

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: P178852

Luminaire Tested: **22SR-LD2-20-C-UNV-EL7W-L840-CD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P178852  
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-EL7W-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: 1009.5 lumens  
Efficiency: N/A  
Efficacy: 162.8 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

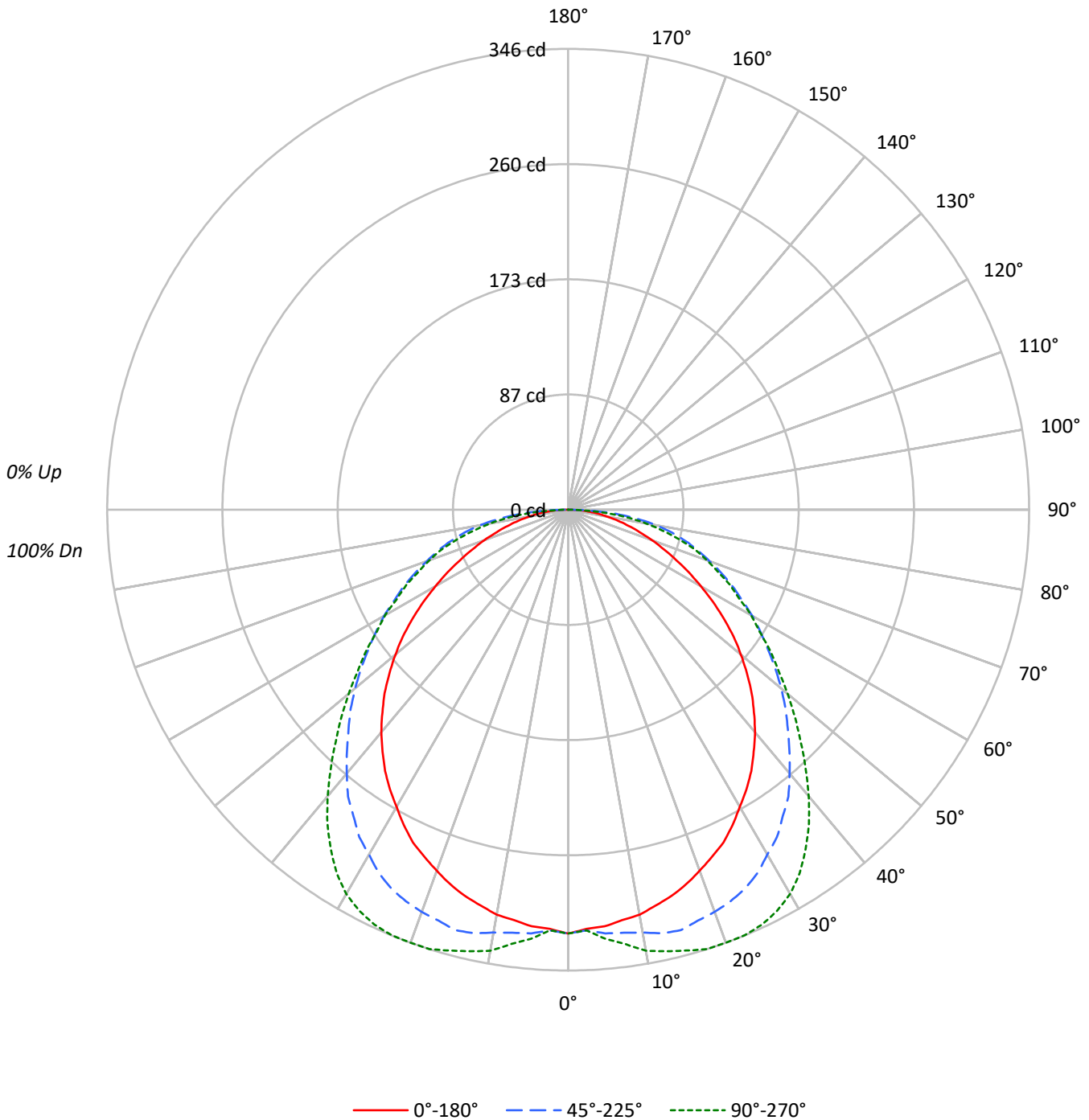
Input Watts (W): 6.2  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	856	856	856
5°	848	863	874
10°	844	881	919
15°	836	910	955
20°	826	920	991
25°	819	932	1021
30°	800	929	1035
35°	787	923	1021
40°	766	908	987
45°	741	887	940
50°	708	873	900
55°	669	859	869
60°	618	859	854
65°	569	867	854
70°	528	887	871
75°	488	951	896
80°	462	1040	924
85°	460	1118	889



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	30.5	3.0
10°-20°	91.3	9.0
20°-30°	143.0	14.2
30°-40°	172.9	17.1
40°-50°	174.4	17.3
50°-60°	155.3	15.4
60°-70°	124.2	12.3
70°-80°	85.7	8.5
80°-90°	32.2	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°	264.8	26.2
0°-40°	437.7	43.4
0°-60°	767.3	76.0
0°-90°	1009.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1009.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	318	318	318	318	318	
5°	314	314	319	325	324	30
15°	300	304	327	338	343	85
25°	276	286	314	337	344	127
35°	240	249	281	303	311	150
45°	195	205	233	246	247	150
55°	143	161	183	186	185	127
65°	89	119	136	134	134	89
75°	47	78	92	88	86	50
85°	15	32	36	31	29	16
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°	318.2	318.2	318.2	318.2	318.2	318.2	318.2	318.2	318.2	318.2	318.2
2.5°	315.0	316.1	316.1	316.1	316.1	316.1	316.1	316.1	316.1	316.1	316.1
5°	314.0	315.0	314.0	314.0	314.0	314.0	314.0	314.0	316.1	317.1	319.3
7.5°	310.8	311.8	310.8	310.8	311.8	311.8	314.0	317.1	319.3	320.3	320.3
10°	308.7	309.7	307.6	307.6	311.8	314.0	315.0	316.1	315.0	318.2	322.4
12.5°	304.3	304.3	302.2	306.6	310.8	310.8	309.7	311.8	317.1	322.4	325.7
15°	300.1	299.0	298.0	303.3	304.3	304.3	306.6	312.9	317.1	321.4	326.8
17.5°	294.8	293.7	293.7	299.0	299.0	302.2	306.6	310.8	316.1	321.4	323.5
