

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: P188530

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188530
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24780)
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-PG-U
Description: METALUX 2X4 SKYRIDGE LED FIXTURE WITH PRIMARY GREEN SKYTRIM.

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

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2732.0 lumens
Efficiency: N/A
Efficacy: 85.6 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 2.25 / 2.05
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

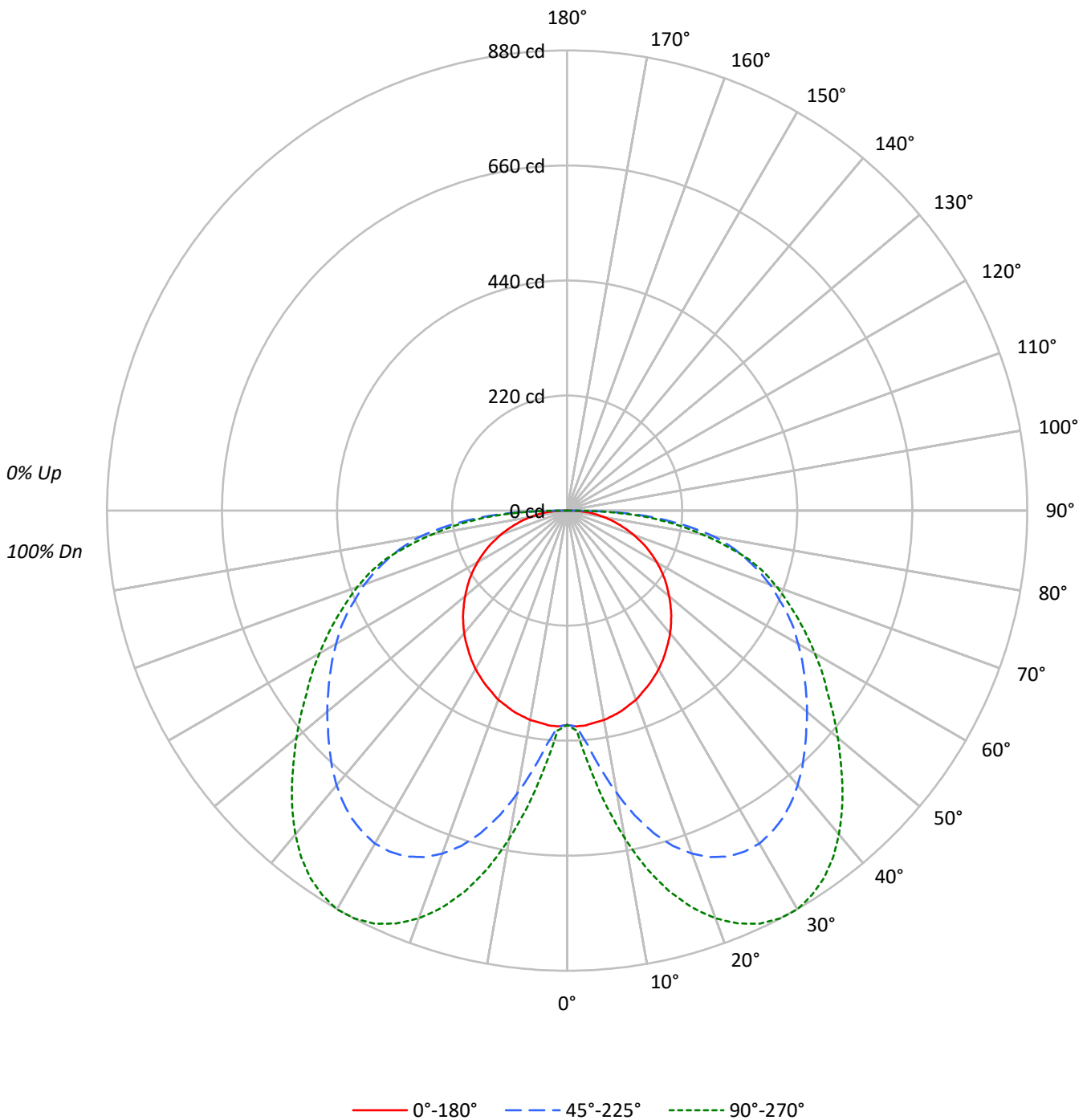
Input Watts (W): 31.9
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	106	100	95	90	103	98	93	88	93	89	86	89	86	83	86	83	80	78
2	95	85	77	70	92	83	76	69	80	73	68	76	71	66	73	69	65	62
3	86	73	64	57	83	72	63	56	69	61	55	66	59	54	63	58	53	51
4	78	64	54	47	75	63	54	46	60	52	46	58	51	45	55	49	44	42
5	71	57	47	39	69	56	46	39	53	45	39	51	44	38	49	43	38	35
6	65	51	41	34	63	50	40	34	48	39	33	46	39	33	44	38	33	30
7	60	46	36	29	58	45	36	29	43	35	29	42	34	29	40	33	28	26
8	56	41	32	26	54	41	32	26	39	31	25	38	31	25	37	30	25	23
9	52	38	29	23	50	37	29	23	36	28	23	35	28	23	34	27	22	20
10	49	34	26	20	47	34	26	20	33	25	20	32	25	20	31	25	20	18

