

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: P1311845

Luminaire Tested: P3SQAS24R659050D010 E3SQCA451MMS

Issue Date: 1/29/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1311845  
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: P3SQAS24R659050D010 E3SQCA451MMS  
Description: 3in Adjustable LED luminaire with, R65 optic, 5000K CCT AND, 90CRI , E3SQCA451MMS TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

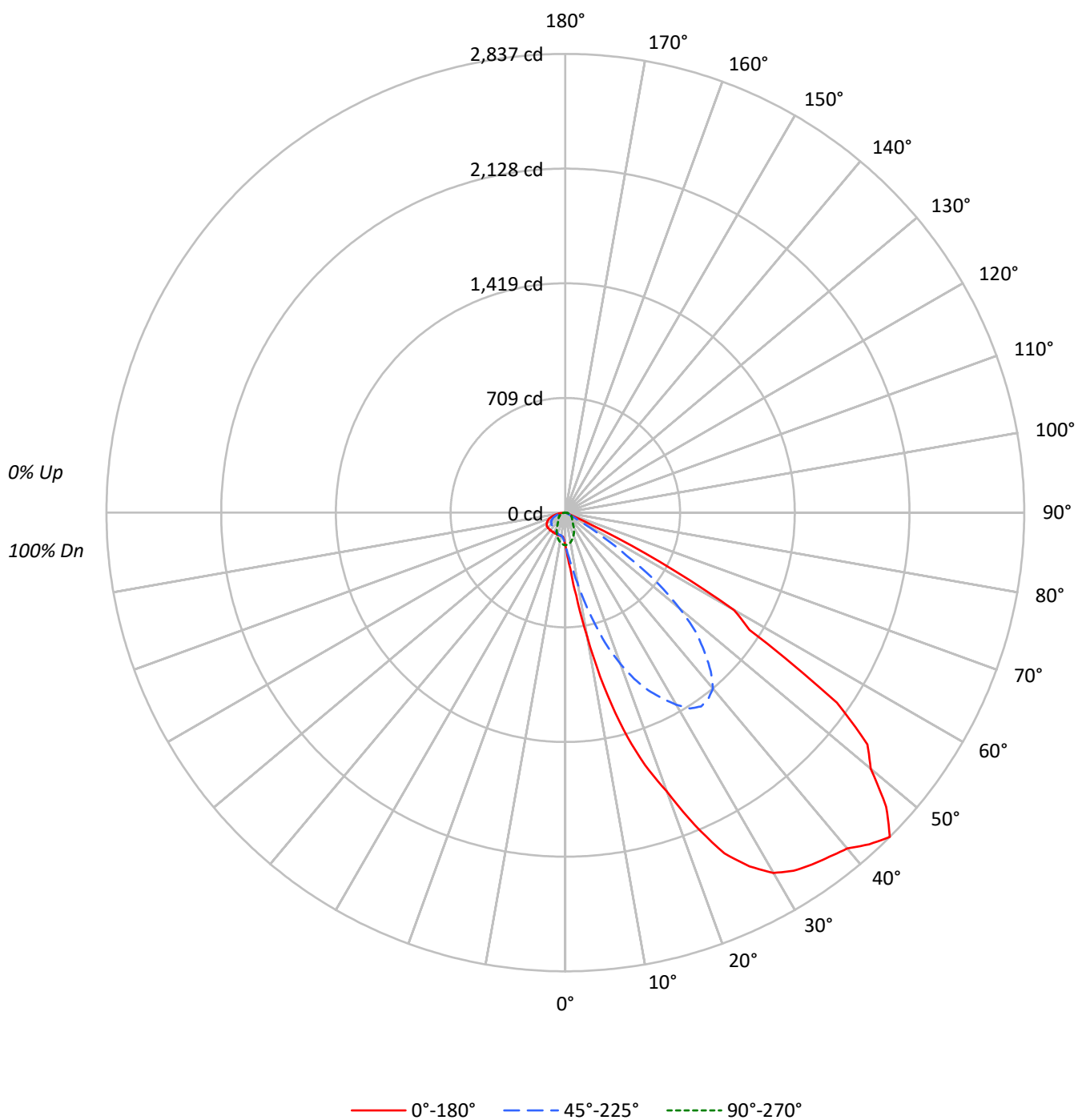
Lumens per Lamp: N/A  
Luminaire Lumens: 2058.0 lumens  
Efficiency: N/A  
Efficacy: 71.5 lumens/watt  
Spacing Criteria (0/90/45): 3.28 / 0.89 / 2.04  
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')  
CIE Type: Direct

Input Watts (W): 28.8  
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  | 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  | 65  | 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°  | 34479  | 34479  | 34479 | 34479 | 34479 |
| 5°  | 60283  | 49236  | 33885 | 27471 | 26399 |
| 10° | 136406 | 79395  | 32475 | 25253 | 25620 |
| 15° | 247977 | 127661 | 30168 | 25390 | 26121 |
| 20° | 336201 | 182286 | 27235 | 25347 | 26465 |
| 25° | 441907 | 230179 | 23924 | 24703 | 27060 |
| 30° | 511721 | 272883 | 20523 | 24620 | 28318 |
| 35° | 558789 | 307588 | 17345 | 25166 | 29939 |
| 40° | 609579 | 319178 | 15310 | 26439 | 32014 |
| 45° | 691052 | 296022 | 14565 | 28155 | 34683 |
| 50° | 660128 | 247139 | 14388 | 29847 | 38153 |
| 55° | 615235 | 138781 | 14863 | 32218 | 42127 |
| 60° | 414368 | 29863  | 14914 | 34100 | 45501 |
| 65° | 63898  | 7580   | 14304 | 35331 | 49594 |
| 70° | 7251   | 7251   | 13495 | 36356 | 52973 |
| 75° | 6854   | 6854   | 12377 | 35733 | 53566 |
| 80° | 6149   | 8232   | 12298 | 32729 | 53259 |
| 85° | 4150   | 8102   | 12251 | 32605 | 49006 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 691052 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 24.2   | 1.2       |
| 10°-20°   | 130.9  | 6.4       |
| 20°-30°   | 307.5  | 14.9      |
