

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: P188294

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188294
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24792)
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-MR-U
Description: METALUX 2X2 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: 1666.0 lumens
Efficiency: N/A
Efficacy: 71.2 lumens/watt
Spacing Criteria (0/90/45): 1.29 / 2.21 / 2.01
Luminous Opening: Rectangular (W 1.92' x L: 1.92' x H: 0')
CIE Type: Direct

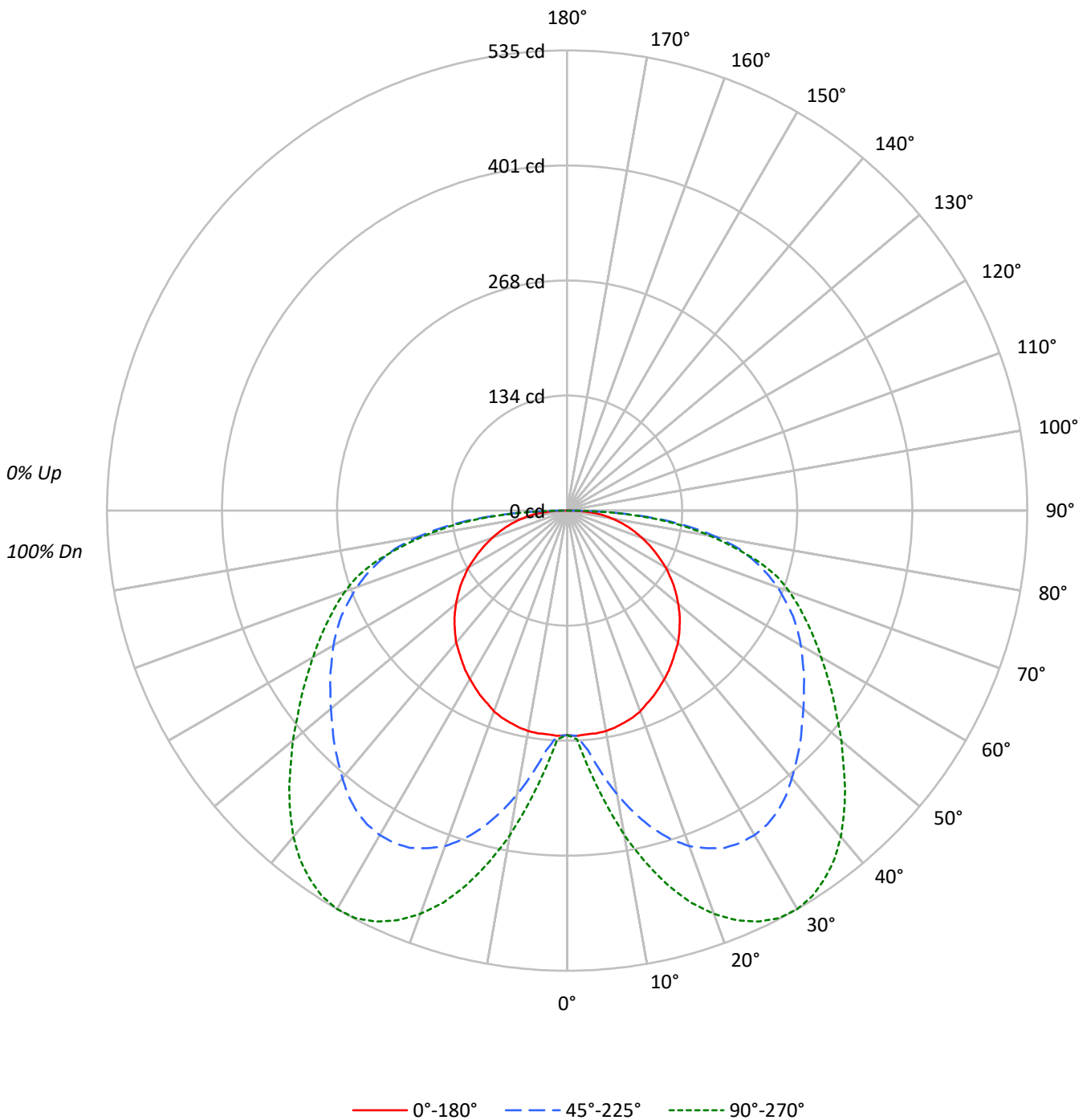
Input Watts (W): 23.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P188294

