

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: P188503

Luminaire Tested: **24SR-LD2-53-C-UNV-L835-CD1-MR-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188503
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24779)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24SR-LD2-53-C-UNV-L835-CD1-MR-U
Description: METALUX 2X4 SKYRIDGE LED FIXTURE WITH MEDIUM RED SKYTRIM.

Light Source: EATON LED 3500K
Ballast/Driver: OSRAM ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3214.0 lumens
Efficiency: N/A
Efficacy: 74.6 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 2.27 / 2.06
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

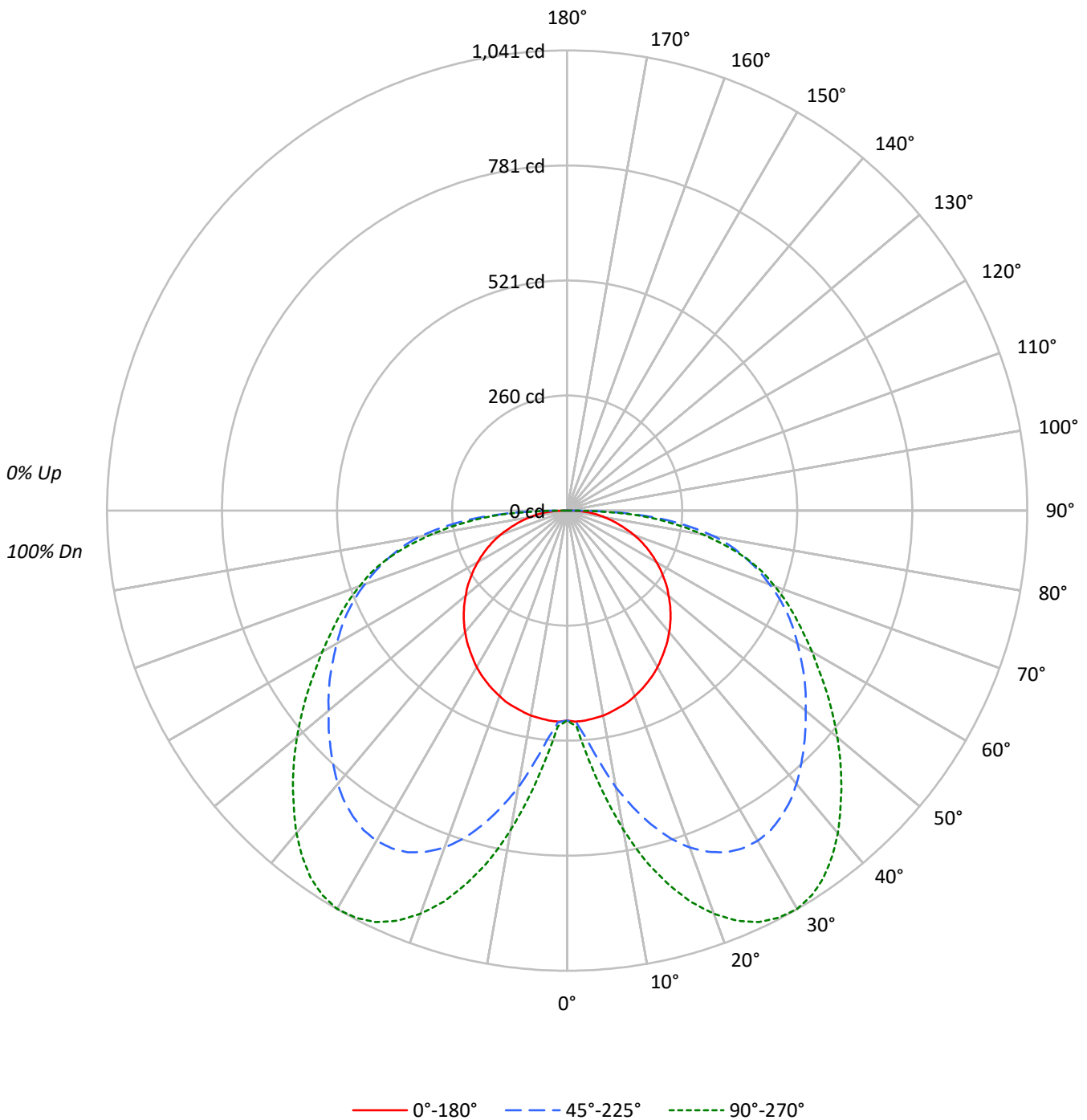
Input Watts (W): 43.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	106	100	95	90	103	98	93	88	93	89	85	89	86	83	86	83	80	78
2	95	85	77	70	92	83	76	69	79	73	68	76	71	66	73	68	64	62
3	85	73	64	56	83	72	63	56	69	61	55	66	59	54	63	58	53	50
4	78	64	54	47	75	63	53	46	60	52	46	58	51	45	55	49	44	42
5	71	57	47	39	69	55	46	39	53	45	39	51	44	38	49	43	38	35
6	65	50	41	34	63	49	40	33	48	39	33	46	38	33	44	38	32	30
7	60	45	36	29	58	45	36	29	43	35	29	41	34	29	40	33	28	26
8	56	41	32	26	54	40	32	26	39	31	25	38	30	25	36	30	25	23
9	52	38	29	23	50	37	28	23	36	28	23	35	27	22	33	27	22	20
10	48	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°	639	639	639
5°	644	704	766
10°	644	869	1001
15°	641	1025	1215
20°	640	1162	1390
25°	637	1266	1525
30°	635	1340	1617
35°	632	1388	1663
40°	631	1418	1674
45°	629	1441	1669
50°	627	1475	1670
55°	627	1536	1681
60°	628	1620	1722
65°	632	1749	1813
70°	632	1917	1965
75°	632	2182	2189
80°	659	2625	2416
85°	770	3293	2979



