

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: P188368

Luminaire Tested: **22SR-LD2-29-C-UNV-L830-CD1-SO-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188368
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24795)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22SR-LD2-29-C-UNV-L830-CD1-SO-U
Description: METALUX 2X2 SKYRIDGE LED FIXTURE WITH STORARO ORANGE SKYTRIM.

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

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1988.0 lumens
Efficiency: N/A
Efficacy: 85.0 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.85 / 1.71
Luminous Opening: Rectangular (W 1.92' x L: 1.92' x H: 0')
CIE Type: Direct

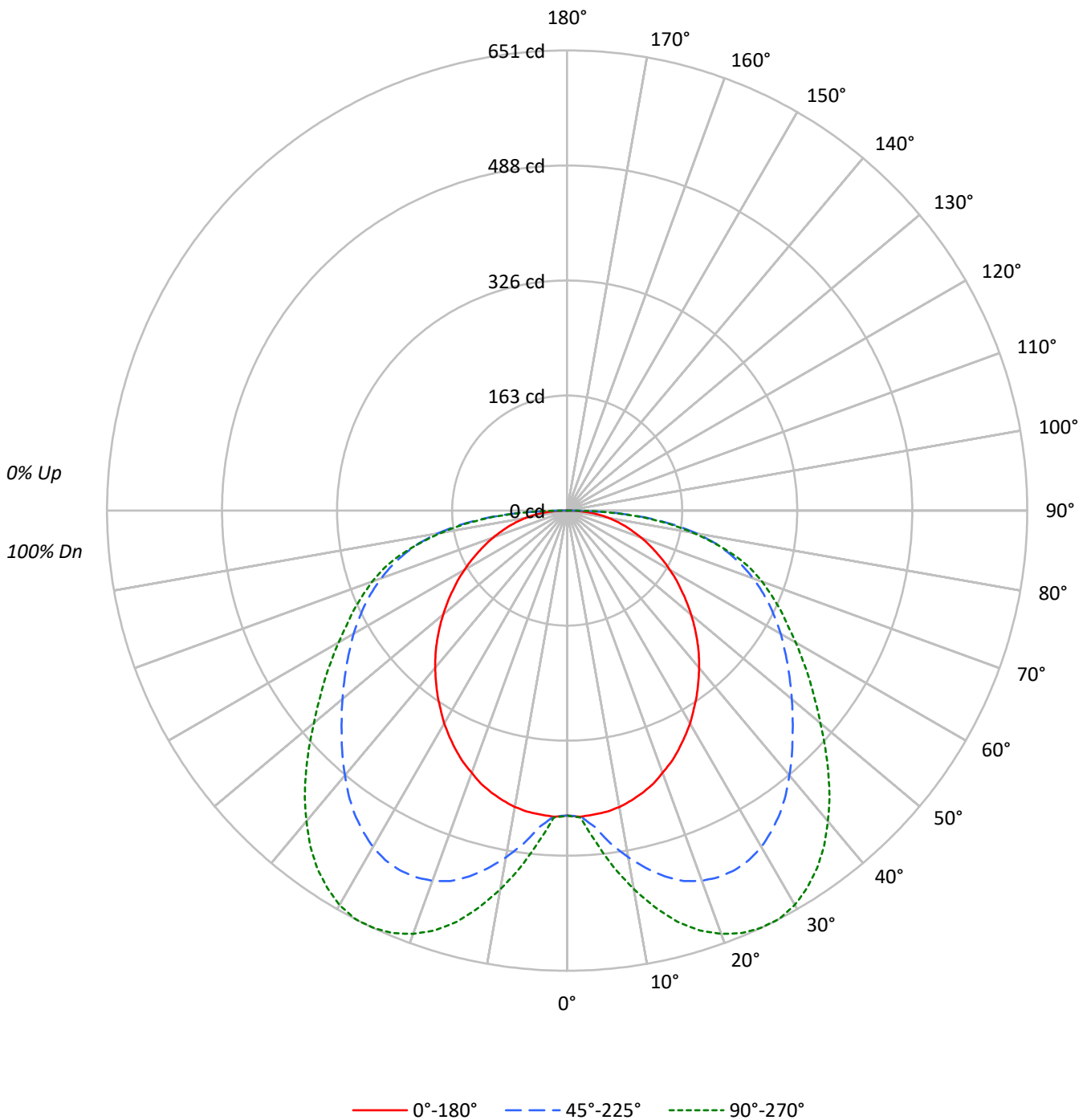
Input Watts (W): 23.4
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	107	101	96	91	104	99	94	90	94	90	87	90	87	84	87	84	82	79
2	96	86	79	72	93	85	77	71	81	75	70	77	72	68	74	70	66	64
3	87	75	66	59	84	73	65	58	70	63	57	67	61	56	65	60	55	53
4	79	66	56	49	77	64	56	49	62	54	48	59	53	47	57	51	46	44
5	72	58	49	42	70	57	48	41	55	47	41	53	46	40	51	45	40	38
6	67	52	43	36	65	51	42	36	49	41	35	48	41	35	46	40	35	32
7	62	47	38	31	60	46	38	31	45	37	31	43	36	31	42	35	31	28
8	57	43	34	28	56	42	34	28	41	33	27	40	32	27	38	32	27	25
9	53	39	31	25	52	39	30	25	37	30	25	36	29	24	35	29	24	22
10	50	36	28	22	49	36	28	22	35	27	22	34	27	22	33	26	22	20

