

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: P178981

Luminaire Tested: **22ALNG-LD4-20-UNV-EL7W-L850-CD1-U**

Issue Date: 3/3/2020



**Test Information**

Test Method: LM-79-08  
Report Number: P178981  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P34296)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22ALNG-LD4-20-UNV-EL7W-L850-CD1-U  
Description: METALUX ARCLINE 2X2 TROFFER LUMINAIRE  
  
Light Source: EATON LED 5000K  
Ballast/Driver: OSRAM ELECTRONIC DRIVER

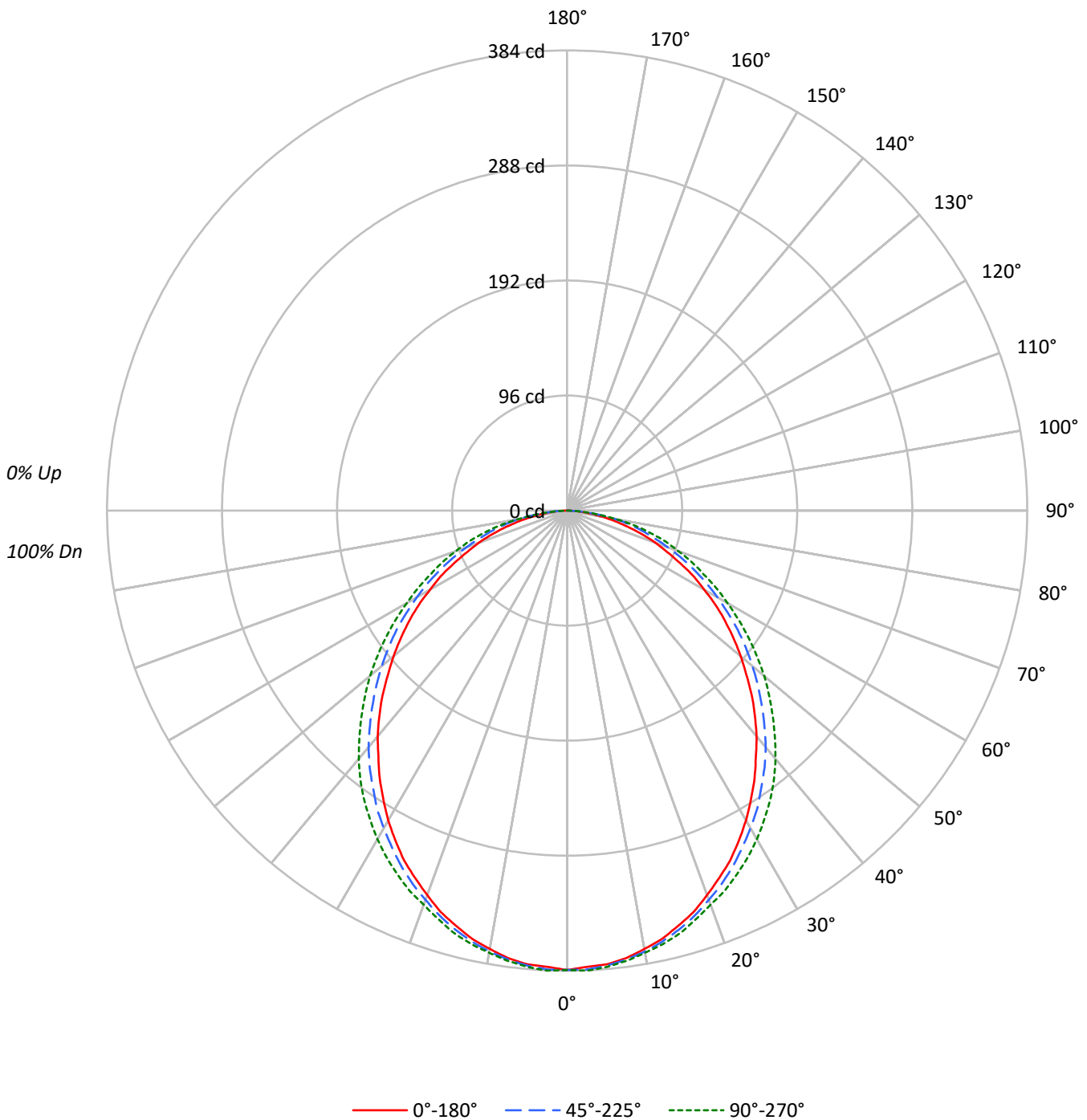
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 997.0 lumens  
Efficiency: N/A  
Efficacy: 160.8 lumens/watt  
Spacing Criteria (0/90/45): 1.17 / 1.23 / 1.31  
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 2' x H: 0.27')  
CIE Type: Direct  
  
