

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: P188498

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188498
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-LD2-48-C-UNV-L835-CD1-MR-U
Description: METALUX 2X4 SKYRIDGE LED FIXTURE WITH MEDIUM RED SKYTRIM.

Light Source: EATON LED 3500K
Ballast/Driver: OSRAM ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2904.0 lumens
Efficiency: N/A
Efficacy: 76.0 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

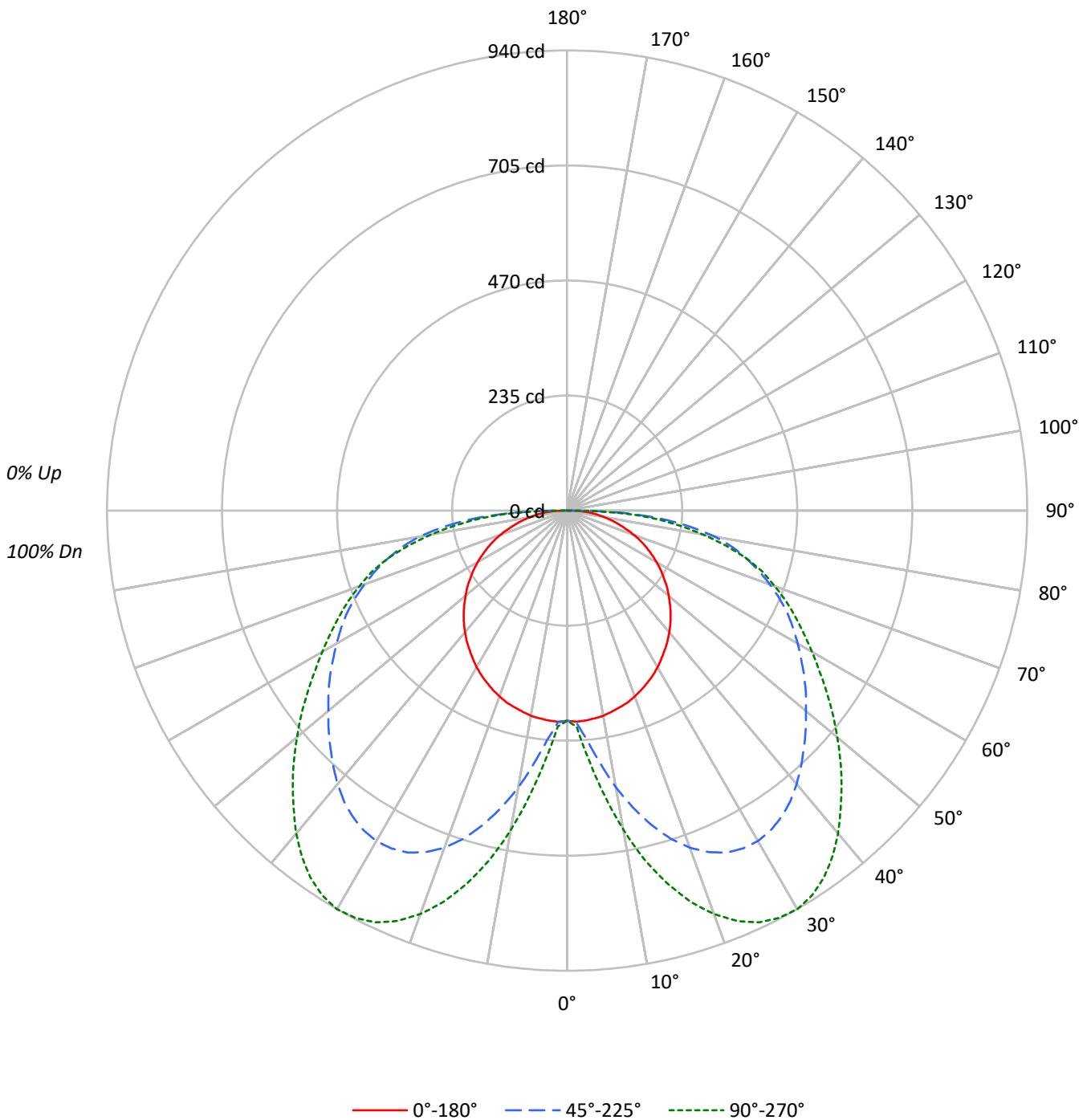
Input Watts (W): 38.2
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	578	578	578
5°	581	636	692
10°	581	785	905
15°	579	926	1097
20°	578	1049	1256
25°	576	1144	1378
30°	574	1211	1461
35°	571	1254	1502
40°	570	1281	1512
45°	569	1302	1508
50°	567	1333	1509
55°	567	1388	1519
60°	568	1464	1556
65°	571	1580	1638
70°	571	1732	1775
75°	571	1972	1978
80°	595	2372	2183
85°	696	2975	2692



