

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: P188458

Luminaire Tested: **24SR-LD2-48-C-UNV-L835-CD1-BR-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188458
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-LD2-48-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: 2970.0 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

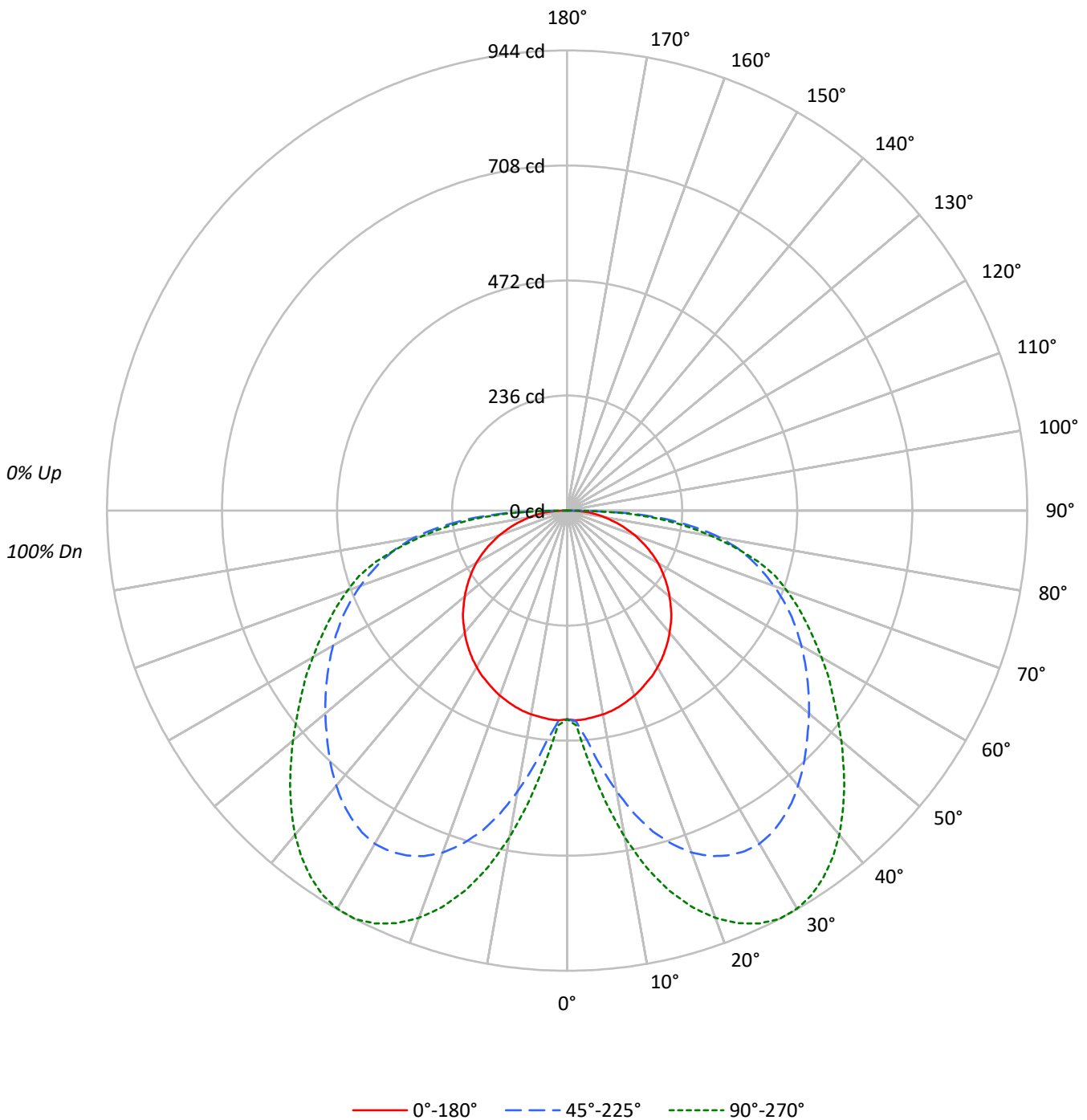
Input Watts (W): 38.2
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	576	576	576
5°	580	639	700
10°	580	798	928
15°	579	950	1123
20°	578	1069	1273
25°	576	1159	1387
30°	576	1226	1465
35°	575	1266	1507
40°	574	1294	1526
45°	576	1318	1530
50°	575	1356	1537
55°	575	1411	1563
60°	581	1493	1622
65°	579	1612	1720
70°	581	1776	1886
75°	583	2036	2112
80°	605	2467	2335
85°	696	3183	2881



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	48.1	1.6
10°-20°	183.6	6.2
20°-30°	335.7	11.3
30°-40°	446.5	15.0
40°-50°	491.6	16.6
50°-60°	487.2	16.4
60°-70°	446.0	15.0
70°-80°	359.1	12.1
80°-90°	172.3	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°	567.4	19.1
0°-40°	1013.9	34.1
0°-60°	1992.6	67.1
0°-90°	2970.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2970.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	428	428	428	428	428	
5°	429	433	473	506	518	41
15°	416	523	682	773	806	117
25°	388	581	781	894	934	179
35°	350	572	771	880	917	219
45°	302	515	693	776	804	233
55°	245	454	601	651	666	219
65°	182	393	506	528	540	180
75°	112	306	392	403	406	118
85°	45	167	206	189	187	46
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°	428.2	428.2	428.2	428.2	428.2	428.2	428.2	428.2	428.2	428.2	428.2
2.5°	430.6	430.6	429.4	429.4	429.4	429.4	429.4	429.4	430.6	433.1	434.3
5°	429.4	429.4	429.4	429.4	430.6	435.5	441.6	451.4	461.1	473.3	484.3
7.5°	427.0	427.0	427.0	430.6	441.6	458.7	474.5	492.8	511.1	529.4	544.1
10°	424.5	424.5	427.0	440.4	462.3	488.0	512.3	536.7	559.9	584.3	605.1
12.5°	420.9	420.9	428.2	452.6	484.3	516.0	547.7	577.0	606.3	636.8	660.0
15°	416.0	416.0	431.8	464.8	503.8	542.8	579.4	614.8	649.0	681.9	707.5
