

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: P188602

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188602
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24785)
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-SO-U
Description: METALUX 2X4 SKYRIDGE LED FIXTURE WITH STORARO ORANGE SKYTRIM.

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

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2467.0 lumens
Efficiency: N/A
Efficacy: 90.7 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.85 / 1.72
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

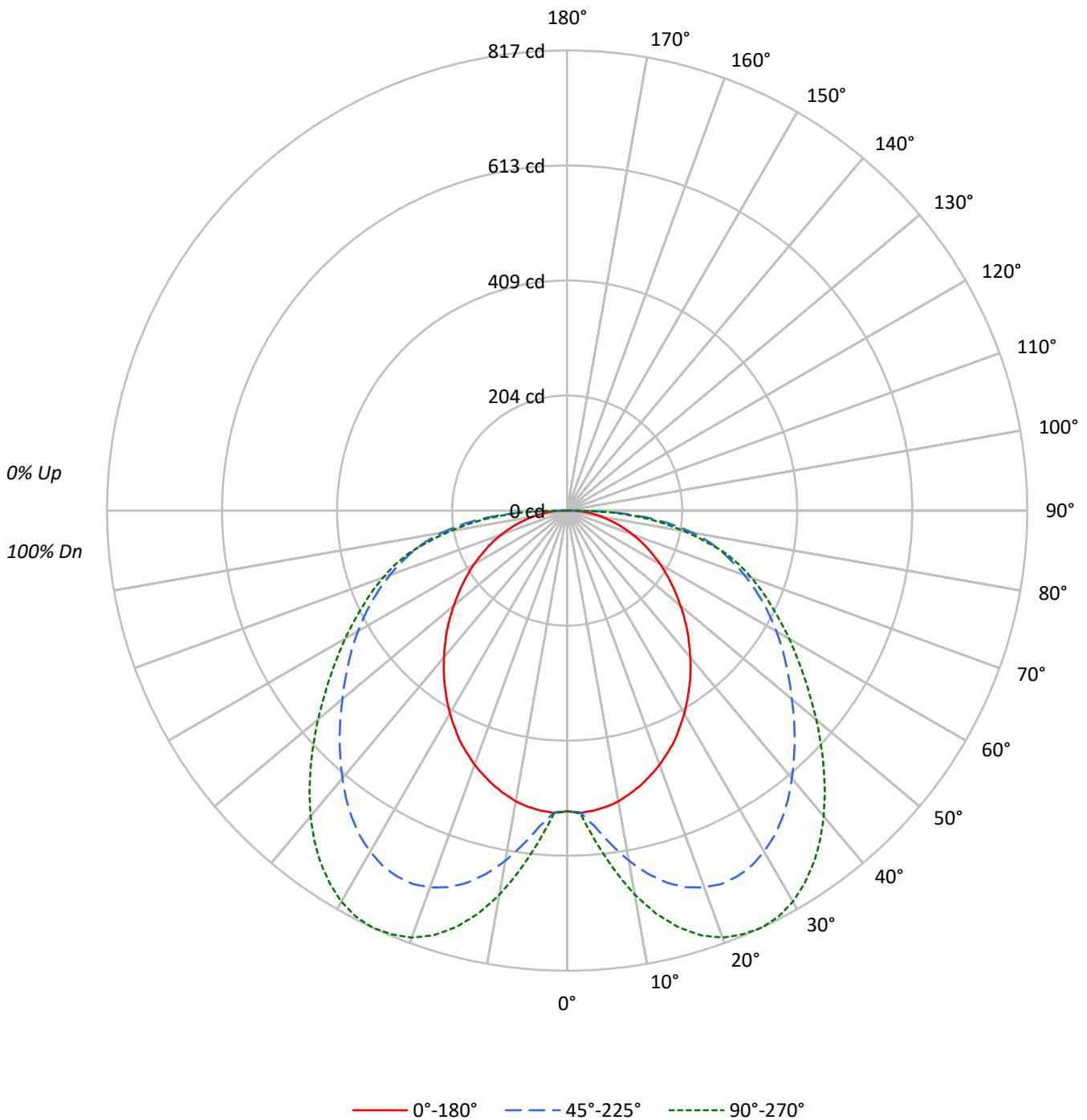
Input Watts (W): 27.2
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	101	96	91	104	99	94	90	94	90	87	90	87	84	87	84	82	79
2	96	87	79	72	93	85	77	71	81	75	70	78	73	68	74	70	66	64
3	87	75	66	59	84	74	65	58	70	63	57	68	61	56	65	60	55	53
4	79	66	56	49	77	65	56	49	62	54	48	60	53	47	57	52	47	44
5	72	59	49	42	70	57	48	42	55	47	41	53	46	41	51	45	40	38
6	67	53	43	36	65	52	43	36	50	42	36	48	41	35	46	40	35	33
7	62	47	38	32	60	47	38	32	45	37	31	43	36	31	42	36	31	29
8	57	43	34	28	56	42	34	28	41	33	28	40	33	28	39	32	27	25
9	53	39	31	25	52	39	31	25	38	30	25	37	30	25	35	29	24	23
10	50	36	28	23	49	36	28	22	35	27	22	34	27	22	33	27	22	20

