

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: P188473

Luminaire Tested: **24SR-LD2-64-C-UNV-L835-CD1-BR-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188473
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-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: 4004.0 lumens
Efficiency: N/A
Efficacy: 72.1 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

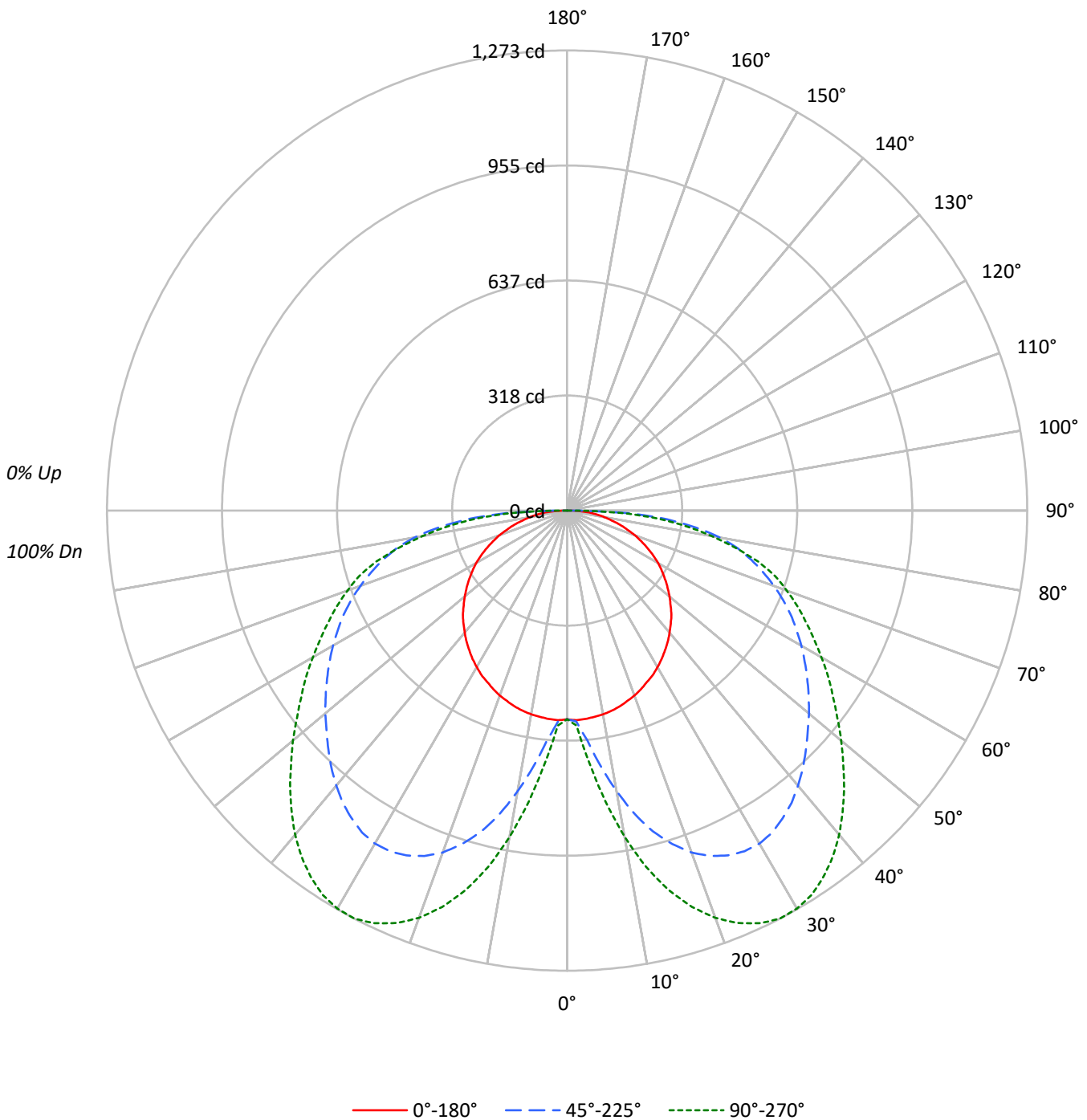
Input Watts (W): 55.5
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	777	777	777
5°	782	862	944
10°	782	1076	1251
15°	781	1281	1514
20°	779	1441	1717
25°	776	1563	1870
30°	777	1653	1975
35°	775	1707	2031
40°	774	1745	2057
45°	776	1777	2062
50°	774	1828	2072
55°	776	1902	2106
60°	783	2014	2186
65°	780	2173	2319
70°	783	2394	2543
75°	787	2744	2847
80°	816	3326	3147
85°	939	4290	3884



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	64.8	1.6
10°-20°	247.6	6.2
20°-30°	452.6	11.3
30°-40°	601.9	15.0
40°-50°	662.7	16.6
50°-60°	656.8	16.4
60°-70°	601.3	15.0
70°-80°	484.1	12.1
80°-90°	232.3	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°	765.0	19.1
0°-40°	1366.8	34.1
0°-60°	2686.3	67.1
0°-90°	4004.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4004.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	577	577	577	577	577	
5°	579	584	638	682	699	55
15°	561	706	919	1042	1087	158
25°	523	784	1052	1205	1260	242
35°	472	770	1039	1186	1237	296
45°	408	695	934	1047	1084	314
55°	331	613	811	878	898	296
65°	245	530	682	712	728	243
75°	151	413	528	543	548	159
85°	61	225	278	255	252	63
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°	577.2	577.2	577.2	577.2	577.2	577.2	577.2	577.2	577.2	577.2	577.2
2.5°	580.5	580.5	578.9	578.9	578.9	578.9	578.9	578.9	580.5	583.8	585.5
5°	578.9	578.9	578.9	578.9	580.5	587.1	595.3	608.5	621.7	638.1	652.9
7.5°	575.6	575.6	575.6	580.5	595.3	618.4	639.7	664.4	689.1	713.7	733.5
10°	572.3	572.3	575.6	593.7	623.3	657.8	690.7	723.6	754.9	787.8	815.7
12.5°	567.4	567.4	577.2	610.1	652.9	695.7	738.4	777.9	817.4	858.5	889.7
15°	560.8	560.8	582.2	626.6	679.2	731.8	781.2	828.9	874.9	919.3	953.9