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	47.6	1.6
10°-20°	180.4	6.2
20°-30°	331.9	11.4
30°-40°	442.5	15.2
40°-50°	484.8	16.7
50°-60°	476.6	16.4
60°-70°	432.6	14.9
70°-80°	344.3	11.9
80°-90°	163.2	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°	560.0	19.3
0°-40°	1002.5	34.5
0°-60°	1963.9	67.6
0°-90°	2904.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2904.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	429	429	429	429	429	
5°	430	434	471	501	512	41
15°	416	515	665	757	788	117
25°	388	571	771	886	928	179
35°	348	562	763	876	915	218
45°	299	506	684	767	793	231
55°	242	447	592	636	648	216
65°	179	387	496	507	515	177
75°	110	302	379	377	380	116
85°	45	163	193	174	174	47
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°	429.3	429.3	429.3	429.3	429.3	429.3	429.3	429.3	429.3	429.3	429.3
2.5°	431.7	431.7	430.5	430.5	430.5	429.3	429.3	430.5	431.7	432.9	434.2
5°	430.5	430.5	430.5	430.5	431.7	436.6	442.7	451.2	458.5	470.7	476.8
7.5°	428.1	428.1	429.3	432.9	442.7	456.1	472.0	490.3	504.9	520.7	535.4
10°	425.6	425.6	428.1	440.3	459.8	482.9	506.1	529.3	550.0	574.4	592.7
12.5°	420.7	420.7	428.1	450.0	479.3	508.5	537.8	568.3	595.1	620.7	646.4
15°	415.9	415.9	430.5	461.0	497.6	532.9	567.1	602.5	634.2	664.7	691.5
17.5°	411.0	412.2	434.2	473.2	513.4	554.9	595.1	632.9	668.3	702.5	732.9
20°	403.7	406.1	436.6	481.7	526.8	573.2	615.9	657.3	696.4	732.9	764.7
22.5°	396.4	401.2	437.8	487.8	537.8	587.8	632.9	675.6	717.1	754.9	787.8
25°	387.8	393.9	439.0	491.5	545.1	596.4	643.9	689.0	731.7	770.8	803.7
27.5°	379.3	387.8	436.6	491.5	547.6	601.2	648.8	695.1	740.3	778.1	813.4
30°	369.5	380.5	432.9	490.3	547.6	600.0	648.8	696.4	740.3	779.3	813.4
32.5°	358.5	373.2	426.8	485.4	542.7	596.4	645.1	691.5	735.4	774.4	807.3
35°	347.6	363.4	419.5	478.1	535.4	587.8	635.4	681.7	724.4	763.4	796.4
37.5°	336.6	354.9	411.0	469.5	524.4	575.6	623.2	669.5	711.0	748.8	779.3
40°	324.4	343.9	400.0	457.3	512.2	561.0	608.6	652.5	692.7	729.3	758.6
42.5°	312.2	332.9	387.8	445.1	497.6	546.4	592.7	635.4	674.4	707.3	734.2
45°	298.8	320.7	375.6	430.5	481.7	530.5	575.6	615.9	653.7	684.2	708.6
47.5°	285.4	308.5	362.2	417.1	467.1	514.6	558.6	597.6	631.7	661.0	684.2
50°	270.7	295.1	348.8	402.4	452.5	498.8	541.5	578.1	611.0	636.6	658.6
52.5°	257.3	282.9	335.4	389.0	437.8	484.2	525.6	559.8	590.3	614.6	632.9
55°	241.5	269.5	323.2	375.6	424.4	469.5	508.5	541.5	569.5	591.5	607.3
57.5°	226.8	256.1	309.8	362.2	409.8	454.9	491.5	523.2	547.6	567.1	581.7
60°	211.0	242.7	296.3	348.8	396.4	440.3	475.6	504.9	528.1	543.9	556.1
62.5°	195.1	228.1	284.2	335.4	381.7	423.2	457.3	484.2	504.9	520.7	528.1
65°	179.3	213.4	269.5	322.0	367.1	406.1	439.0	464.6	482.9	496.4	501.2
67.5°	162.2	198.8	254.9	304.9	350.0	387.8	418.3	442.7	458.5	469.5	472.0
70°	145.1	181.7	237.8	287.8	330.5	365.9	396.4	417.1	432.9	440.3	442.7
72.5°	126.8	164.6	220.7	268.3	308.5	343.9	370.7	392.7	406.1	411.0	411.0
75°	109.8	146.3	201.2	246.3	285.4	318.3	343.9	363.4	375.6	379.3	378.1
77.5°	92.7	129.3	180.5	223.2	258.5	289.0	313.4	331.7	342.7	346.4	345.1
80°	76.8	111.0	156.1	196.3	228.1	256.1	278.1	297.6	307.3	306.1	298.8
82.5°	61.0	90.2	130.5	165.9	193.9	219.5	241.5	253.7	257.3	253.7	246.3
85°	45.1	68.3	101.2	129.3	152.4	173.2	186.6	195.1	196.3	192.7	186.6
87.5°	26.8	40.2	59.8	76.8	93.9	103.7	111.0	117.1	118.3	114.6	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



