

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: P188437

Luminaire Tested: **24SR-LD2-29-C-UNV-L830-CD1-BR-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188437
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24786)
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-L830-CD1-BR-U
Description: METALUX 2X4 SKYRIDGE LED FIXTURE WITH BELLADONNA ROSE

Light Source: EATON LED 3000K
Ballast/Driver: OSRAM ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1755.0 lumens
Efficiency: N/A
Efficacy: 77.7 lumens/watt
Spacing Criteria (0/90/45): 1.29 / 2.29 / 2.08
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

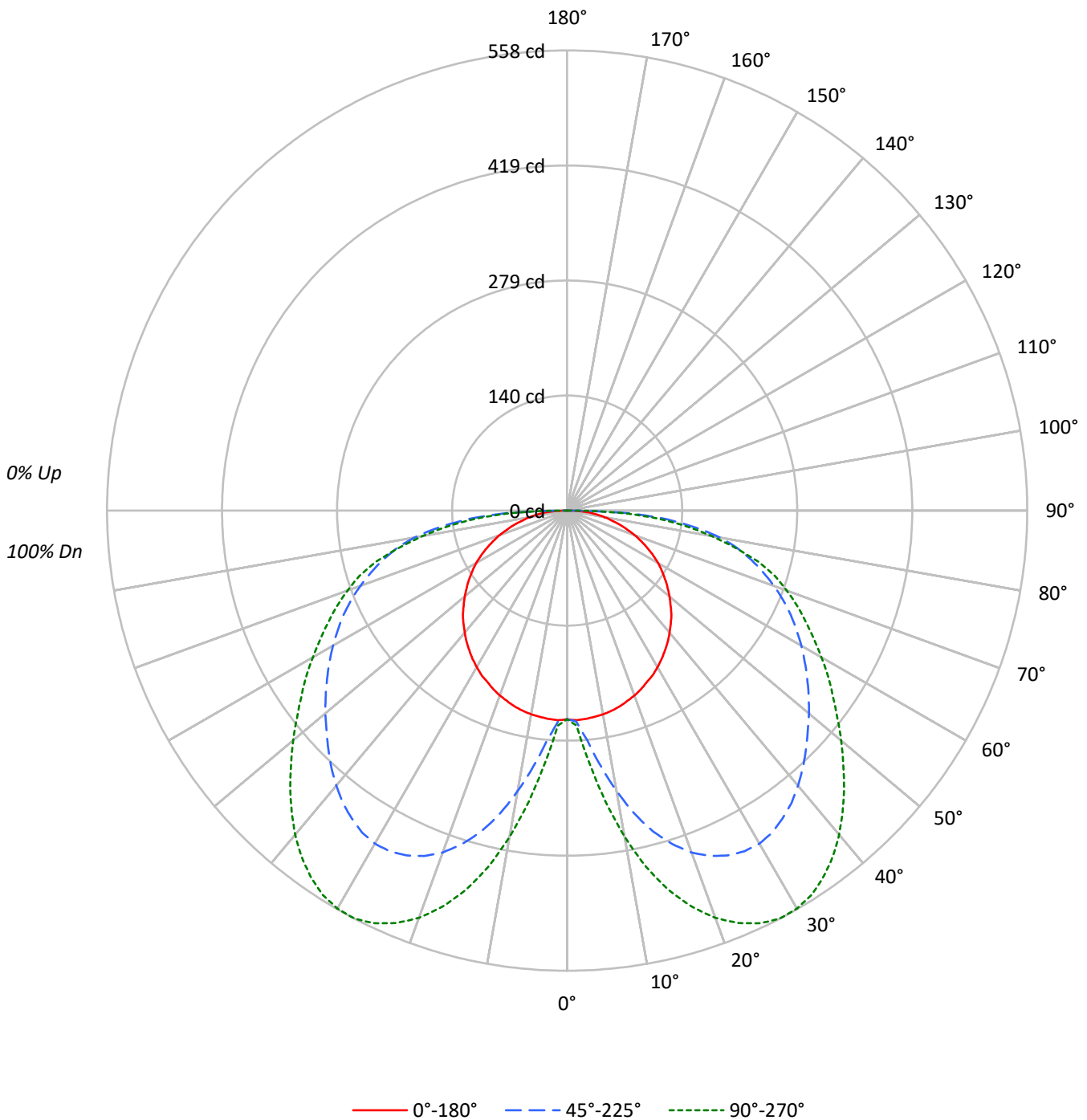
Input Watts (W): 22.6
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	94	90	103	97	93	88	93	89	85	89	86	83	85	83	80	78
2	95	85	77	70	92	83	75	69	79	73	67	76	70	66	73	68	64	62
3	85	73	64	56	83	71	63	56	68	61	55	65	59	54	63	57	53	50
4	77	64	54	46	75	62	53	46	60	52	45	57	50	45	55	49	44	41
5	71	56	46	39	68	55	46	39	53	45	38	51	44	38	49	42	37	35
6	65	50	40	33	63	49	40	33	47	39	33	46	38	33	44	37	32	30
7	60	45	36	29	58	44	35	29	43	35	29	41	34	28	40	33	28	26
8	56	41	32	25	54	40	31	25	39	31	25	38	30	25	36	30	25	23
9	52	37	29	23	50	37	28	22	36	28	22	34	27	22	33	27	22	20
10	48	34	26	20	47	34	26	20	33	25	20	32	25	20	31	24	20	18

