

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: P188291

Luminaire Tested: **22SR-LD2-29-C-UNV-L840-CD1-MR-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P188291
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-L840-CD1-MR-U
Description: METALUX 2X2 SKYRIDGE LED FIXTURE WITH MEDIUM RED SKYTRIM.

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

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1752.0 lumens
Efficiency: N/A
Efficacy: 74.9 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

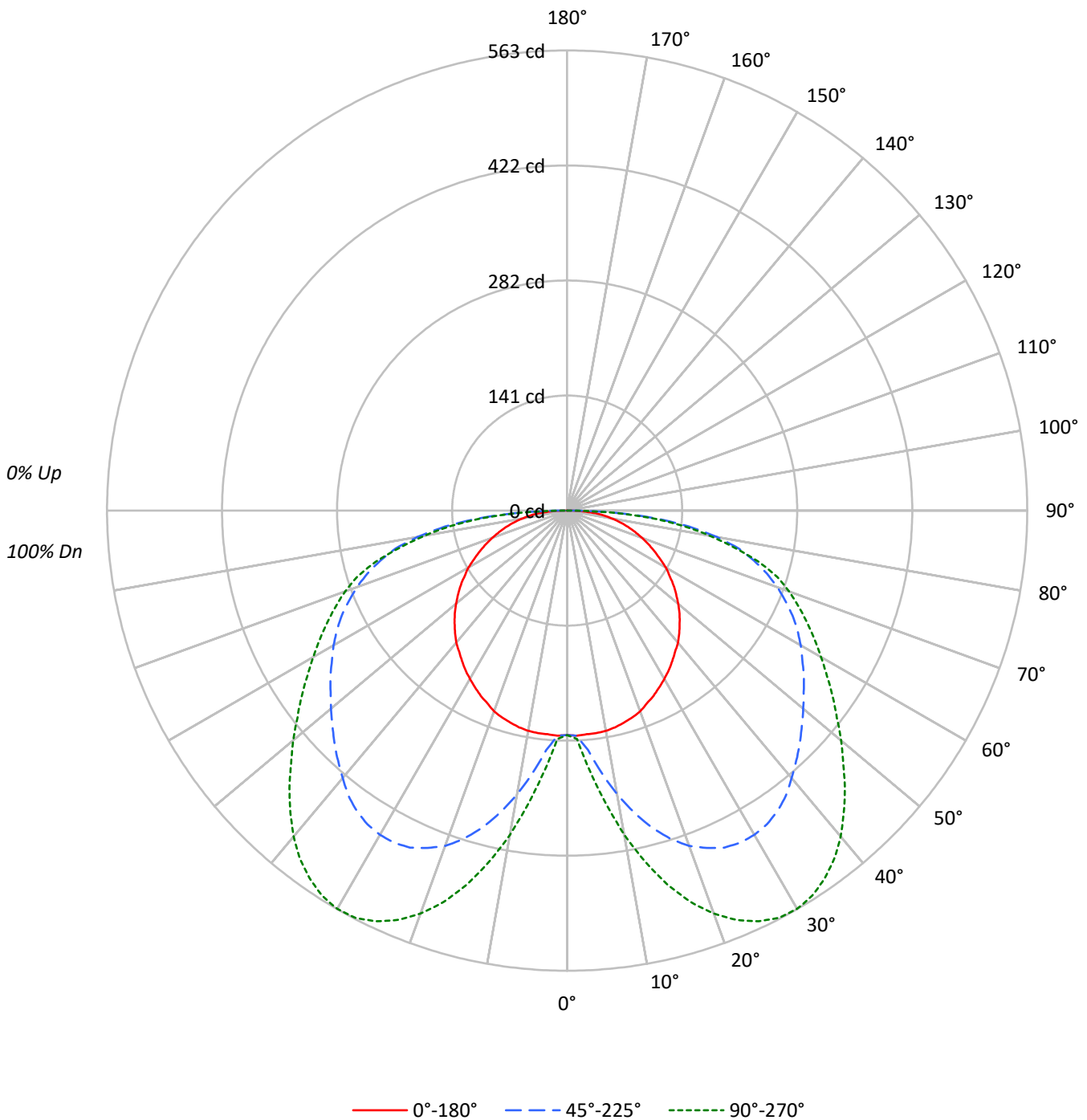
Input Watts (W): 23.4
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P188291

