

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: P1336102

Luminaire Tested: P3A02R459735DE010 E3CA451MB

Issue Date: 2/13/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1336102  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-84)  
Test Lab: INNOVATION CENTER  
Issue Date: 2/13/2026  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: IRiS  
Catalog Number: P3A02R459735DE010 E3CA451MB  
Description: 3in Adjustable LED luminaire with, R45 optic, 3500K CCT AND, 97CRI , E3CA451MB TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

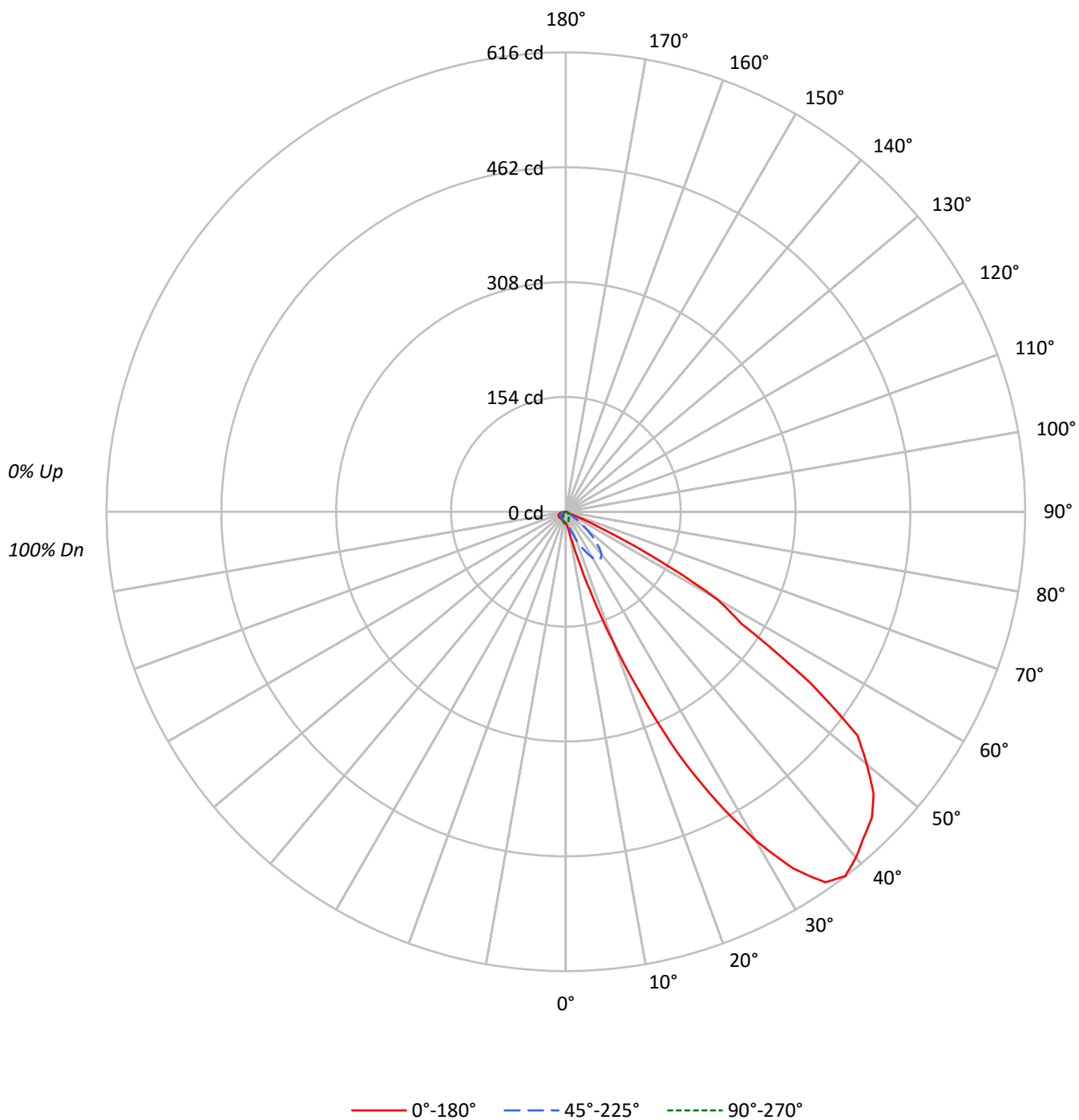
Lumens per Lamp: N/A  
Luminaire Lumens: 275.0 lumens  
Efficiency: N/A  
Efficacy: 76.4 lumens/watt  
Spacing Criteria (0/90/45): 3.81 / 0.82 / 1.83  
Luminous Opening: Circular (Dia: 0.25' x H: 0')  
CIE Type: Direct

