

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: P178985

Luminaire Tested: **22ALNG-LD4-20-UNV-EL14W-L850-CD1-U**

Issue Date: 3/3/2020



**Test Information**

Test Method: LM-79-08  
Report Number: P178985  
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-EL14W-L850-CD1-U  
Description: METALUX ARCLINE 2X2 TROFFER LUMINAIRE  
  
Light Source: EATON LED 5000K  
Ballast/Driver: OSRAM ELECTRONIC DRIVER

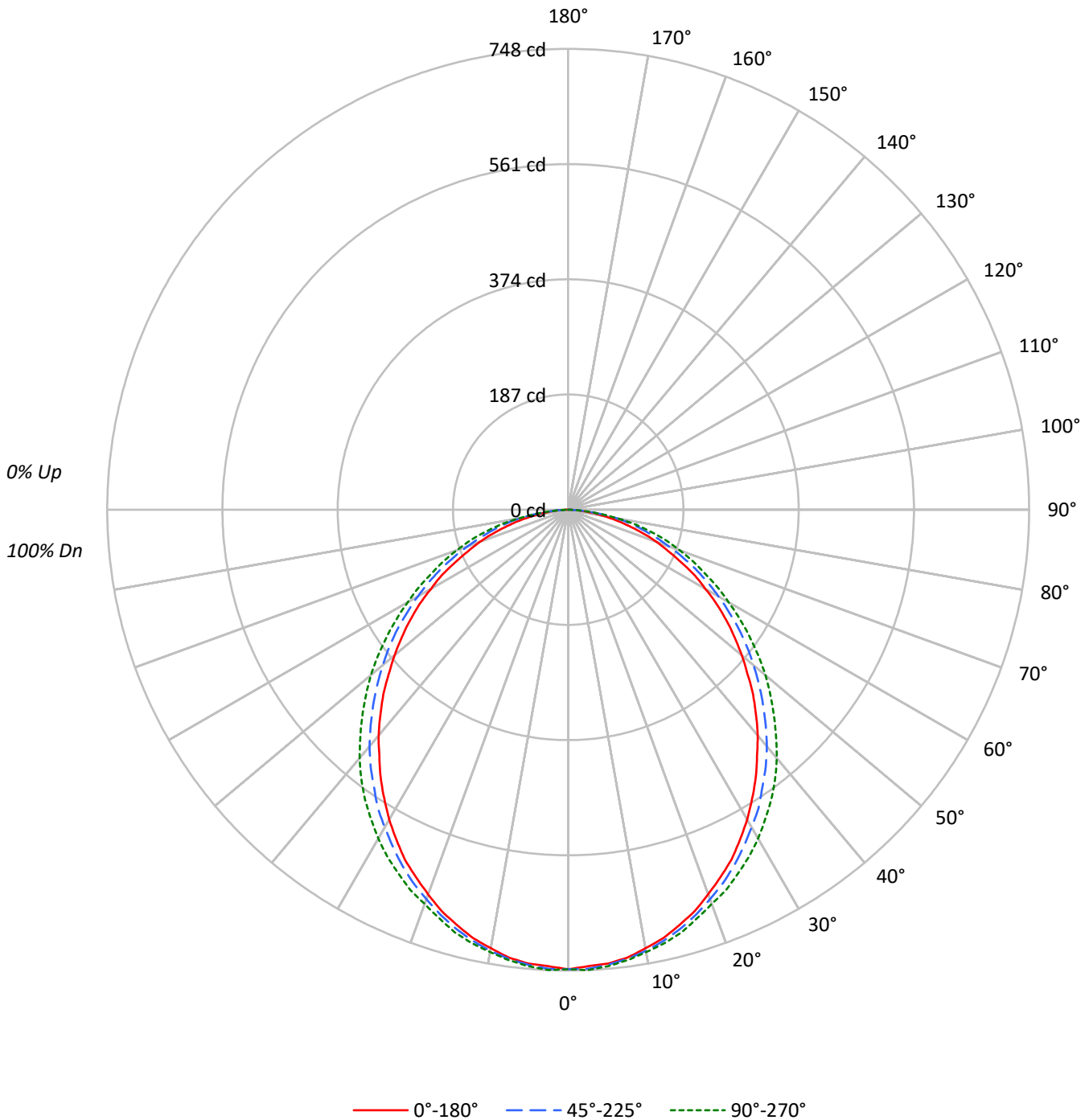
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1940.0 lumens  
Efficiency: N/A  
Efficacy: 151.6 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): 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	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°	2007	2007	2007
5°	1974	1970	1985
10°	1929	1922	1946
15°	1876	1866	1910
20°	1813	1801	1859
25°	1750	1737	1820
30°	1674	1666	1776
35°	1592	1591	1724
40°	1509	1517	1660
45°	1421	1428	1582
50°	1325	1339	1506
55°	1232	1247	1413
60°	1120	1140	1311
65°	1000	1028	1206
70°	874	894	1102
75°	707	760	967
80°	513	590	714
85°	279	283	330



