

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: P166501

Luminaire Tested: **24ALNG-LD4-31-UNV-L830-CD1-U**

Test Date: 03/08/15



**Test Information**

Test Method: LM-79-08  
Report Number: P166501  
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-LD4-31-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: -

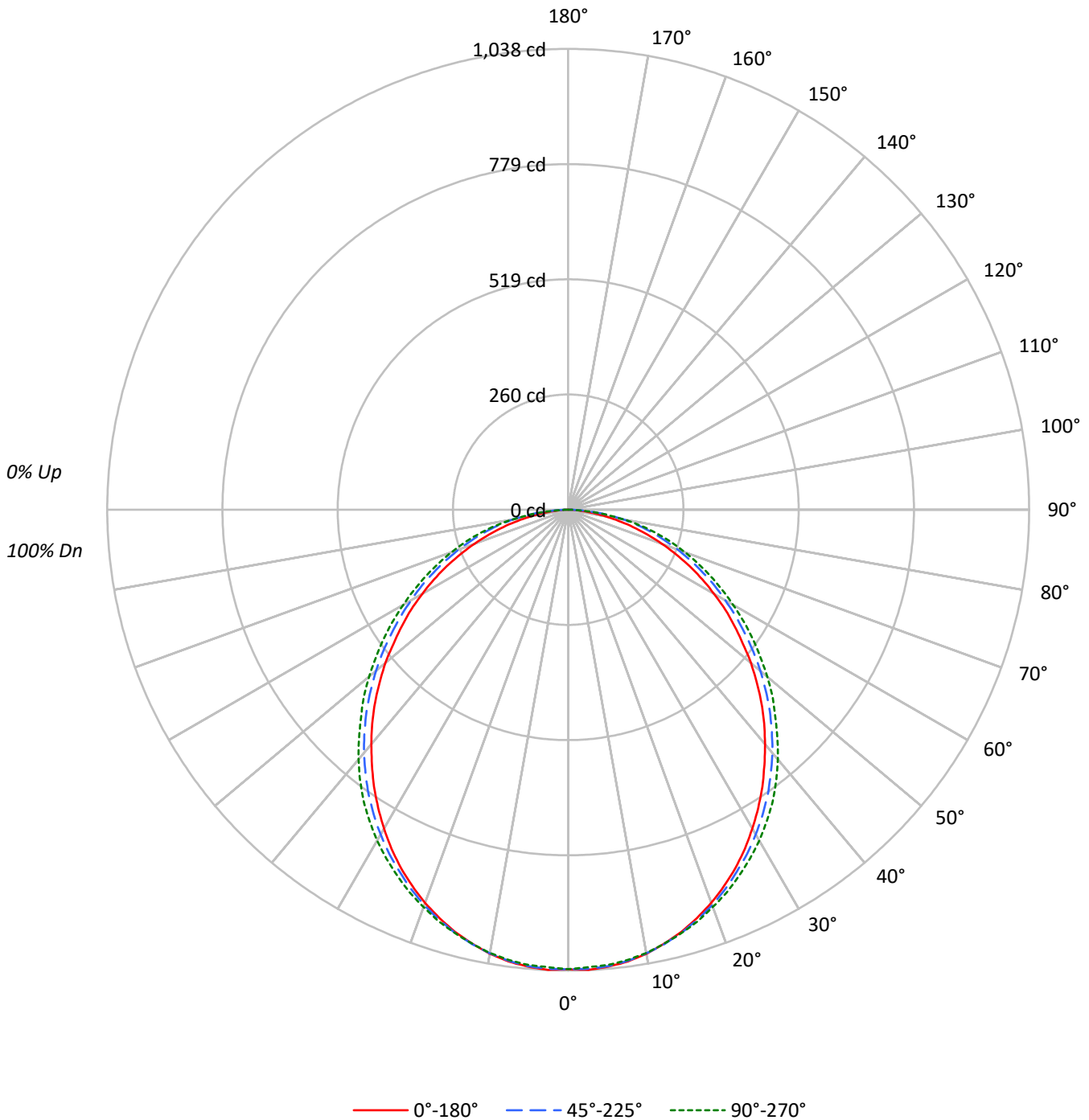
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2781.7 lumens  
Efficiency: N/A  
Efficacy: 108.7 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): 25.6  
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

