

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: P1318344

Luminaire Tested: P3SQAS20R559835D010 E3SQCA451MB

Issue Date: 1/29/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1318344  
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: P3SQAS20R559835D010 E3SQCA451MB  
Description: 3in Adjustable LED luminaire with, R55 optic, 3500K CCT AND, 98CRI , E3SQCA451MB TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

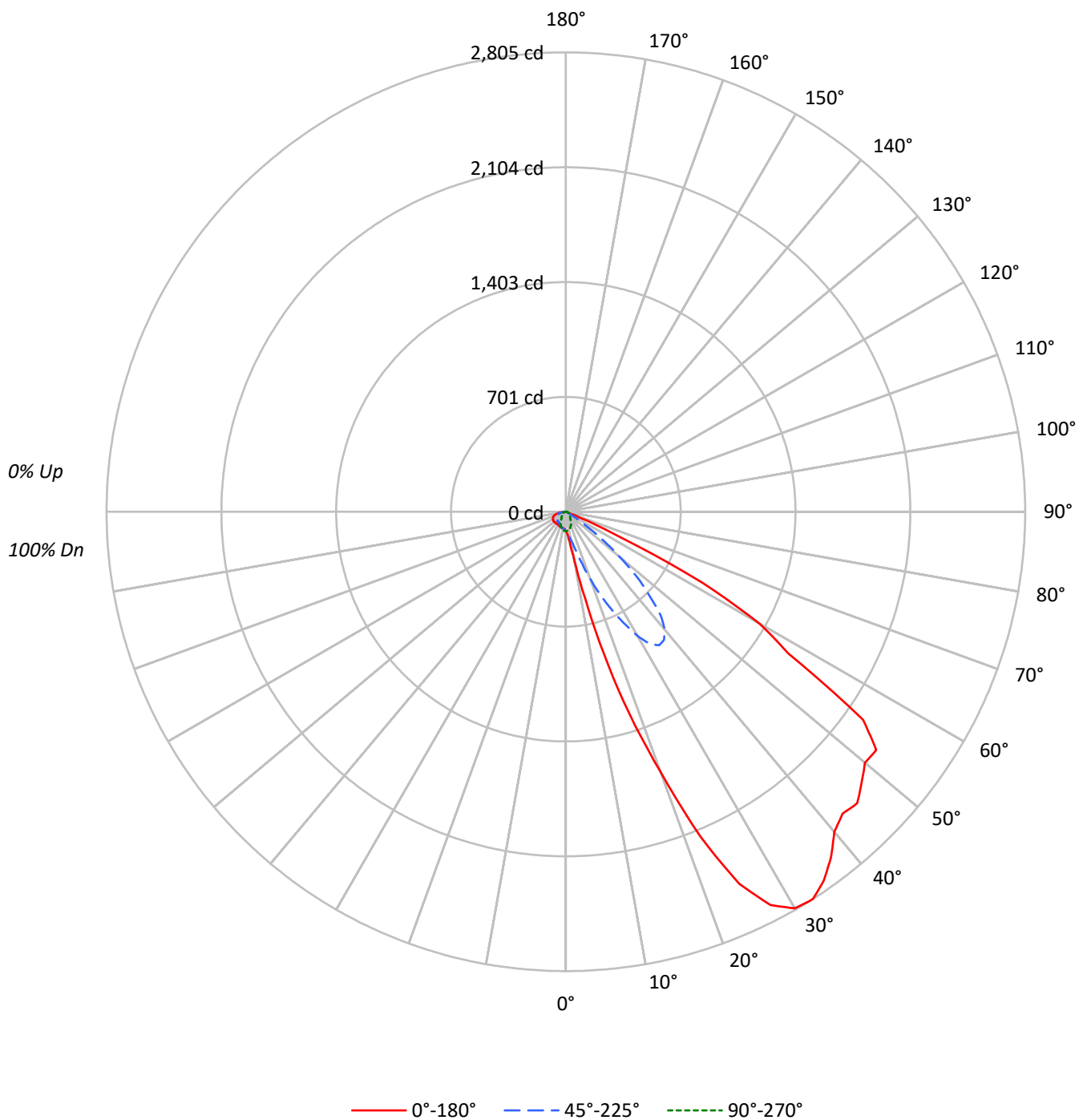
Lumens per Lamp: N/A  
Luminaire Lumens: 1804.0 lumens  
Efficiency: N/A  
Efficacy: 65.8 lumens/watt  
Spacing Criteria (0/90/45): 3.76 / 0.91 / 1.95  
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')  
CIE Type: Direct

