

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: P188607

Luminaire Tested: **24SR-LD2-39-C-UNV-L830-CD1-SO-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188607
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-LD2-39-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: 2847.0 lumens
Efficiency: N/A
Efficacy: 89.2 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

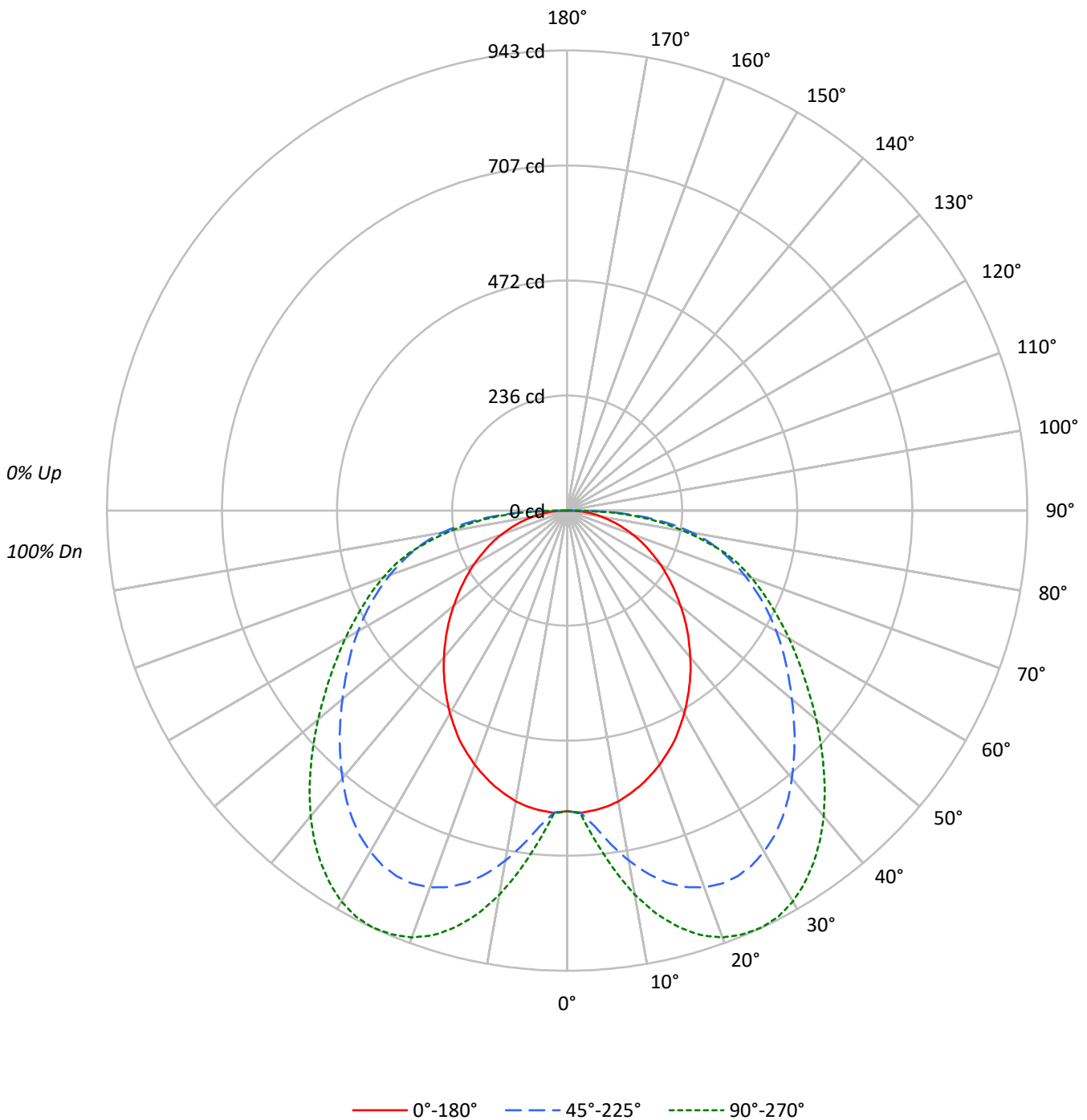
Input Watts (W): 31.9
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	829	829	829
5°	833	877	921
10°	827	995	1092
15°	812	1099	1231
20°	793	1177	1333
25°	773	1227	1400
30°	746	1254	1437
35°	718	1262	1447
40°	690	1258	1436
45°	663	1255	1414
50°	634	1259	1394
55°	612	1284	1390
60°	593	1332	1414
65°	577	1407	1469
70°	561	1522	1579
75°	547	1709	1739
80°	549	2021	1891
85°	608	2536	2294



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.9	2.2
10°-20°	215.2	7.6
20°-30°	360.4	12.7
30°-40°	451.3	15.9
40°-50°	473.5	16.6
50°-60°	447.4	15.7
60°-70°	391.6	13.8
70°-80°	302.5	10.6
80°-90°	141.1	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°	639.6	22.5
0°-40°	1090.9	38.3
0°-60°	2011.8	70.7
0°-90°	2847.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2847.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	616	616	616	616	616	
5°	617	617	650	674	682	59
15°	583	664	789	861	884	164
25°	521	668	827	911	943	239
35°	437	611	769	851	881	273
45°	348	518	659	723	743	269
55°	261	430	547	583	592	233
65°	181	352	442	454	462	179
75°	105	264	329	332	335	112
85°	39	139	164	152	149	42
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°	616.0	616.0	616.0	616.0	616.0	616.0	616.0	616.0	616.0	616.0	616.0
2.5°	620.0	619.0	618.0	616.0	615.1	615.1	615.1	615.1	616.0	619.0	621.0
5°	617.0	617.0	615.1	614.1	615.1	618.0	622.9	630.8	638.7	649.5	658.4
7.5°	612.1	611.1	610.1	611.1	620.0	632.8	645.6	660.3	674.1	689.9	702.6
10°	605.2	604.2	605.2	613.1	630.8	651.5	670.2	688.9	707.6	728.2	745.9
12.5°	594.4	594.4	598.3	616.0	640.6	666.2	690.8	714.5	738.1	761.7	782.4
15°	582.6	583.6	593.4	619.0	649.5	679.0	707.6	735.1	762.7	789.2	811.9
