

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: P188648

Luminaire Tested: **24SR-LD2-39-C-UNV-L835-CD1-ST-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188648
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24808)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24SR-LD2-39-C-UNV-L835-CD1-ST-U
Description: METALUX 2X4 SKYRIDGE LED FIXTURE WITH STRAW SKYTRIM.

Light Source: EATON LED 3500K
Ballast/Driver: OSRAM ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3782.0 lumens
Efficiency: N/A
Efficacy: 118.6 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 1.62 / 1.56
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

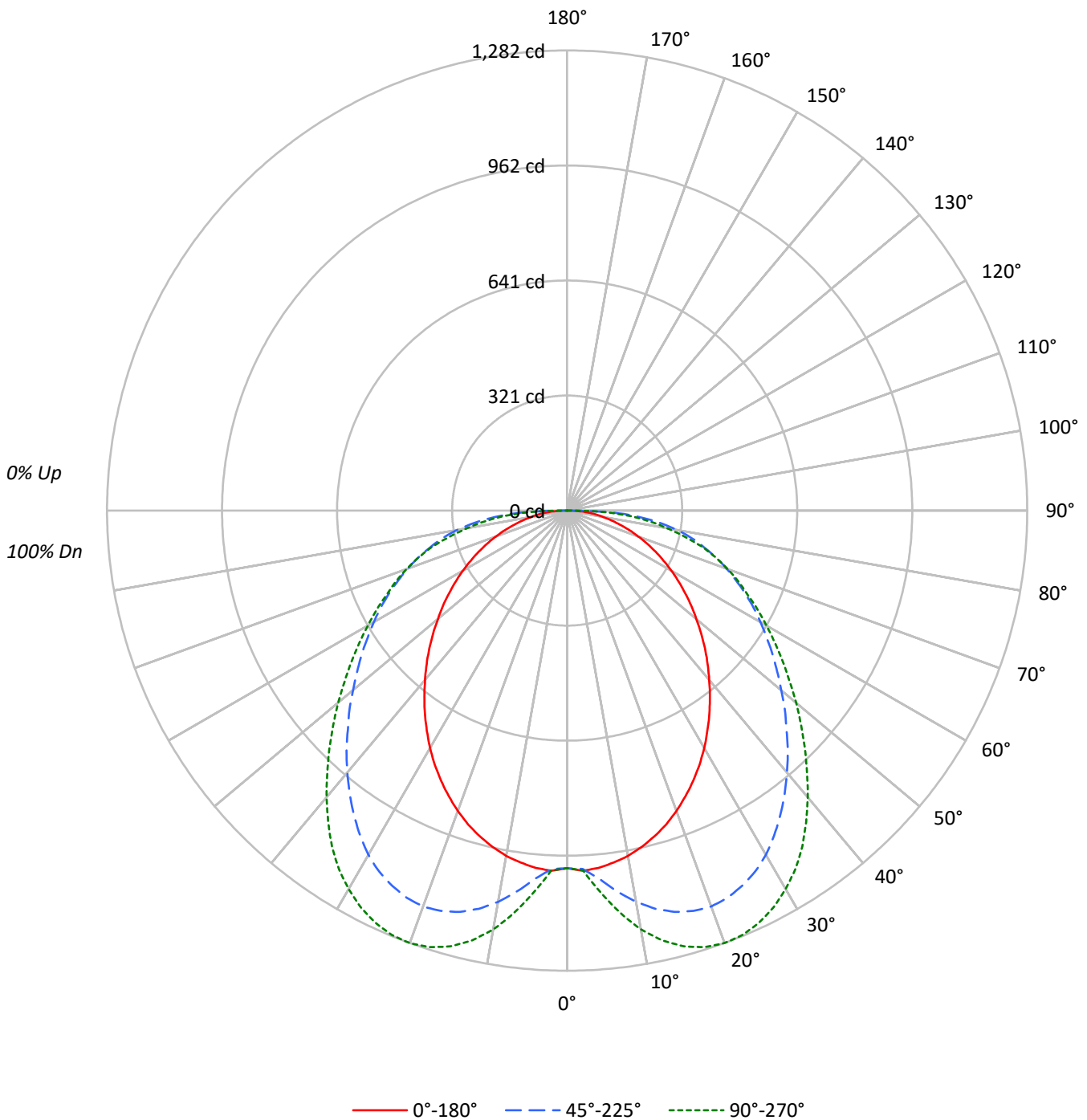
Input Watts (W): 31.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	107	102	97	92	104	99	95	91	95	91	88		91	88	85		87	85	83	80
2	97	88	80	74	94	86	79	73	82	76	71		79	74	69		76	71	68	66
3	88	76	68	61	85	75	67	60	72	65	59		69	63	58		66	61	57	54
4	80	67	58	51	78	66	57	50	63	56	50		61	54	49		59	53	48	46
5	74	60	50	43	71	59	50	43	57	49	43		55	48	42		53	47	42	40
6	68	54	44	38	66	53	44	38	51	43	37		49	42	37		48	41	37	34
7	63	49	40	33	61	48	39	33	46	39	33		45	38	33		43	37	32	30
8	58	44	36	30	57	44	35	29	42	35	29		41	34	29		40	34	29	27
9	55	41	32	26	53	40	32	26	39	31	26		38	31	26		37	31	26	24
10	51	37	29	24	50	37	29	24	36	29	24		35	28	24		34	28	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1340	1340	1340
5°	1350	1391	1441
10°	1335	1512	1619
15°	1309	1612	1751
20°	1275	1681	1836
25°	1234	1712	1880
30°	1187	1721	1891
35°	1135	1701	1876
40°	1082	1673	1832
45°	1033	1645	1782
50°	983	1631	1743
55°	942	1640	1721
60°	904	1674	1725
65°	866	1744	1767
70°	830	1860	1872
75°	791	2051	2020
80°	786	2421	2185
85°	861	3117	2725