Input Watts (W): 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  |
| 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  |  | 95  | 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  | 67  |  | 77  | 71  | 65  |  | 74  | 69  | 64  |  | 72  | 67  | 63  |
| 4   | 83  | 71  | 63  | 56  |  | 81  | 70  | 62  | 56  |  | 68  | 61  | 55  |  | 65  | 59  | 54  |  | 63  | 58  | 54  |
| 5   | 76  | 63  | 54  | 47  |  | 74  | 62  | 53  | 47  |  | 60  | 52  | 47  |  | 58  | 51  | 46  |  | 56  | 50  | 46  |
| 6   | 69  | 56  | 47  | 40  |  | 68  | 55  | 46  | 40  |  | 53  | 46  | 40  |  | 51  | 45  | 39  |  | 50  | 44  | 39  |
| 7   | 64  | 50  | 41  | 35  |  | 62  | 49  | 41  | 35  |  | 48  | 40  | 34  |  | 46  | 39  | 34  |  | 45  | 38  | 34  |
| 8   | 59  | 45  | 36  | 30  |  | 57  | 44  | 36  | 30  |  | 43  | 35  | 30  |  | 41  | 35  | 29  |  | 40  | 34  | 29  |
| 9   | 54  | 40  | 32  | 26  |  | 53  | 40  | 32  | 26  |  | 39  | 31  | 26  |  | 38  | 31  | 26  |  | 36  | 30  | 26  |
| 10  | 50  | 37  | 28  | 23  |  | 49  | 36  | 28  | 23  |  | 35  | 28  | 23  |  | 34  | 27  | 23  |  | 33  | 27  | 23  |

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

|     | 0°     | 45°    | 90°   | 135°  | 180°  |
|-----|--------|--------|-------|-------|-------|
| 0°  | 20047  | 20047  | 20047 | 20047 | 20047 |
| 5°  | 25621  | 23425  | 20123 | 18740 | 18187 |
| 10° | 52132  | 29834  | 19517 | 17838 | 17838 |
| 15° | 160005 | 45751  | 18186 | 17331 | 17901 |
| 20° | 309369 | 80036  | 16367 | 16935 | 17814 |
| 25° | 476150 | 124486 | 14233 | 16361 | 17863 |
| 30° | 555988 | 174027 | 11733 | 16168 | 18375 |
| 35° | 577753 | 209110 | 9713  | 16084 | 19111 |
| 40° | 573360 | 211062 | 8948  | 16839 | 20773 |
| 45° | 612991 | 174705 | 8549  | 18243 | 22505 |
| 50° | 638881 | 115317 | 8547  | 19639 | 25186 |
| 55° | 665258 | 50264  | 8617  | 21529 | 27744 |
| 60° | 469961 | 11539  | 8783  | 23595 | 31310 |
| 65° | 153307 | 3912   | 8436  | 25347 | 35087 |
| 70° | 4834   | 4028   | 8812  | 27292 | 40133 |
| 75° | 4259   | 4259   | 7453  | 28613 | 44516 |
| 80° | 3174   | 4761   | 7934  | 28464 | 47408 |
| 85° | 3162   | 6323   | 9485  | 28257 | 47227 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 52.5°

