

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: P188642

Luminaire Tested: **24SR-LD2-34-C-UNV-L830-CD1-ST-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188642
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-L830-CD1-ST-U
Description: METALUX 2X4 SKYRIDGE LED FIXTURE WITH STRAW SKYTRIM.

Light Source: EATON LED 3000K
Ballast/Driver: OSRAM ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3179.0 lumens
Efficiency: N/A
Efficacy: 116.9 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

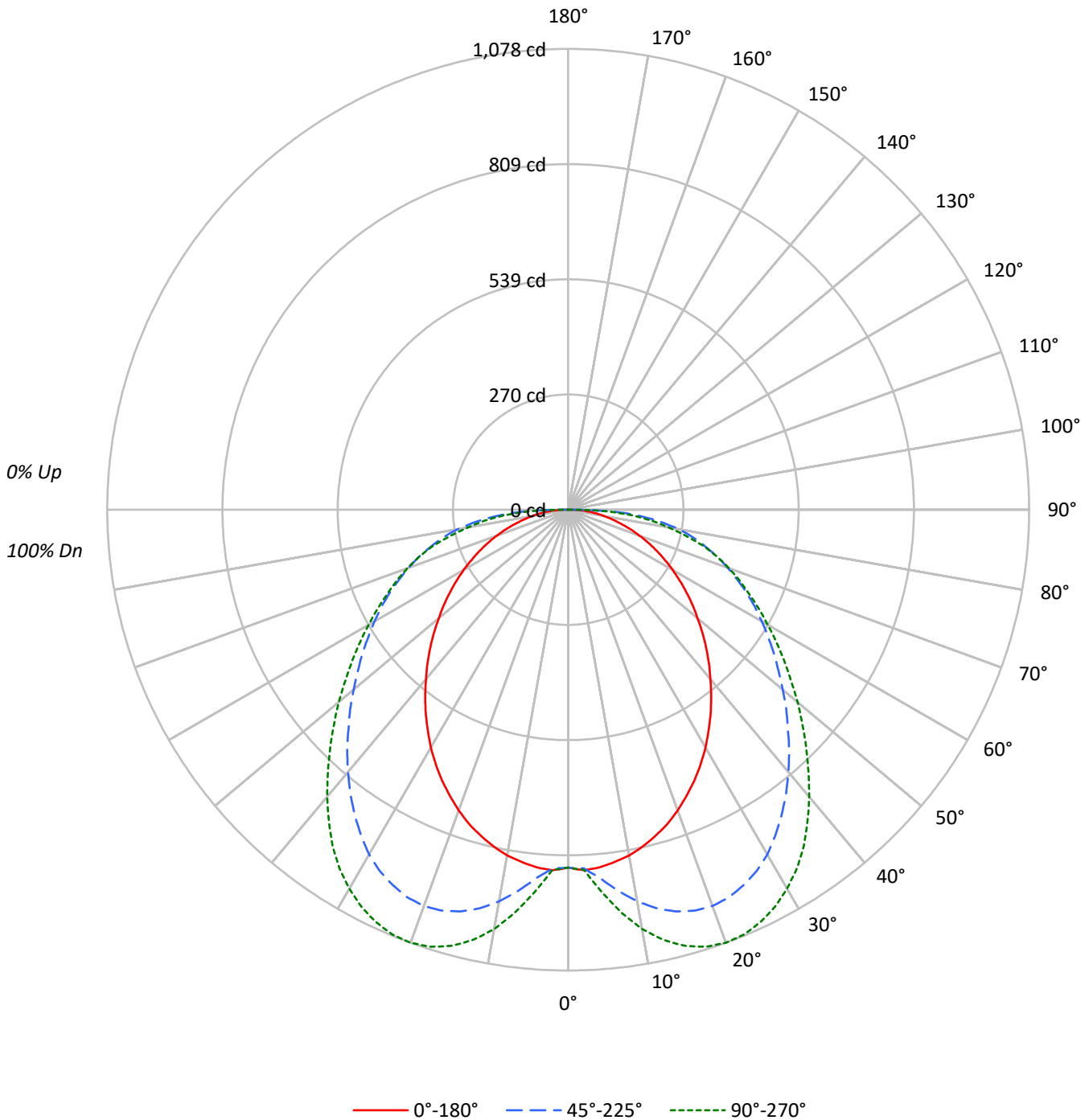
Input Watts (W): 27.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P188642

