

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: P178873

Luminaire Tested: **22SR-LD2-29-C-UNV-EL14W-L850-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P178873
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P34290)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22SR-LD2-29-C-UNV-EL14W-L850-CD1-U
Description: METALUX SKYRIDGE 2X2 TROFFER

Light Source: EATON LED 5000K
Ballast/Driver: OSRAM ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2096.2 lumens
Efficiency: N/A
Efficacy: 163.8 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.47 / 1.44
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

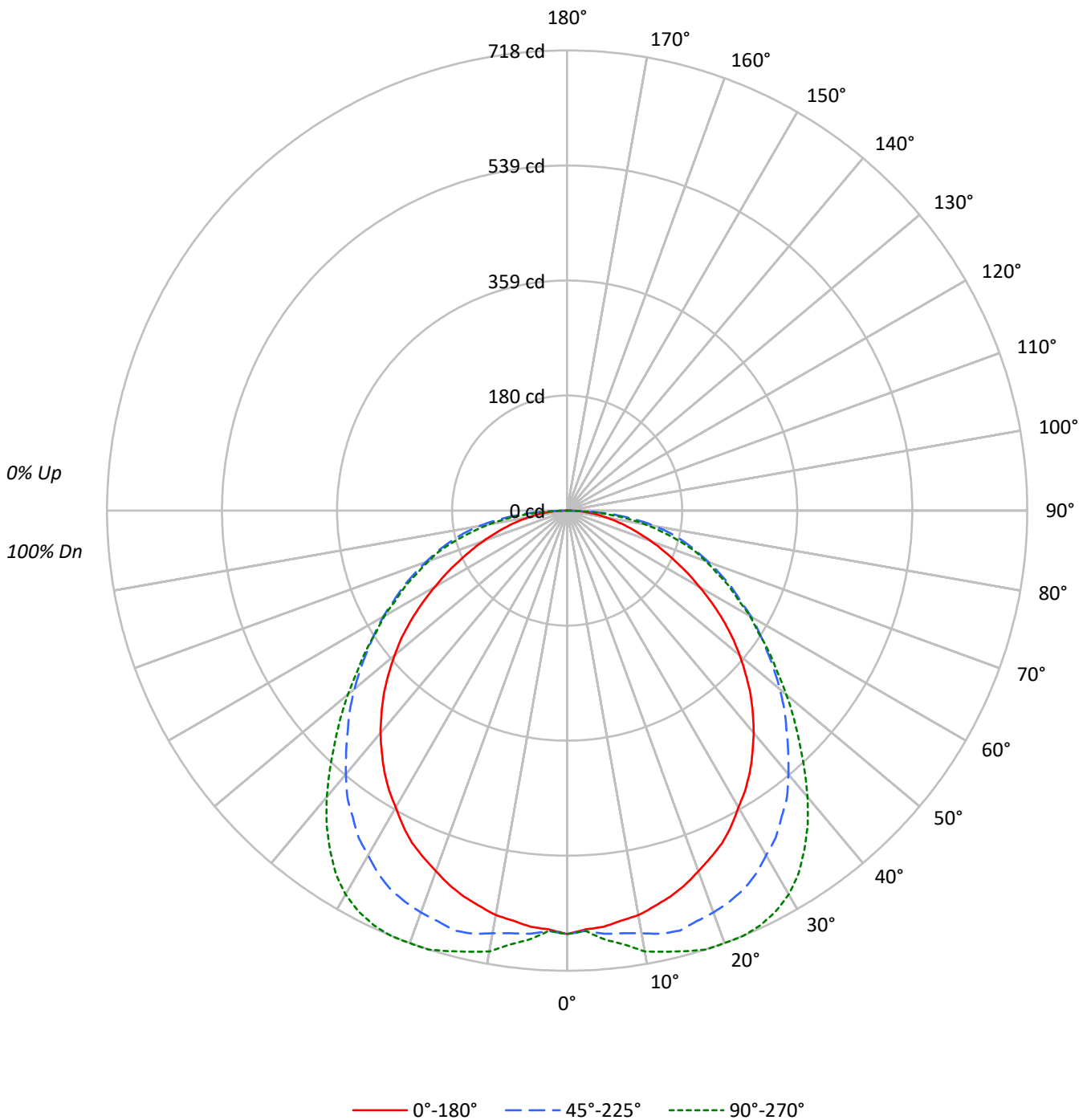
Input Watts (W): 12.8
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P178873

