

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: P1339515

Luminaire Tested: P3A05R459830DE010 E3A451LI

Issue Date: 2/13/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1339515  
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: P3A05R459830DE010 E3A451LI  
Description: 3in Adjustable LED luminaire with, R45 optic, 3000K CCT AND, 98CRI , E3A451LI TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

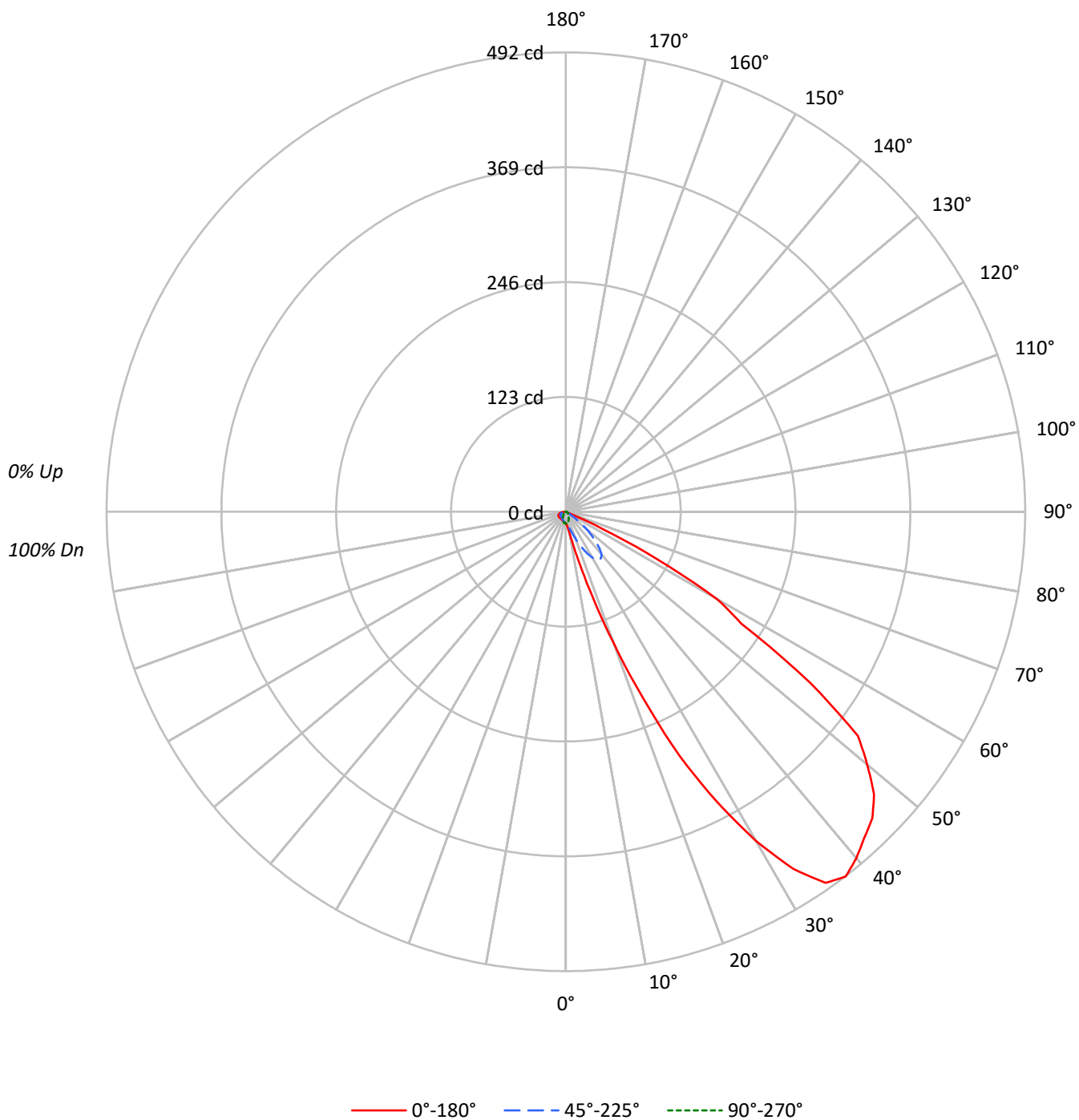
Lumens per Lamp: N/A  
Luminaire Lumens: 220.0 lumens  
Efficiency: N/A  
Efficacy: 30.6 lumens/watt  
Spacing Criteria (0/90/45): 3.81 / 0.82 / 1.83  
Luminous Opening: Circular (Dia: 0.25' x H: 0')  
CIE Type: Direct