| 30°-40°   | 464.5  | 22.6      |
| 40°-50°   | 533.9  | 25.9      |
| 50°-60°   | 423.9  | 20.6      |
| 60°-70°   | 127.0  | 6.2       |
| 70°-80°   | 34.5   | 1.7       |
| 80°-90°   | 11.6   | 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       |
| 0°-30°    | 462.6  | 22.5      |
| 0°-40°    | 927.1  | 45.0      |
| 0°-60°    | 1884.9 | 91.6      |
| 0°-90°    | 2058.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 2058.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 45°  | 90° | 135° | 180° | Flux |
|-----|------|------|-----|------|------|------|
| 0°  | 200  | 200  | 200 | 200  | 200  |      |
| 5°  | 349  | 285  | 196 | 159  | 153  | 47   |
| 15° | 1391 | 716  | 169 | 142  | 146  | 400  |
| 25° | 2326 | 1211 | 126 | 130  | 142  | 1061 |
| 35° | 2658 | 1463 | 82  | 120  | 142  | 1668 |
| 45° | 2837 | 1215 | 60  | 116  | 142  | 2108 |
| 55° | 2049 | 462  | 50  | 107  | 140  | 1688 |
| 65° | 157  | 19   | 35  | 87   | 122  | 352  |
| 75° | 10   | 10   | 19  | 54   | 80   | 11   |
| 85° | 2    | 4    | 6   | 16   | 25   | 3    |
| 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°    | 200.2  | 200.2  | 200.2  | 200.2  | 200.2  | 200.2  | 200.2  | 200.2 | 200.2 | 200.2  | 200.2 |
| 2.5°  | 253.8  | 255.9  | 253.8  | 253.8  | 251.7  | 249.7  | 235.2  | 218.7 | 200.2 | 185.7  | 175.4 |
| 5°    | 348.7  | 350.8  | 344.6  | 344.6  | 340.5  | 334.3  | 284.8  | 237.3 | 196.0 | 173.3  | 158.9 |
| 7.5°  | 515.9  | 524.1  | 513.8  | 501.4  | 478.7  | 474.6  | 354.9  | 255.9 | 191.9 | 161.0  | 148.6 |
| 10°   | 780.0  | 773.8  | 763.5  | 738.7  | 699.5  | 680.9  | 454.0  | 274.4 | 185.7 | 152.7  | 144.4 |
| 12.5° | 1099.8 | 1083.3 | 1070.9 | 1025.6 | 971.9  | 940.9  | 577.8  | 291.0 | 177.5 | 144.4  | 142.4 |
| 15°   | 1390.8 | 1378.4 | 1349.5 | 1306.2 | 1240.2 | 1215.4 | 716.0  | 301.3 | 169.2 | 138.3  | 142.4 |
| 17.5° | 1636.3 | 1624.0 | 1607.5 | 1564.1 | 1496.0 | 1458.9 | 870.8  | 307.5 | 158.9 | 134.1  | 140.3 |
