

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: P188452

Luminaire Tested: **24SR-LD2-45-C-UNV-L830-CD1-BR-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188452
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-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: 2705.0 lumens
Efficiency: N/A
Efficacy: 73.7 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

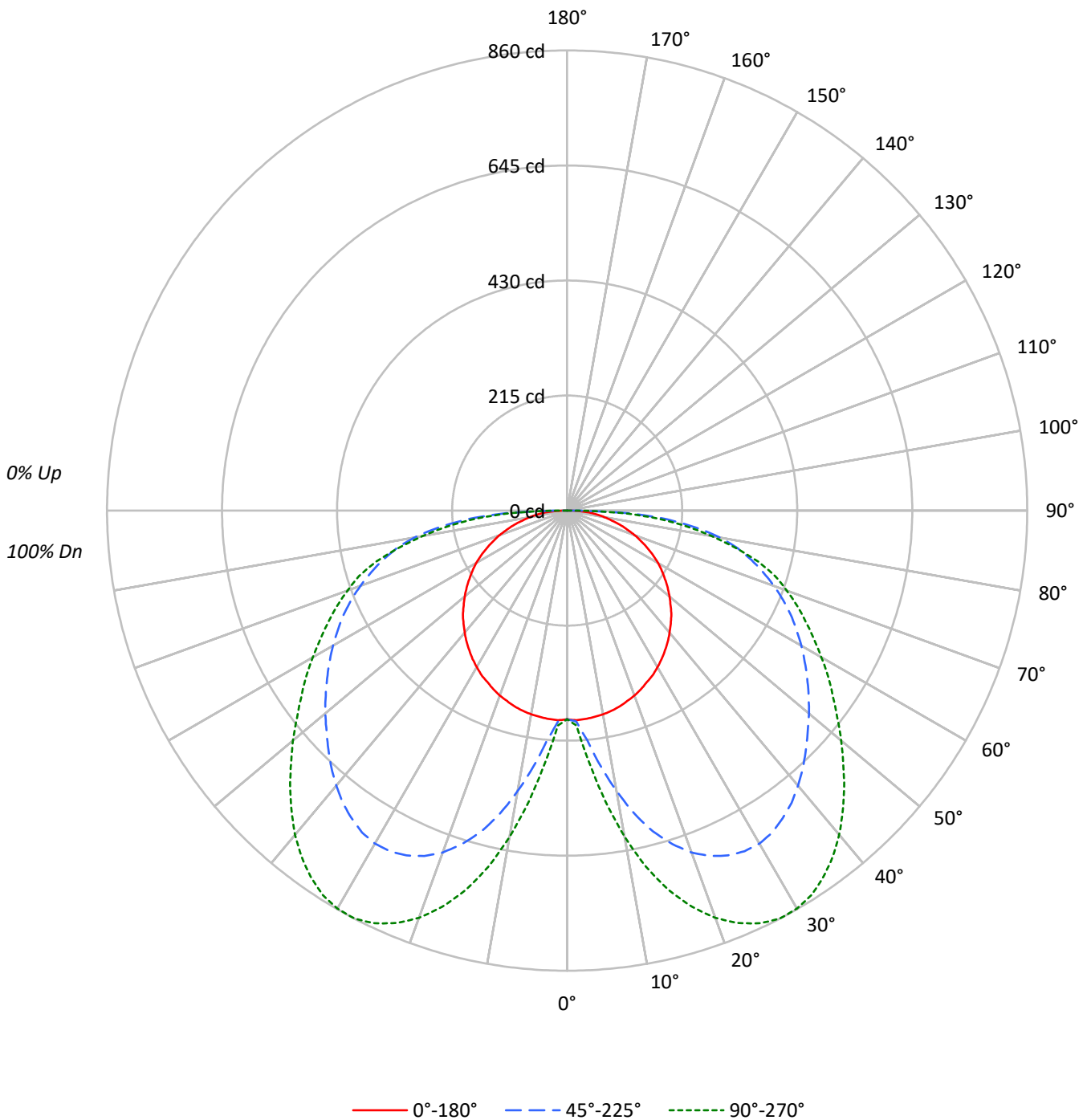
Input Watts (W): 36.7
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	525	525	525
5°	528	582	638
10°	528	727	845
15°	528	865	1023
20°	527	974	1160
25°	525	1056	1264
30°	525	1117	1334
35°	524	1153	1372
40°	523	1179	1389
45°	524	1201	1393
50°	523	1235	1400
55°	524	1285	1423
60°	529	1360	1477
65°	527	1468	1567
70°	529	1617	1718
75°	531	1854	1923
80°	551	2247	2126
85°	634	2899	2624



