

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: P188408

Luminaire Tested: **22SR-LD2-19-C-UNV-L840-CD1-ST-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188408
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24794)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22SR-LD2-19-C-UNV-L840-CD1-ST-U
Description: METALUX 2X2 SKYRIDGE LED FIXTURE WITH STRAW SKYTRIM.

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

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1809.0 lumens
Efficiency: N/A
Efficacy: 123.1 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.62 / 1.55
Luminous Opening: Rectangular (W 1.92' x L: 1.92' x H: 0')
CIE Type: Direct

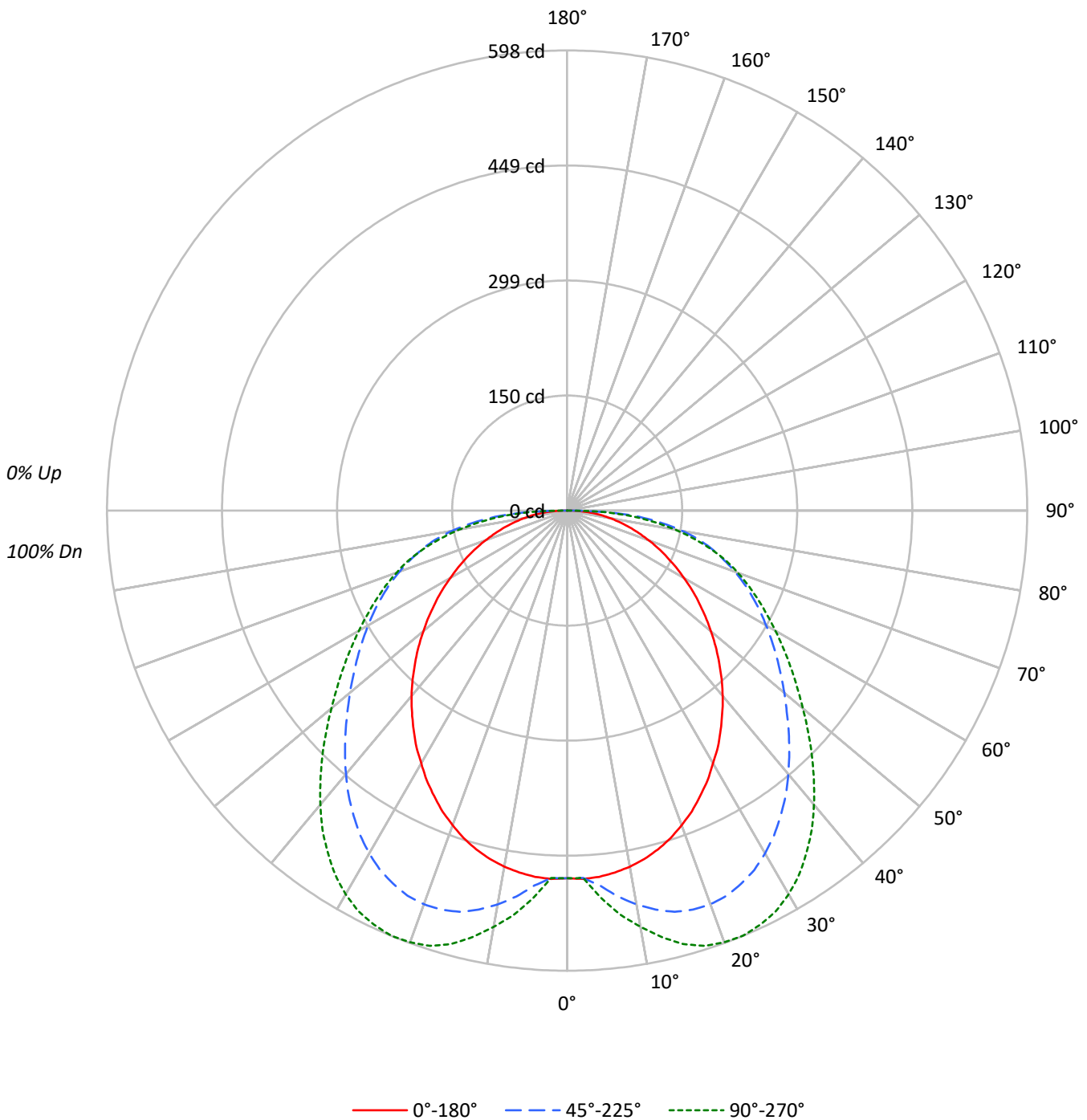
Input Watts (W): 14.7
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	107	102	97	92	104	99	95	91	95	91	88	91	88	85	87	85	83	80
2	97	87	80	74	94	86	79	73	82	76	71	79	74	69	75	71	68	65
3	88	76	67	60	85	75	66	60	72	64	59	69	63	58	66	61	57	54
4	80	67	58	51	78	66	57	50	63	56	49	61	54	49	59	53	48	46
5	73	60	50	43	71	59	50	43	56	49	42	54	47	42	52	46	42	39
6	68	54	44	38	66	53	44	37	51	43	37	49	42	37	47	41	36	34
7	63	49	39	33	61	48	39	33	46	38	33	45	38	32	43	37	32	30
8	58	44	35	29	57	43	35	29	42	34	29	41	34	29	40	33	29	27
9	54	40	32	26	53	40	32	26	39	31	26	38	31	26	37	30	26	24
10	51	37	29	24	50	37	29	24	36	29	24	35	28	23	34	28	23	21

