

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: P709592

Luminaire Tested: **14ARS-L3C3-HO-UNV-4000K-LOW**

Issue Date: 9/22/2023



Test Information

Test Method: LM-79-08
Report Number: P709592
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2305-014-1)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 9/22/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14ARS-L3C3-HO-UNV-4000K-LOW
Description: ARS 1x4 Selectable High Output 80CRI Round, SET AT 4000K AND, LOW LUMEN OUTPUT SETTINGS

Light Source: -
Ballast/Driver: -

Summary

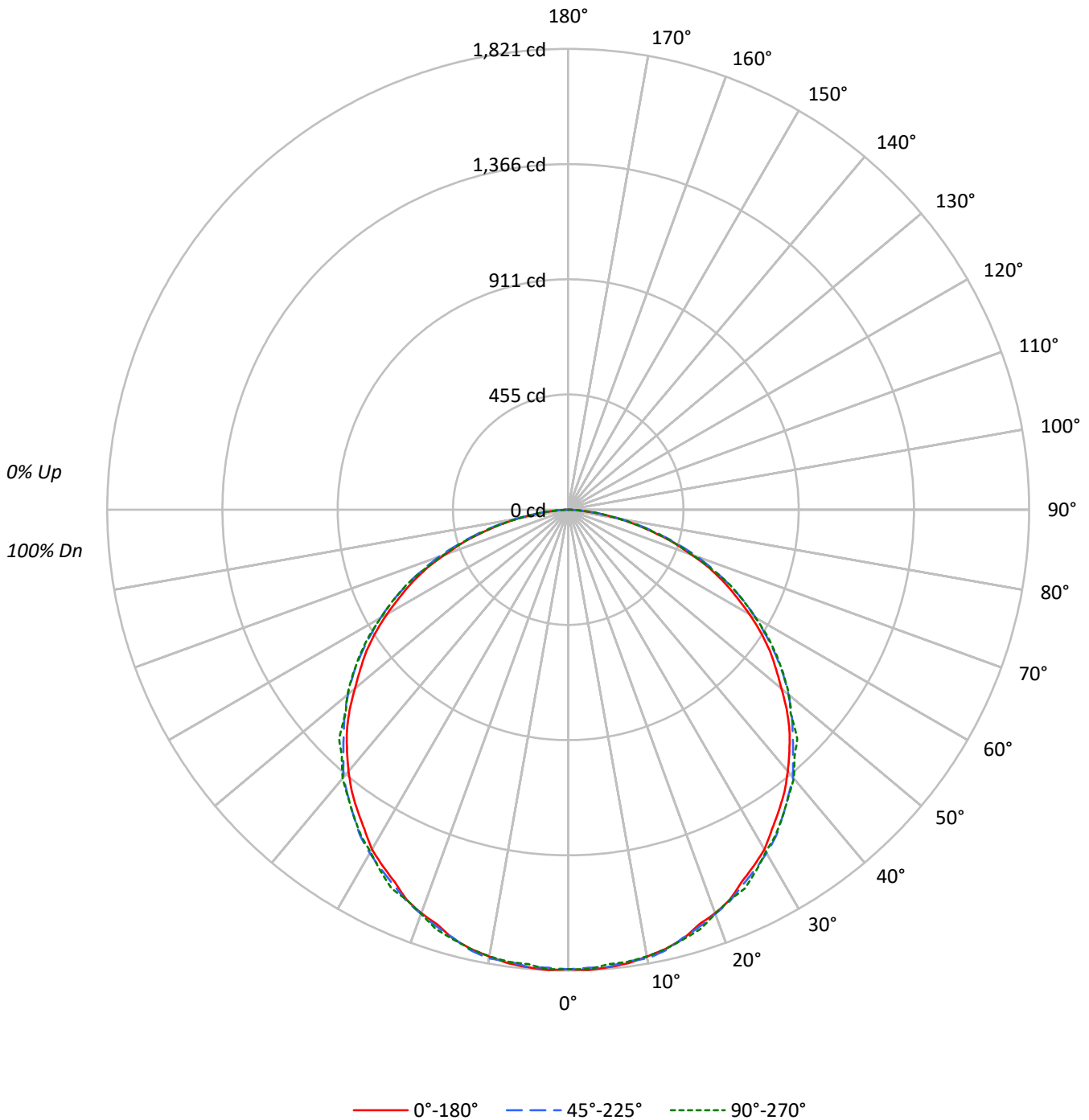
Lumens per Lamp: N/A
Luminaire Lumens: 5362.0 lumens
Efficiency: N/A
Efficacy: 146.9 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.28 / 1.4
Luminous Opening: Rectangular (W 0.85' x L: 3.87' x H: 0')
CIE Type: Direct