17.5°	409.9	412.3	435.5	477.0	520.9	566.0	606.3	646.5	683.1	717.3	747.8
20°	403.8	407.4	439.2	486.7	535.5	585.5	629.5	670.9	710.0	746.6	778.3
22.5°	396.5	401.3	441.6	494.1	546.5	599.0	645.3	689.2	730.7	767.3	800.2
25°	387.9	395.2	442.8	497.7	555.0	607.5	655.1	700.2	742.9	780.7	813.7
27.5°	380.6	390.4	441.6	500.2	558.7	612.4	661.2	706.3	750.2	788.0	822.2
30°	370.8	383.0	439.2	498.9	557.5	612.4	660.0	706.3	750.2	789.3	822.2
32.5°	361.1	375.7	433.1	494.1	553.8	606.3	655.1	701.4	744.1	783.2	814.9
35°	350.1	367.2	425.7	486.7	545.3	597.7	645.3	690.5	734.4	771.0	802.7
37.5°	339.1	357.4	416.0	477.0	534.3	585.5	631.9	677.0	718.5	756.3	785.6
40°	326.9	347.7	406.2	466.0	520.9	570.9	617.3	661.2	701.4	736.8	764.9
42.5°	314.7	336.7	395.2	453.8	507.5	555.0	601.4	642.9	681.9	716.1	741.7
45°	302.5	324.5	381.8	440.4	491.6	539.2	583.1	624.6	661.2	692.9	717.3
47.5°	287.9	312.3	369.6	425.7	475.8	523.3	566.0	605.1	641.7	669.7	692.9
50°	274.5	300.1	356.2	411.1	459.9	507.5	548.9	586.8	620.9	647.8	668.5
52.5°	259.8	286.7	342.8	397.7	446.5	491.6	533.1	568.5	599.0	624.6	644.1
55°	245.2	273.3	330.6	383.0	431.8	477.0	516.0	550.2	579.4	601.4	619.7
57.5°	230.6	259.8	317.2	370.8	418.4	462.3	500.2	530.6	558.7	578.2	594.1
60°	215.9	246.4	302.5	356.2	405.0	446.5	483.1	512.3	536.7	555.0	568.5
62.5°	198.8	231.8	289.1	341.6	389.1	429.4	464.8	491.6	514.8	530.6	541.6
65°	181.8	217.1	274.5	326.9	373.3	412.3	445.3	470.9	491.6	506.3	513.6
67.5°	164.7	202.5	259.8	312.3	356.2	392.8	424.5	448.9	467.2	479.4	485.5
70°	147.6	185.4	242.8	294.0	336.7	370.8	401.3	424.5	440.4	451.4	456.2
72.5°	129.3	168.3	224.5	274.5	314.7	348.9	376.9	398.9	413.5	422.1	425.7
75°	112.2	150.0	204.9	252.5	290.3	322.0	348.9	370.8	385.5	391.6	395.2
77.5°	93.9	131.7	184.2	228.1	263.5	292.8	318.4	339.1	352.5	358.6	362.3
80°	78.1	112.2	159.8	200.1	233.0	261.1	284.2	306.2	317.2	318.4	314.7
82.5°	61.0	92.7	134.2	169.6	197.6	224.5	246.4	261.1	265.9	265.9	262.3
85°	45.1	69.5	104.9	133.0	157.4	176.9	190.3	202.5	204.9	206.2	201.3
87.5°	25.6	39.0	62.2	80.5	95.2	108.6	118.3	124.4	124.4	125.6	123.2
