

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: P709653

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

Issue Date: 9/22/2023



Test Information

Test Method: LM-79-08
Report Number: P709653
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-MID
Description: ARS 2x4 Selectable Standard 80CRI Round, SET AT 3500K AND, MID LUMEN OUTPUT SETTINGS

Light Source: -
Ballast/Driver: -

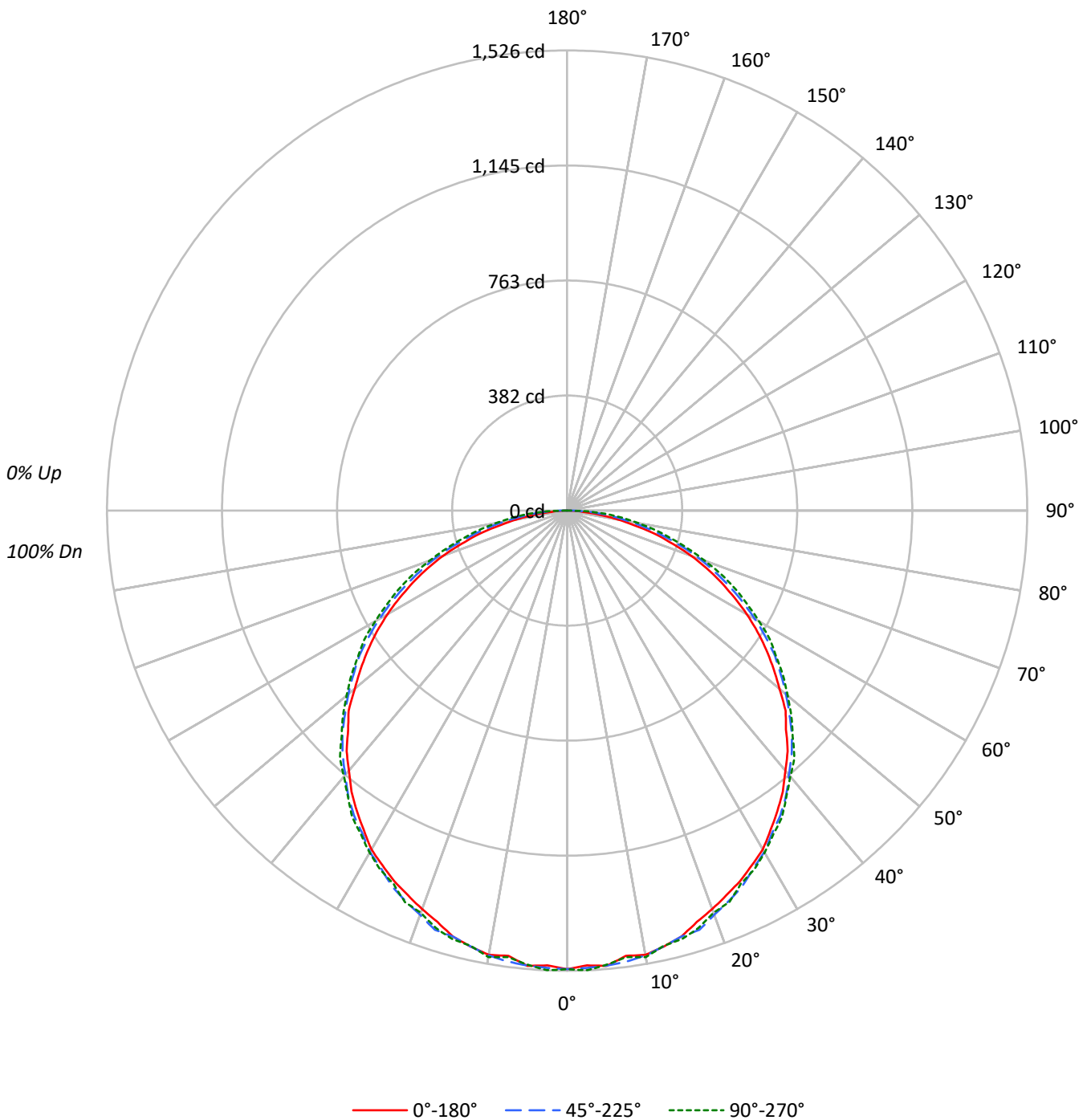
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4566.0 lumens
Efficiency: N/A
Efficacy: 132.7 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): 34.4
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





