

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: P1305668

Luminaire Tested: P3SQAS05R659024DE010 E3SQCA451MMS

Issue Date: 1/29/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1305668  
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: P3SQAS05R659024DE010 E3SQCA451MMS  
Description: 3in Adjustable LED luminaire with, R65 optic, 2400K CCT AND, 90CRI , E3SQCA451MMS TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

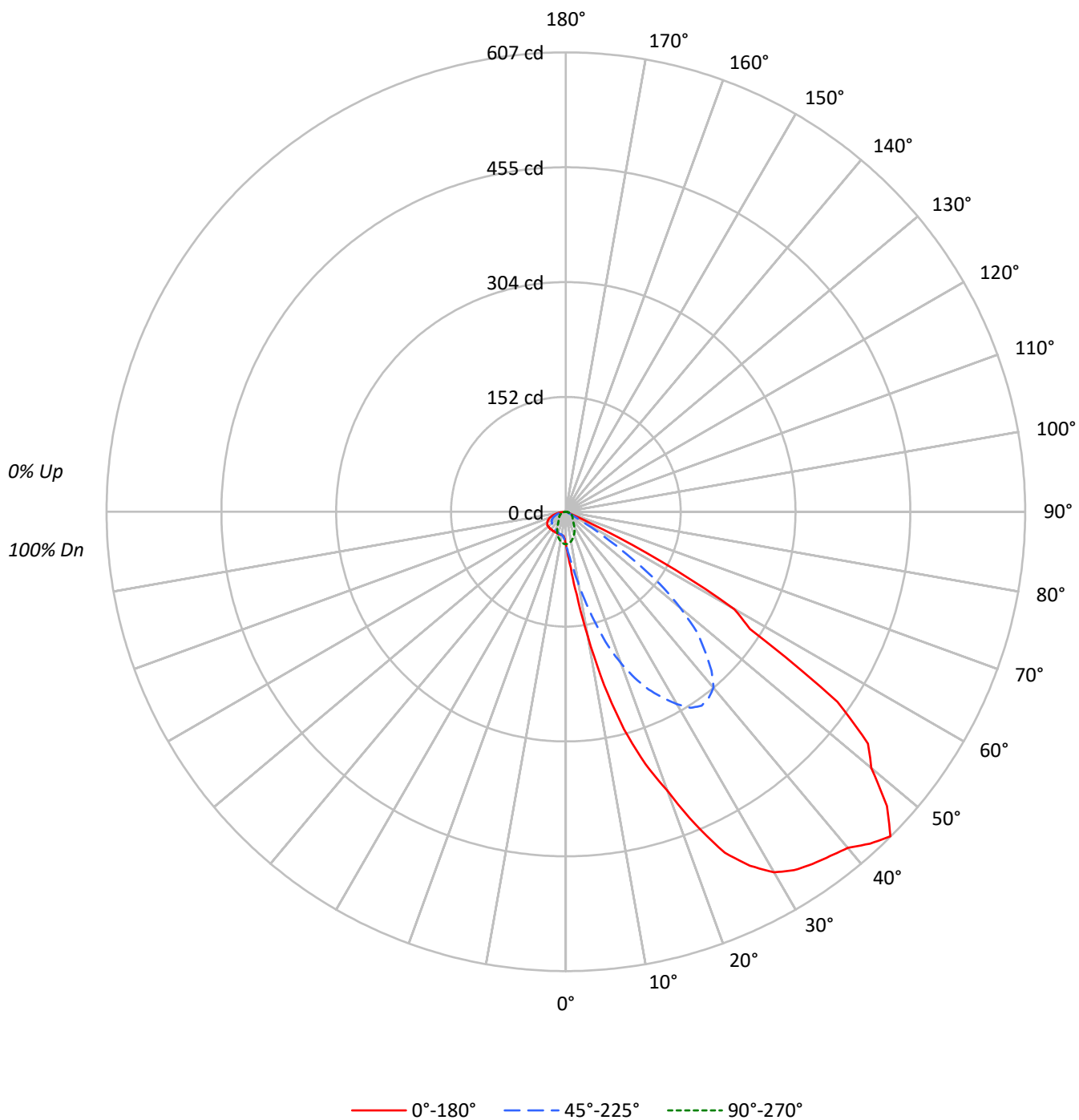
Lumens per Lamp: N/A  
Luminaire Lumens: 440.0 lumens  
Efficiency: N/A  
Efficacy: 61.1 lumens/watt  
Spacing Criteria (0/90/45): 3.28 / 0.89 / 2.04  
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')  
CIE Type: Direct

Input Watts (W): 7.2  
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  |     |    |    | 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 | 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°  | 7371   | 7371  | 7371 | 7371 | 7371  |
| 5°  | 12897  | 10528 | 7244 | 5878 | 5636  |
| 10° | 29170  | 16981 | 6943 | 5404 | 5474  |
| 15° | 53026  | 27297 | 6454 | 5420 | 5581  |
| 20° | 71881  | 38964 | 5828 | 5425 | 5663  |
| 25° | 94481  | 49217 | 5112 | 5283 | 5777  |
| 30° | 109396 | 58347 | 4395 | 5270 | 6046  |
| 35° | 119461 | 65765 | 3700 | 5382 | 6391  |
| 40° | 130329 | 68233 | 3282 | 5643 | 6835  |
| 45° | 147743 | 63301 | 3118 | 6016 | 7404  |
| 50° | 141146 | 52836 | 3081 | 6377 | 8145  |
| 55° | 131544 | 29666 | 3183 | 6876 | 9008  |
| 60° | 88591  | 6372  | 3203 | 7302 | 9713  |
| 65° | 13652  | 1630  | 3056 | 7539 | 10595 |
| 70° | 1561   | 1561  | 2870 | 7755 | 11330 |
| 75° | 1464   | 1464  | 2662 | 7652 | 11445 |
| 80° | 1289   | 1785  | 2579 | 7042 | 11406 |
| 85° | 790    | 1778  | 2569 | 6916 | 10473 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 147743 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 5.2    | 1.2       |