17.5°	552.6	555.9	587.1	643.0	702.2	763.1	817.4	871.6	921.0	967.0	1008.1
20°	544.4	549.3	592.0	656.2	722.0	789.4	848.6	904.5	957.1	1006.5	1049.2
22.5°	534.5	541.1	595.3	666.1	736.8	807.5	870.0	929.2	985.1	1034.4	1078.8
25°	523.0	532.8	597.0	671.0	748.3	819.0	883.1	944.0	1001.5	1052.5	1096.9
27.5°	513.1	526.3	595.3	674.3	753.2	825.6	891.4	952.2	1011.4	1062.4	1108.4
30°	500.0	516.4	592.0	672.6	751.6	825.6	889.7	952.2	1011.4	1064.0	1108.4
32.5°	486.8	506.5	583.8	666.1	746.6	817.4	883.1	945.6	1003.2	1055.8	1098.6
35°	472.0	495.0	574.0	656.2	735.1	805.8	870.0	930.8	990.0	1039.4	1082.1
37.5°	457.2	481.9	560.8	643.0	720.3	789.4	851.9	912.7	968.7	1019.6	1059.1
40°	440.7	468.7	547.6	628.2	702.2	769.7	832.2	891.4	945.6	993.3	1031.2
42.5°	424.3	453.9	532.8	611.8	684.1	748.3	810.8	866.7	919.3	965.4	999.9
45°	407.9	437.5	514.8	593.7	662.8	726.9	786.1	842.0	891.4	934.1	967.0
47.5°	388.1	421.0	498.3	574.0	641.4	705.5	763.1	815.7	865.0	902.9	934.1
50°	370.0	404.6	480.2	554.2	620.0	684.1	740.1	791.0	837.1	873.3	901.2
52.5°	350.3	386.5	462.1	536.1	601.9	662.8	718.7	766.4	807.5	842.0	868.3
55°	330.6	368.4	445.7	516.4	582.2	643.0	695.7	741.7	781.2	810.8	835.4
57.5°	310.8	350.3	427.6	500.0	564.1	623.3	674.3	715.4	753.2	779.5	800.9
60°	291.1	332.2	407.9	480.2	546.0	601.9	651.3	690.7	723.6	748.3	766.4
62.5°	268.1	312.5	389.8	460.5	524.6	578.9	626.6	662.8	694.0	715.4	730.2
65°	245.0	292.7	370.0	440.7	503.2	555.9	600.3	634.8	662.8	682.5	692.4
67.5°	222.0	273.0	350.3	421.0	480.2	529.6	572.3	605.2	629.9	646.3	654.5
70°	199.0	250.0	327.3	396.3	453.9	500.0	541.1	572.3	593.7	608.5	615.1
72.5°	174.3	227.0	302.6	370.0	424.3	470.3	508.2	537.8	557.5	569.0	574.0
75°	151.3	202.3	276.3	340.4	391.4	434.2	470.3	500.0	519.7	527.9	532.8
77.5°	126.6	177.6	248.3	307.5	355.2	394.7	429.2	457.2	475.3	483.5	488.4
80°	105.3	151.3	215.4	269.7	314.1	351.9	383.2	412.8	427.6	429.2	424.3
82.5°	82.2	125.0	180.9	228.6	266.4	302.6	332.2	351.9	358.5	358.5	353.6
85°	60.8	93.7	141.4	179.3	212.2	238.5	256.6	273.0	276.3	277.9	271.4
87.5°	34.5	52.6	83.9	108.5	128.3	146.4	159.5	167.7	167.7	169.4	166.1
