

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: P188644

Luminaire Tested: **24SR-LD2-34-C-UNV-L840-CD1-ST-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188644
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-LD2-34-C-UNV-L840-CD1-ST-U
Description: METALUX 2X4 SKYRIDGE LED FIXTURE WITH STRAW SKYTRIM.

Light Source: EATON LED 4000K
Ballast/Driver: OSRAM ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3343.0 lumens
Efficiency: N/A
Efficacy: 122.9 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

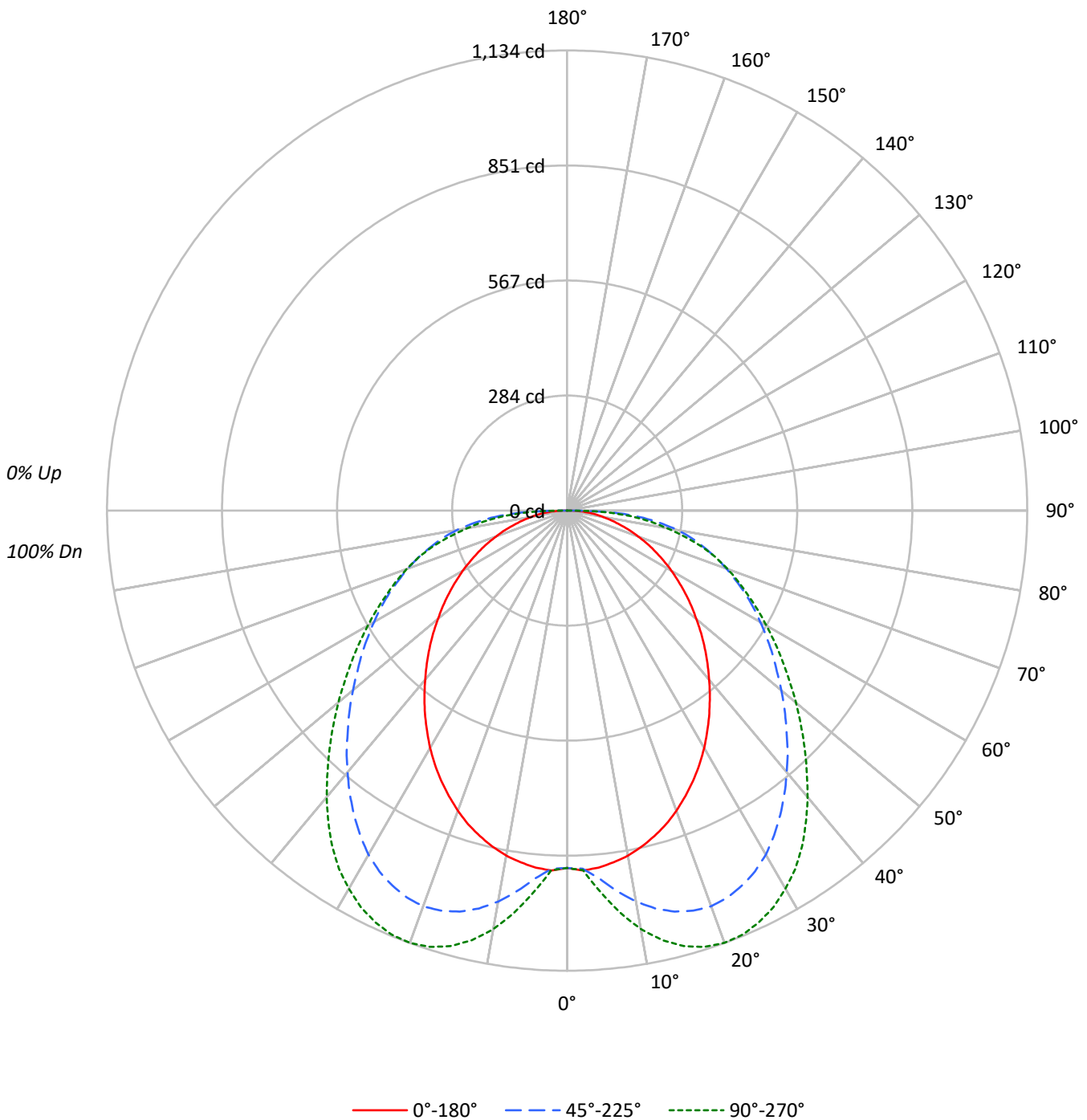
Input Watts (W): 27.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P188644

