

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: P188490

Luminaire Tested: **24SR-LD2-39-C-UNV-L850-CD1-MR-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188490
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24779)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24SR-LD2-39-C-UNV-L850-CD1-MR-U
Description: METALUX 2X4 SKYRIDGE LED FIXTURE WITH MEDIUM RED SKYTRIM.

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

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2681.0 lumens
Efficiency: N/A
Efficacy: 84.0 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 2.27 / 2.06
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

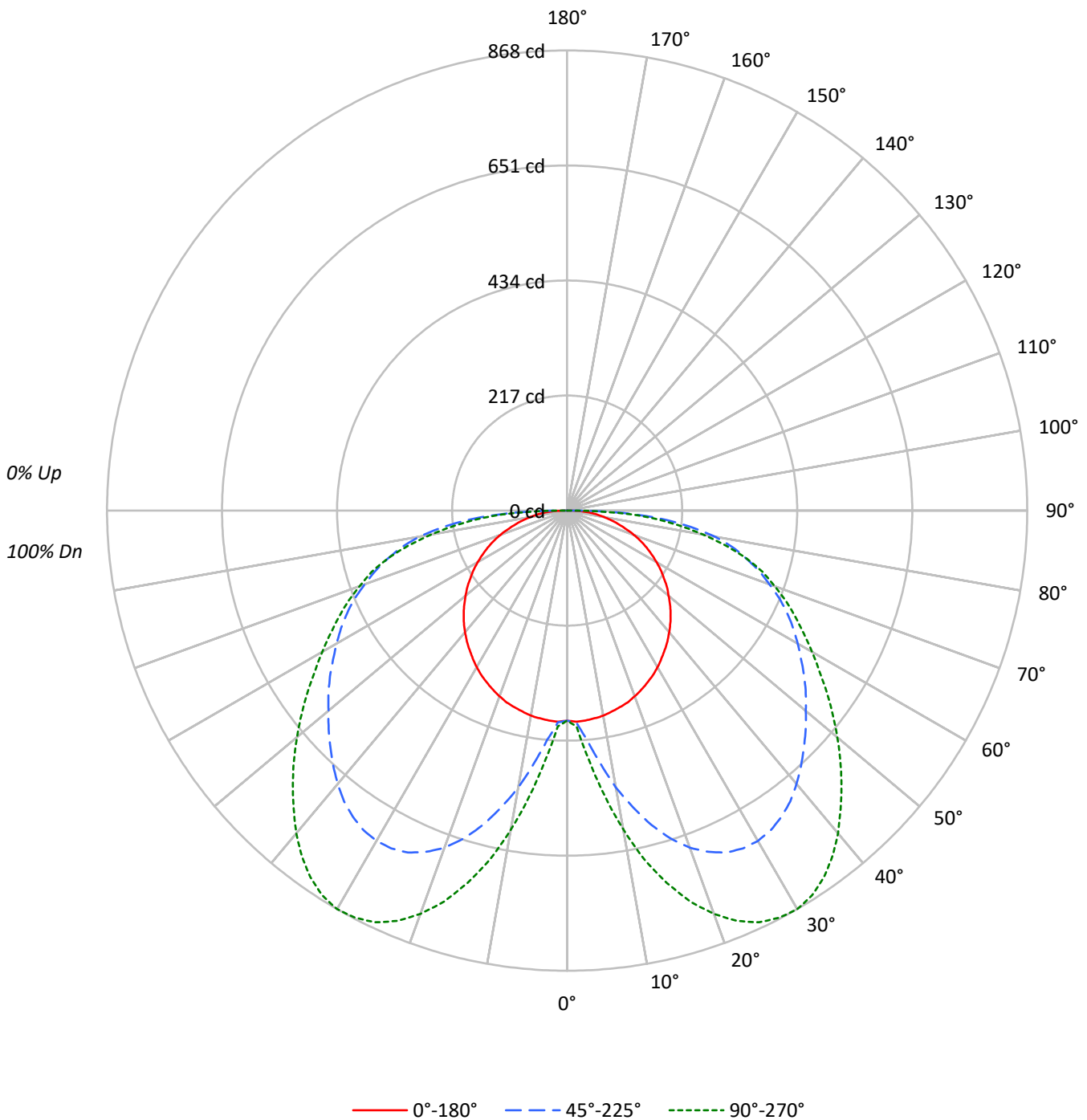
Input Watts (W): 31.9
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	95	90	103	98	93	88	93	89	85	89	86	83	86	83	80	78
2	95	85	77	70	92	83	76	69	79	73	68	76	71	66	73	68	64	62
3	85	73	64	56	83	72	63	56	69	61	55	66	59	54	63	58	53	50
4	78	64	54	47	75	63	53	46	60	52	46	58	51	45	55	49	44	42
5	71	57	47	39	69	55	46	39	53	45	39	51	44	38	49	43	38	35
6	65	50	41	34	63	49	40	33	48	39	33	46	38	33	44	38	32	30
7	60	45	36	29	58	45	35	29	43	35	29	41	34	29	40	33	28	26
8	56	41	32	26	54	40	32	26	39	31	25	38	30	25	36	30	25	23
9	52	38	29	23	50	37	28	23	36	28	23	35	27	22	33	27	22	20
10	48	34	26	20	47	34	26	20	33	25	20	32	25	20	31	25	20	18