TEST NUMBER: P166501

CATALOG NUMBER: 24ALNG-LD4-31-UNV-L830-CD1-U

### 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°	1484	1484	1484
5°	1487	1486	1482
10°	1479	1477	1476
15°	1461	1464	1465
20°	1438	1446	1453
25°	1409	1422	1440
30°	1373	1399	1425
35°	1334	1371	1405
40°	1291	1339	1375
45°	1248	1302	1337
50°	1198	1260	1305
55°	1143	1214	1269
60°	1088	1172	1230
65°	1025	1134	1199
70°	943	1097	1170
75°	839	1068	1145
80°	698	1031	1046
85°	513	860	786



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	97.8	3.5
10°-20°	277.7	10.0
20°-30°	413.9	14.9
30°-40°	488.3	17.6
40°-50°	492.5	17.7
50°-60°	432.7	15.6
60°-70°	327.4	11.8
70°-80°	196.4	7.1
80°-90°	55.0	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°	789.4	28.4
0°-40°	1277.7	45.9
0°-60°	2202.9	79.2
0°-90°	2781.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2781.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1035	1035	1035	1035	1035	
5°	1033	1028	1032	1030	1029	98
15°	984	981	986	987	987	277
25°	891	890	899	904	910	410
35°	762	764	783	795	803	476
45°	615	620	642	655	659	474
55°	457	467	486	500	508	409
65°	302	312	334	347	354	299
75°	152	169	193	204	207	161
85°	31	47	52	50	48	39
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1034.9	1034.9	1034.9	1034.9	1034.9
2.5°	1037.7	1032.2	1034.9	1034.9	1031.3
5°	1033.1	1028.5	1032.2	1030.3	1029.4
7.5°	1026.7	1021.1	1024.8	1023.9	1023.0
10°	1015.6	1010.1	1014.7	1013.8	1013.8
12.5°	1000.9	997.3	1001.9	1000.9	1000.9
15°	984.4	980.7	986.3	987.2	987.2
17.5°	964.2	961.5	967.9	969.7	971.6
20°	942.2	940.3	947.7	948.6	952.3
22.5°	917.4	915.5	924.7	928.4	933.0
25°	890.8	889.8	899.0	904.5	910.0
27.5°	861.4	861.4	873.3	880.6	886.2
30°	829.2	831.1	844.8	854.0	860.4
32.5°	796.2	798.9	814.5	825.6	832.0
35°	762.2	764.0	783.3	795.2	802.6
37.5°	725.5	730.0	749.3	762.2	769.5
40°	689.6	694.2	715.4	727.3	734.6
42.5°	652.9	657.5	678.6	692.4	697.0
45°	615.3	619.9	641.9	654.7	659.3
47.5°	575.8	583.1	603.3	616.2	624.4
50°	537.2	543.6	564.8	577.6	585.0
52.5°	495.9	505.1	525.3	538.1	545.5
55°	457.3	467.4	485.8	499.6	507.8
57.5°	419.7	427.9	447.2	461.0	468.3
60°	379.3	389.4	408.6	421.5	428.8
62.5°	340.7	350.8	371.9	384.8	391.2
65°	302.1	312.2	334.3	347.1	353.5
67.5°	262.6	274.6	297.5	310.4	315.9
70°	225.0	238.8	261.7	274.6	279.2
72.5°	187.3	202.9	226.8	238.8	243.3
75°	151.5	169.0	192.8	203.9	206.6
77.5°	116.6	135.9	158.9	168.0	169.0
80°	84.5	103.8	124.9	127.6	126.7
82.5°	55.1	75.3	89.1	86.3	86.3
85°	31.2	46.8	52.3	49.6	47.8
87.5°	13.8	20.2	18.4	15.6	14.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)