

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: P709594

Luminaire Tested: **14ARS-L3C3-HO-UNV-5000K-HI**

Issue Date: 9/22/2023



Test Information

Test Method: LM-79-08
Report Number: P709594
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-5000K-HI
Description: ARS 1x4 Selectable High Output 80CRI Round, SET AT 5000K AND, HI LUMEN OUTPUT SETTINGS

Light Source: -
Ballast/Driver: -

Summary

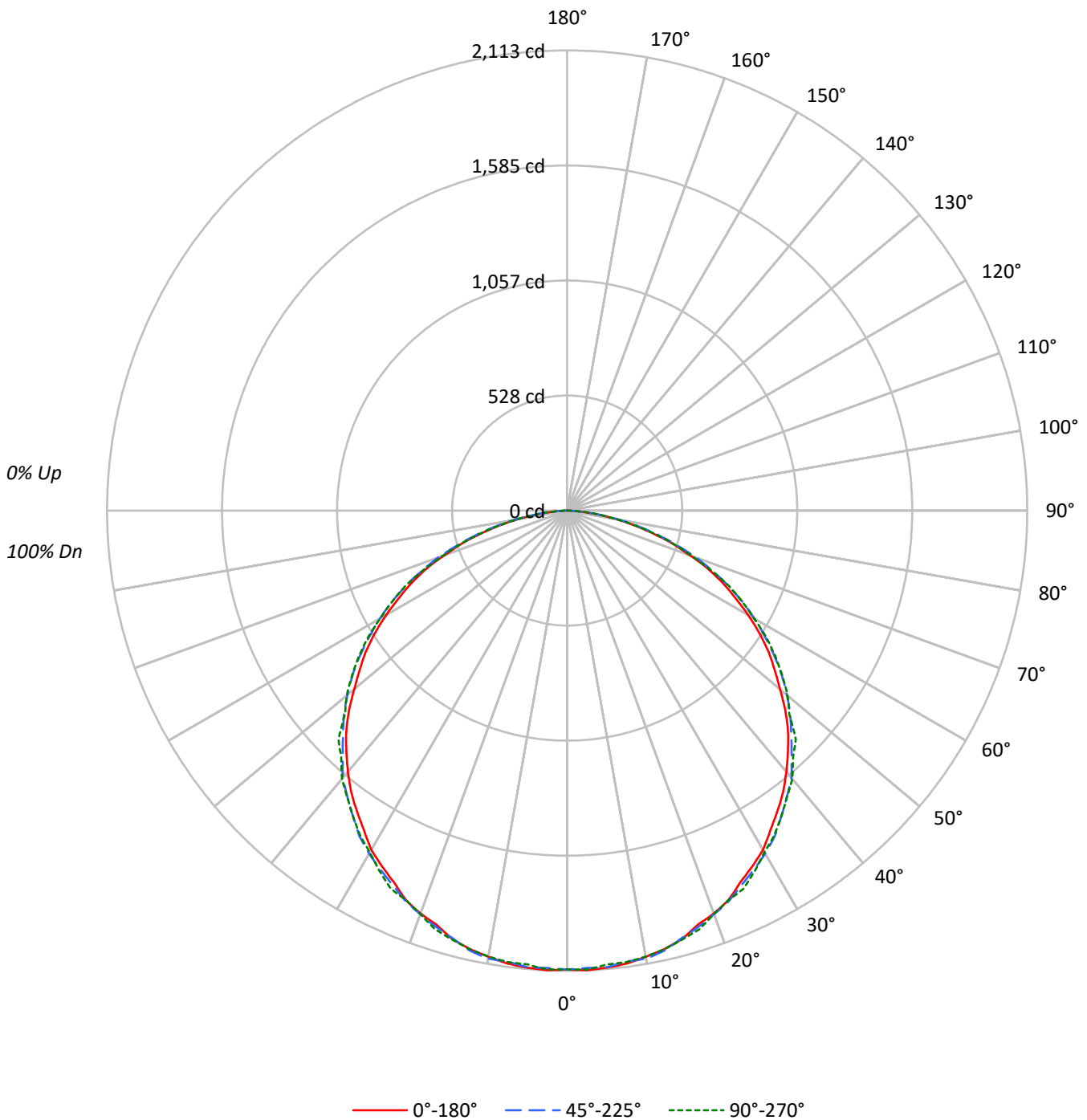
Lumens per Lamp: N/A
Luminaire Lumens: 6222.0 lumens
Efficiency: N/A
Efficacy: 134.7 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.28 / 1.4
Luminous Opening: Rectangular (W 0.85' x L: 3.87' x H: 0')
CIE Type: Direct

