

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: P709652

Luminaire Tested: **24ARS-L3C3-UNV-3500K-LOW**

Issue Date: 9/22/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P709652  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2305-014-25)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 9/22/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24ARS-L3C3-UNV-3500K-LOW  
Description: ARS 2x4 Selectable Standard 80CRI Round, SET AT 3500K AND, LOW LUMEN OUTPUT SETTINGS

Light Source: -  
Ballast/Driver: -

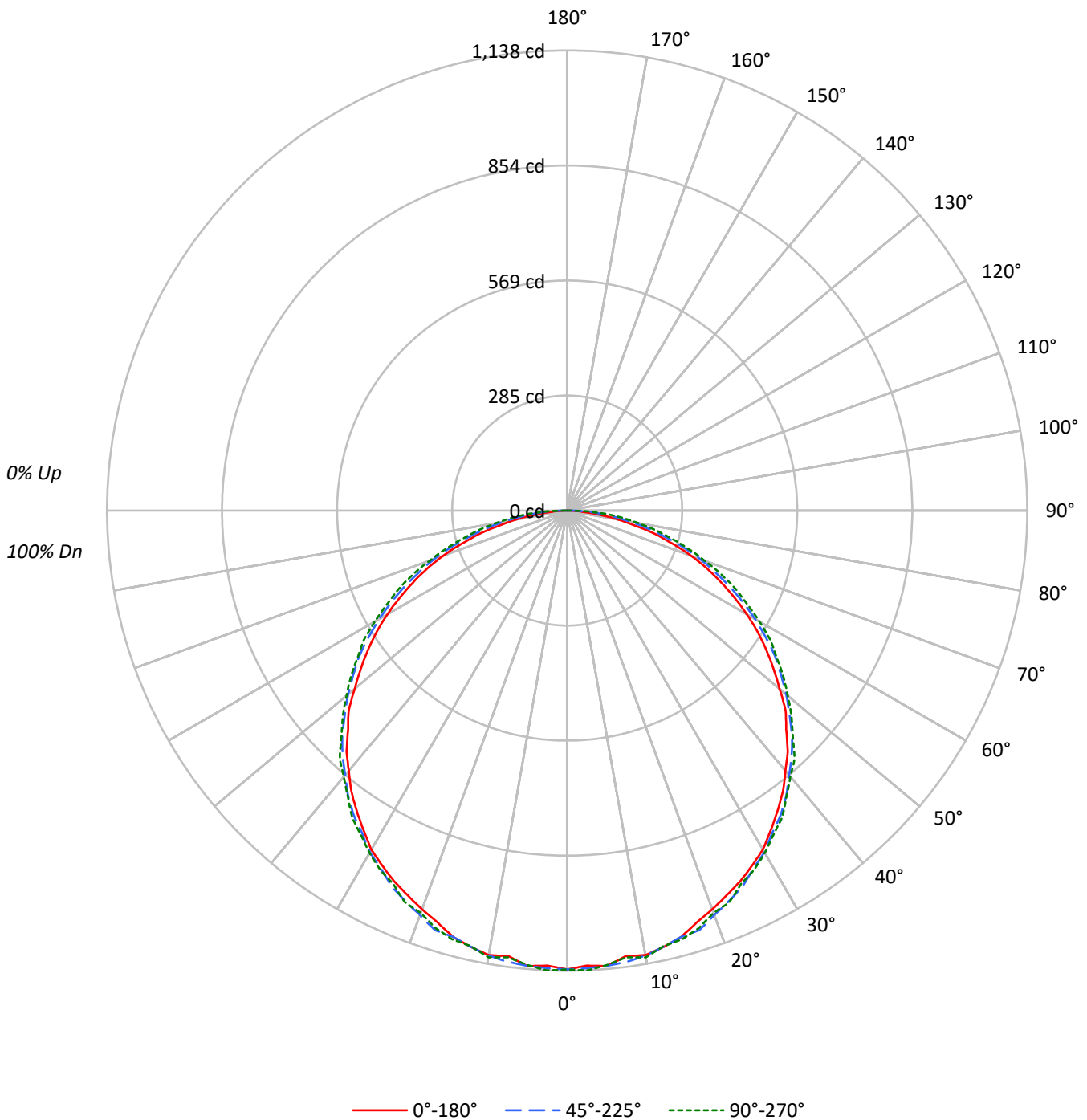
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3407.0 lumens  
Efficiency: N/A  
Efficacy: 137.4 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.28 / 1.4  
Luminous Opening: Rectangular (W 1.83' x L: 3.87' x H: 0')  
CIE Type: Direct