CATALOG NUMBER: 24SR-LD2-34-C-UNV-L830-CD1-ST-U

Luminous Intensity Polar Plot





TEST NUMBER: P188642

CATALOG NUMBER: 24SR-LD2-34-C-UNV-L830-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°	1127	1127	1127
5°	1134	1169	1212
10°	1122	1271	1361
15°	1100	1355	1472
20°	1072	1413	1543
25°	1037	1439	1580
30°	998	1447	1590
35°	954	1430	1577
40°	909	1406	1540
45°	868	1382	1498
50°	826	1371	1465
55°	792	1378	1446
60°	760	1407	1450
65°	727	1466	1485
70°	698	1563	1573
75°	665	1724	1698
80°	661	2035	1837
85°	724	2620	2291



TEST NUMBER: P188642

CATALOG NUMBER: 24SR-LD2-34-C-UNV-L830-CD1-ST-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	84.1	2.6
10°-20°	267.2	8.4
20°-30°	427.3	13.4
30°-40°	517.2	16.3
40°-50°	528.2	16.6
50°-60°	486.7	15.3
60°-70°	414.0	13.0
70°-80°	309.6	9.7
80°-90°	144.6	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°	778.6	24.5
0°-40°	1295.8	40.8
0°-60°	2310.8	72.7
0°-90°	3179.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3179.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	837	837	837	837	837	
5°	840	835	866	888	897	80
15°	790	860	973	1034	1056	222
25°	698	830	970	1039	1064	321
35°	581	734	871	937	960	363
45°	456	607	726	773	787	352
55°	338	491	588	610	616	302
65°	228	388	460	463	466	227
75°	128	281	332	327	327	137
85°	47	148	170	150	148	49
90°	0	0	0	0	0	



TEST NUMBER: P188642

CATALOG NUMBER: 24SR-LD2-34-C-UNV-L830-CD1-ST-U

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	837.4	837.4	837.4	837.4	837.4	837.4	837.4	837.4	837.4	837.4	837.4
2.5°	844.2	842.5	839.9	836.5	835.7	835.7	834.8	834.8	836.5	839.9	845.1
5°	839.9	838.2	835.7	833.1	834.0	836.5	841.7	847.6	856.1	865.5	875.8
7.5°	831.4	830.6	828.9	828.9	835.7	847.6	859.6	871.5	885.1	899.6	915.0
10°	821.2	820.3	819.5	826.3	841.7	859.6	876.6	892.8	911.6	930.3	948.2
12.5°	806.7	806.7	809.2	824.6	845.9	868.1	889.4	910.7	932.9	955.1	974.7
15°	789.6	789.6	798.2	820.3	847.6	873.2	898.8	922.7	948.2	973.0	993.4
17.5°	770.9	770.0	786.2	813.5	844.2	874.1	903.0	929.5	955.9	983.2	1004.5
20°	748.7	750.4	771.7	803.3	837.4	870.6	901.3	929.5	957.6	986.6	1007.1
22.5°	724.0	727.4	753.8	788.8	827.2	861.3	893.7	923.5	952.5	981.5	1002.0
25°	698.4	702.7	735.1	771.7	812.7	847.6	880.0	911.6	940.6	969.6	990.0
27.5°	671.1	677.1	713.7	752.1	793.0	829.7	862.1	894.5	923.5	953.4	972.1
30°	642.1	649.8	689.0	728.2	770.9	806.7	839.1	872.4	902.2	931.2	949.1
32.5°	611.4	620.8	660.9	703.5	745.3	780.3	812.7	846.8	874.9	902.2	920.1
35°	580.7	591.8	632.7	675.4	716.3	751.3	782.8	816.9	845.1	870.6	887.7
37.5°	549.2	562.8	603.7	645.5	685.6	720.6	753.0	784.5	812.7	836.5	853.6
40°	517.6	533.0	573.9	614.8	654.9	688.2	719.7	751.3	779.4	800.7	816.9
42.5°	486.9	502.3	544.0	585.0	621.6	655.8	687.3	718.0	743.6	764.9	779.4
45°	456.2	472.4	513.3	553.4	590.1	624.2	655.8	683.9	708.6	726.5	741.0
47.5°	425.5	442.6	483.5	523.6	558.5	591.8	624.2	649.8	673.7	691.6	703.5
50°	394.8	413.6	453.7	494.6	528.7	562.0	592.7	616.5	638.7	654.9	666.0
52.5°	366.7	384.6	425.5	466.4	500.6	533.8	562.8	585.8	605.4	619.9	631.0
55°	337.7	357.3	399.9	439.2	474.1	507.4	533.8	555.1	573.0	587.5	596.1
57.5°	309.5	331.7	373.5	412.7	448.5	480.1	505.7	526.1	542.3	554.3	562.0
60°	282.3	305.3	348.8	388.0	423.8	454.5	479.2	498.0	512.5	522.7	529.6
62.5°	255.0	281.4	324.0	365.0	399.1	428.9	452.0	469.0	482.6	492.0	496.3
65°	228.5	255.8	300.2	340.2	374.4	402.5	424.7	440.0	452.8	460.5	462.2
67.5°	203.0	231.9	276.3	316.4	349.6	376.1	397.4	411.9	423.0	428.1	429.8
70°	177.4	207.2	252.4	292.5	324.0	349.6	369.2	382.9	392.3	397.4	397.4
72.5°	153.5	183.3	228.5	267.8	296.8	322.3	340.2	353.0	361.6	365.0	364.1
75°	127.9	158.6	203.0	240.5	268.6	292.5	310.4	323.2	329.2	331.7	330.9
77.5°	105.7	134.7	177.4	212.3	242.2	261.8	279.7	291.6	297.6	299.3	298.5
80°	85.3	112.6	150.1	183.3	208.9	230.2	246.4	259.2	264.3	262.6	255.0
82.5°	65.7	90.4	123.6	152.6	176.5	196.1	213.2	220.9	221.7	217.4	210.6
85°	46.9	65.7	93.8	118.5	140.7	155.2	165.4	171.4	173.1	169.7	162.0
87.5°	26.4	38.4	55.4	73.3	90.4	100.6	106.6	110.0	112.6	109.2	104.0
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: P188642

