

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: P1339529

Luminaire Tested: P3A05R459835DE010 E3A451GPH

Issue Date: 2/13/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1339529  
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: P3A05R459835DE010 E3A451GPH  
Description: 3in Adjustable LED luminaire with, R45 optic, 3500K CCT AND, 98CRI , E3A451GPH TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

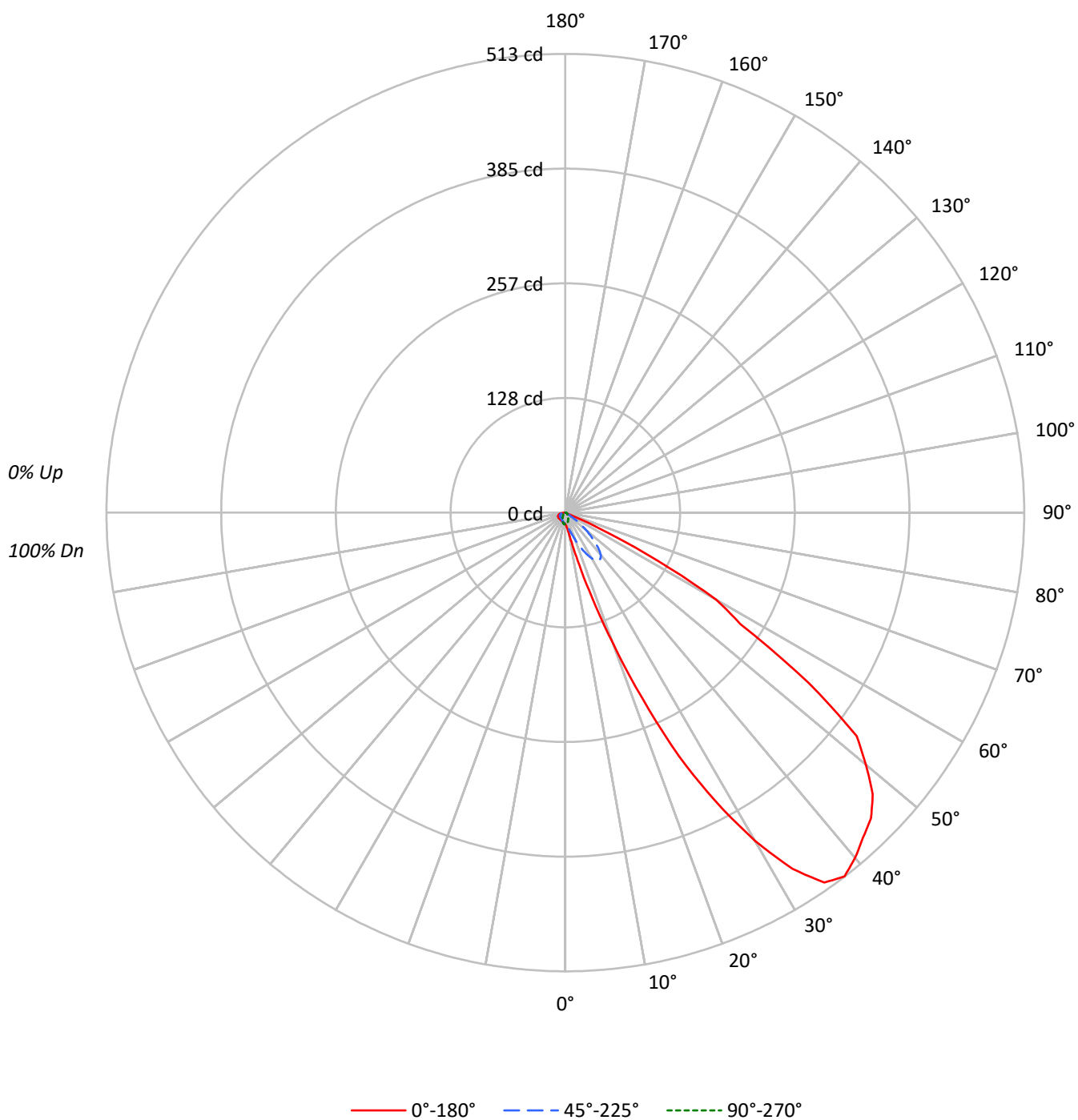
Lumens per Lamp: N/A  
Luminaire Lumens: 229.0 lumens  
Efficiency: N/A  
Efficacy: 31.8 lumens/watt  
Spacing Criteria (0/90/45): 3.81 / 0.82 / 1.83  
Luminous Opening: Circular (Dia: 0.25' x H: 0')  
CIE Type: Direct