Input Watts (W): 36.5
Input Voltage (V): NR
Input Current (A_{in}): 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 | 93 | 91 | 88 | 90 | 88 | 86 | 84 |
| 2 | 99 | 90 | 83 | 78 | 96 | 88 | 82 | 77 | 85 | 79 | 75 | 82 | 77 | 73 | 78 | 75 | 71 | 69 |
| 3 | 90 | 79 | 71 | 64 | 87 | 77 | 70 | 64 | 74 | 68 | 62 | 72 | 66 | 61 | 69 | 64 | 60 | 58 |
| 4 | 82 | 70 | 61 | 54 | 80 | 69 | 60 | 54 | 66 | 59 | 53 | 64 | 57 | 52 | 61 | 56 | 52 | 49 |
| 5 | 75 | 62 | 53 | 46 | 73 | 61 | 53 | 46 | 59 | 51 | 46 | 57 | 50 | 45 | 55 | 49 | 45 | 43 |
| 6 | 70 | 56 | 47 | 40 | 68 | 55 | 46 | 40 | 53 | 46 | 40 | 52 | 45 | 40 | 50 | 44 | 39 | 37 |
| 7 | 64 | 51 | 42 | 36 | 63 | 50 | 41 | 36 | 48 | 41 | 35 | 47 | 40 | 35 | 46 | 39 | 35 | 33 |
| 8 | 60 | 46 | 38 | 32 | 58 | 46 | 37 | 32 | 44 | 37 | 31 | 43 | 36 | 31 | 42 | 36 | 31 | 29 |
| 9 | 56 | 42 | 34 | 28 | 55 | 42 | 34 | 28 | 41 | 33 | 28 | 40 | 33 | 28 | 39 | 32 | 28 | 26 |
| 10 | 52 | 39 | 31 | 26 | 51 | 39 | 31 | 26 | 38 | 30 | 26 | 37 | 30 | 25 | 36 | 30 | 25 | 24 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 5942 | 5942 | 5942 |
| 5° | 5962 | 5957 | 5922 |
| 10° | 5958 | 5982 | 5955 |
| 15° | 5946 | 5935 | 5954 |
| 20° | 5909 | 5918 | 5915 |
| 25° | 5858 | 5899 | 5961 |
| 30° | 5857 | 5922 | 5901 |
| 35° | 5796 | 5901 | 5901 |
| 40° | 5764 | 5900 | 5921 |
| 45° | 5720 | 5803 | 5921 |
| 50° | 5599 | 5783 | 5796 |
| 55° | 5545 | 5713 | 5737 |
| 60° | 5416 | 5604 | 5588 |
| 65° | 5265 | 5442 | 5474 |
| 70° | 4943 | 5187 | 5014 |
| 75° | 4479 | 4687 | 4573 |
| 80° | 3788 | 3895 | 3788 |
| 85° | 2587 | 2741 | 2865 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 171.9 | 3.2 |
| 10°-20° | 495.6 | 9.2 |
| 20°-30° | 753.7 | 14.1 |
| 30°-40° | 920.7 | 17.2 |
| 40°-50° | 967.4 | 18.0 |
| 50°-60° | 888.7 | 16.6 |
| 60°-70° | 687.8 | 12.8 |
| 70°-80° | 385.7 | 7.2 |
| 80°-90° | 90.5 | 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° | 1421.2 | 26.5 |
| 0°-40° | 2341.9 | 43.7 |
| 0°-60° | 4198.0 | 78.3 |
| 0°-90° | 5362.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 5362.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 1816 | 1816 | 1816 | 1816 | 1816 | |
| 5° | 1815 | 1796 | 1814 | 1809 | 1803 | 173 |
| 15° | 1755 | 1756 | 1752 | 1761 | 1758 | 494 |
| 25° | 1622 | 1626 | 1634 | 1642 | 1651 | 750 |
| 35° | 1451 | 1458 | 1477 | 1481 | 1477 | 909 |
| 45° | 1236 | 1243 | 1254 | 1262 | 1280 | 951 |
| 55° | 972 | 988 | 1002 | 998 | 1006 | 866 |
| 65° | 680 | 689 | 703 | 703 | 707 | 670 |
| 75° | 354 | 368 | 371 | 358 | 362 | 376 |
| 85° | 69 | 70 | 73 | 74 | 76 | 88 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P709592

