

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: P1305992

Luminaire Tested: P3SQAS13R659024DE010 E3SQCA451MB

Issue Date: 1/29/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1305992  
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: P3SQAS13R659024DE010 E3SQCA451MB  
Description: 3in Adjustable LED luminaire with, R65 optic, 2400K CCT AND, 90CRI , E3SQCA451MB TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

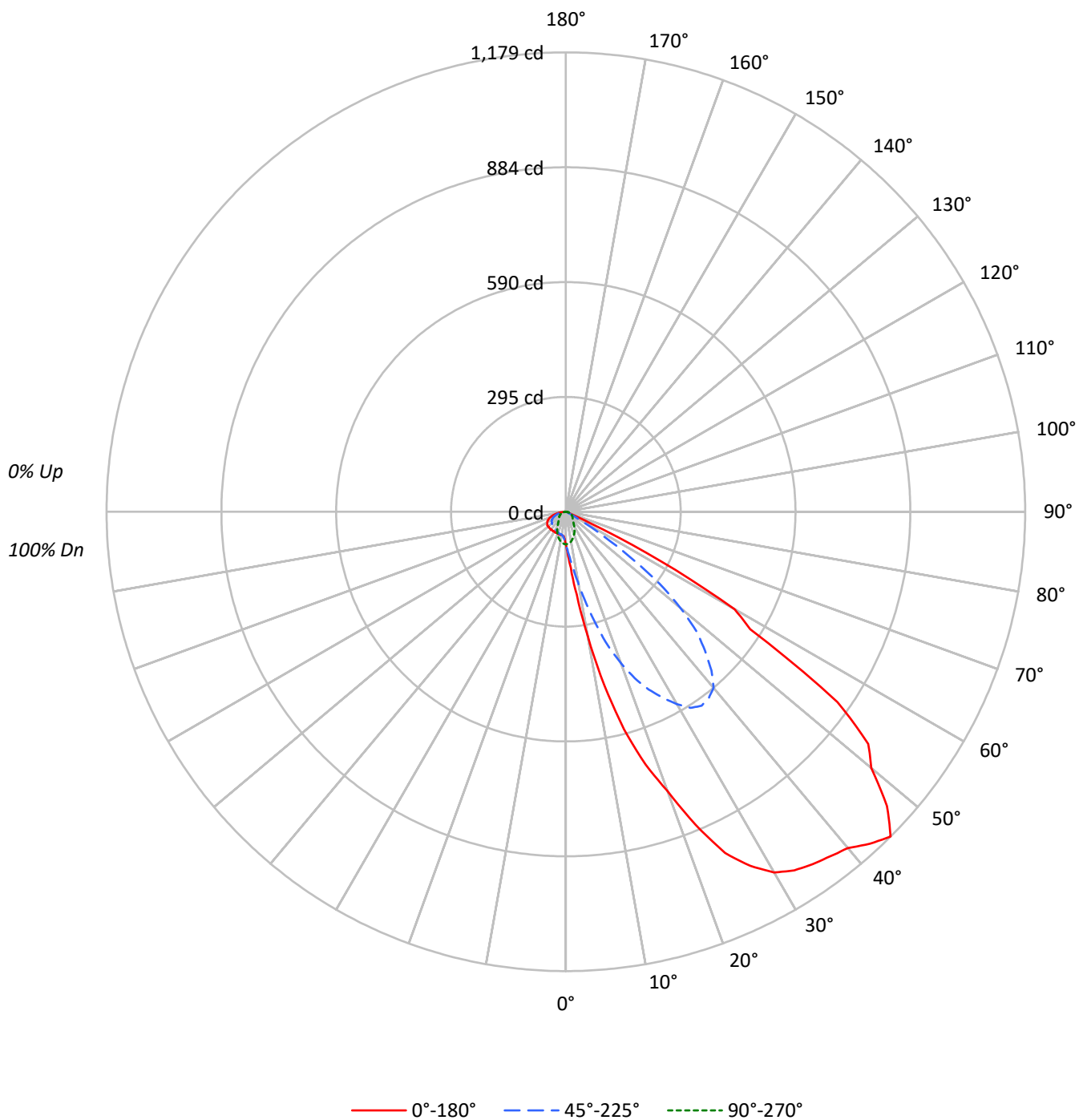
Lumens per Lamp: N/A  
Luminaire Lumens: 855.0 lumens  
Efficiency: N/A  
Efficacy: 58.6 lumens/watt  
Spacing Criteria (0/90/45): 3.28 / 0.89 / 2.04  
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')  
CIE Type: Direct