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  |
| 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°  | 2895   | 2895  | 2895 | 2895 | 2895 |
| 5°  | 3456   | 3214  | 2884 | 2663 | 2663 |
| 10° | 5522   | 3741  | 2694 | 2538 | 2538 |
| 15° | 13734  | 5017  | 2452 | 2361 | 2452 |
| 20° | 36216  | 7514  | 2124 | 2264 | 2380 |
| 25° | 72706  | 11130 | 1839 | 2105 | 2347 |
| 30° | 107181 | 14888 | 1494 | 2051 | 2405 |
| 35° | 135185 | 17480 | 1258 | 2034 | 2490 |
| 40° | 144242 | 17662 | 1145 | 2118 | 2662 |
| 45° | 149876 | 14730 | 1054 | 2295 | 2884 |
| 50° | 149624 | 10268 | 1023 | 2456 | 3241 |
| 55° | 127154 | 4549  | 1070 | 2753 | 3555 |
| 60° | 85476  | 921   | 1096 | 3070 | 4079 |
| 65° | 22674  | 415   | 1090 | 3321 | 4618 |
| 70° | 577    | 513   | 1090 | 3654 | 5193 |
| 75° | 508    | 508   | 1101 | 3813 | 5931 |
| 80° | 505    | 758   | 1137 | 4041 | 6693 |
| 85° | 503    | 1006  | 2013 | 4277 | 6542 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 10°

Vertical Angle: 47.5°

Luminance: 153719 cd/sqm

TEST NUMBER: P1339529

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 1.3    | 0.6       |
| 10°-20°   | 6.5    | 2.8       |
| 20°-30°   | 26.6   | 11.6      |
| 30°-40°   | 56.1   | 24.5      |
| 40°-50°   | 69.3   | 30.2      |
| 50°-60°   | 51.9   | 22.7      |
| 60°-70°   | 13.4   | 5.8       |
| 70°-80°   | 2.8    | 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°    | 34.4   | 15.0      |
| 0°-40°    | 90.6   | 39.5      |
| 0°-60°    | 211.7  | 92.5      |
| 0°-90°    | 229.0  | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 229.0  | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°  | 45° | 90° | 135° | 180° | Flux |
|-----|-----|-----|-----|------|------|------|
| 0°  | 13  | 13  | 13  | 13   | 13   |      |
| 5°  | 16  | 15  | 13  | 12   | 12   | 2    |
| 15° | 60  | 22  | 11  | 10   | 11   | 22   |
| 25° | 300 | 46  | 8   | 9    | 10   | 140  |
| 35° | 505 | 65  | 5   | 8    | 9    | 308  |
| 45° | 483 | 48  | 3   | 7    | 9    | 370  |
| 55° | 333 | 12  | 3   | 7    | 9    | 287  |
| 65° | 44  | 1   | 2   | 6    | 9    | 63   |
| 75° | 1   | 1   | 1   | 4    | 7    | 1    |
| 85° | 0   | 0   | 1   | 2    | 3    | 0    |
| 90° | 0   | 0   | 0   | 0    | 0    |      |