CATALOG NUMBER: 14ARS-L3C3-HO-UNV-4000K-LOW

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 1816.0 | 1816.0 | 1816.0 | 1816.0 | 1816.0 |
| 2.5° | 1820.9 | 1812.7 | 1811.9 | 1815.1 | 1817.6 |
| 5° | 1815.1 | 1795.5 | 1813.5 | 1809.4 | 1802.8 |
| 7.5° | 1807.8 | 1779.9 | 1799.6 | 1802.0 | 1802.0 |
| 10° | 1793.0 | 1780.7 | 1800.4 | 1795.5 | 1792.2 |
| 12.5° | 1777.4 | 1776.6 | 1783.2 | 1780.7 | 1777.4 |
| 15° | 1755.3 | 1756.1 | 1752.0 | 1761.0 | 1757.7 |
| 17.5° | 1718.4 | 1730.7 | 1727.4 | 1738.0 | 1738.0 |
| 20° | 1697.0 | 1690.5 | 1699.5 | 1704.4 | 1698.7 |
| 22.5° | 1668.3 | 1655.2 | 1672.4 | 1675.7 | 1668.3 |
| 25° | 1622.4 | 1626.5 | 1633.9 | 1642.1 | 1651.1 |
| 27.5° | 1587.1 | 1589.6 | 1601.1 | 1599.4 | 1607.6 |
| 30° | 1550.2 | 1551.9 | 1567.4 | 1574.8 | 1561.7 |
| 32.5° | 1497.7 | 1515.8 | 1528.9 | 1525.6 | 1524.8 |
| 35° | 1451.0 | 1458.3 | 1477.2 | 1481.3 | 1477.2 |
| 37.5° | 1404.2 | 1409.1 | 1428.0 | 1427.2 | 1429.6 |
| 40° | 1349.3 | 1359.1 | 1381.2 | 1373.9 | 1386.2 |
| 42.5° | 1293.5 | 1305.0 | 1314.0 | 1322.2 | 1323.0 |
| 45° | 1236.1 | 1242.6 | 1254.1 | 1261.5 | 1279.5 |
| 47.5° | 1171.3 | 1186.9 | 1198.3 | 1204.1 | 1192.6 |
| 50° | 1099.9 | 1126.2 | 1136.0 | 1141.7 | 1138.5 |
| 52.5° | 1034.3 | 1062.2 | 1070.4 | 1070.4 | 1072.8 |
| 55° | 972.0 | 987.5 | 1001.5 | 998.2 | 1005.6 |
| 57.5° | 901.4 | 918.6 | 927.7 | 931.8 | 935.0 |
| 60° | 827.6 | 851.4 | 856.3 | 854.7 | 853.8 |
| 62.5° | 751.3 | 772.6 | 782.5 | 775.9 | 781.7 |
| 65° | 680.0 | 689.0 | 702.9 | 702.9 | 707.0 |
| 67.5° | 604.5 | 614.3 | 623.4 | 621.7 | 615.2 |
| 70° | 516.7 | 530.7 | 542.2 | 531.5 | 524.1 |
| 72.5° | 439.6 | 451.1 | 452.8 | 444.6 | 445.4 |
| 75° | 354.3 | 368.3 | 370.7 | 358.4 | 361.7 |
| 77.5° | 274.0 | 288.7 | 291.2 | 278.1 | 278.1 |
| 80° | 201.0 | 210.8 | 206.7 | 201.0 | 201.0 |
| 82.5° | 130.4 | 137.0 | 132.9 | 136.2 | 132.9 |
| 85° | 68.9 | 70.5 | 73.0 | 73.8 | 76.3 |
| 87.5° | 23.0 | 25.4 | 24.6 | 22.1 | 20.5 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)