

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: P166504

Luminaire Tested: **24ALNG-LD4-45-UNV-L830-CD1-U**

Test Date: 03/08/15



**Test Information**

Test Method: LM-79-08  
Report Number: P166504  
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-LD4-45-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: -

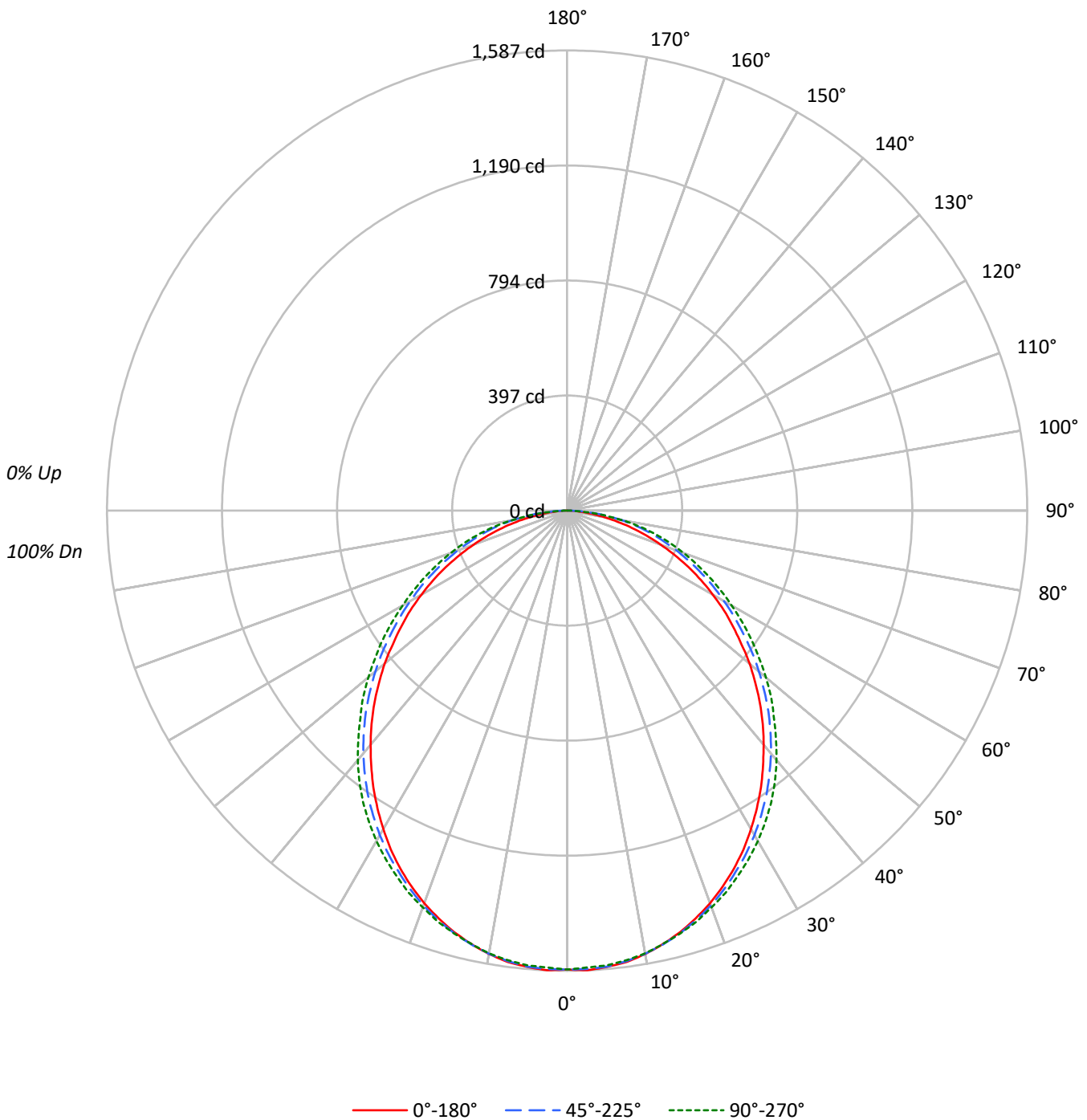
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4253.8 lumens  
Efficiency: N/A  
Efficacy: 101.8 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): 41.8  
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	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°	2269	2269	2269
5°	2274	2272	2266
10°	2261	2259	2257
15°	2235	2239	2241
20°	2198	2211	2222
25°	2155	2175	2202
30°	2100	2139	2179
35°	2040	2097	2148
40°	1974	2048	2103
45°	1908	1990	2045
50°	1833	1927	1995
55°	1748	1857	1941
60°	1663	1792	1881
65°	1567	1734	1834
70°	1443	1678	1790
75°	1284	1634	1751
80°	1067	1577	1600
85°	786	1318	1201