| 10°-20°   | 28.0   | 6.4       |
| 20°-30°   | 65.7   | 14.9      |
| 30°-40°   | 99.3   | 22.6      |
| 40°-50°   | 114.2  | 25.9      |
| 50°-60°   | 90.6   | 20.6      |
| 60°-70°   | 27.2   | 6.2       |
| 70°-80°   | 7.4    | 1.7       |
| 80°-90°   | 2.5    | 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°    | 98.9   | 22.5      |
| 0°-40°    | 198.2  | 45.0      |
| 0°-60°    | 403.0  | 91.6      |
| 0°-90°    | 440.0  | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 440.0  | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°  | 45° | 90° | 135° | 180° | Flux |
|-----|-----|-----|-----|------|------|------|
| 0°  | 43  | 43  | 43  | 43   | 43   |      |
| 5°  | 75  | 61  | 42  | 34   | 33   | 10   |
| 15° | 297 | 153 | 36  | 30   | 31   | 86   |
| 25° | 497 | 259 | 27  | 28   | 30   | 227  |
| 35° | 568 | 313 | 18  | 26   | 30   | 357  |
| 45° | 607 | 260 | 13  | 25   | 30   | 451  |
| 55° | 438 | 99  | 11  | 23   | 30   | 361  |
| 65° | 34  | 4   | 8   | 18   | 26   | 75   |
| 75° | 2   | 2   | 4   | 12   | 17   | 2    |
| 85° | 0   | 1   | 1   | 4    | 5    | 1    |
| 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°    | 42.8  | 42.8  | 42.8  | 42.8  | 42.8  | 42.8  | 42.8  | 42.8  | 42.8 | 42.8   | 42.8 |
| 2.5°  | 54.3  | 54.7  | 54.3  | 54.3  | 53.8  | 53.4  | 50.3  | 46.8  | 42.8 | 39.7   | 37.5 |
| 5°    | 74.6  | 75.0  | 73.7  | 73.7  | 72.8  | 71.5  | 60.9  | 50.7  | 41.9 | 37.1   | 34.0 |
| 7.5°  | 110.3 | 112.1 | 109.9 | 107.2 | 102.4 | 101.5 | 75.9  | 54.7  | 41.0 | 34.4   | 31.8 |
| 10°   | 166.8 | 165.4 | 163.2 | 157.9 | 149.6 | 145.6 | 97.1  | 58.7  | 39.7 | 32.6   | 30.9 |
| 12.5° | 235.1 | 231.6 | 229.0 | 219.3 | 207.8 | 201.2 | 123.5 | 62.2  | 37.9 | 30.9   | 30.4 |
| 15°   | 297.4 | 294.7 | 288.5 | 279.3 | 265.1 | 259.9 | 153.1 | 64.4  | 36.2 | 29.6   | 30.4 |
| 17.5° | 349.8 | 347.2 | 343.7 | 334.4 | 319.9 | 311.9 | 186.2 | 65.7  | 34.0 | 28.7   | 30.0 |
