

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: P188494

Luminaire Tested: **24SR-LD2-45-C-UNV-L840-CD1-MR-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188494
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-LD2-45-C-UNV-L840-CD1-MR-U
Description: METALUX 2X4 SKYRIDGE LED FIXTURE WITH MEDIUM RED SKYTRIM.

Light Source: EATON LED 4000K
Ballast/Driver: OSRAM ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2781.0 lumens
Efficiency: N/A
Efficacy: 75.8 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

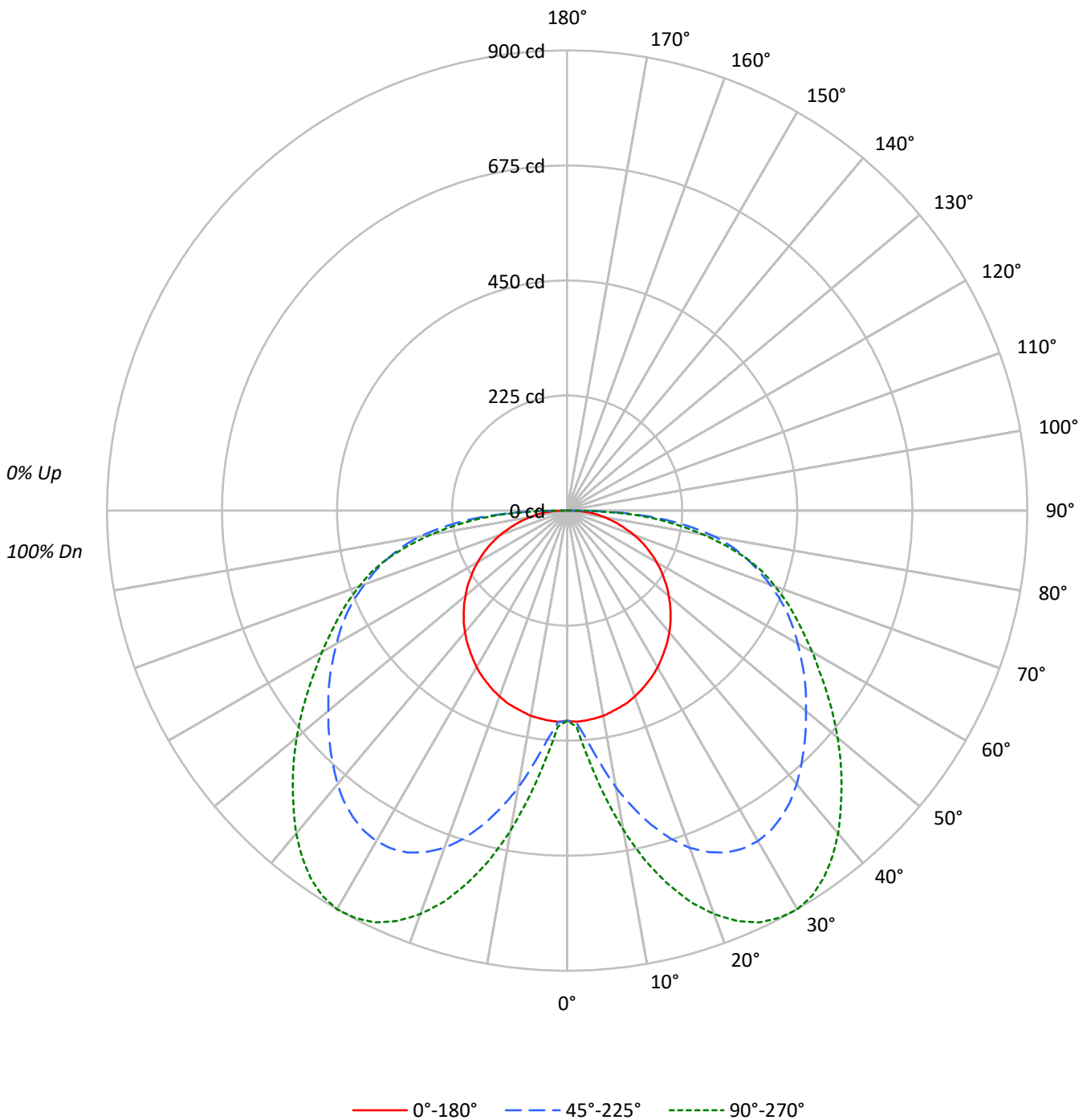
Input Watts (W): 36.7
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	553	553	553
5°	557	609	662
10°	557	752	866
15°	555	887	1051
20°	554	1005	1202
25°	551	1096	1319
30°	550	1159	1399
35°	547	1201	1439
40°	546	1227	1448
45°	544	1247	1444
50°	543	1276	1445
55°	542	1329	1455
60°	544	1402	1490
65°	547	1513	1569
70°	547	1659	1700
75°	546	1888	1894
80°	570	2271	2091
85°	667	2848	2578