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	718	718	718
5°	722	760	798
10°	716	862	946
15°	703	953	1067
20°	687	1019	1155
25°	670	1063	1213
30°	646	1086	1245
35°	622	1094	1254
40°	598	1090	1245
45°	574	1087	1225
50°	550	1091	1208
55°	530	1112	1204
60°	514	1154	1225
65°	500	1219	1273
70°	486	1318	1369
75°	474	1481	1507
80°	476	1751	1639
85°	526	2198	1988



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	55.4	2.2
10°-20°	186.5	7.6
20°-30°	312.3	12.7
30°-40°	391.1	15.9
40°-50°	410.3	16.6
50°-60°	387.7	15.7
60°-70°	339.3	13.8
70°-80°	262.1	10.6
80°-90°	122.3	5.0
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°	554.2	22.5
0°-40°	945.3	38.3
0°-60°	1743.3	70.7
0°-90°	2467.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2467.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	534	534	534	534	534	
5°	535	534	563	584	591	51
15°	505	576	684	746	766	142
25°	451	579	716	789	817	207
35°	379	529	666	738	763	237
45°	302	448	571	627	644	233
55°	226	373	474	505	513	202
65°	157	305	383	394	400	155
75°	91	229	285	287	290	97
85°	34	120	142	132	129	36
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°	533.8	533.8	533.8	533.8	533.8	533.8	533.8	533.8	533.8	533.8	533.8
2.5°	537.2	536.4	535.5	533.8	533.0	533.0	533.0	533.0	533.8	536.4	538.1
5°	534.7	534.7	533.0	532.1	533.0	535.5	539.8	546.6	553.4	562.8	570.5
7.5°	530.4	529.6	528.7	529.6	537.2	548.3	559.4	572.2	584.1	597.8	608.9
10°	524.4	523.6	524.4	531.3	546.6	564.5	580.7	596.9	613.1	631.0	646.4
12.5°	515.1	515.1	518.5	533.8	555.1	577.3	598.6	619.1	639.6	660.0	677.9
15°	504.8	505.7	514.2	536.4	562.8	588.4	613.1	637.0	660.9	683.9	703.5
17.5°	492.9	494.6	509.1	536.4	566.2	596.1	624.2	650.6	676.2	701.0	721.4
20°	480.1	481.8	503.1	534.7	567.9	600.3	630.2	659.2	686.5	712.0	733.4
22.5°	465.6	468.2	495.4	529.6	566.2	601.2	631.9	661.7	689.9	717.2	738.5
25°	451.1	454.5	486.1	522.7	561.1	596.9	629.3	659.2	689.0	716.3	737.6
27.5°	433.2	439.2	475.0	512.5	553.4	589.2	621.7	653.2	683.1	710.3	731.7
30°	416.1	423.8	461.3	500.6	542.3	578.2	610.6	642.1	672.0	699.3	720.6
32.5°	397.4	406.8	446.0	486.9	527.9	562.8	596.1	627.6	657.5	684.8	705.2
35°	378.6	389.7	429.8	471.6	511.6	546.6	579.0	610.6	639.6	666.0	685.6
37.5°	359.9	371.8	411.9	454.5	492.9	527.0	559.4	590.1	619.9	644.7	664.3
40°	340.2	353.9	394.0	434.9	473.3	506.5	538.9	568.8	596.9	620.8	639.6
42.5°	320.6	336.0	376.1	416.1	452.8	485.2	517.6	546.6	573.0	596.1	614.0
45°	301.9	317.2	356.4	396.5	432.3	464.7	496.3	524.4	550.0	571.3	588.4
47.5°	282.3	299.3	338.5	377.8	411.9	444.3	475.0	501.4	526.1	545.8	562.0
50°	262.6	281.4	319.8	358.2	393.1	424.7	454.5	480.1	503.1	521.0	536.4
52.5°	243.9	263.5	302.7	340.2	374.4	405.9	434.9	459.6	481.0	497.2	510.8
55°	226.0	246.4	285.7	322.3	357.3	388.0	415.3	439.2	458.8	474.1	486.1
57.5°	208.1	230.2	269.5	307.0	340.2	370.9	397.4	419.6	437.5	452.0	462.2
