

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: P188455

Luminaire Tested: **24SR-LD2-45-C-UNV-L850-CD1-BR-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188455
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-LD2-45-C-UNV-L850-CD1-BR-U
Description: METALUX 2X4 SKYRIDGE LED FIXTURE WITH BELLADONNA ROSE

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

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3095.0 lumens
Efficiency: N/A
Efficacy: 84.3 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

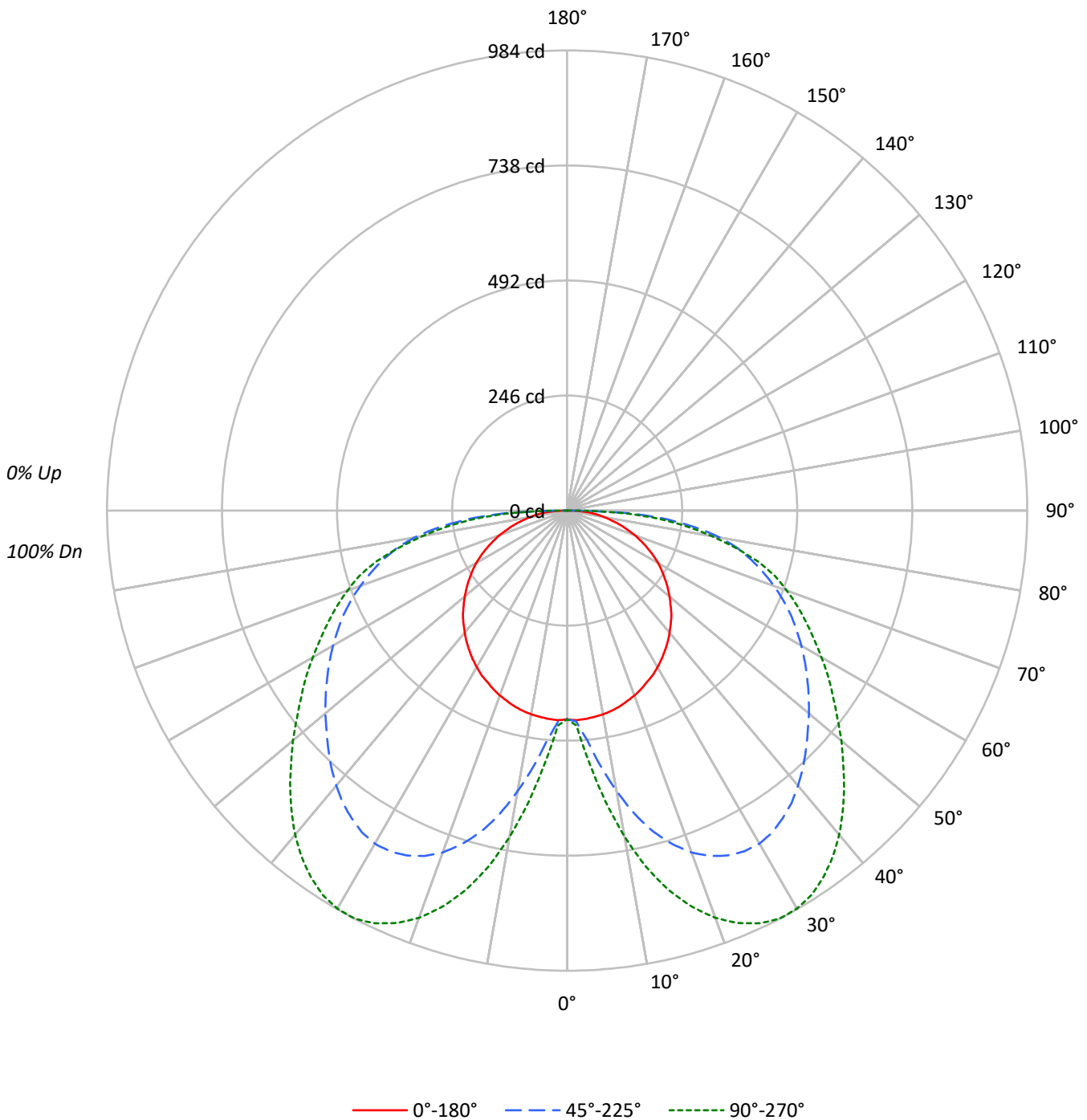
Input Watts (W): 36.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	600	600	600
5°	604	666	730
10°	604	832	967
15°	604	990	1170
20°	603	1114	1327
25°	600	1208	1446
30°	600	1278	1527
35°	599	1320	1570
40°	598	1349	1590
45°	600	1374	1594
50°	599	1413	1602
55°	599	1470	1628
60°	605	1556	1690
65°	603	1680	1793
70°	605	1851	1965
75°	608	2122	2201
80°	631	2571	2433
85°	726	3316	3003