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	45.6	1.6
10°-20°	172.8	6.2
20°-30°	317.9	11.4
30°-40°	423.7	15.2
40°-50°	464.2	16.7
50°-60°	456.5	16.4
60°-70°	414.2	14.9
70°-80°	329.8	11.9
80°-90°	156.3	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°	536.3	19.3
0°-40°	960.0	34.5
0°-60°	1880.7	67.6
0°-90°	2781.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2781.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	411	411	411	411	411	
5°	412	416	451	480	490	39
15°	398	493	636	725	754	113
25°	371	547	738	848	889	171
35°	333	538	731	839	876	208
45°	286	485	655	735	759	221
55°	231	428	566	609	620	207
65°	172	370	475	485	493	169
75°	105	289	363	361	364	111
85°	43	156	184	167	167	45
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°	411.1	411.1	411.1	411.1	411.1	411.1	411.1	411.1	411.1	411.1	411.1
2.5°	413.4	413.4	412.3	412.3	412.3	411.1	411.1	412.3	413.4	414.6	415.8
5°	412.3	412.3	412.3	412.3	413.4	418.1	423.9	432.1	439.1	450.8	456.6
7.5°	409.9	409.9	411.1	414.6	423.9	436.8	452.0	469.5	483.5	498.7	512.7
10°	407.6	407.6	409.9	421.6	440.3	462.5	484.7	506.9	526.7	550.1	567.6
12.5°	402.9	402.9	409.9	431.0	459.0	487.0	515.0	544.2	569.9	594.5	619.0
15°	398.3	398.3	412.3	441.5	476.5	510.4	543.1	576.9	607.3	636.5	662.2
17.5°	393.6	394.7	415.8	453.1	491.7	531.4	569.9	606.1	640.0	672.7	701.9
20°	386.6	388.9	418.1	461.3	504.5	548.9	589.8	629.5	666.9	701.9	732.3
22.5°	379.6	384.2	419.3	467.2	515.0	562.9	606.1	647.0	686.7	722.9	754.5
25°	371.4	377.2	420.4	470.7	522.0	571.1	616.6	659.9	700.7	738.1	769.6
27.5°	363.2	371.4	418.1	470.7	524.4	575.8	621.3	665.7	708.9	745.1	779.0
30°	353.9	364.4	414.6	469.5	524.4	574.6	621.3	666.9	708.9	746.3	779.0
32.5°	343.4	357.4	408.8	464.8	519.7	571.1	617.8	662.2	704.2	741.6	773.1
35°	332.8	348.0	401.8	457.8	512.7	562.9	608.5	652.8	693.7	731.1	762.6
37.5°	322.3	339.9	393.6	449.6	502.2	551.2	596.8	641.2	680.9	717.1	746.3
40°	310.7	329.3	383.1	438.0	490.5	537.2	582.8	624.8	663.4	698.4	726.4
42.5°	299.0	318.8	371.4	426.3	476.5	523.2	567.6	608.5	645.8	677.4	703.1
45°	286.1	307.2	359.7	412.3	461.3	508.0	551.2	589.8	626.0	655.2	678.5
47.5°	273.3	295.5	346.9	399.4	447.3	492.8	534.9	572.3	605.0	633.0	655.2
50°	259.3	282.6	334.0	385.4	433.3	477.7	518.5	553.6	585.1	609.6	630.7
52.5°	246.4	271.0	321.2	372.6	419.3	463.7	503.4	536.1	565.3	588.6	606.1
55°	231.2	258.1	309.5	359.7	406.4	449.6	487.0	518.5	545.4	566.4	581.6
57.5°	217.2	245.3	296.6	346.9	392.4	435.6	470.7	501.0	524.4	543.1	557.1
60°	202.0	232.4	283.8	334.0	379.6	421.6	455.5	483.5	505.7	520.9	532.6
62.5°	186.9	218.4	272.1	321.2	365.5	405.3	438.0	463.7	483.5	498.7	505.7
65°	171.7	204.4	258.1	308.3	351.5	388.9	420.4	445.0	462.5	475.3	480.0
