

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: P188492

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188492
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-L830-CD1-MR-U
Description: METALUX 2X4 SKYRIDGE LED FIXTURE WITH MEDIUM RED SKYTRIM.

Light Source: EATON LED 3000K
Ballast/Driver: OSRAM ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2645.0 lumens
Efficiency: N/A
Efficacy: 72.1 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

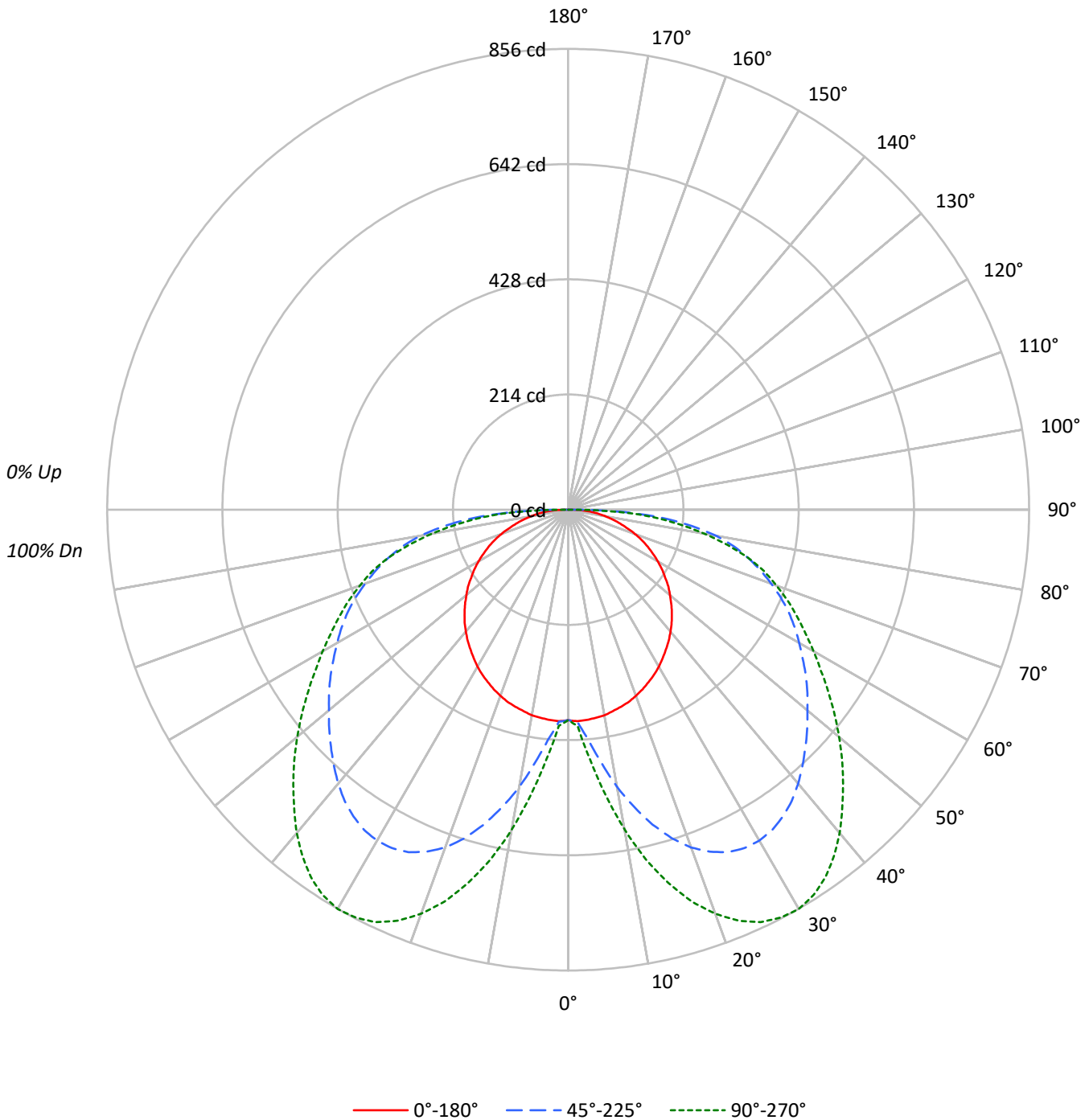
Input Watts (W): 36.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	36	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°	526	526	526
5°	530	579	630
10°	530	715	824
15°	528	843	1000
20°	526	956	1143
25°	524	1042	1255
30°	523	1103	1331
35°	520	1142	1368
40°	519	1167	1377
45°	518	1186	1374
50°	516	1214	1374
55°	516	1264	1384
60°	517	1333	1417
65°	520	1439	1492
70°	520	1578	1617
75°	520	1796	1802
80°	542	2160	1988
85°	634	2709	2452