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	52.7	1.6
10°-20°	199.7	6.2
20°-30°	367.4	11.4
30°-40°	489.7	15.2
40°-50°	536.5	16.7
50°-60°	527.5	16.4
60°-70°	478.7	14.9
70°-80°	381.1	11.9
80°-90°	180.7	5.6
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°	619.8	19.3
0°-40°	1109.5	34.5
0°-60°	2173.5	67.6
0°-90°	3214.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3214.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	475	475	475	475	475	
5°	476	480	521	555	567	45
15°	460	570	736	838	872	130
25°	429	632	853	981	1027	198
35°	385	622	845	970	1012	241
45°	331	560	757	849	877	255
55°	267	495	655	704	717	239
65°	198	428	549	561	570	196
75°	122	334	420	417	421	129
85°	50	180	213	193	193	52
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°	475.1	475.1	475.1	475.1	475.1	475.1	475.1	475.1	475.1	475.1	475.1
2.5°	477.8	477.8	476.5	476.5	476.5	475.1	475.1	476.5	477.8	479.2	480.5
5°	476.5	476.5	476.5	476.5	477.8	483.2	490.0	499.4	507.5	521.0	527.7
7.5°	473.8	473.8	475.1	479.2	490.0	504.8	522.3	542.6	558.8	576.3	592.5
10°	471.1	471.1	473.8	487.3	508.8	534.5	560.1	585.8	608.7	635.7	656.0
12.5°	465.7	465.7	473.8	498.0	530.4	562.8	595.2	629.0	658.7	687.0	715.4
15°	460.3	460.3	476.5	510.2	550.7	589.8	627.6	666.8	701.9	735.6	765.3
17.5°	454.9	456.2	480.5	523.7	568.2	614.1	658.7	700.5	739.7	777.4	811.2
20°	446.8	449.5	483.2	533.1	583.1	634.4	681.6	727.5	770.7	811.2	846.3
22.5°	438.7	444.1	484.6	539.9	595.2	650.6	700.5	747.7	793.6	835.5	871.9
25°	429.2	436.0	485.9	543.9	603.3	660.0	712.7	762.6	809.8	853.0	889.5
27.5°	419.8	429.2	483.2	543.9	606.0	665.4	718.1	769.3	819.3	861.1	900.3
30°	409.0	421.1	479.2	542.6	606.0	664.1	718.1	770.7	819.3	862.5	900.3
32.5°	396.8	413.0	472.4	537.2	600.6	660.0	714.0	765.3	813.9	857.1	893.5
35°	384.7	402.2	464.3	529.1	592.5	650.6	703.2	754.5	801.7	844.9	881.4
37.5°	372.5	392.8	454.9	519.6	580.4	637.1	689.7	741.0	786.9	828.7	862.5
40°	359.0	380.6	442.7	506.1	566.9	620.9	673.5	722.1	766.6	807.1	839.5
42.5°	345.5	368.5	429.2	492.7	550.7	604.7	656.0	703.2	746.4	782.8	812.5
45°	330.7	355.0	415.7	476.5	533.1	587.1	637.1	681.6	723.5	757.2	784.2
47.5°	315.8	341.5	400.9	461.6	516.9	569.6	618.2	661.4	699.2	731.6	757.2
50°	299.6	326.6	386.0	445.4	500.7	552.0	599.3	639.8	676.2	704.6	728.9
52.5°	284.8	313.1	371.2	430.6	484.6	535.8	581.7	619.5	653.3	680.3	700.5
55°	267.2	298.3	357.7	415.7	469.7	519.6	562.8	599.3	630.3	654.6	672.2
57.5°	251.0	283.4	342.8	400.9	453.5	503.4	543.9	579.0	606.0	627.6	643.8
60°	233.5	268.6	328.0	386.0	438.7	487.3	526.4	558.8	584.4	602.0	615.5
62.5°	216.0	252.4	314.5	371.2	422.5	468.4	506.1	535.8	558.8	576.3	584.4
65°	198.4	236.2	298.3	356.3	406.3	449.5	485.9	514.2	534.5	549.3	554.7
