

Scaled data based on original data using  
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions

Brand: IRiS

Report Number: P1308067

Luminaire Tested: P3SQAS13R559030DE010 E3SQCA451MMS

Issue Date: 1/29/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1308067  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-80)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/29/2026  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: IRiS  
Catalog Number: P3SQAS13R559030DE010 E3SQCA451MMS  
Description: 3in Adjustable LED luminaire with, R55 optic, 3000K CCT AND, 90CRI , E3SQCA451MMS TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

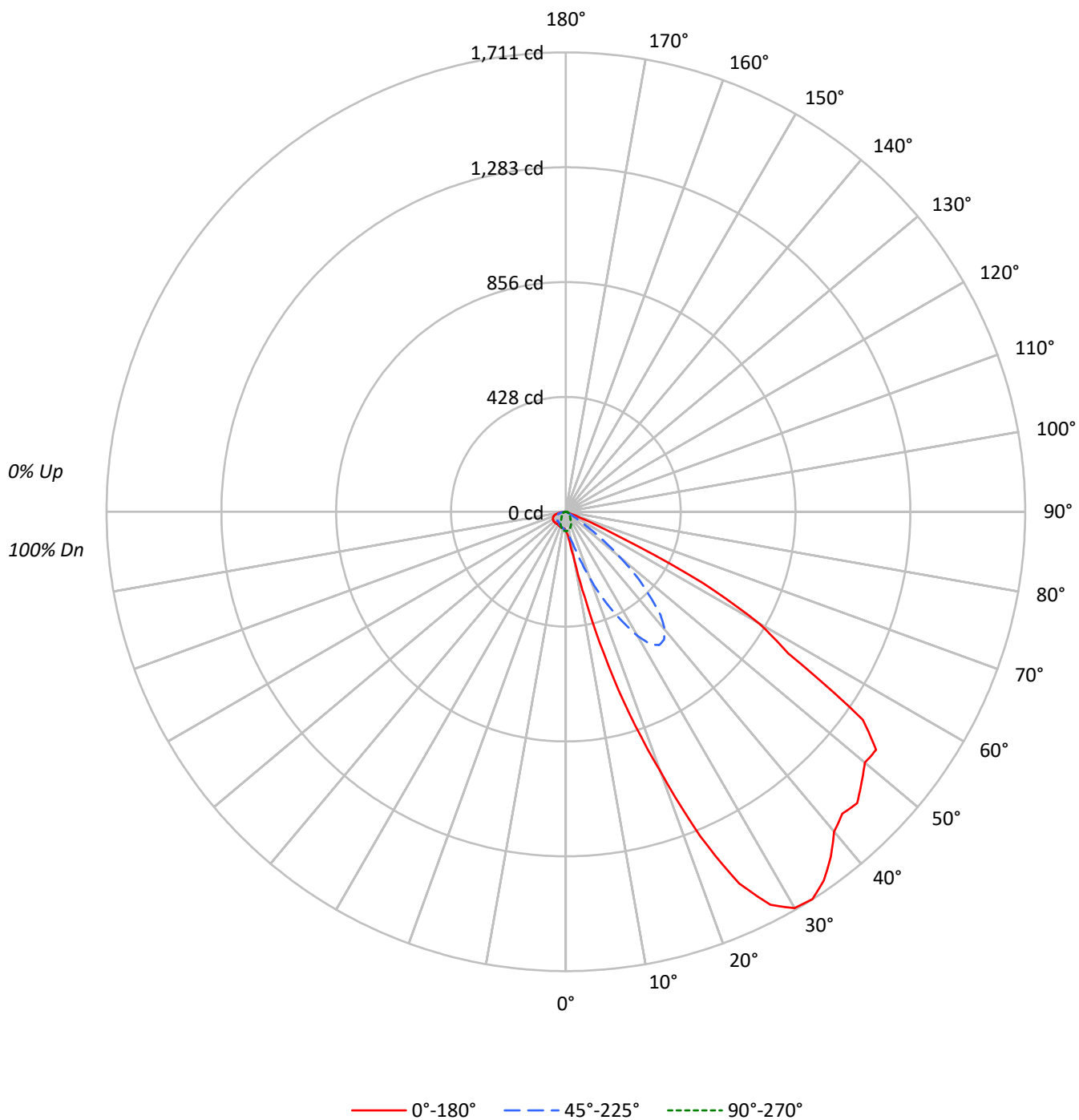
Lumens per Lamp: N/A  
Luminaire Lumens: 1100.0 lumens  
Efficiency: N/A  
Efficacy: 75.3 lumens/watt  
Spacing Criteria (0/90/45): 3.76 / 0.91 / 1.95  
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')  
CIE Type: Direct

