

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: P1318360

Luminaire Tested: P3SQAS20R659835D010 E3SQCA451MB

Issue Date: 1/29/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1318360  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-82)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/29/2026  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: IRiS  
Catalog Number: P3SQAS20R659835D010 E3SQCA451MB  
Description: 3in Adjustable LED luminaire with, R65 optic, 3500K CCT AND, 98CRI , E3SQCA451MB TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

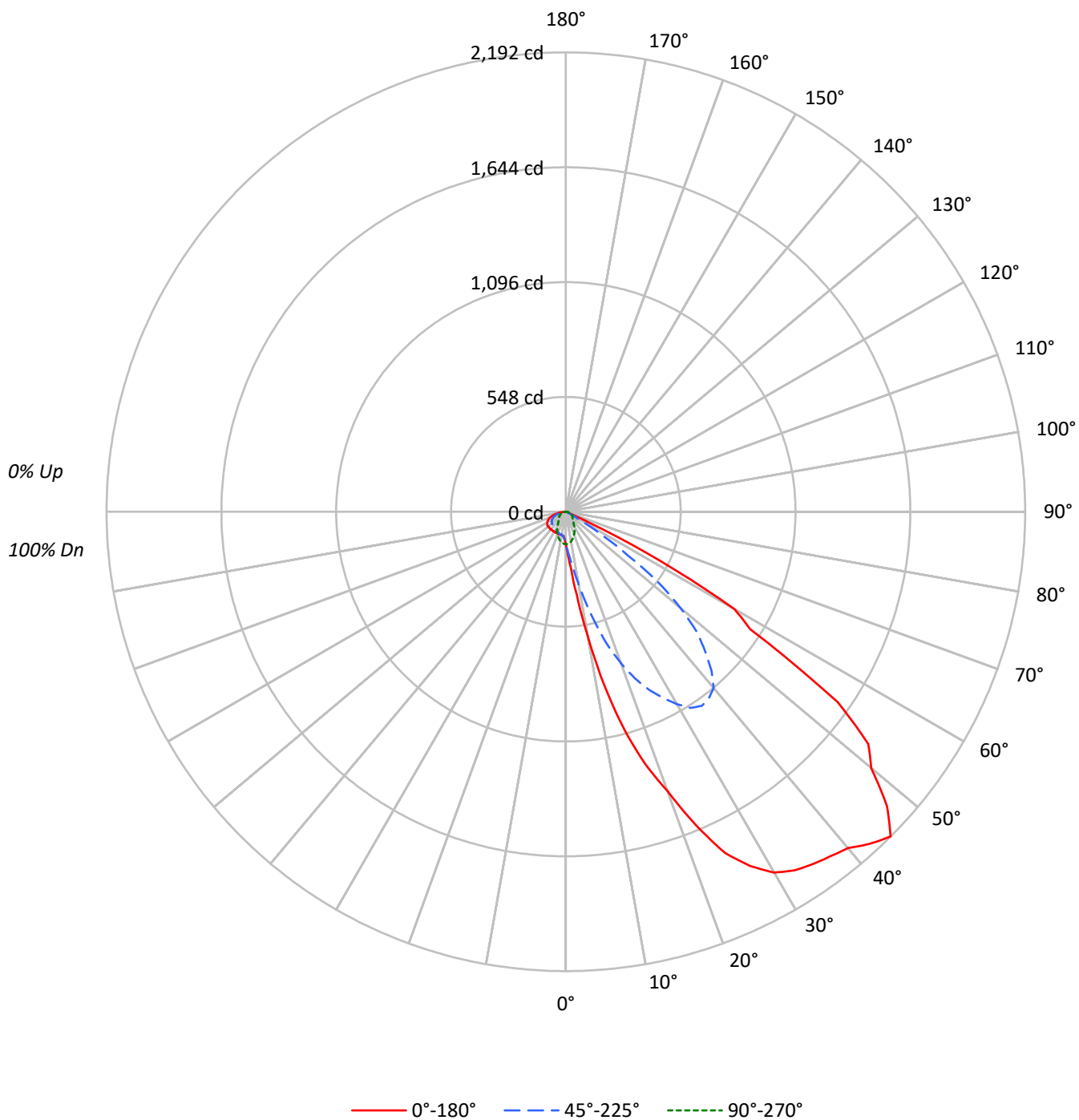
Lumens per Lamp: N/A  
Luminaire Lumens: 1590.0 lumens  
Efficiency: N/A  
Efficacy: 58.0 lumens/watt  
Spacing Criteria (0/90/45): 3.28 / 0.89 / 2.04  
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')  
CIE Type: Direct

