

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: P188480

Luminaire Tested: **24SR-LD2-29-C-UNV-L850-CD1-MR-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188480
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-LD2-29-C-UNV-L850-CD1-MR-U
Description: METALUX 2X4 SKYRIDGE LED FIXTURE WITH MEDIUM RED SKYTRIM.

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

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1964.0 lumens
Efficiency: N/A
Efficacy: 86.9 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

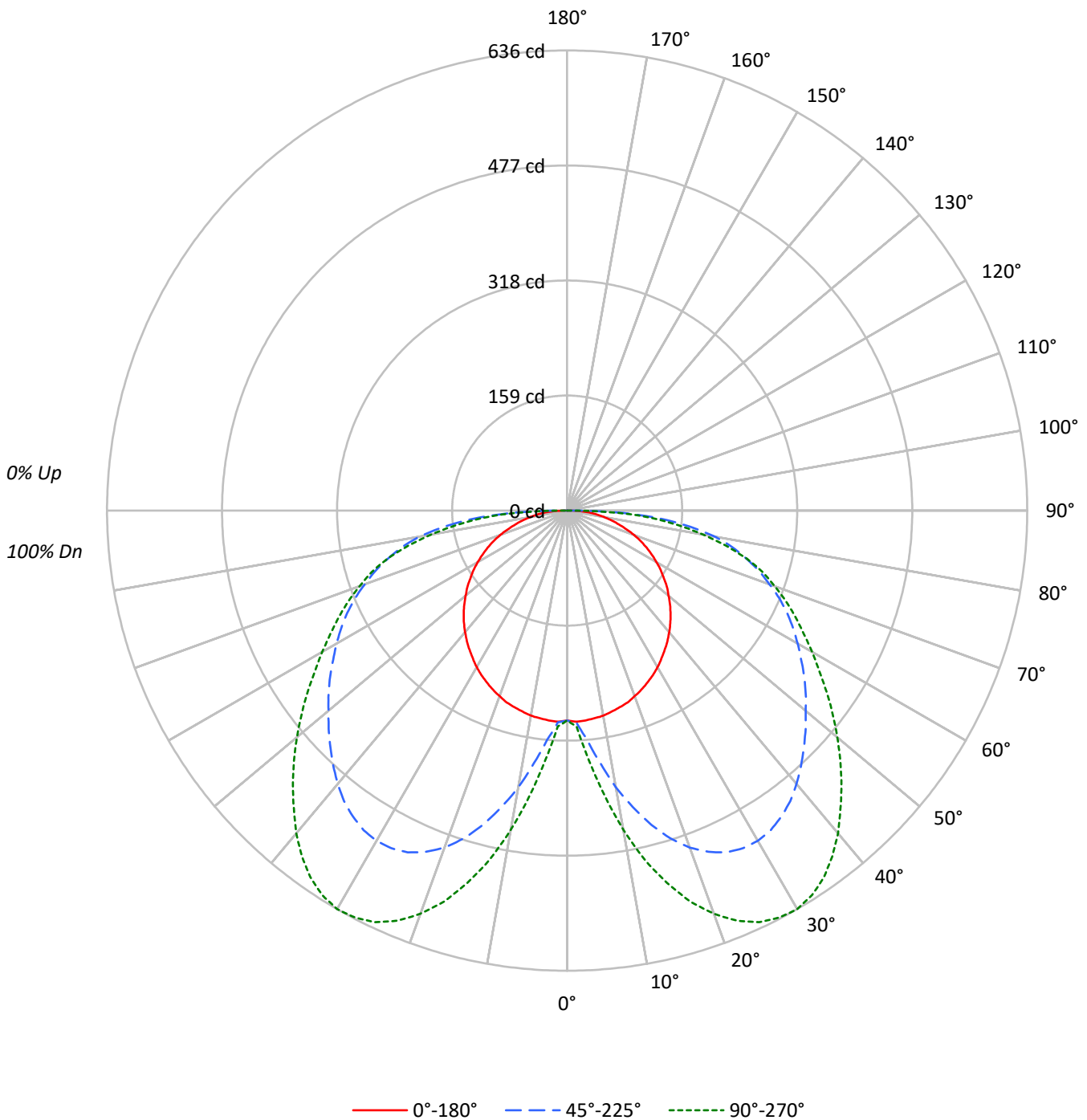
Input Watts (W): 22.6
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P188480

