

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: P188609

Luminaire Tested: **24SR-LD2-39-C-UNV-L840-CD1-SO-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188609
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-L840-CD1-SO-U
Description: METALUX 2X4 SKYRIDGE LED FIXTURE WITH STORARO ORANGE SKYTRIM.

Light Source: EATON LED 4000K
Ballast/Driver: OSRAM ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2994.0 lumens
Efficiency: N/A
Efficacy: 93.9 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

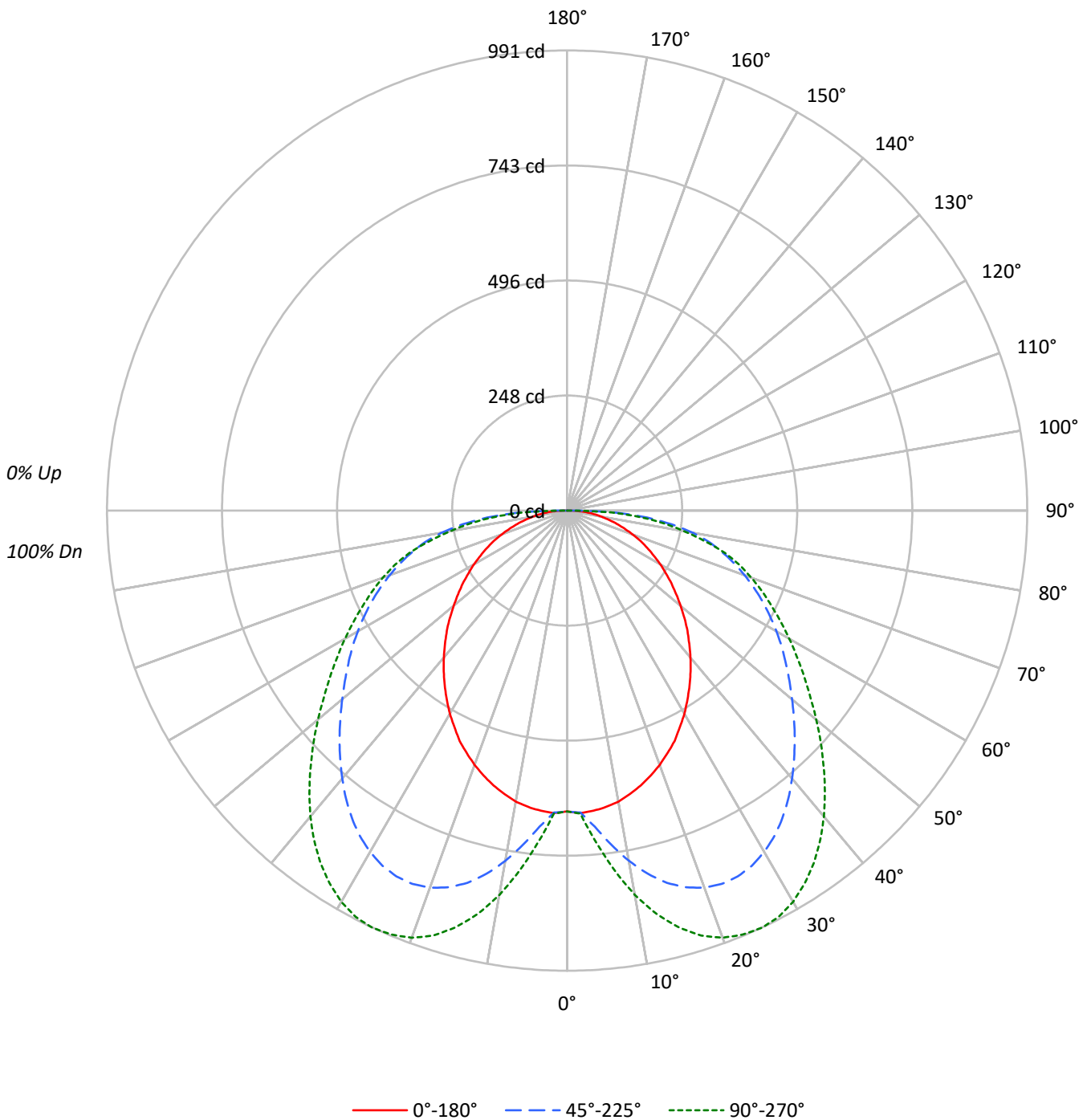
Input Watts (W): 31.9
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	872	872	872
5°	876	922	969
10°	870	1046	1148
15°	853	1156	1295
20°	834	1237	1402
25°	813	1291	1472
30°	785	1318	1511
35°	755	1328	1521
40°	725	1323	1511
45°	697	1319	1487
50°	667	1324	1467
55°	643	1350	1461
60°	624	1401	1487
65°	606	1479	1545
70°	590	1600	1661
75°	575	1797	1829
80°	577	2125	1989
85°	639	2668	2413



