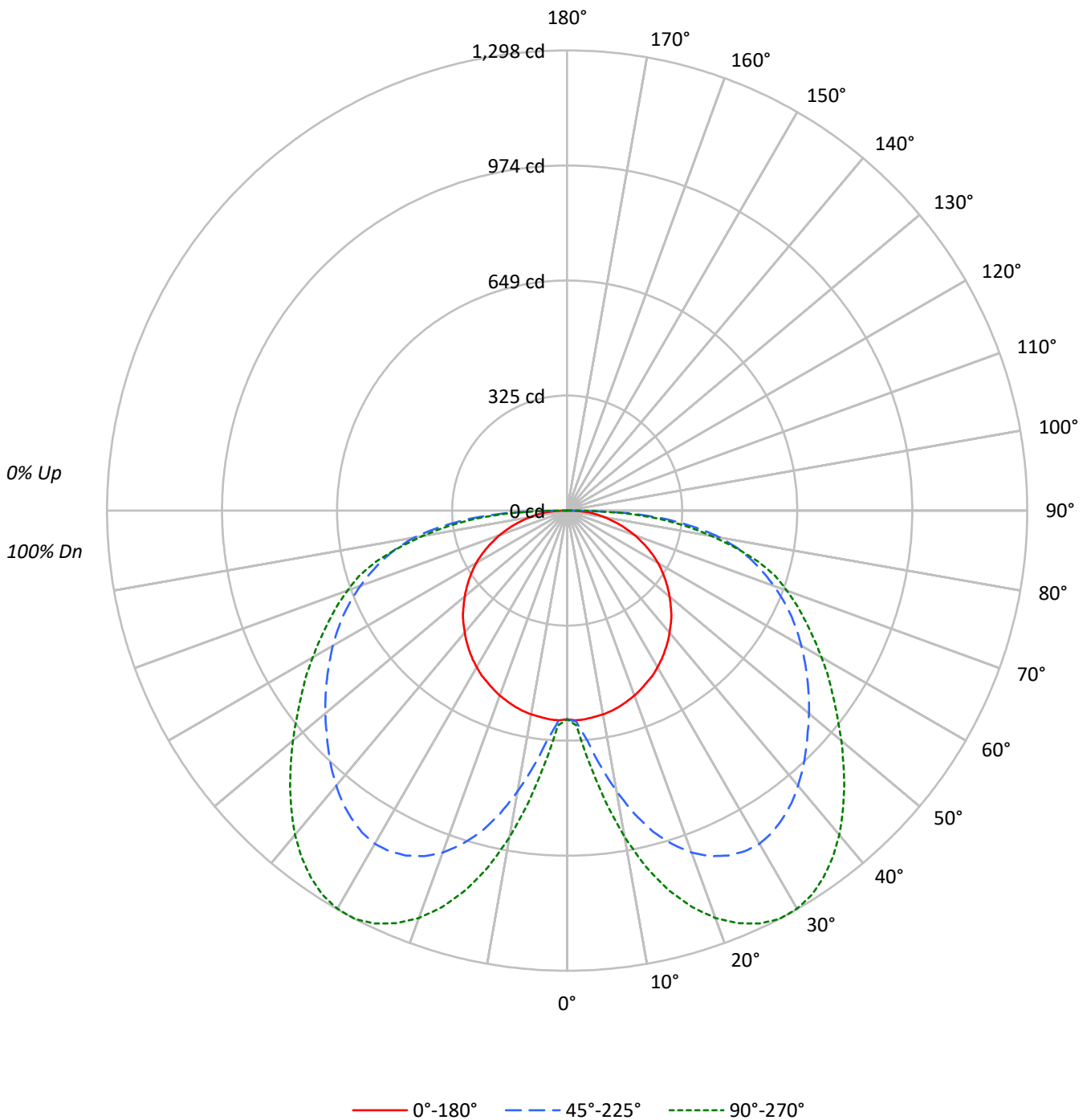
Input Watts (W): 55.5
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	792	792	792
5°	798	879	963
10°	797	1098	1276
15°	797	1306	1545
20°	795	1470	1751
25°	792	1594	1908
30°	792	1686	2015
35°	791	1741	2072
40°	790	1780	2098
45°	792	1813	2103
50°	790	1864	2114
55°	791	1940	2149
60°	799	2054	2230
65°	796	2216	2366
70°	799	2442	2593
75°	802	2799	2904
80°	832	3392	3210
85°	959	4377	3961



