

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: P188472

Luminaire Tested: **24SR-LD2-64-C-UNV-L830-CD1-BR-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188472
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-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: 3883.0 lumens
Efficiency: N/A
Efficacy: 70.0 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

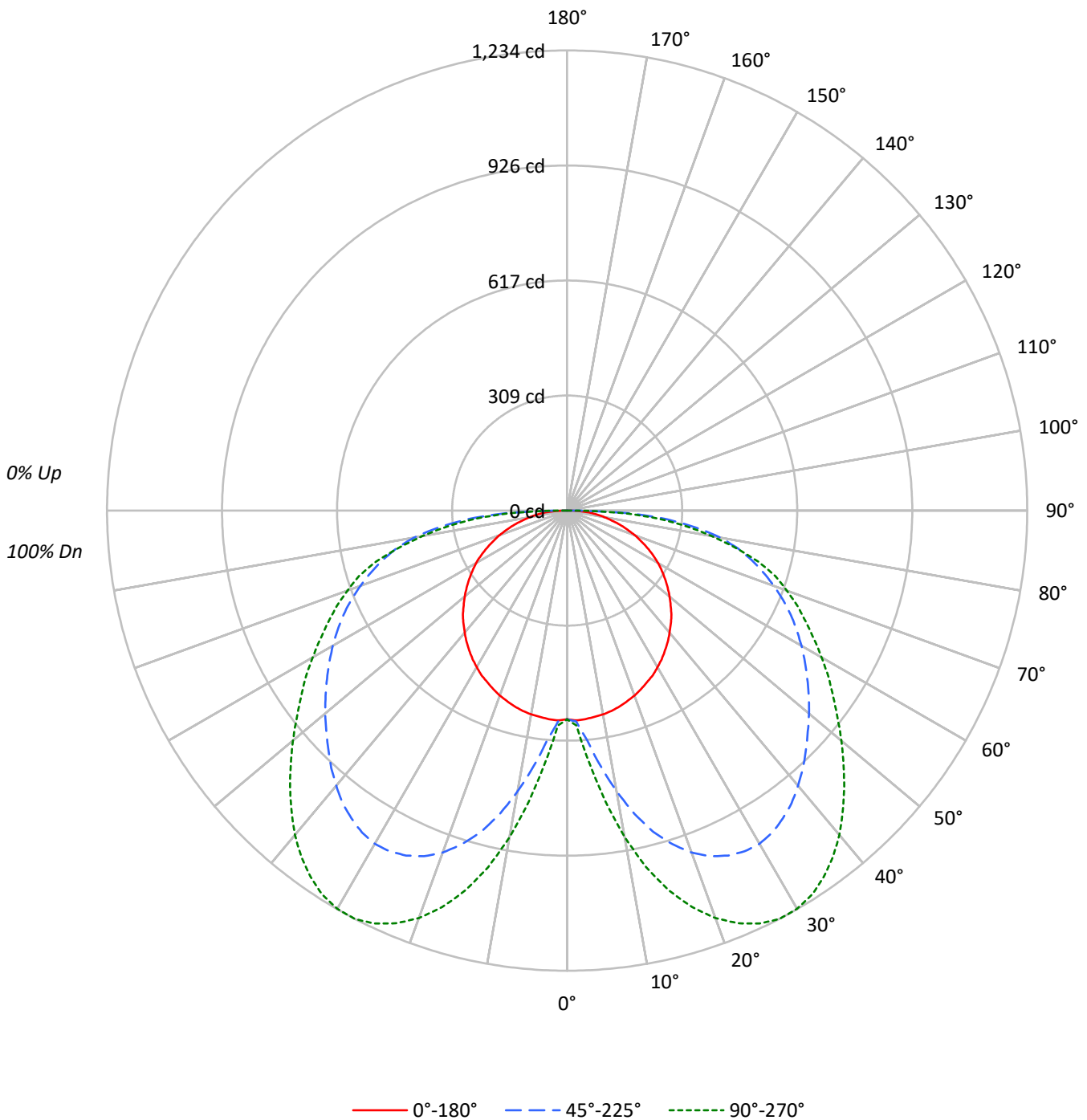
Input Watts (W): 55.5
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	753	753	753
5°	758	836	915
10°	758	1044	1214
15°	758	1242	1468
20°	756	1398	1665
25°	753	1515	1814
30°	753	1603	1915
35°	752	1656	1970
40°	751	1692	1995
45°	753	1724	2000
50°	751	1773	2010
55°	752	1844	2043
60°	760	1953	2120
65°	756	2107	2249
70°	759	2321	2466
75°	763	2662	2761
80°	791	3226	3052
85°	911	4160	3767



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	62.9	1.6
10°-20°	240.1	6.2
20°-30°	438.9	11.3
30°-40°	583.7	15.0
40°-50°	642.7	16.6
50°-60°	636.9	16.4
60°-70°	583.1	15.0
70°-80°	469.5	12.1
80°-90°	225.3	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°	741.8	19.1
0°-40°	1325.5	34.1
0°-60°	2605.1	67.1
0°-90°	3883.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3883.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	560	560	560	560	560	
5°	561	566	619	661	678	53
15°	544	684	892	1010	1054	153
25°	507	760	1021	1168	1222	234
35°	458	747	1008	1150	1199	287
45°	396	674	906	1015	1051	304
55°	321	594	786	852	871	287
65°	238	514	662	691	706	235
75°	147	400	512	526	531	155
85°	59	218	270	247	244	61
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°	559.8	559.8	559.8	559.8	559.8	559.8	559.8	559.8	559.8	559.8	559.8
2.5°	563.0	563.0	561.4	561.4	561.4	561.4	561.4	561.4	563.0	566.2	567.8
5°	561.4	561.4	561.4	561.4	563.0	569.4	577.3	590.1	602.9	618.8	633.2
7.5°	558.2	558.2	558.2	563.0	577.3	599.7	620.4	644.3	668.3	692.2	711.3
10°	555.0	555.0	558.2	575.8	604.5	638.0	669.9	701.7	732.1	763.9	791.1
12.5°	550.2	550.2	559.8	591.7	633.2	674.6	716.1	754.4	792.7	832.5	862.8
15°	543.9	543.9	564.6	607.6	658.7	709.7	757.6	803.8	848.5	891.5	925.0