CATALOG NUMBER: 22SR-LD2-29-C-UNV-EL14W-L850-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P178873

CATALOG NUMBER: 22SR-LD2-29-C-UNV-EL14W-L850-CD1-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	108	103	98	94	105	101	96	93	96	93	90	92	89	87	89	86	84	82
2	98	89	82	76	95	87	81	75	84	78	73	80	76	72	77	73	70	68
3	89	78	70	63	86	76	69	62	73	67	61	71	65	60	68	63	59	57
4	81	69	60	53	79	68	59	53	65	58	52	63	56	51	61	55	50	48
5	75	62	52	46	73	60	52	45	58	51	45	56	50	44	54	49	44	42
6	69	55	46	40	67	54	46	40	53	45	39	51	44	39	49	43	38	36
7	64	50	41	35	62	49	41	35	48	40	35	46	39	34	45	39	34	32
8	60	46	37	31	58	45	37	31	44	36	31	42	36	31	41	35	30	29
9	56	42	34	28	54	41	33	28	40	33	28	39	32	28	38	32	27	26
10	52	39	31	25	51	38	30	25	37	30	25	36	30	25	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1778	1778	1778
5°	1761	1791	1815
10°	1751	1830	1908
15°	1736	1890	1982
20°	1715	1911	2057
25°	1700	1936	2119
30°	1662	1930	2149
35°	1633	1917	2120
40°	1591	1886	2050
45°	1539	1842	1951
50°	1471	1813	1869
55°	1390	1783	1804
60°	1285	1784	1772
65°	1182	1801	1773
70°	1096	1843	1808
75°	1011	1975	1861
80°	959	2159	1918
85°	954	2319	1843



TEST NUMBER: P178873

CATALOG NUMBER: 22SR-LD2-29-C-UNV-EL14W-L850-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.4	3.0
10°-20°	189.5	9.0
20°-30°	297.0	14.2
30°-40°	358.9	17.1
40°-50°	362.1	17.3
50°-60°	322.4	15.4
60°-70°	258.0	12.3
70°-80°	178.0	8.5
80°-90°	66.9	3.2
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°	549.9	26.2
0°-40°	908.9	43.4
0°-60°	1593.4	76.0
0°-90°	2096.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2096.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	661	661	661	661	661	
5°	652	652	663	674	672	62
15°	623	632	678	703	712	176
25°	572	594	652	700	714	263
35°	497	517	584	630	645	310
45°	404	426	484	510	513	311
55°	296	334	380	387	384	264
65°	186	248	283	278	278	185
75°	97	161	190	183	179	104
85°	31	66	75	64	60	34
90°	0	0	0	0	0	