| 20°   | 1834.4 | 1826.2 | 1803.5 | 1768.4 | 1700.3 | 1665.2 | 994.6  | 307.5 | 148.6 | 130.0  | 138.3 |
| 22.5° | 2090.3 | 2071.7 | 2042.8 | 1991.3 | 1906.7 | 1853.0 | 1112.2 | 301.3 | 138.3 | 125.9  | 134.1 |
| 25°   | 2325.5 | 2313.2 | 2276.0 | 2214.1 | 2123.3 | 2069.7 | 1211.3 | 288.9 | 125.9 | 119.7  | 130.0 |
| 27.5° | 2465.9 | 2457.6 | 2422.5 | 2358.6 | 2257.5 | 2216.2 | 1293.8 | 270.3 | 113.5 | 113.5  | 127.9 |
| 30°   | 2573.2 | 2556.7 | 2521.6 | 2459.7 | 2356.5 | 2307.0 | 1372.2 | 247.6 | 103.2 | 107.3  | 123.8 |
| 32.5° | 2626.8 | 2620.6 | 2589.7 | 2536.0 | 2434.9 | 2379.2 | 1436.2 | 218.7 | 90.8  | 103.2  | 121.7 |
| 35°   | 2657.8 | 2651.6 | 2626.8 | 2575.2 | 2480.3 | 2426.7 | 1463.0 | 191.9 | 82.5  | 99.0   | 119.7 |
| 37.5° | 2682.5 | 2676.3 | 2645.4 | 2593.8 | 2498.9 | 2443.2 | 1450.6 | 163.0 | 74.3  | 94.9   | 117.6 |
| 40°   | 2711.4 | 2688.7 | 2641.3 | 2589.7 | 2503.0 | 2449.4 | 1419.7 | 136.2 | 68.1  | 92.9   | 117.6 |
| 42.5° | 2781.6 | 2703.2 | 2628.9 | 2581.4 | 2498.9 | 2437.0 | 1330.9 | 107.3 | 61.9  | 88.7   | 115.6 |
| 45°   | 2837.3 | 2699.0 | 2604.1 | 2567.0 | 2482.4 | 2412.2 | 1215.4 | 78.4  | 59.8  | 86.7   | 115.6 |
| 47.5° | 2690.8 | 2606.2 | 2562.8 | 2542.2 | 2451.4 | 2375.1 | 1095.7 | 53.7  | 57.8  | 84.6   | 113.5 |
| 50°   | 2463.8 | 2453.5 | 2437.0 | 2439.0 | 2356.5 | 2294.6 | 922.4  | 37.1  | 53.7  | 82.5   | 111.4 |
| 52.5° | 2354.4 | 2342.1 | 2313.2 | 2292.5 | 2210.0 | 2156.3 | 730.5  | 28.9  | 51.6  | 80.5   | 109.4 |
| 55°   | 2049.0 | 2057.3 | 2026.3 | 2038.7 | 2014.0 | 1987.1 | 462.2  | 26.8  | 49.5  | 76.3   | 107.3 |
| 57.5° | 1349.5 | 1390.8 | 1463.0 | 1549.7 | 1628.1 | 1681.7 | 249.7  | 26.8  | 45.4  | 74.3   | 103.2 |
| 60°   | 1203.0 | 1192.7 | 1190.6 | 1207.1 | 1242.2 | 1271.1 | 86.7   | 24.8  | 43.3  | 68.1   | 99.0  |
| 62.5° | 658.3  | 654.1  | 716.0  | 821.3  | 883.2  | 889.4  | 24.8   | 24.8  | 39.2  | 64.0   | 92.9  |
| 65°   | 156.8  | 163.0  | 181.6  | 227.0  | 268.3  | 295.1  | 18.6   | 22.7  | 35.1  | 59.8   | 86.7  |
