

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: P178870

Luminaire Tested: **22SR-LD2-29-C-UNV-EL14W-L830-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P178870
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-L830-CD1-U
Description: METALUX SKYRIDGE 2X2 TROFFER

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

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1895.2 lumens
Efficiency: N/A
Efficacy: 148.1 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

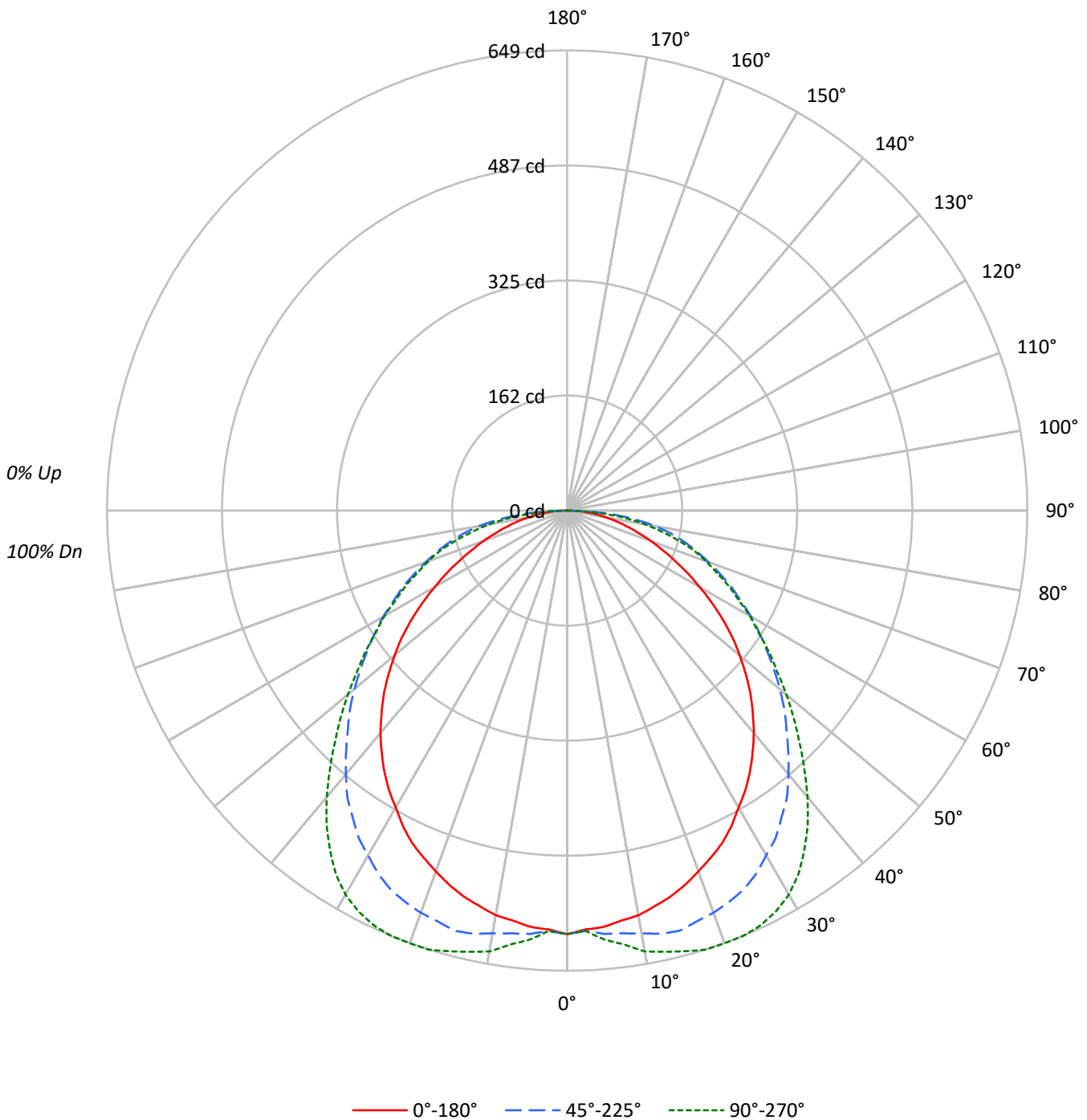
Input Watts (W): 12.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	1608	1608	1608
5°	1592	1619	1641
10°	1583	1654	1725
15°	1570	1709	1792
20°	1551	1728	1859
25°	1536	1750	1916
30°	1502	1745	1943
35°	1477	1733	1917
40°	1439	1705	1853
45°	1391	1665	1764
50°	1330	1639	1690
55°	1256	1612	1631
60°	1161	1613	1602
65°	1068	1629	1603
70°	991	1666	1635
75°	914	1786	1682
80°	868	1951	1733
85°	861	2096	1667



