

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: P188643

Luminaire Tested: **24SR-LD2-34-C-UNV-L835-CD1-ST-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188643
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-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: 3278.0 lumens
Efficiency: N/A
Efficacy: 120.5 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

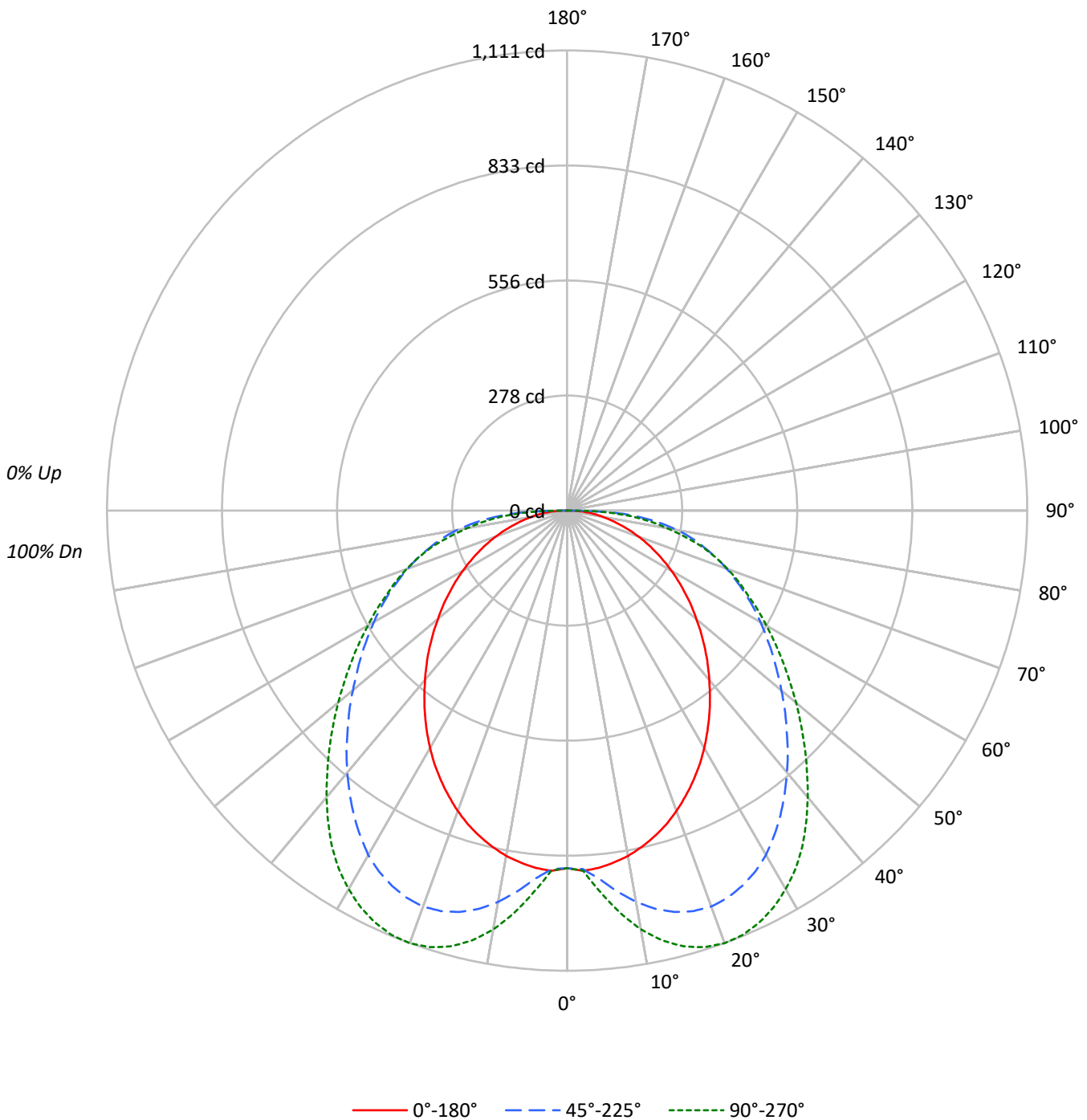
Input Watts (W): 27.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1162	1162	1162
5°	1170	1205	1249
10°	1157	1311	1403
15°	1134	1398	1517
20°	1105	1457	1591
25°	1069	1484	1629
30°	1029	1492	1639
35°	984	1475	1626
40°	937	1450	1588
45°	895	1426	1544
50°	852	1414	1511
55°	817	1421	1491
60°	783	1450	1495
65°	750	1512	1531
70°	720	1612	1622
75°	686	1778	1751
80°	681	2098	1894
85°	747	2702	2362



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	86.8	2.6
10°-20°	275.5	8.4
20°-30°	440.6	13.4
30°-40°	533.3	16.3
40°-50°	544.7	16.6
50°-60°	501.9	15.3
60°-70°	426.9	13.0
70°-80°	319.2	9.7
80°-90°	149.1	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°	802.9	24.5
0°-40°	1336.2	40.8
0°-60°	2382.8	72.7
0°-90°	3278.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3278.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	864	864	864	864	864	
5°	866	861	892	915	925	82
15°	814	887	1003	1066	1089	229
25°	720	856	1000	1071	1097	331
35°	599	757	898	966	990	374
45°	470	626	749	798	812	363
55°	348	506	606	629	636	312
65°	236	400	475	478	481	234
75°	132	289	342	337	337	141
85°	48	153	175	155	153	51
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°	863.5	863.5	863.5	863.5	863.5	863.5	863.5	863.5	863.5	863.5	863.5
2.5°	870.5	868.7	866.1	862.6	861.7	861.7	860.8	860.8	862.6	866.1	871.4
5°	866.1	864.3	861.7	859.1	859.9	862.6	867.9	874.0	882.8	892.5	903.0
7.5°	857.3	856.4	854.7	854.7	861.7	874.0	886.3	898.6	912.7	927.7	943.5
10°	846.8	845.9	845.0	852.0	867.9	886.3	903.9	920.6	940.0	959.3	977.8
12.5°	831.8	831.8	834.4	850.3	872.3	895.1	917.1	939.1	961.9	984.8	1005.0
15°	814.2	814.2	823.0	845.9	874.0	900.4	926.8	951.4	977.8	1003.3	1024.4
