

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: P166506

Luminaire Tested: **24ALNG-LD4-55-UNV-L830-CD1-U**

Test Date: 03/08/15



Test Information

Test Method: LM-79-08
Report Number: P166506
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-LD4-55-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

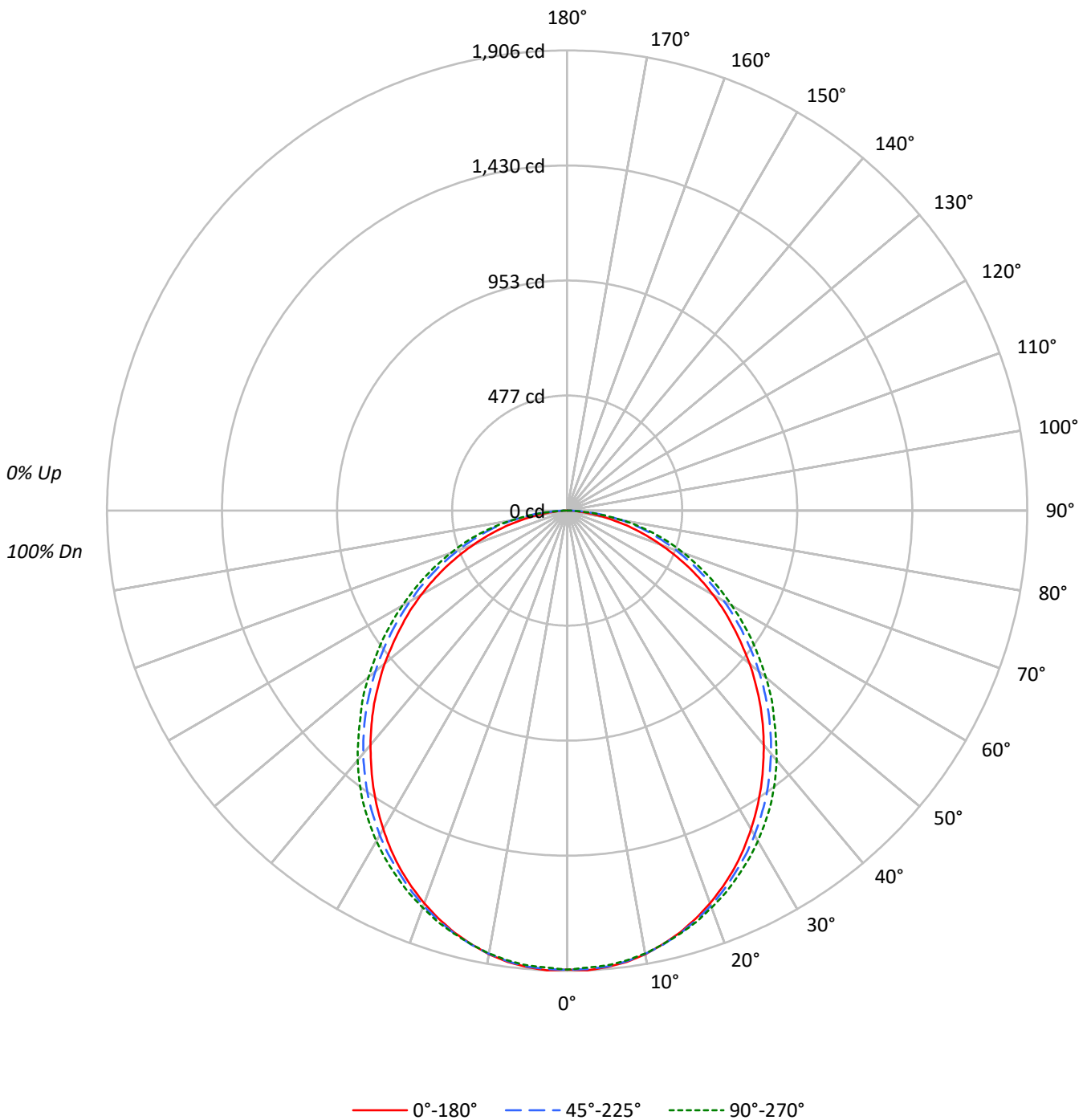
Lumens per Lamp: N/A
Luminaire Lumens: 5110.5 lumens
Efficiency: N/A
Efficacy: 100.4 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.24 / 1.33
Luminous Opening: Rectangular (W 1.92' x L: 3.92' x H: 0')
CIE Type: Direct