CATALOG NUMBER: 24SR-LD2-34-C-UNV-L840-CD1-ST-U

Luminous Intensity Polar Plot





TEST NUMBER: P188644

CATALOG NUMBER: 24SR-LD2-34-C-UNV-L840-CD1-ST-U

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°	1185	1185	1185
5°	1193	1229	1274
10°	1180	1337	1431
15°	1157	1425	1548
20°	1127	1486	1623
25°	1090	1514	1661
30°	1049	1521	1672
35°	1003	1504	1658
40°	956	1479	1619
45°	913	1454	1575
50°	869	1442	1541
55°	833	1449	1521
60°	799	1479	1525
65°	765	1542	1562
70°	734	1644	1655
75°	699	1813	1785
80°	695	2140	1932
85°	761	2754	2408



TEST NUMBER: P188644

CATALOG NUMBER: 24SR-LD2-34-C-UNV-L840-CD1-ST-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	88.5	2.6
10°-20°	281.0	8.4
20°-30°	449.3	13.4
30°-40°	543.9	16.3
40°-50°	555.5	16.6
50°-60°	511.9	15.3
60°-70°	435.4	13.0
70°-80°	325.5	9.7
80°-90°	152.1	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°	818.8	24.5
0°-40°	1362.7	40.8
0°-60°	2430.0	72.7
0°-90°	3343.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3343.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	881	881	881	881	881	
5°	883	878	910	934	943	84
15°	830	905	1023	1087	1111	234
25°	734	873	1020	1092	1119	338
35°	611	772	916	985	1010	382
45°	480	638	764	813	828	370
55°	355	516	618	642	648	318
65°	240	408	484	487	490	238
75°	134	295	349	343	343	144
85°	49	156	178	158	156	52
90°	0	0	0	0	0	



TEST NUMBER: P188644

CATALOG NUMBER: 24SR-LD2-34-C-UNV-L840-CD1-ST-U

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	880.6	880.6	880.6	880.6	880.6	880.6	880.6	880.6	880.6	880.6	880.6
2.5°	887.8	886.0	883.3	879.7	878.8	878.8	877.9	877.9	879.7	883.3	888.7
5°	883.3	881.5	878.8	876.1	877.0	879.7	885.1	891.3	900.3	910.2	920.9
7.5°	874.3	873.4	871.6	871.6	878.8	891.3	903.9	916.5	930.8	946.0	962.2
10°	863.6	862.7	861.8	868.9	885.1	903.9	921.8	938.9	958.6	978.3	997.2
12.5°	848.3	848.3	851.0	867.1	889.6	912.9	935.3	957.7	981.0	1004.3	1025.0
15°	830.4	830.4	839.3	862.7	891.3	918.3	945.2	970.3	997.2	1023.2	1044.7
17.5°	810.6	809.7	826.8	855.5	887.8	919.1	949.6	977.4	1005.2	1033.9	1056.3
20°	787.3	789.1	811.5	844.7	880.6	915.6	947.8	977.4	1007.0	1037.5	1059.0
22.5°	761.3	764.9	792.7	829.5	869.8	905.7	939.8	971.2	1001.6	1032.1	1053.7
25°	734.4	738.9	773.0	811.5	854.6	891.3	925.4	958.6	989.1	1019.6	1041.1
27.5°	705.7	712.0	750.6	790.9	834.0	872.5	906.6	940.7	971.2	1002.5	1022.3
30°	675.2	683.3	724.6	765.8	810.6	848.3	882.4	917.4	948.7	979.2	998.1
32.5°	643.0	652.8	695.0	739.8	783.7	820.5	854.6	890.5	920.0	948.7	967.6
35°	610.7	622.3	665.4	710.2	753.3	790.0	823.2	859.1	888.7	915.6	933.5
37.5°	577.5	591.8	634.9	678.8	721.0	757.7	791.8	825.0	854.6	879.7	897.6
40°	544.3	560.5	603.5	646.5	688.7	723.7	756.8	790.0	819.6	842.0	859.1
42.5°	512.0	528.2	572.1	615.2	653.7	689.6	722.8	755.0	781.9	804.4	819.6
45°	479.8	496.8	539.8	582.0	620.5	656.4	689.6	719.2	745.2	764.0	779.3
47.5°	447.5	465.4	508.4	550.6	587.4	622.3	656.4	683.3	708.4	727.2	739.8
50°	415.2	434.9	477.1	520.1	556.0	590.9	623.2	648.3	671.7	688.7	700.3
52.5°	385.6	404.4	447.5	490.5	526.4	561.4	591.8	616.1	636.7	651.9	663.6
55°	355.1	375.7	420.6	461.8	498.6	533.6	561.4	583.8	602.6	617.8	626.8
57.5°	325.5	348.8	392.8	434.0	471.7	504.9	531.8	553.3	570.3	582.9	590.9
60°	296.8	321.0	366.8	408.0	445.7	478.0	504.0	523.7	538.9	549.7	556.9
62.5°	268.1	295.9	340.8	383.8	419.7	451.1	475.3	493.2	507.5	517.4	521.9
65°	240.3	269.0	315.6	357.8	393.7	423.3	446.6	462.7	476.2	484.2	486.0
67.5°	213.4	243.9	290.5	332.7	367.7	395.5	417.9	433.1	444.8	450.2	452.0
70°	186.5	217.9	265.4	307.6	340.8	367.7	388.3	402.6	412.5	417.9	417.9
72.5°	161.4	192.8	240.3	281.6	312.1	339.0	357.8	371.2	380.2	383.8	382.9
75°	134.5	166.8	213.4	252.9	282.5	307.6	326.4	339.9	346.1	348.8	347.9
77.5°	111.2	141.7	186.5	223.3	254.7	275.3	294.1	306.7	313.0	314.8	313.9
80°	89.7	118.4	157.8	192.8	219.7	242.1	259.2	272.6	278.0	276.2	268.1
82.5°	69.0	95.1	130.0	160.5	185.6	206.2	224.2	232.3	233.1	228.7	221.5
85°	49.3	69.0	98.6	124.6	148.0	163.2	174.0	180.2	182.0	178.4	170.4
87.5°	27.8	40.4	58.3	77.1	95.1	105.8	112.1	115.7	118.4	114.8	109.4
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: P188644