TEST NUMBER: P178873

CATALOG NUMBER: 22SR-LD2-29-C-UNV-EL14W-L850-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	660.7	660.7	660.7	660.7	660.7	660.7	660.7	660.7	660.7	660.7	660.7
2.5°	654.2	656.4	656.4	656.4	656.4	656.4	656.4	656.4	656.4	656.4	656.4
5°	651.9	654.2	651.9	651.9	651.9	651.9	651.9	651.9	656.4	658.6	662.9
7.5°	645.3	647.5	645.3	645.3	647.5	647.5	651.9	658.6	662.9	665.2	665.2
10°	640.9	643.1	638.7	638.7	647.5	651.9	654.2	656.4	654.2	660.7	669.6
12.5°	632.0	632.0	627.6	636.5	645.3	645.3	643.1	647.5	658.6	669.6	676.3
15°	623.2	621.0	618.8	629.8	632.0	632.0	636.5	649.7	658.6	667.4	678.5
17.5°	612.2	609.9	609.9	621.0	621.0	627.6	636.5	645.3	656.4	667.4	671.8
20°	598.9	594.5	601.1	603.3	612.2	621.0	625.4	636.5	647.5	656.4	667.4
22.5°	585.6	579.0	587.8	587.8	603.3	607.7	614.4	627.6	636.5	649.7	660.7
25°	572.4	565.7	572.4	574.6	590.0	594.5	603.3	612.2	625.4	638.7	651.9
27.5°	554.7	545.8	552.5	559.1	572.4	579.0	583.5	596.7	612.2	625.4	638.7
30°	534.8	528.1	530.4	541.5	554.7	559.1	565.7	579.0	594.5	607.7	621.0
32.5°	517.1	508.2	508.2	521.6	534.8	537.0	545.8	561.4	574.6	590.0	605.5
35°	497.2	488.3	488.3	499.5	510.5	517.1	523.8	539.2	554.7	570.1	583.5
37.5°	475.1	466.3	468.6	479.6	488.3	495.0	501.7	517.1	530.4	548.0	563.6
40°	453.0	444.2	446.4	455.2	466.3	472.9	479.6	495.0	510.5	523.8	537.0
42.5°	428.8	422.1	424.3	433.1	442.0	450.8	457.4	470.7	486.2	499.5	510.5
45°	404.4	397.8	400.0	408.9	419.9	426.5	433.1	448.7	461.9	475.1	484.0
47.5°	377.9	373.4	375.7	384.5	397.8	402.2	408.9	424.3	437.6	448.7	459.7
50°	351.4	347.0	351.4	360.2	373.4	380.1	386.8	400.0	413.2	424.3	433.1
52.5°	324.9	320.4	327.1	338.1	349.2	355.8	364.6	377.9	389.0	400.0	406.7
55°	296.2	296.2	302.7	313.9	327.1	333.7	340.3	355.8	366.9	375.7	380.1
57.5°	267.4	269.6	278.4	291.7	305.0	311.6	320.4	331.5	342.5	351.4	355.8
60°	238.7	243.1	254.2	269.6	282.8	289.5	296.2	309.4	318.2	327.1	331.5
62.5°	212.2	218.8	232.1	245.3	260.7	267.4	274.1	287.3	296.2	300.5	305.0
65°	185.6	194.5	207.7	223.2	238.7	247.5	252.0	265.2	271.8	278.4	282.8
67.5°	161.4	172.4	187.8	203.3	216.6	225.4	232.1	243.1	249.7	254.2	258.5
70°	139.3	150.3	165.7	181.3	196.7	203.3	209.9	218.8	227.6	232.1	234.3
72.5°	117.1	130.4	148.0	161.4	176.8	183.4	187.8	198.9	205.5	209.9	212.2
75°	97.2	110.5	128.1	141.5	156.9	161.4	165.7	176.8	183.4	187.8	190.0
77.5°	79.6	92.8	108.3	121.6	134.8	141.5	145.8	154.7	159.1	163.5	165.7
80°	61.9	75.1	90.6	101.7	112.7	117.1	123.8	130.4	134.8	139.3	139.3
82.5°	46.5	57.5	70.7	79.6	88.4	92.8	97.2	106.0	108.3	110.5	108.3
85°	30.9	37.6	46.5	55.2	61.9	66.3	68.5	72.9	77.4	75.1	75.1
87.5°	15.4	17.7	24.3	26.6	30.9	33.1	35.3	37.6	35.3	35.3	33.1
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: P178873