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°  | 3487   | 3487  | 3487 | 3487 | 3487 |
| 5°  | 4160   | 3852  | 3456 | 3192 | 3192 |
| 10° | 6635   | 4498  | 3229 | 3028 | 3028 |
| 15° | 16504  | 6039  | 2951 | 2838 | 2951 |
| 20° | 43474  | 9007  | 2544 | 2707 | 2870 |
| 25° | 87295  | 13356 | 2202 | 2540 | 2807 |
| 30° | 128703 | 17901 | 1772 | 2481 | 2887 |
| 35° | 162355 | 20987 | 1526 | 2436 | 2971 |
| 40° | 173210 | 21211 | 1374 | 2548 | 3177 |
| 45° | 179957 | 17676 | 1271 | 2760 | 3442 |
| 50° | 179679 | 12315 | 1228 | 2934 | 3889 |
| 55° | 152731 | 5467  | 1300 | 3288 | 4244 |
| 60° | 102623 | 1096  | 1316 | 3684 | 4868 |
| 65° | 27240  | 467   | 1297 | 3995 | 5552 |
| 70° | 705    | 577   | 1282 | 4360 | 6283 |
| 75° | 593    | 593   | 1356 | 4660 | 7117 |
| 80° | 631    | 884   | 1389 | 4925 | 8082 |
| 85° | 503    | 1258  | 2264 | 5032 | 8051 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 10°