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°	577.2	577.2	577.2	577.2	577.2	577.2	577.2	577.2
2.5°	585.5	588.8	588.8	592.0	593.7	593.7	595.3	595.3
5°	659.5	672.6	677.6	685.8	690.7	697.3	700.6	698.9
7.5°	748.3	768.0	777.9	789.4	802.6	805.8	810.8	810.8
10°	837.1	860.1	874.9	888.1	902.9	909.5	916.0	916.0
12.5°	917.7	940.7	960.4	976.9	991.7	1001.5	1008.1	1009.8
15°	983.5	1013.1	1032.8	1050.9	1067.3	1077.2	1085.4	1087.1
17.5°	1037.7	1065.7	1092.0	1111.7	1126.5	1141.3	1146.3	1149.6
20°	1080.5	1110.1	1138.0	1157.8	1174.2	1189.0	1195.6	1198.9
22.5°	1111.7	1143.0	1170.9	1192.3	1208.8	1223.6	1231.8	1235.1
25°	1131.5	1164.4	1194.0	1215.3	1233.4	1248.2	1256.5	1259.7
27.5°	1144.6	1177.5	1205.5	1226.9	1244.9	1259.7	1268.0	1272.9
30°	1144.6	1177.5	1205.5	1226.9	1244.9	1259.7	1268.0	1271.3
32.5°	1134.8	1167.7	1195.6	1215.3	1233.4	1248.2	1256.5	1259.7
35°	1116.7	1149.6	1175.9	1195.6	1213.7	1226.9	1235.1	1236.7
37.5°	1092.0	1123.2	1147.9	1167.7	1184.1	1197.3	1205.5	1207.1
40°	1064.0	1093.6	1116.7	1134.8	1149.6	1161.1	1169.3	1170.9
42.5°	1031.2	1059.1	1078.8	1096.9	1110.1	1121.6	1129.8	1128.2
45°	996.6	1022.9	1039.4	1054.2	1069.0	1077.2	1083.8	1083.8
47.5°	962.1	983.5	998.3	1011.4	1022.9	1031.2	1036.1	1036.1
50°	925.9	944.0	957.1	968.7	978.5	985.1	990.0	990.0
52.5°	889.7	906.2	916.0	925.9	934.1	939.1	944.0	942.3
55°	853.5	866.7	873.3	883.1	889.7	896.3	899.6	897.9
57.5°	817.4	825.6	832.2	840.4	847.0	853.5	855.2	856.8
60°	777.9	786.1	791.0	799.3	805.8	810.8	814.1	812.4
62.5°	740.1	745.0	749.9	756.5	761.4	768.0	769.7	769.7
65°	698.9	703.9	708.8	715.4	720.3	726.9	730.2	728.5
67.5°	659.5	664.4	669.3	674.3	680.9	687.4	689.1	689.1
70°	618.4	623.3	626.6	633.2	638.1	644.7	646.3	646.3
72.5°	578.9	582.2	585.5	592.0	595.3	600.3	603.6	603.6
75°	534.5	537.8	541.1	544.4	546.0	547.6	549.3	547.6
77.5°	485.2	481.9	478.6	478.6	475.3	476.9	478.6	476.9
80°	417.7	414.4	411.1	409.5	406.2	406.2	407.9	406.2
82.5°	347.0	340.4	337.1	335.5	332.2	332.2	332.2	332.2
85°	261.5	258.2	256.6	253.3	250.0	248.3	250.0	251.6
87.5°	162.8	159.5	156.2	152.9	151.3	149.7	152.9	148.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)