

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: P188537

Luminaire Tested: **24SR-LD2-48-C-UNV-L830-CD1-PG-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188537
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24780)
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-L830-CD1-PG-U
Description: METALUX 2X4 SKYRIDGE LED FIXTURE WITH PRIMARY GREEN SKYTRIM.

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

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2870.0 lumens
Efficiency: N/A
Efficacy: 75.1 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 2.25 / 2.05
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

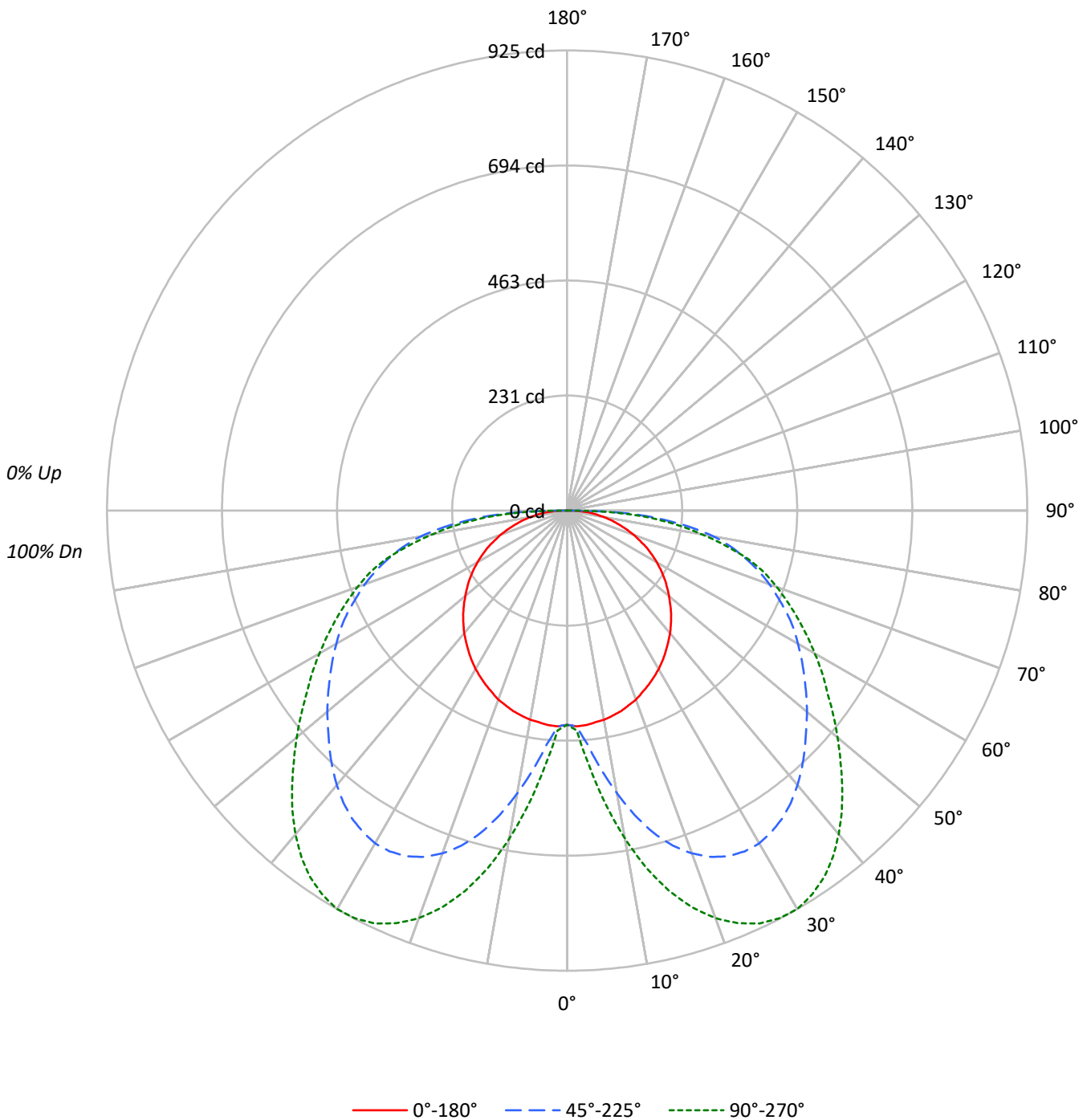
Input Watts (W): 38.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	86	89	86	83	86	83	80	78
2	95	85	77	70	92	83	76	69	80	73	68	76	71	66	73	69	65	62
3	86	73	64	57	83	72	63	56	69	61	55	66	59	54	63	58	53	51
4	78	64	54	47	75	63	54	46	60	52	46	58	51	45	55	49	44	42
5	71	57	47	39	69	56	46	39	53	45	39	51	44	38	49	43	38	35
6	65	51	41	34	63	50	40	34	48	39	33	46	39	33	44	38	33	30
7	60	46	36	29	58	45	36	29	43	35	29	42	34	29	40	33	28	26
8	56	41	32	26	54	41	32	26	39	31	25	38	31	25	37	30	25	23
9	52	38	29	23	50	37	29	23	36	28	23	35	28	23	34	27	22	20
10	49	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°	579	579	579
5°	585	637	698
10°	583	789	915
15°	582	934	1102
20°	579	1050	1248
25°	574	1138	1359
30°	572	1200	1437
35°	567	1240	1479
40°	565	1265	1492
45°	563	1285	1488
50°	560	1317	1486
55°	560	1365	1498
60°	560	1442	1547
65°	561	1551	1627
70°	558	1703	1764
75°	559	1931	1961
80°	577	2319	2135
85°	676	2885	2594