17.5°	794.9	794.0	810.7	838.8	870.5	901.3	931.2	958.4	985.7	1013.8	1035.8
20°	772.0	773.8	795.8	828.3	863.5	897.8	929.4	958.4	987.4	1017.3	1038.4
22.5°	746.5	750.0	777.3	813.3	852.9	888.1	921.5	952.3	982.2	1012.1	1033.2
25°	720.1	724.5	758.0	795.8	838.0	874.0	907.4	940.0	969.9	999.8	1020.9
27.5°	692.0	698.2	736.0	775.5	817.7	855.6	889.0	922.4	952.3	983.1	1002.4
30°	662.1	670.0	710.5	750.9	794.9	831.8	865.2	899.5	930.3	960.2	978.7
32.5°	630.5	640.1	681.5	725.4	768.5	804.6	838.0	873.1	902.2	930.3	948.8
35°	598.8	610.2	652.4	696.4	738.6	774.7	807.2	842.4	871.4	897.8	915.3
37.5°	566.3	580.3	622.5	665.6	707.0	743.0	776.4	809.0	838.0	862.6	880.2
40°	533.7	549.6	591.8	634.0	675.3	709.6	742.1	774.7	803.7	825.7	842.4
42.5°	502.1	517.9	561.0	603.2	641.0	676.2	708.7	740.4	766.7	788.7	803.7
45°	470.4	487.1	529.3	570.7	608.5	643.6	676.2	705.2	730.7	749.2	764.1
47.5°	438.8	456.4	498.6	539.9	575.9	610.2	643.6	670.0	694.6	713.1	725.4
50°	407.1	426.5	467.8	510.0	545.2	579.5	611.1	635.7	658.6	675.3	686.7
52.5°	378.1	396.6	438.8	481.0	516.1	550.4	580.3	604.1	624.3	639.2	650.7
55°	348.2	368.4	412.4	452.8	488.9	523.2	550.4	572.4	590.9	605.8	614.6
57.5°	319.2	342.0	385.1	425.6	462.5	495.0	521.4	542.5	559.2	571.5	579.5
60°	291.0	314.8	359.6	400.1	437.0	468.7	494.2	513.5	528.5	539.0	546.0
62.5°	262.9	290.2	334.1	376.3	411.5	442.3	466.0	483.6	497.7	507.4	511.7
65°	235.7	263.8	309.5	350.8	386.0	415.0	437.9	453.7	466.9	474.8	476.6
67.5°	209.3	239.2	284.9	326.2	360.5	387.8	409.8	424.7	436.1	441.4	443.2
70°	182.9	213.7	260.3	301.6	334.1	360.5	380.7	394.8	404.5	409.8	409.8
72.5°	158.3	189.0	235.7	276.1	306.0	332.4	350.8	364.0	372.8	376.3	375.5
75°	131.9	163.5	209.3	248.0	277.0	301.6	320.1	333.3	339.4	342.0	341.2
77.5°	109.0	138.9	182.9	218.9	249.7	269.9	288.4	300.7	306.9	308.6	307.8
80°	87.9	116.1	154.8	189.0	215.4	237.4	254.1	267.3	272.6	270.8	262.9
82.5°	67.7	93.2	127.5	157.4	182.0	202.2	219.8	227.7	228.6	224.2	217.2
85°	48.4	67.7	96.7	122.2	145.1	160.0	170.6	176.7	178.5	175.0	167.1
87.5°	27.3	39.6	57.2	75.6	93.2	103.8	109.9	113.4	116.1	112.5	107.3