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	43.4	1.6
10°-20°	164.4	6.2
20°-30°	302.3	11.4
30°-40°	403.0	15.2
40°-50°	441.5	16.7
50°-60°	434.1	16.4
60°-70°	394.0	14.9
70°-80°	313.6	11.9
80°-90°	148.7	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°	510.0	19.3
0°-40°	913.1	34.5
0°-60°	1788.7	67.6
0°-90°	2645.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2645.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	391	391	391	391	391	
5°	392	395	429	457	466	37
15°	379	469	605	690	718	107
25°	353	520	702	807	845	163
35°	317	512	695	798	833	198
45°	272	461	623	699	722	210
55°	220	407	539	579	590	197
65°	163	352	452	462	469	161
75°	100	275	346	343	347	106
85°	41	148	176	159	159	42
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°	391.0	391.0	391.0	391.0	391.0	391.0	391.0	391.0	391.0	391.0	391.0
2.5°	393.2	393.2	392.1	392.1	392.1	391.0	391.0	392.1	393.2	394.3	395.4
5°	392.1	392.1	392.1	392.1	393.2	397.7	403.2	411.0	417.7	428.8	434.3
7.5°	389.9	389.9	391.0	394.3	403.2	415.4	429.9	446.5	459.9	474.3	487.6
10°	387.7	387.7	389.9	401.0	418.8	439.9	461.0	482.1	501.0	523.2	539.8
12.5°	383.2	383.2	389.9	409.9	436.5	463.2	489.9	517.6	542.1	565.4	588.7
15°	378.8	378.8	392.1	419.9	453.2	485.4	516.5	548.7	577.6	605.4	629.8
17.5°	374.3	375.4	395.4	431.0	467.6	505.4	542.1	576.5	608.7	639.8	667.6
20°	367.7	369.9	397.7	438.8	479.9	522.1	560.9	598.7	634.3	667.6	696.5
22.5°	361.0	365.4	398.8	444.3	489.9	535.4	576.5	615.4	653.1	687.6	717.6
25°	353.2	358.8	399.9	447.6	496.5	543.2	586.5	627.6	666.5	702.0	732.0
27.5°	345.5	353.2	397.7	447.6	498.7	547.6	590.9	633.1	674.2	708.7	740.9
30°	336.6	346.6	394.3	446.5	498.7	546.5	590.9	634.3	674.2	709.8	740.9
32.5°	326.6	339.9	388.8	442.1	494.3	543.2	587.6	629.8	669.8	705.3	735.3
35°	316.6	331.0	382.1	435.4	487.6	535.4	578.7	620.9	659.8	695.3	725.3
37.5°	306.6	323.2	374.3	427.6	477.6	524.3	567.6	609.8	647.6	682.0	709.8
40°	295.5	313.2	364.3	416.5	466.5	511.0	554.3	594.3	630.9	664.2	690.9
42.5°	284.4	303.2	353.2	405.4	453.2	497.6	539.8	578.7	614.3	644.2	668.7
45°	272.1	292.1	342.1	392.1	438.8	483.2	524.3	560.9	595.4	623.1	645.4
47.5°	259.9	281.0	329.9	379.9	425.4	468.7	508.7	544.3	575.4	602.0	623.1
50°	246.6	268.8	317.7	366.6	412.1	454.3	493.2	526.5	556.5	579.8	599.8
52.5°	234.4	257.7	305.5	354.3	398.8	441.0	478.7	509.8	537.6	559.8	576.5
55°	219.9	245.5	294.4	342.1	386.5	427.6	463.2	493.2	518.7	538.7	553.2
57.5°	206.6	233.3	282.1	329.9	373.2	414.3	447.6	476.5	498.7	516.5	529.8
60°	192.2	221.0	269.9	317.7	361.0	401.0	433.2	459.9	481.0	495.4	506.5
62.5°	177.7	207.7	258.8	305.5	347.7	385.4	416.5	441.0	459.9	474.3	481.0
65°	163.3	194.4	245.5	293.2	334.3	369.9	399.9	423.2	439.9	452.1	456.5