Luminance: 675949 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 12.4   | 0.7       |
| 10°-20°   | 76.6   | 4.2       |
| 20°-30°   | 256.8  | 14.2      |
| 30°-40°   | 421.7  | 23.4      |
| 40°-50°   | 470.3  | 26.1      |
| 50°-60°   | 395.9  | 21.9      |
| 60°-70°   | 134.3  | 7.4       |
| 70°-80°   | 26.3   | 1.5       |
| 80°-90°   | 9.9    | 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°    | 345.7  | 19.2      |
| 0°-40°    | 767.4  | 42.5      |
| 0°-60°    | 1633.6 | 90.6      |
| 0°-90°    | 1804.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 1804.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 45° | 90° | 135° | 180° | Flux |
|-----|------|-----|-----|------|------|------|
| 0°  | 116  | 116 | 116 | 116  | 116  |      |
| 5°  | 148  | 136 | 116 | 108  | 105  | 18   |
| 15° | 897  | 257 | 102 | 97   | 100  | 285  |
| 25° | 2506 | 655 | 75  | 86   | 94   | 1126 |
| 35° | 2748 | 995 | 46  | 76   | 91   | 1706 |
| 45° | 2517 | 717 | 35  | 75   | 92   | 1922 |
| 55° | 2216 | 167 | 29  | 72   | 92   | 1804 |
| 65° | 376  | 10  | 21  | 62   | 86   | 509  |
| 75° | 6    | 6   | 11  | 43   | 67   | 7    |
| 85° | 2    | 3   | 5   | 14   | 24   | 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°    | 116.4  | 116.4  | 116.4  | 116.4  | 116.4  | 116.4  | 116.4 | 116.4 | 116.4 | 116.4  | 116.4 |
| 2.5°  | 127.5  | 127.5  | 127.5  | 127.5  | 127.5  | 127.5  | 125.9 | 121.1 | 118.0 | 113.2  | 111.6 |
| 5°    | 148.2  | 148.2  | 148.2  | 146.6  | 146.6  | 143.5  | 135.5 | 124.3 | 116.4 | 110.0  | 108.4 |
| 7.5°  | 191.3  | 189.7  | 186.5  | 184.9  | 180.1  | 178.5  | 149.8 | 127.5 | 114.8 | 106.8  | 105.2 |
| 10°   | 298.1  | 294.9  | 290.1  | 272.6  | 256.6  | 245.5  | 170.6 | 129.1 | 111.6 | 103.6  | 102.0 |
| 12.5° | 537.2  | 530.8  | 506.9  | 470.2  | 425.6  | 403.3  | 204.0 | 130.7 | 106.8 | 100.4  | 100.4 |
| 15°   | 897.4  | 889.4  | 844.8  | 793.8  | 712.5  | 667.9  | 256.6 | 129.1 | 102.0 | 95.6   | 97.2  |
| 17.5° | 1295.9 | 1273.6 | 1227.3 | 1160.4 | 1050.4 | 997.8  | 334.7 | 125.9 | 95.6  | 92.4   | 95.6  |
| 20°   | 1688.0 | 1681.6 | 1605.1 | 1514.2 | 1378.8 | 1308.6 | 436.7 | 121.1 | 89.3  | 87.7   | 92.4  |
| 22.5° | 2147.0 | 2119.9 | 2038.7 | 1941.4 | 1754.9 | 1662.5 | 546.7 | 114.8 | 82.9  | 82.9   | 89.3  |
| 25°   | 2505.7 | 2473.8 | 2410.0 | 2296.9 | 2119.9 | 2021.1 | 655.1 | 106.8 | 74.9  | 78.1   | 86.1  |
| 27.5° | 2706.5 | 2669.9 | 2622.0 | 2524.8 | 2387.7 | 2300.1 | 763.5 | 97.2  | 66.9  | 73.3   | 82.9  |
| 30°   | 2795.8 | 2786.2 | 2751.1 | 2679.4 | 2553.5 | 2475.4 | 875.1 | 86.1  | 59.0  | 68.5   | 81.3  |
| 32.5° | 2805.3 | 2810.1 | 2795.8 | 2749.5 | 2653.9 | 2587.0 | 958.0 | 76.5  | 52.6  | 65.4   | 78.1  |
| 35°   | 2748.0 | 2765.5 | 2775.1 | 2755.9 | 2693.8 | 2639.6 | 994.6 | 65.4  | 46.2  | 62.2   | 76.5  |
| 37.5° | 2658.7 | 2690.6 | 2722.5 | 2727.2 | 2689.0 | 2653.9 | 985.1 | 55.8  | 43.0  | 60.6   | 76.5  |
| 40°   | 2550.3 | 2579.0 | 2644.3 | 2685.8 | 2673.0 | 2647.5 | 938.8 | 46.2  | 39.8  | 57.4   | 74.9  |