TEST NUMBER: P709653

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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° | 2311 | 2311 | 2311 |
| 5° | 2312 | 2311 | 2306 |
| 10° | 2309 | 2312 | 2320 |
| 15° | 2301 | 2301 | 2315 |
| 20° | 2275 | 2307 | 2295 |
| 25° | 2274 | 2306 | 2288 |
| 30° | 2277 | 2294 | 2299 |
| 35° | 2256 | 2288 | 2304 |
| 40° | 2233 | 2270 | 2284 |
| 45° | 2207 | 2266 | 2273 |
| 50° | 2174 | 2240 | 2257 |
| 55° | 2137 | 2230 | 2244 |
| 60° | 2092 | 2186 | 2236 |
| 65° | 2027 | 2133 | 2217 |
| 70° | 1945 | 2082 | 2153 |
| 75° | 1786 | 1972 | 2101 |
| 80° | 1505 | 1855 | 2084 |
| 85° | 1020 | 1848 | 2291 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 144.0 | 3.2 |
| 10°-20° | 414.1 | 9.1 |
| 20°-30° | 631.3 | 13.8 |
| 30°-40° | 769.5 | 16.9 |
| 40°-50° | 809.4 | 17.7 |
| 50°-60° | 746.4 | 16.3 |
| 60°-70° | 586.2 | 12.8 |
| 70°-80° | 353.3 | 7.7 |
| 80°-90° | 111.8 | 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° | 1189.4 | 26.0 |
| 0°-40° | 1958.9 | 42.9 |
| 0°-60° | 3514.7 | 77.0 |
| 0°-90° | 4566.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 4566.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 1521 | 1521 | 1521 | 1521 | 1521 | |
| 5° | 1515 | 1516 | 1514 | 1522 | 1512 | 143 |
| 15° | 1462 | 1475 | 1462 | 1473 | 1471 | 411 |
| 25° | 1356 | 1370 | 1375 | 1366 | 1364 | 625 |
| 35° | 1216 | 1228 | 1233 | 1236 | 1242 | 761 |
| 45° | 1027 | 1038 | 1054 | 1062 | 1058 | 794 |
| 55° | 806 | 828 | 842 | 848 | 847 | 721 |
| 65° | 564 | 576 | 593 | 610 | 616 | 558 |
| 75° | 304 | 312 | 336 | 353 | 358 | 318 |
| 85° | 58 | 78 | 106 | 126 | 131 | 76 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P709653

CATALOG NUMBER: 24ARS-L3C3-UNV-3500K-MID

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 1520.7 | 1520.7 | 1520.7 | 1520.7 | 1520.7 |
| 2.5° | 1509.7 | 1515.2 | 1517.9 | 1521.4 | 1525.5 |
| 5° | 1515.2 | 1516.5 | 1514.5 | 1522.0 | 1511.7 |
| 7.5° | 1489.0 | 1512.4 | 1508.3 | 1509.7 | 1493.8 |
| 10° | 1495.9 | 1493.8 | 1498.0 | 1502.8 | 1503.5 |
| 12.5° | 1480.8 | 1484.2 | 1480.1 | 1492.5 | 1478.0 |
| 15° | 1462.2 | 1474.6 | 1462.2 | 1473.2 | 1471.1 |
| 17.5° | 1430.5 | 1434.7 | 1458.1 | 1447.7 | 1450.5 |
| 20° | 1406.4 | 1424.3 | 1426.4 | 1425.0 | 1418.8 |
| 22.5° | 1380.3 | 1394.1 | 1400.9 | 1407.8 | 1405.1 |
| 25° | 1356.2 | 1370.0 | 1374.8 | 1366.5 | 1364.5 |
| 27.5° | 1326.6 | 1332.8 | 1337.0 | 1351.4 | 1342.5 |
| 30° | 1297.7 | 1297.7 | 1307.4 | 1312.9 | 1310.1 |
| 32.5° | 1255.8 | 1269.5 | 1266.1 | 1272.3 | 1273.0 |
| 35° | 1215.8 | 1227.5 | 1233.1 | 1236.5 | 1242.0 |
| 37.5° | 1174.6 | 1182.8 | 1192.5 | 1196.6 | 1194.5 |
| 40° | 1125.7 | 1132.6 | 1144.3 | 1152.5 | 1151.2 |
| 42.5° | 1082.4 | 1093.4 | 1101.6 | 1108.5 | 1115.4 |
| 45° | 1026.6 | 1038.3 | 1054.1 | 1061.7 | 1057.6 |
| 47.5° | 982.6 | 986.7 | 999.1 | 1006.7 | 1008.7 |
| 50° | 919.3 | 942.7 | 947.5 | 962.6 | 954.4 |
| 52.5° | 862.9 | 884.2 | 893.1 | 904.1 | 903.5 |
| 55° | 806.4 | 827.8 | 841.5 | 848.4 | 847.0 |
| 57.5° | 748.6 | 765.8 | 780.3 | 789.9 | 798.9 |
| 60° | 688.1 | 703.2 | 719.1 | 731.4 | 735.6 |
| 62.5° | 625.5 | 642.7 | 656.4 | 677.8 | 673.6 |
| 65° | 563.5 | 575.9 | 593.1 | 610.3 | 616.5 |
| 67.5° | 501.6 | 514.7 | 529.1 | 545.7 | 553.2 |
| 70° | 437.6 | 448.6 | 468.6 | 479.6 | 484.4 |
| 72.5° | 366.8 | 381.9 | 402.5 | 417.7 | 421.1 |
| 75° | 304.1 | 312.4 | 335.8 | 353.0 | 357.8 |
| 77.5° | 231.9 | 251.2 | 274.5 | 291.7 | 300.0 |
| 80° | 172.0 | 188.5 | 211.9 | 231.2 | 238.1 |
| 82.5° | 114.9 | 130.0 | 156.2 | 179.6 | 185.1 |
| 85° | 58.5 | 77.8 | 106.0 | 125.9 | 131.4 |
| 87.5° | 20.0 | 36.5 | 57.1 | 66.1 | 68.8 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)