

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: P188460

Luminaire Tested: **24SR-LD2-48-C-UNV-L850-CD1-BR-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188460
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-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: 3296.0 lumens
Efficiency: N/A
Efficacy: 86.3 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

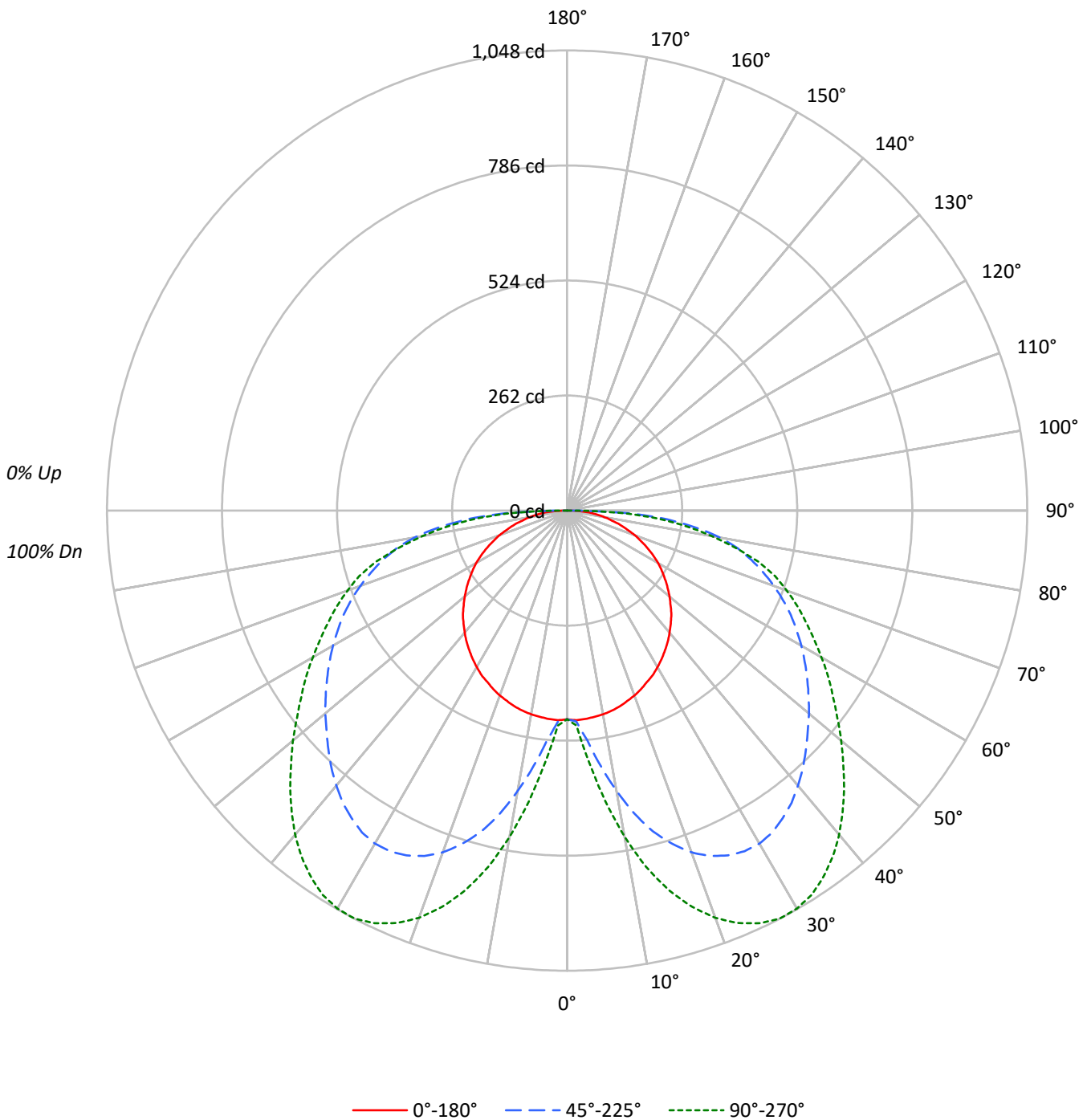
Input Watts (W): 38.2
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	639	639	639
5°	644	709	777
10°	644	886	1030
15°	643	1054	1246
20°	642	1186	1413
25°	639	1286	1540
30°	639	1361	1626
35°	638	1405	1672
40°	637	1436	1693
45°	639	1463	1697
50°	638	1505	1706
55°	638	1566	1734
60°	645	1658	1800
65°	642	1789	1909
70°	644	1971	2093
75°	647	2259	2344
80°	671	2737	2591
85°	773	3532	3197



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	53.4	1.6
10°-20°	203.8	6.2
20°-30°	372.6	11.3
30°-40°	495.5	15.0
40°-50°	545.5	16.6
50°-60°	540.7	16.4
60°-70°	494.9	15.0
70°-80°	398.5	12.1
80°-90°	191.2	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°	629.7	19.1
0°-40°	1125.1	34.1
0°-60°	2211.3	67.1
0°-90°	3296.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3296.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	475	475	475	475	475	
5°	476	481	525	561	575	45
15°	462	581	757	858	895	130
25°	430	645	866	992	1037	199
35°	388	634	856	976	1018	243
45°	336	572	769	862	892	258
55°	272	504	667	723	739	244
65°	202	436	562	586	600	200
75°	124	340	435	447	451	131
85°	50	185	229	210	207	52
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°	475.2	475.2	475.2	475.2	475.2	475.2	475.2	475.2	475.2	475.2	475.2
2.5°	477.9	477.9	476.5	476.5	476.5	476.5	476.5	476.5	477.9	480.6	481.9
5°	476.5	476.5	476.5	476.5	477.9	483.3	490.1	500.9	511.7	525.3	537.5
7.5°	473.8	473.8	473.8	477.9	490.1	509.0	526.6	546.9	567.2	587.5	603.8
10°	471.1	471.1	473.8	488.7	513.1	541.5	568.6	595.7	621.4	648.5	671.5
12.5°	467.1	467.1	475.2	502.3	537.5	572.6	607.8	640.3	672.8	706.7	732.4
15°	461.6	461.6	479.2	515.8	559.1	602.4	643.0	682.3	720.2	756.8	785.2