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	66.1	1.6
10°-20°	252.5	6.2
20°-30°	461.6	11.3
30°-40°	613.9	15.0
40°-50°	675.9	16.6
50°-60°	669.9	16.4
60°-70°	613.3	15.0
70°-80°	493.8	12.1
80°-90°	236.9	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°	780.2	19.1
0°-40°	1394.2	34.1
0°-60°	2740.0	67.1
0°-90°	4084.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4084.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	589	589	589	589	589	
5°	590	595	651	695	713	56
15°	572	720	938	1063	1109	161
25°	533	799	1074	1229	1285	246
35°	481	786	1060	1209	1261	301
45°	416	709	953	1068	1105	320
55°	337	625	827	896	916	302
65°	250	540	696	726	743	247
75°	154	421	538	554	559	163
85°	62	230	284	260	257	64
90°	0	0	0	0	0	



TEST NUMBER: P188474

CATALOG NUMBER: 24SR-LD2-64-C-UNV-L840-CD1-BR-U

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	588.8	588.8	588.8	588.8	588.8	588.8	588.8	588.8	588.8	588.8	588.8
2.5°	592.1	592.1	590.5	590.5	590.5	590.5	590.5	590.5	592.1	595.5	597.2
5°	590.5	590.5	590.5	590.5	592.1	598.8	607.2	620.7	634.1	650.8	665.9
7.5°	587.1	587.1	587.1	592.1	607.2	630.7	652.5	677.7	702.8	728.0	748.1
10°	583.7	583.7	587.1	605.6	635.7	671.0	704.5	738.1	769.9	803.5	832.0
12.5°	578.7	578.7	588.8	622.3	665.9	709.6	753.2	793.4	833.7	875.6	907.5
15°	572.0	572.0	593.8	639.1	692.8	746.5	796.8	845.4	892.4	937.7	972.9
17.5°	563.6	567.0	598.8	655.9	716.3	778.3	833.7	889.0	939.4	986.3	1028.3
20°	555.2	560.3	603.9	669.3	736.4	805.2	865.6	922.6	976.3	1026.6	1070.2
22.5°	545.2	551.9	607.2	679.4	751.5	823.6	887.4	947.8	1004.8	1055.1	1100.4
25°	533.4	543.5	608.9	684.4	763.2	835.4	900.8	962.8	1021.6	1073.6	1118.9
27.5°	523.4	536.8	607.2	687.7	768.3	842.1	909.2	971.2	1031.6	1083.6	1130.6
30°	509.9	526.7	603.9	686.1	766.6	842.1	907.5	971.2	1031.6	1085.3	1130.6
32.5°	496.5	516.7	595.5	679.4	761.6	833.7	900.8	964.5	1023.2	1076.9	1120.5
35°	481.4	504.9	585.4	669.3	749.8	821.9	887.4	949.4	1009.8	1060.1	1103.8
37.5°	466.3	491.5	572.0	655.9	734.7	805.2	868.9	931.0	988.0	1040.0	1080.3
40°	449.6	478.1	558.6	640.8	716.3	785.0	848.8	909.2	964.5	1013.2	1051.8
42.5°	432.8	463.0	543.5	624.0	697.8	763.2	827.0	884.0	937.7	984.7	1019.9
45°	416.0	446.2	525.0	605.6	676.0	741.4	801.8	858.8	909.2	952.8	986.3
47.5°	395.9	429.4	508.3	585.4	654.2	719.6	778.3	832.0	882.3	920.9	952.8
50°	377.4	412.6	489.8	565.3	632.4	697.8	754.8	806.8	853.8	890.7	919.2
52.5°	357.3	394.2	471.4	546.8	613.9	676.0	733.0	781.7	823.6	858.8	885.7
55°	337.2	375.7	454.6	526.7	593.8	655.9	709.6	756.5	796.8	827.0	852.1
57.5°	317.0	357.3	436.1	509.9	575.4	635.7	687.7	729.7	768.3	795.1	816.9
60°	296.9	338.8	416.0	489.8	556.9	613.9	664.3	704.5	738.1	763.2	781.7
62.5°	273.4	318.7	397.6	469.7	535.1	590.5	639.1	676.0	707.9	729.7	744.8
65°	249.9	298.6	377.4	449.6	513.3	567.0	612.3	647.5	676.0	696.1	706.2
67.5°	226.5	278.5	357.3	429.4	489.8	540.1	583.7	617.3	642.5	659.2	667.6
70°	203.0	255.0	333.8	404.3	463.0	509.9	551.9	583.7	605.6	620.7	627.4
72.5°	177.8	231.5	308.6	377.4	432.8	479.7	518.3	548.5	568.7	580.4	585.4
75°	154.3	206.3	281.8	347.2	399.2	442.8	479.7	509.9	530.1	538.5	543.5
77.5°	129.2	181.2	253.3	313.7	362.3	402.6	437.8	466.3	484.8	493.2	498.2
80°	107.4	154.3	219.7	275.1	320.4	359.0	390.8	421.0	436.1	437.8	432.8
82.5°	83.9	127.5	184.5	233.2	271.7	308.6	338.8	359.0	365.7	365.7	360.6
85°	62.1	95.6	144.3	182.8	216.4	243.2	261.7	278.5	281.8	283.5	276.8
87.5°	35.2	53.7	85.5	110.7	130.8	149.3	162.7	171.1	171.1	172.8	169.4
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: P188474