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	552	552	552
5°	557	607	665
10°	555	751	871
15°	554	889	1049
20°	551	1000	1188
25°	547	1083	1294
30°	544	1142	1368
35°	540	1180	1407
40°	538	1204	1420
45°	536	1223	1416
50°	533	1254	1414
55°	533	1300	1426
60°	533	1373	1473
65°	534	1477	1549
70°	531	1621	1679
75°	533	1838	1867
80°	549	2208	2033
85°	644	2746	2468



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	45.6	1.7
10°-20°	172.4	6.3
20°-30°	313.8	11.5
30°-40°	416.2	15.2
40°-50°	456.0	16.7
50°-60°	448.2	16.4
60°-70°	406.5	14.9
70°-80°	322.2	11.8
80°-90°	151.0	5.5
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°	531.8	19.5
0°-40°	948.1	34.7
0°-60°	1852.2	67.8
0°-90°	2732.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2732.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	410	410	410	410	410	
5°	412	415	449	481	492	39
15°	398	494	638	725	753	112
25°	368	544	730	833	872	170
35°	329	532	718	820	857	206
45°	282	478	643	721	744	217
55°	227	420	554	597	608	203
65°	168	363	464	477	486	165
75°	102	280	354	354	359	108
85°	42	151	178	160	160	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°	409.9	409.9	409.9	409.9	409.9	409.9	409.9	409.9	409.9	409.9	409.9
2.5°	413.2	412.1	412.1	412.1	411.0	411.0	411.0	412.1	412.1	413.2	415.5
5°	412.1	411.0	411.0	411.0	413.2	416.6	423.4	431.3	440.3	449.3	459.4
7.5°	408.7	408.7	408.7	412.1	422.2	435.8	452.6	469.5	484.2	499.9	514.6
10°	406.5	406.5	408.7	420.0	440.3	462.8	485.3	507.8	528.1	549.5	569.7
12.5°	402.0	402.0	408.7	430.1	458.3	487.6	515.7	543.9	570.9	596.8	619.3
15°	397.5	397.5	412.1	442.5	476.3	511.2	545.0	577.6	609.2	638.4	664.3
17.5°	390.7	391.8	414.4	451.5	492.1	531.5	568.6	605.8	639.6	672.2	699.2
20°	385.1	387.3	416.6	459.4	504.4	548.4	590.0	628.3	664.3	698.1	727.4
22.5°	376.1	380.6	417.7	465.0	513.4	560.7	603.5	644.1	682.3	717.3	746.5
25°	368.2	373.8	416.6	467.3	520.2	568.6	612.5	654.2	693.6	729.6	760.0
27.5°	359.2	368.2	415.5	468.4	522.5	572.0	617.0	659.8	699.2	735.3	766.8
30°	350.2	361.4	412.1	467.3	521.3	570.9	615.9	659.8	699.2	735.3	765.7
32.5°	340.0	352.4	405.4	461.7	516.8	565.2	610.3	653.1	693.6	728.5	758.9
35°	328.8	343.4	397.5	453.8	507.8	556.2	600.1	642.9	682.3	718.4	747.7
37.5°	317.5	334.4	388.5	444.8	497.7	545.0	587.8	630.6	668.8	703.7	731.9
40°	306.3	324.3	378.3	433.5	485.3	531.5	574.3	615.9	651.9	685.7	711.6
42.5°	293.9	314.1	367.1	421.1	470.7	515.7	558.5	599.0	633.9	665.5	690.2
45°	281.5	301.8	354.7	407.6	457.1	499.9	541.6	581.0	613.7	642.9	666.6
47.5°	268.0	290.5	343.4	394.1	441.4	485.3	525.8	561.9	594.5	620.4	642.9
50°	254.5	278.1	329.9	380.6	426.7	469.5	508.9	543.9	574.3	599.0	618.2
52.5°	241.0	265.7	317.5	367.1	413.2	454.9	493.2	525.8	554.0	576.5	595.6
55°	227.4	253.3	305.1	353.6	399.7	440.3	477.4	507.8	534.8	554.0	569.7
57.5°	212.8	241.0	292.8	341.2	386.2	426.7	461.7	490.9	515.7	532.6	546.1
