

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: P1313470

Luminaire Tested: P3SQAS13R559730DE010 E3SQCA451MMS

Issue Date: 1/29/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1313470  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-80)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/29/2026  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: IRiS  
Catalog Number: P3SQAS13R559730DE010 E3SQCA451MMS  
Description: 3in Adjustable LED luminaire with, R55 optic, 3000K CCT AND, 97CRI , E3SQCA451MMS TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

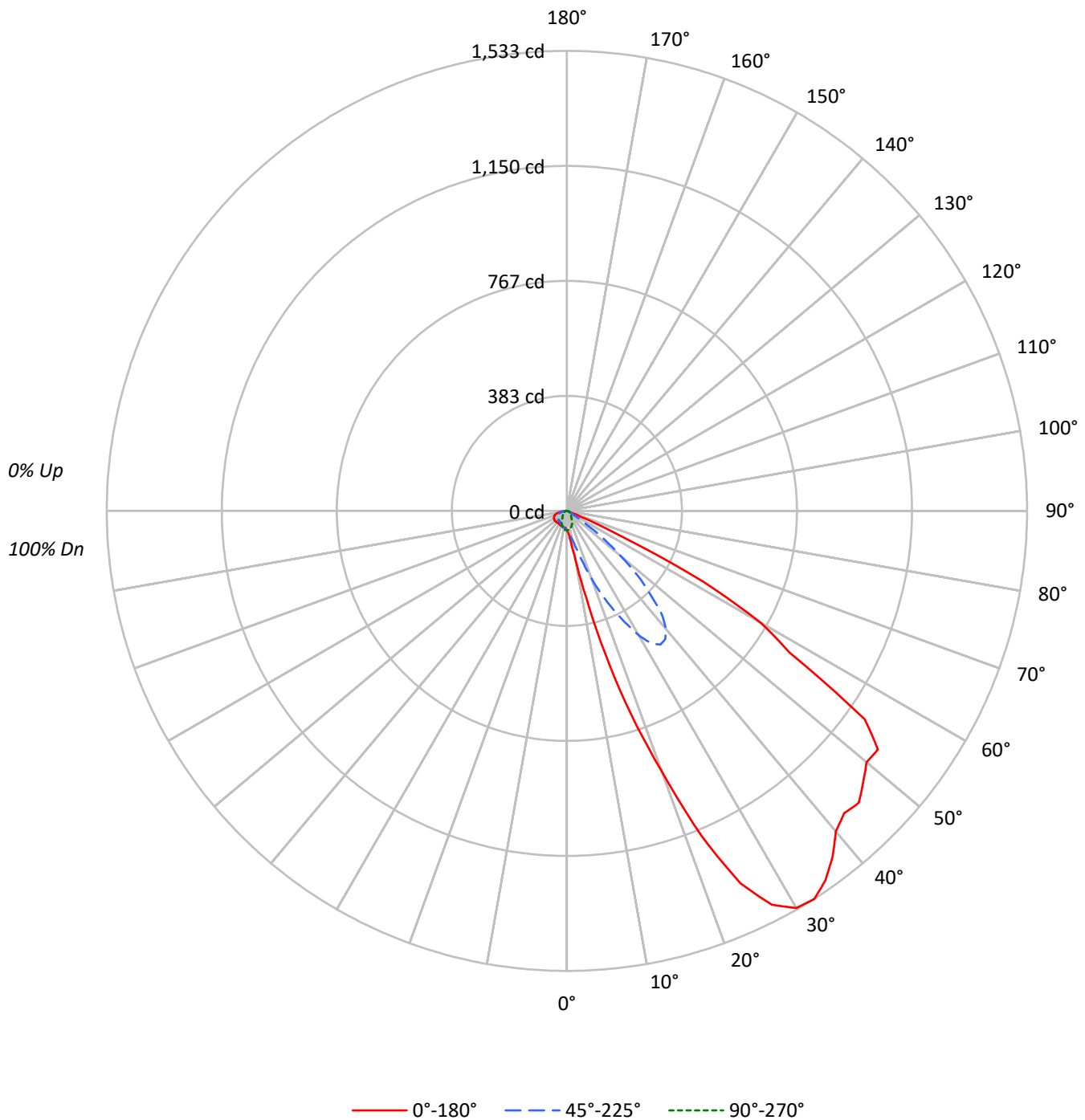
Lumens per Lamp: N/A  
Luminaire Lumens: 986.0 lumens  
Efficiency: N/A  
Efficacy: 67.5 lumens/watt  
Spacing Criteria (0/90/45): 3.76 / 0.9 / 1.95  
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')  
CIE Type: Direct

