

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: P188638

Luminaire Tested: **24SR-LD2-29-C-UNV-L835-CD1-ST-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188638
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-LD2-29-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: 2770.0 lumens
Efficiency: N/A
Efficacy: 122.6 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

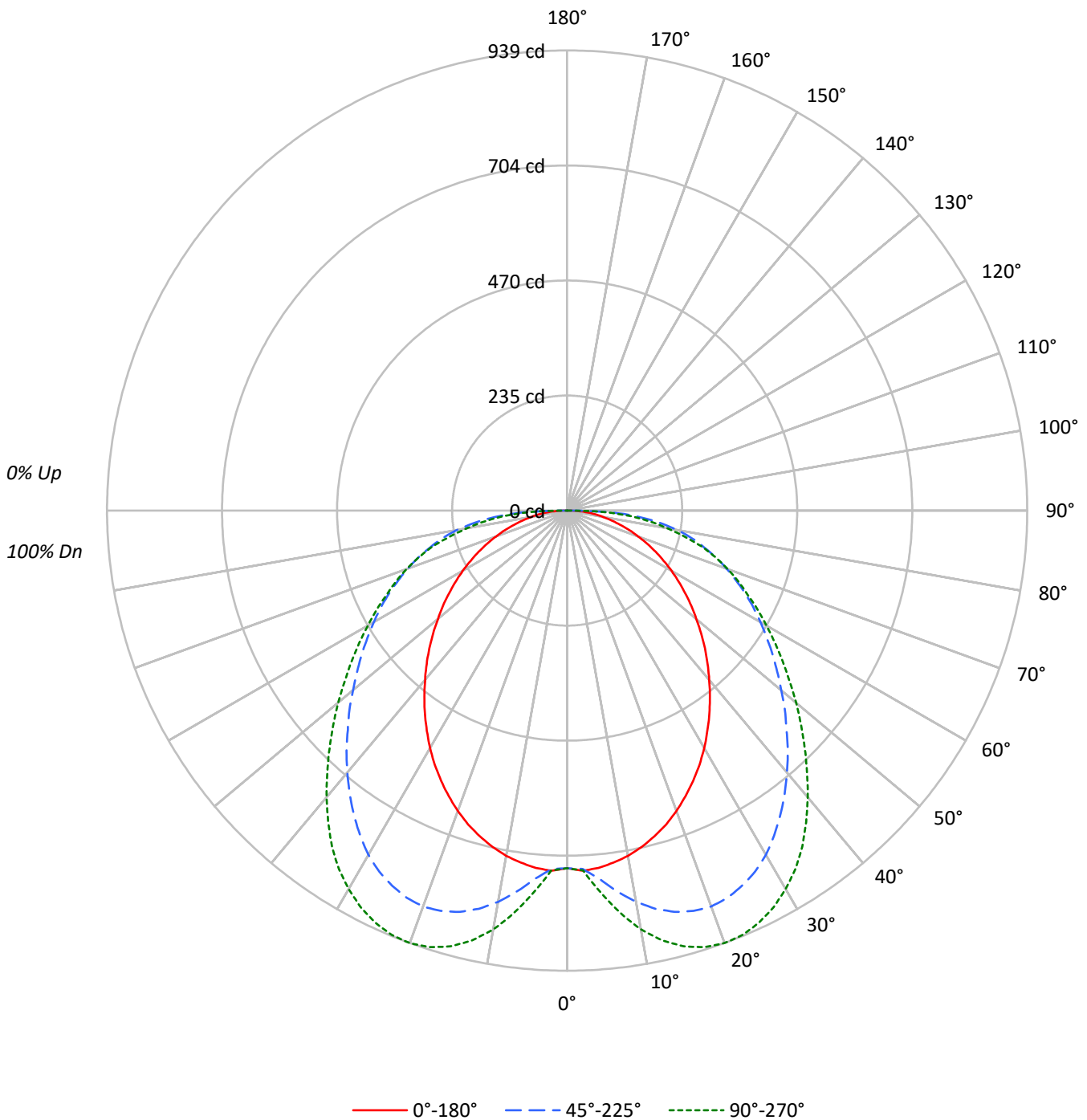
Input Watts (W): 22.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	982	982	982
5°	989	1019	1056
10°	978	1107	1186
15°	958	1181	1282
20°	934	1231	1345
25°	903	1254	1377
30°	869	1261	1385
35°	831	1246	1374
40°	792	1225	1342
45°	756	1205	1305
50°	720	1194	1277
55°	690	1201	1260
60°	662	1226	1264
65°	634	1277	1294
70°	608	1362	1371
75°	580	1502	1480
80°	576	1774	1601
85°	631	2283	1996



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	73.3	2.6
10°-20°	232.8	8.4
20°-30°	372.3	13.4
30°-40°	450.7	16.3
40°-50°	460.3	16.6
50°-60°	424.1	15.3
60°-70°	360.8	13.0
70°-80°	269.7	9.7
80°-90°	126.0	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°	678.4	24.5
0°-40°	1129.1	40.8
0°-60°	2013.5	72.7
0°-90°	2770.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2770.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	730	730	730	730	730	
5°	732	728	754	774	782	69
15°	688	750	848	901	921	194
25°	608	723	845	905	927	280
35°	506	639	759	816	837	316
45°	398	529	633	674	686	307
55°	294	428	512	532	537	263
65°	199	338	401	404	406	198
75°	112	244	289	285	285	119
85°	41	129	148	131	129	43
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°	729.7	729.7	729.7	729.7	729.7	729.7	729.7	729.7	729.7	729.7	729.7
2.5°	735.6	734.1	731.9	728.9	728.2	728.2	727.4	727.4	728.9	731.9	736.3
5°	731.9	730.4	728.2	725.9	726.7	728.9	733.4	738.6	746.0	754.2	763.1
7.5°	724.5	723.7	722.2	722.2	728.2	738.6	749.0	759.4	771.3	783.9	797.3
10°	715.5	714.8	714.0	720.0	733.4	749.0	763.8	777.9	794.3	810.6	826.2
12.5°	702.9	702.9	705.1	718.5	737.1	756.4	775.0	793.6	812.9	832.2	849.3