Input Watts (W): 6.2  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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	109	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84
2	99	91	84	79	97	89	83	78	86	80	76	82	78	74	79	76	73	70
3	91	80	72	66	88	79	71	65	76	69	64	73	67	63	70	66	62	60
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	58	53	51
5	76	64	55	48	74	63	54	48	60	53	47	59	52	47	57	51	46	44
6	71	57	49	42	69	57	48	42	55	47	42	53	46	41	51	46	41	39
7	66	52	44	37	64	51	43	37	50	42	37	48	42	37	47	41	36	34
8	61	48	39	33	60	47	39	33	46	38	33	44	38	33	43	37	33	31
9	57	44	36	30	56	43	35	30	42	35	30	41	34	30	40	34	30	28
10	54	41	33	27	52	40	32	27	39	32	27	38	32	27	37	31	27	25

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	1031	1031	1031
5°	1015	1012	1020
10°	991	988	1000
15°	964	959	981
20°	932	925	955
25°	900	892	936
30°	860	856	913
35°	818	818	886
40°	776	780	853
45°	730	734	813
50°	681	688	774
55°	633	641	726
60°	576	586	674
65°	514	528	620
70°	450	459	567
75°	363	390	497
80°	264	303	367
85°	143	145	170



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	36.1	3.6
10°-20°	101.9	10.2
20°-30°	151.0	15.1
30°-40°	177.1	17.8
40°-50°	177.3	17.8
50°-60°	154.7	15.5
60°-70°	114.9	11.5
70°-80°	67.0	6.7
80°-90°	17.0	1.7
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°	289.0	29.0
0°-40°	466.2	46.8
0°-60°	798.1	80.1
0°-90°	997.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	997.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	383	383	383	383	383	
5°	380	380	381	382	382	36
15°	359	360	362	364	365	101
25°	322	323	327	333	335	148
35°	273	275	282	292	295	170
45°	218	220	230	238	243	168
55°	161	164	174	181	185	144
65°	104	108	117	122	126	104
75°	53	57	64	70	72	56
85°	12	14	15	14	14	14
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	383.3	383.3	383.3	383.3	383.3
2.5°	381.1	382.2	383.3	383.3	384.3
5°	380.1	380.1	381.1	382.2	382.2
7.5°	376.8	376.8	377.9	379.0	379.0
10°	371.5	371.5	373.6	374.7	374.7
12.5°	366.1	367.2	368.2	370.4	370.4
15°	358.6	359.7	361.8	363.9	365.0
17.5°	351.1	351.1	354.3	356.4	357.5
20°	341.4	342.5	345.7	348.9	350.0
22.5°	331.7	332.8	337.1	341.4	343.5
25°	322.1	323.2	327.4	332.8	335.0
27.5°	310.3	312.4	316.7	323.2	326.4
30°	298.5	300.6	306.0	313.5	316.7
32.5°	285.6	288.8	295.2	302.8	306.0
35°	272.7	274.8	282.4	292.0	295.2
37.5°	258.7	262.0	270.5	279.1	283.4
40°	245.9	248.0	257.7	266.3	270.5
42.5°	231.9	234.0	243.7	252.3	256.6
45°	217.9	220.1	229.7	238.3	242.6
47.5°	202.9	206.1	215.8	225.5	228.7
50°	189.0	193.2	201.8	210.4	214.7
52.5°	175.0	178.2	187.9	196.5	199.7
55°	161.0	164.3	173.9	181.4	184.7
57.5°	147.1	150.3	158.9	166.4	169.6
60°	132.1	135.3	144.9	151.4	154.6
62.5°	119.2	122.4	131.0	136.3	140.6
65°	104.1	108.4	117.0	122.4	125.6
67.5°	90.2	95.5	103.1	109.5	112.7
70°	78.4	82.7	89.1	95.5	98.8
72.5°	65.5	69.8	76.2	82.7	85.9
75°	52.6	56.9	64.4	69.8	71.9
77.5°	40.8	45.1	52.6	56.9	58.0
80°	30.1	34.4	40.8	41.9	41.9
82.5°	20.4	23.6	26.8	26.8	26.8
85°	11.8	14.0	15.0	14.0	14.0
87.5°	5.4	5.4	4.3	3.2	3.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)