

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: P1309184

Luminaire Tested: P3SQAS13R559035DE010 E3SQCA451MB

Issue Date: 1/29/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1309184  
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: P3SQAS13R559035DE010 E3SQCA451MB  
Description: 3in Adjustable LED luminaire with, R55 optic, 3500K CCT AND, 90CRI , E3SQCA451MB TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

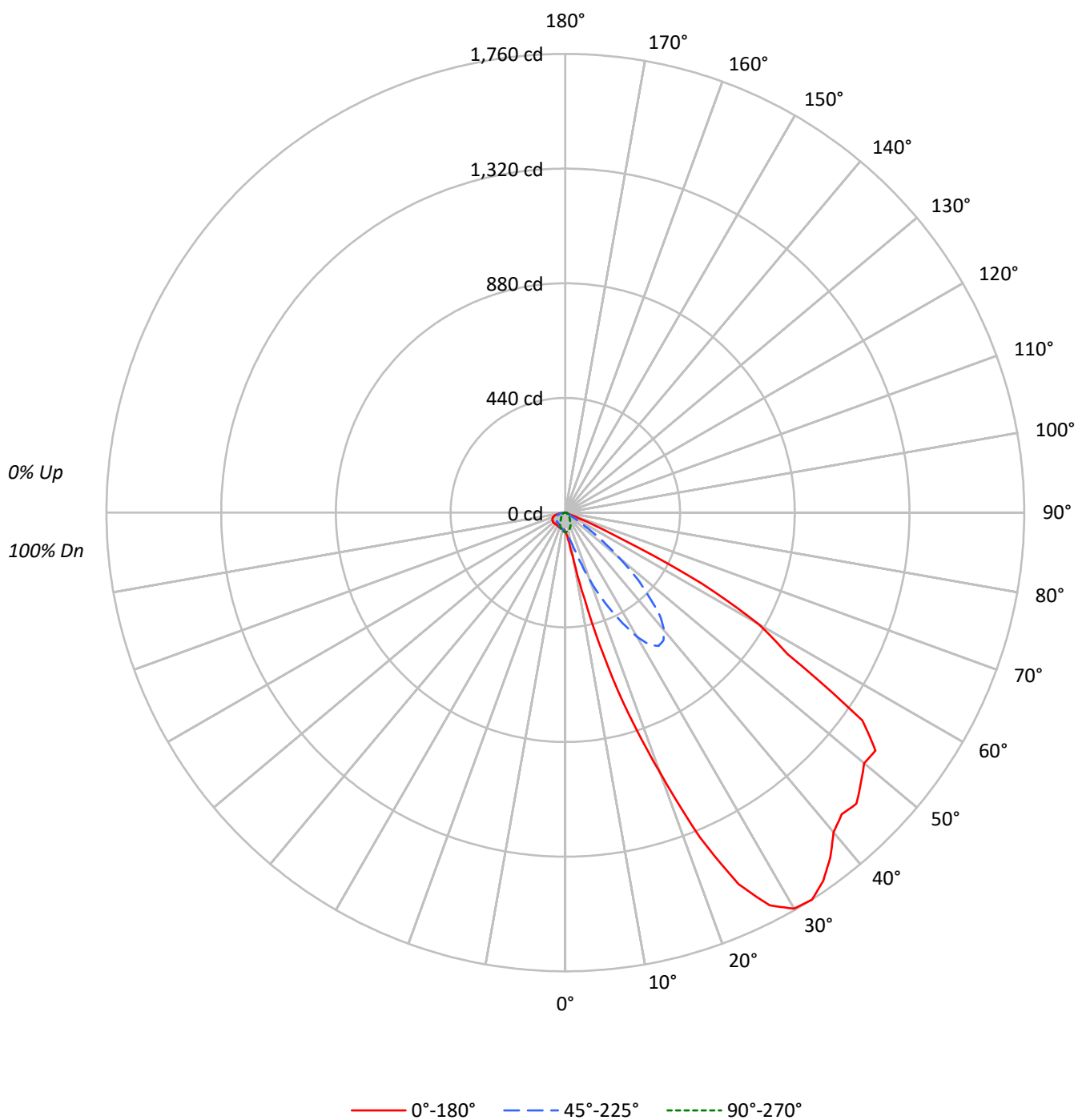
Lumens per Lamp: N/A  
Luminaire Lumens: 1132.0 lumens  
Efficiency: N/A  
Efficacy: 77.5 lumens/watt  
Spacing Criteria (0/90/45): 3.76 / 0.91 / 1.95  
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')  
CIE Type: Direct