15°	688.0	688.0	695.5	714.8	738.6	760.9	783.2	804.0	826.2	847.8	865.6
17.5°	671.7	671.0	685.1	708.8	735.6	761.6	786.9	809.9	832.9	856.7	875.3
20°	652.4	653.9	672.4	699.9	729.7	758.6	785.4	809.9	834.4	859.7	877.5
22.5°	630.8	633.8	656.8	687.3	720.7	750.5	778.7	804.7	830.0	855.2	873.1
25°	608.5	612.3	640.5	672.4	708.1	738.6	766.8	794.3	819.6	844.8	862.7
27.5°	584.8	590.0	621.9	655.4	691.0	723.0	751.2	779.4	804.7	830.7	847.1
30°	559.5	566.2	600.4	634.5	671.7	702.9	731.1	760.1	786.1	811.4	827.0
32.5°	532.8	540.9	575.8	613.0	649.4	679.9	708.1	737.8	762.3	786.1	801.7
35°	506.0	515.7	551.3	588.5	624.1	654.6	682.1	711.8	736.3	758.6	773.5
37.5°	478.5	490.4	526.1	562.5	597.4	627.9	656.1	683.6	708.1	728.9	743.8
40°	451.0	464.4	500.1	535.7	570.6	599.6	627.1	654.6	679.1	697.7	711.8
42.5°	424.3	437.6	474.1	509.7	541.7	571.4	598.9	625.6	647.9	666.5	679.1
45°	397.5	411.6	447.3	482.2	514.2	543.9	571.4	595.9	617.5	633.1	645.7
47.5°	370.8	385.6	421.3	456.2	486.7	515.7	543.9	566.2	587.0	602.6	613.0
50°	344.0	360.4	395.3	431.0	460.7	489.7	516.4	537.2	556.5	570.6	580.3
52.5°	319.5	335.1	370.8	406.4	436.2	465.1	490.4	510.5	527.5	540.2	549.8
55°	294.2	311.3	348.5	382.7	413.1	442.1	465.1	483.7	499.3	511.9	519.4
57.5°	269.7	289.0	325.4	359.6	390.8	418.3	440.6	458.4	472.6	483.0	489.7
60°	245.9	266.0	303.9	338.1	369.3	396.0	417.6	433.9	446.6	455.5	461.4
62.5°	222.2	245.2	282.4	318.0	347.7	373.7	393.8	408.7	420.6	428.7	432.4
65°	199.1	222.9	261.5	296.5	326.2	350.7	370.0	383.4	394.5	401.2	402.7
67.5°	176.8	202.1	240.7	275.7	304.6	327.7	346.3	358.9	368.5	373.0	374.5
70°	154.5	180.6	219.9	254.9	282.4	304.6	321.7	333.6	341.8	346.3	346.3
72.5°	133.7	159.8	199.1	233.3	258.6	280.9	296.5	307.6	315.0	318.0	317.3
75°	111.5	138.2	176.8	209.5	234.1	254.9	270.5	281.6	286.8	289.0	288.3
77.5°	92.1	117.4	154.5	185.0	211.0	228.1	243.7	254.1	259.3	260.8	260.1
80°	74.3	98.1	130.8	159.8	182.0	200.6	214.7	225.9	230.3	228.9	222.2
82.5°	57.2	78.8	107.7	133.0	153.8	170.9	185.8	192.4	193.2	189.5	183.5
85°	40.9	57.2	81.7	103.3	122.6	135.2	144.1	149.3	150.8	147.9	141.2