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	533	533	533
5°	537	587	639
10°	537	725	835
15°	535	855	1013
20°	534	969	1159
25°	531	1056	1272
30°	530	1118	1349
35°	527	1158	1387
40°	526	1183	1396
45°	525	1202	1392
50°	523	1230	1393
55°	523	1281	1402
60°	524	1351	1436
65°	527	1459	1513
70°	527	1599	1639
75°	527	1821	1826
80°	549	2190	2015
85°	644	2746	2485



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	43.9	1.6
10°-20°	166.6	6.2
20°-30°	306.4	11.4
30°-40°	408.5	15.2
40°-50°	447.5	16.7
50°-60°	440.0	16.4
60°-70°	399.3	14.9
70°-80°	317.9	11.9
80°-90°	150.7	5.6
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°	517.0	19.3
0°-40°	925.5	34.5
0°-60°	1813.1	67.6
0°-90°	2681.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2681.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	396	396	396	396	396	
5°	397	401	435	463	473	38
15°	384	476	614	699	727	108
25°	358	527	712	818	857	165
35°	321	518	705	809	844	201
45°	276	467	632	708	732	213
55°	223	413	546	587	598	200
65°	166	357	458	468	475	163
75°	101	279	350	348	351	107
85°	42	150	178	161	161	43
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°	396.3	396.3	396.3	396.3	396.3	396.3	396.3	396.3	396.3	396.3	396.3
2.5°	398.6	398.6	397.4	397.4	397.4	396.3	396.3	397.4	398.6	399.7	400.8
5°	397.4	397.4	397.4	397.4	398.6	403.1	408.7	416.6	423.3	434.6	440.2
7.5°	395.2	395.2	396.3	399.7	408.7	421.1	435.7	452.6	466.1	480.8	494.3
10°	392.9	392.9	395.2	406.4	424.5	445.9	467.2	488.6	507.8	530.3	547.2
12.5°	388.4	388.4	395.2	415.5	442.5	469.5	496.5	524.7	549.4	573.1	596.7
15°	383.9	383.9	397.4	425.6	459.4	492.0	523.5	556.2	585.5	613.6	638.4
17.5°	379.4	380.6	400.8	436.8	474.0	512.3	549.4	584.3	617.0	648.5	676.7
20°	372.7	374.9	403.1	444.7	486.4	529.2	568.6	606.9	642.9	676.7	705.9
22.5°	365.9	370.4	404.2	450.4	496.5	542.7	584.3	623.7	662.0	696.9	727.3
25°	358.0	363.7	405.3	453.7	503.3	550.6	594.5	636.1	675.5	711.6	742.0
27.5°	350.2	358.0	403.1	453.7	505.5	555.1	599.0	641.8	683.4	718.3	751.0
30°	341.1	351.3	399.7	452.6	505.5	553.9	599.0	642.9	683.4	719.4	751.0
32.5°	331.0	344.5	394.1	448.1	501.0	550.6	595.6	638.4	678.9	714.9	745.3
35°	320.9	335.5	387.3	441.4	494.3	542.7	586.6	629.4	668.8	704.8	735.2
37.5°	310.7	327.6	379.4	433.5	484.1	531.4	575.3	618.1	656.4	691.3	719.4
40°	299.5	317.5	369.3	422.2	472.9	517.9	561.8	602.4	639.5	673.3	700.3
42.5°	288.2	307.4	358.0	411.0	459.4	504.4	547.2	586.6	622.6	653.0	677.8
45°	275.8	296.1	346.8	397.4	444.7	489.8	531.4	568.6	603.5	631.6	654.1
47.5°	263.5	284.9	334.4	385.1	431.2	475.1	515.7	551.7	583.2	610.2	631.6
50°	249.9	272.5	322.0	371.5	417.7	460.5	499.9	533.7	564.1	587.7	608.0
52.5°	237.6	261.2	309.6	359.2	404.2	447.0	485.3	516.8	544.9	567.5	584.3
55°	222.9	248.8	298.4	346.8	391.8	433.5	469.5	499.9	525.8	546.1	560.7
57.5°	209.4	236.4	286.0	334.4	378.3	420.0	453.7	483.0	505.5	523.5	537.1