60°	198.2	227.4	279.2	328.8	372.7	412.1	445.9	474.0	495.4	510.1	522.5
62.5°	182.4	213.9	266.9	315.3	359.2	397.5	429.0	453.8	475.2	488.7	495.4
65°	167.8	200.4	253.3	301.8	344.6	380.6	411.0	434.6	452.6	463.9	469.5
67.5°	150.9	185.8	238.7	287.1	327.7	362.6	390.7	413.2	429.0	436.9	441.4
70°	135.1	171.1	222.9	270.2	308.5	342.3	369.3	390.7	404.2	412.1	413.2
72.5°	118.2	155.4	207.2	252.2	289.4	320.9	346.8	365.9	377.2	384.0	385.1
75°	102.5	138.5	188.0	230.8	265.7	295.0	319.8	337.8	349.1	353.6	353.6
77.5°	86.7	120.5	167.8	208.3	241.0	268.0	290.5	308.5	317.5	322.0	322.0
80°	70.9	103.6	146.4	183.5	212.8	237.6	260.1	275.9	284.9	284.9	278.1
82.5°	56.3	84.4	121.6	155.4	180.2	202.7	224.1	234.2	236.5	234.2	228.6
85°	41.7	64.2	94.6	120.5	143.0	158.8	172.3	179.0	180.2	177.9	173.4
87.5°	23.6	37.2	54.0	70.9	85.6	93.5	104.7	107.0	107.0	110.3	104.7
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°	409.9	409.9	409.9	409.9	409.9	409.9	409.9	409.9
2.5°	416.6	417.7	417.7	421.1	421.1	422.2	421.1	421.1
5°	466.2	470.7	477.4	484.2	486.4	490.9	489.8	492.1
7.5°	525.8	534.8	545.0	554.0	558.5	563.0	564.1	567.5
10°	585.5	596.8	609.2	621.5	628.3	631.7	636.2	637.3
12.5°	637.3	654.2	666.6	680.1	689.1	693.6	698.1	700.4
15°	684.6	701.5	717.3	731.9	740.9	747.7	752.2	753.3
17.5°	720.6	739.8	756.7	772.4	781.4	789.3	793.8	796.1
20°	748.8	770.2	787.1	802.8	813.0	822.0	828.7	829.9
22.5°	769.0	790.4	809.6	825.3	837.7	846.7	852.4	854.6
25°	783.7	806.2	825.3	841.1	853.5	863.6	869.3	871.5
27.5°	790.4	814.1	834.4	849.0	861.4	871.5	878.3	879.4
30°	791.6	814.1	834.4	850.1	862.5	872.6	878.3	880.5
32.5°	783.7	807.3	827.6	842.2	854.6	864.8	870.4	871.5
35°	772.4	793.8	813.0	827.6	840.0	849.0	854.6	856.9
37.5°	755.5	775.8	793.8	807.3	818.6	827.6	833.2	835.5
40°	735.3	754.4	771.3	783.7	793.8	801.7	806.2	808.5
42.5°	711.6	729.6	745.4	755.5	765.7	772.4	775.8	778.1
45°	686.9	703.7	716.1	725.1	734.1	739.8	743.2	744.3
47.5°	661.0	675.6	685.7	693.6	700.4	706.0	709.4	709.4
50°	635.1	647.4	655.3	663.2	668.8	672.2	674.5	675.6
52.5°	609.2	619.3	624.9	631.7	636.2	639.6	641.8	641.8
55°	582.1	590.0	594.5	600.1	604.7	606.9	609.2	608.0
57.5°	556.2	561.9	565.2	569.7	573.1	575.4	577.6	578.8
60°	529.2	533.7	534.8	539.3	542.7	545.0	546.1	547.2
62.5°	501.1	504.4	506.7	508.9	512.3	514.6	515.7	516.8
65°	472.9	475.2	475.2	479.7	483.0	484.2	485.3	486.4
67.5°	443.6	444.8	445.9	449.3	452.6	453.8	456.0	456.0
70°	414.4	414.4	415.5	418.9	422.2	423.4	425.6	426.7
72.5°	384.0	385.1	385.1	388.5	391.8	394.1	395.2	396.3
75°	352.4	352.4	353.6	354.7	355.8	356.9	356.9	359.2
77.5°	318.7	314.1	311.9	309.6	310.8	310.8	309.6	310.8
80°	271.4	265.7	262.4	261.2	262.4	261.2	261.2	262.4
82.5°	222.9	216.2	213.9	212.8	212.8	212.8	211.7	213.9
85°	167.8	163.3	161.0	158.8	159.9	159.9	158.8	159.9
87.5°	101.3	99.1	96.8	94.6	95.7	94.6	93.5	96.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)