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	67.2	2.2
10°-20°	226.4	7.6
20°-30°	379.0	12.7
30°-40°	474.6	15.9
40°-50°	497.9	16.6
50°-60°	470.5	15.7
60°-70°	411.8	13.8
70°-80°	318.1	10.6
80°-90°	148.4	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°	672.6	22.5
0°-40°	1147.2	38.3
0°-60°	2115.7	70.7
0°-90°	2994.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2994.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	648	648	648	648	648	
5°	649	648	683	709	717	62
15°	613	699	830	905	929	173
25°	548	703	869	958	991	251
35°	460	642	808	895	926	287
45°	366	544	693	761	781	282
55°	274	452	575	613	623	246
65°	190	370	465	478	485	189
75°	111	277	346	349	352	117
85°	41	146	173	160	156	44
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°	647.9	647.9	647.9	647.9	647.9	647.9	647.9	647.9	647.9	647.9	647.9
2.5°	652.0	651.0	649.9	647.9	646.8	646.8	646.8	646.8	647.9	651.0	653.0
5°	648.9	648.9	646.8	645.8	646.8	649.9	655.1	663.4	671.7	683.0	692.4
7.5°	643.7	642.7	641.6	642.7	652.0	665.4	678.9	694.4	708.9	725.5	738.9
10°	636.5	635.4	636.5	644.8	663.4	685.1	704.8	724.4	744.1	765.8	784.5
12.5°	625.1	625.1	629.2	647.9	673.7	700.6	726.5	751.3	776.2	801.0	822.8
15°	612.7	613.7	624.1	651.0	683.0	714.1	744.1	773.1	802.1	830.0	853.8
17.5°	598.2	600.2	617.8	651.0	687.2	723.4	757.6	789.6	820.7	850.7	875.5
20°	582.7	584.7	610.6	648.9	689.3	728.6	764.8	800.0	833.1	864.2	890.0
22.5°	565.1	568.2	601.3	642.7	687.2	729.6	766.9	803.1	837.2	870.4	896.2
25°	547.5	551.6	589.9	634.4	681.0	724.4	763.8	800.0	836.2	869.3	895.2
27.5°	525.7	533.0	576.4	622.0	671.7	715.1	754.5	792.7	829.0	862.1	888.0
30°	505.0	514.4	559.9	607.5	658.2	701.7	741.0	779.3	815.5	848.6	874.5
32.5°	482.3	493.7	541.3	590.9	640.6	683.0	723.4	761.7	797.9	831.0	855.9
35°	459.5	473.0	521.6	572.3	620.9	663.4	702.7	741.0	776.2	808.3	832.1
37.5°	436.7	451.2	499.9	551.6	598.2	639.6	678.9	716.2	752.4	782.4	806.2
40°	412.9	429.5	478.1	527.8	574.4	614.7	654.1	690.3	724.4	753.4	776.2
42.5°	389.1	407.8	456.4	505.0	549.5	588.9	628.2	663.4	695.5	723.4	745.1
45°	366.4	385.0	432.6	481.2	524.7	564.0	602.3	636.5	667.5	693.4	714.1
47.5°	342.6	363.3	410.9	458.5	499.9	539.2	576.4	608.5	638.5	662.3	682.0
50°	318.8	341.5	388.1	434.7	477.1	515.4	551.6	582.7	610.6	632.3	651.0
52.5°	296.0	319.8	367.4	412.9	454.3	492.6	527.8	557.8	583.7	603.4	619.9
55°	274.3	299.1	346.7	391.2	433.6	470.9	504.0	533.0	556.8	575.4	589.9
57.5°	252.5	279.4	327.0	372.6	412.9	450.2	482.3	509.2	530.9	548.5	560.9
60°	231.8	259.8	308.4	352.9	393.3	429.5	460.5	485.4	506.1	520.6	529.9
62.5°	210.1	240.1	288.7	334.3	374.6	408.8	438.8	462.6	480.2	492.6	500.9
65°	190.4	220.4	270.1	315.6	353.9	387.1	415.0	437.8	454.3	464.7	469.9