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	47.9	1.7
10°-20°	181.1	6.3
20°-30°	329.6	11.5
30°-40°	437.3	15.2
40°-50°	479.0	16.7
50°-60°	470.8	16.4
60°-70°	427.1	14.9
70°-80°	338.5	11.8
80°-90°	158.6	5.5
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°	558.7	19.5
0°-40°	996.0	34.7
0°-60°	1945.8	67.8
0°-90°	2870.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2870.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	431	431	431	431	431	
5°	433	436	472	505	517	41
15°	418	519	671	761	791	118
25°	387	572	766	875	916	178
35°	345	559	755	862	900	216
45°	296	503	675	757	782	228
55°	239	441	582	628	639	213
65°	176	381	487	502	511	174
75°	108	295	371	372	377	114
85°	44	158	187	168	168	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°	430.6	430.6	430.6	430.6	430.6	430.6	430.6	430.6	430.6	430.6	430.6
2.5°	434.1	432.9	432.9	432.9	431.7	431.7	431.7	432.9	432.9	434.1	436.5
5°	432.9	431.7	431.7	431.7	434.1	437.7	444.8	453.0	462.5	472.0	482.6
7.5°	429.4	429.4	429.4	432.9	443.6	457.8	475.5	493.3	508.6	525.2	540.6
10°	427.0	427.0	429.4	441.2	462.5	486.2	509.8	533.5	554.8	577.2	598.5
12.5°	422.3	422.3	429.4	451.9	481.4	512.2	541.8	571.3	599.7	626.9	650.6
15°	417.5	417.5	432.9	464.9	500.4	537.0	572.5	606.8	639.9	670.7	697.9
17.5°	410.5	411.6	435.3	474.3	516.9	558.3	597.3	636.4	671.9	706.2	734.6
20°	404.5	406.9	437.7	482.6	529.9	576.1	619.8	660.0	697.9	733.4	764.1
22.5°	395.1	399.8	438.8	488.5	539.4	589.1	634.0	676.6	716.8	753.5	784.2
25°	386.8	392.7	437.7	490.9	546.5	597.3	643.5	687.2	728.6	766.5	798.4
27.5°	377.3	386.8	436.5	492.1	548.8	600.9	648.2	693.2	734.6	772.4	805.5
30°	367.9	379.7	432.9	490.9	547.7	599.7	647.0	693.2	734.6	772.4	804.3
32.5°	357.2	370.2	425.8	485.0	542.9	593.8	641.1	686.1	728.6	765.3	797.2
35°	345.4	360.8	417.5	476.7	533.5	584.3	630.5	675.4	716.8	754.7	785.4
37.5°	333.6	351.3	408.1	467.2	522.8	572.5	617.5	662.4	702.6	739.3	768.9
40°	321.7	340.7	397.4	455.4	509.8	558.3	603.3	647.0	684.9	720.4	747.6
42.5°	308.7	330.0	385.6	442.4	494.4	541.8	586.7	629.3	666.0	699.1	725.1
45°	295.7	317.0	372.6	428.2	480.2	525.2	569.0	610.4	644.7	675.4	700.3
47.5°	281.5	305.2	360.8	414.0	463.7	509.8	552.4	590.2	624.6	651.8	675.4
50°	267.3	292.2	346.6	399.8	448.3	493.3	534.7	571.3	603.3	629.3	649.4
52.5°	253.1	279.2	333.6	385.6	434.1	477.9	518.1	552.4	582.0	605.6	625.7
55°	238.9	266.1	320.6	371.4	419.9	462.5	501.5	533.5	561.9	582.0	598.5
57.5°	223.6	253.1	307.5	358.4	405.7	448.3	485.0	515.7	541.8	559.5	573.7
60°	208.2	238.9	293.3	345.4	391.5	432.9	468.4	498.0	520.5	535.8	548.8
62.5°	191.6	224.7	280.3	331.2	377.3	417.5	450.7	476.7	499.2	513.4	520.5
65°	176.2	210.5	266.1	317.0	362.0	399.8	431.7	456.6	475.5	487.3	493.3