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	100.1	2.6
10°-20°	317.9	8.4
20°-30°	508.3	13.4
30°-40°	615.3	16.3
40°-50°	628.4	16.6
50°-60°	579.1	15.3
60°-70°	492.6	13.0
70°-80°	368.3	9.7
80°-90°	172.0	4.5
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°	926.3	24.5
0°-40°	1541.6	40.8
0°-60°	2749.1	72.7
0°-90°	3782.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3782.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	996	996	996	996	996	
5°	999	994	1030	1056	1067	95
15°	939	1024	1158	1230	1257	265
25°	831	988	1154	1236	1266	382
35°	691	873	1036	1114	1142	432
45°	543	722	864	920	936	419
55°	402	584	699	726	734	360
65°	272	462	548	551	555	270
75°	152	334	395	389	388	163
85°	56	176	202	179	176	59
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°	996.2	996.2	996.2	996.2	996.2	996.2	996.2	996.2	996.2	996.2	996.2
2.5°	1004.3	1002.3	999.3	995.2	994.2	994.2	993.2	993.2	995.2	999.3	1005.4
5°	999.3	997.2	994.2	991.2	992.2	995.2	1001.3	1008.4	1018.5	1029.7	1041.9
7.5°	989.1	988.1	986.1	986.1	994.2	1008.4	1022.6	1036.8	1053.0	1070.3	1088.5
10°	977.0	975.9	974.9	983.0	1001.3	1022.6	1042.9	1062.2	1084.5	1106.8	1128.1
12.5°	959.7	959.7	962.7	981.0	1006.4	1032.7	1058.1	1083.5	1109.8	1136.2	1159.6
15°	939.4	939.4	949.6	975.9	1008.4	1038.8	1069.3	1097.7	1128.1	1157.5	1181.9
17.5°	917.1	916.1	935.4	967.8	1004.3	1039.8	1074.3	1105.8	1137.2	1169.7	1195.1
20°	890.7	892.7	918.1	955.6	996.2	1035.8	1072.3	1105.8	1139.3	1173.8	1198.1
22.5°	861.3	865.4	896.8	938.4	984.1	1024.6	1063.2	1098.7	1133.2	1167.7	1192.0
25°	830.9	835.9	874.5	918.1	966.8	1008.4	1047.0	1084.5	1119.0	1153.5	1177.8
27.5°	798.4	805.5	849.1	894.8	943.5	987.1	1025.6	1064.2	1098.7	1134.2	1156.5
30°	763.9	773.0	819.7	866.4	917.1	959.7	998.3	1037.8	1073.3	1107.8	1129.1
32.5°	727.4	738.5	786.2	837.0	886.7	928.3	966.8	1007.4	1040.9	1073.3	1094.6
35°	690.9	704.1	752.7	803.5	852.2	893.8	931.3	971.9	1005.4	1035.8	1056.1
37.5°	653.3	669.6	718.3	768.0	815.6	857.2	895.8	933.3	966.8	995.2	1015.5
40°	615.8	634.1	682.8	731.4	779.1	818.7	856.2	893.8	927.2	952.6	971.9
42.5°	579.3	597.5	647.2	695.9	739.6	780.1	817.7	854.2	884.6	910.0	927.2
45°	542.8	562.0	610.7	658.4	702.0	742.6	780.1	813.6	843.0	864.3	881.6
47.5°	506.2	526.5	575.2	622.9	664.5	704.1	742.6	773.0	801.4	822.7	837.0
50°	469.7	492.0	539.7	588.4	629.0	668.5	705.1	733.5	759.9	779.1	792.3
52.5°	436.2	457.5	506.2	554.9	595.5	635.1	669.6	697.0	720.3	737.5	750.7
55°	401.7	425.1	475.8	522.5	564.1	603.6	635.1	660.4	681.7	699.0	709.1
57.5°	368.3	394.6	444.3	491.0	533.6	571.2	601.6	625.9	645.2	659.4	668.5
60°	335.8	363.2	414.9	461.6	504.2	540.7	570.1	592.5	609.7	621.9	630.0
62.5°	303.3	334.8	385.5	434.2	474.8	510.3	537.7	558.0	574.2	585.4	590.4
65°	271.9	304.3	357.1	404.8	445.4	478.8	505.2	523.5	538.7	547.8	549.9
