

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: P1317598

Luminaire Tested: P3SQAS02R459835DE010 E3SQCA451MW

Issue Date: 1/29/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1317598  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-84)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/29/2026  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: IRiS  
Catalog Number: P3SQAS02R459835DE010 E3SQCA451MW  
Description: 3in Adjustable LED luminaire with, R45 optic, 3500K CCT AND, 98CRI , E3SQCA451MW TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

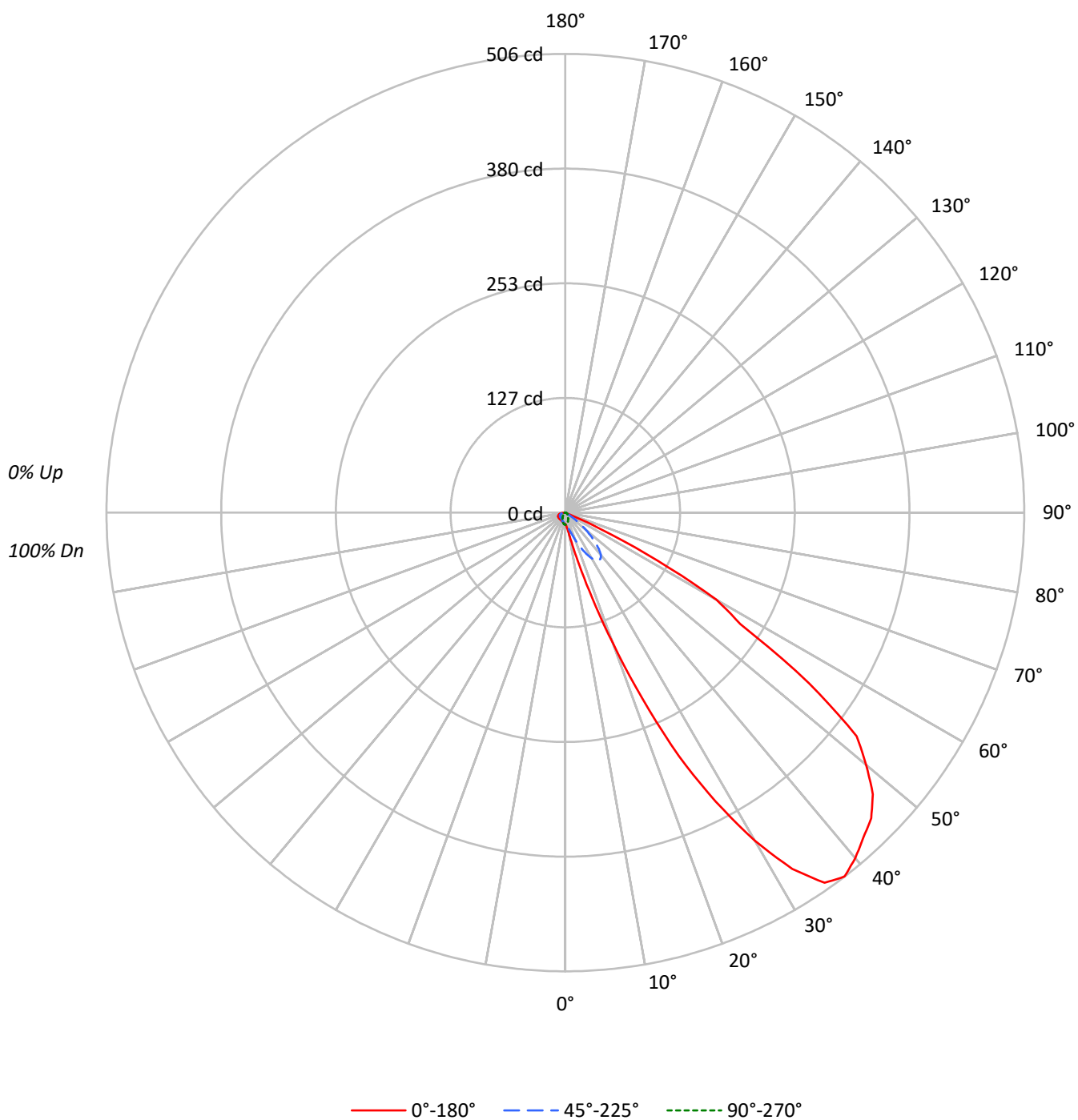
Lumens per Lamp: N/A  
Luminaire Lumens: 226.0 lumens  
Efficiency: N/A  
Efficacy: 62.8 lumens/watt  
Spacing Criteria (0/90/45): 3.81 / 0.82 / 1.83  
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')  
CIE Type: Direct