Input Watts (W): 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  |     |    |    |
| 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 |
| 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  | 107 | 104 | 100 | 97  | 99  | 97  | 94  | 96  | 93  | 91  | 92  | 90  | 88  | 86  |    |    |
| 2   | 100 | 93  | 86  | 81  | 98  | 91  | 85  | 80  | 87  | 83  | 78  | 84  | 80  | 77  | 81  | 78  | 75  | 73  |    |    |
| 3   | 91  | 81  | 73  | 67  | 89  | 80  | 72  | 66  | 77  | 70  | 65  | 74  | 69  | 64  | 71  | 67  | 63  | 61  |    |    |
| 4   | 83  | 71  | 62  | 56  | 81  | 70  | 62  | 55  | 67  | 60  | 55  | 65  | 59  | 54  | 63  | 58  | 53  | 51  |    |    |
| 5   | 76  | 63  | 53  | 47  | 73  | 61  | 53  | 46  | 59  | 52  | 46  | 57  | 51  | 45  | 55  | 50  | 45  | 43  |    |    |
| 6   | 69  | 55  | 46  | 39  | 67  | 54  | 46  | 39  | 52  | 45  | 39  | 51  | 44  | 39  | 49  | 43  | 38  | 36  |    |    |
| 7   | 63  | 49  | 40  | 34  | 61  | 48  | 40  | 33  | 47  | 39  | 33  | 45  | 38  | 33  | 44  | 37  | 33  | 31  |    |    |
| 8   | 58  | 44  | 35  | 29  | 56  | 43  | 35  | 29  | 42  | 34  | 29  | 40  | 33  | 28  | 39  | 33  | 28  | 26  |    |    |
| 9   | 53  | 39  | 31  | 25  | 52  | 39  | 30  | 25  | 38  | 30  | 25  | 36  | 29  | 25  | 35  | 29  | 24  | 22  |    |    |
| 10  | 49  | 36  | 27  | 22  | 48  | 35  | 27  | 22  | 34  | 27  | 21  | 33  | 26  | 21  | 32  | 26  | 21  | 19  |    |    |

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

|     | 0°     | 45°   | 90°  | 135° | 180° |
|-----|--------|-------|------|------|------|
| 0°  | 2785   | 2785  | 2785 | 2785 | 2785 |
| 5°  | 3324   | 3082  | 2751 | 2553 | 2553 |
| 10° | 5299   | 3607  | 2583 | 2427 | 2427 |
| 15° | 13212  | 4835  | 2361 | 2270 | 2361 |
| 20° | 34793  | 7211  | 2030 | 2170 | 2287 |
| 25° | 69851  | 10694 | 1766 | 2032 | 2250 |
| 30° | 102953 | 14306 | 1418 | 1975 | 2304 |
| 35° | 129884 | 16784 | 1205 | 1954 | 2382 |
| 40° | 138574 | 16975 | 1088 | 2032 | 2548 |
| 45° | 143984 | 14141 | 1023 | 2202 | 2760 |
| 50° | 143756 | 9859  | 989  | 2354 | 3104 |
| 55° | 122184 | 4396  | 1032 | 2638 | 3403 |
| 60° | 82099  | 877   | 1053 | 2938 | 3903 |
| 65° | 21792  | 363   | 1038 | 3217 | 4410 |
| 70° | 577    | 449   | 1026 | 3526 | 5001 |
| 75° | 424    | 424   | 1101 | 3728 | 5676 |
| 80° | 505    | 631   | 1137 | 3915 | 6440 |
| 85° | 503    | 1006  | 1761 | 4026 | 6290 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 10°