17.5°	535.9	539.1	569.4	623.6	681.0	740.0	792.7	845.3	893.1	937.8	977.7
20°	527.9	532.7	574.2	636.4	700.2	765.5	823.0	877.2	928.2	976.1	1017.5
22.5°	518.3	524.7	577.3	645.9	714.5	783.1	843.7	901.1	955.3	1003.2	1046.2
25°	507.2	516.7	578.9	650.7	725.7	794.3	856.5	915.5	971.3	1020.7	1063.8
27.5°	497.6	510.4	577.3	653.9	730.5	800.6	864.4	923.4	980.9	1030.3	1075.0
30°	484.8	500.8	574.2	652.3	728.9	800.6	862.8	923.4	980.9	1031.9	1075.0
32.5°	472.1	491.2	566.2	645.9	724.1	792.7	856.5	917.1	972.9	1023.9	1065.4
35°	457.7	480.1	556.6	636.4	712.9	781.5	843.7	902.7	960.1	1008.0	1049.4
37.5°	443.4	467.3	543.9	623.6	698.6	765.5	826.1	885.2	939.4	988.8	1027.1
40°	427.4	454.5	531.1	609.2	681.0	746.4	807.0	864.4	917.1	963.3	1000.0
42.5°	411.5	440.2	516.7	593.3	663.5	725.7	786.3	840.5	891.5	936.2	969.7
45°	395.5	424.2	499.2	575.8	642.7	704.9	762.4	816.6	864.4	905.9	937.8
47.5°	376.4	408.3	483.2	556.6	622.0	684.2	740.0	791.1	838.9	875.6	905.9
50°	358.8	392.3	465.7	537.5	601.3	663.5	717.7	767.1	811.8	846.9	874.0
52.5°	339.7	374.8	448.2	519.9	583.7	642.7	697.0	743.2	783.1	816.6	842.1
55°	320.6	357.3	432.2	500.8	564.6	623.6	674.6	719.3	757.6	786.3	810.2
57.5°	301.4	339.7	414.7	484.8	547.0	604.5	653.9	693.8	730.5	756.0	776.7
60°	282.3	322.2	395.5	465.7	529.5	583.7	631.6	669.9	701.7	725.7	743.2
62.5°	260.0	303.0	378.0	446.6	508.8	561.4	607.6	642.7	673.0	693.8	708.1
65°	237.6	283.9	358.8	427.4	488.0	539.1	582.1	615.6	642.7	661.9	671.4
67.5°	215.3	264.8	339.7	408.3	465.7	513.6	555.0	586.9	610.8	626.8	634.8
70°	193.0	242.4	317.4	384.4	440.2	484.8	524.7	555.0	575.8	590.1	596.5
72.5°	169.1	220.1	293.5	358.8	411.5	456.1	492.8	521.5	540.7	551.8	556.6
75°	146.7	196.2	267.9	330.1	379.6	421.0	456.1	484.8	504.0	512.0	516.7
77.5°	122.8	172.2	240.8	298.2	344.5	382.8	416.3	443.4	460.9	468.9	473.7
80°	102.1	146.7	208.9	261.6	304.6	341.3	371.6	400.3	414.7	416.3	411.5
82.5°	79.7	121.2	175.4	221.7	258.4	293.5	322.2	341.3	347.7	347.7	342.9
85°	59.0	90.9	137.2	173.8	205.7	231.3	248.8	264.8	267.9	269.5	263.2
87.5°	33.5	51.0	81.3	105.3	124.4	141.9	154.7	162.7	162.7	164.3	161.1
