

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: P188478

Luminaire Tested: **24SR-LD2-29-C-UNV-L835-CD1-MR-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188478
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-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: 1769.0 lumens
Efficiency: N/A
Efficacy: 78.3 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

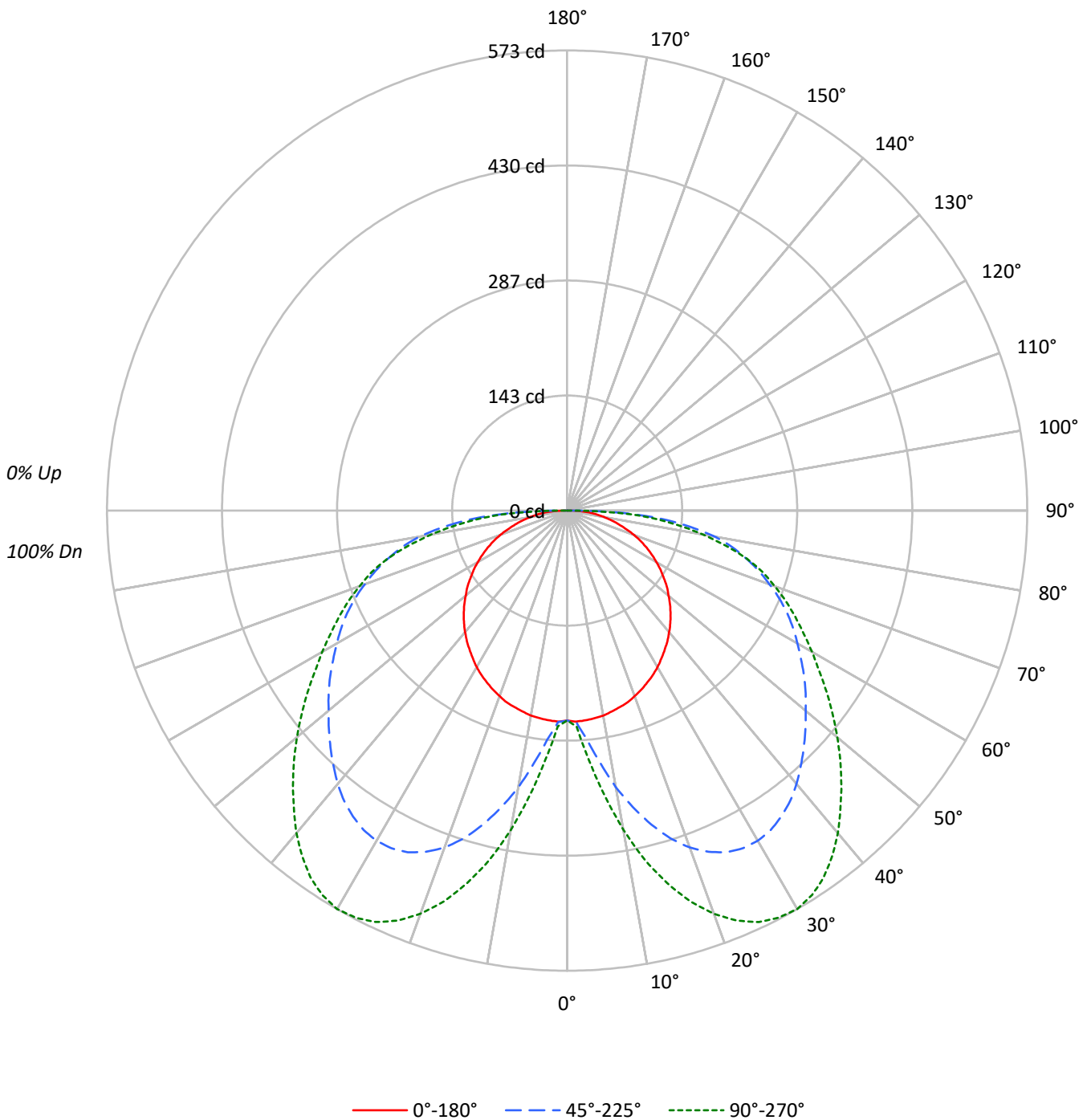
Input Watts (W): 22.6
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	35	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°	352	352	352
5°	354	387	421
10°	354	478	551
15°	353	564	668
20°	352	639	765
25°	351	697	839
30°	350	738	890
35°	348	764	915
40°	347	780	921
45°	346	793	919
50°	345	812	919
55°	345	845	925
60°	346	892	947
65°	348	963	998
70°	348	1055	1081
75°	348	1201	1205
80°	363	1445	1330
85°	425	1812	1639



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	29.0	1.6
10°-20°	109.9	6.2
20°-30°	202.2	11.4
30°-40°	269.5	15.2
40°-50°	295.3	16.7
50°-60°	290.4	16.4
60°-70°	263.5	14.9
70°-80°	209.8	11.9
80°-90°	99.4	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°	341.1	19.3
0°-40°	610.7	34.5
0°-60°	1196.3	67.6
0°-90°	1769.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1769.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	262	262	262	262	262	
5°	262	264	287	305	312	25
15°	253	314	405	461	480	72
25°	236	348	470	540	565	109
35°	212	342	465	534	557	133
45°	182	308	417	467	483	140
55°	147	272	360	387	394	132
65°	109	236	302	309	314	108
75°	67	184	231	230	232	71
85°	28	99	117	106	106	28
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°	261.5	261.5	261.5	261.5	261.5	261.5	261.5	261.5	261.5	261.5	261.5
2.5°	263.0	263.0	262.2	262.2	262.2	261.5	261.5	262.2	263.0	263.7	264.5
5°	262.2	262.2	262.2	262.2	263.0	266.0	269.7	274.9	279.3	286.8	290.5
7.5°	260.8	260.8	261.5	263.7	269.7	277.8	287.5	298.6	307.6	317.2	326.1
10°	259.3	259.3	260.8	268.2	280.1	294.2	308.3	322.4	335.0	349.9	361.0
12.5°	256.3	256.3	260.8	274.1	292.0	309.8	327.6	346.2	362.5	378.1	393.7
