

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: P709607

Luminaire Tested: **22ARS-L3C3-HO-SQR-UNV-3500K-LOW**

Issue Date: 9/22/2023



Test Information

Test Method: LM-79-08
Report Number: P709607
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2305-014-10)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 9/22/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22ARS-L3C3-HO-SQR-UNV-3500K-LOW
Description: ARS 2x2 Selectable High Output 80CRI Square, SET AT 3500K AND, LOW LUMEN OUTPUT SETTINGS

Light Source: -
Ballast/Driver: -

Summary

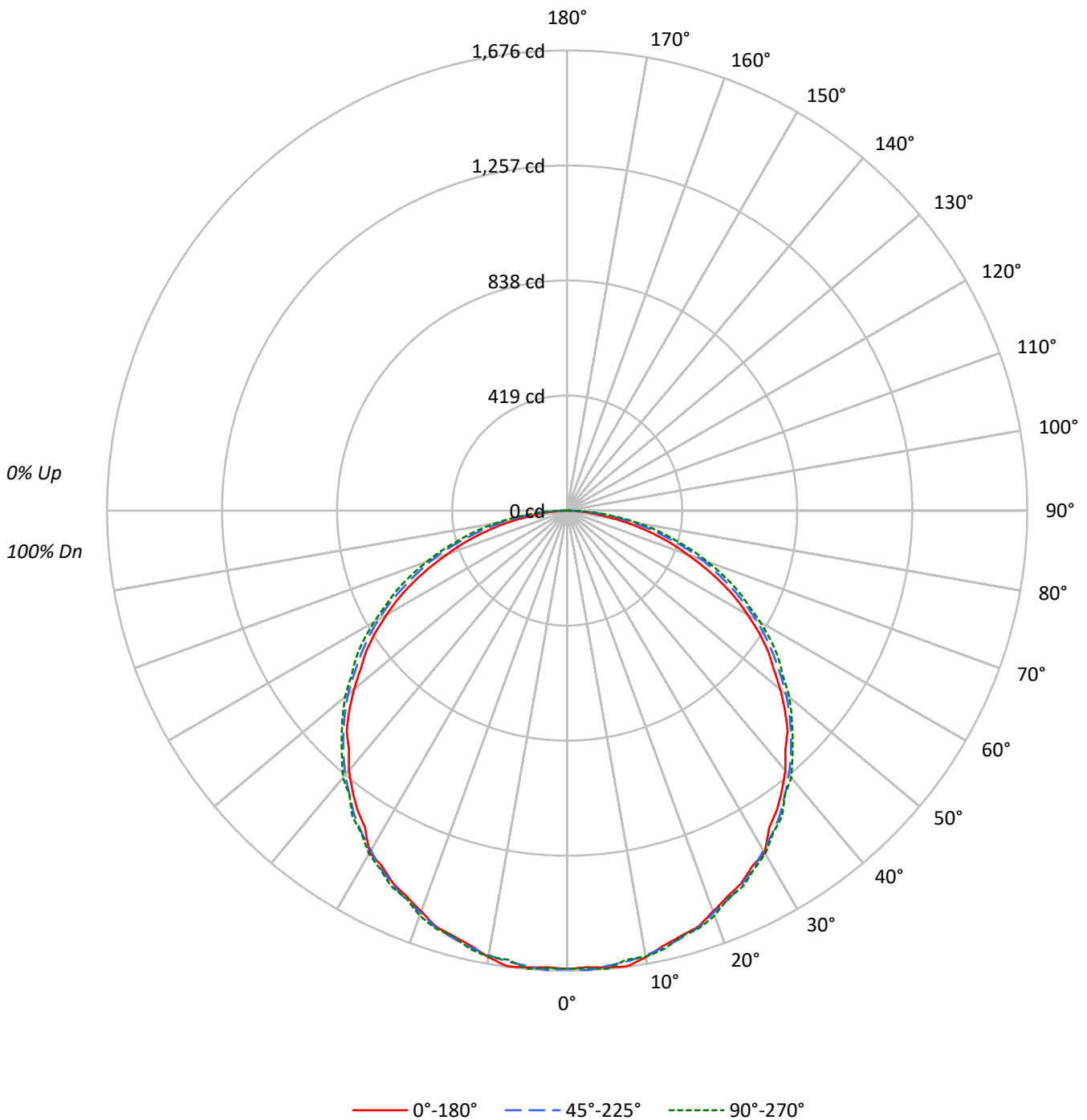
Lumens per Lamp: N/A
Luminaire Lumens: 5006.0 lumens
Efficiency: N/A
Efficacy: 129.7 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.28 / 1.4
Luminous Opening: Rectangular (W 1.97' x L: 1.97' x H: 0')
CIE Type: Direct

