

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: P178996

Luminaire Tested: **22ALNG-LD4-31-UNV-EL7W-L840-CD1-U**

Issue Date: 3/3/2020



**Test Information**

Test Method: LM-79-08  
Report Number: P178996  
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-LD4-31-UNV-EL7W-L840-CD1-U  
Description: METALUX ARCLINE 2X2 TROFFER LUMINAIRE  
  
Light Source: EATON LED 4000K  
Ballast/Driver: OSRAM ELECTRONIC DRIVER

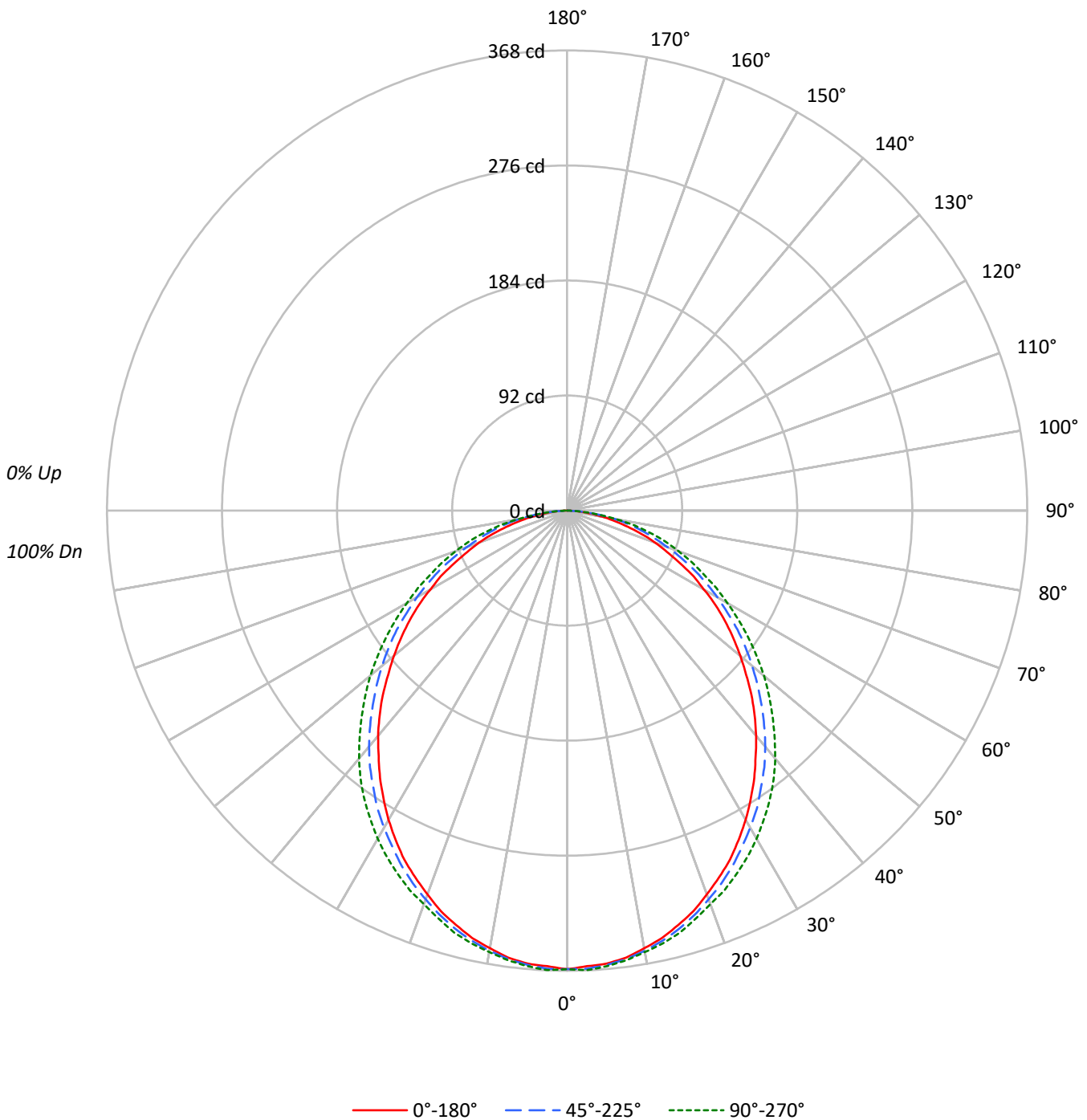
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 954.0 lumens  
Efficiency: N/A  
Efficacy: 153.9 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°	987	987	987
5°	971	969	976
10°	948	945	957
15°	922	917	939
20°	892	886	914
25°	861	854	895
30°	823	819	873
35°	783	783	848
40°	742	746	817
45°	699	702	778
50°	652	658	741
55°	606	613	695
60°	551	561	645
65°	491	506	593
70°	430	440	542
75°	347	374	475
80°	252	290	351
85°	137	139	162



