

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: P188438

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188438
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-L835-CD1-BR-U
Description: METALUX 2X4 SKYRIDGE LED FIXTURE WITH BELLADONNA ROSE

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

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1810.0 lumens
Efficiency: N/A
Efficacy: 80.1 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

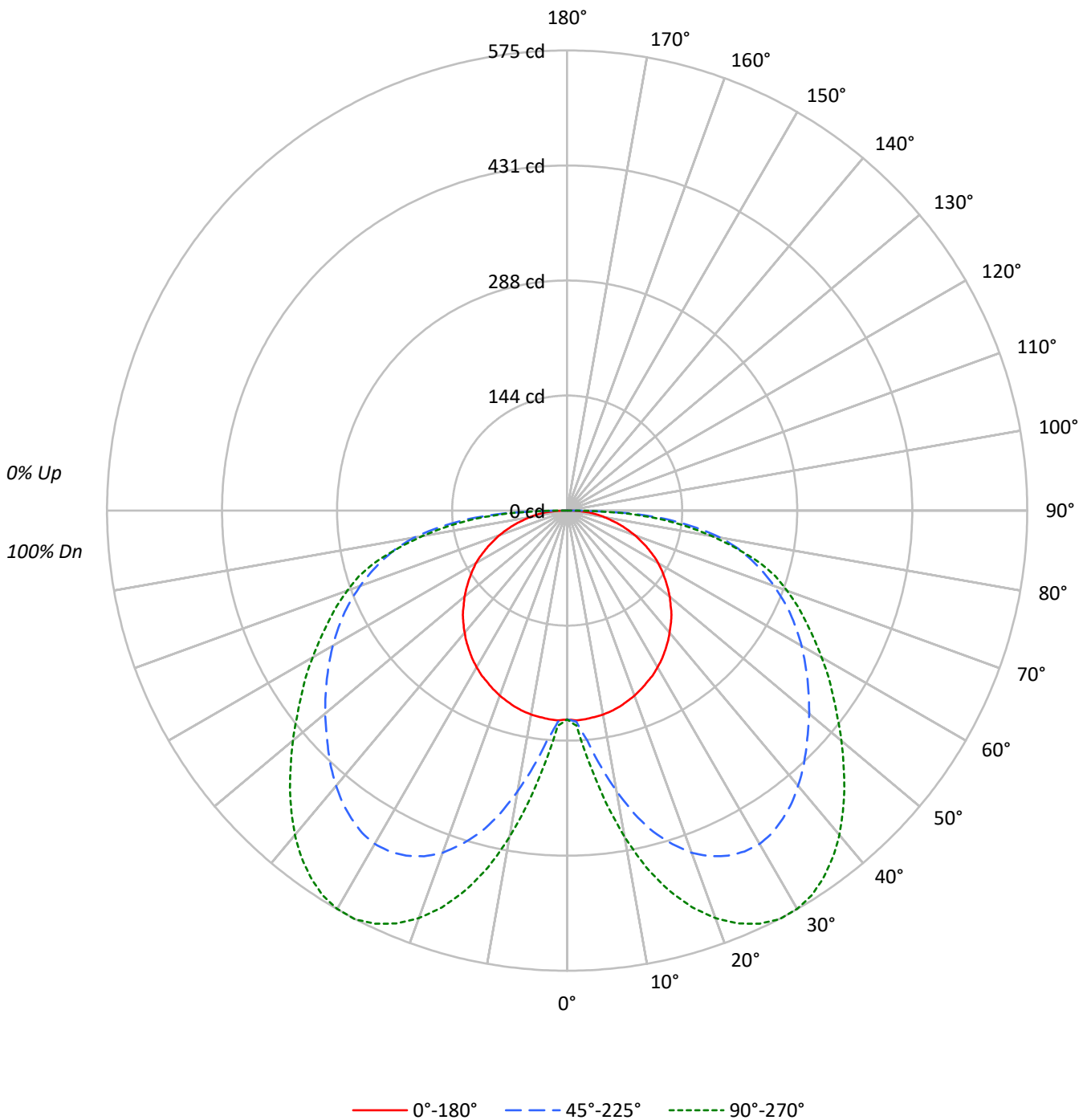
Input Watts (W): 22.6
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	351	351	351
5°	353	390	427
10°	353	487	566
15°	353	579	684
20°	352	651	776
25°	351	706	845
30°	351	747	893
35°	351	772	918
40°	350	789	930
45°	351	804	932
50°	350	826	937
55°	350	860	952
60°	354	910	988
65°	353	982	1048
70°	354	1082	1149
75°	356	1240	1287
80°	369	1503	1423
85°	425	1939	1755