CATALOG NUMBER: 24SR-LD2-29-C-UNV-L850-CD1-MR-U

Luminous Intensity Polar Plot





TEST NUMBER: P188480

CATALOG NUMBER: 24SR-LD2-29-C-UNV-L850-CD1-MR-U

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	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					100			
1	106	100	95	90	103	98	93	88	93	89	85	89	86	83	86	83	80	78					78			
2	95	85	77	70	92	83	76	69	79	73	68	76	71	66	73	68	64	62					62			
3	85	73	64	56	83	72	63	56	69	61	55	66	59	54	63	58	53	50					50			
4	78	64	54	47	75	63	53	46	60	52	46	58	51	45	55	49	44	42					42			
5	71	57	47	39	69	55	46	39	53	45	39	51	44	38	49	43	38	35					35			
6	65	50	41	34	63	49	40	33	48	39	33	46	38	33	44	38	32	30					30			
7	60	45	36	29	58	45	35	29	43	35	29	41	34	29	40	33	28	26					26			
8	56	41	32	26	54	40	32	26	39	31	25	38	30	25	36	30	25	23					23			
9	52	38	29	23	50	37	28	23	36	28	23	35	27	22	33	27	22	20					20			
10	48	34	26	20	47	34	26	20	33	25	20	32	25	20	31	25	20	18					18			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	391	391	391
5°	393	430	468
10°	393	531	612
15°	392	626	742
20°	391	710	849
25°	389	774	932
30°	388	819	988
35°	386	848	1016
40°	385	866	1023
45°	385	880	1020
50°	383	901	1020
55°	383	938	1027
60°	384	990	1052
65°	386	1069	1108
70°	386	1171	1201
75°	386	1333	1338
80°	403	1604	1476
85°	471	2012	1820



TEST NUMBER: P188480

CATALOG NUMBER: 24SR-LD2-29-C-UNV-L850-CD1-MR-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	32.2	1.6
10°-20°	122.0	6.2
20°-30°	224.5	11.4
30°-40°	299.3	15.2
40°-50°	327.8	16.7
50°-60°	322.4	16.4
60°-70°	292.5	14.9
70°-80°	232.9	11.9
80°-90°	110.4	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°	378.7	19.3
0°-40°	678.0	34.5
0°-60°	1328.2	67.6
0°-90°	1964.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1964.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	290	290	290	290	290	
5°	291	294	318	339	346	28
15°	281	348	450	512	533	79
25°	262	386	521	599	628	121
35°	235	380	516	593	619	147
45°	202	342	463	519	536	156
55°	163	302	400	430	438	146
65°	121	262	336	343	348	120
75°	74	204	256	255	257	79
85°	30	110	130	118	118	32
90°	0	0	0	0	0	



TEST NUMBER: P188480

CATALOG NUMBER: 24SR-LD2-29-C-UNV-L850-CD1-MR-U

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	290.3	290.3	290.3	290.3	290.3	290.3	290.3	290.3	290.3	290.3	290.3
2.5°	292.0	292.0	291.1	291.1	291.1	290.3	290.3	291.1	292.0	292.8	293.6
5°	291.1	291.1	291.1	291.1	292.0	295.3	299.4	305.2	310.1	318.4	322.5
7.5°	289.5	289.5	290.3	292.8	299.4	308.5	319.2	331.6	341.5	352.2	362.1
10°	287.9	287.9	289.5	297.7	310.9	326.6	342.3	358.0	372.0	388.5	400.8
12.5°	284.6	284.6	289.5	304.3	324.1	343.9	363.7	384.4	402.5	419.8	437.1
15°	281.3	281.3	291.1	311.8	336.5	360.4	383.5	407.4	428.9	449.5	467.7
17.5°	278.0	278.8	293.6	320.0	347.2	375.3	402.5	428.1	452.0	475.1	495.7
20°	273.0	274.7	295.3	325.8	356.3	387.7	416.5	444.6	471.0	495.7	517.1
22.5°	268.1	271.4	296.1	329.9	363.7	397.5	428.1	456.9	485.0	510.5	532.8
25°	262.3	266.4	296.9	332.4	368.7	403.3	435.5	466.0	494.9	521.3	543.5
27.5°	256.5	262.3	295.3	332.4	370.3	406.6	438.8	470.1	500.6	526.2	550.1
30°	249.9	257.3	292.8	331.6	370.3	405.8	438.8	471.0	500.6	527.0	550.1
32.5°	242.5	252.4	288.7	328.3	367.0	403.3	436.3	467.7	497.3	523.7	546.0
35°	235.1	245.8	283.7	323.3	362.1	397.5	429.7	461.1	489.9	516.3	538.6
37.5°	227.6	240.0	278.0	317.5	354.7	389.3	421.5	452.8	480.9	506.4	527.0
40°	219.4	232.6	270.5	309.3	346.4	379.4	411.6	441.3	468.5	493.2	513.0
42.5°	211.1	225.2	262.3	301.0	336.5	369.5	400.8	429.7	456.1	478.4	496.5
45°	202.1	216.9	254.0	291.1	325.8	358.8	389.3	416.5	442.1	462.7	479.2
47.5°	193.0	208.7	245.0	282.1	315.9	348.1	377.8	404.1	427.2	447.0	462.7
50°	183.1	199.6	235.9	272.2	306.0	337.3	366.2	390.9	413.2	430.5	445.4
52.5°	174.0	191.4	226.8	263.1	296.1	327.4	355.5	378.6	399.2	415.7	428.1
55°	163.3	182.3	218.6	254.0	287.0	317.5	343.9	366.2	385.2	400.0	410.7
57.5°	153.4	173.2	209.5	245.0	277.1	307.6	332.4	353.8	370.3	383.5	393.4
60°	142.7	164.1	200.4	235.9	268.1	297.7	321.7	341.5	357.1	367.9	376.1
62.5°	132.0	154.2	192.2	226.8	258.2	286.2	309.3	327.4	341.5	352.2	357.1
65°	121.2	144.3	182.3	217.7	248.3	274.7	296.9	314.2	326.6	335.7	339.0
67.5°	109.7	134.4	172.4	206.2	236.7	262.3	282.9	299.4	310.1	317.5	319.2
70°	98.1	122.9	160.8	194.6	223.5	247.4	268.1	282.1	292.8	297.7	299.4
72.5°	85.8	111.3	149.3	181.5	208.7	232.6	250.7	265.6	274.7	278.0	278.0
75°	74.2	99.0	136.1	166.6	193.0	215.3	232.6	245.8	254.0	256.5	255.7
77.5°	62.7	87.4	122.1	150.9	174.9	195.5	212.0	224.3	231.8	234.2	233.4
80°	52.0	75.1	105.6	132.8	154.2	173.2	188.1	201.2	207.8	207.0	202.1
82.5°	41.2	61.0	88.3	112.2	131.1	148.5	163.3	171.6	174.0	171.6	166.6
85°	30.5	46.2	68.5	87.4	103.1	117.1	126.2	132.0	132.8	130.3	126.2
87.5°	18.1	27.2	40.4	52.0	63.5	70.1	75.1	79.2	80.0	77.5	75.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P188480