67.5°	179.5	220.0	282.1	337.4	387.4	429.2	463.0	490.0	507.5	519.6	522.3
70°	160.6	201.1	263.2	318.5	365.8	404.9	438.7	461.6	479.2	487.3	490.0
72.5°	140.4	182.2	244.3	296.9	341.5	380.6	410.3	434.6	449.5	454.9	454.9
75°	121.5	162.0	222.7	272.6	315.8	352.3	380.6	402.2	415.7	419.8	418.4
77.5°	102.6	143.1	199.8	247.0	286.1	319.9	346.9	367.1	379.3	383.3	382.0
80°	85.0	122.8	172.8	217.3	252.4	283.4	307.7	329.3	340.1	338.8	330.7
82.5°	67.5	99.9	144.4	183.6	214.6	243.0	267.2	280.7	284.8	280.7	272.6
85°	49.9	75.6	112.0	143.1	168.7	191.7	206.5	216.0	217.3	213.3	206.5
87.5°	29.7	44.5	66.1	85.0	103.9	114.7	122.8	129.6	130.9	126.9	124.2
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°	475.1	475.1	475.1	475.1	475.1	475.1	475.1	475.1
2.5°	481.9	483.2	484.6	487.3	485.9	487.3	487.3	488.6
5°	537.2	545.3	550.7	558.8	558.8	562.8	564.2	566.9
7.5°	604.7	615.5	627.6	639.8	641.1	647.9	650.6	650.6
10°	673.5	688.4	703.2	716.7	720.8	728.9	732.9	732.9
12.5°	735.6	751.8	772.0	786.9	792.3	801.7	807.1	808.5
15°	789.6	809.8	830.1	846.3	855.7	865.2	870.6	871.9
17.5°	835.5	859.8	881.4	897.6	908.4	919.2	925.9	927.3
20°	871.9	898.9	920.5	938.1	950.2	963.7	969.1	970.5
22.5°	900.3	925.9	950.2	969.1	982.6	996.1	1002.8	1004.2
25°	919.2	946.2	970.5	990.7	1005.5	1017.7	1024.4	1027.1
27.5°	930.0	958.3	982.6	1001.5	1016.3	1029.8	1036.6	1037.9
30°	931.3	959.7	984.0	1002.8	1017.7	1031.2	1037.9	1040.6
32.5°	924.6	952.9	975.9	994.7	1009.6	1021.7	1028.5	1031.2
35°	911.1	938.1	961.0	978.6	992.1	1002.8	1010.9	1012.3
37.5°	892.2	917.8	938.1	954.3	967.8	978.6	985.3	985.3
40°	866.5	890.8	908.4	923.2	936.7	944.8	952.9	952.9
42.5°	838.2	861.1	877.3	890.8	900.3	909.7	915.1	915.1
45°	808.5	827.4	843.6	854.4	863.8	870.6	877.3	877.3
47.5°	778.8	795.0	807.1	817.9	826.0	832.8	838.2	838.2
50°	747.7	762.6	772.0	781.5	788.2	793.6	797.7	797.7
52.5°	716.7	728.9	735.6	743.7	749.1	754.5	757.2	757.2
55°	687.0	695.1	700.5	707.3	711.3	714.0	716.7	716.7
57.5°	654.6	660.0	665.4	669.5	672.2	674.9	677.6	676.2
60°	622.2	626.3	630.3	633.0	635.7	638.4	639.8	639.8
62.5°	589.8	591.2	592.5	597.9	600.6	602.0	603.3	603.3
65°	557.4	557.4	558.8	562.8	565.5	568.2	569.6	569.6
67.5°	522.3	523.7	525.0	529.1	530.4	533.1	535.8	535.8
70°	487.3	488.6	488.6	492.7	494.0	496.7	499.4	499.4
72.5°	453.5	453.5	453.5	456.2	458.9	461.6	464.3	464.3
75°	415.7	415.7	415.7	418.4	418.4	419.8	422.5	421.1
77.5°	375.2	371.2	367.1	365.8	365.8	367.1	368.5	368.5
80°	322.6	317.2	314.5	311.8	310.4	311.8	313.1	311.8
82.5°	267.2	260.5	256.4	255.1	255.1	255.1	256.4	253.7
85°	202.5	195.7	193.0	193.0	191.7	191.7	191.7	193.0
87.5°	121.5	117.4	113.4	114.7	113.4	112.0	113.4	116.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)