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	29.3	1.6
10°-20°	111.9	6.2
20°-30°	204.6	11.3
30°-40°	272.1	15.0
40°-50°	299.6	16.6
50°-60°	296.9	16.4
60°-70°	271.8	15.0
70°-80°	218.9	12.1
80°-90°	105.0	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°	345.8	19.1
0°-40°	617.9	34.1
0°-60°	1214.4	67.1
0°-90°	1810.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1810.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	261	261	261	261	261	
5°	262	264	288	308	316	25
15°	254	319	416	471	491	72
25°	236	354	476	545	570	109
35°	213	348	470	536	559	134
45°	184	314	422	473	490	142
55°	149	277	366	397	406	134
65°	111	239	308	322	329	110
75°	68	187	239	245	248	72
85°	28	102	126	115	114	28
90°	0	0	0	0	0	



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CATALOG NUMBER: 24SR-LD2-29-C-UNV-L835-CD1-BR-U

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	260.9	260.9	260.9	260.9	260.9	260.9	260.9	260.9	260.9	260.9	260.9
2.5°	262.4	262.4	261.7	261.7	261.7	261.7	261.7	261.7	262.4	263.9	264.7
5°	261.7	261.7	261.7	261.7	262.4	265.4	269.1	275.1	281.0	288.5	295.1
7.5°	260.2	260.2	260.2	262.4	269.1	279.5	289.2	300.3	311.5	322.6	331.6
10°	258.7	258.7	260.2	268.4	281.8	297.4	312.2	327.1	341.2	356.1	368.7
12.5°	256.5	256.5	260.9	275.8	295.1	314.5	333.8	351.6	369.5	388.1	402.2
15°	253.5	253.5	263.2	283.2	307.0	330.8	353.1	374.7	395.5	415.6	431.2
17.5°	249.8	251.3	265.4	290.7	317.4	345.0	369.5	394.0	416.3	437.1	455.7
20°	246.1	248.3	267.6	296.6	326.4	356.8	383.6	408.9	432.7	455.0	474.3
22.5°	241.6	244.6	269.1	301.1	333.1	365.0	393.3	420.0	445.3	467.6	487.7
25°	236.4	240.9	269.9	303.3	338.3	370.2	399.2	426.7	452.7	475.8	495.9
27.5°	231.9	237.9	269.1	304.8	340.5	373.2	402.9	430.4	457.2	480.3	501.1
30°	226.0	233.4	267.6	304.1	339.7	373.2	402.2	430.4	457.2	481.0	501.1
32.5°	220.1	229.0	263.9	301.1	337.5	369.5	399.2	427.5	453.5	477.3	496.6
35°	213.4	223.8	259.5	296.6	332.3	364.3	393.3	420.8	447.5	469.8	489.2
37.5°	206.7	217.8	253.5	290.7	325.6	356.8	385.1	412.6	437.9	460.9	478.8
40°	199.2	211.9	247.6	284.0	317.4	347.9	376.2	402.9	427.5	449.0	466.1
42.5°	191.8	205.2	240.9	276.6	309.3	338.3	366.5	391.8	415.6	436.4	452.0
45°	184.4	197.8	232.7	268.4	299.6	328.6	355.4	380.6	402.9	422.3	437.1
47.5°	175.4	190.3	225.3	259.5	289.9	318.9	345.0	368.7	391.0	408.1	422.3
50°	167.3	182.9	217.1	250.5	280.3	309.3	334.5	357.6	378.4	394.8	407.4
52.5°	158.4	174.7	208.9	242.4	272.1	299.6	324.9	346.4	365.0	380.6	392.5
55°	149.4	166.5	201.5	233.4	263.2	290.7	314.5	335.3	353.1	366.5	377.7
57.5°	140.5	158.4	193.3	226.0	255.0	281.8	304.8	323.4	340.5	352.4	362.0
60°	131.6	150.2	184.4	217.1	246.8	272.1	294.4	312.2	327.1	338.3	346.4
62.5°	121.2	141.3	176.2	208.2	237.2	261.7	283.2	299.6	313.7	323.4	330.1
65°	110.8	132.3	167.3	199.2	227.5	251.3	271.4	287.0	299.6	308.5	313.0
67.5°	100.4	123.4	158.4	190.3	217.1	239.4	258.7	273.6	284.7	292.2	295.9
70°	90.0	113.0	147.9	179.2	205.2	226.0	244.6	258.7	268.4	275.1	278.0
72.5°	78.8	102.6	136.8	167.3	191.8	212.6	229.7	243.1	252.0	257.2	259.5
75°	68.4	91.4	124.9	153.9	176.9	196.3	212.6	226.0	234.9	238.6	240.9
77.5°	57.2	80.3	112.3	139.0	160.6	178.4	194.0	206.7	214.9	218.6	220.8
80°	47.6	68.4	97.4	121.9	142.0	159.1	173.2	186.6	193.3	194.0	191.8
82.5°	37.2	56.5	81.8	103.3	120.4	136.8	150.2	159.1	162.1	162.1	159.8
85°	27.5	42.4	63.9	81.0	95.9	107.8	116.0	123.4	124.9	125.6	122.7
87.5°	15.6	23.8	37.9	49.1	58.0	66.2	72.1	75.8	75.8	76.6	75.1
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: P188438