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1400	1400	1400
5°	1405	1439	1486
10°	1398	1547	1634
15°	1383	1637	1769
20°	1357	1698	1862
25°	1323	1730	1920
30°	1283	1741	1948
35°	1244	1731	1940
40°	1203	1711	1909
45°	1157	1687	1864
50°	1112	1680	1822
55°	1069	1699	1811
60°	1027	1750	1831
65°	994	1844	1899
70°	965	1987	2021
75°	951	2218	2195
80°	955	2563	2406
85°	1009	3160	2844



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	47.5	2.6
10°-20°	149.5	8.3
20°-30°	239.6	13.2
30°-40°	292.6	16.2
40°-50°	301.3	16.7
50°-60°	279.3	15.4
60°-70°	239.4	13.2
70°-80°	180.1	10.0
80°-90°	79.6	4.4
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°	436.6	24.1
0°-40°	729.3	40.3
0°-60°	1309.9	72.4
0°-90°	1809.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1809.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	478	478	478	478	478	
5°	478	478	489	500	505	45
15°	456	489	540	571	583	128
25°	409	469	535	578	594	188
35°	348	416	484	527	542	218
45°	279	348	407	439	450	216
55°	209	279	332	350	354	187
65°	143	217	266	272	274	142
75°	84	154	196	195	194	89
85°	30	71	94	87	85	32
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°	477.8	477.8	477.8	477.8	477.8	477.8	477.8	477.8	477.8	477.8	477.8
2.5°	479.2	478.5	477.8	478.5	477.8	477.8	477.2	476.5	477.8	477.8	477.8
5°	477.8	477.2	476.5	477.2	477.2	478.5	479.2	482.5	486.5	489.1	493.1
7.5°	474.5	473.8	473.2	475.2	477.8	482.5	487.8	494.5	500.5	505.8	510.5
10°	469.8	469.2	469.2	473.8	480.5	489.1	496.5	504.5	512.5	519.8	526.5
12.5°	463.8	463.8	464.5	473.2	483.2	493.8	502.5	512.5	522.5	531.1	539.1
15°	455.8	455.2	458.5	470.5	483.2	495.1	506.5	517.8	529.8	539.8	548.5
17.5°	446.5	445.8	452.5	467.2	480.5	494.5	507.8	520.5	533.1	543.8	553.8
20°	435.2	435.2	444.5	461.8	476.5	491.8	505.8	519.1	533.1	544.5	555.1
22.5°	423.2	423.8	435.8	453.8	469.8	485.8	500.5	515.1	529.1	541.8	552.5
25°	409.2	410.5	424.5	443.2	460.5	477.2	492.5	507.8	522.5	535.1	546.5
27.5°	395.2	396.5	413.2	431.8	449.8	466.5	482.5	498.5	513.8	526.5	537.8
30°	379.2	382.5	399.2	418.5	437.2	453.8	470.5	486.5	501.1	514.5	526.5
32.5°	364.5	367.2	385.9	404.5	423.8	440.5	457.2	472.5	487.1	500.5	511.8
35°	347.9	351.9	370.5	389.2	407.8	424.5	441.2	456.5	471.2	483.8	495.1
37.5°	331.2	336.5	354.5	373.9	391.9	408.5	425.2	439.8	454.5	466.5	477.2
40°	314.5	319.2	337.9	356.5	375.2	391.2	407.2	421.2	435.2	447.2	457.2
42.5°	297.2	302.6	321.2	339.2	357.2	373.2	389.2	403.2	416.5	427.2	436.5
45°	279.2	285.9	303.9	321.9	339.9	355.9	371.2	384.5	396.5	407.2	415.8
47.5°	261.9	269.2	287.2	305.2	322.5	337.9	353.2	366.5	377.9	387.2	395.2
50°	243.9	252.6	269.9	287.2	305.2	320.5	335.2	347.2	359.2	368.5	375.2
52.5°	226.6	235.2	253.2	270.6	287.9	303.2	317.9	330.5	341.2	349.9	357.2
55°	209.3	218.6	236.6	253.9	271.2	286.6	301.2	313.2	323.9	332.5	338.5
57.5°	192.6	202.6	219.9	237.9	255.2	270.6	285.2	297.2	307.2	315.2	321.2