Vertical Angle: 47.5°

Luminance: 184587 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 1.6    | 0.6       |
| 10°-20°   | 7.8    | 2.8       |
| 20°-30°   | 32.0   | 11.6      |
| 30°-40°   | 67.4   | 24.5      |
| 40°-50°   | 83.2   | 30.2      |
| 50°-60°   | 62.3   | 22.7      |
| 60°-70°   | 16.0   | 5.8       |
| 70°-80°   | 3.3    | 1.2       |
| 80°-90°   | 1.4    | 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°    | 41.3   | 15.0      |
| 0°-40°    | 108.8  | 39.5      |
| 0°-60°    | 254.3  | 92.5      |
| 0°-90°    | 275.0  | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 275.0  | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°  | 45° | 90° | 135° | 180° | Flux |
|-----|-----|-----|-----|------|------|------|
| 0°  | 16  | 16  | 16  | 16   | 16   |      |
| 5°  | 19  | 18  | 16  | 14   | 14   | 2    |
| 15° | 73  | 27  | 13  | 12   | 13   | 27   |
| 25° | 361 | 55  | 9   | 10   | 12   | 168  |
| 35° | 606 | 78  | 6   | 9    | 11   | 370  |
| 45° | 580 | 57  | 4   | 9    | 11   | 444  |
| 55° | 400 | 14  | 3   | 9    | 11   | 345  |
| 65° | 52  | 1   | 2   | 8    | 11   | 76   |
| 75° | 1   | 1   | 2   | 6    | 8    | 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°    | 15.9  | 15.9  | 15.9  | 15.9  | 15.9  | 15.9  | 15.9  | 15.9 | 15.9  | 15.9 | 15.9   |
| 2.5°  | 16.8  | 16.8  | 16.8  | 16.8  | 16.8  | 16.8  | 16.8  | 16.6 | 16.4  | 15.9 | 15.5   |
| 5°    | 18.9  | 18.6  | 18.6  | 18.6  | 18.4  | 18.2  | 18.2  | 17.5 | 16.6  | 15.7 | 15.0   |
| 7.5°  | 22.3  | 22.3  | 22.0  | 21.6  | 21.4  | 20.9  | 20.5  | 18.6 | 16.6  | 15.2 | 14.3   |
| 10°   | 29.8  | 29.3  | 28.6  | 28.2  | 27.0  | 25.4  | 24.3  | 20.2 | 16.4  | 14.5 | 13.9   |
| 12.5° | 44.5  | 45.4  | 43.2  | 40.9  | 37.7  | 34.8  | 31.1  | 22.9 | 16.4  | 13.9 | 13.2   |
| 15°   | 72.7  | 74.3  | 70.0  | 65.4  | 57.7  | 50.4  | 43.6  | 26.6 | 15.9  | 13.0 | 12.3   |
| 17.5° | 118.8 | 120.9 | 113.6 | 102.9 | 90.9  | 76.3  | 63.9  | 31.6 | 15.5  | 12.0 | 11.6   |
| 20°   | 186.3 | 186.1 | 172.0 | 158.6 | 135.4 | 114.1 | 90.7  | 38.6 | 14.8  | 10.9 | 10.9   |
| 22.5° | 269.3 | 270.2 | 252.9 | 228.8 | 195.9 | 161.6 | 124.3 | 46.8 | 13.9  | 10.0 | 10.2   |
| 25°   | 360.8 | 353.1 | 332.7 | 303.3 | 261.3 | 213.8 | 164.7 | 55.2 | 13.0  | 9.1  | 9.5    |
| 27.5° | 437.2 | 429.7 | 406.3 | 371.5 | 326.3 | 269.9 | 205.9 | 63.6 | 11.8  | 8.2  | 8.9    |
| 30°   | 508.3 | 498.8 | 470.6 | 431.3 | 377.4 | 316.5 | 244.5 | 70.7 | 10.5  | 7.0  | 8.2    |
| 32.5° | 566.9 | 558.3 | 526.3 | 480.6 | 422.0 | 356.5 | 277.2 | 76.1 | 9.1   | 6.4  | 7.7    |
| 35°   | 606.5 | 597.6 | 568.1 | 517.8 | 454.0 | 385.6 | 303.8 | 78.4 | 8.0   | 5.7  | 7.5    |
| 37.5° | 615.6 | 610.8 | 589.7 | 542.6 | 476.0 | 404.2 | 320.8 | 77.7 | 6.6   | 5.2  | 7.0    |
| 40°   | 605.1 | 606.2 | 596.2 | 557.2 | 487.9 | 412.2 | 327.9 | 74.1 | 5.5   | 4.8  | 6.8    |
| 42.5° | 591.7 | 594.7 | 594.0 | 563.1 | 492.9 | 412.6 | 324.9 | 66.8 | 4.3   | 4.3  | 6.6    |