| 20°   | 392.2 | 390.4 | 385.6 | 378.1 | 363.5 | 356.0 | 212.6 | 65.7  | 31.8 | 27.8   | 29.6 |
| 22.5° | 446.9 | 442.9 | 436.8 | 425.7 | 407.6 | 396.2 | 237.8 | 64.4  | 29.6 | 26.9   | 28.7 |
| 25°   | 497.2 | 494.6 | 486.6 | 473.4 | 454.0 | 442.5 | 259.0 | 61.8  | 26.9 | 25.6   | 27.8 |
| 27.5° | 527.2 | 525.4 | 517.9 | 504.3 | 482.6 | 473.8 | 276.6 | 57.8  | 24.3 | 24.3   | 27.4 |
| 30°   | 550.1 | 546.6 | 539.1 | 525.9 | 503.8 | 493.2 | 293.4 | 52.9  | 22.1 | 22.9   | 26.5 |
| 32.5° | 561.6 | 560.3 | 553.7 | 542.2 | 520.6 | 508.7 | 307.1 | 46.8  | 19.4 | 22.1   | 26.0 |
| 35°   | 568.2 | 566.9 | 561.6 | 550.6 | 530.3 | 518.8 | 312.8 | 41.0  | 17.6 | 21.2   | 25.6 |
| 37.5° | 573.5 | 572.2 | 565.6 | 554.6 | 534.3 | 522.3 | 310.1 | 34.9  | 15.9 | 20.3   | 25.1 |
| 40°   | 579.7 | 574.8 | 564.7 | 553.7 | 535.1 | 523.7 | 303.5 | 29.1  | 14.6 | 19.9   | 25.1 |
| 42.5° | 594.7 | 577.9 | 562.1 | 551.9 | 534.3 | 521.0 | 284.6 | 22.9  | 13.2 | 19.0   | 24.7 |
| 45°   | 606.6 | 577.1 | 556.8 | 548.8 | 530.7 | 515.7 | 259.9 | 16.8  | 12.8 | 18.5   | 24.7 |
| 47.5° | 575.3 | 557.2 | 547.9 | 543.5 | 524.1 | 507.8 | 234.3 | 11.5  | 12.4 | 18.1   | 24.3 |
| 50°   | 526.8 | 524.6 | 521.0 | 521.5 | 503.8 | 490.6 | 197.2 | 7.9   | 11.5 | 17.6   | 23.8 |
| 52.5° | 503.4 | 500.7 | 494.6 | 490.1 | 472.5 | 461.0 | 156.2 | 6.2   | 11.0 | 17.2   | 23.4 |
| 55°   | 438.1 | 439.8 | 433.2 | 435.9 | 430.6 | 424.8 | 98.8  | 5.7   | 10.6 | 16.3   | 22.9 |
| 57.5° | 288.5 | 297.4 | 312.8 | 331.3 | 348.1 | 359.6 | 53.4  | 5.7   | 9.7  | 15.9   | 22.1 |
| 60°   | 257.2 | 255.0 | 254.6 | 258.1 | 265.6 | 271.8 | 18.5  | 5.3   | 9.3  | 14.6   | 21.2 |
| 62.5° | 140.7 | 139.9 | 153.1 | 175.6 | 188.8 | 190.1 | 5.3   | 5.3   | 8.4  | 13.7   | 19.9 |
| 65°   | 33.5  | 34.9  | 38.8  | 48.5  | 57.4  | 63.1  | 4.0   | 4.9   | 7.5  | 12.8   | 18.5 |