Input Watts (W): 46.2
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° | 6895 | 6895 | 6895 |
| 5° | 6919 | 6912 | 6872 |
| 10° | 6913 | 6941 | 6910 |
| 15° | 6900 | 6887 | 6909 |
| 20° | 6857 | 6867 | 6864 |
| 25° | 6797 | 6845 | 6917 |
| 30° | 6797 | 6872 | 6847 |
| 35° | 6726 | 6847 | 6847 |
| 40° | 6688 | 6846 | 6871 |
| 45° | 6637 | 6735 | 6871 |
| 50° | 6497 | 6710 | 6725 |
| 55° | 6434 | 6630 | 6657 |
| 60° | 6285 | 6503 | 6484 |
| 65° | 6109 | 6316 | 6352 |
| 70° | 5737 | 6019 | 5819 |
| 75° | 5199 | 5439 | 5306 |
| 80° | 4394 | 4519 | 4394 |
| 85° | 3000 | 3180 | 3323 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 199.5 | 3.2 |
| 10°-20° | 575.0 | 9.2 |
| 20°-30° | 874.6 | 14.1 |
| 30°-40° | 1068.3 | 17.2 |
| 40°-50° | 1122.6 | 18.0 |
| 50°-60° | 1031.2 | 16.6 |
| 60°-70° | 798.1 | 12.8 |
| 70°-80° | 447.6 | 7.2 |
| 80°-90° | 105.0 | 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° | 1649.2 | 26.5 |
| 0°-40° | 2717.5 | 43.7 |
| 0°-60° | 4871.3 | 78.3 |
| 0°-90° | 6222.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 6222.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 2107 | 2107 | 2107 | 2107 | 2107 | |
| 5° | 2106 | 2083 | 2104 | 2100 | 2092 | 200 |
| 15° | 2037 | 2038 | 2033 | 2044 | 2040 | 574 |
| 25° | 1883 | 1887 | 1896 | 1905 | 1916 | 871 |
| 35° | 1684 | 1692 | 1714 | 1719 | 1714 | 1055 |
| 45° | 1434 | 1442 | 1455 | 1464 | 1485 | 1104 |
| 55° | 1128 | 1146 | 1162 | 1158 | 1167 | 1005 |
| 65° | 789 | 800 | 816 | 816 | 820 | 778 |
| 75° | 411 | 427 | 430 | 416 | 420 | 436 |
| 85° | 80 | 82 | 85 | 86 | 88 | 102 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P709594

CATALOG NUMBER: 14ARS-L3C3-HO-UNV-5000K-HI

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 2107.2 | 2107.2 | 2107.2 | 2107.2 | 2107.2 |
| 2.5° | 2112.9 | 2103.4 | 2102.5 | 2106.3 | 2109.1 |
| 5° | 2106.3 | 2083.4 | 2104.4 | 2099.6 | 2092.0 |
| 7.5° | 2097.7 | 2065.3 | 2088.2 | 2091.0 | 2091.0 |
| 10° | 2080.6 | 2066.3 | 2089.1 | 2083.4 | 2079.6 |
| 12.5° | 2062.5 | 2061.5 | 2069.2 | 2066.3 | 2062.5 |
| 15° | 2036.8 | 2037.7 | 2033.0 | 2043.5 | 2039.6 |
| 17.5° | 1994.0 | 2008.2 | 2004.4 | 2016.8 | 2016.8 |
| 20° | 1969.2 | 1961.6 | 1972.1 | 1977.8 | 1971.1 |
| 22.5° | 1935.9 | 1920.7 | 1940.7 | 1944.5 | 1935.9 |
| 25° | 1882.6 | 1887.4 | 1895.9 | 1905.4 | 1915.9 |
| 27.5° | 1841.7 | 1844.5 | 1857.9 | 1856.0 | 1865.5 |
| 30° | 1798.8 | 1800.8 | 1818.8 | 1827.4 | 1812.2 |
| 32.5° | 1737.9 | 1758.9 | 1774.1 | 1770.3 | 1769.3 |
| 35° | 1683.7 | 1692.3 | 1714.1 | 1718.9 | 1714.1 |
| 37.5° | 1629.4 | 1635.1 | 1657.0 | 1656.1 | 1658.9 |
| 40° | 1565.7 | 1577.1 | 1602.8 | 1594.2 | 1608.5 |
| 42.5° | 1500.9 | 1514.3 | 1524.7 | 1534.3 | 1535.2 |
| 45° | 1434.3 | 1441.9 | 1455.3 | 1463.8 | 1484.8 |
| 47.5° | 1359.1 | 1377.2 | 1390.5 | 1397.2 | 1383.9 |
| 50° | 1276.3 | 1306.8 | 1318.2 | 1324.9 | 1321.1 |
| 52.5° | 1200.2 | 1232.5 | 1242.1 | 1242.1 | 1244.9 |
| 55° | 1127.8 | 1145.9 | 1162.1 | 1158.3 | 1166.9 |
| 57.5° | 1046.0 | 1066.0 | 1076.5 | 1081.2 | 1085.0 |
| 60° | 960.3 | 987.9 | 993.6 | 991.7 | 990.8 |
| 62.5° | 871.8 | 896.6 | 908.0 | 900.4 | 907.0 |
| 65° | 789.0 | 799.5 | 815.7 | 815.7 | 820.4 |
| 67.5° | 701.5 | 712.9 | 723.3 | 721.4 | 713.8 |
| 70° | 599.6 | 615.8 | 629.1 | 616.7 | 608.2 |
| 72.5° | 510.1 | 523.5 | 525.4 | 515.9 | 516.8 |
| 75° | 411.2 | 427.3 | 430.2 | 415.9 | 419.7 |
| 77.5° | 317.9 | 335.0 | 337.9 | 322.7 | 322.7 |
| 80° | 233.2 | 244.6 | 239.8 | 233.2 | 233.2 |
| 82.5° | 151.3 | 158.9 | 154.2 | 158.0 | 154.2 |
| 85° | 79.9 | 81.9 | 84.7 | 85.7 | 88.5 |
| 87.5° | 26.6 | 29.5 | 28.6 | 25.7 | 23.8 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)