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	50.1	1.6
10°-20°	191.4	6.2
20°-30°	349.8	11.3
30°-40°	465.2	15.0
40°-50°	512.2	16.6
50°-60°	507.7	16.4
60°-70°	464.8	15.0
70°-80°	374.2	12.1
80°-90°	179.6	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°	591.3	19.1
0°-40°	1056.5	34.1
0°-60°	2076.5	67.1
0°-90°	3095.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3095.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	446	446	446	446	446	
5°	448	451	493	527	540	43
15°	434	545	711	805	840	122
25°	404	606	814	931	974	187
35°	365	596	803	917	956	228
45°	315	537	722	809	838	243
55°	256	474	627	679	694	229
65°	189	409	528	550	563	188
75°	117	319	408	420	423	123
85°	47	174	215	197	194	48
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°	446.2	446.2	446.2	446.2	446.2	446.2	446.2	446.2	446.2	446.2	446.2
2.5°	448.7	448.7	447.5	447.5	447.5	447.5	447.5	447.5	448.7	451.3	452.6
5°	447.5	447.5	447.5	447.5	448.7	453.8	460.2	470.4	480.5	493.2	504.7
7.5°	444.9	444.9	444.9	448.7	460.2	478.0	494.5	513.6	532.6	551.7	567.0
10°	442.4	442.4	444.9	458.9	481.8	508.5	533.9	559.3	583.5	608.9	630.5
12.5°	438.6	438.6	446.2	471.6	504.7	537.7	570.8	601.3	631.8	663.6	687.7
15°	433.5	433.5	450.0	484.3	525.0	565.7	603.8	640.7	676.3	710.6	737.3
17.5°	427.1	429.7	453.8	497.0	542.8	589.8	631.8	673.7	711.9	747.5	779.3
20°	420.8	424.6	457.6	507.2	558.1	610.2	656.0	699.2	739.9	778.0	811.0
22.5°	413.1	418.2	460.2	514.8	569.5	624.2	672.5	718.2	761.5	799.6	833.9
25°	404.2	411.9	461.5	518.7	578.4	633.1	682.6	729.7	774.2	813.6	847.9
27.5°	396.6	406.8	460.2	521.2	582.2	638.2	689.0	736.0	781.8	821.2	856.8
30°	386.5	399.2	457.6	519.9	580.9	638.2	687.7	736.0	781.8	822.5	856.8
32.5°	376.3	391.5	451.3	514.8	577.1	631.8	682.6	731.0	775.4	816.1	849.2
35°	364.8	382.6	443.7	507.2	568.2	622.9	672.5	719.5	765.3	803.4	836.5
37.5°	353.4	372.5	433.5	497.0	556.8	610.2	658.5	705.5	748.8	788.2	818.7
40°	340.7	362.3	423.3	485.6	542.8	594.9	643.2	689.0	731.0	767.8	797.1
42.5°	328.0	350.9	411.9	472.9	528.8	578.4	626.7	669.9	710.6	746.2	772.9
45°	315.3	338.1	397.9	458.9	512.3	561.9	607.6	650.9	689.0	722.1	747.5
47.5°	300.0	325.4	385.2	443.7	495.8	545.4	589.8	630.5	668.7	697.9	722.1
50°	286.0	312.7	371.2	428.4	479.3	528.8	572.1	611.5	647.1	675.0	696.6
52.5°	270.8	298.7	357.2	414.4	465.3	512.3	555.5	592.4	624.2	650.9	671.2
55°	255.5	284.8	344.5	399.2	450.0	497.0	537.7	573.3	603.8	626.7	645.8
57.5°	240.3	270.8	330.5	386.5	436.0	481.8	521.2	553.0	582.2	602.6	619.1
60°	225.0	256.8	315.3	371.2	422.0	465.3	503.4	533.9	559.3	578.4	592.4
62.5°	207.2	241.5	301.3	355.9	405.5	447.5	484.3	512.3	536.5	553.0	564.4
65°	189.4	226.3	286.0	340.7	389.0	429.7	464.0	490.7	512.3	527.6	535.2