60°	194.8	224.1	273.6	322.0	365.9	406.4	439.1	466.1	487.5	502.1	513.4
62.5°	180.1	210.5	262.3	309.6	352.4	390.7	422.2	447.0	466.1	480.8	487.5
65°	165.5	197.0	248.8	297.2	338.9	374.9	405.3	429.0	445.9	458.2	462.7
67.5°	149.7	183.5	235.3	281.5	323.1	358.0	386.2	408.7	423.3	433.5	435.7
70°	134.0	167.8	219.5	265.7	305.1	337.8	365.9	385.1	399.7	406.4	408.7
72.5°	117.1	152.0	203.8	247.7	284.9	317.5	342.3	362.5	374.9	379.4	379.4
75°	101.3	135.1	185.8	227.4	263.5	293.9	317.5	335.5	346.8	350.2	349.0
77.5°	85.6	119.3	166.6	206.0	238.7	266.8	289.4	306.2	316.4	319.8	318.6
80°	70.9	102.5	144.1	181.3	210.5	236.4	256.7	274.7	283.7	282.6	275.8
82.5°	56.3	83.3	120.5	153.1	179.0	202.7	222.9	234.2	237.6	234.2	227.4
85°	41.7	63.1	93.4	119.3	140.7	159.9	172.3	180.1	181.3	177.9	172.3
87.5°	24.8	37.2	55.2	70.9	86.7	95.7	102.5	108.1	109.2	105.8	103.6
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°	396.3	396.3	396.3	396.3	396.3	396.3	396.3	396.3
2.5°	401.9	403.1	404.2	406.4	405.3	406.4	406.4	407.6
5°	448.1	454.9	459.4	466.1	466.1	469.5	470.6	472.9
7.5°	504.4	513.4	523.5	533.7	534.8	540.4	542.7	542.7
10°	561.8	574.2	586.6	597.8	601.2	608.0	611.4	611.4
12.5°	613.6	627.1	644.0	656.4	660.9	668.8	673.3	674.4
15°	658.6	675.5	692.4	705.9	713.8	721.7	726.2	727.3
17.5°	696.9	717.2	735.2	748.7	757.7	766.7	772.4	773.5
20°	727.3	749.8	767.9	782.5	792.6	803.9	808.4	809.5
22.5°	751.0	772.4	792.6	808.4	819.7	830.9	836.5	837.7
25°	766.7	789.3	809.5	826.4	838.8	848.9	854.6	856.8
27.5°	775.7	799.4	819.7	835.4	847.8	859.1	864.7	865.8
30°	776.9	800.5	820.8	836.5	848.9	860.2	865.8	868.1
32.5°	771.2	794.9	814.0	829.8	842.2	852.3	857.9	860.2
35°	760.0	782.5	801.6	816.3	827.5	836.5	843.3	844.4
37.5°	744.2	765.6	782.5	796.0	807.3	816.3	821.9	821.9
40°	722.8	743.1	757.7	770.1	781.4	788.1	794.9	794.9
42.5°	699.2	718.3	731.8	743.1	751.0	758.9	763.4	763.4
45°	674.4	690.2	703.7	712.7	720.6	726.2	731.8	731.8
47.5°	649.6	663.2	673.3	682.3	689.0	694.7	699.2	699.2
50°	623.7	636.1	644.0	651.9	657.5	662.0	665.4	665.4
52.5°	597.8	608.0	613.6	620.4	624.9	629.4	631.6	631.6
55°	573.1	579.8	584.3	590.0	593.3	595.6	597.8	597.8
57.5°	546.1	550.6	555.1	558.4	560.7	562.9	565.2	564.1
60°	519.0	522.4	525.8	528.0	530.3	532.5	533.7	533.7
62.5°	492.0	493.1	494.3	498.8	501.0	502.1	503.3	503.3
65°	465.0	465.0	466.1	469.5	471.7	474.0	475.1	475.1
67.5°	435.7	436.8	438.0	441.4	442.5	444.7	447.0	447.0
70°	406.4	407.6	407.6	411.0	412.1	414.3	416.6	416.6
72.5°	378.3	378.3	378.3	380.6	382.8	385.1	387.3	387.3
75°	346.8	346.8	346.8	349.0	349.0	350.2	352.4	351.3
77.5°	313.0	309.6	306.2	305.1	305.1	306.2	307.4	307.4
80°	269.1	264.6	262.3	260.1	259.0	260.1	261.2	260.1
82.5°	222.9	217.3	213.9	212.8	212.8	212.8	213.9	211.7
85°	168.9	163.3	161.0	161.0	159.9	159.9	159.9	161.0
87.5°	101.3	98.0	94.6	95.7	94.6	93.4	94.6	96.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)