TEST NUMBER: P1339529

CATALOG NUMBER: P3A05R459835DE010 E3A451GPH

**CANDELA DISTRIBUTION (FULL):**

|       | 0°    | 5°    | 10°   | 15°   | 20°   | 25°   | 30°   | 45°  | 67.5° | 90°  | 112.5° |
|-------|-------|-------|-------|-------|-------|-------|-------|------|-------|------|--------|
| 0°    | 13.2  | 13.2  | 13.2  | 13.2  | 13.2  | 13.2  | 13.2  | 13.2 | 13.2  | 13.2 | 13.2   |
| 2.5°  | 14.0  | 14.0  | 14.0  | 14.0  | 14.0  | 14.0  | 14.0  | 13.8 | 13.6  | 13.2 | 12.9   |
| 5°    | 15.7  | 15.5  | 15.5  | 15.5  | 15.3  | 15.1  | 15.1  | 14.6 | 13.8  | 13.1 | 12.5   |
| 7.5°  | 18.5  | 18.5  | 18.4  | 18.0  | 17.8  | 17.4  | 17.0  | 15.5 | 13.8  | 12.7 | 11.9   |
| 10°   | 24.8  | 24.4  | 23.8  | 23.5  | 22.5  | 21.2  | 20.2  | 16.8 | 13.6  | 12.1 | 11.5   |
| 12.5° | 37.1  | 37.8  | 36.0  | 34.1  | 31.4  | 29.0  | 25.9  | 19.1 | 13.6  | 11.5 | 11.0   |
| 15°   | 60.5  | 61.9  | 58.3  | 54.5  | 48.1  | 42.0  | 36.3  | 22.1 | 13.2  | 10.8 | 10.2   |
| 17.5° | 99.0  | 100.7 | 94.6  | 85.7  | 75.7  | 63.6  | 53.2  | 26.3 | 12.9  | 10.0 | 9.7    |
| 20°   | 155.2 | 155.0 | 143.2 | 132.1 | 112.8 | 95.0  | 75.5  | 32.2 | 12.3  | 9.1  | 9.1    |
| 22.5° | 224.2 | 225.0 | 210.6 | 190.5 | 163.1 | 134.5 | 103.5 | 39.0 | 11.5  | 8.3  | 8.5    |
| 25°   | 300.5 | 294.0 | 277.0 | 252.6 | 217.6 | 178.1 | 137.2 | 46.0 | 10.8  | 7.6  | 7.9    |
| 27.5° | 364.1 | 357.8 | 338.3 | 309.4 | 271.7 | 224.8 | 171.4 | 53.0 | 9.8   | 6.8  | 7.4    |
| 30°   | 423.3 | 415.3 | 391.9 | 359.1 | 314.3 | 263.6 | 203.6 | 58.8 | 8.7   | 5.9  | 6.8    |
| 32.5° | 472.1 | 464.9 | 438.2 | 400.2 | 351.4 | 296.9 | 230.8 | 63.4 | 7.6   | 5.3  | 6.4    |
| 35°   | 505.0 | 497.6 | 473.0 | 431.2 | 378.1 | 321.1 | 253.0 | 65.3 | 6.6   | 4.7  | 6.2    |
| 37.5° | 512.6 | 508.6 | 491.0 | 451.9 | 396.4 | 336.6 | 267.2 | 64.7 | 5.5   | 4.4  | 5.9    |
| 40°   | 503.9 | 504.8 | 496.5 | 464.0 | 406.2 | 343.2 | 273.0 | 61.7 | 4.5   | 4.0  | 5.7    |
| 42.5° | 492.7 | 495.2 | 494.6 | 468.9 | 410.4 | 343.6 | 270.6 | 55.6 | 3.6   | 3.6  | 5.5    |
| 45°   | 483.3 | 485.7 | 489.1 | 466.8 | 407.6 | 338.7 | 262.8 | 47.5 | 2.6   | 3.4  | 5.5    |
| 47.5° | 466.0 | 468.7 | 473.6 | 450.1 | 393.2 | 326.0 | 248.8 | 38.6 | 1.9   | 3.2  | 5.3    |
| 50°   | 438.6 | 439.9 | 438.6 | 412.3 | 365.6 | 305.6 | 226.1 | 30.1 | 1.3   | 3.0  | 5.3    |
| 52.5° | 410.4 | 407.8 | 396.8 | 363.5 | 321.7 | 273.2 | 197.5 | 21.4 | 0.9   | 2.8  | 5.1    |
| 55°   | 332.6 | 328.5 | 320.3 | 299.9 | 276.1 | 233.5 | 159.7 | 11.9 | 0.9   | 2.8  | 4.9    |
| 57.5° | 231.8 | 234.1 | 236.9 | 232.7 | 221.8 | 183.9 | 121.3 | 5.3  | 0.9   | 2.6  | 4.9    |
| 60°   | 194.9 | 193.0 | 193.2 | 190.5 | 172.4 | 134.2 | 83.4  | 2.1  | 0.9   | 2.5  | 4.7    |
| 62.5° | 116.4 | 117.7 | 120.2 | 120.7 | 102.7 | 74.9  | 43.7  | 0.9  | 0.9   | 2.3  | 4.5    |
| 65°   | 43.7  | 45.8  | 40.1  | 34.8  | 27.6  | 20.2  | 10.2  | 0.8  | 1.1   | 2.1  | 4.2    |
| 67.5° | 1.3   | 1.5   | 1.9   | 1.7   | 1.7   | 1.5   | 1.1   | 0.8  | 1.1   | 1.9  | 4.0    |
| 70°   | 0.9   | 0.9   | 0.9   | 0.9   | 0.9   | 0.8   | 0.8   | 0.8  | 0.9   | 1.7  | 3.6    |
| 72.5° | 0.8   | 0.8   | 0.8   | 0.8   | 0.8   | 0.8   | 0.8   | 0.8  | 0.9   | 1.5  | 3.2    |
| 75°   | 0.6   | 0.8   | 0.6   | 0.6   | 0.6   | 0.6   | 0.6   | 0.6  | 0.9   | 1.3  | 2.6    |
| 77.5° | 0.6   | 0.6   | 0.6   | 0.6   | 0.6   | 0.6   | 0.6   | 0.6  | 0.8   | 1.1  | 2.3    |
| 80°   | 0.4   | 0.4   | 0.4   | 0.4   | 0.4   | 0.4   | 0.4   | 0.6  | 0.8   | 0.9  | 1.9    |
| 82.5° | 0.4   | 0.4   | 0.4   | 0.2   | 0.4   | 0.4   | 0.4   | 0.4  | 0.8   | 0.8  | 1.5    |
| 85°   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.4  | 0.6   | 0.8  | 0.9    |
| 87.5° | 0.0   | 0.0   | 0.0   | 0.0   | 0.2   | 0.2   | 0.2   | 0.4  | 0.6   | 0.6  | 0.6    |
| 90°   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0  | 0.0   | 0.0  | 0.0    |