Input Watts (W): 14.6  
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: 24 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   | 110 | 106 | 102 | 99  | 107 | 104 | 100 | 97  | 99  | 97  | 94  |  | 95  | 93  | 91  |  | 92  | 90  | 88  | 86  |
| 2   | 100 | 93  | 86  | 81  | 98  | 91  | 85  | 80  | 87  | 83  | 78  |  | 84  | 80  | 77  |  | 81  | 78  | 75  | 73  |
| 3   | 91  | 81  | 73  | 67  | 89  | 80  | 72  | 67  | 77  | 71  | 65  |  | 74  | 69  | 64  |  | 72  | 67  | 63  | 61  |
| 4   | 83  | 71  | 63  | 56  | 81  | 70  | 62  | 56  | 68  | 61  | 55  |  | 65  | 59  | 54  |  | 63  | 58  | 54  | 51  |
| 5   | 76  | 63  | 54  | 47  | 74  | 62  | 53  | 47  | 60  | 52  | 47  |  | 58  | 51  | 46  |  | 56  | 50  | 46  | 43  |
| 6   | 69  | 56  | 47  | 40  | 68  | 55  | 46  | 40  | 53  | 46  | 40  |  | 51  | 45  | 39  |  | 50  | 44  | 39  | 37  |
| 7   | 64  | 50  | 41  | 35  | 62  | 49  | 41  | 35  | 48  | 40  | 34  |  | 46  | 39  | 34  |  | 45  | 38  | 34  | 32  |
| 8   | 59  | 45  | 36  | 30  | 57  | 44  | 36  | 30  | 43  | 35  | 30  |  | 41  | 35  | 29  |  | 40  | 34  | 29  | 27  |
| 9   | 54  | 40  | 32  | 26  | 53  | 40  | 32  | 26  | 39  | 31  | 26  |  | 38  | 31  | 26  |  | 36  | 30  | 26  | 24  |
| 10  | 50  | 37  | 28  | 23  | 49  | 36  | 28  | 23  | 35  | 28  | 23  |  | 34  | 27  | 23  |  | 33  | 27  | 23  | 21  |

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

|     | 0°     | 45°    | 90°   | 135°  | 180°  |
|-----|--------|--------|-------|-------|-------|
| 0°  | 12211  | 12211  | 12211 | 12211 | 12211 |
| 5°  | 15628  | 14280  | 12257 | 11427 | 11082 |
| 10° | 31776  | 18187  | 11892 | 10878 | 10878 |
| 15° | 97565  | 27904  | 11090 | 10573 | 10912 |
| 20° | 188645 | 48806  | 9970  | 10337 | 10868 |
| 25° | 290342 | 75916  | 8684  | 9976  | 10889 |
| 30° | 339006 | 106115 | 7159  | 9864  | 11216 |
| 35° | 352287 | 127514 | 5929  | 9818  | 11648 |
| 40° | 349619 | 128710 | 5463  | 10274 | 12680 |
| 45° | 373791 | 106533 | 5212  | 11131 | 13737 |
| 50° | 389571 | 70305  | 5198  | 11977 | 15352 |
| 55° | 405653 | 30657  | 5255  | 13121 | 16935 |
| 60° | 286578 | 7027   | 5373  | 14398 | 19082 |
| 65° | 93484  | 2364   | 5135  | 15445 | 21394 |
| 70° | 2921   | 2467   | 5388  | 16617 | 24472 |
| 75° | 2595   | 2595   | 4525  | 17434 | 27149 |
| 80° | 1884   | 2876   | 4860  | 17356 | 28960 |
| 85° | 1976   | 3754   | 5730  | 17191 | 28850 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 52.5°

Luminance: 412167 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 7.5    | 0.7       |
| 10°-20°   | 46.7   | 4.2       |
| 20°-30°   | 156.6  | 14.2      |
| 30°-40°   | 257.1  | 23.4      |
| 40°-50°   | 286.8  | 26.1      |
| 50°-60°   | 241.4  | 21.9      |
| 60°-70°   | 81.9   | 7.4       |
| 70°-80°   | 16.0   | 1.5       |
| 80°-90°   | 6.0    | 0.5       |
| 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°    | 210.8  | 19.2      |
| 0°-40°    | 467.9  | 42.5      |
| 0°-60°    | 996.1  | 90.6      |
| 0°-90°    | 1100.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 1100.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 45° | 90° | 135° | 180° | Flux |
|-----|------|-----|-----|------|------|------|
| 0°  | 71   | 71  | 71  | 71   | 71   |      |
| 5°  | 90   | 83  | 71  | 66   | 64   | 11   |
| 15° | 547  | 156 | 62  | 59   | 61   | 174  |
| 25° | 1528 | 400 | 46  | 52   | 57   | 687  |
| 35° | 1676 | 606 | 28  | 47   | 55   | 1040 |
| 45° | 1535 | 437 | 21  | 46   | 56   | 1172 |
| 55° | 1351 | 102 | 18  | 44   | 56   | 1100 |
| 65° | 229  | 6   | 13  | 38   | 52   | 311  |
| 75° | 4    | 4   | 7   | 26   | 41   | 4    |
| 85° | 1    | 2   | 3   | 9    | 15   | 1    |
| 90° | 0    | 0   | 0   | 0    | 0    |      |