| 67.5° | 5.3   | 5.7   | 5.7   | 7.1   | 7.9   | 7.9   | 3.5   | 4.4   | 6.6  | 11.5   | 17.2 |
| 70°   | 3.1   | 3.1   | 3.1   | 3.1   | 3.1   | 3.1   | 3.1   | 4.0   | 5.7  | 10.1   | 15.4 |
| 72.5° | 2.6   | 2.6   | 2.6   | 2.6   | 2.6   | 2.6   | 3.1   | 3.5   | 4.9  | 8.8    | 13.2 |
| 75°   | 2.2   | 2.2   | 2.2   | 2.2   | 2.2   | 2.2   | 2.2   | 3.1   | 4.0  | 7.1    | 11.5 |
| 77.5° | 1.8   | 1.8   | 1.8   | 1.8   | 1.8   | 1.8   | 2.2   | 2.6   | 3.5  | 5.7    | 9.3  |
| 80°   | 1.3   | 1.3   | 1.3   | 1.3   | 1.3   | 1.3   | 1.8   | 2.2   | 2.6  | 4.4    | 7.1  |
| 82.5° | 0.9   | 0.9   | 0.9   | 0.9   | 0.9   | 0.9   | 1.3   | 1.8   | 2.2  | 3.5    | 5.3  |
| 85°   | 0.4   | 0.4   | 0.4   | 0.4   | 0.9   | 0.9   | 0.9   | 1.3   | 1.3  | 2.2    | 3.5  |
| 87.5° | 0.4   | 0.4   | 0.4   | 0.4   | 0.4   | 0.4   | 0.9   | 0.9   | 0.9  | 1.3    | 1.8  |
| 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°    | 42.8   | 42.8 |
| 2.5°  | 36.2   | 35.7 |
| 5°    | 32.6   | 32.6 |
| 7.5°  | 31.3   | 31.3 |
| 10°   | 30.9   | 31.3 |
| 12.5° | 30.9   | 31.3 |
| 15°   | 30.9   | 31.3 |
| 17.5° | 30.9   | 31.3 |
| 20°   | 30.4   | 30.9 |
| 22.5° | 30.0   | 30.4 |
| 25°   | 29.6   | 30.4 |
| 27.5° | 29.1   | 30.4 |
| 30°   | 29.1   | 30.4 |
| 32.5° | 29.1   | 30.4 |
| 35°   | 28.7   | 30.4 |
| 37.5° | 28.7   | 30.4 |
| 40°   | 28.7   | 30.4 |
| 42.5° | 28.7   | 30.4 |
| 45°   | 28.7   | 30.4 |
| 47.5° | 28.7   | 30.4 |
| 50°   | 28.7   | 30.4 |
| 52.5° | 28.2   | 30.4 |
| 55°   | 28.2   | 30.0 |
| 57.5° | 27.4   | 29.1 |
| 60°   | 26.5   | 28.2 |
| 62.5° | 25.6   | 27.4 |
| 65°   | 24.3   | 26.0 |
| 67.5° | 22.9   | 24.3 |
| 70°   | 20.7   | 22.5 |
| 72.5° | 18.5   | 19.9 |
| 75°   | 15.9   | 17.2 |
| 77.5° | 13.2   | 14.6 |
| 80°   | 10.6   | 11.5 |
| 82.5° | 7.5    | 8.4  |
| 85°   | 4.9    | 5.3  |
| 87.5° | 2.2    | 2.2  |
| 90°   | 0.0    | 0.0  |

(END OF REPORT)