67.5°	147.7	181.1	232.2	277.7	318.8	353.2	381.0	403.2	417.7	427.6	429.9
70°	132.2	165.5	216.6	262.1	301.0	333.2	361.0	379.9	394.3	401.0	403.2
72.5°	115.5	150.0	201.1	244.4	281.0	313.2	337.7	357.7	369.9	374.3	374.3
75°	100.0	133.3	183.3	224.4	259.9	289.9	313.2	331.0	342.1	345.5	344.3
77.5°	84.4	117.7	164.4	203.3	235.5	263.3	285.5	302.1	312.1	315.5	314.3
80°	70.0	101.1	142.2	178.8	207.7	233.3	253.3	271.0	279.9	278.8	272.1
82.5°	55.5	82.2	118.9	151.1	176.6	199.9	219.9	231.0	234.4	231.0	224.4
85°	41.1	62.2	92.2	117.7	138.8	157.7	169.9	177.7	178.8	175.5	169.9
87.5°	24.4	36.7	54.4	70.0	85.5	94.4	101.1	106.6	107.7	104.4	102.2
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°	391.0	391.0	391.0	391.0	391.0	391.0	391.0	391.0
2.5°	396.5	397.7	398.8	401.0	399.9	401.0	401.0	402.1
5°	442.1	448.8	453.2	459.9	459.9	463.2	464.3	466.5
7.5°	497.6	506.5	516.5	526.5	527.6	533.2	535.4	535.4
10°	554.3	566.5	578.7	589.8	593.2	599.8	603.2	603.2
12.5°	605.4	618.7	635.4	647.6	652.0	659.8	664.2	665.4
15°	649.8	666.5	683.1	696.5	704.2	712.0	716.5	717.6
17.5°	687.6	707.6	725.3	738.7	747.6	756.4	762.0	763.1
20°	717.6	739.8	757.5	772.0	782.0	793.1	797.5	798.6
22.5°	740.9	762.0	782.0	797.5	808.6	819.8	825.3	826.4
25°	756.4	778.7	798.6	815.3	827.5	837.5	843.1	845.3
27.5°	765.3	788.7	808.6	824.2	836.4	847.5	853.1	854.2
30°	766.4	789.8	809.8	825.3	837.5	848.6	854.2	856.4
32.5°	760.9	784.2	803.1	818.6	830.9	840.9	846.4	848.6
35°	749.8	772.0	790.9	805.3	816.4	825.3	832.0	833.1
37.5°	734.2	755.3	772.0	785.3	796.4	805.3	810.9	810.9
40°	713.1	733.1	747.6	759.8	770.9	777.5	784.2	784.2
42.5°	689.8	708.7	722.0	733.1	740.9	748.7	753.1	753.1
45°	665.4	680.9	694.2	703.1	710.9	716.5	722.0	722.0
47.5°	640.9	654.2	664.2	673.1	679.8	685.3	689.8	689.8
50°	615.4	627.6	635.4	643.1	648.7	653.1	656.5	656.5
52.5°	589.8	599.8	605.4	612.0	616.5	620.9	623.1	623.1
55°	565.4	572.0	576.5	582.0	585.4	587.6	589.8	589.8
57.5°	538.7	543.2	547.6	550.9	553.2	555.4	557.6	556.5
60°	512.1	515.4	518.7	521.0	523.2	525.4	526.5	526.5
62.5°	485.4	486.5	487.6	492.1	494.3	495.4	496.5	496.5
65°	458.8	458.8	459.9	463.2	465.4	467.6	468.7	468.7
67.5°	429.9	431.0	432.1	435.4	436.5	438.8	441.0	441.0
70°	401.0	402.1	402.1	405.4	406.5	408.8	411.0	411.0
72.5°	373.2	373.2	373.2	375.4	377.7	379.9	382.1	382.1
75°	342.1	342.1	342.1	344.3	344.3	345.5	347.7	346.6
77.5°	308.8	305.5	302.1	301.0	301.0	302.1	303.2	303.2
80°	265.5	261.0	258.8	256.6	255.5	256.6	257.7	256.6
82.5°	219.9	214.4	211.0	209.9	209.9	209.9	211.0	208.8
85°	166.6	161.1	158.8	158.8	157.7	157.7	157.7	158.8
87.5°	100.0	96.6	93.3	94.4	93.3	92.2	93.3	95.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)