CATALOG NUMBER: 24SR-LD2-34-C-UNV-L840-CD1-ST-U

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	880.6	880.6	880.6	880.6	880.6	880.6	880.6	880.6
2.5°	883.3	886.0	885.1	886.9	887.8	887.8	885.1	886.9
5°	921.8	927.2	930.8	936.2	939.8	939.8	940.7	943.4
7.5°	964.0	973.0	981.0	987.3	991.8	993.6	996.3	999.0
10°	1003.4	1014.2	1023.2	1031.2	1036.6	1040.2	1042.9	1047.4
12.5°	1033.9	1046.5	1056.3	1065.3	1072.5	1077.9	1080.6	1084.1
15°	1056.3	1070.7	1082.4	1092.2	1098.5	1104.8	1107.5	1111.0
17.5°	1069.8	1084.1	1096.7	1106.6	1113.7	1120.0	1123.6	1127.2
20°	1073.4	1087.7	1101.2	1111.0	1118.2	1126.3	1129.9	1133.5
22.5°	1068.0	1082.4	1096.7	1107.5	1115.5	1123.6	1127.2	1130.8
25°	1057.2	1072.5	1086.8	1097.6	1104.8	1112.8	1117.3	1119.1
27.5°	1040.2	1055.5	1069.8	1079.7	1087.7	1095.8	1100.3	1101.2
30°	1016.0	1031.2	1045.6	1055.5	1064.4	1071.6	1076.1	1076.1
32.5°	986.4	1000.8	1016.0	1025.0	1033.0	1040.2	1044.7	1046.5
35°	952.3	966.7	981.0	989.1	998.1	1003.4	1007.0	1009.7
37.5°	915.6	929.9	941.6	948.7	958.6	962.2	967.6	966.7
40°	876.1	887.8	898.5	904.8	912.9	917.4	922.7	921.8
42.5°	834.9	846.5	855.5	862.7	867.1	871.6	875.2	874.3
45°	792.7	803.5	811.5	815.1	822.3	824.1	827.7	827.7
47.5°	750.6	759.5	766.7	772.1	775.7	777.5	781.1	781.1
50°	710.2	718.3	722.8	727.2	730.8	733.5	735.3	736.2
52.5°	670.8	677.0	680.6	684.2	687.8	689.6	691.4	690.5
55°	633.1	637.6	640.3	643.0	645.6	648.3	648.3	648.3
57.5°	595.4	598.1	600.8	602.6	605.3	607.1	607.1	607.1
60°	558.7	561.4	562.2	564.0	566.7	567.6	568.5	566.7
62.5°	522.8	523.7	524.6	525.5	528.2	530.0	530.0	529.1
65°	486.0	486.0	486.9	487.8	489.6	491.4	492.3	490.5
67.5°	450.2	450.2	451.1	451.1	453.7	455.5	456.4	456.4
70°	415.2	414.3	416.1	417.0	418.8	418.8	420.6	420.6
72.5°	380.2	379.3	381.1	381.1	382.9	383.8	383.8	383.8
75°	346.1	343.4	344.3	342.6	344.3	344.3	343.4	343.4
77.5°	309.4	303.1	301.3	297.7	297.7	297.7	295.9	295.9
80°	262.7	256.5	253.8	251.1	251.1	250.2	249.3	249.3
82.5°	216.1	210.7	208.0	205.4	207.1	204.5	205.4	206.2
85°	165.9	161.4	159.6	156.9	156.0	156.0	156.9	156.0
87.5°	107.6	103.1	103.1	100.4	102.2	99.5	96.8	98.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)