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	70.3	3.6
10°-20°	198.3	10.2
20°-30°	293.8	15.1
30°-40°	344.7	17.8
40°-50°	345.0	17.8
50°-60°	301.0	15.5
60°-70°	223.5	11.5
70°-80°	130.4	6.7
80°-90°	33.1	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°	562.4	29.0
0°-40°	907.1	46.8
0°-60°	1553.0	80.1
0°-90°	1940.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1940.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	746	746	746	746	746	
5°	740	740	742	744	744	70
15°	698	700	704	708	710	197
25°	627	629	637	648	652	288
35°	531	535	549	568	574	332
45°	424	428	447	464	472	327
55°	313	320	338	353	359	280
65°	203	211	228	238	244	202
75°	102	111	125	136	140	109
85°	23	27	29	27	27	28
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	745.8	745.8	745.8	745.8	745.8
2.5°	741.6	743.7	745.8	745.8	747.9
5°	739.5	739.5	741.6	743.7	743.7
7.5°	733.3	733.3	735.3	737.4	737.4
10°	722.8	722.8	727.0	729.1	729.1
12.5°	712.4	714.4	716.5	720.7	720.7
15°	697.7	699.8	704.0	708.2	710.3
17.5°	683.1	683.1	689.4	693.6	695.6
20°	664.3	666.4	672.7	678.9	681.0
22.5°	645.5	647.6	656.0	664.3	668.5
25°	626.7	628.8	637.2	647.6	651.8
27.5°	603.7	607.9	616.3	628.8	635.1
30°	580.8	584.9	595.4	610.0	616.3
32.5°	555.7	562.0	574.5	589.1	595.4
35°	530.6	534.8	549.4	568.2	574.5
37.5°	503.5	509.7	526.4	543.1	551.5
40°	478.4	482.6	501.4	518.1	526.4
42.5°	451.2	455.4	474.2	490.9	499.3
45°	424.1	428.3	447.1	463.8	472.1
47.5°	394.8	401.1	419.9	438.7	445.0
50°	367.7	376.0	392.7	409.5	417.8
52.5°	340.5	346.8	365.6	382.3	388.6
55°	313.4	319.6	338.4	353.0	359.3
57.5°	286.2	292.5	309.2	323.8	330.1
60°	257.0	263.2	282.0	294.6	300.8
62.5°	231.9	238.1	254.9	265.3	273.7
65°	202.6	211.0	227.7	238.1	244.4
67.5°	175.5	185.9	200.5	213.1	219.3
70°	152.5	160.9	173.4	185.9	192.2
72.5°	127.4	135.8	148.3	160.9	167.1
75°	102.4	110.7	125.3	135.8	140.0
77.5°	79.4	87.7	102.4	110.7	112.8
80°	58.5	66.8	79.4	81.5	81.5
82.5°	39.7	46.0	52.2	52.2	52.2
85°	23.0	27.2	29.2	27.2	27.2
87.5°	10.4	10.4	8.4	6.3	6.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)