CATALOG NUMBER: 22SR-LD2-29-C-UNV-EL14W-L850-CD1-U

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
0°	660.7	660.7	660.7	660.7	660.7	660.7	660.7	660.7	660.7	660.7
2.5°	656.4	656.4	656.4	656.4	656.4	656.4	656.4	656.4	656.4	656.4
5°	667.4	669.6	671.8	671.8	674.1	671.8	671.8	671.8	671.8	671.8
7.5°	662.9	667.4	669.6	674.1	676.3	678.5	680.6	682.8	682.8	682.8
10°	678.5	682.8	687.3	691.7	691.7	691.7	696.2	698.4	698.4	698.4
12.5°	680.6	687.3	693.9	698.4	700.5	702.7	702.7	702.7	705.0	705.0
15°	685.1	689.5	693.9	700.5	702.7	705.0	707.2	711.6	711.6	711.6
17.5°	682.8	689.5	696.2	702.7	707.2	709.4	713.8	718.2	718.2	718.2
20°	676.3	687.3	696.2	702.7	705.0	707.2	711.6	716.1	718.2	718.2
22.5°	671.8	680.6	691.7	700.5	702.7	705.0	709.4	713.8	718.2	718.2
25°	662.9	674.1	685.1	693.9	700.5	702.7	707.2	711.6	711.6	713.8
27.5°	651.9	662.9	676.3	682.8	685.1	689.5	696.2	700.5	702.7	705.0
30°	638.7	649.7	660.7	669.6	671.8	676.3	682.8	687.3	689.5	691.7
32.5°	618.8	632.0	640.9	651.9	656.4	658.6	662.9	667.4	669.6	671.8
35°	598.9	609.9	618.8	627.6	629.8	634.3	638.7	640.9	645.3	645.3
37.5°	574.6	585.6	594.5	601.1	603.3	605.5	612.2	614.4	616.6	616.6
40°	548.0	559.1	565.7	572.4	574.6	574.6	579.0	583.5	583.5	583.5
42.5°	521.6	528.1	534.8	539.2	543.7	543.7	545.8	548.0	548.0	548.0
45°	495.0	501.7	503.9	508.2	510.5	510.5	512.7	512.7	514.9	512.7
47.5°	466.3	470.7	472.9	477.3	477.3	477.3	477.3	479.6	479.6	479.6
50°	437.6	442.0	444.2	446.4	446.4	446.4	446.4	446.4	446.4	446.4
52.5°	411.1	413.2	415.4	415.4	415.4	415.4	415.4	413.2	413.2	413.2
55°	384.5	386.8	386.8	384.5	386.8	384.5	384.5	382.3	384.5	384.5
57.5°	358.0	360.2	358.0	358.0	358.0	355.8	355.8	355.8	355.8	353.6
60°	331.5	333.7	331.5	331.5	329.3	329.3	329.3	327.1	327.1	329.3
62.5°	309.4	307.2	305.0	305.0	302.7	302.7	300.5	300.5	300.5	300.5
65°	282.8	282.8	280.6	278.4	278.4	278.4	276.3	276.3	276.3	278.4
67.5°	260.7	258.5	256.4	254.2	254.2	252.0	252.0	252.0	252.0	252.0
70°	236.5	234.3	232.1	229.8	229.8	229.8	229.8	229.8	229.8	229.8
72.5°	212.2	209.9	209.9	207.7	207.7	207.7	205.5	205.5	205.5	207.7
75°	190.0	187.8	185.6	183.4	183.4	183.4	181.3	181.3	181.3	179.0
77.5°	165.7	163.5	159.1	156.9	154.7	154.7	152.5	152.5	152.5	150.3
80°	137.0	132.6	130.4	128.1	125.9	125.9	123.8	123.8	123.8	123.8
82.5°	106.0	103.9	101.7	99.5	95.0	95.0	92.8	95.0	95.0	92.8
85°	72.9	70.7	66.3	64.1	64.1	61.9	61.9	61.9	59.7	59.7
87.5°	33.1	30.9	30.9	28.7	26.6	26.6	26.6	24.3	24.3	24.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)