| 67.5° | 24.8   | 26.8   | 26.8   | 33.0   | 37.1   | 37.1   | 16.5   | 20.6  | 31.0  | 53.7   | 80.5  |
| 70°   | 14.4   | 14.4   | 14.4   | 14.4   | 14.4   | 14.4   | 14.4   | 18.6  | 26.8  | 47.5   | 72.2  |
| 72.5° | 12.4   | 12.4   | 12.4   | 12.4   | 12.4   | 12.4   | 14.4   | 16.5  | 22.7  | 41.3   | 61.9  |
| 75°   | 10.3   | 10.3   | 10.3   | 10.3   | 10.3   | 10.3   | 10.3   | 14.4  | 18.6  | 33.0   | 53.7  |
| 77.5° | 8.3    | 8.3    | 8.3    | 8.3    | 8.3    | 8.3    | 10.3   | 12.4  | 16.5  | 26.8   | 43.3  |
| 80°   | 6.2    | 6.2    | 6.2    | 6.2    | 6.2    | 6.2    | 8.3    | 10.3  | 12.4  | 20.6   | 33.0  |
| 82.5° | 4.1    | 4.1    | 4.1    | 4.1    | 4.1    | 4.1    | 6.2    | 8.3   | 10.3  | 16.5   | 24.8  |
| 85°   | 2.1    | 2.1    | 2.1    | 2.1    | 4.1    | 4.1    | 4.1    | 6.2   | 6.2   | 10.3   | 16.5  |
| 87.5° | 2.1    | 2.1    | 2.1    | 2.1    | 2.1    | 2.1    | 4.1    | 4.1   | 4.1   | 6.2    | 8.3   |
| 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°    | 200.2  | 200.2 |
| 2.5°  | 169.2  | 167.1 |
| 5°    | 152.7  | 152.7 |
| 7.5°  | 146.5  | 146.5 |
| 10°   | 144.4  | 146.5 |
| 12.5° | 144.4  | 146.5 |
| 15°   | 144.4  | 146.5 |
| 17.5° | 144.4  | 146.5 |
| 20°   | 142.4  | 144.4 |
| 22.5° | 140.3  | 142.4 |
| 25°   | 138.3  | 142.4 |
| 27.5° | 136.2  | 142.4 |
| 30°   | 136.2  | 142.4 |
| 32.5° | 136.2  | 142.4 |
| 35°   | 134.1  | 142.4 |
| 37.5° | 134.1  | 142.4 |
| 40°   | 134.1  | 142.4 |
| 42.5° | 134.1  | 142.4 |
| 45°   | 134.1  | 142.4 |
| 47.5° | 134.1  | 142.4 |
| 50°   | 134.1  | 142.4 |
| 52.5° | 132.1  | 142.4 |
| 55°   | 132.1  | 140.3 |
| 57.5° | 127.9  | 136.2 |
| 60°   | 123.8  | 132.1 |
| 62.5° | 119.7  | 127.9 |
| 65°   | 113.5  | 121.7 |
| 67.5° | 107.3  | 113.5 |
| 70°   | 97.0   | 105.2 |
| 72.5° | 86.7   | 92.9  |
| 75°   | 74.3   | 80.5  |
| 77.5° | 61.9   | 68.1  |
| 80°   | 49.5   | 53.7  |
| 82.5° | 35.1   | 39.2  |
| 85°   | 22.7   | 24.8  |
| 87.5° | 10.3   | 10.3  |
| 90°   | 0.0    | 0.0   |

(END OF REPORT)