Input Watts (W): 14.6  
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  | 108 | 104 | 100 | 97  | 100 | 97  | 94  | 96  | 94  | 91  | 92  | 90  | 89  |
| 2   | 101 | 93  | 87  | 82  | 98  | 92  | 86  | 81  | 88  | 83  | 79  | 85  | 81  | 77  | 82  | 79  | 76  |
| 3   | 92  | 82  | 75  | 69  | 90  | 81  | 74  | 68  | 78  | 72  | 67  | 75  | 70  | 66  | 73  | 68  | 65  |
| 4   | 84  | 73  | 64  | 58  | 82  | 71  | 63  | 57  | 69  | 62  | 57  | 67  | 61  | 56  | 64  | 59  | 55  |
| 5   | 77  | 64  | 56  | 49  | 75  | 63  | 55  | 49  | 61  | 54  | 48  | 59  | 53  | 48  | 57  | 52  | 47  |
| 6   | 71  | 57  | 49  | 42  | 69  | 57  | 48  | 42  | 55  | 47  | 42  | 53  | 46  | 41  | 51  | 46  | 41  |
| 7   | 65  | 52  | 43  | 37  | 63  | 51  | 42  | 36  | 49  | 42  | 36  | 48  | 41  | 36  | 46  | 40  | 36  |
| 8   | 60  | 46  | 38  | 32  | 58  | 46  | 38  | 32  | 44  | 37  | 32  | 43  | 36  | 31  | 42  | 36  | 31  |
| 9   | 56  | 42  | 34  | 28  | 54  | 41  | 33  | 28  | 40  | 33  | 28  | 39  | 33  | 28  | 38  | 32  | 28  |
| 10  | 52  | 38  | 30  | 25  | 50  | 38  | 30  | 25  | 37  | 30  | 25  | 36  | 29  | 25  | 35  | 29  | 24  |