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1265	1265	1265
5°	1269	1321	1387
10°	1267	1481	1618
15°	1253	1626	1827
20°	1230	1738	1987
25°	1207	1814	2104
30°	1177	1859	2179
35°	1143	1875	2206
40°	1111	1871	2195
45°	1078	1869	2164
50°	1044	1892	2132
55°	1010	1946	2140
60°	982	2044	2187
65°	960	2189	2310
70°	952	2395	2513
75°	960	2702	2779
80°	1002	3140	3057
85°	1083	3701	3570



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	44.3	2.2
10°-20°	147.8	7.4
20°-30°	248.5	12.5
30°-40°	313.2	15.8
40°-50°	330.2	16.6
50°-60°	314.7	15.8
60°-70°	278.4	14.0
70°-80°	216.3	10.9
80°-90°	94.6	4.8
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°	440.6	22.2
0°-40°	753.8	37.9
0°-60°	1398.7	70.4
0°-90°	1988.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1988.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	432	432	432	432	432	
5°	432	433	449	466	472	41
15°	413	462	536	585	602	116
25°	373	460	561	627	651	172
35°	320	420	524	592	617	200
45°	260	359	451	505	522	201
55°	198	298	381	413	419	177
65°	138	240	316	328	333	137
75°	85	175	239	244	246	90
85°	32	79	110	106	106	34
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°	431.6	431.6	431.6	431.6	431.6	431.6	431.6	431.6	431.6	431.6	431.6
2.5°	433.6	433.6	432.6	432.6	432.6	432.6	431.6	431.6	432.6	432.6	432.6
5°	431.6	431.6	431.6	431.6	431.6	433.6	435.5	440.4	444.3	449.2	454.1
7.5°	429.7	428.7	428.7	430.7	434.6	441.4	449.2	458.9	467.7	475.5	482.3
10°	425.8	425.8	425.8	431.6	441.4	454.1	465.8	476.5	487.2	497.9	508.6
12.5°	420.0	420.0	421.9	433.6	448.2	463.8	477.4	492.1	506.7	518.4	531.0
15°	413.1	413.1	418.0	434.6	453.1	470.6	488.2	504.7	521.3	535.9	549.5
17.5°	405.3	404.4	414.1	434.6	455.0	475.5	495.0	514.5	533.0	549.5	564.2
20°	394.6	395.6	409.2	432.6	455.0	478.4	498.9	519.3	539.8	557.3	572.9
22.5°	384.9	386.8	403.4	428.7	453.1	477.4	499.9	521.3	542.7	561.2	577.8
25°	373.2	375.1	394.6	421.9	447.2	472.6	496.0	519.3	540.8	561.2	578.8
27.5°	360.5	363.4	385.9	413.1	440.4	465.8	490.1	513.5	536.9	557.3	574.9
30°	347.9	351.8	376.1	404.4	430.7	457.0	482.3	505.7	529.1	549.5	568.1
32.5°	333.2	338.1	364.4	392.7	420.0	445.3	470.6	495.0	517.4	537.9	556.4
35°	319.6	325.4	351.8	380.0	407.3	433.6	458.0	482.3	503.8	524.2	542.7
37.5°	305.0	310.8	338.1	366.4	392.7	419.0	443.3	466.7	488.2	507.7	525.2
40°	290.4	297.2	323.5	351.8	377.1	403.4	426.8	450.2	470.6	489.1	506.7
42.5°	275.7	283.5	309.9	337.1	362.5	387.8	411.2	433.6	453.1	470.6	486.2
45°	260.2	268.9	294.3	321.5	346.9	371.2	394.6	416.1	434.6	451.1	466.7
47.5°	244.6	254.3	279.6	306.9	331.3	355.6	377.1	398.5	416.1	432.6	446.3
50°	229.0	239.7	265.0	291.3	315.7	340.1	361.5	382.0	398.5	415.1	427.8
52.5°	213.4	226.1	251.4	276.7	301.1	324.5	345.9	365.4	382.0	397.5	409.2
55°	197.8	211.4	236.8	262.1	286.5	309.9	330.3	350.8	366.4	381.0	391.7
57.5°	183.2	196.8	222.2	247.5	271.9	295.2	315.7	335.2	350.8	364.4	375.1