Vertical Angle: 47.5°

Luminance: 147682 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 1.3    | 0.6       |
| 10°-20°   | 6.2    | 2.8       |
| 20°-30°   | 25.6   | 11.6      |
| 30°-40°   | 53.9   | 24.5      |
| 40°-50°   | 66.6   | 30.3      |
| 50°-60°   | 49.9   | 22.7      |
| 60°-70°   | 12.8   | 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°    | 33.1   | 15.0      |
| 0°-40°    | 87.0   | 39.5      |
| 0°-60°    | 203.4  | 92.5      |
| 0°-90°    | 220.0  | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 220.0  | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°  | 45° | 90° | 135° | 180° | Flux |
|-----|-----|-----|-----|------|------|------|
| 0°  | 13  | 13  | 13  | 13   | 13   |      |
| 5°  | 15  | 14  | 12  | 12   | 12   | 2    |
| 15° | 58  | 21  | 10  | 10   | 10   | 21   |
| 25° | 289 | 44  | 7   | 8    | 9    | 134  |
| 35° | 485 | 63  | 4   | 7    | 9    | 296  |
| 45° | 464 | 46  | 3   | 7    | 9    | 355  |
| 55° | 320 | 12  | 3   | 7    | 9    | 276  |
| 65° | 42  | 1   | 2   | 6    | 8    | 61   |
| 75° | 0   | 0   | 1   | 4    | 7    | 1    |
| 85° | 0   | 0   | 1   | 2    | 2    | 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°    | 12.7  | 12.7  | 12.7  | 12.7  | 12.7  | 12.7  | 12.7  | 12.7 | 12.7  | 12.7 | 12.7   |
| 2.5°  | 13.5  | 13.5  | 13.5  | 13.5  | 13.5  | 13.5  | 13.5  | 13.3 | 13.1  | 12.7 | 12.4   |
| 5°    | 15.1  | 14.9  | 14.9  | 14.9  | 14.7  | 14.5  | 14.5  | 14.0 | 13.3  | 12.5 | 12.0   |
| 7.5°  | 17.8  | 17.8  | 17.6  | 17.3  | 17.1  | 16.7  | 16.4  | 14.9 | 13.3  | 12.2 | 11.5   |
| 10°   | 23.8  | 23.4  | 22.9  | 22.5  | 21.6  | 20.4  | 19.5  | 16.2 | 13.1  | 11.6 | 11.1   |
| 12.5° | 35.6  | 36.4  | 34.5  | 32.7  | 30.2  | 27.8  | 24.9  | 18.4 | 13.1  | 11.1 | 10.5   |
| 15°   | 58.2  | 59.4  | 56.0  | 52.4  | 46.2  | 40.4  | 34.9  | 21.3 | 12.7  | 10.4 | 9.8    |
| 17.5° | 95.1  | 96.7  | 90.9  | 82.3  | 72.7  | 61.1  | 51.1  | 25.3 | 12.4  | 9.6  | 9.3    |
| 20°   | 149.1 | 148.9 | 137.6 | 126.9 | 108.3 | 91.3  | 72.5  | 30.9 | 11.8  | 8.7  | 8.7    |
| 22.5° | 215.4 | 216.1 | 202.3 | 183.1 | 156.7 | 129.2 | 99.4  | 37.4 | 11.1  | 8.0  | 8.2    |
| 25°   | 288.7 | 282.5 | 266.1 | 242.7 | 209.0 | 171.1 | 131.8 | 44.2 | 10.4  | 7.3  | 7.6    |
| 27.5° | 349.7 | 343.7 | 325.0 | 297.2 | 261.0 | 216.0 | 164.7 | 50.9 | 9.5   | 6.5  | 7.1    |
| 30°   | 406.6 | 399.0 | 376.5 | 345.0 | 301.9 | 253.2 | 195.6 | 56.5 | 8.4   | 5.6  | 6.5    |
| 32.5° | 453.5 | 446.6 | 421.0 | 384.5 | 337.6 | 285.2 | 221.8 | 60.9 | 7.3   | 5.1  | 6.2    |
| 35°   | 485.2 | 478.1 | 454.5 | 414.3 | 363.2 | 308.5 | 243.0 | 62.7 | 6.4   | 4.5  | 6.0    |
| 37.5° | 492.4 | 488.6 | 471.7 | 434.1 | 380.8 | 323.4 | 256.7 | 62.2 | 5.3   | 4.2  | 5.6    |
| 40°   | 484.1 | 485.0 | 477.0 | 445.7 | 390.3 | 329.8 | 262.3 | 59.3 | 4.4   | 3.8  | 5.5    |
| 42.5° | 473.4 | 475.7 | 475.2 | 450.5 | 394.3 | 330.1 | 259.9 | 53.4 | 3.5   | 3.5  | 5.3    |