67.5°	171.6	211.0	270.8	325.4	371.2	409.3	442.4	467.8	486.9	499.6	505.9
70°	153.8	193.2	253.0	306.4	350.9	386.5	418.2	442.4	458.9	470.4	475.4
72.5°	134.7	175.4	233.9	286.0	328.0	363.6	392.8	415.7	430.9	439.8	443.7
75°	117.0	156.4	213.6	263.1	302.6	335.6	363.6	386.5	401.7	408.1	411.9
77.5°	97.9	137.3	192.0	237.7	274.6	305.1	331.8	353.4	367.4	373.7	377.6
80°	81.4	117.0	166.5	208.5	242.8	272.0	296.2	319.1	330.5	331.8	328.0
82.5°	63.6	96.6	139.8	176.7	205.9	233.9	256.8	272.0	277.1	277.1	273.3
85°	47.0	72.5	109.3	138.6	164.0	184.3	198.3	211.0	213.6	214.8	209.8
87.5°	26.7	40.7	64.8	83.9	99.2	113.1	123.3	129.7	129.7	130.9	128.4
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°	446.2	446.2	446.2	446.2	446.2	446.2	446.2	446.2
2.5°	452.6	455.1	455.1	457.6	458.9	458.9	460.2	460.2
5°	509.8	519.9	523.7	530.1	533.9	539.0	541.5	540.3
7.5°	578.4	593.7	601.3	610.2	620.4	622.9	626.7	626.7
10°	647.1	664.8	676.3	686.5	697.9	703.0	708.1	708.1
12.5°	709.3	727.1	742.4	755.1	766.5	774.2	779.3	780.5
15°	760.2	783.1	798.3	812.3	825.0	832.7	839.0	840.3
17.5°	802.1	823.8	844.1	859.3	870.8	882.2	886.0	888.6
20°	835.2	858.1	879.7	894.9	907.7	919.1	924.2	926.7
22.5°	859.3	883.5	905.1	921.6	934.3	945.8	952.1	954.7
25°	874.6	900.0	922.9	939.4	953.4	964.9	971.2	973.8
27.5°	884.8	910.2	931.8	948.3	962.3	973.8	980.1	983.9
30°	884.8	910.2	931.8	948.3	962.3	973.8	980.1	982.7
32.5°	877.1	902.6	924.2	939.4	953.4	964.9	971.2	973.8
35°	863.2	888.6	908.9	924.2	938.2	948.3	954.7	956.0
37.5°	844.1	868.2	887.3	902.6	915.3	925.5	931.8	933.1
40°	822.5	845.4	863.2	877.1	888.6	897.5	903.8	905.1
42.5°	797.1	818.7	833.9	847.9	858.1	867.0	873.3	872.1
45°	770.4	790.7	803.4	814.9	826.3	832.7	837.7	837.7
47.5°	743.7	760.2	771.6	781.8	790.7	797.1	800.9	800.9
50°	715.7	729.7	739.9	748.8	756.4	761.5	765.3	765.3
52.5°	687.7	700.4	708.1	715.7	722.1	725.9	729.7	728.4
55°	659.8	669.9	675.0	682.6	687.7	692.8	695.4	694.1
57.5°	631.8	638.2	643.2	649.6	654.7	659.8	661.0	662.3
60°	601.3	607.6	611.5	617.8	622.9	626.7	629.3	628.0
62.5°	572.1	575.9	579.7	584.8	588.6	593.7	594.9	594.9
65°	540.3	544.1	547.9	553.0	556.8	561.9	564.4	563.2
67.5°	509.8	513.6	517.4	521.2	526.3	531.4	532.6	532.6
70°	478.0	481.8	484.3	489.4	493.2	498.3	499.6	499.6
72.5°	447.5	450.0	452.6	457.6	460.2	464.0	466.5	466.5
75°	413.1	415.7	418.2	420.8	422.0	423.3	424.6	423.3
77.5°	375.0	372.5	369.9	369.9	367.4	368.7	369.9	368.7
80°	322.9	320.3	317.8	316.5	314.0	314.0	315.3	314.0
82.5°	268.2	263.1	260.6	259.3	256.8	256.8	256.8	256.8
85°	202.1	199.6	198.3	195.8	193.2	192.0	193.2	194.5
87.5°	125.9	123.3	120.8	118.2	117.0	115.7	118.2	114.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)