CATALOG NUMBER: 22SR-LD2-29-C-UNV-L830-CD1-MR-U

Luminous Intensity Polar Plot





TEST NUMBER: P188294

CATALOG NUMBER: 22SR-LD2-29-C-UNV-L830-CD1-MR-U

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	89	93	89	86	89	86	83	86	83	80	78
2	95	85	77	70	92	83	76	69	79	73	68	76	71	66	73	68	65	62
3	86	73	64	57	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	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°	765	765	765
5°	768	823	894
10°	774	997	1140
15°	774	1159	1366
20°	775	1294	1556
25°	769	1399	1704
30°	765	1474	1810
35°	763	1527	1868
40°	768	1554	1893
45°	767	1587	1894
50°	769	1635	1897
55°	771	1717	1926
60°	776	1839	1999
65°	777	2006	2135
70°	793	2229	2354
75°	828	2548	2614
80°	888	2976	2845
85°	1015	3439	3244



TEST NUMBER: P188294

CATALOG NUMBER: 22SR-LD2-29-C-UNV-L830-CD1-MR-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	28.3	1.7
10°-20°	104.6	6.3
20°-30°	189.4	11.4
30°-40°	251.6	15.1
40°-50°	276.6	16.6
50°-60°	274.3	16.5
60°-70°	252.5	15.2
70°-80°	201.6	12.1
80°-90°	87.0	5.2
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°	322.3	19.3
0°-40°	573.9	34.4
0°-60°	1124.8	67.5
0°-90°	1666.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1666.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	261	261	261	261	261	
5°	261	263	280	298	304	25
15°	255	306	382	432	450	72
25°	238	328	433	502	527	110
35°	213	318	427	498	522	134
45°	185	287	383	438	457	143
55°	151	251	336	370	377	135
65°	112	212	289	304	308	111
75°	73	162	225	230	231	77
85°	30	74	102	96	96	31
90°	0	0	0	0	0	



TEST NUMBER: P188294

CATALOG NUMBER: 22SR-LD2-29-C-UNV-L830-CD1-MR-U

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	261.1	261.1	261.1	261.1	261.1	261.1	261.1	261.1	261.1	261.1	261.1
2.5°	262.1	262.1	262.1	262.1	261.1	261.1	261.1	261.1	261.1	262.1	263.1
5°	261.1	261.1	261.1	262.1	262.1	264.1	267.0	270.9	274.8	279.7	285.5
7.5°	261.1	261.1	261.1	262.1	267.0	274.8	283.6	292.3	300.1	307.9	316.7
10°	260.2	260.2	260.2	266.0	276.7	289.4	302.1	313.8	324.5	335.2	345.9
12.5°	258.2	258.2	261.1	271.9	287.5	304.0	317.7	333.3	346.9	359.6	372.2
15°	255.3	255.3	261.1	277.7	297.2	314.7	333.3	350.8	367.4	382.0	396.6
17.5°	252.4	252.4	262.1	282.6	304.0	325.5	345.9	365.4	383.9	400.5	416.1
20°	248.5	248.5	262.1	286.5	309.9	333.3	355.7	376.1	396.6	415.1	431.7
22.5°	242.6	244.6	262.1	288.4	313.8	338.1	361.5	384.9	406.3	424.9	443.4
25°	237.8	240.7	261.1	288.4	314.7	341.1	366.4	389.8	412.2	432.7	451.2
27.5°	231.9	235.8	259.2	287.5	314.7	341.1	367.4	391.7	415.1	435.6	455.1
30°	226.1	230.9	256.3	284.5	312.8	340.1	365.4	390.8	414.1	435.6	455.1
32.5°	220.2	226.1	251.4	280.6	308.9	336.2	362.5	387.8	411.2	432.7	452.1
35°	213.4	220.2	246.5	275.8	304.0	331.3	356.6	382.0	405.4	426.8	445.3
37.5°	206.6	214.4	240.7	269.9	297.2	324.5	349.8	374.2	397.6	418.0	436.5
40°	200.7	207.6	233.9	263.1	290.4	316.7	342.0	365.4	387.8	406.3	424.9
42.5°	192.9	201.7	227.0	256.3	282.6	307.9	333.3	355.7	377.1	394.6	412.2
45°	185.1	194.9	220.2	247.5	274.8	299.2	323.5	345.9	365.4	383.0	398.5
47.5°	177.3	187.1	212.4	239.7	266.0	290.4	313.8	335.2	353.7	370.3	385.9
50°	168.6	180.3	204.6	230.9	257.3	281.6	304.0	324.5	343.0	358.6	373.2
52.5°	159.8	172.5	196.8	223.1	247.5	271.9	294.3	313.8	331.3	346.9	359.6
55°	151.0	163.7	189.0	214.4	238.7	264.1	285.5	305.0	322.5	336.2	347.9
57.5°	141.3	155.9	180.3	205.6	230.0	253.4	275.8	295.3	310.8	324.5	335.2
60°	132.5	147.1	171.5	195.9	221.2	244.6	266.0	284.5	300.1	313.8	323.5
62.5°	121.8	138.4	161.8	187.1	211.5	233.9	256.3	274.8	290.4	302.1	309.9
65°	112.1	128.6	152.0	176.4	200.7	224.1	245.6	264.1	277.7	289.4	296.2
67.5°	102.3	118.9	142.3	166.6	190.0	212.4	233.9	251.4	265.0	274.8	280.6
70°	92.6	109.1	131.5	154.9	178.3	200.7	221.2	237.8	250.4	260.2	265.0
72.5°	82.8	99.4	120.8	143.2	165.7	187.1	207.6	223.1	234.8	243.6	248.5
75°	73.1	88.7	109.1	130.6	151.0	172.5	192.0	206.6	218.3	225.1	229.0
77.5°	63.3	78.0	96.5	116.0	136.4	155.9	173.5	188.1	197.8	204.6	206.6
80°	52.6	66.3	81.9	100.4	117.9	136.4	152.0	164.7	173.5	176.4	176.4
82.5°	42.9	52.6	65.3	80.9	95.5	111.1	124.7	135.4	140.3	143.2	142.3
85°	30.2	36.1	44.8	56.5	67.2	80.9	90.6	97.4	101.3	102.3	101.3
87.5°	15.6	16.6	21.4	27.3	33.1	41.9	45.8	51.6	53.6	53.6	53.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P188294