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	429.3	429.3	429.3	429.3	429.3	429.3	429.3	429.3
2.5°	435.4	436.6	437.8	440.3	439.0	440.3	440.3	441.5
5°	485.4	492.7	497.6	504.9	504.9	508.5	509.8	512.2
7.5°	546.4	556.1	567.1	578.1	579.3	585.4	587.8	587.8
10°	608.6	622.0	635.4	647.6	651.2	658.6	662.2	662.2
12.5°	664.7	679.3	697.6	711.0	715.9	724.4	729.3	730.5
15°	713.4	731.7	750.0	764.7	773.2	781.7	786.6	787.8
17.5°	754.9	776.8	796.4	811.0	820.8	830.5	836.6	837.8
20°	787.8	812.2	831.7	847.6	858.6	870.8	875.6	876.9
22.5°	813.4	836.6	858.6	875.6	887.8	900.0	906.1	907.3
25°	830.5	854.9	876.9	895.1	908.6	919.5	925.6	928.1
27.5°	840.3	865.9	887.8	904.9	918.3	930.5	936.6	937.8
30°	841.5	867.1	889.0	906.1	919.5	931.7	937.8	940.3
32.5°	835.4	861.0	881.7	898.8	912.2	923.2	929.3	931.7
35°	823.2	847.6	868.3	884.2	896.4	906.1	913.4	914.7
37.5°	806.1	829.3	847.6	862.2	874.4	884.2	890.3	890.3
40°	782.9	804.9	820.8	834.2	846.4	853.7	861.0	861.0
42.5°	757.3	778.1	792.7	804.9	813.4	822.0	826.9	826.9
45°	730.5	747.6	762.2	772.0	780.5	786.6	792.7	792.7
47.5°	703.7	718.3	729.3	739.0	746.4	752.5	757.3	757.3
50°	675.6	689.0	697.6	706.1	712.2	717.1	720.7	720.7
52.5°	647.6	658.6	664.7	672.0	676.8	681.7	684.2	684.2
55°	620.7	628.1	632.9	639.0	642.7	645.1	647.6	647.6
57.5°	591.5	596.4	601.2	604.9	607.3	609.8	612.2	611.0
60°	562.2	565.9	569.5	572.0	574.4	576.8	578.1	578.1
62.5°	532.9	534.2	535.4	540.3	542.7	543.9	545.1	545.1
65°	503.7	503.7	504.9	508.5	511.0	513.4	514.6	514.6
67.5°	472.0	473.2	474.4	478.1	479.3	481.7	484.2	484.2
70°	440.3	441.5	441.5	445.1	446.4	448.8	451.2	451.2
72.5°	409.8	409.8	409.8	412.2	414.6	417.1	419.5	419.5
75°	375.6	375.6	375.6	378.1	378.1	379.3	381.7	380.5
77.5°	339.0	335.4	331.7	330.5	330.5	331.7	332.9	332.9
80°	291.5	286.6	284.2	281.7	280.5	281.7	282.9	281.7
82.5°	241.5	235.4	231.7	230.5	230.5	230.5	231.7	229.3
85°	182.9	176.8	174.4	174.4	173.2	173.2	173.2	174.4
87.5°	109.8	106.1	102.4	103.7	102.4	101.2	102.4	104.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)