Input Watts (W): 24.8  
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   | 108 | 103 | 99  | 95  | 106 | 101 | 97  | 93  | 97  | 93  | 90  |  | 93  | 90  | 87  |  | 89  | 87  | 85  | 83  |
| 2   | 98  | 90  | 83  | 77  | 95  | 88  | 81  | 76  | 84  | 79  | 74  |  | 81  | 76  | 72  |  | 78  | 74  | 71  | 68  |
| 3   | 89  | 78  | 70  | 63  | 87  | 77  | 69  | 63  | 74  | 67  | 62  |  | 71  | 65  | 60  |  | 68  | 64  | 59  | 57  |
| 4   | 82  | 69  | 60  | 53  | 79  | 68  | 60  | 53  | 65  | 58  | 52  |  | 63  | 57  | 52  |  | 61  | 55  | 51  | 49  |
| 5   | 75  | 62  | 53  | 46  | 73  | 61  | 52  | 46  | 58  | 51  | 45  |  | 56  | 50  | 44  |  | 55  | 49  | 44  | 42  |
| 6   | 69  | 56  | 46  | 40  | 67  | 55  | 46  | 40  | 53  | 45  | 39  |  | 51  | 44  | 39  |  | 49  | 43  | 39  | 36  |
| 7   | 64  | 50  | 41  | 35  | 62  | 49  | 41  | 35  | 48  | 40  | 35  |  | 46  | 40  | 34  |  | 45  | 39  | 34  | 32  |
| 8   | 60  | 46  | 37  | 31  | 58  | 45  | 37  | 31  | 44  | 36  | 31  |  | 43  | 36  | 31  |  | 41  | 35  | 31  | 29  |
| 9   | 56  | 42  | 34  | 28  | 54  | 41  | 33  | 28  | 40  | 33  | 28  |  | 39  | 32  | 28  |  | 38  | 32  | 28  | 26  |
| 10  | 52  | 39  | 31  | 25  | 51  | 38  | 31  | 25  | 37  | 30  | 25  |  | 36  | 30  | 25  |  | 35  | 29  | 25  | 23  |