Input Watts (W): 38.6
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 | 108 | 103 | 99 | 95 | 106 | 101 | 97 | 93 | 97 | 93 | 90 | | 93 | 90 | 88 | | 89 | 87 | 85 | 83 |
| 2 | 98 | 90 | 83 | 77 | 96 | 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 | 61 | | 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 | 45 | | 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° | 4630 | 4630 | 4630 |
| 5° | 4650 | 4635 | 4665 |
| 10° | 4651 | 4631 | 4647 |
| 15° | 4604 | 4626 | 4608 |
| 20° | 4586 | 4600 | 4634 |
| 25° | 4587 | 4599 | 4627 |
| 30° | 4606 | 4577 | 4621 |
| 35° | 4508 | 4579 | 4613 |
| 40° | 4475 | 4551 | 4599 |
| 45° | 4453 | 4523 | 4557 |
| 50° | 4371 | 4491 | 4558 |
| 55° | 4321 | 4437 | 4545 |
| 60° | 4209 | 4398 | 4496 |
| 65° | 4064 | 4303 | 4486 |
| 70° | 3771 | 4229 | 4405 |
| 75° | 3463 | 3986 | 4294 |
| 80° | 2885 | 3750 | 4196 |
| 85° | 2170 | 3478 | 3676 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 158.4 | 3.2 |
| 10°-20° | 454.3 | 9.1 |
| 20°-30° | 692.0 | 13.8 |
| 30°-40° | 842.4 | 16.8 |
| 40°-50° | 887.2 | 17.7 |
| 50°-60° | 820.0 | 16.4 |
| 60°-70° | 646.8 | 12.9 |
| 70°-80° | 391.3 | 7.8 |
| 80°-90° | 113.7 | 2.3 |
| 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° | 1304.7 | 26.1 |
| 0°-40° | 2147.2 | 42.9 |
| 0°-60° | 3854.3 | 77.0 |
| 0°-90° | 5006.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 5006.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 1669 | 1669 | 1669 | 1669 | 1669 | |
| 5° | 1670 | 1662 | 1665 | 1663 | 1676 | 159 |
| 15° | 1603 | 1610 | 1611 | 1606 | 1605 | 454 |
| 25° | 1499 | 1495 | 1503 | 1505 | 1512 | 690 |
| 35° | 1331 | 1337 | 1352 | 1355 | 1362 | 834 |
| 45° | 1135 | 1136 | 1153 | 1162 | 1162 | 871 |
| 55° | 894 | 900 | 918 | 937 | 940 | 796 |
| 65° | 619 | 632 | 656 | 678 | 684 | 610 |
| 75° | 323 | 344 | 372 | 398 | 401 | 341 |
| 85° | 68 | 84 | 109 | 112 | 116 | 81 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P709607

CATALOG NUMBER: 22ARS-L3C3-HO-SQR-UNV-3500K-LOW

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 1669.3 | 1669.3 | 1669.3 | 1669.3 | 1669.3 |
| 2.5° | 1664.6 | 1673.1 | 1675.5 | 1668.5 | 1667.7 |
| 5° | 1670.0 | 1662.3 | 1664.6 | 1663.1 | 1675.5 |
| 7.5° | 1673.9 | 1661.5 | 1656.9 | 1653.0 | 1649.9 |
| 10° | 1651.4 | 1646.0 | 1644.5 | 1643.7 | 1649.9 |
| 12.5° | 1622.8 | 1627.4 | 1629.0 | 1626.6 | 1635.2 |
| 15° | 1603.4 | 1609.6 | 1611.1 | 1605.7 | 1604.9 |
| 17.5° | 1588.7 | 1584.0 | 1592.5 | 1584.0 | 1595.6 |
| 20° | 1553.8 | 1557.7 | 1558.4 | 1566.2 | 1570.1 |
| 22.5° | 1522.8 | 1533.7 | 1533.7 | 1539.1 | 1529.0 |
| 25° | 1498.8 | 1494.9 | 1502.7 | 1505.0 | 1512.0 |
| 27.5° | 1460.0 | 1457.7 | 1470.1 | 1461.6 | 1473.2 |
| 30° | 1438.3 | 1425.9 | 1429.0 | 1435.2 | 1443.0 |
| 32.5° | 1369.4 | 1388.0 | 1392.6 | 1395.7 | 1394.2 |
| 35° | 1331.4 | 1336.8 | 1352.3 | 1354.6 | 1362.4 |
| 37.5° | 1284.9 | 1283.3 | 1302.7 | 1310.5 | 1302.7 |
| 40° | 1236.1 | 1240.7 | 1257.0 | 1265.5 | 1270.2 |
| 42.5° | 1176.4 | 1187.2 | 1205.8 | 1215.1 | 1214.4 |
| 45° | 1135.3 | 1136.1 | 1153.1 | 1162.4 | 1161.7 |
| 47.5° | 1075.6 | 1082.6 | 1098.9 | 1112.8 | 1109.0 |
| 50° | 1012.9 | 1024.5 | 1040.8 | 1053.2 | 1056.3 |
| 52.5° | 947.8 | 961.7 | 978.8 | 1003.6 | 990.4 |
| 55° | 893.5 | 899.7 | 917.6 | 936.9 | 940.0 |
| 57.5° | 829.2 | 836.2 | 857.1 | 874.2 | 879.6 |
| 60° | 758.7 | 765.7 | 792.8 | 813.7 | 810.6 |
| 62.5° | 692.8 | 703.7 | 726.9 | 745.5 | 743.2 |
| 65° | 619.2 | 632.4 | 655.6 | 678.1 | 683.5 |
| 67.5° | 540.9 | 558.7 | 588.2 | 613.0 | 613.8 |
| 70° | 465.0 | 485.9 | 521.5 | 541.7 | 543.2 |
| 72.5° | 397.6 | 413.1 | 450.3 | 472.0 | 473.5 |
| 75° | 323.2 | 344.1 | 372.0 | 398.3 | 400.7 |
| 77.5° | 251.1 | 272.8 | 304.6 | 330.1 | 335.6 |
| 80° | 180.6 | 204.6 | 234.8 | 258.8 | 262.7 |
| 82.5° | 118.6 | 141.8 | 171.3 | 193.0 | 193.0 |
| 85° | 68.2 | 84.5 | 109.3 | 112.4 | 115.5 |
| 87.5° | 22.5 | 32.5 | 41.1 | 44.2 | 44.9 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)