

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: P178856

Luminaire Tested: **22SR-LD2-20-C-UNV-EL14W-L840-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P178856
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-LD2-20-C-UNV-EL14W-L840-CD1-U
Description: METALUX SKYRIDGE 2X2 TROFFER

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

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2006.3 lumens
Efficiency: N/A
Efficacy: 156.7 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

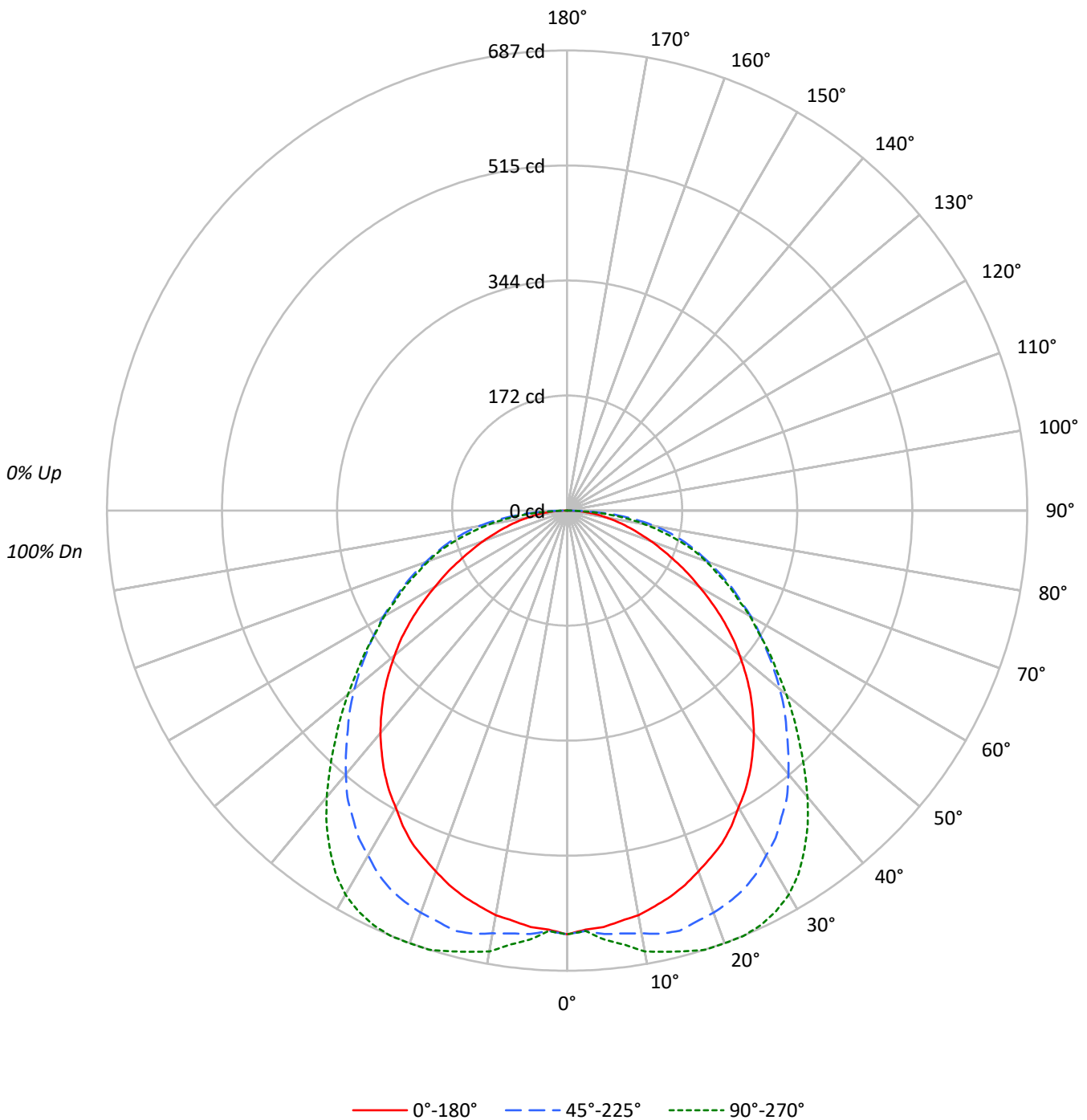
Input Watts (W): 12.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1702	1702	1702
5°	1686	1714	1737
10°	1676	1751	1826
15°	1662	1809	1897
20°	1641	1829	1968
25°	1627	1853	2029
30°	1590	1847	2057
35°	1563	1834	2029
40°	1523	1806	1962
45°	1473	1763	1867
50°	1408	1736	1789
55°	1330	1707	1727
60°	1230	1707	1696
65°	1131	1724	1698
70°	1048	1764	1731
75°	967	1891	1781
80°	919	2064	1835
85°	914	2223	1763