CATALOG NUMBER: 22SR-LD2-29-C-UNV-L830-CD1-MR-U

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	261.1	261.1	261.1	261.1	261.1	261.1	261.1	261.1
2.5°	263.1	263.1	265.0	265.0	266.0	265.0	266.0	266.0
5°	289.4	293.3	297.2	299.2	302.1	303.1	304.0	304.0
7.5°	321.6	327.4	332.3	335.2	340.1	342.0	343.0	343.0
10°	352.7	360.5	367.4	372.2	377.1	380.0	382.0	383.0
12.5°	382.0	391.7	399.5	406.3	411.2	415.1	417.1	418.0
15°	407.3	419.0	428.8	435.6	442.4	446.3	449.2	450.2
17.5°	429.7	441.4	452.1	460.9	467.7	472.6	475.5	477.5
20°	446.3	459.9	471.6	480.4	489.2	494.0	497.0	498.9
22.5°	459.0	473.6	486.2	496.0	504.8	510.6	513.5	515.5
25°	467.7	483.3	497.0	506.7	516.5	522.3	526.2	527.2
27.5°	472.6	489.2	502.8	513.5	523.3	529.1	533.0	534.0
30°	473.6	489.2	503.8	514.5	524.2	530.1	534.0	535.0
32.5°	470.7	486.2	499.9	511.6	520.4	526.2	530.1	531.1
35°	463.8	479.4	492.1	503.8	512.6	518.4	522.3	522.3
37.5°	453.1	468.7	481.4	492.1	500.9	505.7	509.6	510.6
40°	441.4	455.1	467.7	477.5	485.3	490.1	494.0	495.0
42.5°	427.8	440.4	451.2	459.9	467.7	473.6	475.5	476.5
45°	413.2	424.9	434.6	442.4	449.2	452.1	456.0	457.0
47.5°	398.5	409.3	417.1	423.9	429.7	433.6	435.6	435.6
50°	383.9	392.7	400.5	406.3	410.2	412.2	414.1	416.1
52.5°	370.3	377.1	383.9	387.8	390.8	393.7	394.6	395.6
55°	356.6	363.5	368.3	371.3	373.2	376.1	376.1	377.1
57.5°	343.0	347.9	351.8	353.7	355.7	356.6	357.6	358.6
60°	329.4	333.3	335.2	337.2	338.1	340.1	340.1	341.1
62.5°	315.7	317.7	319.6	320.6	321.6	323.5	324.5	324.5
65°	300.1	302.1	303.1	304.0	305.0	306.9	307.9	307.9
67.5°	284.5	285.5	285.5	287.5	288.4	290.4	290.4	291.4
70°	268.0	268.0	268.9	269.9	270.9	271.9	273.8	274.8
72.5°	250.4	249.5	250.4	251.4	253.4	254.3	255.3	256.3
75°	229.0	229.0	230.0	229.0	229.0	230.0	230.0	230.9
77.5°	205.6	202.7	199.8	199.8	199.8	198.8	198.8	199.8
80°	174.4	170.5	168.6	168.6	167.6	167.6	168.6	168.6
82.5°	139.3	138.4	134.5	134.5	135.4	133.5	134.5	135.4
85°	99.4	98.4	96.5	96.5	96.5	94.5	95.5	96.5
87.5°	52.6	51.6	49.7	50.7	50.7	48.7	50.7	49.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)