Input Watts (W): 27.4  
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 |
| 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  | 108 | 104 | 100 | 97  | 100 | 97  | 94  | 96  | 94  | 91  | 92  | 90  | 89  | 87  |    |    |
| 2   | 101 | 93  | 87  | 82  | 98  | 92  | 86  | 81  | 88  | 83  | 79  | 85  | 81  | 77  | 82  | 79  | 76  | 74  |    |    |
| 3   | 92  | 82  | 75  | 69  | 90  | 81  | 74  | 68  | 78  | 72  | 67  | 75  | 70  | 66  | 73  | 68  | 64  | 62  |    |    |
| 4   | 84  | 73  | 64  | 58  | 82  | 71  | 63  | 57  | 69  | 62  | 57  | 67  | 61  | 56  | 64  | 59  | 55  | 53  |    |    |
| 5   | 77  | 64  | 56  | 49  | 75  | 63  | 55  | 49  | 61  | 54  | 48  | 59  | 53  | 48  | 57  | 52  | 47  | 45  |    |    |
| 6   | 71  | 57  | 49  | 42  | 69  | 57  | 48  | 42  | 55  | 47  | 42  | 53  | 46  | 41  | 51  | 46  | 41  | 39  |    |    |
| 7   | 65  | 52  | 43  | 37  | 63  | 51  | 42  | 36  | 49  | 42  | 36  | 48  | 41  | 36  | 46  | 40  | 36  | 34  |    |    |
| 8   | 60  | 46  | 38  | 32  | 58  | 46  | 38  | 32  | 44  | 37  | 32  | 43  | 36  | 31  | 42  | 36  | 31  | 29  |    |    |
| 9   | 56  | 42  | 34  | 28  | 54  | 41  | 33  | 28  | 40  | 33  | 28  | 39  | 33  | 28  | 38  | 32  | 28  | 26  |    |    |
| 10  | 52  | 38  | 30  | 25  | 50  | 38  | 30  | 25  | 37  | 30  | 25  | 36  | 29  | 25  | 35  | 29  | 24  | 23  |    |    |