67.5°	170.8	201.8	251.5	296.0	333.2	365.3	391.2	412.9	427.4	435.7	439.8
70°	150.1	183.2	231.8	275.3	311.5	341.5	367.4	386.0	399.5	406.7	408.8
72.5°	129.4	163.5	212.2	254.6	288.7	317.7	341.5	359.1	371.5	376.7	377.7
75°	110.7	142.8	190.4	230.8	263.9	290.8	314.6	331.2	340.5	345.7	346.7
77.5°	92.1	123.2	168.7	207.0	236.0	261.8	284.6	300.1	309.4	313.6	313.6
80°	74.5	103.5	144.9	179.0	207.0	230.8	251.5	267.0	275.3	274.3	270.1
82.5°	58.0	84.9	120.0	150.1	174.9	196.6	217.3	226.6	229.8	226.6	223.5
85°	41.4	63.1	91.1	115.9	137.6	154.2	167.7	174.9	175.9	172.8	169.7
87.5°	23.8	35.2	51.7	70.4	81.8	92.1	103.5	107.6	107.6	109.7	103.5
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°	647.9	647.9	647.9	647.9	647.9	647.9	647.9	647.9
2.5°	652.0	653.0	653.0	655.1	656.1	656.1	655.1	653.0
5°	695.5	701.7	705.8	712.0	715.1	718.2	719.3	717.2
7.5°	746.2	755.5	763.8	773.1	777.2	780.3	784.5	781.4
10°	794.8	807.2	817.6	827.9	834.1	838.3	841.4	840.3
12.5°	836.2	850.7	862.1	872.4	880.7	886.9	890.0	890.0
15°	868.3	884.9	899.3	910.7	919.0	925.2	929.4	929.4
17.5°	893.1	909.7	925.2	936.6	944.9	953.2	957.3	959.4
20°	907.6	925.2	940.7	953.2	962.5	971.8	975.9	979.0
22.5°	914.9	932.5	949.0	962.5	972.8	981.1	986.3	988.3
25°	914.9	933.5	951.1	964.5	974.9	984.2	989.4	991.4
27.5°	908.7	928.3	945.9	958.3	969.7	979.0	984.2	986.3
30°	896.2	915.9	933.5	945.9	957.3	965.6	970.7	972.8
32.5°	876.6	897.3	913.8	926.2	937.6	945.9	951.1	952.1
35°	853.8	873.5	889.0	901.4	912.8	920.0	924.2	926.2
37.5°	825.9	844.5	860.0	871.4	881.7	890.0	894.2	895.2
40°	795.8	813.4	826.9	837.2	847.6	854.8	859.0	860.0
42.5°	763.8	780.3	792.7	802.1	811.4	817.6	820.7	821.7
45°	730.6	745.1	756.5	764.8	773.1	778.3	781.4	781.4
47.5°	697.5	711.0	720.3	726.5	733.8	738.9	742.0	741.0
50°	664.4	675.8	683.0	689.3	695.5	698.6	701.7	700.6
52.5°	631.3	641.6	645.8	651.0	656.1	659.2	662.3	660.3
55°	599.2	606.5	610.6	614.7	618.9	622.0	624.1	623.0
57.5°	568.2	573.3	576.4	580.6	583.7	585.8	587.8	586.8
60°	535.0	539.2	541.3	545.4	548.5	550.6	552.6	552.6
62.5°	504.0	507.1	508.1	512.3	514.4	516.4	519.5	518.5
65°	470.9	474.0	476.1	479.2	481.2	483.3	486.4	485.4
67.5°	439.8	442.9	444.0	447.1	450.2	453.3	454.3	454.3
70°	408.8	410.9	411.9	416.0	417.1	420.2	422.2	422.2
72.5°	377.7	378.8	380.8	384.0	386.0	388.1	390.2	389.1
75°	344.6	346.7	347.7	349.8	349.8	351.9	351.9	351.9
77.5°	310.5	307.4	306.3	305.3	304.3	304.3	304.3	303.2
80°	263.9	260.8	259.8	257.7	257.7	257.7	257.7	256.7
82.5°	218.4	214.2	212.2	211.1	210.1	210.1	210.1	209.1
85°	165.6	161.4	160.4	159.4	159.4	158.3	157.3	156.3
87.5°	102.5	99.4	98.3	96.2	97.3	95.2	95.2	95.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)