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	149.6	3.5
10°-20°	424.6	10.0
20°-30°	633.0	14.9
30°-40°	746.8	17.6
40°-50°	753.2	17.7
50°-60°	661.6	15.6
60°-70°	500.6	11.8
70°-80°	300.4	7.1
80°-90°	84.1	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°	1207.1	28.4
0°-40°	1953.9	45.9
0°-60°	3368.7	79.2
0°-90°	4253.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4253.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1583	1583	1583	1583	1583	
5°	1580	1573	1578	1576	1574	150
15°	1505	1500	1508	1510	1510	424
25°	1362	1361	1375	1383	1392	627
35°	1166	1168	1198	1216	1227	728
45°	941	948	982	1001	1008	725
55°	699	715	743	764	776	626
65°	462	477	511	531	541	457
75°	232	258	295	312	316	246
85°	48	72	80	76	73	59
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1582.6	1582.6	1582.6	1582.6	1582.6
2.5°	1586.8	1578.4	1582.6	1582.6	1577.0
5°	1579.8	1572.8	1578.4	1575.6	1574.1
7.5°	1569.9	1561.6	1567.2	1565.8	1564.3
10°	1553.1	1544.7	1551.7	1550.3	1550.3
12.5°	1530.6	1525.0	1532.1	1530.6	1530.6
15°	1505.4	1499.8	1508.2	1509.6	1509.6
17.5°	1474.5	1470.3	1480.1	1482.9	1485.7
20°	1440.8	1438.0	1449.2	1450.6	1456.2
22.5°	1402.9	1400.0	1414.1	1419.7	1426.8
25°	1362.1	1360.7	1374.8	1383.2	1391.6
27.5°	1317.2	1317.2	1335.5	1346.7	1355.1
30°	1268.1	1270.8	1292.0	1306.0	1315.8
32.5°	1217.5	1221.7	1245.6	1262.5	1272.3
35°	1165.5	1168.4	1197.8	1216.1	1227.3
37.5°	1109.4	1116.4	1145.9	1165.5	1176.8
40°	1054.6	1061.6	1093.9	1112.2	1123.4
42.5°	998.5	1005.4	1037.8	1058.8	1065.9
45°	940.9	947.9	981.6	1001.2	1008.3
47.5°	880.5	891.7	922.6	942.3	954.9
50°	821.5	831.3	863.7	883.3	894.5
52.5°	758.3	772.4	803.2	822.9	834.1
55°	699.3	714.8	742.8	763.9	776.5
57.5°	641.7	654.4	683.9	705.0	716.2
60°	580.0	595.4	624.9	644.6	655.8
62.5°	521.0	536.5	568.7	588.4	598.2
65°	462.0	477.4	511.1	530.8	540.6
67.5°	401.7	419.8	455.0	474.7	483.0
70°	344.1	365.1	400.2	419.8	426.9
72.5°	286.5	310.4	346.8	365.1	372.1
75°	231.7	258.4	294.9	311.8	316.0
77.5°	178.3	207.8	243.0	256.9	258.4
80°	129.2	158.7	191.0	195.2	193.8
82.5°	84.3	115.2	136.2	132.0	132.0
85°	47.8	71.6	80.1	75.9	73.0
87.5°	21.0	30.9	28.1	23.9	22.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)