15°	253.3	253.3	262.2	280.8	303.1	324.6	345.4	367.0	386.3	404.9	421.2
17.5°	250.4	251.1	264.5	288.2	312.8	338.0	362.5	385.6	407.1	427.9	446.5
20°	245.9	247.4	266.0	293.4	320.9	349.2	375.2	400.4	424.2	446.5	465.8
22.5°	241.4	244.4	266.7	297.2	327.6	358.1	385.6	411.6	436.8	459.9	479.9
25°	236.2	240.0	267.4	299.4	332.1	363.3	392.2	419.7	445.7	469.5	489.6
27.5°	231.0	236.2	266.0	299.4	333.6	366.2	395.2	423.5	450.9	474.0	495.5
30°	225.1	231.8	263.7	298.6	333.6	365.5	395.2	424.2	450.9	474.7	495.5
32.5°	218.4	227.3	260.0	295.7	330.6	363.3	393.0	421.2	448.0	471.7	491.8
35°	211.7	221.4	255.6	291.2	326.1	358.1	387.0	415.3	441.3	465.1	485.1
37.5°	205.0	216.2	250.4	286.0	319.4	350.6	379.6	407.9	433.1	456.1	474.7
40°	197.6	209.5	243.7	278.6	312.0	341.7	370.7	397.4	422.0	444.3	462.1
42.5°	190.2	202.8	236.2	271.2	303.1	332.8	361.0	387.0	410.8	430.9	447.2
45°	182.0	195.4	228.8	262.2	293.4	323.2	350.6	375.2	398.2	416.8	431.6
47.5°	173.8	188.0	220.6	254.1	284.5	313.5	340.2	364.0	384.8	402.6	416.8
50°	164.9	179.8	212.5	245.2	275.6	303.8	329.8	352.1	372.2	387.8	401.2
52.5°	156.8	172.4	204.3	237.0	266.7	294.9	320.2	341.0	359.6	374.4	385.6
55°	147.1	164.2	196.9	228.8	258.5	286.0	309.8	329.8	346.9	360.3	370.0
57.5°	138.2	156.0	188.7	220.6	249.6	277.1	299.4	318.7	333.6	345.4	354.4
60°	128.5	147.8	180.5	212.5	241.4	268.2	289.7	307.6	321.7	331.3	338.8
62.5°	118.9	138.9	173.1	204.3	232.5	257.8	278.6	294.9	307.6	317.2	321.7
65°	109.2	130.0	164.2	196.1	223.6	247.4	267.4	283.0	294.2	302.4	305.3
67.5°	98.8	121.1	155.3	185.7	213.2	236.2	254.8	269.7	279.3	286.0	287.5
70°	88.4	110.7	144.9	175.3	201.3	222.9	241.4	254.1	263.7	268.2	269.7
72.5°	77.3	100.3	134.5	163.4	188.0	209.5	225.8	239.2	247.4	250.4	250.4
75°	66.9	89.1	122.6	150.1	173.8	193.9	209.5	221.4	228.8	231.0	230.3
77.5°	56.5	78.7	109.9	136.0	157.5	176.1	190.9	202.1	208.8	211.0	210.2
80°	46.8	67.6	95.1	119.6	138.9	156.0	169.4	181.3	187.2	186.5	182.0
82.5°	37.1	55.0	79.5	101.0	118.1	133.7	147.1	154.5	156.8	154.5	150.1
85°	27.5	41.6	61.7	78.7	92.9	105.5	113.7	118.9	119.6	117.4	113.7