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

|     | 0°     | 45°    | 90°   | 135°  | 180°  |
|-----|--------|--------|-------|-------|-------|
| 0°  | 26626  | 26626  | 26626 | 26626 | 26626 |
| 5°  | 46574  | 38034  | 26191 | 21230 | 20400 |
| 10° | 105382 | 61330  | 25095 | 19517 | 19796 |
| 15° | 191581 | 98634  | 23304 | 19613 | 20183 |
| 20° | 259756 | 140829 | 21040 | 19574 | 20454 |
| 25° | 341421 | 177827 | 18471 | 19079 | 20903 |
| 30° | 395345 | 210837 | 15850 | 19031 | 21875 |
| 35° | 431717 | 237640 | 13414 | 19448 | 23127 |
| 40° | 470954 | 246583 | 11826 | 20436 | 24730 |
| 45° | 533907 | 228702 | 11252 | 21750 | 26792 |
| 50° | 510006 | 190928 | 11119 | 23069 | 29472 |
| 55° | 475343 | 107223 | 11500 | 24892 | 32548 |
| 60° | 320127 | 23078  | 11539 | 26350 | 35133 |
| 65° | 49391  | 5827   | 11044 | 27303 | 38347 |
| 70° | 5640   | 5640   | 10423 | 28098 | 40938 |
| 75° | 5323   | 5323   | 9515  | 27615 | 41389 |
| 80° | 4761   | 6347   | 9521  | 25291 | 41159 |
| 85° | 3162   | 6323   | 9485  | 25293 | 37742 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 533907 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 18.7   | 1.2       |
| 10°-20°   | 101.1  | 6.4       |
| 20°-30°   | 237.5  | 14.9      |
| 30°-40°   | 358.9  | 22.6      |
| 40°-50°   | 412.5  | 25.9      |
| 50°-60°   | 327.5  | 20.6      |
| 60°-70°   | 98.1   | 6.2       |
| 70°-80°   | 26.7   | 1.7       |
| 80°-90°   | 9.0    | 0.6       |
| 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       |
| <hr/>     |        |           |
| 0°-30°    | 357.4  | 22.5      |
| 0°-40°    | 716.2  | 45.0      |
| 0°-60°    | 1456.3 | 91.6      |
| 0°-90°    | 1590.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 1590.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 45°  | 90° | 135° | 180° | Flux |
|-----|------|------|-----|------|------|------|
| 0°  | 155  | 155  | 155 | 155  | 155  |      |
| 5°  | 269  | 220  | 152 | 123  | 118  | 36   |
| 15° | 1074 | 553  | 131 | 110  | 113  | 309  |
| 25° | 1797 | 936  | 97  | 100  | 110  | 820  |
| 35° | 2053 | 1130 | 64  | 92   | 110  | 1289 |
| 45° | 2192 | 939  | 46  | 89   | 110  | 1628 |
| 55° | 1583 | 357  | 38  | 83   | 108  | 1304 |
| 65° | 121  | 14   | 27  | 67   | 94   | 272  |
| 75° | 8    | 8    | 14  | 42   | 62   | 8    |
| 85° | 2    | 3    | 5   | 13   | 19   | 2    |
| 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°    | 154.6  | 154.6  | 154.6  | 154.6  | 154.6  | 154.6  | 154.6  | 154.6 | 154.6 | 154.6  | 154.6 |
| 2.5°  | 196.1  | 197.7  | 196.1  | 196.1  | 194.5  | 192.9  | 181.7  | 169.0 | 154.6 | 143.5  | 135.5 |
| 5°    | 269.4  | 271.0  | 266.2  | 266.2  | 263.0  | 258.3  | 220.0  | 183.3 | 151.5 | 133.9  | 122.8 |
| 7.5°  | 398.6  | 404.9  | 397.0  | 387.4  | 369.9  | 366.7  | 274.2  | 197.7 | 148.3 | 124.4  | 114.8 |
| 10°   | 602.6  | 597.8  | 589.9  | 570.7  | 540.4  | 526.1  | 350.7  | 212.0 | 143.5 | 118.0  | 111.6 |
| 12.5° | 849.7  | 837.0  | 827.4  | 792.3  | 750.9  | 727.0  | 446.4  | 224.8 | 137.1 | 111.6  | 110.0 |
| 15°   | 1074.5 | 1065.0 | 1042.6 | 1009.2 | 958.1  | 939.0  | 553.2  | 232.8 | 130.7 | 106.8  | 110.0 |
| 17.5° | 1264.2 | 1254.7 | 1241.9 | 1208.4 | 1155.8 | 1127.1 | 672.8  | 237.5 | 122.8 | 103.6  | 108.4 |
| 20°   | 1417.3 | 1410.9 | 1393.4 | 1366.3 | 1313.7 | 1286.5 | 768.4  | 237.5 | 114.8 | 100.4  | 106.8 |
| 22.5° | 1615.0 | 1600.6 | 1578.3 | 1538.4 | 1473.1 | 1431.6 | 859.3  | 232.8 | 106.8 | 97.2   | 103.6 |
| 25°   | 1796.7 | 1787.1 | 1758.4 | 1710.6 | 1640.5 | 1599.0 | 935.8  | 223.2 | 97.2  | 92.5   | 100.4 |
| 27.5° | 1905.1 | 1898.7 | 1871.6 | 1822.2 | 1744.1 | 1712.2 | 999.6  | 208.8 | 87.7  | 87.7   | 98.8  |