60°	175.3	186.6	203.9	221.2	239.2	255.2	269.2	281.2	291.2	298.6	303.9
62.5°	159.3	170.6	187.9	205.9	223.9	239.9	253.9	265.9	275.2	282.6	286.6
65°	143.3	155.3	172.6	190.6	208.6	224.6	238.6	250.6	259.2	265.9	269.9
67.5°	128.0	139.9	157.3	175.3	193.3	209.3	223.2	234.6	243.2	249.2	251.9
70°	112.6	124.6	141.9	159.9	177.3	193.9	207.9	218.6	227.2	231.9	233.9
72.5°	98.0	110.6	127.3	143.9	161.9	177.9	191.9	203.3	209.9	213.9	217.3
75°	84.0	96.0	112.0	128.6	145.3	161.9	175.3	185.3	191.9	195.9	197.3
77.5°	70.0	82.0	97.3	112.6	129.3	144.6	157.9	167.3	172.6	175.9	177.9
80°	56.6	67.3	81.3	96.0	111.3	125.3	137.3	145.9	150.6	151.9	151.9
82.5°	44.0	52.6	64.6	77.3	90.6	103.3	114.0	120.6	124.0	124.6	124.0
85°	30.0	36.0	45.3	55.3	65.3	76.6	86.0	90.6	92.6	94.0	92.6
87.5°	16.0	18.0	23.3	29.3	36.7	44.0	50.0	53.3	55.3	55.3	56.0
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°	477.8	477.8	477.8	477.8	477.8	477.8	477.8	477.8
2.5°	477.8	477.8	478.5	477.8	477.8	478.5	477.8	477.8
5°	495.1	496.5	499.8	501.1	501.8	503.8	503.8	505.1
7.5°	513.8	517.1	520.5	523.1	525.1	527.8	528.5	529.8
10°	531.1	535.1	539.1	543.1	545.8	547.1	548.5	549.1
12.5°	545.1	550.5	555.8	559.8	563.1	565.1	567.1	567.8
15°	555.1	562.5	568.5	573.8	577.1	579.8	581.8	583.1
17.5°	561.8	569.8	576.4	582.4	586.4	589.1	591.8	593.1
20°	563.8	571.8	579.8	585.8	590.4	593.8	595.8	597.1
22.5°	561.8	570.5	578.4	585.1	589.8	593.8	595.8	597.8
25°	556.5	565.8	574.4	581.1	586.4	590.4	592.4	593.8
27.5°	548.5	558.5	567.1	573.8	579.1	583.1	585.8	587.1
30°	537.1	546.5	555.8	562.5	567.8	571.8	574.4	575.8
32.5°	523.1	532.5	541.1	547.8	553.8	557.1	559.8	561.1
35°	505.8	515.1	523.8	529.8	535.8	539.1	541.8	542.5
37.5°	487.1	496.5	504.5	509.8	515.8	518.5	521.8	522.5
40°	466.5	475.2	482.5	487.8	493.1	495.8	497.8	499.1
42.5°	445.2	453.2	460.5	465.2	469.2	471.8	474.5	474.5
45°	424.5	430.5	437.2	441.2	445.2	447.2	449.2	449.8
47.5°	403.2	409.2	414.5	417.2	421.2	422.5	423.8	424.5
50°	382.5	387.9	391.9	394.5	397.2	398.5	399.8	399.8
52.5°	362.5	367.2	370.5	371.9	374.5	375.2	375.9	376.5
55°	343.9	347.2	349.9	350.5	352.5	352.5	353.9	354.5
57.5°	325.9	327.9	329.9	329.9	331.2	331.2	332.5	333.2
60°	307.9	309.2	309.9	309.9	311.2	310.5	311.9	312.5
62.5°	289.9	290.6	290.6	290.6	291.2	291.2	291.9	292.6
65°	271.9	271.9	271.9	271.9	272.6	271.9	273.2	273.9
67.5°	253.9	253.2	253.2	252.6	253.9	253.2	254.6	255.2
70°	235.2	235.2	233.9	233.9	234.6	235.2	235.9	235.9
72.5°	216.6	215.3	215.3	214.6	215.3	215.9	217.3	216.6
75°	197.3	196.6	195.3	194.6	194.6	193.9	194.6	193.9
77.5°	174.6	172.6	169.9	169.3	167.9	167.3	167.9	168.6
80°	147.9	145.9	143.9	143.3	141.9	141.9	141.9	142.6
82.5°	120.0	118.6	116.6	116.6	115.3	115.3	115.3	114.6
85°	88.6	88.0	86.6	86.6	85.3	85.3	85.3	84.6
87.5°	52.0	52.0	50.6	51.3	49.3	49.3	49.3	50.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)