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	340	340	340
5°	343	378	414
10°	343	472	549
15°	342	561	664
20°	342	632	752
25°	340	685	820
30°	340	725	866
35°	340	748	890
40°	339	765	901
45°	340	779	904
50°	340	801	908
55°	340	834	923
60°	343	883	958
65°	342	952	1017
70°	343	1049	1114
75°	345	1203	1248
80°	357	1457	1379
85°	412	1880	1703



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	28.4	1.6
10°-20°	108.5	6.2
20°-30°	198.4	11.3
30°-40°	263.8	15.0
40°-50°	290.5	16.6
50°-60°	287.9	16.4
60°-70°	263.5	15.0
70°-80°	212.2	12.1
80°-90°	101.8	5.8
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°	335.3	19.1
0°-40°	599.1	34.1
0°-60°	1177.4	67.1
0°-90°	1755.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1755.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	253	253	253	253	253	
5°	254	256	280	299	306	24
15°	246	309	403	457	476	69
25°	229	344	461	528	552	106
35°	207	338	456	520	542	130
45°	179	305	409	459	475	138
55°	145	268	355	385	394	130
65°	107	232	299	312	319	106
75°	66	181	231	238	240	70
85°	27	99	122	112	110	27
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°	253.0	253.0	253.0	253.0	253.0	253.0	253.0	253.0	253.0	253.0	253.0
2.5°	254.5	254.5	253.7	253.7	253.7	253.7	253.7	253.7	254.5	255.9	256.6
5°	253.7	253.7	253.7	253.7	254.5	257.3	260.9	266.7	272.5	279.7	286.2
7.5°	252.3	252.3	252.3	254.5	260.9	271.0	280.4	291.2	302.0	312.8	321.5
10°	250.9	250.9	252.3	260.2	273.2	288.3	302.8	317.2	330.9	345.3	357.5
12.5°	248.7	248.7	253.0	267.4	286.2	304.9	323.7	341.0	358.3	376.3	390.0
15°	245.8	245.8	255.2	274.6	297.7	320.8	342.4	363.3	383.5	402.9	418.1
17.5°	242.2	243.6	257.3	281.8	307.8	334.5	358.3	382.0	403.7	423.9	441.9
20°	238.6	240.8	259.5	287.6	316.4	346.0	372.0	396.5	419.5	441.2	459.9
22.5°	234.3	237.2	260.9	291.9	322.9	353.9	381.3	407.3	431.8	453.4	472.9
25°	229.2	233.6	261.7	294.1	328.0	359.0	387.1	413.8	439.0	461.3	480.8
27.5°	224.9	230.7	260.9	295.5	330.1	361.9	390.7	417.4	443.3	465.7	485.8
30°	219.1	226.3	259.5	294.8	329.4	361.9	390.0	417.4	443.3	466.4	485.8
32.5°	213.4	222.0	255.9	291.9	327.3	358.3	387.1	414.5	439.7	462.8	481.5
35°	206.9	217.0	251.6	287.6	322.2	353.2	381.3	408.0	433.9	455.6	474.3
37.5°	200.4	211.2	245.8	281.8	315.7	346.0	373.4	400.1	424.6	446.9	464.2
40°	193.2	205.4	240.0	275.4	307.8	337.4	364.7	390.7	414.5	435.4	452.0
42.5°	186.0	199.0	233.6	268.2	299.9	328.0	355.4	379.9	402.9	423.1	438.3
45°	178.8	191.7	225.6	260.2	290.5	318.6	344.6	369.1	390.7	409.4	423.9
47.5°	170.1	184.5	218.4	251.6	281.1	309.2	334.5	357.5	379.2	395.7	409.4
50°	162.2	177.3	210.5	242.9	271.8	299.9	324.4	346.7	366.9	382.8	395.0
52.5°	153.5	169.4	202.6	235.0	263.8	290.5	315.0	335.9	353.9	369.1	380.6
55°	144.9	161.5	195.3	226.3	255.2	281.8	304.9	325.1	342.4	355.4	366.2
57.5°	136.2	153.5	187.4	219.1	247.2	273.2	295.5	313.6	330.1	341.7	351.0