TEST NUMBER: P1339529

CATALOG NUMBER: P3A05R459835DE010 E3A451GPH

**CANDELA DISTRIBUTION (continued):**

|       | 135° | 157.5° | 180° |
|-------|------|--------|------|
| 0°    | 13.2 | 13.2   | 13.2 |
| 2.5°  | 12.5 | 12.5   | 12.5 |
| 5°    | 12.1 | 12.1   | 12.1 |
| 7.5°  | 11.7 | 11.7   | 11.7 |
| 10°   | 11.4 | 11.4   | 11.4 |
| 12.5° | 11.0 | 11.0   | 11.2 |
| 15°   | 10.4 | 10.8   | 10.8 |
| 17.5° | 10.0 | 10.4   | 10.6 |
| 20°   | 9.7  | 10.0   | 10.2 |
| 22.5° | 9.1  | 9.7    | 10.0 |
| 25°   | 8.7  | 9.5    | 9.7  |
| 27.5° | 8.3  | 9.3    | 9.7  |
| 30°   | 8.1  | 9.1    | 9.5  |
| 32.5° | 7.8  | 8.9    | 9.3  |
| 35°   | 7.6  | 8.9    | 9.3  |
| 37.5° | 7.6  | 8.7    | 9.3  |
| 40°   | 7.4  | 8.7    | 9.3  |
| 42.5° | 7.4  | 8.7    | 9.3  |
| 45°   | 7.4  | 8.7    | 9.3  |
| 47.5° | 7.2  | 8.7    | 9.5  |
| 50°   | 7.2  | 8.9    | 9.5  |
| 52.5° | 7.2  | 8.9    | 9.5  |
| 55°   | 7.2  | 8.9    | 9.3  |
| 57.5° | 7.0  | 8.7    | 9.3  |
| 60°   | 7.0  | 8.7    | 9.3  |
| 62.5° | 6.6  | 8.5    | 9.1  |
| 65°   | 6.4  | 8.3    | 8.9  |
| 67.5° | 6.1  | 8.1    | 8.5  |
| 70°   | 5.7  | 7.6    | 8.1  |
| 72.5° | 5.1  | 7.2    | 7.8  |
| 75°   | 4.5  | 6.6    | 7.0  |
| 77.5° | 4.0  | 5.9    | 6.2  |
| 80°   | 3.2  | 4.9    | 5.3  |
| 82.5° | 2.5  | 3.8    | 4.0  |
| 85°   | 1.7  | 2.5    | 2.6  |
| 87.5° | 0.8  | 1.1    | 1.3  |
| 90°   | 0.0  | 0.0    | 0.0  |

(END OF REPORT)