CATALOG NUMBER: 22SR-LD2-29-C-UNV-L840-CD1-MR-U

Luminous Intensity Polar Plot





TEST NUMBER: P188291

CATALOG NUMBER: 22SR-LD2-29-C-UNV-L840-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°	805	805	805
5°	808	865	940
10°	814	1049	1198
15°	814	1219	1436
20°	815	1361	1636
25°	808	1471	1792
30°	804	1550	1903
35°	803	1605	1965
40°	807	1634	1991
45°	807	1669	1991
50°	808	1719	1995
55°	811	1806	2026
60°	817	1934	2102
65°	817	2110	2245
70°	834	2344	2476
75°	871	2680	2750
80°	933	3130	2992
85°	1069	3617	3409



TEST NUMBER: P188291

CATALOG NUMBER: 22SR-LD2-29-C-UNV-L840-CD1-MR-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	29.8	1.7
10°-20°	109.9	6.3
20°-30°	199.2	11.4
30°-40°	264.6	15.1
40°-50°	290.9	16.6
50°-60°	288.4	16.5
60°-70°	265.6	15.2
70°-80°	212.0	12.1
80°-90°	91.5	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°	338.9	19.3
0°-40°	603.5	34.4
0°-60°	1182.9	67.5
0°-90°	1752.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1752.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	275	275	275	275	275	
5°	275	277	294	314	320	26
15°	268	322	402	454	473	76
25°	250	345	455	528	554	115
35°	224	334	449	524	549	141
45°	195	302	403	461	481	150
55°	159	264	354	389	397	142
65°	118	223	304	319	324	117
75°	77	170	237	241	243	81
85°	32	78	108	101	101	33
90°	0	0	0	0	0	



TEST NUMBER: P188291

CATALOG NUMBER: 22SR-LD2-29-C-UNV-L840-CD1-MR-U

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	274.6	274.6	274.6	274.6	274.6	274.6	274.6	274.6	274.6	274.6	274.6
2.5°	275.7	275.7	275.7	275.7	274.6	274.6	274.6	274.6	274.6	275.7	276.7
5°	274.6	274.6	274.6	275.7	275.7	277.7	280.8	284.9	289.0	294.1	300.2
7.5°	274.6	274.6	274.6	275.7	280.8	289.0	298.2	307.4	315.6	323.8	333.0
10°	273.6	273.6	273.6	279.8	291.0	304.3	317.7	330.0	341.2	352.5	363.8
12.5°	271.6	271.6	274.6	285.9	302.3	319.7	334.1	350.5	364.8	378.1	391.5
15°	268.5	268.5	274.6	292.1	312.5	331.0	350.5	368.9	386.3	401.7	417.1
17.5°	265.4	265.4	275.7	297.2	319.7	342.3	363.8	384.3	403.7	421.2	437.6
20°	261.3	261.3	275.7	301.3	325.9	350.5	374.0	395.5	417.1	436.5	454.0
22.5°	255.2	257.2	275.7	303.3	330.0	355.6	380.2	404.8	427.3	446.8	466.3
25°	250.0	253.1	274.6	303.3	331.0	358.7	385.3	409.9	433.5	455.0	474.5
27.5°	243.9	248.0	272.6	302.3	331.0	358.7	386.3	411.9	436.5	458.1	478.6
30°	237.7	242.9	269.5	299.2	328.9	357.6	384.3	410.9	435.5	458.1	478.6
32.5°	231.6	237.7	264.4	295.1	324.8	353.5	381.2	407.8	432.4	455.0	475.5
35°	224.4	231.6	259.3	290.0	319.7	348.4	375.1	401.7	426.3	448.8	468.3
37.5°	217.2	225.4	253.1	283.9	312.5	341.2	367.9	393.5	418.1	439.6	459.1
40°	211.1	218.3	245.9	276.7	305.4	333.0	359.7	384.3	407.8	427.3	446.8
42.5°	202.9	212.1	238.8	269.5	297.2	323.8	350.5	374.0	396.6	415.0	433.5
45°	194.7	204.9	231.6	260.3	289.0	314.6	340.2	363.8	384.3	402.7	419.1
47.5°	186.5	196.8	223.4	252.1	279.8	305.4	330.0	352.5	372.0	389.4	405.8
50°	177.3	189.6	215.2	242.9	270.5	296.1	319.7	341.2	360.7	377.1	392.5
52.5°	168.1	181.4	207.0	234.7	260.3	285.9	309.5	330.0	348.4	364.8	378.1
55°	158.8	172.2	198.8	225.4	251.1	277.7	300.2	320.7	339.2	353.5	365.8
57.5°	148.6	164.0	189.6	216.2	241.8	266.4	290.0	310.5	326.9	341.2	352.5
60°	139.4	154.7	180.4	206.0	232.6	257.2	279.8	299.2	315.6	330.0	340.2
62.5°	128.1	145.5	170.1	196.8	222.4	245.9	269.5	289.0	305.4	317.7	325.9
65°	117.8	135.3	159.9	185.5	211.1	235.7	258.2	277.7	292.1	304.3	311.5
67.5°	107.6	125.0	149.6	175.2	199.8	223.4	245.9	264.4	278.7	289.0	295.1
70°	97.4	114.8	138.3	162.9	187.5	211.1	232.6	250.0	263.4	273.6	278.7
72.5°	87.1	104.5	127.1	150.6	174.2	196.8	218.3	234.7	247.0	256.2	261.3
75°	76.9	93.3	114.8	137.3	158.8	181.4	201.9	217.2	229.5	236.7	240.8
77.5°	66.6	82.0	101.4	121.9	143.5	164.0	182.4	197.8	208.0	215.2	217.2
80°	55.3	69.7	86.1	105.5	124.0	143.5	159.9	173.2	182.4	185.5	185.5
82.5°	45.1	55.3	68.7	85.1	100.4	116.8	131.2	142.4	147.6	150.6	149.6
85°	31.8	37.9	47.1	59.4	70.7	85.1	95.3	102.5	106.6	107.6	106.6
87.5°	16.4	17.4	22.5	28.7	34.8	44.1	48.2	54.3	56.4	56.4	56.4
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: P188291