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	43.8	1.6
10°-20°	167.2	6.2
20°-30°	305.8	11.3
30°-40°	406.6	15.0
40°-50°	447.7	16.6
50°-60°	443.7	16.4
60°-70°	406.2	15.0
70°-80°	327.1	12.1
80°-90°	156.9	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°	516.8	19.1
0°-40°	923.4	34.1
0°-60°	1814.8	67.1
0°-90°	2705.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2705.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	390	390	390	390	390	
5°	391	394	431	460	472	37
15°	379	477	621	704	734	107
25°	353	529	711	814	851	163
35°	319	520	702	801	836	200
45°	276	469	631	707	732	212
55°	223	414	548	593	607	200
65°	166	358	461	481	492	164
75°	102	279	357	367	370	108
85°	41	152	188	172	170	42
90°	0	0	0	0	0	



TEST NUMBER: P188452

CATALOG NUMBER: 24SR-LD2-45-C-UNV-L830-CD1-BR-U

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	390.0	390.0	390.0	390.0	390.0	390.0	390.0	390.0	390.0	390.0	390.0
2.5°	392.2	392.2	391.1	391.1	391.1	391.1	391.1	391.1	392.2	394.4	395.5
5°	391.1	391.1	391.1	391.1	392.2	396.6	402.2	411.1	420.0	431.1	441.1
7.5°	388.9	388.9	388.9	392.2	402.2	417.7	432.2	448.9	465.5	482.2	495.5
10°	386.6	386.6	388.9	401.1	421.1	444.4	466.6	488.9	510.0	532.2	551.1
12.5°	383.3	383.3	390.0	412.2	441.1	470.0	498.9	525.5	552.2	580.0	601.1
15°	378.9	378.9	393.3	423.3	458.9	494.4	527.7	560.0	591.1	621.1	644.4
17.5°	373.3	375.5	396.6	434.4	474.4	515.5	552.2	588.8	622.2	653.3	681.1
20°	367.8	371.1	400.0	443.3	487.7	533.3	573.3	611.1	646.6	680.0	708.8
22.5°	361.1	365.5	402.2	450.0	497.7	545.5	587.7	627.7	665.5	698.8	728.8
25°	353.3	360.0	403.3	453.3	505.5	553.3	596.6	637.7	676.6	711.1	741.1
27.5°	346.6	355.5	402.2	455.5	508.9	557.7	602.2	643.3	683.3	717.7	748.8
30°	337.8	348.9	400.0	454.4	507.7	557.7	601.1	643.3	683.3	718.8	748.8
32.5°	328.9	342.2	394.4	450.0	504.4	552.2	596.6	638.8	677.7	713.3	742.2
35°	318.9	334.4	387.8	443.3	496.6	544.4	587.7	628.8	668.8	702.2	731.1
37.5°	308.9	325.5	378.9	434.4	486.6	533.3	575.5	616.6	654.4	688.8	715.5
40°	297.8	316.6	370.0	424.4	474.4	520.0	562.2	602.2	638.8	671.1	696.6
42.5°	286.6	306.6	360.0	413.3	462.2	505.5	547.7	585.5	621.1	652.2	675.5
45°	275.5	295.5	347.8	401.1	447.7	491.1	531.1	568.9	602.2	631.1	653.3
47.5°	262.2	284.4	336.6	387.8	433.3	476.6	515.5	551.1	584.4	610.0	631.1
50°	250.0	273.3	324.4	374.4	418.9	462.2	500.0	534.4	565.5	590.0	608.8
52.5°	236.7	261.1	312.2	362.2	406.6	447.7	485.5	517.7	545.5	568.9	586.6
55°	223.3	248.9	301.1	348.9	393.3	434.4	470.0	501.1	527.7	547.7	564.4
57.5°	210.0	236.7	288.9	337.8	381.1	421.1	455.5	483.3	508.9	526.6	541.1
60°	196.7	224.4	275.5	324.4	368.9	406.6	440.0	466.6	488.9	505.5	517.7
62.5°	181.1	211.1	263.3	311.1	354.4	391.1	423.3	447.7	468.9	483.3	493.3
65°	165.5	197.8	250.0	297.8	340.0	375.5	405.5	428.9	447.7	461.1	467.7
67.5°	150.0	184.4	236.7	284.4	324.4	357.8	386.6	408.9	425.5	436.6	442.2
70°	134.4	168.9	221.1	267.8	306.6	337.8	365.5	386.6	401.1	411.1	415.5
72.5°	117.8	153.3	204.4	250.0	286.6	317.8	343.3	363.3	376.6	384.4	387.8
75°	102.2	136.7	186.7	230.0	264.4	293.3	317.8	337.8	351.1	356.6	360.0
77.5°	85.5	120.0	167.8	207.8	240.0	266.6	290.0	308.9	321.1	326.6	330.0
80°	71.1	102.2	145.5	182.2	212.2	237.8	258.9	278.9	288.9	290.0	286.6
82.5°	55.6	84.4	122.2	154.4	180.0	204.4	224.4	237.8	242.2	242.2	238.9
85°	41.1	63.3	95.5	121.1	143.3	161.1	173.3	184.4	186.7	187.8	183.3
87.5°	23.3	35.6	56.7	73.3	86.7	98.9	107.8	113.3	113.3	114.4	112.2
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: P188452