Input Watts (W): 50.9
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° | 2726 | 2726 | 2726 |
| 5° | 2732 | 2729 | 2722 |
| 10° | 2717 | 2714 | 2712 |
| 15° | 2685 | 2690 | 2692 |
| 20° | 2641 | 2657 | 2670 |
| 25° | 2589 | 2613 | 2645 |
| 30° | 2522 | 2570 | 2617 |
| 35° | 2451 | 2519 | 2581 |
| 40° | 2372 | 2460 | 2526 |
| 45° | 2292 | 2391 | 2456 |
| 50° | 2202 | 2315 | 2397 |
| 55° | 2100 | 2231 | 2332 |
| 60° | 1998 | 2153 | 2259 |
| 65° | 1883 | 2084 | 2204 |
| 70° | 1733 | 2016 | 2150 |
| 75° | 1542 | 1963 | 2103 |
| 80° | 1282 | 1895 | 1922 |
| 85° | 944 | 1581 | 1443 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 179.7 | 3.5 |
| 10°-20° | 510.1 | 10.0 |
| 20°-30° | 760.5 | 14.9 |
| 30°-40° | 897.2 | 17.6 |
| 40°-50° | 904.8 | 17.7 |
| 50°-60° | 794.9 | 15.6 |
| 60°-70° | 601.4 | 11.8 |
| 70°-80° | 360.8 | 7.1 |
| 80°-90° | 101.1 | 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° | 1450.3 | 28.4 |
| 0°-40° | 2347.5 | 45.9 |
| 0°-60° | 4047.2 | 79.2 |
| 0°-90° | 5110.5 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 5110.5 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 1901 | 1901 | 1901 | 1901 | 1901 | |
| 5° | 1898 | 1890 | 1896 | 1893 | 1891 | 180 |
| 15° | 1809 | 1802 | 1812 | 1814 | 1814 | 510 |
| 25° | 1636 | 1635 | 1652 | 1662 | 1672 | 753 |
| 35° | 1400 | 1404 | 1439 | 1461 | 1474 | 875 |
| 45° | 1130 | 1139 | 1179 | 1203 | 1211 | 871 |
| 55° | 840 | 859 | 892 | 918 | 933 | 752 |
| 65° | 555 | 574 | 614 | 638 | 650 | 549 |
| 75° | 278 | 310 | 354 | 375 | 380 | 295 |
| 85° | 57 | 86 | 96 | 91 | 88 | 71 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P166506

CATALOG NUMBER: 24ALNG-LD4-55-UNV-L830-CD1-U

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 1901.3 | 1901.3 | 1901.3 | 1901.3 | 1901.3 |
| 2.5° | 1906.4 | 1896.3 | 1901.3 | 1901.3 | 1894.6 |
| 5° | 1897.9 | 1889.6 | 1896.3 | 1892.9 | 1891.2 |
| 7.5° | 1886.2 | 1876.1 | 1882.8 | 1881.1 | 1879.4 |
| 10° | 1865.9 | 1855.8 | 1864.2 | 1862.6 | 1862.6 |
| 12.5° | 1838.9 | 1832.2 | 1840.6 | 1838.9 | 1838.9 |
| 15° | 1808.6 | 1801.8 | 1812.0 | 1813.6 | 1813.6 |
| 17.5° | 1771.5 | 1766.4 | 1778.2 | 1781.6 | 1785.0 |
| 20° | 1731.0 | 1727.6 | 1741.1 | 1742.7 | 1749.5 |
| 22.5° | 1685.4 | 1682.1 | 1698.9 | 1705.7 | 1714.1 |
| 25° | 1636.5 | 1634.8 | 1651.7 | 1661.8 | 1671.9 |
| 27.5° | 1582.5 | 1582.5 | 1604.5 | 1618.0 | 1628.1 |
| 30° | 1523.5 | 1526.9 | 1552.1 | 1569.0 | 1580.9 |
| 32.5° | 1462.8 | 1467.8 | 1496.5 | 1516.7 | 1528.5 |
| 35° | 1400.3 | 1403.7 | 1439.1 | 1461.0 | 1474.5 |
| 37.5° | 1332.8 | 1341.3 | 1376.7 | 1400.3 | 1413.8 |
| 40° | 1267.0 | 1275.4 | 1314.3 | 1336.2 | 1349.7 |
| 42.5° | 1199.5 | 1207.9 | 1246.8 | 1272.0 | 1280.5 |
| 45° | 1130.3 | 1138.8 | 1179.3 | 1202.9 | 1211.3 |
| 47.5° | 1057.8 | 1071.3 | 1108.4 | 1132.1 | 1147.2 |
| 50° | 987.0 | 998.7 | 1037.6 | 1061.2 | 1074.7 |
| 52.5° | 911.0 | 927.9 | 965.0 | 988.6 | 1002.1 |
| 55° | 840.2 | 858.7 | 892.5 | 917.7 | 933.0 |
| 57.5° | 771.0 | 786.2 | 821.6 | 846.9 | 860.4 |
| 60° | 696.8 | 715.4 | 750.8 | 774.4 | 787.9 |
| 62.5° | 625.9 | 644.5 | 683.3 | 706.9 | 718.7 |
| 65° | 555.0 | 573.6 | 614.1 | 637.8 | 649.5 |
| 67.5° | 482.5 | 504.4 | 546.7 | 570.3 | 580.4 |
| 70° | 413.3 | 438.7 | 480.8 | 504.4 | 512.9 |
| 72.5° | 344.2 | 372.8 | 416.7 | 438.7 | 447.1 |
| 75° | 278.3 | 310.4 | 354.3 | 374.6 | 379.6 |
| 77.5° | 214.2 | 249.7 | 291.8 | 308.7 | 310.4 |
| 80° | 155.2 | 190.6 | 229.5 | 234.5 | 232.8 |
| 82.5° | 101.2 | 138.4 | 163.6 | 158.6 | 158.6 |
| 85° | 57.4 | 86.0 | 96.1 | 91.1 | 87.7 |
| 87.5° | 25.3 | 37.1 | 33.7 | 28.7 | 27.0 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)