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	60.6	3.0
10°-20°	181.4	9.0
20°-30°	284.3	14.2
30°-40°	343.5	17.1
40°-50°	346.6	17.3
50°-60°	308.6	15.4
60°-70°	246.9	12.3
70°-80°	170.3	8.5
80°-90°	64.0	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°	526.3	26.2
0°-40°	869.9	43.4
0°-60°	1525.1	76.0
0°-90°	2006.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2006.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	632	632	632	632	632	
5°	624	624	635	645	643	59
15°	596	605	649	673	681	168
25°	548	569	624	670	683	252
35°	476	495	558	603	618	297
45°	387	408	463	489	491	298
55°	283	319	364	370	368	253
65°	178	237	271	267	267	177
75°	93	154	182	176	171	100
85°	30	64	72	61	57	32
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°	632.5	632.5	632.5	632.5	632.5	632.5	632.5	632.5	632.5	632.5	632.5
2.5°	626.1	628.2	628.2	628.2	628.2	628.2	628.2	628.2	628.2	628.2	628.2
5°	624.0	626.1	624.0	624.0	624.0	624.0	624.0	624.0	628.2	630.4	634.6
7.5°	617.7	619.8	617.7	617.7	619.8	619.8	624.0	630.4	634.6	636.7	636.7
10°	613.4	615.5	611.3	611.3	619.8	624.0	626.1	628.2	626.1	632.5	640.9
12.5°	605.0	605.0	600.7	609.2	617.7	617.7	615.5	619.8	630.4	640.9	647.2
15°	596.5	594.4	592.3	602.8	605.0	605.0	609.2	621.9	630.4	638.8	649.3
17.5°	585.9	583.8	583.8	594.4	594.4	600.7	609.2	617.7	628.2	638.8	643.1
20°	573.2	569.0	575.3	577.4	585.9	594.4	598.6	609.2	619.8	628.2	638.8
22.5°	560.5	554.2	562.6	562.6	577.4	581.7	588.0	600.7	609.2	621.9	632.5
25°	547.8	541.5	547.8	549.9	564.7	569.0	577.4	585.9	598.6	611.3	624.0
27.5°	530.9	522.4	528.8	535.1	547.8	554.2	558.4	571.1	585.9	598.6	611.3
30°	511.8	505.5	507.6	518.2	530.9	535.1	541.5	554.2	569.0	581.7	594.4
32.5°	494.9	486.4	486.4	499.1	511.8	514.0	522.4	537.2	549.9	564.7	579.6
35°	475.9	467.4	467.4	478.0	488.6	494.9	501.3	516.1	530.9	545.7	558.4
37.5°	454.8	446.3	448.5	459.0	467.4	473.7	480.1	494.9	507.6	524.5	539.3
40°	433.6	425.2	427.3	435.8	446.3	452.7	459.0	473.7	488.6	501.3	514.0
42.5°	410.4	404.0	406.1	414.6	423.1	431.5	437.9	450.6	465.3	478.0	488.6
45°	387.1	380.7	382.8	391.3	401.9	408.2	414.6	429.4	442.1	454.8	463.2
47.5°	361.7	357.5	359.6	368.0	380.7	385.0	391.3	406.1	418.8	429.4	440.0
50°	336.3	332.1	336.3	344.8	357.5	363.8	370.1	382.8	395.5	406.1	414.6
52.5°	310.9	306.7	313.0	323.6	334.2	340.5	349.0	361.7	372.3	382.8	389.2
55°	283.4	283.4	289.7	300.3	313.0	319.4	325.7	340.5	351.1	359.6	363.8
57.5°	256.0	258.1	266.6	279.1	291.8	298.2	306.7	317.2	327.8	336.3	340.5
60°	228.5	232.7	243.3	258.1	270.8	277.0	283.4	296.1	304.5	313.0	317.2
62.5°	203.1	209.4	222.1	234.8	249.6	256.0	262.3	275.0	283.4	287.6	291.8
65°	177.7	186.1	198.8	213.6	228.5	236.9	241.2	253.9	260.2	266.6	270.8
67.5°	154.4	165.0	179.8	194.6	207.3	215.8	222.1	232.7	239.0	243.3	247.5
70°	133.2	143.8	158.6	173.4	188.2	194.6	200.9	209.4	217.9	222.1	224.2