67.5°	155.3	190.4	244.1	292.0	335.2	371.4	400.6	423.9	439.1	449.6	452.0
70°	139.0	174.0	227.7	275.6	316.5	350.4	379.6	399.4	414.6	421.6	423.9
72.5°	121.5	157.7	211.4	256.9	295.5	329.3	355.0	376.1	388.9	393.6	393.6
75°	105.1	140.1	192.7	235.9	273.3	304.8	329.3	348.0	359.7	363.2	362.0
77.5°	88.8	123.8	172.8	213.7	247.6	276.8	300.1	317.7	328.2	331.7	330.5
80°	73.6	106.3	149.5	188.0	218.4	245.3	266.3	285.0	294.3	293.1	286.1
82.5°	58.4	86.4	125.0	158.8	185.7	210.2	231.2	242.9	246.4	242.9	235.9
85°	43.2	65.4	96.9	123.8	146.0	165.8	178.7	186.9	188.0	184.5	178.7
87.5°	25.7	38.5	57.2	73.6	89.9	99.3	106.3	112.1	113.3	109.8	107.4
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°	411.1	411.1	411.1	411.1	411.1	411.1	411.1	411.1
2.5°	416.9	418.1	419.3	421.6	420.4	421.6	421.6	422.8
5°	464.8	471.8	476.5	483.5	483.5	487.0	488.2	490.5
7.5°	523.2	532.6	543.1	553.6	554.7	560.6	562.9	562.9
10°	582.8	595.6	608.5	620.1	623.7	630.7	634.2	634.2
12.5°	636.5	650.5	668.0	680.9	685.6	693.7	698.4	699.6
15°	683.2	700.7	718.3	732.3	740.4	748.6	753.3	754.5
17.5°	722.9	743.9	762.6	776.6	786.0	795.3	801.2	802.3
20°	754.5	777.8	796.5	811.7	822.2	833.9	838.5	839.7
22.5°	779.0	801.2	822.2	838.5	850.2	861.9	867.7	868.9
25°	795.3	818.7	839.7	857.2	870.1	880.6	886.4	888.8
27.5°	804.7	829.2	850.2	866.6	879.4	891.1	896.9	898.1
30°	805.8	830.4	851.4	867.7	880.6	892.3	898.1	900.4
32.5°	800.0	824.5	844.4	860.7	873.6	884.1	889.9	892.3
35°	788.3	811.7	831.5	846.7	858.4	867.7	874.7	875.9
37.5°	772.0	794.2	811.7	825.7	837.4	846.7	852.6	852.6
40°	749.8	770.8	786.0	798.8	810.5	817.5	824.5	824.5
42.5°	725.3	745.1	759.1	770.8	779.0	787.2	791.8	791.8
45°	699.6	715.9	729.9	739.3	747.4	753.3	759.1	759.1
47.5°	673.9	687.9	698.4	707.7	714.7	720.6	725.3	725.3
50°	647.0	659.9	668.0	676.2	682.0	686.7	690.2	690.2
52.5°	620.1	630.7	636.5	643.5	648.2	652.8	655.2	655.2
55°	594.5	601.5	606.1	612.0	615.5	617.8	620.1	620.1
57.5°	566.4	571.1	575.8	579.3	581.6	583.9	586.3	585.1
60°	538.4	541.9	545.4	547.7	550.1	552.4	553.6	553.6
62.5°	510.4	511.5	512.7	517.4	519.7	520.9	522.0	522.0
65°	482.3	482.3	483.5	487.0	489.3	491.7	492.8	492.8
67.5°	452.0	453.1	454.3	457.8	459.0	461.3	463.7	463.7
70°	421.6	422.8	422.8	426.3	427.4	429.8	432.1	432.1
72.5°	392.4	392.4	392.4	394.7	397.1	399.4	401.8	401.8
75°	359.7	359.7	359.7	362.0	362.0	363.2	365.5	364.4
77.5°	324.7	321.2	317.7	316.5	316.5	317.7	318.8	318.8
80°	279.1	274.5	272.1	269.8	268.6	269.8	271.0	269.8
82.5°	231.2	225.4	221.9	220.7	220.7	220.7	221.9	219.6
85°	175.2	169.3	167.0	167.0	165.8	165.8	165.8	167.0
87.5°	105.1	101.6	98.1	99.3	98.1	96.9	98.1	100.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)