| 42.5° | 2500.9 | 2507.3 | 2577.4 | 2647.5 | 2644.3 | 2623.6 | 857.5 | 36.7  | 36.7  | 57.4   | 74.9  |
| 45°   | 2516.8 | 2488.1 | 2534.4 | 2615.7 | 2610.9 | 2583.8 | 717.3 | 28.7  | 35.1  | 55.8   | 74.9  |
| 47.5° | 2449.9 | 2410.0 | 2488.1 | 2583.8 | 2566.2 | 2526.4 | 592.9 | 20.7  | 33.5  | 54.2   | 73.3  |
| 50°   | 2384.5 | 2378.2 | 2438.7 | 2486.5 | 2462.6 | 2440.3 | 430.4 | 15.9  | 31.9  | 52.6   | 73.3  |
| 52.5° | 2389.3 | 2378.2 | 2384.5 | 2382.9 | 2335.1 | 2311.2 | 294.9 | 12.8  | 30.3  | 51.0   | 73.3  |
| 55°   | 2215.6 | 2180.5 | 2147.0 | 2156.6 | 2159.8 | 2143.9 | 167.4 | 11.2  | 28.7  | 51.0   | 71.7  |
| 57.5° | 1609.9 | 1600.3 | 1637.0 | 1740.6 | 1821.9 | 1831.4 | 81.3  | 11.2  | 27.1  | 49.4   | 70.1  |
| 60°   | 1364.4 | 1358.0 | 1359.6 | 1389.9 | 1433.0 | 1405.9 | 33.5  | 11.2  | 25.5  | 47.8   | 68.5  |
| 62.5° | 940.4  | 1002.6 | 1028.1 | 1098.2 | 1069.5 | 1031.3 | 12.8  | 12.8  | 23.9  | 44.6   | 66.9  |
| 65°   | 376.2  | 374.6  | 409.6  | 443.1  | 433.6  | 404.9  | 9.6   | 11.2  | 20.7  | 41.4   | 62.2  |
| 67.5° | 87.7   | 79.7   | 68.5   | 59.0   | 49.4   | 39.8   | 9.6   | 11.2  | 19.1  | 38.3   | 59.0  |
| 70°   | 9.6    | 9.6    | 9.6    | 9.6    | 9.6    | 8.0    | 8.0   | 11.2  | 17.5  | 35.1   | 54.2  |
| 72.5° | 8.0    | 8.0    | 8.0    | 8.0    | 8.0    | 8.0    | 8.0   | 9.6   | 14.3  | 30.3   | 49.4  |
| 75°   | 6.4    | 6.4    | 6.4    | 6.4    | 6.4    | 6.4    | 6.4   | 8.0   | 11.2  | 25.5   | 43.0  |
| 77.5° | 4.8    | 4.8    | 4.8    | 6.4    | 4.8    | 6.4    | 6.4   | 8.0   | 9.6   | 20.7   | 36.7  |
| 80°   | 3.2    | 3.2    | 4.8    | 4.8    | 4.8    | 4.8    | 4.8   | 6.4   | 8.0   | 17.5   | 28.7  |
| 82.5° | 3.2    | 3.2    | 3.2    | 3.2    | 3.2    | 3.2    | 4.8   | 4.8   | 6.4   | 12.8   | 20.7  |
| 85°   | 1.6    | 1.6    | 1.6    | 1.6    | 1.6    | 3.2    | 3.2   | 4.8   | 4.8   | 9.6    | 14.3  |
| 87.5° | 1.6    | 1.6    | 1.6    | 1.6    | 1.6    | 1.6    | 3.2   | 3.2   | 4.8   | 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°    | 116.4  | 116.4 |
| 2.5°  | 110.0  | 110.0 |
| 5°    | 106.8  | 105.2 |
| 7.5°  | 103.6  | 103.6 |
| 10°   | 102.0  | 102.0 |
| 12.5° | 100.4  | 102.0 |
| 15°   | 100.4  | 100.4 |
| 17.5° | 97.2   | 98.8  |
| 20°   | 95.6   | 97.2  |
| 22.5° | 94.0   | 95.6  |
| 25°   | 92.4   | 94.0  |
| 27.5° | 90.9   | 92.4  |
| 30°   | 89.3   | 92.4  |
| 32.5° | 87.7   | 90.9  |
| 35°   | 87.7   | 90.9  |
| 37.5° | 87.7   | 92.4  |
| 40°   | 87.7   | 92.4  |
| 42.5° | 87.7   | 92.4  |
| 45°   | 87.7   | 92.4  |
| 47.5° | 87.7   | 92.4  |
| 50°   | 87.7   | 94.0  |
| 52.5° | 87.7   | 94.0  |
| 55°   | 87.7   | 92.4  |
| 57.5° | 86.1   | 92.4  |
| 60°   | 86.1   | 90.9  |
| 62.5° | 84.5   | 89.3  |
| 65°   | 81.3   | 86.1  |
| 67.5° | 78.1   | 84.5  |
| 70°   | 73.3   | 79.7  |
| 72.5° | 68.5   | 73.3  |
| 75°   | 62.2   | 66.9  |
| 77.5° | 54.2   | 57.4  |
| 80°   | 43.0   | 47.8  |
| 82.5° | 33.5   | 36.7  |
| 85°   | 22.3   | 23.9  |
| 87.5° | 9.6    | 11.2  |
| 90°   | 0.0    | 0.0   |

(END OF REPORT)