60°	127.6	145.6	178.8	210.5	239.3	263.8	285.5	302.8	317.2	328.0	335.9
62.5°	117.5	137.0	170.8	201.8	229.9	253.7	274.6	290.5	304.2	313.6	320.1
65°	107.4	128.3	162.2	193.2	220.6	243.6	263.1	278.2	290.5	299.1	303.5
67.5°	97.3	119.7	153.5	184.5	210.5	232.1	250.9	265.3	276.1	283.3	286.9
70°	87.2	109.6	143.4	173.7	199.0	219.1	237.2	250.9	260.2	266.7	269.6
72.5°	76.4	99.5	132.6	162.2	186.0	206.2	222.7	235.7	244.4	249.4	251.6
75°	66.3	88.7	121.1	149.2	171.6	190.3	206.2	219.1	227.8	231.4	233.6
77.5°	55.5	77.9	108.8	134.8	155.7	173.0	188.1	200.4	208.3	211.9	214.1
80°	46.1	66.3	94.4	118.2	137.7	154.3	168.0	180.9	187.4	188.1	186.0
82.5°	36.0	54.8	79.3	100.2	116.8	132.6	145.6	154.3	157.1	157.1	155.0
85°	26.7	41.1	62.0	78.6	93.0	104.5	112.5	119.7	121.1	121.8	118.9
87.5°	15.1	23.1	36.8	47.6	56.2	64.2	69.9	73.5	73.5	74.2	72.8
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°	253.0	253.0	253.0	253.0	253.0	253.0	253.0	253.0
2.5°	256.6	258.1	258.1	259.5	260.2	260.2	260.9	260.9
5°	289.1	294.8	297.0	300.6	302.8	305.6	307.1	306.4
7.5°	328.0	336.6	341.0	346.0	351.8	353.2	355.4	355.4
10°	366.9	377.0	383.5	389.3	395.7	398.6	401.5	401.5
12.5°	402.2	412.3	421.0	428.2	434.7	439.0	441.9	442.6
15°	431.1	444.0	452.7	460.6	467.8	472.1	475.8	476.5
17.5°	454.8	467.1	478.6	487.3	493.8	500.3	502.4	503.9
20°	473.6	486.6	498.8	507.5	514.7	521.2	524.0	525.5
22.5°	487.3	501.0	513.2	522.6	529.8	536.3	539.9	541.3
25°	495.9	510.4	523.3	532.7	540.6	547.1	550.7	552.2
27.5°	501.7	516.1	528.4	537.7	545.7	552.2	555.8	557.9
30°	501.7	516.1	528.4	537.7	545.7	552.2	555.8	557.2
32.5°	497.4	511.8	524.0	532.7	540.6	547.1	550.7	552.2
35°	489.4	503.9	515.4	524.0	532.0	537.7	541.3	542.1
37.5°	478.6	492.3	503.1	511.8	519.0	524.8	528.4	529.1
40°	466.4	479.4	489.4	497.4	503.9	508.9	512.5	513.2
42.5°	452.0	464.2	472.9	480.8	486.6	491.6	495.2	494.5
45°	436.8	448.4	455.6	462.1	468.5	472.1	475.0	475.0
47.5°	421.7	431.1	437.5	443.3	448.4	452.0	454.1	454.1
50°	405.8	413.8	419.5	424.6	428.9	431.8	433.9	433.9
52.5°	390.0	397.2	401.5	405.8	409.4	411.6	413.8	413.0
55°	374.1	379.9	382.8	387.1	390.0	392.9	394.3	393.6
57.5°	358.3	361.9	364.7	368.3	371.2	374.1	374.8	375.6
60°	341.0	344.6	346.7	350.3	353.2	355.4	356.8	356.1
62.5°	324.4	326.5	328.7	331.6	333.7	336.6	337.4	337.4
65°	306.4	308.5	310.7	313.6	315.7	318.6	320.1	319.3
67.5°	289.1	291.2	293.4	295.5	298.4	301.3	302.0	302.0
70°	271.0	273.2	274.6	277.5	279.7	282.6	283.3	283.3
72.5°	253.7	255.2	256.6	259.5	260.9	263.1	264.5	264.5
75°	234.3	235.7	237.2	238.6	239.3	240.0	240.8	240.0
77.5°	212.6	211.2	209.8	209.8	208.3	209.0	209.8	209.0
80°	183.1	181.7	180.2	179.5	178.0	178.0	178.8	178.0
82.5°	152.1	149.2	147.8	147.1	145.6	145.6	145.6	145.6
85°	114.6	113.2	112.5	111.0	109.6	108.8	109.6	110.3
87.5°	71.4	69.9	68.5	67.0	66.3	65.6	67.0	64.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)