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

|     | 0°     | 45°    | 90°   | 135°  | 180°  |
|-----|--------|--------|-------|-------|-------|
| 0°  | 14329  | 14329  | 14329 | 14329 | 14329 |
| 5°  | 25050  | 20452  | 14072 | 11410 | 10961 |
| 10° | 56678  | 32982  | 13501 | 10493 | 10650 |
| 15° | 103021 | 53044  | 12534 | 10555 | 10858 |
| 20° | 139674 | 75729  | 11308 | 10520 | 10997 |
| 25° | 183604 | 95621  | 9938  | 10261 | 11250 |
| 30° | 212587 | 113373 | 8531  | 10222 | 11773 |
| 35° | 232153 | 127787 | 7211  | 10449 | 12447 |
| 40° | 253261 | 132599 | 6362  | 10994 | 13309 |
| 45° | 287108 | 122973 | 6065  | 11691 | 14419 |
| 50° | 274254 | 102671 | 5975  | 12405 | 15862 |
| 55° | 255612 | 57650  | 6185  | 13392 | 17505 |
| 60° | 172154 | 12400  | 6200  | 14157 | 18910 |
| 65° | 26570  | 3138   | 5950  | 14670 | 20620 |
| 70° | 3021   | 3021   | 5589  | 15106 | 22005 |
| 75° | 2861   | 2861   | 5124  | 14839 | 22225 |
| 80° | 2579   | 3372   | 5058  | 13588 | 22117 |
| 85° | 1778   | 3359   | 5138  | 13635 | 20353 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 287108 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 10.1   | 1.2       |
| 10°-20°   | 54.4   | 6.4       |
| 20°-30°   | 127.7  | 14.9      |
| 30°-40°   | 193.0  | 22.6      |
| 40°-50°   | 221.8  | 25.9      |
| 50°-60°   | 176.1  | 20.6      |
| 60°-70°   | 52.8   | 6.2       |
| 70°-80°   | 14.3   | 1.7       |
| 80°-90°   | 4.8    | 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°    | 192.2  | 22.5      |
| 0°-40°    | 385.2  | 45.0      |
| 0°-60°    | 783.1  | 91.6      |
| 0°-90°    | 855.0  | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 855.0  | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 45° | 90° | 135° | 180° | Flux |
|-----|------|-----|-----|------|------|------|
| 0°  | 83   | 83  | 83  | 83   | 83   |      |
| 5°  | 145  | 118 | 81  | 66   | 63   | 19   |
| 15° | 578  | 298 | 70  | 59   | 61   | 166  |
| 25° | 966  | 503 | 52  | 54   | 59   | 441  |
| 35° | 1104 | 608 | 34  | 50   | 59   | 693  |
| 45° | 1179 | 505 | 25  | 48   | 59   | 876  |
| 55° | 851  | 192 | 21  | 45   | 58   | 701  |
| 65° | 65   | 8   | 15  | 36   | 51   | 146  |
| 75° | 4    | 4   | 8   | 22   | 33   | 5    |
| 85° | 1    | 2   | 3   | 7    | 10   | 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°    | 83.2   | 83.2   | 83.2   | 83.2   | 83.2   | 83.2   | 83.2  | 83.2  | 83.2 | 83.2   | 83.2 |
| 2.5°  | 105.4  | 106.3  | 105.4  | 105.4  | 104.6  | 103.7  | 97.7  | 90.9  | 83.2 | 77.2   | 72.9 |
| 5°    | 144.9  | 145.7  | 143.2  | 143.2  | 141.5  | 138.9  | 118.3 | 98.6  | 81.4 | 72.0   | 66.0 |
| 7.5°  | 214.3  | 217.7  | 213.5  | 208.3  | 198.9  | 197.2  | 147.5 | 106.3 | 79.7 | 66.9   | 61.7 |
| 10°   | 324.1  | 321.5  | 317.2  | 306.9  | 290.6  | 282.9  | 188.6 | 114.0 | 77.2 | 63.4   | 60.0 |
| 12.5° | 456.9  | 450.1  | 444.9  | 426.1  | 403.8  | 390.9  | 240.0 | 120.9 | 73.7 | 60.0   | 59.2 |
| 15°   | 577.8  | 572.7  | 560.7  | 542.7  | 515.2  | 504.9  | 297.5 | 125.2 | 70.3 | 57.4   | 59.2 |
| 17.5° | 679.8  | 674.7  | 667.8  | 649.8  | 621.5  | 606.1  | 361.8 | 127.7 | 66.0 | 55.7   | 58.3 |
| 20°   | 762.1  | 758.7  | 749.3  | 734.7  | 706.4  | 691.8  | 413.2 | 127.7 | 61.7 | 54.0   | 57.4 |
| 22.5° | 868.4  | 860.7  | 848.7  | 827.3  | 792.1  | 769.8  | 462.1 | 125.2 | 57.4 | 52.3   | 55.7 |
| 25°   | 966.2  | 961.0  | 945.6  | 919.9  | 882.1  | 859.9  | 503.2 | 120.0 | 52.3 | 49.7   | 54.0 |
| 27.5° | 1024.4 | 1021.0 | 1006.4 | 979.9  | 937.9  | 920.7  | 537.5 | 112.3 | 47.2 | 47.2   | 53.2 |
