

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: P178978

Luminaire Tested: **22ALNG-LD4-20-UNV-EL7W-L830-CD1-U**

Issue Date: 3/3/2020



**Test Information**

Test Method: LM-79-08  
Report Number: P178978  
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-L830-CD1-U  
Description: METALUX ARCLINE 2X2 TROFFER LUMINAIRE  
  
Light Source: EATON LED 3000K  
Ballast/Driver: OSRAM ELECTRONIC DRIVER

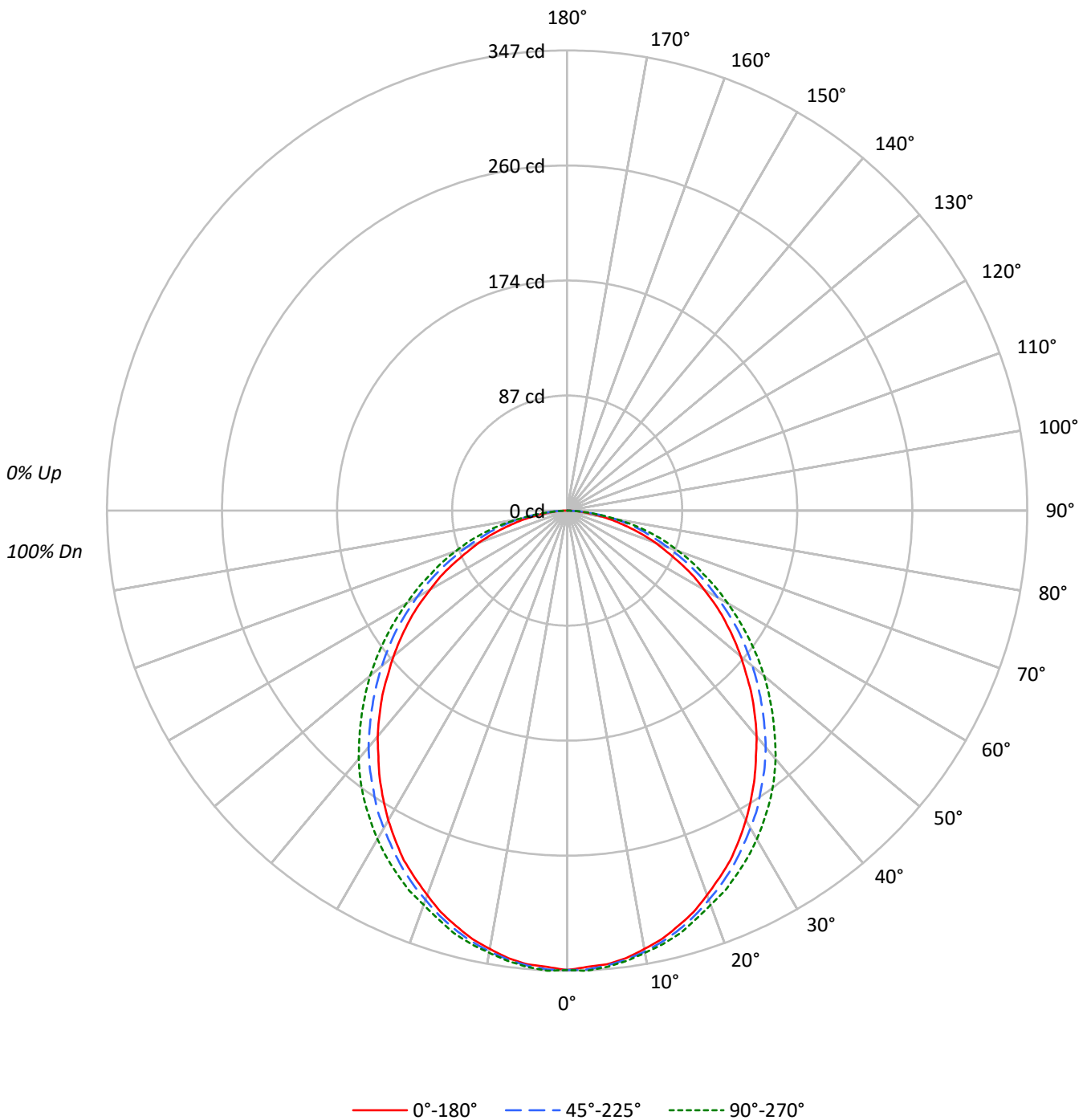
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 901.0 lumens  
Efficiency: N/A  
Efficacy: 145.3 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°	932	932	932
5°	917	915	922
10°	896	892	904
15°	871	867	887
20°	842	836	863
25°	813	807	845
30°	777	774	825
35°	739	739	801
40°	701	705	771
45°	660	663	735
50°	616	622	699
55°	572	579	656
60°	520	529	609
65°	464	478	560
70°	406	415	512
75°	328	353	449
80°	238	274	331
85°	130	132	153