| 45°   | 580.3 | 583.3 | 587.4 | 560.6 | 489.4 | 406.7 | 315.6 | 57.0 | 3.2   | 4.1  | 6.6    |
| 47.5° | 559.7 | 562.8 | 568.7 | 540.6 | 472.2 | 391.5 | 298.8 | 46.4 | 2.3   | 3.9  | 6.4    |
| 50°   | 526.7 | 528.3 | 526.7 | 495.1 | 439.0 | 367.0 | 271.5 | 36.1 | 1.6   | 3.6  | 6.4    |
| 52.5° | 492.9 | 489.7 | 476.5 | 436.5 | 386.3 | 328.1 | 237.2 | 25.7 | 1.1   | 3.4  | 6.1    |
| 55°   | 399.5 | 394.5 | 384.7 | 360.2 | 331.5 | 280.4 | 191.8 | 14.3 | 1.1   | 3.4  | 5.9    |
| 57.5° | 278.4 | 281.1 | 284.5 | 279.5 | 266.3 | 220.9 | 145.7 | 6.4  | 1.1   | 3.2  | 5.9    |
| 60°   | 234.0 | 231.8 | 232.0 | 228.8 | 207.0 | 161.1 | 100.2 | 2.5  | 1.1   | 3.0  | 5.7    |
| 62.5° | 139.7 | 141.3 | 144.3 | 145.0 | 123.4 | 90.0  | 52.5  | 1.1  | 1.1   | 2.7  | 5.5    |
| 65°   | 52.5  | 55.0  | 48.2  | 41.8  | 33.2  | 24.3  | 12.3  | 0.9  | 1.4   | 2.5  | 5.0    |
| 67.5° | 1.6   | 1.8   | 2.3   | 2.0   | 2.0   | 1.8   | 1.4   | 0.9  | 1.4   | 2.3  | 4.8    |
| 70°   | 1.1   | 1.1   | 1.1   | 1.1   | 1.1   | 0.9   | 0.9   | 0.9  | 1.1   | 2.0  | 4.3    |
| 72.5° | 0.9   | 0.9   | 0.9   | 0.9   | 0.9   | 0.9   | 0.9   | 0.9  | 1.1   | 1.8  | 3.9    |
| 75°   | 0.7   | 0.9   | 0.7   | 0.7   | 0.7   | 0.7   | 0.7   | 0.7  | 1.1   | 1.6  | 3.2    |
| 77.5° | 0.7   | 0.7   | 0.7   | 0.7   | 0.7   | 0.7   | 0.7   | 0.7  | 0.9   | 1.4  | 2.7    |
| 80°   | 0.5   | 0.5   | 0.5   | 0.5   | 0.5   | 0.5   | 0.5   | 0.7  | 0.9   | 1.1  | 2.3    |
| 82.5° | 0.5   | 0.5   | 0.5   | 0.2   | 0.5   | 0.5   | 0.5   | 0.5  | 0.9   | 0.9  | 1.8    |
| 85°   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.5  | 0.7   | 0.9  | 1.1    |
| 87.5° | 0.0   | 0.0   | 0.0   | 0.0   | 0.2   | 0.2   | 0.2   | 0.5  | 0.7   | 0.7  | 0.7    |
| 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°    | 15.9 | 15.9   | 15.9 |
| 2.5°  | 15.0 | 15.0   | 15.0 |
| 5°    | 14.5 | 14.5   | 14.5 |
| 7.5°  | 14.1 | 14.1   | 14.1 |
| 10°   | 13.6 | 13.6   | 13.6 |
| 12.5° | 13.2 | 13.2   | 13.4 |
| 15°   | 12.5 | 13.0   | 13.0 |
| 17.5° | 12.0 | 12.5   | 12.7 |
| 20°   | 11.6 | 12.0   | 12.3 |
| 22.5° | 10.9 | 11.6   | 12.0 |
| 25°   | 10.5 | 11.4   | 11.6 |
| 27.5° | 10.0 | 11.1   | 11.6 |
| 30°   | 9.8  | 10.9   | 11.4 |
| 32.5° | 9.3  | 10.7   | 11.1 |
| 35°   | 9.1  | 10.7   | 11.1 |
| 37.5° | 9.1  | 10.5   | 11.1 |
| 40°   | 8.9  | 10.5   | 11.1 |
| 42.5° | 8.9  | 10.5   | 11.1 |
| 45°   | 8.9  | 10.5   | 11.1 |
| 47.5° | 8.6  | 10.5   | 11.4 |
| 50°   | 8.6  | 10.7   | 11.4 |
| 52.5° | 8.6  | 10.7   | 11.4 |
| 55°   | 8.6  | 10.7   | 11.1 |
| 57.5° | 8.4  | 10.5   | 11.1 |
| 60°   | 8.4  | 10.5   | 11.1 |
| 62.5° | 8.0  | 10.2   | 10.9 |
| 65°   | 7.7  | 10.0   | 10.7 |
| 67.5° | 7.3  | 9.8    | 10.2 |
| 70°   | 6.8  | 9.1    | 9.8  |
| 72.5° | 6.1  | 8.6    | 9.3  |
| 75°   | 5.5  | 8.0    | 8.4  |
| 77.5° | 4.8  | 7.0    | 7.5  |
| 80°   | 3.9  | 5.9    | 6.4  |
| 82.5° | 3.0  | 4.5    | 4.8  |
| 85°   | 2.0  | 3.0    | 3.2  |
| 87.5° | 0.9  | 1.4    | 1.6  |
| 90°   | 0.0  | 0.0    | 0.0  |

(END OF REPORT)