17.5°	568.8	570.8	587.5	619.0	653.4	687.9	720.4	750.9	780.4	808.9	832.5
20°	554.0	556.0	580.6	617.0	655.4	692.8	727.3	760.7	792.2	821.7	846.3
22.5°	537.3	540.3	571.8	611.1	653.4	693.8	729.2	763.7	796.1	827.6	852.2
25°	520.6	524.5	560.9	603.3	647.5	688.9	726.3	760.7	795.2	826.6	851.2
27.5°	499.9	506.8	548.1	591.4	638.7	680.0	717.4	753.8	788.3	819.8	844.4
30°	480.2	489.1	532.4	577.7	625.9	667.2	704.6	741.0	775.5	807.0	831.6
32.5°	458.6	469.4	514.7	561.9	609.2	649.5	687.9	724.3	758.7	790.2	813.9
35°	436.9	449.7	496.0	544.2	590.5	630.8	668.2	704.6	738.1	768.6	791.2
37.5°	415.3	429.1	475.3	524.5	568.8	608.2	645.6	681.0	715.4	744.0	766.6
40°	392.7	408.4	454.7	501.9	546.2	584.6	622.0	656.4	688.9	716.4	738.1
42.5°	370.0	387.7	434.0	480.2	522.6	560.0	597.3	630.8	661.3	687.9	708.6
45°	348.4	366.1	411.4	457.6	498.9	536.3	572.7	605.2	634.7	659.3	679.0
47.5°	325.7	345.4	390.7	436.0	475.3	512.7	548.1	578.7	607.2	629.8	648.5
50°	303.1	324.8	369.0	413.3	453.7	490.1	524.5	554.0	580.6	601.3	619.0
52.5°	281.5	304.1	349.4	392.7	432.0	468.4	501.9	530.4	555.0	573.7	589.5
55°	260.8	284.4	329.7	372.0	412.3	447.8	479.3	506.8	529.4	547.2	560.9
57.5°	240.1	265.7	311.0	354.3	392.7	428.1	458.6	484.2	504.8	521.6	533.4
60°	220.4	247.0	293.3	335.6	374.0	408.4	437.9	461.5	481.2	495.0	503.9
62.5°	199.8	228.3	274.6	317.9	356.2	388.7	417.3	439.9	456.6	468.4	476.3
65°	181.1	209.6	256.9	300.2	336.6	368.1	394.6	416.3	432.0	441.9	446.8
67.5°	162.4	191.9	239.1	281.5	316.9	347.4	372.0	392.7	406.4	414.3	418.2
70°	142.7	174.2	220.4	261.8	296.2	324.8	349.4	367.1	379.9	386.8	388.7
72.5°	123.0	155.5	201.7	242.1	274.6	302.1	324.8	341.5	353.3	358.2	359.2
75°	105.3	135.8	181.1	219.5	250.9	276.5	299.2	314.9	323.8	328.7	329.7
77.5°	87.6	117.1	160.4	196.8	224.4	249.0	270.6	285.4	294.2	298.2	298.2
80°	70.9	98.4	137.8	170.2	196.8	219.5	239.1	253.9	261.8	260.8	256.9
82.5°	55.1	80.7	114.2	142.7	166.3	187.0	206.7	215.5	218.5	215.5	212.6
85°	39.4	60.0	86.6	110.2	130.9	146.6	159.4	166.3	167.3	164.3	161.4
