

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: P166510

Luminaire Tested: **24ALNG-LD4-80-UNV-L830-CD1-U**

Test Date: 03/08/15



**Test Information**

Test Method: LM-79-08  
Report Number: P166510  
Test Lab: INNOVATION CENTER-P2  
Test Date: 03/08/15  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24ALNG-LD4-80-UNV-L830-CD1-U  
Description: METALUX ARCLINE 2X4 LED FIXTURE  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25830)  
Light Source: -  
Ballast/Driver: -

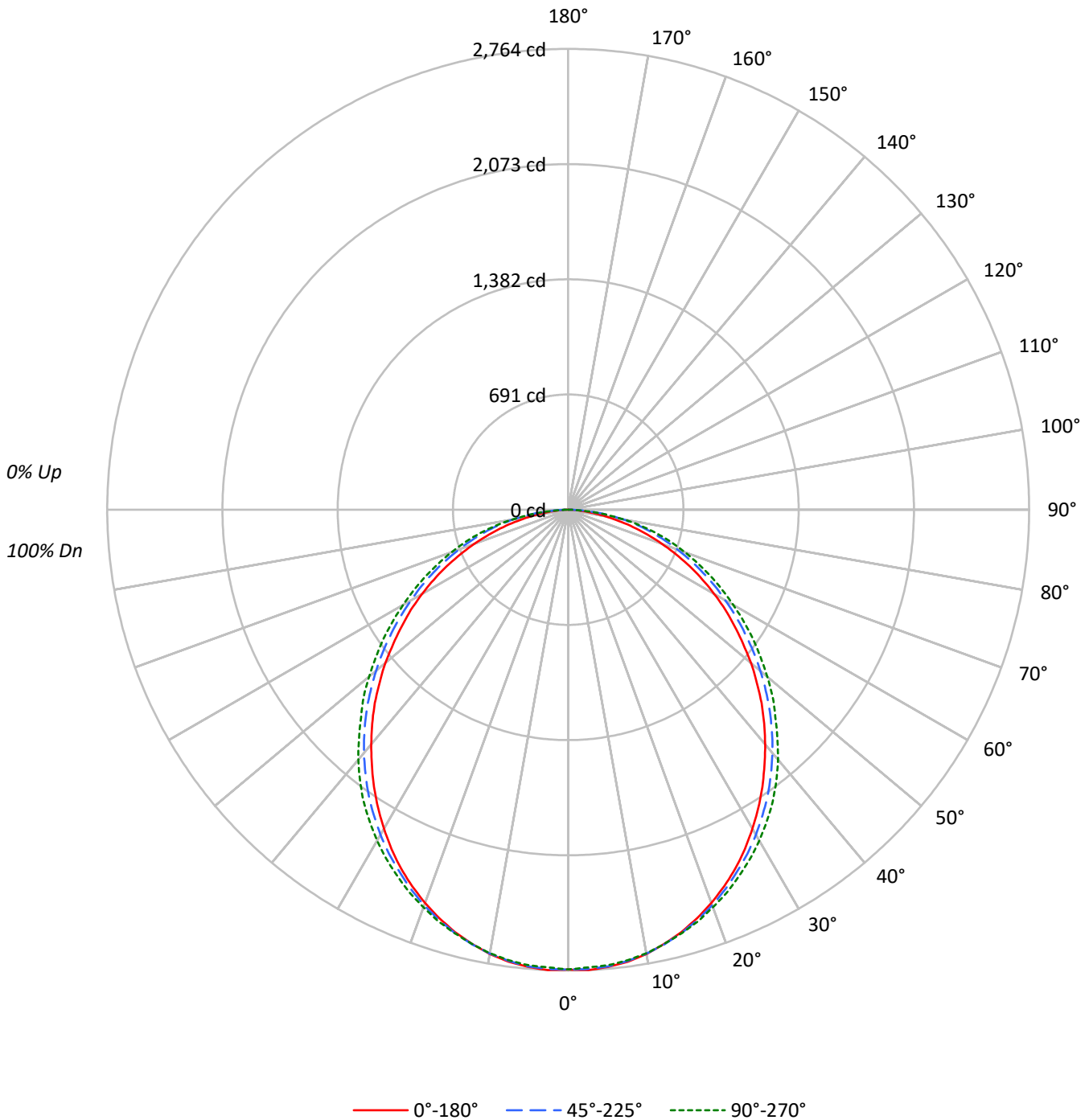
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7411.0 lumens  
Efficiency: N/A  
Efficacy: 90.2 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.24 / 1.33  
Luminous Opening: Rectangular (W 1.92' x L: 3.92' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 82.2  
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	109	104	100	96	106	102	98	94	97	94	91		94	91	88		90	88	86	84
2	99	91	84	78	96	89	83	77	85	80	75		82	78	74		79	75	72	70
3	90	80	72	65	88	78	71	64	75	69	63		72	67	62		70	65	61	59
4	83	71	62	55	80	69	61	55	67	60	54		65	58	53		62	57	53	50
5	76	63	54	48	74	62	54	47	60	53	47		58	52	46		56	50	46	44
6	70	57	48	42	68	56	48	42	54	47	41		53	46	41		51	45	40	38
7	65	52	43	37	64	51	43	37	49	42	36		48	41	36		47	41	36	34
8	61	47	39	33	59	47	38	33	45	38	33		44	37	32		43	37	32	30
9	57	43	35	30	55	43	35	30	42	35	29		41	34	29		40	34	29	27
10	53	40	32	27	52	40	32	27	39	32	27		38	31	27		37	31	27	25