67.5°	241.4	275.9	328.7	376.4	415.9	447.4	472.8	490.0	503.2	509.3	511.3
70°	211.0	246.5	300.3	348.0	385.5	415.9	439.3	455.5	466.7	472.8	472.8
72.5°	182.6	218.1	271.9	318.5	353.0	383.5	404.8	420.0	430.1	434.2	433.2
75°	152.2	188.7	241.4	286.1	319.6	348.0	369.3	384.5	391.6	394.6	393.6
77.5°	125.8	160.3	211.0	252.6	288.1	311.4	332.8	347.0	354.1	356.1	355.1
80°	101.4	133.9	178.5	218.1	248.5	273.9	293.2	308.4	314.5	312.5	303.3
82.5°	78.1	107.5	147.1	181.6	210.0	233.3	253.6	262.8	263.8	258.7	250.6
85°	55.8	78.1	111.6	141.0	167.4	184.6	196.8	203.9	205.9	201.9	192.8
87.5°	31.4	45.7	65.9	87.2	107.5	119.7	126.8	130.9	133.9	129.9	123.8
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°	996.2	996.2	996.2	996.2	996.2	996.2	996.2	996.2
2.5°	999.3	1002.3	1001.3	1003.3	1004.3	1004.3	1001.3	1003.3
5°	1042.9	1049.0	1053.0	1059.1	1063.2	1063.2	1064.2	1067.2
7.5°	1090.6	1100.7	1109.8	1117.0	1122.0	1124.1	1127.1	1130.1
10°	1135.2	1147.4	1157.5	1166.7	1172.7	1176.8	1179.8	1184.9
12.5°	1169.7	1183.9	1195.1	1205.2	1213.3	1219.4	1222.5	1226.5
15°	1195.1	1211.3	1224.5	1235.6	1242.7	1249.8	1252.9	1256.9
17.5°	1210.3	1226.5	1240.7	1251.9	1260.0	1267.1	1271.2	1275.2
20°	1214.3	1230.6	1245.8	1256.9	1265.1	1274.2	1278.3	1282.3
22.5°	1208.3	1224.5	1240.7	1252.9	1262.0	1271.2	1275.2	1279.3
25°	1196.1	1213.3	1229.6	1241.7	1249.8	1259.0	1264.1	1266.1
27.5°	1176.8	1194.1	1210.3	1221.4	1230.6	1239.7	1244.8	1245.8
30°	1149.4	1166.7	1182.9	1194.1	1204.2	1212.3	1217.4	1217.4
32.5°	1115.9	1132.2	1149.4	1159.6	1168.7	1176.8	1181.9	1183.9
35°	1077.4	1093.6	1109.8	1119.0	1129.1	1135.2	1139.3	1142.3
37.5°	1035.8	1052.0	1065.2	1073.3	1084.5	1088.5	1094.6	1093.6
40°	991.2	1004.3	1016.5	1023.6	1032.7	1037.8	1043.9	1042.9
42.5°	944.5	957.7	967.8	975.9	981.0	986.1	990.1	989.1
45°	896.8	909.0	918.1	922.2	930.3	932.3	936.4	936.4
47.5°	849.1	859.3	867.4	873.5	877.5	879.6	883.6	883.6
50°	803.5	812.6	817.7	822.7	826.8	829.9	831.9	832.9
52.5°	758.8	765.9	770.0	774.1	778.1	780.1	782.2	781.2
55°	716.2	721.3	724.3	727.4	730.4	733.5	733.5	733.5
57.5°	673.6	676.7	679.7	681.7	684.8	686.8	686.8	686.8
60°	632.0	635.1	636.1	638.1	641.2	642.2	643.2	641.2
62.5°	591.4	592.5	593.5	594.5	597.5	599.6	599.6	598.5
65°	549.9	549.9	550.9	551.9	553.9	555.9	557.0	554.9
67.5°	509.3	509.3	510.3	510.3	513.3	515.4	516.4	516.4
70°	469.7	468.7	470.7	471.7	473.8	473.8	475.8	475.8
72.5°	430.1	429.1	431.2	431.2	433.2	434.2	434.2	434.2
75°	391.6	388.5	389.6	387.5	389.6	389.6	388.5	388.5
77.5°	350.0	342.9	340.9	336.8	336.8	336.8	334.8	334.8
80°	297.2	290.1	287.1	284.1	284.1	283.0	282.0	282.0
82.5°	244.5	238.4	235.4	232.3	234.3	231.3	232.3	233.3
85°	187.7	182.6	180.6	177.5	176.5	176.5	177.5	176.5
87.5°	121.7	116.7	116.7	113.6	115.7	112.6	109.6	111.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)