60°	167.6	183.2	207.5	232.9	257.2	280.6	301.1	320.6	336.2	348.8	357.6
62.5°	153.0	168.6	193.9	218.3	242.6	266.0	286.5	306.0	320.6	332.3	340.1
65°	138.4	154.9	179.3	203.6	228.0	251.4	271.9	290.4	305.0	315.7	322.5
67.5°	124.7	141.3	165.6	189.0	213.4	235.8	257.2	274.8	287.4	298.2	303.0
70°	111.1	127.6	151.0	174.4	197.8	220.2	240.7	258.2	270.9	279.6	284.5
72.5°	97.4	114.0	136.4	158.8	182.2	203.6	224.1	240.7	252.4	260.2	264.1
75°	84.8	100.4	121.8	143.2	164.7	186.1	205.6	221.2	231.9	238.7	242.6
77.5°	72.1	87.7	107.2	126.7	147.1	167.6	186.1	199.7	210.5	215.3	219.2
80°	59.4	73.1	90.6	108.2	127.6	145.2	162.7	174.4	183.2	186.1	187.1
82.5°	46.8	57.5	72.1	86.7	103.3	118.9	133.5	142.3	150.1	151.0	152.0
85°	32.2	39.0	49.7	60.4	73.1	85.7	97.4	104.3	110.1	110.1	111.1
87.5°	16.6	18.5	23.4	30.2	38.0	44.8	53.6	56.5	60.4	61.4	61.4
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°	431.6	431.6	431.6	431.6	431.6	431.6	431.6	431.6
2.5°	433.6	433.6	433.6	434.6	434.6	434.6	434.6	434.6
5°	458.0	460.9	464.8	466.7	468.7	470.6	471.6	471.6
7.5°	487.2	492.1	497.9	501.8	504.7	507.7	509.6	509.6
10°	515.4	523.2	528.1	534.9	538.8	540.8	543.7	543.7
12.5°	539.8	548.6	556.4	564.2	568.1	571.0	574.9	574.9
15°	560.3	572.0	580.7	589.5	594.4	598.3	601.2	602.2
17.5°	576.8	588.5	598.3	608.0	613.9	618.7	621.7	622.6
20°	586.6	600.2	610.9	620.7	627.5	633.3	636.3	637.2
22.5°	593.4	607.0	618.7	629.4	637.2	643.1	646.0	647.0
25°	594.4	609.0	621.7	632.4	641.1	647.0	649.9	650.9
27.5°	591.4	607.0	619.7	631.4	640.2	646.0	649.9	650.9
30°	584.6	600.2	613.9	625.6	633.3	640.2	643.1	644.1
32.5°	572.9	588.5	602.2	612.9	621.7	628.5	631.4	632.4
35°	559.3	573.9	586.6	598.3	606.1	612.9	616.8	616.8
37.5°	540.8	555.4	568.1	578.8	586.6	593.4	596.3	597.3
40°	521.3	534.9	546.6	557.3	565.1	571.0	573.9	573.9
42.5°	500.8	514.5	525.2	534.0	540.8	546.6	548.6	549.5
45°	479.4	491.1	500.8	508.6	514.5	519.3	521.3	522.3
47.5°	458.9	469.6	478.4	485.2	490.1	493.0	494.0	495.0
50°	438.5	448.2	455.0	460.9	463.8	466.7	467.7	467.7
52.5°	419.0	427.8	432.6	436.5	439.4	442.4	442.4	442.4
55°	400.5	407.3	411.2	414.1	416.1	418.0	419.0	419.0
57.5°	382.0	386.8	389.8	392.7	393.6	394.6	394.6	395.6
60°	363.4	367.3	369.3	371.2	371.2	372.2	373.2	373.2
62.5°	344.9	346.9	348.8	349.8	349.8	351.8	351.8	351.8
65°	325.4	327.4	328.4	328.4	329.3	331.3	331.3	333.2
67.5°	306.0	306.9	306.9	307.9	308.9	310.8	310.8	312.8
70°	286.5	287.4	286.5	288.4	288.4	290.4	291.3	293.3
72.5°	266.0	266.0	266.0	267.0	268.0	269.9	270.9	271.9
75°	242.6	243.6	243.6	243.6	242.6	243.6	243.6	245.5
77.5°	216.3	214.4	212.4	212.4	210.5	211.4	211.4	213.4
80°	184.2	182.2	180.3	180.3	178.3	180.3	181.2	181.2
82.5°	149.1	148.1	146.2	146.2	145.2	145.2	145.2	146.2
85°	109.1	108.2	106.2	106.2	105.2	105.2	106.2	106.2
87.5°	60.4	59.4	58.5	58.5	56.5	57.5	59.4	58.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)