CATALOG NUMBER: 22SR-LD2-29-C-UNV-L840-CD1-MR-U

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	274.6	274.6	274.6	274.6	274.6	274.6	274.6	274.6
2.5°	276.7	276.7	278.7	278.7	279.8	278.7	279.8	279.8
5°	304.3	308.4	312.5	314.6	317.7	318.7	319.7	319.7
7.5°	338.2	344.3	349.4	352.5	357.6	359.7	360.7	360.7
10°	371.0	379.2	386.3	391.5	396.6	399.6	401.7	402.7
12.5°	401.7	411.9	420.1	427.3	432.4	436.5	438.6	439.6
15°	428.3	440.6	450.9	458.1	465.2	469.3	472.4	473.4
17.5°	451.9	464.2	475.5	484.7	491.9	497.0	500.1	502.1
20°	469.3	483.7	496.0	505.2	514.4	519.5	522.6	524.7
22.5°	482.7	498.0	511.3	521.6	530.8	537.0	540.0	542.1
25°	491.9	508.3	522.6	532.9	543.1	549.3	553.4	554.4
27.5°	497.0	514.4	528.8	540.0	550.3	556.4	560.5	561.6
30°	498.0	514.4	529.8	541.1	551.3	557.5	561.6	562.6
32.5°	494.9	511.3	525.7	538.0	547.2	553.4	557.5	558.5
35°	487.8	504.2	517.5	529.8	539.0	545.2	549.3	549.3
37.5°	476.5	492.9	506.2	517.5	526.7	531.8	535.9	537.0
40°	464.2	478.6	491.9	502.1	510.3	515.4	519.5	520.6
42.5°	449.9	463.2	474.5	483.7	491.9	498.0	500.1	501.1
45°	434.5	446.8	457.0	465.2	472.4	475.5	479.6	480.6
47.5°	419.1	430.4	438.6	445.8	451.9	456.0	458.1	458.1
50°	403.7	413.0	421.2	427.3	431.4	433.5	435.5	437.6
52.5°	389.4	396.6	403.7	407.8	410.9	414.0	415.0	416.0
55°	375.1	382.2	387.4	390.4	392.5	395.5	395.5	396.6
57.5°	360.7	365.8	369.9	372.0	374.0	375.1	376.1	377.1
60°	346.4	350.5	352.5	354.6	355.6	357.6	357.6	358.7
62.5°	332.0	334.1	336.1	337.1	338.2	340.2	341.2	341.2
65°	315.6	317.7	318.7	319.7	320.7	322.8	323.8	323.8
67.5°	299.2	300.2	300.2	302.3	303.3	305.4	305.4	306.4
70°	281.8	281.8	282.8	283.9	284.9	285.9	288.0	289.0
72.5°	263.4	262.3	263.4	264.4	266.4	267.5	268.5	269.5
75°	240.8	240.8	241.8	240.8	240.8	241.8	241.8	242.9
77.5°	216.2	213.1	210.1	210.1	210.1	209.0	209.0	210.1
80°	183.4	179.3	177.3	177.3	176.3	176.3	177.3	177.3
82.5°	146.5	145.5	141.4	141.4	142.4	140.4	141.4	142.4
85°	104.5	103.5	101.4	101.4	101.4	99.4	100.4	101.4
87.5°	55.3	54.3	52.3	53.3	53.3	51.2	53.3	52.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)