CATALOG NUMBER: 24SR-LD2-29-C-UNV-L850-CD1-MR-U

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	290.3	290.3	290.3	290.3	290.3	290.3	290.3	290.3
2.5°	294.4	295.3	296.1	297.7	296.9	297.7	297.7	298.6
5°	328.3	333.2	336.5	341.5	341.5	343.9	344.8	346.4
7.5°	369.5	376.1	383.5	390.9	391.8	395.9	397.5	397.5
10°	411.6	420.6	429.7	438.0	440.4	445.4	447.9	447.9
12.5°	449.5	459.4	471.8	480.9	484.2	489.9	493.2	494.0
15°	482.5	494.9	507.2	517.1	522.9	528.7	532.0	532.8
17.5°	510.5	525.4	538.6	548.5	555.1	561.7	565.8	566.6
20°	532.8	549.3	562.5	573.2	580.7	588.9	592.2	593.0
22.5°	550.1	565.8	580.7	592.2	600.4	608.7	612.8	613.6
25°	561.7	578.2	593.0	605.4	614.5	621.9	626.0	627.7
27.5°	568.3	585.6	600.4	612.0	621.1	629.3	633.4	634.3
30°	569.1	586.4	601.3	612.8	621.9	630.1	634.3	635.9
32.5°	565.0	582.3	596.3	607.9	616.9	624.4	628.5	630.1
35°	556.7	573.2	587.2	598.0	606.2	612.8	617.8	618.6
37.5°	545.2	560.9	573.2	583.1	591.4	598.0	602.1	602.1
40°	529.5	544.4	555.1	564.2	572.4	577.4	582.3	582.3
42.5°	512.2	526.2	536.1	544.4	550.1	555.9	559.2	559.2
45°	494.0	505.6	515.5	522.1	527.9	532.0	536.1	536.1
47.5°	475.9	485.8	493.2	499.8	504.8	508.9	512.2	512.2
50°	456.9	466.0	471.8	477.6	481.7	485.0	487.4	487.4
52.5°	438.0	445.4	449.5	454.5	457.8	461.1	462.7	462.7
55°	419.8	424.8	428.1	432.2	434.7	436.3	438.0	438.0
57.5°	400.0	403.3	406.6	409.1	410.7	412.4	414.0	413.2
60°	380.2	382.7	385.2	386.8	388.5	390.1	390.9	390.9
62.5°	360.4	361.3	362.1	365.4	367.0	367.9	368.7	368.7
65°	340.6	340.6	341.5	343.9	345.6	347.2	348.1	348.1
67.5°	319.2	320.0	320.8	323.3	324.1	325.8	327.4	327.4
70°	297.7	298.6	298.6	301.0	301.9	303.5	305.2	305.2
72.5°	277.1	277.1	277.1	278.8	280.4	282.1	283.7	283.7
75°	254.0	254.0	254.0	255.7	255.7	256.5	258.2	257.3
77.5°	229.3	226.8	224.3	223.5	223.5	224.3	225.2	225.2
80°	197.1	193.8	192.2	190.5	189.7	190.5	191.4	190.5
82.5°	163.3	159.2	156.7	155.9	155.9	155.9	156.7	155.1
85°	123.7	119.6	117.9	117.9	117.1	117.1	117.1	117.9
87.5°	74.2	71.8	69.3	70.1	69.3	68.5	69.3	70.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)