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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	390.0	390.0	390.0	390.0	390.0	390.0	390.0	390.0
2.5°	395.5	397.8	397.8	400.0	401.1	401.1	402.2	402.2
5°	445.5	454.4	457.7	463.3	466.6	471.1	473.3	472.2
7.5°	505.5	518.9	525.5	533.3	542.2	544.4	547.7	547.7
10°	565.5	581.1	591.1	600.0	610.0	614.4	618.8	618.8
12.5°	620.0	635.5	648.8	660.0	670.0	676.6	681.1	682.2
15°	664.4	684.4	697.7	710.0	721.1	727.7	733.3	734.4
17.5°	701.1	720.0	737.7	751.1	761.1	771.1	774.4	776.6
20°	730.0	749.9	768.8	782.2	793.3	803.3	807.7	809.9
22.5°	751.1	772.2	791.1	805.5	816.6	826.6	832.2	834.4
25°	764.4	786.6	806.6	821.1	833.3	843.3	848.8	851.1
27.5°	773.3	795.5	814.4	828.8	841.1	851.1	856.6	859.9
30°	773.3	795.5	814.4	828.8	841.1	851.1	856.6	858.8
32.5°	766.6	788.8	807.7	821.1	833.3	843.3	848.8	851.1
35°	754.4	776.6	794.4	807.7	819.9	828.8	834.4	835.5
37.5°	737.7	758.8	775.5	788.8	799.9	808.8	814.4	815.5
40°	718.8	738.8	754.4	766.6	776.6	784.4	789.9	791.1
42.5°	696.6	715.5	728.8	741.1	749.9	757.7	763.3	762.2
45°	673.3	691.1	702.2	712.2	722.2	727.7	732.2	732.2
47.5°	650.0	664.4	674.4	683.3	691.1	696.6	700.0	700.0
50°	625.5	637.7	646.6	654.4	661.1	665.5	668.8	668.8
52.5°	601.1	612.2	618.8	625.5	631.1	634.4	637.7	636.6
55°	576.6	585.5	590.0	596.6	601.1	605.5	607.7	606.6
57.5°	552.2	557.7	562.2	567.7	572.2	576.6	577.7	578.8
60°	525.5	531.1	534.4	540.0	544.4	547.7	550.0	548.9
62.5°	500.0	503.3	506.6	511.1	514.4	518.9	520.0	520.0
65°	472.2	475.5	478.9	483.3	486.6	491.1	493.3	492.2
67.5°	445.5	448.9	452.2	455.5	460.0	464.4	465.5	465.5
70°	417.7	421.1	423.3	427.7	431.1	435.5	436.6	436.6
72.5°	391.1	393.3	395.5	400.0	402.2	405.5	407.8	407.8
75°	361.1	363.3	365.5	367.8	368.9	370.0	371.1	370.0
77.5°	327.8	325.5	323.3	323.3	321.1	322.2	323.3	322.2
80°	282.2	280.0	277.8	276.6	274.4	274.4	275.5	274.4
82.5°	234.4	230.0	227.8	226.7	224.4	224.4	224.4	224.4
85°	176.7	174.4	173.3	171.1	168.9	167.8	168.9	170.0
87.5°	110.0	107.8	105.5	103.3	102.2	101.1	103.3	100.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)