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

TEST NUMBER: P1309184

CATALOG NUMBER: P3SQAS13R559035DE010 E3SQCA451MB

### Luminous Intensity Polar Plot



TEST NUMBER: P1309184

CATALOG NUMBER: P3SQAS13R559035DE010 E3SQCA451MB

**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  | 50  | 30 | 10 |
| 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°  | 12572  | 12572  | 12572 | 12572 | 12572 |
| 5°  | 16078  | 14695  | 12620 | 11756 | 11410 |
| 10° | 32702  | 18712  | 12242 | 11192 | 11192 |
| 15° | 100400 | 28706  | 11411 | 10876 | 11233 |
| 20° | 194125 | 50236  | 10263 | 10630 | 11180 |
| 25° | 298779 | 78120  | 8931  | 10261 | 11212 |
| 30° | 348870 | 109197 | 7358  | 10142 | 11534 |
| 35° | 362525 | 131214 | 6097  | 10092 | 11984 |
| 40° | 359781 | 132442 | 5621  | 10567 | 13040 |
| 45° | 384654 | 109626 | 5358  | 11447 | 14126 |
| 50° | 400905 | 72368  | 5359  | 12325 | 15808 |
| 55° | 417453 | 31527  | 5405  | 13512 | 17415 |
| 60° | 294914 | 7233   | 5511  | 14811 | 19633 |
| 65° | 96173  | 2445   | 5298  | 15893 | 22006 |
| 70° | 3021   | 2518   | 5539  | 17121 | 25177 |
| 75° | 2662   | 2662   | 4658  | 17966 | 27948 |
| 80° | 1984   | 2975   | 4959  | 17852 | 29754 |
| 85° | 1976   | 3952   | 5928  | 17784 | 29640 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 52.5°

Luminance: 424162 cd/sqm

TEST NUMBER: P1309184

CATALOG NUMBER: P3SQAS13R559035DE010 E3SQCA451MB

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 7.7    | 0.7       |
| 10°-20°   | 48.1   | 4.2       |
| 20°-30°   | 161.1  | 14.2      |
| 30°-40°   | 264.6  | 23.4      |
| 40°-50°   | 295.1  | 26.1      |
| 50°-60°   | 248.4  | 21.9      |
| 60°-70°   | 84.3   | 7.4       |
| 70°-80°   | 16.5   | 1.5       |
| 80°-90°   | 6.2    | 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°    | 216.9  | 19.2      |
| 0°-40°    | 481.5  | 42.5      |
| 0°-60°    | 1025.0 | 90.6      |
| 0°-90°    | 1132.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 1132.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 45° | 90° | 135° | 180° | Flux |
|-----|------|-----|-----|------|------|------|
| 0°  | 73   | 73  | 73  | 73   | 73   |      |
| 5°  | 93   | 85  | 73  | 68   | 66   | 12   |
| 15° | 563  | 161 | 64  | 61   | 63   | 179  |
| 25° | 1572 | 411 | 47  | 54   | 59   | 707  |
| 35° | 1724 | 624 | 29  | 48   | 57   | 1071 |
| 45° | 1579 | 450 | 22  | 47   | 58   | 1206 |
| 55° | 1390 | 105 | 18  | 45   | 58   | 1132 |
| 65° | 236  | 6   | 13  | 39   | 54   | 320  |
| 75° | 4    | 4   | 7   | 27   | 42   | 4    |
| 85° | 1    | 2   | 3   | 9    | 15   | 1    |
| 90° | 0    | 0   | 0   | 0    | 0    |      |