CATALOG NUMBER: 24SR-LD2-64-C-UNV-L840-CD1-BR-U

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	588.8	588.8	588.8	588.8	588.8	588.8	588.8	588.8
2.5°	597.2	600.5	600.5	603.9	605.6	605.6	607.2	607.2
5°	672.7	686.1	691.1	699.5	704.5	711.2	714.6	712.9
7.5°	763.2	783.4	793.4	805.2	818.6	821.9	827.0	827.0
10°	853.8	877.3	892.4	905.8	920.9	927.6	934.3	934.3
12.5°	936.0	959.5	979.6	996.4	1011.5	1021.6	1028.3	1029.9
15°	1003.1	1033.3	1053.4	1071.9	1088.7	1098.7	1107.1	1108.8
17.5°	1058.5	1087.0	1113.8	1133.9	1149.0	1164.1	1169.2	1172.5
20°	1102.1	1132.3	1160.8	1180.9	1197.7	1212.8	1219.5	1222.9
22.5°	1133.9	1165.8	1194.3	1216.1	1232.9	1248.0	1256.4	1259.8
25°	1154.1	1187.6	1217.8	1239.6	1258.1	1273.2	1281.6	1284.9
27.5°	1167.5	1201.0	1229.6	1251.4	1269.8	1284.9	1293.3	1298.3
30°	1167.5	1201.0	1229.6	1251.4	1269.8	1284.9	1293.3	1296.7
32.5°	1157.4	1191.0	1219.5	1239.6	1258.1	1273.2	1281.6	1284.9
35°	1139.0	1172.5	1199.4	1219.5	1237.9	1251.4	1259.8	1261.4
37.5°	1113.8	1145.7	1170.9	1191.0	1207.8	1221.2	1229.6	1231.2
40°	1085.3	1115.5	1139.0	1157.4	1172.5	1184.3	1192.7	1194.3
42.5°	1051.8	1080.3	1100.4	1118.9	1132.3	1144.0	1152.4	1150.7
45°	1016.5	1043.4	1060.1	1075.2	1090.3	1098.7	1105.4	1105.4
47.5°	981.3	1003.1	1018.2	1031.6	1043.4	1051.8	1056.8	1056.8
50°	944.4	962.8	976.3	988.0	998.1	1004.8	1009.8	1009.8
52.5°	907.5	924.3	934.3	944.4	952.8	957.8	962.8	961.2
55°	870.6	884.0	890.7	900.8	907.5	914.2	917.6	915.9
57.5°	833.7	842.1	848.8	857.2	863.9	870.6	872.3	873.9
60°	793.4	801.8	806.8	815.2	821.9	827.0	830.3	828.7
62.5°	754.8	759.9	764.9	771.6	776.7	783.4	785.0	785.0
65°	712.9	717.9	723.0	729.7	734.7	741.4	744.8	743.1
67.5°	672.7	677.7	682.7	687.7	694.5	701.2	702.8	702.8
70°	630.7	635.7	639.1	645.8	650.8	657.6	659.2	659.2
72.5°	590.5	593.8	597.2	603.9	607.2	612.3	615.6	615.6
75°	545.2	548.5	551.9	555.2	556.9	558.6	560.3	558.6
77.5°	494.8	491.5	488.1	488.1	484.8	486.5	488.1	486.5
80°	426.1	422.7	419.4	417.7	414.3	414.3	416.0	414.3
82.5°	353.9	347.2	343.9	342.2	338.8	338.8	338.8	338.8
85°	266.7	263.4	261.7	258.3	255.0	253.3	255.0	256.6
87.5°	166.1	162.7	159.4	156.0	154.3	152.6	156.0	151.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)