60°	191.0	214.0	254.1	290.8	324.0	353.9	379.5	399.9	417.0	428.9	436.6
62.5°	173.1	197.8	237.9	275.4	308.7	336.8	361.6	381.2	395.7	405.9	412.7
65°	156.9	181.6	222.6	260.1	291.6	318.9	342.0	360.7	374.4	382.9	387.1
67.5°	140.7	166.3	207.2	243.9	274.6	301.0	322.3	340.2	352.2	359.0	362.4
70°	123.6	150.9	191.0	226.8	256.7	281.4	302.7	318.1	329.2	335.1	336.8
72.5°	106.6	134.7	174.8	209.8	237.9	261.8	281.4	295.9	306.1	310.4	311.3
75°	91.2	117.7	156.9	190.2	217.5	239.6	259.2	272.9	280.6	284.8	285.7
77.5°	75.9	101.5	139.0	170.5	194.4	215.7	234.5	247.3	255.0	258.4	258.4
80°	61.4	85.3	119.4	147.5	170.5	190.2	207.2	220.0	226.8	226.0	222.6
82.5°	47.8	69.9	98.9	123.6	144.1	162.0	179.1	186.8	189.3	186.8	184.2
85°	34.1	52.0	75.0	95.5	113.4	127.1	138.1	144.1	145.0	142.4	139.9
87.5°	19.6	29.0	42.6	58.0	67.4	75.9	85.3	88.7	88.7	90.4	85.3
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°	533.8	533.8	533.8	533.8	533.8	533.8	533.8	533.8
2.5°	537.2	538.1	538.1	539.8	540.6	540.6	539.8	538.1
5°	573.0	578.2	581.6	586.7	589.2	591.8	592.7	591.0
7.5°	614.8	622.5	629.3	637.0	640.4	643.0	646.4	643.8
10°	654.9	665.1	673.7	682.2	687.3	690.7	693.3	692.4
12.5°	689.0	701.0	710.3	718.9	725.7	730.8	733.4	733.4
15°	715.5	729.1	741.0	750.4	757.2	762.4	765.8	765.8
17.5°	735.9	749.6	762.4	771.7	778.6	785.4	788.8	790.5
20°	747.9	762.4	775.1	785.4	793.1	800.7	804.1	806.7
22.5°	753.8	768.3	782.0	793.1	801.6	808.4	812.7	814.4
25°	753.8	769.2	783.7	794.8	803.3	811.0	815.2	816.9
27.5°	748.7	764.9	779.4	789.6	799.0	806.7	811.0	812.7
30°	738.5	754.7	769.2	779.4	788.8	795.6	799.9	801.6
32.5°	722.3	739.3	753.0	763.2	772.6	779.4	783.7	784.5
35°	703.5	719.7	732.5	742.7	752.1	758.1	761.5	763.2
37.5°	680.5	695.8	708.6	718.0	726.5	733.4	736.8	737.6
40°	655.8	670.3	681.3	689.9	698.4	704.4	707.8	708.6
42.5°	629.3	643.0	653.2	660.9	668.6	673.7	676.2	677.1
45°	602.0	614.0	623.4	630.2	637.0	641.3	643.8	643.8
47.5°	574.8	585.8	593.5	598.6	604.6	608.9	611.4	610.6
50°	547.5	556.8	562.8	567.9	573.0	575.6	578.2	577.3
52.5°	520.2	528.7	532.1	536.4	540.6	543.2	545.8	544.1
55°	493.7	499.7	503.1	506.5	509.9	512.5	514.2	513.4
57.5°	468.2	472.4	475.0	478.4	481.0	482.7	484.4	483.5
60°	440.9	444.3	446.0	449.4	452.0	453.7	455.4	455.4
62.5°	415.3	417.8	418.7	422.1	423.8	425.5	428.1	427.2
65°	388.0	390.6	392.3	394.8	396.5	398.2	400.8	399.9
67.5°	362.4	365.0	365.8	368.4	370.9	373.5	374.4	374.4
70°	336.8	338.5	339.4	342.8	343.7	346.2	347.9	347.9
72.5°	311.3	312.1	313.8	316.4	318.1	319.8	321.5	320.6
75°	284.0	285.7	286.5	288.2	288.2	289.9	289.9	289.9
77.5°	255.8	253.3	252.4	251.6	250.7	250.7	250.7	249.9
80°	217.5	214.9	214.0	212.3	212.3	212.3	212.3	211.5
82.5°	179.9	176.5	174.8	174.0	173.1	173.1	173.1	172.3
85°	136.4	133.0	132.2	131.3	131.3	130.5	129.6	128.8
87.5°	84.4	81.9	81.0	79.3	80.2	78.5	78.5	78.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)