

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: P188610

Luminaire Tested: **24SR-LD2-39-C-UNV-L850-CD1-SO-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188610
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-L850-CD1-SO-U
Description: METALUX 2X4 SKYRIDGE LED FIXTURE WITH STORARO ORANGE SKYTRIM.

Light Source: EATON LED 5000K
Ballast/Driver: OSRAM ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3258.0 lumens
Efficiency: N/A
Efficacy: 102.1 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

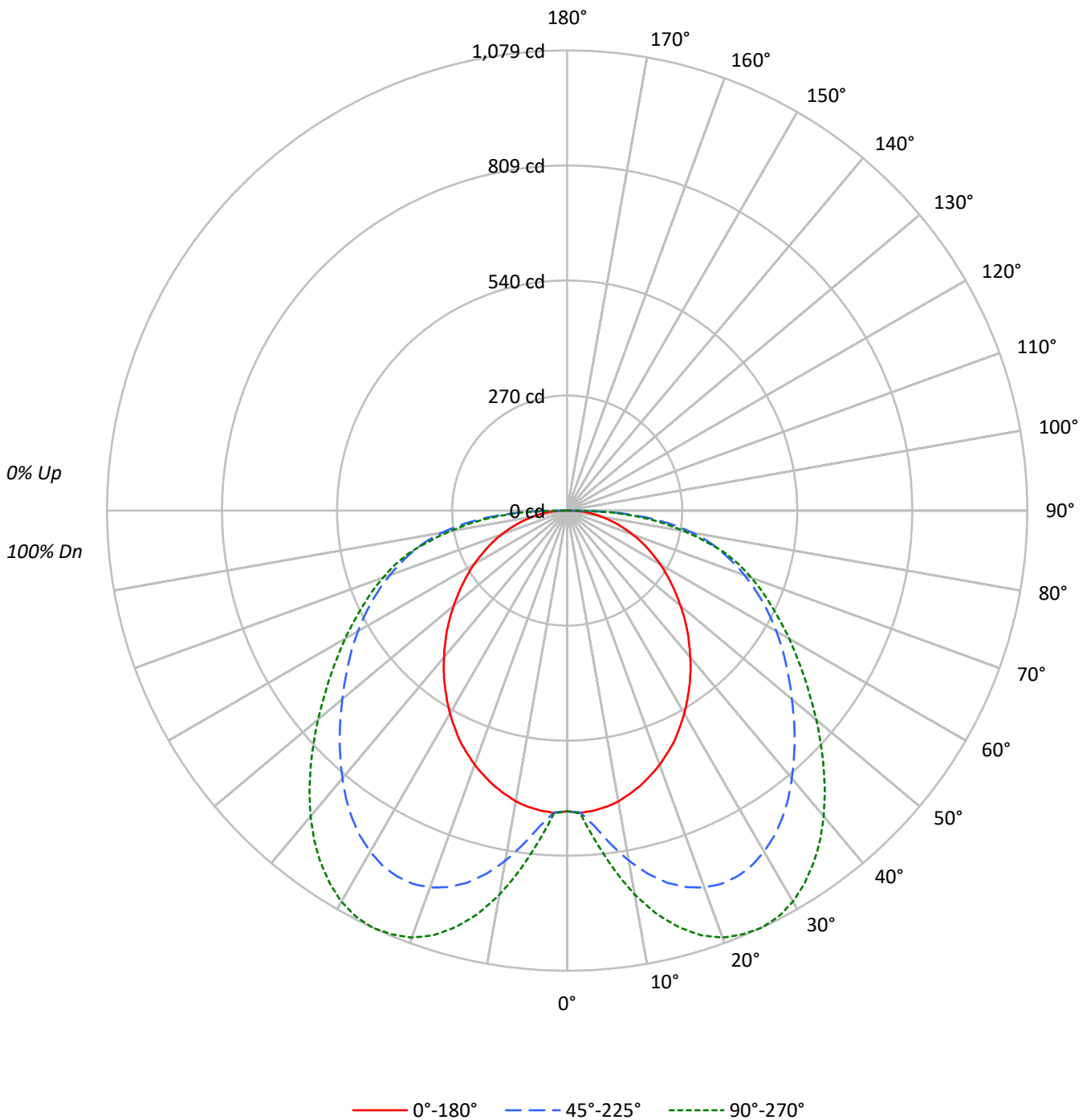
Input Watts (W): 31.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	949	949	949
5°	954	1004	1054
10°	946	1139	1249
15°	929	1258	1409
20°	908	1347	1525
25°	884	1404	1602
30°	854	1435	1645
35°	821	1445	1656
40°	789	1440	1644
45°	759	1436	1618
50°	726	1440	1596
55°	700	1469	1590
60°	679	1524	1618
65°	660	1610	1682
70°	642	1741	1808
75°	626	1955	1991
80°	628	2312	2164
85°	695	2904	2626