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	57.3	3.0
10°-20°	171.4	9.0
20°-30°	268.5	14.2
30°-40°	324.5	17.1
40°-50°	327.4	17.3
50°-60°	291.5	15.4
60°-70°	233.2	12.3
70°-80°	160.9	8.5
80°-90°	60.5	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°	497.2	26.2
0°-40°	821.7	43.4
0°-60°	1440.6	76.0
0°-90°	1895.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1895.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	597	597	597	597	597	
5°	589	589	599	609	607	56
15°	564	571	613	635	643	159
25°	517	537	589	633	645	238
35°	450	468	528	569	583	281
45°	366	386	438	462	464	281
55°	268	302	344	350	348	239
65°	168	224	256	252	252	167
75°	88	146	172	166	162	94
85°	28	60	68	58	54	30
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	597.4	597.4	597.4	597.4	597.4	597.4	597.4	597.4	597.4	597.4	597.4
2.5°	591.4	593.4	593.4	593.4	593.4	593.4	593.4	593.4	593.4	593.4	593.4
5°	589.4	591.4	589.4	589.4	589.4	589.4	589.4	589.4	593.4	595.4	599.3
7.5°	583.4	585.4	583.4	583.4	585.4	585.4	589.4	595.4	599.3	601.4	601.4
10°	579.5	581.5	577.4	577.4	585.4	589.4	591.4	593.4	591.4	597.4	605.4
12.5°	571.4	571.4	567.4	575.4	583.4	583.4	581.5	585.4	595.4	605.4	611.4
15°	563.5	561.5	559.5	569.4	571.4	571.4	575.4	587.4	595.4	603.4	613.4
17.5°	553.4	551.4	551.4	561.5	561.5	567.4	575.4	583.4	593.4	603.4	607.4
20°	541.5	537.4	543.5	545.5	553.4	561.5	565.4	575.4	585.4	593.4	603.4
22.5°	529.5	523.5	531.4	531.4	545.5	549.4	555.4	567.4	575.4	587.4	597.4
25°	517.4	511.5	517.4	519.5	533.4	537.4	545.5	553.4	565.4	577.4	589.4
27.5°	501.5	493.5	499.5	505.5	517.4	523.5	527.5	539.5	553.4	565.4	577.4
30°	483.5	477.6	479.6	489.5	501.5	505.5	511.5	523.5	537.4	549.4	561.5
32.5°	467.5	459.6	459.6	471.5	483.5	485.5	493.5	507.5	519.5	533.4	547.5
35°	449.5	441.6	441.6	451.5	461.6	467.5	473.5	487.5	501.5	515.4	527.5
37.5°	429.6	421.6	423.6	433.5	441.6	447.5	453.5	467.5	479.6	495.5	509.5
40°	409.6	401.6	403.6	411.6	421.6	427.6	433.5	447.5	461.6	473.5	485.5
42.5°	387.6	381.6	383.6	391.6	399.6	407.6	413.5	425.6	439.6	451.5	461.6
45°	365.6	359.7	361.7	369.6	379.6	385.6	391.6	405.6	417.6	429.6	437.6
47.5°	341.7	337.7	339.7	347.6	359.7	363.6	369.6	383.6	395.7	405.6	415.5
50°	317.7	313.6	317.7	325.7	337.7	343.7	349.6	361.7	373.6	383.6	391.6
52.5°	293.7	289.7	295.7	305.7	315.7	321.7	329.6	341.7	351.6	361.7	367.6
55°	267.7	267.7	273.7	283.7	295.7	301.7	307.7	321.7	331.6	339.7	343.7
57.5°	241.8	243.8	251.7	263.7	275.8	281.7	289.7	299.7	309.7	317.7	321.7
60°	215.8	219.8	229.7	243.8	255.8	261.7	267.7	279.7	287.7	295.7	299.7
62.5°	191.8	197.8	209.8	221.8	235.8	241.8	247.7	259.8	267.7	271.7	275.8
65°	167.8	175.9	187.8	201.8	215.8	223.8	227.7	239.8	245.7	251.7	255.8
67.5°	145.8	155.9	169.8	183.8	195.8	203.8	209.8	219.8	225.8	229.7	233.7
70°	125.9	135.9	149.8	163.8	177.8	183.8	189.8	197.8	205.8	209.8	211.7
72.5°	105.9	117.9	133.9	145.8	159.9	165.8	169.8	179.8	185.8	189.8	191.8