CATALOG NUMBER: 24SR-LD2-34-C-UNV-L830-CD1-ST-U

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	837.4	837.4	837.4	837.4	837.4	837.4	837.4	837.4
2.5°	839.9	842.5	841.7	843.4	844.2	844.2	841.7	843.4
5°	876.6	881.7	885.1	890.3	893.7	893.7	894.5	897.1
7.5°	916.7	925.2	932.9	938.9	943.1	944.8	947.4	950.0
10°	954.2	964.4	973.0	980.6	985.8	989.2	991.7	996.0
12.5°	983.2	995.1	1004.5	1013.1	1019.9	1025.0	1027.5	1031.0
15°	1004.5	1018.2	1029.3	1038.6	1044.6	1050.6	1053.1	1056.5
17.5°	1017.3	1031.0	1042.9	1052.3	1059.1	1065.1	1068.5	1071.9
20°	1020.7	1034.4	1047.2	1056.5	1063.4	1071.0	1074.4	1077.9
22.5°	1015.6	1029.3	1042.9	1053.1	1060.8	1068.5	1071.9	1075.3
25°	1005.4	1019.9	1033.5	1043.8	1050.6	1058.2	1062.5	1064.2
27.5°	989.2	1003.7	1017.3	1026.7	1034.4	1042.0	1046.3	1047.2
30°	966.2	980.6	994.3	1003.7	1012.2	1019.0	1023.3	1023.3
32.5°	938.0	951.7	966.2	974.7	982.4	989.2	993.4	995.1
35°	905.6	919.3	932.9	940.6	949.1	954.2	957.6	960.2
37.5°	870.6	884.3	895.4	902.2	911.6	915.0	920.1	919.3
40°	833.1	844.2	854.4	860.4	868.1	872.4	877.5	876.6
42.5°	793.9	805.0	813.5	820.3	824.6	828.9	832.3	831.4
45°	753.8	764.1	771.7	775.1	782.0	783.7	787.1	787.1
47.5°	713.7	722.3	729.1	734.2	737.6	739.3	742.7	742.7
50°	675.4	683.0	687.3	691.6	695.0	697.5	699.2	700.1
52.5°	637.8	643.8	647.2	650.6	654.1	655.8	657.5	656.6
55°	602.0	606.3	608.9	611.4	614.0	616.5	616.5	616.5
57.5°	566.2	568.8	571.3	573.0	575.6	577.3	577.3	577.3
60°	531.3	533.8	534.7	536.4	538.9	539.8	540.6	538.9
62.5°	497.1	498.0	498.9	499.7	502.3	504.0	504.0	503.1
65°	462.2	462.2	463.0	463.9	465.6	467.3	468.2	466.4
67.5°	428.1	428.1	428.9	428.9	431.5	433.2	434.0	434.0
70°	394.8	394.0	395.7	396.5	398.2	398.2	399.9	399.9
72.5°	361.6	360.7	362.4	362.4	364.1	365.0	365.0	365.0
75°	329.2	326.6	327.5	325.7	327.5	327.5	326.6	326.6
77.5°	294.2	288.2	286.5	283.1	283.1	283.1	281.4	281.4
80°	249.9	243.9	241.3	238.8	238.8	237.9	237.1	237.1
82.5°	205.5	200.4	197.8	195.3	197.0	194.4	195.3	196.1
85°	157.8	153.5	151.8	149.2	148.4	148.4	149.2	148.4
87.5°	102.3	98.1	98.1	95.5	97.2	94.7	92.1	93.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)