17.5°	454.9	457.6	483.3	529.3	578.1	628.2	672.8	717.5	758.1	796.0	829.9
20°	448.1	452.2	487.4	540.2	594.3	649.8	698.6	744.6	787.9	828.5	863.7
22.5°	440.0	445.4	490.1	548.3	606.5	664.7	716.1	764.9	810.9	851.5	888.1
25°	430.5	438.6	491.4	552.3	616.0	674.2	727.0	777.1	824.5	866.4	903.0
27.5°	422.4	433.2	490.1	555.0	620.0	679.6	733.7	783.8	832.6	874.5	912.4
30°	411.5	425.1	487.4	553.7	618.7	679.6	732.4	783.8	832.6	875.9	912.4
32.5°	400.7	417.0	480.6	548.3	614.6	672.8	727.0	778.4	825.8	869.1	904.3
35°	388.5	407.5	472.5	540.2	605.1	663.4	716.1	766.2	815.0	855.6	890.8
37.5°	376.4	396.7	461.6	529.3	593.0	649.8	701.3	751.3	797.4	839.3	871.8
40°	362.8	385.8	450.8	517.1	578.1	633.6	685.0	733.7	778.4	817.7	848.8
42.5°	349.3	373.6	438.6	503.6	563.2	616.0	667.4	713.4	756.8	794.7	823.1
45°	335.7	360.1	423.7	488.7	545.6	598.4	647.1	693.1	733.7	768.9	796.0
47.5°	319.5	346.6	410.2	472.5	528.0	580.8	628.2	671.5	712.1	743.2	768.9
50°	304.6	333.0	395.3	456.2	510.4	563.2	609.2	651.2	689.1	718.9	741.9
52.5°	288.4	318.1	380.4	441.3	495.5	545.6	591.6	630.9	664.7	693.1	714.8
55°	272.1	303.2	366.9	425.1	479.2	529.3	572.6	610.6	643.0	667.4	687.7
57.5°	255.9	288.4	352.0	411.5	464.3	513.1	555.0	588.9	620.0	641.7	659.3
60°	239.6	273.5	335.7	395.3	449.5	495.5	536.1	568.6	595.7	616.0	630.9
62.5°	220.7	257.2	320.8	379.1	431.9	476.5	515.8	545.6	571.3	588.9	601.1
65°	201.7	241.0	304.6	362.8	414.3	457.6	494.1	522.6	545.6	561.8	569.9
67.5°	182.8	224.7	288.4	346.6	395.3	435.9	471.1	498.2	518.5	532.0	538.8
70°	163.8	205.8	269.4	326.3	373.6	411.5	445.4	471.1	488.7	500.9	506.3
72.5°	143.5	186.8	249.1	304.6	349.3	387.2	418.3	442.7	458.9	468.4	472.5
75°	124.5	166.5	227.4	280.2	322.2	357.4	387.2	411.5	427.8	434.6	438.6
77.5°	104.2	146.2	204.4	253.2	292.4	324.9	353.3	376.4	391.2	398.0	402.1
80°	86.6	124.5	177.3	222.0	258.6	289.7	315.4	339.8	352.0	353.3	349.3
82.5°	67.7	102.9	148.9	188.2	219.3	249.1	273.5	289.7	295.1	295.1	291.1
85°	50.1	77.2	116.4	147.6	174.6	196.3	211.2	224.7	227.4	228.8	223.4
87.5°	28.4	43.3	69.0	89.3	105.6	120.5	131.3	138.1	138.1	139.4	136.7