20°	288.5	286.2	289.5	290.6	294.8	299.0	301.2	306.6	311.8	316.1	321.4
22.5°	282.0	278.8	283.1	283.1	290.6	292.7	295.9	302.2	306.6	312.9	318.2
25°	275.7	272.5	275.7	276.7	284.1	286.2	290.6	294.8	301.2	307.6	314.0
27.5°	267.1	262.8	266.0	269.3	275.7	278.8	280.9	287.4	294.8	301.2	307.6
30°	257.6	254.4	255.4	260.7	267.1	269.3	272.5	278.8	286.2	292.7	299.0
32.5°	249.0	244.8	244.8	251.2	257.6	258.6	262.8	270.4	276.7	284.1	291.6
35°	239.5	235.2	235.2	240.5	245.8	249.0	252.3	259.7	267.1	274.6	280.9
37.5°	228.8	224.5	225.6	230.9	235.2	238.4	241.6	249.0	255.4	263.9	271.4
40°	218.2	214.0	215.0	219.3	224.5	227.7	230.9	238.4	245.8	252.3	258.6
42.5°	206.4	203.3	204.3	208.6	212.9	217.1	220.3	226.7	234.2	240.5	245.8
45°	194.8	191.5	192.6	196.9	202.2	205.4	208.6	216.1	222.4	228.8	233.1
47.5°	182.0	179.9	180.9	185.2	191.5	193.6	196.9	204.3	210.7	216.1	221.4
50°	169.2	167.1	169.2	173.4	179.9	183.1	186.2	192.6	199.0	204.3	208.6
52.5°	156.4	154.3	157.6	162.9	168.1	171.3	175.6	182.0	187.3	192.6	195.9
55°	142.6	142.6	145.8	151.1	157.6	160.7	163.9	171.3	176.7	180.9	183.1
57.5°	128.8	129.8	134.1	140.5	146.9	150.0	154.3	159.7	165.0	169.2	171.3
60°	114.9	117.0	122.4	129.8	136.2	139.5	142.6	149.0	153.2	157.6	159.7
62.5°	102.2	105.4	111.7	118.1	125.6	128.8	132.0	138.3	142.6	144.8	146.9
65°	89.4	93.6	100.0	107.5	114.9	119.2	121.4	127.7	130.9	134.1	136.2
67.5°	77.7	83.0	90.5	97.9	104.3	108.6	111.7	117.0	120.2	122.4	124.5
70°	67.1	72.4	79.8	87.3	94.7	97.9	101.1	105.4	109.6	111.7	112.8
72.5°	56.4	62.7	71.3	77.7	85.2	88.4	90.5	95.8	98.9	101.1	102.2
75°	46.9	53.2	61.7	68.1	75.6	77.7	79.8	85.2	88.4	90.5	91.5
77.5°	38.3	44.7	52.2	58.5	65.0	68.1	70.3	74.5	76.6	78.7	79.8
80°	29.8	36.2	43.6	49.0	54.3	56.4	59.6	62.7	65.0	67.1	67.1
82.5°	22.3	27.6	34.1	38.3	42.5	44.7	46.9	51.1	52.2	53.2	52.2
85°	14.9	18.1	22.3	26.6	29.8	32.0	33.0	35.1	37.2	36.2	36.2
87.5°	7.4	8.5	11.7	12.8	14.9	16.0	17.0	18.1	17.0	17.0	16.0
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°	318.2	318.2	318.2	318.2	318.2	318.2	318.2	318.2	318.2	318.2
2.5°	316.1	316.1	316.1	316.1	316.1	316.1	316.1	316.1	316.1	316.1
5°	321.4	322.4	323.5	323.5	324.6	323.5	323.5	323.5	323.5	323.5