TEST NUMBER: P1309184

CATALOG NUMBER: P3SQAS13R559035DE010 E3SQCA451MB

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 10°    | 15°    | 20°    | 22.5°  | 45°   | 67.5° | 90°  | 112.5° | 135° |
|-------|--------|--------|--------|--------|--------|--------|-------|-------|------|--------|------|
| 0°    | 73.0   | 73.0   | 73.0   | 73.0   | 73.0   | 73.0   | 73.0  | 73.0  | 73.0 | 73.0   | 73.0 |
| 2.5°  | 80.0   | 80.0   | 80.0   | 80.0   | 80.0   | 80.0   | 79.0  | 76.0  | 74.0 | 71.0   | 70.0 |
| 5°    | 93.0   | 93.0   | 93.0   | 92.0   | 92.0   | 90.0   | 85.0  | 78.0  | 73.0 | 69.0   | 68.0 |
| 7.5°  | 120.0  | 119.0  | 117.0  | 116.0  | 113.0  | 112.0  | 94.0  | 80.0  | 72.0 | 67.0   | 66.0 |
| 10°   | 187.0  | 185.0  | 182.0  | 171.0  | 161.0  | 154.0  | 107.0 | 81.0  | 70.0 | 65.0   | 64.0 |
| 12.5° | 337.1  | 333.1  | 318.1  | 295.1  | 267.1  | 253.0  | 128.0 | 82.0  | 67.0 | 63.0   | 63.0 |
| 15°   | 563.1  | 558.1  | 530.1  | 498.1  | 447.1  | 419.1  | 161.0 | 81.0  | 64.0 | 60.0   | 61.0 |
| 17.5° | 813.2  | 799.2  | 770.1  | 728.1  | 659.1  | 626.1  | 210.0 | 79.0  | 60.0 | 58.0   | 60.0 |
| 20°   | 1059.2 | 1055.2 | 1007.2 | 950.2  | 865.2  | 821.2  | 274.1 | 76.0  | 56.0 | 55.0   | 58.0 |
| 22.5° | 1347.3 | 1330.3 | 1279.2 | 1218.2 | 1101.2 | 1043.2 | 343.1 | 72.0  | 52.0 | 52.0   | 56.0 |
| 25°   | 1572.3 | 1552.3 | 1512.3 | 1441.3 | 1330.3 | 1268.2 | 411.1 | 67.0  | 47.0 | 49.0   | 54.0 |
| 27.5° | 1698.3 | 1675.3 | 1645.3 | 1584.3 | 1498.3 | 1443.3 | 479.1 | 61.0  | 42.0 | 46.0   | 52.0 |
| 30°   | 1754.3 | 1748.3 | 1726.3 | 1681.3 | 1602.3 | 1553.3 | 549.1 | 54.0  | 37.0 | 43.0   | 51.0 |
| 32.5° | 1760.3 | 1763.3 | 1754.3 | 1725.3 | 1665.3 | 1623.3 | 601.1 | 48.0  | 33.0 | 41.0   | 49.0 |
| 35°   | 1724.3 | 1735.3 | 1741.3 | 1729.3 | 1690.3 | 1656.3 | 624.1 | 41.0  | 29.0 | 39.0   | 48.0 |
| 37.5° | 1668.3 | 1688.3 | 1708.3 | 1711.3 | 1687.3 | 1665.3 | 618.1 | 35.0  | 27.0 | 38.0   | 48.0 |
| 40°   | 1600.3 | 1618.3 | 1659.3 | 1685.3 | 1677.3 | 1661.3 | 589.1 | 29.0  | 25.0 | 36.0   | 47.0 |
| 42.5° | 1569.3 | 1573.3 | 1617.3 | 1661.3 | 1659.3 | 1646.3 | 538.1 | 23.0  | 23.0 | 36.0   | 47.0 |
| 45°   | 1579.3 | 1561.3 | 1590.3 | 1641.3 | 1638.3 | 1621.3 | 450.1 | 18.0  | 22.0 | 35.0   | 47.0 |
| 47.5° | 1537.3 | 1512.3 | 1561.3 | 1621.3 | 1610.3 | 1585.3 | 372.1 | 13.0  | 21.0 | 34.0   | 46.0 |
| 50°   | 1496.3 | 1492.3 | 1530.3 | 1560.3 | 1545.3 | 1531.3 | 270.1 | 10.0  | 20.0 | 33.0   | 46.0 |
| 52.5° | 1499.3 | 1492.3 | 1496.3 | 1495.3 | 1465.3 | 1450.3 | 185.0 | 8.0   | 19.0 | 32.0   | 46.0 |
| 55°   | 1390.3 | 1368.3 | 1347.3 | 1353.3 | 1355.3 | 1345.3 | 105.0 | 7.0   | 18.0 | 32.0   | 45.0 |
| 57.5° | 1010.2 | 1004.2 | 1027.2 | 1092.2 | 1143.2 | 1149.2 | 51.0  | 7.0   | 17.0 | 31.0   | 44.0 |
| 60°   | 856.2  | 852.2  | 853.2  | 872.2  | 899.2  | 882.2  | 21.0  | 7.0   | 16.0 | 30.0   | 43.0 |
| 62.5° | 590.1  | 629.1  | 645.1  | 689.1  | 671.1  | 647.1  | 8.0   | 8.0   | 15.0 | 28.0   | 42.0 |
| 65°   | 236.0  | 235.0  | 257.0  | 278.1  | 272.1  | 254.0  | 6.0   | 7.0   | 13.0 | 26.0   | 39.0 |
| 67.5° | 55.0   | 50.0   | 43.0   | 37.0   | 31.0   | 25.0   | 6.0   | 7.0   | 12.0 | 24.0   | 37.0 |
| 70°   | 6.0    | 6.0    | 6.0    | 6.0    | 6.0    | 5.0    | 5.0   | 7.0   | 11.0 | 22.0   | 34.0 |
| 72.5° | 5.0    | 5.0    | 5.0    | 5.0    | 5.0    | 5.0    | 5.0   | 6.0   | 9.0  | 19.0   | 31.0 |
| 75°   | 4.0    | 4.0    | 4.0    | 4.0    | 4.0    | 4.0    | 4.0   | 5.0   | 7.0  | 16.0   | 27.0 |
| 77.5° | 3.0    | 3.0    | 3.0    | 4.0    | 3.0    | 4.0    | 4.0   | 5.0   | 6.0  | 13.0   | 23.0 |
| 80°   | 2.0    | 2.0    | 3.0    | 3.0    | 3.0    | 3.0    | 3.0   | 4.0   | 5.0  | 11.0   | 18.0 |
| 82.5° | 2.0    | 2.0    | 2.0    | 2.0    | 2.0    | 2.0    | 3.0   | 3.0   | 4.0  | 8.0    | 13.0 |
| 85°   | 1.0    | 1.0    | 1.0    | 1.0    | 1.0    | 2.0    | 2.0   | 3.0   | 3.0  | 6.0    | 9.0  |
| 87.5° | 1.0    | 1.0    | 1.0    | 1.0    | 1.0    | 1.0    | 2.0   | 2.0   | 3.0  | 3.0    | 4.0  |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0   | 0.0   | 0.0  | 0.0    | 0.0  |