Input Watts (W): 3.6  
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  |
| RW  | 70  | 50  | 30  | 10  | 70  | 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 |
| 1   | 110 | 106 | 102 | 99  | 107 | 104 | 100 | 97  | 99  | 97  | 94  | 96  | 93  | 91  | 92  | 90  | 88  |
| 2   | 100 | 93  | 86  | 81  | 98  | 91  | 85  | 80  | 87  | 83  | 78  | 84  | 80  | 77  | 81  | 78  | 75  |
| 3   | 91  | 81  | 73  | 67  | 89  | 80  | 72  | 66  | 77  | 70  | 65  | 74  | 69  | 64  | 71  | 67  | 63  |
| 4   | 83  | 71  | 62  | 56  | 81  | 70  | 62  | 55  | 67  | 60  | 55  | 65  | 59  | 54  | 63  | 58  | 53  |
| 5   | 76  | 63  | 53  | 47  | 73  | 61  | 53  | 46  | 59  | 52  | 46  | 57  | 51  | 45  | 55  | 50  | 45  |
| 6   | 69  | 55  | 46  | 39  | 67  | 54  | 46  | 39  | 52  | 45  | 39  | 51  | 44  | 39  | 49  | 43  | 38  |
| 7   | 63  | 49  | 40  | 34  | 61  | 48  | 40  | 33  | 47  | 39  | 33  | 45  | 38  | 33  | 44  | 37  | 33  |
| 8   | 58  | 44  | 35  | 29  | 56  | 43  | 35  | 29  | 42  | 34  | 29  | 40  | 33  | 28  | 39  | 33  | 28  |
| 9   | 53  | 39  | 31  | 25  | 52  | 39  | 30  | 25  | 38  | 30  | 25  | 36  | 29  | 25  | 35  | 29  | 24  |
| 10  | 49  | 36  | 27  | 22  | 48  | 35  | 27  | 22  | 34  | 27  | 21  | 33  | 26  | 21  | 32  | 26  | 21  |

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

|     | 0°     | 45°   | 90°  | 135° | 180° |
|-----|--------|-------|------|------|------|
| 0°  | 2256   | 2256  | 2256 | 2256 | 2256 |
| 5°  | 2680   | 2489  | 2230 | 2075 | 2075 |
| 10° | 4285   | 2903  | 2099 | 1959 | 1959 |
| 15° | 10662  | 3887  | 1890 | 1836 | 1890 |
| 20° | 28059  | 5810  | 1649 | 1741 | 1851 |
| 25° | 56343  | 8627  | 1425 | 1634 | 1805 |
| 30° | 83066  | 11554 | 1153 | 1591 | 1849 |
| 35° | 104786 | 13540 | 988  | 1577 | 1934 |
| 40° | 111803 | 13692 | 877  | 1641 | 2068 |
| 45° | 116154 | 11423 | 828  | 1778 | 2241 |
| 50° | 115987 | 7958  | 804  | 1902 | 2492 |
| 55° | 98576  | 3543  | 841  | 2132 | 2762 |
| 60° | 66237  | 723   | 827  | 2377 | 3169 |
| 65° | 17564  | 285   | 856  | 2567 | 3586 |
| 70° | 453    | 352   | 856  | 2820 | 4028 |
| 75° | 399    | 399   | 865  | 2994 | 4591 |
| 80° | 397    | 595   | 893  | 3174 | 5157 |
| 85° | 395    | 790   | 1383 | 3359 | 5138 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 10°

Vertical Angle: 47.5°

Luminance: 119150 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 1.3    | 0.6       |
| 10°-20°   | 6.4    | 2.8       |
| 20°-30°   | 26.3   | 11.6      |
| 30°-40°   | 55.4   | 24.5      |
| 40°-50°   | 68.4   | 30.2      |
| 50°-60°   | 51.2   | 22.7      |
| 60°-70°   | 13.2   | 5.8       |
| 70°-80°   | 2.7    | 1.2       |
| 80°-90°   | 1.1    | 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°    | 34.0   | 15.0      |
| 0°-40°    | 89.4   | 39.5      |
| 0°-60°    | 209.0  | 92.5      |
| 0°-90°    | 226.0  | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 226.0  | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°  | 45° | 90° | 135° | 180° | Flux |
|-----|-----|-----|-----|------|------|------|
| 0°  | 13  | 13  | 13  | 13   | 13   |      |
| 5°  | 16  | 14  | 13  | 12   | 12   | 2    |
| 15° | 60  | 22  | 11  | 10   | 11   | 22   |
| 25° | 296 | 45  | 8   | 9    | 10   | 138  |
| 35° | 498 | 64  | 5   | 8    | 9    | 304  |
| 45° | 477 | 47  | 3   | 7    | 9    | 365  |
| 55° | 328 | 12  | 3   | 7    | 9    | 283  |
| 65° | 43  | 1   | 2   | 6    | 9    | 62   |
| 75° | 1   | 1   | 1   | 4    | 7    | 1    |
| 85° | 0   | 0   | 1   | 2    | 3    | 0    |
| 90° | 0   | 0   | 0   | 0    | 0    |      |