67.5°	158.5	195.2	250.8	301.6	344.2	380.9	410.5	434.1	450.7	459.0	463.7
70°	141.9	179.8	234.2	283.9	324.1	359.6	388.0	410.5	424.6	432.9	434.1
72.5°	124.2	163.2	217.6	265.0	304.0	337.1	364.3	384.4	396.3	403.4	404.5
75°	107.6	145.5	197.5	242.5	279.2	309.9	335.9	354.9	366.7	371.4	371.4
77.5°	91.1	126.6	176.2	218.8	253.1	281.5	305.2	324.1	333.6	338.3	338.3
80°	74.5	108.8	153.8	192.8	223.6	249.6	273.2	289.8	299.3	299.3	292.2
82.5°	59.1	88.7	127.7	163.2	189.3	212.9	235.4	246.0	248.4	246.0	240.1
85°	43.8	67.4	99.4	126.6	150.2	166.8	181.0	188.1	189.3	186.9	182.2
87.5°	24.8	39.0	56.8	74.5	89.9	98.2	110.0	112.4	112.4	115.9	110.0
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°	430.6	430.6	430.6	430.6	430.6	430.6	430.6	430.6
2.5°	437.7	438.8	438.8	442.4	442.4	443.6	442.4	442.4
5°	489.7	494.4	501.5	508.6	511.0	515.7	514.5	516.9
7.5°	552.4	561.9	572.5	582.0	586.7	591.4	592.6	596.2
10°	615.1	626.9	639.9	652.9	660.0	663.6	668.3	669.5
12.5°	669.5	687.2	700.3	714.4	723.9	728.6	733.4	735.7
15°	719.2	736.9	753.5	768.9	778.3	785.4	790.2	791.3
17.5°	757.0	777.1	794.9	811.4	820.9	829.2	833.9	836.3
20°	786.6	809.1	826.8	843.4	854.0	863.5	870.6	871.8
22.5°	807.9	830.4	850.5	867.0	880.0	889.5	895.4	897.8
25°	823.3	846.9	867.0	883.6	896.6	907.3	913.2	915.5
27.5°	830.4	855.2	876.5	891.9	904.9	915.5	922.6	923.8
30°	831.6	855.2	876.5	893.1	906.1	916.7	922.6	925.0
32.5°	823.3	848.1	869.4	884.8	897.8	908.4	914.4	915.5
35°	811.4	833.9	854.0	869.4	882.4	891.9	897.8	900.2
37.5°	793.7	815.0	833.9	848.1	859.9	869.4	875.3	877.7
40°	772.4	792.5	810.3	823.3	833.9	842.2	846.9	849.3
42.5°	747.6	766.5	783.1	793.7	804.3	811.4	815.0	817.4
45°	721.5	739.3	752.3	761.8	771.2	777.1	780.7	781.9
47.5°	694.3	709.7	720.4	728.6	735.7	741.7	745.2	745.2
50°	667.1	680.1	688.4	696.7	702.6	706.2	708.5	709.7
52.5°	639.9	650.6	656.5	663.6	668.3	671.9	674.2	674.2
55°	611.5	619.8	624.6	630.5	635.2	637.6	639.9	638.7
57.5°	584.3	590.2	593.8	598.5	602.1	604.4	606.8	608.0
60°	555.9	560.7	561.9	566.6	570.1	572.5	573.7	574.9
62.5°	526.4	529.9	532.3	534.7	538.2	540.6	541.8	542.9
65°	496.8	499.2	499.2	503.9	507.4	508.6	509.8	511.0
67.5°	466.0	467.2	468.4	472.0	475.5	476.7	479.1	479.1
70°	435.3	435.3	436.5	440.0	443.6	444.8	447.1	448.3
72.5°	403.4	404.5	404.5	408.1	411.6	414.0	415.2	416.4
75°	370.2	370.2	371.4	372.6	373.8	375.0	375.0	377.3
77.5°	334.7	330.0	327.7	325.3	326.5	326.5	325.3	326.5
80°	285.1	279.2	275.6	274.4	275.6	274.4	274.4	275.6
82.5°	234.2	227.1	224.7	223.6	223.6	223.6	222.4	224.7
85°	176.2	171.5	169.1	166.8	168.0	168.0	166.8	168.0
87.5°	106.5	104.1	101.7	99.4	100.5	99.4	98.2	101.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)