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	73.1	2.2
10°-20°	246.3	7.6
20°-30°	412.5	12.7
30°-40°	516.5	15.9
40°-50°	541.8	16.6
50°-60°	512.0	15.7
60°-70°	448.2	13.8
70°-80°	346.1	10.6
80°-90°	161.5	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°	731.9	22.5
0°-40°	1248.4	38.3
0°-60°	2302.2	70.7
0°-90°	3258.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3258.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	705	705	705	705	705	
5°	706	706	743	771	780	67
15°	667	760	903	985	1011	188
25°	596	765	946	1042	1079	274
35°	500	699	880	974	1008	313
45°	399	592	754	828	850	307
55°	298	492	626	667	678	267
65°	207	403	506	520	528	205
75°	120	302	376	380	383	128
85°	45	159	188	174	170	48
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°	705.0	705.0	705.0	705.0	705.0	705.0	705.0	705.0	705.0	705.0	705.0
2.5°	709.5	708.4	707.2	705.0	703.9	703.9	703.9	703.9	705.0	708.4	710.6
5°	706.1	706.1	703.9	702.7	703.9	707.2	712.9	721.9	730.9	743.3	753.4
7.5°	700.5	699.4	698.2	699.4	709.5	724.1	738.8	755.7	771.4	789.4	804.1
10°	692.6	691.5	692.6	701.6	721.9	745.5	766.9	788.3	809.7	833.4	853.6
12.5°	680.2	680.2	684.7	705.0	733.1	762.4	790.6	817.6	844.6	871.7	895.3
15°	666.7	667.8	679.1	708.4	743.3	777.1	809.7	841.2	872.8	903.2	929.1
17.5°	650.9	653.2	672.3	708.4	747.8	787.2	824.4	859.3	893.1	925.7	952.7
20°	634.0	636.3	664.4	706.1	750.0	792.8	832.2	870.5	906.6	940.4	968.5
22.5°	614.9	618.3	654.3	699.4	747.8	793.9	834.5	873.9	911.1	947.1	975.3
25°	595.7	600.2	641.9	690.3	741.0	788.3	831.1	870.5	909.9	946.0	974.1
27.5°	572.1	580.0	627.3	676.8	730.9	778.2	821.0	862.6	902.1	938.1	966.3
30°	549.6	559.7	609.3	661.1	716.2	763.5	806.3	848.0	887.4	923.5	951.6
32.5°	524.8	537.2	589.0	643.0	697.1	743.3	787.2	828.9	868.3	904.3	931.3
35°	500.0	514.7	567.6	622.8	675.7	721.9	764.7	806.3	844.6	879.5	905.4
37.5°	475.2	491.0	543.9	600.2	650.9	696.0	738.8	779.3	818.7	851.4	877.3
40°	449.3	467.4	520.3	574.3	625.0	668.9	711.7	751.2	788.3	819.9	844.6
42.5°	423.4	443.7	496.6	549.6	598.0	640.8	683.6	721.9	756.8	787.2	810.8
45°	398.7	418.9	470.7	523.7	571.0	613.8	655.4	692.6	726.4	754.5	777.1
47.5°	372.8	395.3	447.1	498.9	543.9	586.7	627.3	662.2	694.8	720.7	742.1
50°	346.9	371.6	422.3	473.0	519.2	560.8	600.2	634.0	664.4	688.1	708.4
52.5°	322.1	348.0	399.8	449.3	494.4	536.1	574.3	607.0	635.2	656.6	674.6
55°	298.4	325.5	377.3	425.7	471.9	512.4	548.4	580.0	605.9	626.1	641.9
57.5°	274.8	304.1	355.9	405.4	449.3	489.9	524.8	554.1	577.7	596.9	610.4
60°	252.3	282.7	335.6	384.0	427.9	467.4	501.1	528.2	550.7	566.5	576.6
62.5°	228.6	261.3	314.2	363.8	407.7	444.8	477.5	503.4	522.5	536.1	545.1
65°	207.2	239.9	293.9	343.5	385.1	421.2	451.6	476.4	494.4	505.6	511.3