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°	475.2	475.2	475.2	475.2	475.2	475.2	475.2	475.2
2.5°	481.9	484.7	484.7	487.4	488.7	488.7	490.1	490.1
5°	542.9	553.7	557.8	564.5	568.6	574.0	576.7	575.4
7.5°	616.0	632.2	640.3	649.8	660.6	663.4	667.4	667.4
10°	689.1	708.0	720.2	731.0	743.2	748.6	754.1	754.1
12.5°	755.4	774.4	790.6	804.1	816.3	824.5	829.9	831.2
15°	809.6	833.9	850.2	865.1	878.6	886.7	893.5	894.8
17.5°	854.2	877.2	898.9	915.2	927.3	939.5	943.6	946.3
20°	889.4	913.8	936.8	953.1	966.6	978.8	984.2	986.9
22.5°	915.2	940.9	963.9	981.5	995.0	1007.2	1014.0	1016.7
25°	931.4	958.5	982.8	1000.4	1015.3	1027.5	1034.3	1037.0
27.5°	942.2	969.3	992.3	1009.9	1024.8	1037.0	1043.8	1047.8
30°	942.2	969.3	992.3	1009.9	1024.8	1037.0	1043.8	1046.5
32.5°	934.1	961.2	984.2	1000.4	1015.3	1027.5	1034.3	1037.0
35°	919.2	946.3	968.0	984.2	999.1	1009.9	1016.7	1018.0
37.5°	898.9	924.6	944.9	961.2	974.7	985.6	992.3	993.7
40°	875.9	900.3	919.2	934.1	946.3	955.8	962.5	963.9
42.5°	848.8	871.8	888.1	903.0	913.8	923.3	930.0	928.7
45°	820.4	842.1	855.6	867.8	880.0	886.7	892.1	892.1
47.5°	792.0	809.6	821.7	832.6	842.1	848.8	852.9	852.9
50°	762.2	777.1	787.9	797.4	805.5	810.9	815.0	815.0
52.5°	732.4	745.9	754.1	762.2	768.9	773.0	777.1	775.7
55°	702.6	713.4	718.9	727.0	732.4	737.8	740.5	739.2
57.5°	672.8	679.6	685.0	691.8	697.2	702.6	704.0	705.3
60°	640.3	647.1	651.2	657.9	663.4	667.4	670.1	668.8
62.5°	609.2	613.3	617.3	622.7	626.8	632.2	633.6	633.6
65°	575.4	579.4	583.5	588.9	593.0	598.4	601.1	599.7
67.5°	542.9	546.9	551.0	555.0	560.5	565.9	567.2	567.2
70°	509.0	513.1	515.8	521.2	525.3	530.7	532.0	532.0
72.5°	476.5	479.2	481.9	487.4	490.1	494.1	496.8	496.8
75°	440.0	442.7	445.4	448.1	449.5	450.8	452.2	450.8
77.5°	399.4	396.7	394.0	394.0	391.2	392.6	394.0	392.6
80°	343.9	341.2	338.4	337.1	334.4	334.4	335.7	334.4
82.5°	285.6	280.2	277.5	276.2	273.5	273.5	273.5	273.5
85°	215.3	212.5	211.2	208.5	205.8	204.4	205.8	207.1
87.5°	134.0	131.3	128.6	125.9	124.5	123.2	125.9	121.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)