| 45°   | 464.3 | 466.6 | 469.9 | 448.5 | 391.6 | 325.4 | 252.5 | 45.6 | 2.5   | 3.3  | 5.3    |
| 47.5° | 447.7 | 450.3 | 455.0 | 432.5 | 377.7 | 313.2 | 239.0 | 37.1 | 1.8   | 3.1  | 5.1    |
| 50°   | 421.4 | 422.6 | 421.4 | 396.1 | 351.2 | 293.6 | 217.2 | 28.9 | 1.3   | 2.9  | 5.1    |
| 52.5° | 394.3 | 391.7 | 381.2 | 349.2 | 309.0 | 262.5 | 189.8 | 20.5 | 0.9   | 2.7  | 4.9    |
| 55°   | 319.6 | 315.6 | 307.8 | 288.1 | 265.2 | 224.3 | 153.4 | 11.5 | 0.9   | 2.7  | 4.7    |
| 57.5° | 222.7 | 224.9 | 227.6 | 223.6 | 213.0 | 176.7 | 116.5 | 5.1  | 0.9   | 2.5  | 4.7    |
| 60°   | 187.2 | 185.4 | 185.6 | 183.1 | 165.6 | 128.9 | 80.2  | 2.0  | 0.9   | 2.4  | 4.5    |
| 62.5° | 111.8 | 113.1 | 115.4 | 116.0 | 98.7  | 72.0  | 42.0  | 0.9  | 0.9   | 2.2  | 4.4    |
| 65°   | 42.0  | 44.0  | 38.5  | 33.4  | 26.5  | 19.5  | 9.8   | 0.7  | 1.1   | 2.0  | 4.0    |
| 67.5° | 1.3   | 1.5   | 1.8   | 1.6   | 1.6   | 1.5   | 1.1   | 0.7  | 1.1   | 1.8  | 3.8    |
| 70°   | 0.9   | 0.9   | 0.9   | 0.9   | 0.9   | 0.7   | 0.7   | 0.7  | 0.9   | 1.6  | 3.5    |
| 72.5° | 0.7   | 0.7   | 0.7   | 0.7   | 0.7   | 0.7   | 0.7   | 0.7  | 0.9   | 1.5  | 3.1    |
| 75°   | 0.5   | 0.7   | 0.5   | 0.5   | 0.5   | 0.5   | 0.5   | 0.5  | 0.9   | 1.3  | 2.5    |
| 77.5° | 0.5   | 0.5   | 0.5   | 0.5   | 0.5   | 0.5   | 0.5   | 0.5  | 0.7   | 1.1  | 2.2    |
| 80°   | 0.4   | 0.4   | 0.4   | 0.4   | 0.4   | 0.4   | 0.4   | 0.5  | 0.7   | 0.9  | 1.8    |
| 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  | 0.5   | 0.7  | 0.9    |
| 87.5° | 0.0   | 0.0   | 0.0   | 0.0   | 0.2   | 0.2   | 0.2   | 0.4  | 0.5   | 0.5  | 0.5    |
| 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°    | 12.7 | 12.7   | 12.7 |
| 2.5°  | 12.0 | 12.0   | 12.0 |
| 5°    | 11.6 | 11.6   | 11.6 |
| 7.5°  | 11.3 | 11.3   | 11.3 |
| 10°   | 10.9 | 10.9   | 10.9 |
| 12.5° | 10.5 | 10.5   | 10.7 |
| 15°   | 10.0 | 10.4   | 10.4 |
| 17.5° | 9.6  | 10.0   | 10.2 |
| 20°   | 9.3  | 9.6    | 9.8  |
| 22.5° | 8.7  | 9.3    | 9.6  |
| 25°   | 8.4  | 9.1    | 9.3  |
| 27.5° | 8.0  | 8.9    | 9.3  |
| 30°   | 7.8  | 8.7    | 9.1  |
| 32.5° | 7.5  | 8.5    | 8.9  |
| 35°   | 7.3  | 8.5    | 8.9  |
| 37.5° | 7.3  | 8.4    | 8.9  |
| 40°   | 7.1  | 8.4    | 8.9  |
| 42.5° | 7.1  | 8.4    | 8.9  |
| 45°   | 7.1  | 8.4    | 8.9  |
| 47.5° | 6.9  | 8.4    | 9.1  |
| 50°   | 6.9  | 8.5    | 9.1  |
| 52.5° | 6.9  | 8.5    | 9.1  |
| 55°   | 6.9  | 8.5    | 8.9  |
| 57.5° | 6.7  | 8.4    | 8.9  |
| 60°   | 6.7  | 8.4    | 8.9  |
| 62.5° | 6.4  | 8.2    | 8.7  |
| 65°   | 6.2  | 8.0    | 8.5  |
| 67.5° | 5.8  | 7.8    | 8.2  |
| 70°   | 5.5  | 7.3    | 7.8  |
| 72.5° | 4.9  | 6.9    | 7.5  |
| 75°   | 4.4  | 6.4    | 6.7  |
| 77.5° | 3.8  | 5.6    | 6.0  |
| 80°   | 3.1  | 4.7    | 5.1  |
| 82.5° | 2.4  | 3.6    | 3.8  |
| 85°   | 1.6  | 2.4    | 2.5  |
| 87.5° | 0.7  | 1.1    | 1.3  |
| 90°   | 0.0  | 0.0    | 0.0  |

(END OF REPORT)