| 30°   | 1988.0 | 1975.3 | 1948.2 | 1900.3 | 1820.6 | 1782.4 | 1060.2 | 191.3 | 79.7  | 82.9   | 95.7  |
| 32.5° | 2029.5 | 2024.7 | 2000.8 | 1959.3 | 1881.2 | 1838.2 | 1109.6 | 169.0 | 70.1  | 79.7   | 94.1  |
| 35°   | 2053.4 | 2048.6 | 2029.5 | 1989.6 | 1916.3 | 1874.8 | 1130.3 | 148.3 | 63.8  | 76.5   | 92.5  |
| 37.5° | 2072.5 | 2067.7 | 2043.8 | 2004.0 | 1930.6 | 1887.6 | 1120.7 | 125.9 | 57.4  | 73.3   | 90.9  |
| 40°   | 2094.8 | 2077.3 | 2040.6 | 2000.8 | 1933.8 | 1892.4 | 1096.8 | 105.2 | 52.6  | 71.7   | 90.9  |
| 42.5° | 2149.0 | 2088.5 | 2031.1 | 1994.4 | 1930.6 | 1882.8 | 1028.3 | 82.9  | 47.8  | 68.6   | 89.3  |
| 45°   | 2192.1 | 2085.3 | 2011.9 | 1983.2 | 1917.9 | 1863.7 | 939.0  | 60.6  | 46.2  | 67.0   | 89.3  |
| 47.5° | 2078.9 | 2013.5 | 1980.0 | 1964.1 | 1894.0 | 1835.0 | 846.5  | 41.5  | 44.6  | 65.4   | 87.7  |
| 50°   | 1903.5 | 1895.5 | 1882.8 | 1884.4 | 1820.6 | 1772.8 | 712.6  | 28.7  | 41.5  | 63.8   | 86.1  |
| 52.5° | 1819.0 | 1809.5 | 1787.1 | 1771.2 | 1707.4 | 1666.0 | 564.4  | 22.3  | 39.9  | 62.2   | 84.5  |
| 55°   | 1583.1 | 1589.5 | 1565.5 | 1575.1 | 1556.0 | 1535.3 | 357.1  | 20.7  | 38.3  | 59.0   | 82.9  |
| 57.5° | 1042.6 | 1074.5 | 1130.3 | 1197.3 | 1257.9 | 1299.3 | 192.9  | 20.7  | 35.1  | 57.4   | 79.7  |
| 60°   | 929.4  | 921.5  | 919.9  | 932.6  | 959.7  | 982.1  | 67.0   | 19.1  | 33.5  | 52.6   | 76.5  |
| 62.5° | 508.6  | 505.4  | 553.2  | 634.5  | 682.3  | 687.1  | 19.1   | 19.1  | 30.3  | 49.4   | 71.7  |
| 65°   | 121.2  | 125.9  | 140.3  | 175.4  | 207.3  | 228.0  | 14.3   | 17.5  | 27.1  | 46.2   | 67.0  |
| 67.5° | 19.1   | 20.7   | 20.7   | 25.5   | 28.7   | 28.7   | 12.8   | 15.9  | 23.9  | 41.5   | 62.2  |
| 70°   | 11.2   | 11.2   | 11.2   | 11.2   | 11.2   | 11.2   | 11.2   | 14.3  | 20.7  | 36.7   | 55.8  |
| 72.5° | 9.6    | 9.6    | 9.6    | 9.6    | 9.6    | 9.6    | 11.2   | 12.8  | 17.5  | 31.9   | 47.8  |
| 75°   | 8.0    | 8.0    | 8.0    | 8.0    | 8.0    | 8.0    | 8.0    | 11.2  | 14.3  | 25.5   | 41.5  |
| 77.5° | 6.4    | 6.4    | 6.4    | 6.4    | 6.4    | 6.4    | 8.0    | 9.6   | 12.8  | 20.7   | 33.5  |
| 80°   | 4.8    | 4.8    | 4.8    | 4.8    | 4.8    | 4.8    | 6.4    | 8.0   | 9.6   | 15.9   | 25.5  |
| 82.5° | 3.2    | 3.2    | 3.2    | 3.2    | 3.2    | 3.2    | 4.8    | 6.4   | 8.0   | 12.8   | 19.1  |
| 85°   | 1.6    | 1.6    | 1.6    | 1.6    | 3.2    | 3.2    | 3.2    | 4.8   | 4.8   | 8.0    | 12.8  |
| 87.5° | 1.6    | 1.6    | 1.6    | 1.6    | 1.6    | 1.6    | 3.2    | 3.2   | 3.2   | 4.8    | 6.4   |
| 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°    | 154.6  | 154.6 |
| 2.5°  | 130.7  | 129.1 |
| 5°    | 118.0  | 118.0 |
| 7.5°  | 113.2  | 113.2 |
| 10°   | 111.6  | 113.2 |
| 12.5° | 111.6  | 113.2 |
| 15°   | 111.6  | 113.2 |
| 17.5° | 111.6  | 113.2 |
| 20°   | 110.0  | 111.6 |
| 22.5° | 108.4  | 110.0 |
| 25°   | 106.8  | 110.0 |
| 27.5° | 105.2  | 110.0 |
| 30°   | 105.2  | 110.0 |
| 32.5° | 105.2  | 110.0 |
| 35°   | 103.6  | 110.0 |
| 37.5° | 103.6  | 110.0 |
| 40°   | 103.6  | 110.0 |
| 42.5° | 103.6  | 110.0 |
| 45°   | 103.6  | 110.0 |
| 47.5° | 103.6  | 110.0 |
| 50°   | 103.6  | 110.0 |
| 52.5° | 102.0  | 110.0 |
| 55°   | 102.0  | 108.4 |
| 57.5° | 98.8   | 105.2 |
| 60°   | 95.7   | 102.0 |
| 62.5° | 92.5   | 98.8  |
| 65°   | 87.7   | 94.1  |
| 67.5° | 82.9   | 87.7  |
| 70°   | 74.9   | 81.3  |
| 72.5° | 67.0   | 71.7  |
| 75°   | 57.4   | 62.2  |
| 77.5° | 47.8   | 52.6  |
| 80°   | 38.3   | 41.5  |
| 82.5° | 27.1   | 30.3  |
| 85°   | 17.5   | 19.1  |
| 87.5° | 8.0    | 8.0   |
| 90°   | 0.0    | 0.0   |

(END OF REPORT)