67.5°	185.8	219.6	273.7	322.1	362.6	397.5	425.7	449.3	465.1	474.1	478.6
70°	163.3	199.3	252.3	299.6	339.0	371.6	399.8	420.1	434.7	442.6	444.8
72.5°	140.8	177.9	230.9	277.0	314.2	345.7	371.6	390.8	404.3	409.9	411.1
75°	120.5	155.4	207.2	251.1	287.2	316.5	342.4	360.4	370.5	376.1	377.3
77.5°	100.2	134.0	183.6	225.2	256.8	284.9	309.7	326.6	336.7	341.2	341.2
80°	81.1	112.6	157.7	194.8	225.2	251.1	273.7	290.6	299.6	298.4	293.9
82.5°	63.1	92.3	130.6	163.3	190.3	214.0	236.5	246.6	250.0	246.6	243.3
85°	45.0	68.7	99.1	126.1	149.8	167.8	182.4	190.3	191.4	188.1	184.7
87.5°	25.9	38.3	56.3	76.6	89.0	100.2	112.6	117.1	117.1	119.4	112.6
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°	705.0	705.0	705.0	705.0	705.0	705.0	705.0	705.0
2.5°	709.5	710.6	710.6	712.9	714.0	714.0	712.9	710.6
5°	756.8	763.5	768.0	774.8	778.2	781.6	782.7	780.4
7.5°	812.0	822.1	831.1	841.2	845.8	849.1	853.6	850.3
10°	864.9	878.4	889.7	900.9	907.7	912.2	915.6	914.4
12.5°	909.9	925.7	938.1	949.4	958.4	965.1	968.5	968.5
15°	944.9	962.9	978.6	991.0	1000.0	1006.8	1011.3	1011.3
17.5°	971.9	989.9	1006.8	1019.2	1028.2	1037.2	1041.7	1044.0
20°	987.6	1006.8	1023.7	1037.2	1047.3	1057.5	1062.0	1065.4
22.5°	995.5	1014.7	1032.7	1047.3	1058.6	1067.6	1073.2	1075.5
25°	995.5	1015.8	1034.9	1049.6	1060.8	1071.0	1076.6	1078.9
27.5°	988.8	1010.2	1029.3	1042.8	1055.2	1065.4	1071.0	1073.2
30°	975.3	996.7	1015.8	1029.3	1041.7	1050.7	1056.3	1058.6
32.5°	953.9	976.4	994.4	1007.9	1020.3	1029.3	1034.9	1036.1
35°	929.1	950.5	967.4	980.9	993.3	1001.2	1005.7	1007.9
37.5°	898.7	919.0	935.8	948.2	959.5	968.5	973.0	974.1
40°	866.0	885.2	899.8	911.1	922.3	930.2	934.7	935.8
42.5°	831.1	849.1	862.6	872.8	882.9	889.7	893.1	894.2
45°	795.1	810.8	823.2	832.2	841.2	846.9	850.3	850.3
47.5°	759.0	773.7	783.8	790.6	798.5	804.1	807.5	806.3
50°	723.0	735.4	743.3	750.0	756.8	760.2	763.5	762.4
52.5°	687.0	698.2	702.7	708.4	714.0	717.4	720.7	718.5
55°	652.1	659.9	664.4	668.9	673.4	676.8	679.1	678.0
57.5°	618.3	623.9	627.3	631.8	635.2	637.4	639.7	638.5
60°	582.2	586.7	589.0	593.5	596.9	599.1	601.4	601.4
62.5°	548.4	551.8	552.9	557.5	559.7	562.0	565.3	564.2
65°	512.4	515.8	518.0	521.4	523.7	525.9	529.3	528.2
67.5°	478.6	482.0	483.1	486.5	489.9	493.3	494.4	494.4
70°	444.8	447.1	448.2	452.7	453.8	457.2	459.5	459.5
72.5°	411.1	412.2	414.4	417.8	420.1	422.3	424.6	423.4
75°	375.0	377.3	378.4	380.6	380.6	382.9	382.9	382.9
77.5°	337.9	334.5	333.3	332.2	331.1	331.1	331.1	330.0
80°	287.2	283.8	282.7	280.4	280.4	280.4	280.4	279.3
82.5°	237.6	233.1	230.9	229.7	228.6	228.6	228.6	227.5
85°	180.2	175.7	174.6	173.4	173.4	172.3	171.2	170.1
87.5°	111.5	108.1	107.0	104.7	105.9	103.6	103.6	103.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)