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°	863.5	863.5	863.5	863.5	863.5	863.5	863.5	863.5
2.5°	866.1	868.7	867.9	869.6	870.5	870.5	867.9	869.6
5°	903.9	909.2	912.7	918.0	921.5	921.5	922.4	925.0
7.5°	945.2	954.0	961.9	968.1	972.5	974.3	976.9	979.5
10°	983.9	994.5	1003.3	1011.2	1016.5	1020.0	1022.6	1027.0
12.5°	1013.8	1026.1	1035.8	1044.6	1051.6	1056.9	1059.5	1063.1
15°	1035.8	1049.9	1061.3	1071.0	1077.1	1083.3	1085.9	1089.4
17.5°	1049.0	1063.1	1075.4	1085.0	1092.1	1098.2	1101.8	1105.3
20°	1052.5	1066.6	1079.8	1089.4	1096.5	1104.4	1107.9	1111.4
22.5°	1047.2	1061.3	1075.4	1085.9	1093.8	1101.8	1105.3	1108.8
25°	1036.7	1051.6	1065.7	1076.3	1083.3	1091.2	1095.6	1097.4
27.5°	1020.0	1034.9	1049.0	1058.7	1066.6	1074.5	1078.9	1079.8
30°	996.2	1011.2	1025.3	1034.9	1043.7	1050.8	1055.2	1055.2
32.5°	967.2	981.3	996.2	1005.0	1012.9	1020.0	1024.4	1026.1
35°	933.8	947.9	961.9	969.9	978.7	983.9	987.4	990.1
37.5°	897.8	911.8	923.3	930.3	940.0	943.5	948.8	947.9
40°	859.1	870.5	881.1	887.2	895.1	899.5	904.8	903.9
42.5°	818.6	830.1	838.8	845.9	850.3	854.7	858.2	857.3
45°	777.3	787.8	795.8	799.3	806.3	808.1	811.6	811.6
47.5°	736.0	744.8	751.8	757.1	760.6	762.3	765.9	765.9
50°	696.4	704.3	708.7	713.1	716.6	719.3	721.0	721.9
52.5°	657.7	663.9	667.4	670.9	674.4	676.2	677.9	677.1
55°	620.8	625.2	627.8	630.5	633.1	635.7	635.7	635.7
57.5°	583.9	586.5	589.1	590.9	593.5	595.3	595.3	595.3
60°	547.8	550.4	551.3	553.1	555.7	556.6	557.5	555.7
62.5°	512.6	513.5	514.4	515.3	517.9	519.7	519.7	518.8
65°	476.6	476.6	477.5	478.3	480.1	481.9	482.7	481.0
67.5°	441.4	441.4	442.3	442.3	444.9	446.7	447.6	447.6
70°	407.1	406.2	408.0	408.9	410.6	410.6	412.4	412.4
72.5°	372.8	371.9	373.7	373.7	375.5	376.3	376.3	376.3
75°	339.4	336.8	337.6	335.9	337.6	337.6	336.8	336.8
77.5°	303.4	297.2	295.4	291.9	291.9	291.9	290.2	290.2
80°	257.6	251.5	248.8	246.2	246.2	245.3	244.4	244.4
82.5°	211.9	206.6	204.0	201.4	203.1	200.5	201.4	202.2
85°	162.7	158.3	156.5	153.9	153.0	153.0	153.9	153.0
87.5°	105.5	101.1	101.1	98.5	100.2	97.6	95.0	96.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)