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**CANDELA DISTRIBUTION (FULL):**

|       | 0°    | 5°    | 10°   | 15°   | 20°   | 25°   | 30°   | 45°  | 67.5° | 90°  | 112.5° |
|-------|-------|-------|-------|-------|-------|-------|-------|------|-------|------|--------|
| 0°    | 13.1  | 13.1  | 13.1  | 13.1  | 13.1  | 13.1  | 13.1  | 13.1 | 13.1  | 13.1 | 13.1   |
| 2.5°  | 13.8  | 13.8  | 13.8  | 13.8  | 13.8  | 13.8  | 13.8  | 13.6 | 13.4  | 13.1 | 12.7   |
| 5°    | 15.5  | 15.3  | 15.3  | 15.3  | 15.1  | 14.9  | 14.9  | 14.4 | 13.6  | 12.9 | 12.3   |
| 7.5°  | 18.3  | 18.3  | 18.1  | 17.7  | 17.6  | 17.2  | 16.8  | 15.3 | 13.6  | 12.5 | 11.8   |
| 10°   | 24.5  | 24.1  | 23.5  | 23.2  | 22.2  | 20.9  | 20.0  | 16.6 | 13.4  | 12.0 | 11.4   |
| 12.5° | 36.6  | 37.3  | 35.5  | 33.6  | 31.0  | 28.6  | 25.6  | 18.9 | 13.4  | 11.4 | 10.8   |
| 15°   | 59.8  | 61.1  | 57.5  | 53.8  | 47.4  | 41.5  | 35.9  | 21.8 | 13.1  | 10.6 | 10.1   |
| 17.5° | 97.7  | 99.3  | 93.4  | 84.6  | 74.7  | 62.7  | 52.5  | 26.0 | 12.7  | 9.9  | 9.5    |
| 20°   | 153.1 | 152.9 | 141.4 | 130.3 | 111.3 | 93.7  | 74.5  | 31.7 | 12.1  | 9.0  | 9.0    |
| 22.5° | 221.3 | 222.0 | 207.8 | 188.0 | 161.0 | 132.8 | 102.1 | 38.5 | 11.4  | 8.2  | 8.4    |
| 25°   | 296.5 | 290.2 | 273.4 | 249.3 | 214.7 | 175.7 | 135.4 | 45.4 | 10.6  | 7.5  | 7.8    |
| 27.5° | 359.3 | 353.1 | 333.9 | 305.3 | 268.2 | 221.8 | 169.2 | 52.3 | 9.7   | 6.7  | 7.3    |
| 30°   | 417.7 | 409.9 | 386.7 | 354.4 | 310.2 | 260.1 | 200.9 | 58.1 | 8.6   | 5.8  | 6.7    |
| 32.5° | 465.9 | 458.8 | 432.5 | 395.0 | 346.8 | 293.0 | 227.8 | 62.6 | 7.5   | 5.2  | 6.3    |
| 35°   | 498.4 | 491.1 | 466.8 | 425.6 | 373.1 | 316.9 | 249.7 | 64.4 | 6.5   | 4.7  | 6.2    |
| 37.5° | 505.9 | 502.0 | 484.6 | 445.9 | 391.2 | 332.2 | 263.7 | 63.9 | 5.4   | 4.3  | 5.8    |
| 40°   | 497.3 | 498.2 | 490.0 | 457.9 | 400.9 | 338.7 | 269.5 | 60.9 | 4.5   | 3.9  | 5.6    |
| 42.5° | 486.3 | 488.7 | 488.1 | 462.7 | 405.0 | 339.1 | 267.0 | 54.9 | 3.5   | 3.5  | 5.4    |
| 45°   | 476.9 | 479.4 | 482.7 | 460.7 | 402.2 | 334.3 | 259.4 | 46.9 | 2.6   | 3.4  | 5.4    |
| 47.5° | 459.9 | 462.6 | 467.4 | 444.3 | 388.0 | 321.8 | 245.6 | 38.1 | 1.9   | 3.2  | 5.2    |
| 50°   | 432.9 | 434.2 | 432.9 | 406.9 | 360.8 | 301.6 | 223.2 | 29.7 | 1.3   | 3.0  | 5.2    |
| 52.5° | 405.0 | 402.4 | 391.6 | 358.7 | 317.5 | 269.7 | 195.0 | 21.1 | 0.9   | 2.8  | 5.0    |
| 55°   | 328.3 | 324.2 | 316.1 | 296.0 | 272.5 | 230.4 | 157.6 | 11.8 | 0.9   | 2.8  | 4.9    |
| 57.5° | 228.8 | 231.0 | 233.8 | 229.7 | 218.9 | 181.5 | 119.7 | 5.2  | 0.9   | 2.6  | 4.9    |
| 60°   | 192.3 | 190.5 | 190.7 | 188.0 | 170.1 | 132.4 | 82.4  | 2.1  | 0.9   | 2.4  | 4.7    |
| 62.5° | 114.8 | 116.2 | 118.6 | 119.1 | 101.4 | 73.9  | 43.1  | 0.9  | 0.9   | 2.2  | 4.5    |
| 65°   | 43.1  | 45.2  | 39.6  | 34.4  | 27.3  | 20.0  | 10.1  | 0.7  | 1.1   | 2.1  | 4.1    |
| 67.5° | 1.3   | 1.5   | 1.9   | 1.7   | 1.7   | 1.5   | 1.1   | 0.7  | 1.1   | 1.9  | 3.9    |
| 70°   | 0.9   | 0.9   | 0.9   | 0.9   | 0.9   | 0.7   | 0.7   | 0.7  | 0.9   | 1.7  | 3.5    |
| 72.5° | 0.7   | 0.7   | 0.7   | 0.7   | 0.7   | 0.7   | 0.7   | 0.7  | 0.9   | 1.5  | 3.2    |
| 75°   | 0.6   | 0.7   | 0.6   | 0.6   | 0.6   | 0.6   | 0.6   | 0.6  | 0.9   | 1.3  | 2.6    |
| 77.5° | 0.6   | 0.6   | 0.6   | 0.6   | 0.6   | 0.6   | 0.6   | 0.6  | 0.7   | 1.1  | 2.2    |
| 80°   | 0.4   | 0.4   | 0.4   | 0.4   | 0.4   | 0.4   | 0.4   | 0.6  | 0.7   | 0.9  | 1.9    |
| 82.5° | 0.4   | 0.4   | 0.4   | 0.2   | 0.4   | 0.4   | 0.4   | 0.4  | 0.7   | 0.7  | 1.5    |
| 85°   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.4  | 0.6   | 0.7  | 0.9    |
| 87.5° | 0.0   | 0.0   | 0.0   | 0.0   | 0.2   | 0.2   | 0.2   | 0.4  | 0.6   | 0.6  | 0.6    |
| 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):**