87.5°	22.6	33.5	49.2	66.9	77.7	87.6	98.4	102.3	102.3	104.3	98.4
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°	616.0	616.0	616.0	616.0	616.0	616.0	616.0	616.0
2.5°	620.0	621.0	621.0	622.9	623.9	623.9	622.9	621.0
5°	661.3	667.2	671.2	677.1	680.0	683.0	683.9	682.0
7.5°	709.5	718.4	726.3	735.1	739.1	742.0	745.9	743.0
10°	755.8	767.6	777.4	787.3	793.2	797.1	800.1	799.1
12.5°	795.2	808.9	819.8	829.6	837.5	843.4	846.3	846.3
15°	825.7	841.4	855.2	866.0	873.9	879.8	883.7	883.7
17.5°	849.3	865.0	879.8	890.6	898.5	906.4	910.3	912.3
20°	863.1	879.8	894.5	906.4	915.2	924.1	928.0	931.0
22.5°	869.9	886.7	902.4	915.2	925.1	932.9	937.8	939.8
25°	869.9	887.7	904.4	917.2	927.0	935.9	940.8	942.8
27.5°	864.0	882.7	899.5	911.3	922.1	931.0	935.9	937.8
30°	852.2	870.9	887.7	899.5	910.3	918.2	923.1	925.1
32.5°	833.5	853.2	869.0	880.8	891.6	899.5	904.4	905.4
35°	811.9	830.6	845.3	857.2	868.0	874.9	878.8	880.8
37.5°	785.3	803.0	817.8	828.6	838.5	846.3	850.3	851.2
40°	756.8	773.5	786.3	796.1	806.0	812.9	816.8	817.8
42.5°	726.3	742.0	753.8	762.7	771.5	777.4	780.4	781.4
45°	694.8	708.6	719.4	727.3	735.1	740.0	743.0	743.0
47.5°	663.3	676.1	684.9	690.8	697.7	702.6	705.6	704.6
50°	631.8	642.6	649.5	655.4	661.3	664.3	667.2	666.2
52.5°	600.3	610.1	614.1	619.0	623.9	626.9	629.8	627.9
55°	569.8	576.7	580.6	584.6	588.5	591.4	593.4	592.4
57.5°	540.3	545.2	548.1	552.1	555.0	557.0	559.0	558.0
60°	508.8	512.7	514.7	518.6	521.6	523.5	525.5	525.5
62.5°	479.3	482.2	483.2	487.1	489.1	491.1	494.0	493.0
65°	447.8	450.7	452.7	455.6	457.6	459.6	462.5	461.5
67.5°	418.2	421.2	422.2	425.1	428.1	431.0	432.0	432.0
70°	388.7	390.7	391.7	395.6	396.6	399.5	401.5	401.5
72.5°	359.2	360.2	362.1	365.1	367.1	369.0	371.0	370.0
75°	327.7	329.7	330.7	332.6	332.6	334.6	334.6	334.6
77.5°	295.2	292.3	291.3	290.3	289.3	289.3	289.3	288.3
80°	250.9	248.0	247.0	245.0	245.0	245.0	245.0	244.1
82.5°	207.6	203.7	201.7	200.8	199.8	199.8	199.8	198.8
85°	157.5	153.5	152.5	151.6	151.6	150.6	149.6	148.6
87.5°	97.4	94.5	93.5	91.5	92.5	90.5	90.5	90.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)