| 30°   | 1069.0 | 1062.2 | 1047.6 | 1021.9 | 979.0  | 958.4  | 570.1 | 102.9 | 42.9 | 44.6   | 51.4 |
| 32.5° | 1091.3 | 1088.7 | 1075.9 | 1053.6 | 1011.6 | 988.4  | 596.7 | 90.9  | 37.7 | 42.9   | 50.6 |
| 35°   | 1104.2 | 1101.6 | 1091.3 | 1069.9 | 1030.4 | 1008.2 | 607.8 | 79.7  | 34.3 | 41.1   | 49.7 |
| 37.5° | 1114.5 | 1111.9 | 1099.0 | 1077.6 | 1038.2 | 1015.0 | 602.7 | 67.7  | 30.9 | 39.4   | 48.9 |
| 40°   | 1126.5 | 1117.0 | 1097.3 | 1075.9 | 1039.9 | 1017.6 | 589.8 | 56.6  | 28.3 | 38.6   | 48.9 |
| 42.5° | 1155.6 | 1123.0 | 1092.2 | 1072.5 | 1038.2 | 1012.4 | 552.9 | 44.6  | 25.7 | 36.9   | 48.0 |
| 45°   | 1178.8 | 1121.3 | 1081.9 | 1066.5 | 1031.3 | 1002.2 | 504.9 | 32.6  | 24.9 | 36.0   | 48.0 |
| 47.5° | 1117.9 | 1082.7 | 1064.7 | 1056.2 | 1018.4 | 986.7  | 455.2 | 22.3  | 24.0 | 35.1   | 47.2 |
| 50°   | 1023.6 | 1019.3 | 1012.4 | 1013.3 | 979.0  | 953.3  | 383.2 | 15.4  | 22.3 | 34.3   | 46.3 |
| 52.5° | 978.2  | 973.0  | 961.0  | 952.4  | 918.1  | 895.9  | 303.5 | 12.0  | 21.4 | 33.4   | 45.4 |
| 55°   | 851.3  | 854.7  | 841.8  | 847.0  | 836.7  | 825.6  | 192.0 | 11.1  | 20.6 | 31.7   | 44.6 |
| 57.5° | 560.7  | 577.8  | 607.8  | 643.8  | 676.4  | 698.7  | 103.7 | 11.1  | 18.9 | 30.9   | 42.9 |
| 60°   | 499.8  | 495.5  | 494.6  | 501.5  | 516.1  | 528.1  | 36.0  | 10.3  | 18.0 | 28.3   | 41.1 |
| 62.5° | 273.5  | 271.8  | 297.5  | 341.2  | 366.9  | 369.5  | 10.3  | 10.3  | 16.3 | 26.6   | 38.6 |
| 65°   | 65.2   | 67.7   | 75.4   | 94.3   | 111.4  | 122.6  | 7.7   | 9.4   | 14.6 | 24.9   | 36.0 |
| 67.5° | 10.3   | 11.1   | 11.1   | 13.7   | 15.4   | 15.4   | 6.9   | 8.6   | 12.9 | 22.3   | 33.4 |
| 70°   | 6.0    | 6.0    | 6.0    | 6.0    | 6.0    | 6.0    | 6.0   | 7.7   | 11.1 | 19.7   | 30.0 |
| 72.5° | 5.1    | 5.1    | 5.1    | 5.1    | 5.1    | 5.1    | 6.0   | 6.9   | 9.4  | 17.1   | 25.7 |
| 75°   | 4.3    | 4.3    | 4.3    | 4.3    | 4.3    | 4.3    | 4.3   | 6.0   | 7.7  | 13.7   | 22.3 |
| 77.5° | 3.4    | 3.4    | 3.4    | 3.4    | 3.4    | 3.4    | 4.3   | 5.1   | 6.9  | 11.1   | 18.0 |
| 80°   | 2.6    | 2.6    | 2.6    | 2.6    | 2.6    | 2.6    | 3.4   | 4.3   | 5.1  | 8.6    | 13.7 |
| 82.5° | 1.7    | 1.7    | 1.7    | 1.7    | 1.7    | 1.7    | 2.6   | 3.4   | 4.3  | 6.9    | 10.3 |
| 85°   | 0.9    | 0.9    | 0.9    | 0.9    | 1.7    | 1.7    | 1.7   | 2.6   | 2.6  | 4.3    | 6.9  |
| 87.5° | 0.9    | 0.9    | 0.9    | 0.9    | 0.9    | 0.9    | 1.7   | 1.7   | 1.7  | 2.6    | 3.4  |
| 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°    | 83.2   | 83.2 |
| 2.5°  | 70.3   | 69.4 |
| 5°    | 63.4   | 63.4 |
| 7.5°  | 60.9   | 60.9 |
| 10°   | 60.0   | 60.9 |
| 12.5° | 60.0   | 60.9 |
| 15°   | 60.0   | 60.9 |
| 17.5° | 60.0   | 60.9 |
| 20°   | 59.2   | 60.0 |
| 22.5° | 58.3   | 59.2 |
| 25°   | 57.4   | 59.2 |
| 27.5° | 56.6   | 59.2 |
| 30°   | 56.6   | 59.2 |
| 32.5° | 56.6   | 59.2 |
| 35°   | 55.7   | 59.2 |
| 37.5° | 55.7   | 59.2 |
| 40°   | 55.7   | 59.2 |
| 42.5° | 55.7   | 59.2 |
| 45°   | 55.7   | 59.2 |
| 47.5° | 55.7   | 59.2 |
| 50°   | 55.7   | 59.2 |
| 52.5° | 54.9   | 59.2 |
| 55°   | 54.9   | 58.3 |
| 57.5° | 53.2   | 56.6 |
| 60°   | 51.4   | 54.9 |
| 62.5° | 49.7   | 53.2 |
| 65°   | 47.2   | 50.6 |
| 67.5° | 44.6   | 47.2 |
| 70°   | 40.3   | 43.7 |
| 72.5° | 36.0   | 38.6 |
| 75°   | 30.9   | 33.4 |
| 77.5° | 25.7   | 28.3 |
| 80°   | 20.6   | 22.3 |
| 82.5° | 14.6   | 16.3 |
| 85°   | 9.4    | 10.3 |
| 87.5° | 4.3    | 4.3  |
| 90°   | 0.0    | 0.0  |

(END OF REPORT)