7.5°	319.3	321.4	322.4	324.6	325.7	326.8	327.8	328.9	328.9	328.9
10°	326.8	328.9	331.0	333.1	333.1	333.1	335.2	336.3	336.3	336.3
12.5°	327.8	331.0	334.2	336.3	337.3	338.4	338.4	338.4	339.5	339.5
15°	329.9	332.1	334.2	337.3	338.4	339.5	340.5	342.7	342.7	342.7
17.5°	328.9	332.1	335.2	338.4	340.5	341.6	343.8	345.9	345.9	345.9
20°	325.7	331.0	335.2	338.4	339.5	340.5	342.7	344.9	345.9	345.9
22.5°	323.5	327.8	333.1	337.3	338.4	339.5	341.6	343.8	345.9	345.9
25°	319.3	324.6	329.9	334.2	337.3	338.4	340.5	342.7	342.7	343.8
27.5°	314.0	319.3	325.7	328.9	329.9	332.1	335.2	337.3	338.4	339.5
30°	307.6	312.9	318.2	322.4	323.5	325.7	328.9	331.0	332.1	333.1
32.5°	298.0	304.3	308.7	314.0	316.1	317.1	319.3	321.4	322.4	323.5
35°	288.5	293.7	298.0	302.2	303.3	305.5	307.6	308.7	310.8	310.8
37.5°	276.7	282.0	286.2	289.5	290.6	291.6	294.8	295.9	296.9	296.9
40°	263.9	269.3	272.5	275.7	276.7	276.7	278.8	280.9	280.9	280.9
42.5°	251.2	254.4	257.6	259.7	261.8	261.8	262.8	263.9	263.9	263.9
45°	238.4	241.6	242.6	244.8	245.8	245.8	246.9	246.9	247.9	246.9
47.5°	224.5	226.7	227.7	229.8	229.8	229.8	229.8	230.9	230.9	230.9
50°	210.7	212.9	214.0	215.0	215.0	215.0	215.0	215.0	215.0	215.0
52.5°	198.0	199.0	200.1	200.1	200.1	200.1	200.1	199.0	199.0	199.0
55°	185.2	186.2	186.2	185.2	186.2	185.2	185.2	184.1	185.2	185.2
57.5°	172.4	173.4	172.4	172.4	172.4	171.3	171.3	171.3	171.3	170.3
60°	159.7	160.7	159.7	159.7	158.6	158.6	158.6	157.6	157.6	158.6
62.5°	149.0	147.9	146.9	146.9	145.8	145.8	144.8	144.8	144.8	144.8
65°	136.2	136.2	135.1	134.1	134.1	134.1	133.0	133.0	133.0	134.1
67.5°	125.6	124.5	123.5	122.4	122.4	121.4	121.4	121.4	121.4	121.4
70°	113.9	112.8	111.7	110.7	110.7	110.7	110.7	110.7	110.7	110.7
72.5°	102.2	101.1	101.1	100.0	100.0	100.0	98.9	98.9	98.9	100.0
75°	91.5	90.5	89.4	88.4	88.4	88.4	87.3	87.3	87.3	86.2
77.5°	79.8	78.7	76.6	75.6	74.5	74.5	73.4	73.4	73.4	72.4
80°	66.0	63.8	62.7	61.7	60.6	60.6	59.6	59.6	59.6	59.6
82.5°	51.1	50.1	49.0	47.9	45.7	45.7	44.7	45.7	45.7	44.7
85°	35.1	34.1	32.0	30.9	30.9	29.8	29.8	29.8	28.8	28.8
87.5°	16.0	14.9	14.9	13.9	12.8	12.8	12.8	11.7	11.7	11.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)