72.5°	112.1	124.8	141.7	154.4	169.2	175.6	179.8	190.4	196.7	200.9	203.1
75°	93.0	105.7	122.6	135.3	150.2	154.4	158.6	169.2	175.6	179.8	181.9
77.5°	76.2	88.9	103.6	116.3	129.0	135.3	139.6	148.0	152.3	156.5	158.6
80°	59.3	72.0	86.8	97.2	107.8	112.1	118.4	124.8	129.0	133.2	133.2
82.5°	44.4	55.0	67.7	76.2	84.7	88.9	93.0	101.5	103.6	105.7	103.6
85°	29.6	36.0	44.4	52.9	59.3	63.5	65.6	69.8	74.1	72.0	72.0
87.5°	14.8	16.9	23.3	25.4	29.6	31.7	33.9	36.0	33.9	33.9	31.7
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°	632.5	632.5	632.5	632.5	632.5	632.5	632.5	632.5	632.5	632.5
2.5°	628.2	628.2	628.2	628.2	628.2	628.2	628.2	628.2	628.2	628.2
5°	638.8	640.9	643.1	643.1	645.1	643.1	643.1	643.1	643.1	643.1
7.5°	634.6	638.8	640.9	645.1	647.2	649.3	651.4	653.5	653.5	653.5
10°	649.3	653.5	657.8	662.0	662.0	662.0	666.2	668.3	668.3	668.3
12.5°	651.4	657.8	664.1	668.3	670.5	672.6	672.6	672.6	674.7	674.7
15°	655.6	659.9	664.1	670.5	672.6	674.7	676.8	681.0	681.0	681.0
17.5°	653.5	659.9	666.2	672.6	676.8	678.9	683.2	687.4	687.4	687.4
20°	647.2	657.8	666.2	672.6	674.7	676.8	681.0	685.3	687.4	687.4
22.5°	643.1	651.4	662.0	670.5	672.6	674.7	678.9	683.2	687.4	687.4
25°	634.6	645.1	655.6	664.1	670.5	672.6	676.8	681.0	681.0	683.2
27.5°	624.0	634.6	647.2	653.5	655.6	659.9	666.2	670.5	672.6	674.7
30°	611.3	621.9	632.5	640.9	643.1	647.2	653.5	657.8	659.9	662.0
32.5°	592.3	605.0	613.4	624.0	628.2	630.4	634.6	638.8	640.9	643.1
35°	573.2	583.8	592.3	600.7	602.8	607.1	611.3	613.4	617.7	617.7
37.5°	549.9	560.5	569.0	575.3	577.4	579.6	585.9	588.0	590.1	590.1
40°	524.5	535.1	541.5	547.8	549.9	549.9	554.2	558.4	558.4	558.4
42.5°	499.1	505.5	511.8	516.1	520.3	520.3	522.4	524.5	524.5	524.5
45°	473.7	480.1	482.2	486.4	488.6	488.6	490.7	490.7	492.8	490.7
47.5°	446.3	450.6	452.7	456.9	456.9	456.9	456.9	459.0	459.0	459.0
50°	418.8	423.1	425.2	427.3	427.3	427.3	427.3	427.3	427.3	427.3
52.5°	393.4	395.5	397.7	397.7	397.7	397.7	397.7	395.5	395.5	395.5
55°	368.0	370.1	370.1	368.0	370.1	368.0	368.0	365.9	368.0	368.0
57.5°	342.6	344.8	342.6	342.6	342.6	340.5	340.5	340.5	340.5	338.4
60°	317.2	319.4	317.2	317.2	315.1	315.1	315.1	313.0	313.0	315.1
62.5°	296.1	294.0	291.8	291.8	289.7	289.7	287.6	287.6	287.6	287.6
65°	270.8	270.8	268.7	266.6	266.6	266.6	264.4	264.4	264.4	266.6
67.5°	249.6	247.5	245.4	243.3	243.3	241.2	241.2	241.2	241.2	241.2
70°	226.3	224.2	222.1	220.0	220.0	220.0	220.0	220.0	220.0	220.0
72.5°	203.1	200.9	200.9	198.8	198.8	198.8	196.7	196.7	196.7	198.8
75°	181.9	179.8	177.7	175.6	175.6	175.6	173.4	173.4	173.4	171.3
77.5°	158.6	156.5	152.3	150.2	148.0	148.0	145.9	145.9	145.9	143.8
80°	131.1	126.9	124.8	122.6	120.5	120.5	118.4	118.4	118.4	118.4
82.5°	101.5	99.4	97.2	95.1	91.0	91.0	88.9	91.0	91.0	88.9
85°	69.8	67.7	63.5	61.4	61.4	59.3	59.3	59.3	57.1	57.1
87.5°	31.7	29.6	29.6	27.5	25.4	25.4	25.4	23.3	23.3	23.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)