75°	87.9	99.9	115.9	127.8	141.9	145.8	149.8	159.9	165.8	169.8	171.8
77.5°	72.0	83.9	97.9	109.8	121.9	127.8	131.8	139.9	143.8	147.8	149.8
80°	56.0	67.9	81.9	92.0	101.9	105.9	111.8	117.9	121.9	125.9	125.9
82.5°	42.0	52.0	63.9	72.0	79.9	83.9	87.9	95.9	97.9	99.9	97.9
85°	27.9	34.0	42.0	49.9	56.0	59.9	61.9	65.9	69.9	67.9	67.9
87.5°	14.0	16.0	22.0	24.0	27.9	29.9	32.0	34.0	32.0	32.0	29.9
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):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
0°	597.4	597.4	597.4	597.4	597.4	597.4	597.4	597.4	597.4	597.4
2.5°	593.4	593.4	593.4	593.4	593.4	593.4	593.4	593.4	593.4	593.4
5°	603.4	605.4	607.4	607.4	609.4	607.4	607.4	607.4	607.4	607.4
7.5°	599.3	603.4	605.4	609.4	611.4	613.4	615.4	617.3	617.3	617.3
10°	613.4	617.3	621.4	625.4	625.4	625.4	629.4	631.4	631.4	631.4
12.5°	615.4	621.4	627.4	631.4	633.3	635.3	635.3	635.3	637.3	637.3
15°	619.3	623.4	627.4	633.3	635.3	637.3	639.3	643.4	643.4	643.4
17.5°	617.3	623.4	629.4	635.3	639.3	641.4	645.4	649.3	649.3	649.3
20°	611.4	621.4	629.4	635.3	637.3	639.3	643.4	647.4	649.3	649.3
22.5°	607.4	615.4	625.4	633.3	635.3	637.3	641.4	645.4	649.3	649.3
25°	599.3	609.4	619.3	627.4	633.3	635.3	639.3	643.4	643.4	645.4
27.5°	589.4	599.3	611.4	617.3	619.3	623.4	629.4	633.3	635.3	637.3
30°	577.4	587.4	597.4	605.4	607.4	611.4	617.3	621.4	623.4	625.4
32.5°	559.5	571.4	579.5	589.4	593.4	595.4	599.3	603.4	605.4	607.4
35°	541.5	551.4	559.5	567.4	569.4	573.4	577.4	579.5	583.4	583.4
37.5°	519.5	529.5	537.4	543.5	545.5	547.5	553.4	555.4	557.4	557.4
40°	495.5	505.5	511.5	517.4	519.5	519.5	523.5	527.5	527.5	527.5
42.5°	471.5	477.6	483.5	487.5	491.5	491.5	493.5	495.5	495.5	495.5
45°	447.5	453.5	455.5	459.6	461.6	461.6	463.6	463.6	465.5	463.6
47.5°	421.6	425.6	427.6	431.5	431.5	431.5	431.5	433.5	433.5	433.5
50°	395.7	399.6	401.6	403.6	403.6	403.6	403.6	403.6	403.6	403.6
52.5°	371.6	373.6	375.7	375.7	375.7	375.7	375.7	373.6	373.6	373.6
55°	347.6	349.6	349.6	347.6	349.6	347.6	347.6	345.7	347.6	347.6
57.5°	323.7	325.7	323.7	323.7	323.7	321.7	321.7	321.7	321.7	319.7
60°	299.7	301.7	299.7	299.7	297.7	297.7	297.7	295.7	295.7	297.7
62.5°	279.7	277.8	275.8	275.8	273.7	273.7	271.7	271.7	271.7	271.7
65°	255.8	255.8	253.7	251.7	251.7	251.7	249.7	249.7	249.7	251.7
67.5°	235.8	233.7	231.7	229.7	229.7	227.7	227.7	227.7	227.7	227.7
70°	213.8	211.7	209.8	207.8	207.8	207.8	207.8	207.8	207.8	207.8
72.5°	191.8	189.8	189.8	187.8	187.8	187.8	185.8	185.8	185.8	187.8
75°	171.8	169.8	167.8	165.8	165.8	165.8	163.8	163.8	163.8	161.8
77.5°	149.8	147.8	143.8	141.9	139.9	139.9	137.9	137.9	137.9	135.9
80°	123.9	119.9	117.9	115.9	113.9	113.9	111.8	111.8	111.8	111.8
82.5°	95.9	93.9	92.0	89.9	85.9	85.9	83.9	85.9	85.9	83.9
85°	65.9	63.9	59.9	58.0	58.0	56.0	56.0	56.0	54.0	54.0
87.5°	29.9	27.9	27.9	25.9	24.0	24.0	24.0	22.0	22.0	22.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)