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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 10°    | 15°    | 20°    | 22.5°  | 45°   | 67.5° | 90°  | 112.5° | 135° |
|-------|--------|--------|--------|--------|--------|--------|-------|-------|------|--------|------|
| 0°    | 70.9   | 70.9   | 70.9   | 70.9   | 70.9   | 70.9   | 70.9  | 70.9  | 70.9 | 70.9   | 70.9 |
| 2.5°  | 77.8   | 77.8   | 77.8   | 77.8   | 77.8   | 77.8   | 76.8  | 73.9  | 71.9 | 69.0   | 68.0 |
| 5°    | 90.4   | 90.4   | 90.4   | 89.4   | 89.4   | 87.5   | 82.6  | 75.8  | 70.9 | 67.1   | 66.1 |
| 7.5°  | 116.6  | 115.7  | 113.7  | 112.7  | 109.8  | 108.9  | 91.4  | 77.8  | 70.0 | 65.1   | 64.1 |
| 10°   | 181.7  | 179.8  | 176.9  | 166.2  | 156.5  | 149.7  | 104.0 | 78.7  | 68.0 | 63.2   | 62.2 |
| 12.5° | 327.5  | 323.6  | 309.1  | 286.7  | 259.5  | 245.9  | 124.4 | 79.7  | 65.1 | 61.2   | 61.2 |
| 15°   | 547.2  | 542.3  | 515.1  | 484.0  | 434.4  | 407.2  | 156.5 | 78.7  | 62.2 | 58.3   | 59.3 |
| 17.5° | 790.2  | 776.6  | 748.4  | 707.6  | 640.5  | 608.4  | 204.1 | 76.8  | 58.3 | 56.4   | 58.3 |
| 20°   | 1029.3 | 1025.4 | 978.7  | 923.3  | 840.7  | 797.9  | 266.3 | 73.9  | 54.4 | 53.5   | 56.4 |
| 22.5° | 1309.2 | 1292.6 | 1243.1 | 1183.8 | 1070.1 | 1013.7 | 333.4 | 70.0  | 50.5 | 50.5   | 54.4 |
| 25°   | 1527.9 | 1508.4 | 1469.5 | 1400.5 | 1292.6 | 1232.4 | 399.5 | 65.1  | 45.7 | 47.6   | 52.5 |
| 27.5° | 1650.3 | 1628.0 | 1598.8 | 1539.5 | 1455.9 | 1402.5 | 465.5 | 59.3  | 40.8 | 44.7   | 50.5 |
| 30°   | 1704.7 | 1698.9 | 1677.5 | 1633.8 | 1557.0 | 1509.4 | 533.6 | 52.5  | 36.0 | 41.8   | 49.6 |
| 32.5° | 1710.6 | 1713.5 | 1704.7 | 1676.6 | 1618.2 | 1577.4 | 584.1 | 46.7  | 32.1 | 39.8   | 47.6 |
| 35°   | 1675.6 | 1686.3 | 1692.1 | 1680.4 | 1642.5 | 1609.5 | 606.5 | 39.8  | 28.2 | 37.9   | 46.7 |
| 37.5° | 1621.2 | 1640.6 | 1660.0 | 1662.9 | 1639.6 | 1618.2 | 600.6 | 34.0  | 26.2 | 36.9   | 46.7 |
| 40°   | 1555.1 | 1572.6 | 1612.4 | 1637.7 | 1629.9 | 1614.4 | 572.5 | 28.2  | 24.3 | 35.0   | 45.7 |
| 42.5° | 1524.9 | 1528.8 | 1571.6 | 1614.4 | 1612.4 | 1599.8 | 522.9 | 22.4  | 22.4 | 35.0   | 45.7 |
| 45°   | 1534.7 | 1517.2 | 1545.3 | 1594.9 | 1592.0 | 1575.5 | 437.4 | 17.5  | 21.4 | 34.0   | 45.7 |
| 47.5° | 1493.8 | 1469.5 | 1517.2 | 1575.5 | 1564.8 | 1540.5 | 361.6 | 12.6  | 20.4 | 33.0   | 44.7 |
| 50°   | 1454.0 | 1450.1 | 1487.0 | 1516.2 | 1501.6 | 1488.0 | 262.4 | 9.7   | 19.4 | 32.1   | 44.7 |
| 52.5° | 1456.9 | 1450.1 | 1454.0 | 1453.0 | 1423.9 | 1409.3 | 179.8 | 7.8   | 18.5 | 31.1   | 44.7 |
| 55°   | 1351.0 | 1329.6 | 1309.2 | 1315.0 | 1316.9 | 1307.2 | 102.1 | 6.8   | 17.5 | 31.1   | 43.7 |
| 57.5° | 981.6  | 975.8  | 998.2  | 1061.3 | 1110.9 | 1116.7 | 49.6  | 6.8   | 16.5 | 30.1   | 42.8 |
| 60°   | 832.0  | 828.1  | 829.0  | 847.5  | 873.8  | 857.2  | 20.4  | 6.8   | 15.6 | 29.2   | 41.8 |
| 62.5° | 573.4  | 611.3  | 626.9  | 669.7  | 652.2  | 628.8  | 7.8   | 7.8   | 14.6 | 27.2   | 40.8 |
| 65°   | 229.4  | 228.4  | 249.8  | 270.2  | 264.4  | 246.9  | 5.8   | 6.8   | 12.6 | 25.3   | 37.9 |
| 67.5° | 53.5   | 48.6   | 41.8   | 36.0   | 30.1   | 24.3   | 5.8   | 6.8   | 11.7 | 23.3   | 36.0 |
| 70°   | 5.8    | 5.8    | 5.8    | 5.8    | 5.8    | 4.9    | 4.9   | 6.8   | 10.7 | 21.4   | 33.0 |
| 72.5° | 4.9    | 4.9    | 4.9    | 4.9    | 4.9    | 4.9    | 4.9   | 5.8   | 8.7  | 18.5   | 30.1 |
| 75°   | 3.9    | 3.9    | 3.9    | 3.9    | 3.9    | 3.9    | 3.9   | 4.9   | 6.8  | 15.6   | 26.2 |
| 77.5° | 2.9    | 2.9    | 2.9    | 3.9    | 2.9    | 3.9    | 3.9   | 4.9   | 5.8  | 12.6   | 22.4 |
| 80°   | 1.9    | 1.9    | 2.9    | 2.9    | 2.9    | 2.9    | 2.9   | 3.9   | 4.9  | 10.7   | 17.5 |
| 82.5° | 1.9    | 1.9    | 1.9    | 1.9    | 1.9    | 1.9    | 2.9   | 2.9   | 3.9  | 7.8    | 12.6 |
| 85°   | 1.0    | 1.0    | 1.0    | 1.0    | 1.0    | 1.9    | 1.9   | 2.9   | 2.9  | 5.8    | 8.7  |
| 87.5° | 1.0    | 1.0    | 1.0    | 1.0    | 1.0    | 1.0    | 1.9   | 1.9   | 2.9  | 2.9    | 3.9  |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0   | 0.0   | 0.0  | 0.0    | 0.0  |