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°	559.8	559.8	559.8	559.8	559.8	559.8	559.8	559.8
2.5°	567.8	571.0	571.0	574.2	575.8	575.8	577.3	577.3
5°	639.5	652.3	657.1	665.1	669.9	676.2	679.4	677.8
7.5°	725.7	744.8	754.4	765.5	778.3	781.5	786.3	786.3
10°	811.8	834.1	848.5	861.2	875.6	882.0	888.3	888.3
12.5°	889.9	912.3	931.4	947.4	961.7	971.3	977.7	979.3
15°	953.7	982.4	1001.6	1019.1	1035.1	1044.6	1052.6	1054.2
17.5°	1006.4	1033.5	1059.0	1078.1	1092.5	1106.8	1111.6	1114.8
20°	1047.8	1076.5	1103.7	1122.8	1138.7	1153.1	1159.5	1162.7
22.5°	1078.1	1108.4	1135.6	1156.3	1172.2	1186.6	1194.6	1197.8
25°	1097.3	1129.2	1157.9	1178.6	1196.2	1210.5	1218.5	1221.7
27.5°	1110.0	1141.9	1169.0	1189.8	1207.3	1221.7	1229.7	1234.4
30°	1110.0	1141.9	1169.0	1189.8	1207.3	1221.7	1229.7	1232.8
32.5°	1100.5	1132.4	1159.5	1178.6	1196.2	1210.5	1218.5	1221.7
35°	1082.9	1114.8	1140.3	1159.5	1177.0	1189.8	1197.8	1199.4
37.5°	1059.0	1089.3	1113.2	1132.4	1148.3	1161.1	1169.0	1170.6
40°	1031.9	1060.6	1082.9	1100.5	1114.8	1126.0	1134.0	1135.6
42.5°	1000.0	1027.1	1046.2	1063.8	1076.5	1087.7	1095.7	1094.1
45°	966.5	992.0	1008.0	1022.3	1036.7	1044.6	1051.0	1051.0
47.5°	933.0	953.7	968.1	980.9	992.0	1000.0	1004.8	1004.8
50°	897.9	915.5	928.2	939.4	949.0	955.3	960.1	960.1
52.5°	862.8	878.8	888.3	897.9	905.9	910.7	915.5	913.9
55°	827.7	840.5	846.9	856.5	862.8	869.2	872.4	870.8
57.5°	792.7	800.6	807.0	815.0	821.4	827.7	829.3	830.9
60°	754.4	762.4	767.1	775.1	781.5	786.3	789.5	787.9
62.5°	717.7	722.5	727.3	733.6	738.4	744.8	746.4	746.4
65°	677.8	682.6	687.4	693.8	698.6	704.9	708.1	706.5
67.5°	639.5	644.3	649.1	653.9	660.3	666.7	668.3	668.3
70°	599.7	604.5	607.6	614.0	618.8	625.2	626.8	626.8
72.5°	561.4	564.6	567.8	574.2	577.3	582.1	585.3	585.3
75°	518.3	521.5	524.7	527.9	529.5	531.1	532.7	531.1
77.5°	470.5	467.3	464.1	464.1	460.9	462.5	464.1	462.5
80°	405.1	401.9	398.7	397.1	393.9	393.9	395.5	393.9
82.5°	336.5	330.1	327.0	325.4	322.2	322.2	322.2	322.2
85°	253.6	250.4	248.8	245.6	242.4	240.8	242.4	244.0
87.5°	157.9	154.7	151.5	148.3	146.7	145.1	148.3	143.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)