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°	428.2	428.2	428.2	428.2	428.2	428.2	428.2	428.2
2.5°	434.3	436.7	436.7	439.2	440.4	440.4	441.6	441.6
5°	489.2	498.9	502.6	508.7	512.3	517.2	519.7	518.4
7.5°	555.0	569.7	577.0	585.5	595.3	597.7	601.4	601.4
10°	620.9	638.0	649.0	658.7	669.7	674.6	679.5	679.5
12.5°	680.7	697.8	712.4	724.6	735.6	742.9	747.8	749.0
15°	729.5	751.4	766.1	779.5	791.7	799.0	805.1	806.3
17.5°	769.7	790.5	810.0	824.6	835.6	846.6	850.3	852.7
20°	801.5	823.4	844.2	858.8	871.0	882.0	886.9	889.3
22.5°	824.6	847.8	868.6	884.4	896.6	907.6	913.7	916.1
25°	839.3	863.7	885.6	901.5	914.9	925.9	932.0	934.4
27.5°	849.0	873.4	894.2	910.0	923.4	934.4	940.5	944.2
30°	849.0	873.4	894.2	910.0	923.4	934.4	940.5	943.0
32.5°	841.7	866.1	886.9	901.5	914.9	925.9	932.0	934.4
35°	828.3	852.7	872.2	886.9	900.3	910.0	916.1	917.4
37.5°	810.0	833.2	851.5	866.1	878.3	888.1	894.2	895.4
40°	789.3	811.2	828.3	841.7	852.7	861.2	867.3	868.6
42.5°	764.9	785.6	800.2	813.7	823.4	832.0	838.1	836.8
45°	739.2	758.8	771.0	781.9	792.9	799.0	803.9	803.9
47.5°	713.6	729.5	740.5	750.2	758.8	764.9	768.5	768.5
50°	686.8	700.2	710.0	718.5	725.8	730.7	734.4	734.4
52.5°	660.0	672.2	679.5	686.8	692.9	696.6	700.2	699.0
55°	633.1	642.9	647.8	655.1	660.0	664.8	667.3	666.1
57.5°	606.3	612.4	617.3	623.4	628.2	633.1	634.3	635.6
60°	577.0	583.1	586.8	592.9	597.7	601.4	603.8	602.6
62.5°	548.9	552.6	556.3	561.1	564.8	569.7	570.9	570.9
65°	518.4	522.1	525.8	530.6	534.3	539.2	541.6	540.4
67.5°	489.2	492.8	496.5	500.2	505.0	509.9	511.1	511.1
70°	458.7	462.3	464.8	469.7	473.3	478.2	479.4	479.4
72.5°	429.4	431.8	434.3	439.2	441.6	445.3	447.7	447.7
75°	396.5	398.9	401.3	403.8	405.0	406.2	407.4	406.2
77.5°	359.9	357.4	355.0	355.0	352.5	353.8	355.0	353.8
80°	309.8	307.4	305.0	303.8	301.3	301.3	302.5	301.3
82.5°	257.4	252.5	250.1	248.9	246.4	246.4	246.4	246.4
85°	194.0	191.5	190.3	187.9	185.4	184.2	185.4	186.6
87.5°	120.8	118.3	115.9	113.4	112.2	111.0	113.4	109.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)