CATALOG NUMBER: 24SR-LD2-29-C-UNV-L835-CD1-BR-U

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	260.9	260.9	260.9	260.9	260.9	260.9	260.9	260.9
2.5°	264.7	266.1	266.1	267.6	268.4	268.4	269.1	269.1
5°	298.1	304.1	306.3	310.0	312.2	315.2	316.7	316.0
7.5°	338.3	347.2	351.6	356.8	362.8	364.3	366.5	366.5
10°	378.4	388.8	395.5	401.5	408.1	411.1	414.1	414.1
12.5°	414.8	425.2	434.2	441.6	448.3	452.7	455.7	456.5
15°	444.6	458.0	466.9	475.1	482.5	486.9	490.7	491.4
17.5°	469.1	481.7	493.6	502.6	509.2	515.9	518.2	519.7
20°	488.4	501.8	514.5	523.4	530.8	537.5	540.5	542.0
22.5°	502.6	516.7	529.3	539.0	546.4	553.1	556.8	558.3
25°	511.5	526.3	539.7	549.4	557.6	564.3	568.0	569.5
27.5°	517.4	532.3	544.9	554.6	562.8	569.5	573.2	575.4
30°	517.4	532.3	544.9	554.6	562.8	569.5	573.2	574.7
32.5°	513.0	527.8	540.5	549.4	557.6	564.3	568.0	569.5
35°	504.8	519.7	531.6	540.5	548.7	554.6	558.3	559.1
37.5°	493.6	507.8	518.9	527.8	535.3	541.2	544.9	545.7
40°	481.0	494.4	504.8	513.0	519.7	524.9	528.6	529.3
42.5°	466.1	478.8	487.7	495.9	501.8	507.0	510.7	510.0
45°	450.5	462.4	469.8	476.5	483.2	486.9	489.9	489.9
47.5°	434.9	444.6	451.3	457.2	462.4	466.1	468.4	468.4
50°	418.6	426.7	432.7	437.9	442.3	445.3	447.5	447.5
52.5°	402.2	409.6	414.1	418.6	422.3	424.5	426.7	426.0
55°	385.8	391.8	394.8	399.2	402.2	405.2	406.7	405.9
57.5°	369.5	373.2	376.2	379.9	382.9	385.8	386.6	387.3
60°	351.6	355.4	357.6	361.3	364.3	366.5	368.0	367.3
62.5°	334.5	336.8	339.0	342.0	344.2	347.2	347.9	347.9
65°	316.0	318.2	320.4	323.4	325.6	328.6	330.1	329.3
67.5°	298.1	300.3	302.6	304.8	307.8	310.8	311.5	311.5
70°	279.5	281.8	283.2	286.2	288.5	291.4	292.2	292.2
72.5°	261.7	263.2	264.7	267.6	269.1	271.4	272.8	272.8
75°	241.6	243.1	244.6	246.1	246.8	247.6	248.3	247.6
77.5°	219.3	217.8	216.3	216.3	214.9	215.6	216.3	215.6
80°	188.8	187.3	185.9	185.1	183.6	183.6	184.4	183.6
82.5°	156.9	153.9	152.4	151.7	150.2	150.2	150.2	150.2
85°	118.2	116.7	116.0	114.5	113.0	112.3	113.0	113.7
87.5°	73.6	72.1	70.6	69.1	68.4	67.7	69.1	66.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)