87.5°	16.3	24.5	36.4	46.8	57.2	63.1	67.6	71.3	72.1	69.8	68.3
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°	261.5	261.5	261.5	261.5	261.5	261.5	261.5	261.5
2.5°	265.2	266.0	266.7	268.2	267.4	268.2	268.2	268.9
5°	295.7	300.1	303.1	307.6	307.6	309.8	310.5	312.0
7.5°	332.8	338.8	345.4	352.1	352.9	356.6	358.1	358.1
10°	370.7	378.9	387.0	394.5	396.7	401.2	403.4	403.4
12.5°	404.9	413.8	424.9	433.1	436.1	441.3	444.3	445.0
15°	434.6	445.7	456.9	465.8	471.0	476.2	479.2	479.9
17.5°	459.9	473.2	485.1	494.0	500.0	505.9	509.6	510.4
20°	479.9	494.8	506.7	516.3	523.0	530.4	533.4	534.1
22.5°	495.5	509.6	523.0	533.4	540.8	548.3	552.0	552.7
25°	505.9	520.8	534.1	545.3	553.5	560.1	563.9	565.3
27.5°	511.9	527.5	540.8	551.2	559.4	566.8	570.5	571.3
30°	512.6	528.2	541.6	552.0	560.1	567.6	571.3	572.8
32.5°	508.9	524.5	537.1	547.5	555.7	562.4	566.1	567.6
35°	501.5	516.3	528.9	538.6	546.0	552.0	556.4	557.2
37.5°	491.1	505.2	516.3	525.2	532.7	538.6	542.3	542.3
40°	476.9	490.3	500.0	508.1	515.6	520.0	524.5	524.5
42.5°	461.3	474.0	482.9	490.3	495.5	500.7	503.7	503.7
45°	445.0	455.4	464.3	470.3	475.5	479.2	482.9	482.9
47.5°	428.7	437.6	444.3	450.2	454.7	458.4	461.3	461.3
50°	411.6	419.7	424.9	430.1	433.9	436.8	439.1	439.1
52.5°	394.5	401.2	404.9	409.3	412.3	415.3	416.8	416.8
55°	378.1	382.6	385.6	389.3	391.5	393.0	394.5	394.5
57.5°	360.3	363.3	366.2	368.5	370.0	371.4	372.9	372.2
60°	342.5	344.7	346.9	348.4	349.9	351.4	352.1	352.1
62.5°	324.6	325.4	326.1	329.1	330.6	331.3	332.1	332.1
65°	306.8	306.8	307.6	309.8	311.3	312.8	313.5	313.5
67.5°	287.5	288.2	289.0	291.2	292.0	293.4	294.9	294.9
70°	268.2	268.9	268.9	271.2	271.9	273.4	274.9	274.9
72.5°	249.6	249.6	249.6	251.1	252.6	254.1	255.6	255.6
75°	228.8	228.8	228.8	230.3	230.3	231.0	232.5	231.8
77.5°	206.5	204.3	202.1	201.3	201.3	202.1	202.8	202.8
80°	177.6	174.6	173.1	171.6	170.9	171.6	172.4	171.6
82.5°	147.1	143.4	141.2	140.4	140.4	140.4	141.2	139.7
85°	111.4	107.7	106.2	106.2	105.5	105.5	105.5	106.2
87.5°	66.9	64.6	62.4	63.1	62.4	61.7	62.4	63.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)