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**CANDELA DISTRIBUTION (continued):**

|       | 157.5° | 180° |
|-------|--------|------|
| 0°    | 70.9   | 70.9 |
| 2.5°  | 67.1   | 67.1 |
| 5°    | 65.1   | 64.1 |
| 7.5°  | 63.2   | 63.2 |
| 10°   | 62.2   | 62.2 |
| 12.5° | 61.2   | 62.2 |
| 15°   | 61.2   | 61.2 |
| 17.5° | 59.3   | 60.3 |
| 20°   | 58.3   | 59.3 |
| 22.5° | 57.3   | 58.3 |
| 25°   | 56.4   | 57.3 |
| 27.5° | 55.4   | 56.4 |
| 30°   | 54.4   | 56.4 |
| 32.5° | 53.5   | 55.4 |
| 35°   | 53.5   | 55.4 |
| 37.5° | 53.5   | 56.4 |
| 40°   | 53.5   | 56.4 |
| 42.5° | 53.5   | 56.4 |
| 45°   | 53.5   | 56.4 |
| 47.5° | 53.5   | 56.4 |
| 50°   | 53.5   | 57.3 |
| 52.5° | 53.5   | 57.3 |
| 55°   | 53.5   | 56.4 |
| 57.5° | 52.5   | 56.4 |
| 60°   | 52.5   | 55.4 |
| 62.5° | 51.5   | 54.4 |
| 65°   | 49.6   | 52.5 |
| 67.5° | 47.6   | 51.5 |
| 70°   | 44.7   | 48.6 |
| 72.5° | 41.8   | 44.7 |
| 75°   | 37.9   | 40.8 |
| 77.5° | 33.0   | 35.0 |
| 80°   | 26.2   | 29.2 |
| 82.5° | 20.4   | 22.4 |
| 85°   | 13.6   | 14.6 |
| 87.5° | 5.8    | 6.8  |
| 90°   | 0.0    | 0.0  |

(END OF REPORT)