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	34.6	3.6
10°-20°	97.5	10.2
20°-30°	144.5	15.1
30°-40°	169.5	17.8
40°-50°	169.6	17.8
50°-60°	148.0	15.5
60°-70°	109.9	11.5
70°-80°	64.1	6.7
80°-90°	16.3	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°	276.5	29.0
0°-40°	446.0	46.8
0°-60°	763.7	80.1
0°-90°	954.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	954.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	367	367	367	367	367	
5°	364	364	365	366	366	34
15°	343	344	346	348	349	97
25°	308	309	313	318	320	142
35°	261	263	270	279	282	163
45°	208	211	220	228	232	161
55°	154	157	166	174	177	138
65°	100	104	112	117	120	99
75°	50	54	62	67	69	54
85°	11	13	14	13	13	14
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	366.7	366.7	366.7	366.7	366.7
2.5°	364.7	365.7	366.7	366.7	367.8
5°	363.7	363.7	364.7	365.7	365.7
7.5°	360.6	360.6	361.6	362.6	362.6
10°	355.4	355.4	357.5	358.5	358.5
12.5°	350.3	351.3	352.4	354.4	354.4
15°	343.1	344.1	346.2	348.3	349.3
17.5°	335.9	335.9	339.0	341.1	342.1
20°	326.7	327.7	330.8	333.9	334.9
22.5°	317.4	318.5	322.6	326.7	328.7
25°	308.2	309.2	313.3	318.5	320.5
27.5°	296.9	298.9	303.0	309.2	312.3
30°	285.6	287.6	292.8	300.0	303.0
32.5°	273.3	276.3	282.5	289.7	292.8
35°	260.9	263.0	270.2	279.4	282.5
37.5°	247.6	250.7	258.9	267.1	271.2
40°	235.2	237.3	246.5	254.8	258.9
42.5°	221.9	223.9	233.2	241.4	245.5
45°	208.5	210.6	219.8	228.1	232.2
47.5°	194.2	197.2	206.5	215.7	218.8
50°	180.8	184.9	193.1	201.3	205.5
52.5°	167.4	170.5	179.8	188.0	191.1
55°	154.1	157.2	166.4	173.6	176.7
57.5°	140.7	143.8	152.0	159.2	162.3
60°	126.4	129.4	138.7	144.8	147.9
62.5°	114.0	117.1	125.3	130.5	134.6
65°	99.6	103.8	112.0	117.1	120.2
67.5°	86.3	91.4	98.6	104.8	107.9
70°	75.0	79.1	85.3	91.4	94.5
72.5°	62.7	66.8	72.9	79.1	82.2
75°	50.3	54.4	61.6	66.8	68.8
77.5°	39.0	43.1	50.3	54.4	55.5
80°	28.8	32.9	39.0	40.1	40.1
82.5°	19.5	22.6	25.7	25.7	25.7
85°	11.3	13.4	14.4	13.4	13.4
87.5°	5.1	5.1	4.1	3.1	3.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)