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	32.6	3.6
10°-20°	92.1	10.2
20°-30°	136.4	15.1
30°-40°	160.1	17.8
40°-50°	160.2	17.8
50°-60°	139.8	15.5
60°-70°	103.8	11.5
70°-80°	60.5	6.7
80°-90°	15.4	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°	261.2	29.0
0°-40°	421.3	46.8
0°-60°	721.3	80.1
0°-90°	901.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	901.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	346	346	346	346	346	
5°	344	344	344	345	345	33
15°	324	325	327	329	330	91
25°	291	292	296	301	303	134
35°	246	248	255	264	267	154
45°	197	199	208	215	219	152
55°	146	148	157	164	167	130
65°	94	98	106	111	114	94
75°	48	51	58	63	65	51
85°	11	13	14	13	13	13
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	346.4	346.4	346.4	346.4	346.4
2.5°	344.4	345.4	346.4	346.4	347.3
5°	343.5	343.5	344.4	345.4	345.4
7.5°	340.5	340.5	341.5	342.5	342.5
10°	335.7	335.7	337.6	338.6	338.6
12.5°	330.8	331.8	332.8	334.7	334.7
15°	324.1	325.0	327.0	328.9	329.9
17.5°	317.3	317.3	320.2	322.1	323.1
20°	308.5	309.5	312.4	315.3	316.3
22.5°	299.8	300.8	304.6	308.5	310.5
25°	291.1	292.0	295.9	300.8	302.7
27.5°	280.4	282.3	286.2	292.0	294.9
30°	269.7	271.7	276.5	283.3	286.2
32.5°	258.1	261.0	266.8	273.6	276.5
35°	246.4	248.4	255.2	263.9	266.8
37.5°	233.8	236.7	244.5	252.3	256.1
40°	222.2	224.1	232.9	240.6	244.5
42.5°	209.6	211.5	220.2	228.0	231.9
45°	197.0	198.9	207.6	215.4	219.3
47.5°	183.4	186.3	195.0	203.7	206.7
50°	170.8	174.6	182.4	190.2	194.0
52.5°	158.1	161.1	169.8	177.5	180.5
55°	145.5	148.4	157.2	164.0	166.9
57.5°	132.9	135.8	143.6	150.4	153.3
60°	119.3	122.2	131.0	136.8	139.7
62.5°	107.7	110.6	118.4	123.2	127.1
65°	94.1	98.0	105.8	110.6	113.5
67.5°	81.5	86.3	93.1	99.0	101.9
70°	70.8	74.7	80.5	86.3	89.3
72.5°	59.2	63.1	68.9	74.7	77.6
75°	47.5	51.4	58.2	63.1	65.0
77.5°	36.9	40.7	47.5	51.4	52.4
80°	27.2	31.0	36.9	37.8	37.8
82.5°	18.4	21.3	24.3	24.3	24.3
85°	10.7	12.6	13.6	12.6	12.6
87.5°	4.9	4.9	3.9	2.9	2.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)