|       | 135° | 157.5° | 180° |
|-------|------|--------|------|
| 0°    | 13.1 | 13.1   | 13.1 |
| 2.5°  | 12.3 | 12.3   | 12.3 |
| 5°    | 12.0 | 12.0   | 12.0 |
| 7.5°  | 11.6 | 11.6   | 11.6 |
| 10°   | 11.2 | 11.2   | 11.2 |
| 12.5° | 10.8 | 10.8   | 11.0 |
| 15°   | 10.3 | 10.6   | 10.6 |
| 17.5° | 9.9  | 10.3   | 10.5 |
| 20°   | 9.5  | 9.9    | 10.1 |
| 22.5° | 9.0  | 9.5    | 9.9  |
| 25°   | 8.6  | 9.3    | 9.5  |
| 27.5° | 8.2  | 9.2    | 9.5  |
| 30°   | 8.0  | 9.0    | 9.3  |
| 32.5° | 7.7  | 8.8    | 9.2  |
| 35°   | 7.5  | 8.8    | 9.2  |
| 37.5° | 7.5  | 8.6    | 9.2  |
| 40°   | 7.3  | 8.6    | 9.2  |
| 42.5° | 7.3  | 8.6    | 9.2  |
| 45°   | 7.3  | 8.6    | 9.2  |
| 47.5° | 7.1  | 8.6    | 9.3  |
| 50°   | 7.1  | 8.8    | 9.3  |
| 52.5° | 7.1  | 8.8    | 9.3  |
| 55°   | 7.1  | 8.8    | 9.2  |
| 57.5° | 6.9  | 8.6    | 9.2  |
| 60°   | 6.9  | 8.6    | 9.2  |
| 62.5° | 6.5  | 8.4    | 9.0  |
| 65°   | 6.3  | 8.2    | 8.8  |
| 67.5° | 6.0  | 8.0    | 8.4  |
| 70°   | 5.6  | 7.5    | 8.0  |
| 72.5° | 5.0  | 7.1    | 7.7  |
| 75°   | 4.5  | 6.5    | 6.9  |
| 77.5° | 3.9  | 5.8    | 6.2  |
| 80°   | 3.2  | 4.9    | 5.2  |
| 82.5° | 2.4  | 3.7    | 3.9  |
| 85°   | 1.7  | 2.4    | 2.6  |
| 87.5° | 0.7  | 1.1    | 1.3  |
| 90°   | 0.0  | 0.0    | 0.0  |

(END OF REPORT)