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

	0°	45°	90°
0°	3954	3954	3954
5°	3961	3958	3948
10°	3940	3936	3933
15°	3893	3901	3904
20°	3830	3853	3871
25°	3755	3789	3836
30°	3658	3727	3795
35°	3554	3653	3743
40°	3439	3567	3664
45°	3324	3468	3562
50°	3193	3356	3476
55°	3046	3236	3382
60°	2898	3122	3276
65°	2731	3022	3196
70°	2513	2923	3118
75°	2236	2846	3049
80°	1859	2747	2788
85°	1369	2295	2093



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	260.6	3.5
10°-20°	739.7	10.0
20°-30°	1102.8	14.9
30°-40°	1301.0	17.6
40°-50°	1312.1	17.7
50°-60°	1152.7	15.6
60°-70°	872.1	11.8
70°-80°	523.3	7.1
80°-90°	146.5	2.0
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°	2103.1	28.4
0°-40°	3404.2	45.9
0°-60°	5869.0	79.2
0°-90°	7411.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7411.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2757	2757	2757	2757	2757	
5°	2752	2740	2750	2745	2743	261
15°	2623	2613	2628	2630	2630	739
25°	2373	2371	2395	2410	2424	1092
35°	2031	2036	2087	2119	2138	1269
45°	1639	1651	1710	1744	1757	1263
55°	1218	1245	1294	1331	1353	1091
65°	805	832	891	925	942	796
75°	404	450	514	543	550	429
85°	83	125	140	132	127	103
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2757.3	2757.3	2757.3	2757.3	2757.3
2.5°	2764.5	2749.9	2757.3	2757.3	2747.5
5°	2752.3	2740.1	2749.9	2745.0	2742.6
7.5°	2735.2	2720.6	2730.3	2727.9	2725.4
10°	2705.9	2691.2	2703.4	2701.0	2701.0
12.5°	2666.7	2656.9	2669.1	2666.7	2666.7
15°	2622.7	2612.9	2627.6	2630.0	2630.0
17.5°	2568.9	2561.5	2578.7	2583.5	2588.4
20°	2510.2	2505.2	2524.9	2527.3	2537.1
22.5°	2444.1	2439.2	2463.6	2473.4	2485.7
25°	2373.2	2370.7	2395.2	2409.8	2424.5
27.5°	2294.8	2294.8	2326.7	2346.3	2360.9
30°	2209.2	2214.1	2250.8	2275.3	2292.4
32.5°	2121.2	2128.5	2170.0	2199.4	2216.6
35°	2030.6	2035.5	2086.9	2118.7	2138.3
37.5°	1932.7	1945.0	1996.4	2030.6	2050.2
40°	1837.3	1849.5	1905.8	1937.6	1957.3
42.5°	1739.4	1751.7	1807.9	1844.7	1856.9
45°	1639.2	1651.4	1710.2	1744.4	1756.6
47.5°	1534.0	1553.6	1607.4	1641.6	1663.7
50°	1431.3	1448.3	1504.6	1538.9	1558.4
52.5°	1321.2	1345.6	1399.4	1433.6	1453.2
55°	1218.4	1245.3	1294.3	1330.9	1352.9
57.5°	1118.0	1140.1	1191.5	1228.1	1247.7
60°	1010.4	1037.3	1088.7	1123.0	1142.5
62.5°	907.6	934.6	990.8	1025.1	1042.2
65°	804.9	831.8	890.6	924.8	941.9
67.5°	699.7	731.5	792.7	826.9	841.6
70°	599.4	636.1	697.3	731.5	743.7
72.5°	499.1	540.7	604.3	636.1	648.3
75°	403.7	450.2	513.8	543.2	550.4
77.5°	310.8	362.1	423.2	447.7	450.2
80°	225.1	276.5	332.7	340.0	337.7
82.5°	146.8	200.6	237.3	229.9	229.9
85°	83.2	124.8	139.5	132.1	127.2
87.5°	36.7	53.8	48.9	41.6	39.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)