TEST NUMBER: P1309184

CATALOG NUMBER: P3SQAS13R559035DE010 E3SQCA451MB

**CANDELA DISTRIBUTION (continued):**

|       | 157.5° | 180° |
|-------|--------|------|
| 0°    | 73.0   | 73.0 |
| 2.5°  | 69.0   | 69.0 |
| 5°    | 67.0   | 66.0 |
| 7.5°  | 65.0   | 65.0 |
| 10°   | 64.0   | 64.0 |
| 12.5° | 63.0   | 64.0 |
| 15°   | 63.0   | 63.0 |
| 17.5° | 61.0   | 62.0 |
| 20°   | 60.0   | 61.0 |
| 22.5° | 59.0   | 60.0 |
| 25°   | 58.0   | 59.0 |
| 27.5° | 57.0   | 58.0 |
| 30°   | 56.0   | 58.0 |
| 32.5° | 55.0   | 57.0 |
| 35°   | 55.0   | 57.0 |
| 37.5° | 55.0   | 58.0 |
| 40°   | 55.0   | 58.0 |
| 42.5° | 55.0   | 58.0 |
| 45°   | 55.0   | 58.0 |
| 47.5° | 55.0   | 58.0 |
| 50°   | 55.0   | 59.0 |
| 52.5° | 55.0   | 59.0 |
| 55°   | 55.0   | 58.0 |
| 57.5° | 54.0   | 58.0 |
| 60°   | 54.0   | 57.0 |
| 62.5° | 53.0   | 56.0 |
| 65°   | 51.0   | 54.0 |
| 67.5° | 49.0   | 53.0 |
| 70°   | 46.0   | 50.0 |
| 72.5° | 43.0   | 46.0 |
| 75°   | 39.0   | 42.0 |
| 77.5° | 34.0   | 36.0 |
| 80°   | 27.0   | 30.0 |
| 82.5° | 21.0   | 23.0 |
| 85°   | 14.0   | 15.0 |
| 87.5° | 6.0    | 7.0  |
| 90°   | 0.0    | 0.0  |

(END OF REPORT)