87.5°	23.0	33.4	48.3	63.9	78.8	87.7	92.9	95.9	98.1	95.1	90.6
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°	729.7	729.7	729.7	729.7	729.7	729.7	729.7	729.7
2.5°	731.9	734.1	733.4	734.9	735.6	735.6	733.4	734.9
5°	763.8	768.3	771.3	775.7	778.7	778.7	779.4	781.7
7.5°	798.8	806.2	812.9	818.1	821.8	823.3	825.5	827.7
10°	831.4	840.4	847.8	854.5	858.9	861.9	864.1	867.9
12.5°	856.7	867.1	875.3	882.7	888.7	893.1	895.3	898.3
15°	875.3	887.2	896.8	905.0	910.2	915.4	917.6	920.6
17.5°	886.4	898.3	908.7	916.9	922.8	928.0	931.0	934.0
20°	889.4	901.3	912.4	920.6	926.6	933.2	936.2	939.2
22.5°	884.9	896.8	908.7	917.6	924.3	931.0	934.0	937.0
25°	876.0	888.7	900.5	909.5	915.4	922.1	925.8	927.3
27.5°	861.9	874.5	886.4	894.6	901.3	908.0	911.7	912.4
30°	841.9	854.5	866.4	874.5	882.0	887.9	891.6	891.6
32.5°	817.3	829.2	841.9	849.3	856.0	861.9	865.6	867.1
35°	789.1	801.0	812.9	819.6	827.0	831.4	834.4	836.6
37.5°	758.6	770.5	780.2	786.1	794.3	797.3	801.7	801.0
40°	725.9	735.6	744.5	749.7	756.4	760.1	764.6	763.8
42.5°	691.8	701.4	708.8	714.8	718.5	722.2	725.2	724.5
45°	656.8	665.8	672.4	675.4	681.4	682.8	685.8	685.8
47.5°	621.9	629.3	635.3	639.7	642.7	644.2	647.2	647.2
50°	588.5	595.2	598.9	602.6	605.6	607.8	609.3	610.0
52.5°	555.8	561.0	564.0	566.9	569.9	571.4	572.9	572.1
55°	524.6	528.3	530.5	532.8	535.0	537.2	537.2	537.2
57.5°	493.4	495.6	497.8	499.3	501.5	503.0	503.0	503.0
60°	462.9	465.1	465.9	467.4	469.6	470.3	471.1	469.6
62.5°	433.2	433.9	434.7	435.4	437.6	439.1	439.1	438.4
65°	402.7	402.7	403.5	404.2	405.7	407.2	407.9	406.4
67.5°	373.0	373.0	373.7	373.7	376.0	377.5	378.2	378.2
70°	344.0	343.3	344.8	345.5	347.0	347.0	348.5	348.5
72.5°	315.0	314.3	315.8	315.8	317.3	318.0	318.0	318.0
75°	286.8	284.6	285.3	283.8	285.3	285.3	284.6	284.6
77.5°	256.3	251.1	249.7	246.7	246.7	246.7	245.2	245.2
80°	217.7	212.5	210.3	208.0	208.0	207.3	206.6	206.6
82.5°	179.1	174.6	172.4	170.2	171.6	169.4	170.2	170.9
85°	137.5	133.7	132.3	130.0	129.3	129.3	130.0	129.3
87.5°	89.2	85.4	85.4	83.2	84.7	82.5	80.2	81.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)