**AVERAGE LUMINANCE (cd/sqm):**

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 1725 | 1725 | 1725 |
| 5°  | 1725 | 1724 | 1721 |
| 10° | 1723 | 1725 | 1731 |
| 15° | 1717 | 1717 | 1727 |
| 20° | 1697 | 1721 | 1712 |
| 25° | 1697 | 1720 | 1707 |
| 30° | 1699 | 1712 | 1716 |
| 35° | 1683 | 1707 | 1719 |
| 40° | 1667 | 1694 | 1704 |
| 45° | 1646 | 1691 | 1696 |
| 50° | 1622 | 1672 | 1684 |
| 55° | 1594 | 1664 | 1675 |
| 60° | 1561 | 1631 | 1669 |
| 65° | 1512 | 1592 | 1654 |
| 70° | 1451 | 1554 | 1606 |
| 75° | 1332 | 1472 | 1568 |
| 80° | 1124 | 1384 | 1554 |
| 85° | 760  | 1379 | 1711 |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 107.5  | 3.2       |
| 10°-20°   | 309.0  | 9.1       |
| 20°-30°   | 471.1  | 13.8      |
| 30°-40°   | 574.2  | 16.9      |
| 40°-50°   | 603.9  | 17.7      |
| 50°-60°   | 556.9  | 16.3      |
| 60°-70°   | 437.4  | 12.8      |
| 70°-80°   | 263.7  | 7.7       |
| 80°-90°   | 83.4   | 2.4       |
| 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°    | 887.5  | 26.0      |
| 0°-40°    | 1461.7 | 42.9      |
| 0°-60°    | 2622.6 | 77.0      |
| 0°-90°    | 3407.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 3407.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 1135 | 1135  | 1135 | 1135  | 1135 |      |
| 5°  | 1131 | 1132  | 1130 | 1136  | 1128 | 107  |
| 15° | 1091 | 1100  | 1091 | 1099  | 1098 | 307  |
| 25° | 1012 | 1022  | 1026 | 1020  | 1018 | 466  |
| 35° | 907  | 916   | 920  | 923   | 927  | 568  |
| 45° | 766  | 775   | 787  | 792   | 789  | 593  |
| 55° | 602  | 618   | 628  | 633   | 632  | 538  |
| 65° | 420  | 430   | 443  | 455   | 460  | 416  |
| 75° | 227  | 233   | 251  | 263   | 267  | 238  |
| 85° | 44   | 58    | 79   | 94    | 98   | 57   |
| 90° | 0    | 0     | 0    | 0     | 0    |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 1134.7 | 1134.7 | 1134.7 | 1134.7 | 1134.7 |
| 2.5°  | 1126.5 | 1130.6 | 1132.6 | 1135.2 | 1138.3 |
| 5°    | 1130.6 | 1131.6 | 1130.1 | 1135.7 | 1128.0 |
| 7.5°  | 1111.1 | 1128.5 | 1125.4 | 1126.5 | 1114.7 |
| 10°   | 1116.2 | 1114.7 | 1117.7 | 1121.3 | 1121.8 |
| 12.5° | 1104.9 | 1107.5 | 1104.4 | 1113.6 | 1102.8 |
| 15°   | 1091.0 | 1100.3 | 1091.0 | 1099.2 | 1097.7 |
| 17.5° | 1067.4 | 1070.5 | 1088.0 | 1080.3 | 1082.3 |
| 20°   | 1049.4 | 1062.8 | 1064.3 | 1063.3 | 1058.7 |
| 22.5° | 1029.9 | 1040.2 | 1045.3 | 1050.5 | 1048.4 |
| 25°   | 1012.0 | 1022.2 | 1025.8 | 1019.7 | 1018.1 |
| 27.5° | 989.9  | 994.5  | 997.6  | 1008.4 | 1001.7 |
| 30°   | 968.3  | 968.3  | 975.5  | 979.6  | 977.6  |
| 32.5° | 937.0  | 947.3  | 944.7  | 949.3  | 949.8  |
| 35°   | 907.2  | 916.0  | 920.1  | 922.6  | 926.7  |
| 37.5° | 876.4  | 882.6  | 889.8  | 892.9  | 891.3  |
| 40°   | 840.0  | 845.1  | 853.8  | 860.0  | 859.0  |
| 42.5° | 807.6  | 815.8  | 822.0  | 827.1  | 832.3  |
| 45°   | 766.0  | 774.8  | 786.6  | 792.2  | 789.1  |
| 47.5° | 733.2  | 736.3  | 745.5  | 751.1  | 752.7  |
| 50°   | 685.9  | 703.4  | 707.0  | 718.3  | 712.1  |
| 52.5° | 643.8  | 659.8  | 666.4  | 674.6  | 674.1  |
| 55°   | 601.7  | 617.7  | 627.9  | 633.1  | 632.0  |
| 57.5° | 558.6  | 571.4  | 582.2  | 589.4  | 596.1  |
| 60°   | 513.4  | 524.7  | 536.5  | 545.8  | 548.9  |
| 62.5° | 466.7  | 479.5  | 489.8  | 505.7  | 502.6  |
| 65°   | 420.5  | 429.7  | 442.6  | 455.4  | 460.0  |
| 67.5° | 374.3  | 384.0  | 394.8  | 407.1  | 412.8  |
| 70°   | 326.5  | 334.8  | 349.6  | 357.9  | 361.5  |
| 72.5° | 273.7  | 285.0  | 300.4  | 311.7  | 314.2  |
| 75°   | 226.9  | 233.1  | 250.6  | 263.4  | 267.0  |
| 77.5° | 173.0  | 187.4  | 204.9  | 217.7  | 223.9  |
| 80°   | 128.4  | 140.7  | 158.1  | 172.5  | 177.6  |
| 82.5° | 85.7   | 97.0   | 116.5  | 134.0  | 138.1  |
| 85°   | 43.6   | 58.0   | 79.1   | 94.0   | 98.1   |
| 87.5° | 14.9   | 27.2   | 42.6   | 49.3   | 51.3   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)