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  |     |     | 0   |
| RW  | 70  | 50  | 30  | 10  | 70  | 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  | 107 | 104 | 100 | 97  | 99  | 97  | 94  |  | 95  | 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  | 67  | 77  | 71  | 65  |  | 74  | 69  | 64  |  | 72  | 67  | 63  | 61  |
| 4   | 83  | 71  | 63  | 56  | 81  | 70  | 62  | 56  | 68  | 61  | 55  |  | 65  | 59  | 54  |  | 63  | 58  | 54  | 51  |
| 5   | 76  | 63  | 54  | 47  | 74  | 62  | 53  | 47  | 60  | 52  | 47  |  | 58  | 51  | 46  |  | 56  | 50  | 46  | 43  |
| 6   | 69  | 56  | 47  | 40  | 68  | 55  | 46  | 40  | 53  | 46  | 40  |  | 51  | 45  | 39  |  | 50  | 44  | 39  | 37  |
| 7   | 64  | 50  | 41  | 35  | 62  | 49  | 41  | 35  | 48  | 40  | 34  |  | 46  | 39  | 34  |  | 45  | 38  | 34  | 32  |
| 8   | 59  | 45  | 36  | 30  | 57  | 44  | 36  | 30  | 43  | 35  | 30  |  | 41  | 35  | 29  |  | 40  | 34  | 29  | 27  |
| 9   | 54  | 40  | 32  | 26  | 53  | 40  | 32  | 26  | 39  | 31  | 26  |  | 38  | 31  | 26  |  | 36  | 30  | 26  | 24  |
| 10  | 50  | 37  | 28  | 23  | 49  | 36  | 28  | 23  | 35  | 28  | 23  |  | 34  | 27  | 23  |  | 33  | 27  | 23  | 21  |

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

|     | 0°     | 45°    | 90°   | 135°  | 180°  |
|-----|--------|--------|-------|-------|-------|
| 0°  | 10953  | 10953  | 10953 | 10953 | 10953 |
| 5°  | 14003  | 12810  | 10995 | 10235 | 9941  |
| 10° | 28488  | 16299  | 10668 | 9758  | 9758  |
| 15° | 87455  | 25015  | 9949  | 9468  | 9789  |
| 20° | 169090 | 43748  | 8944  | 9255  | 9732  |
| 25° | 260242 | 68049  | 7772  | 8931  | 9767  |
| 30° | 303886 | 95117  | 6403  | 8830  | 10043 |
| 35° | 315767 | 114289 | 5319  | 8788  | 10449 |
| 40° | 313378 | 115355 | 4901  | 9195  | 11353 |
| 45° | 335041 | 95475  | 4676  | 9962  | 12300 |
| 50° | 349194 | 63017  | 4662  | 10744 | 13772 |
| 55° | 363616 | 27474  | 4714  | 11770 | 15163 |
| 60° | 256853 | 6303   | 4788  | 12917 | 17119 |
| 65° | 83785  | 2119   | 4605  | 13855 | 19153 |
| 70° | 2618   | 2216   | 4834  | 14905 | 21955 |
| 75° | 2329   | 2329   | 4059  | 15637 | 24354 |
| 80° | 1686   | 2579   | 4364  | 15571 | 25886 |
| 85° | 1778   | 3359   | 5138  | 15413 | 25886 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 52.5°

Luminance: 369448 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 6.8    | 0.7       |
| 10°-20°   | 41.9   | 4.2       |
| 20°-30°   | 140.3  | 14.2      |
| 30°-40°   | 230.5  | 23.4      |
| 40°-50°   | 257.1  | 26.1      |
| 50°-60°   | 216.4  | 21.9      |
| 60°-70°   | 73.4   | 7.4       |
| 70°-80°   | 14.4   | 1.5       |
| 80°-90°   | 5.4    | 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°    | 188.9  | 19.2      |
| 0°-40°    | 419.4  | 42.5      |
| 0°-60°    | 892.8  | 90.6      |
| 0°-90°    | 986.0  | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 986.0  | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 45° | 90° | 135° | 180° | Flux |
|-----|------|-----|-----|------|------|------|
| 0°  | 64   | 64  | 64  | 64   | 64   |      |
| 5°  | 81   | 74  | 64  | 59   | 58   | 10   |
| 15° | 490  | 140 | 56  | 53   | 55   | 156  |
| 25° | 1370 | 358 | 41  | 47   | 51   | 615  |
| 35° | 1502 | 544 | 25  | 42   | 50   | 933  |
| 45° | 1376 | 392 | 19  | 41   | 50   | 1051 |
| 55° | 1211 | 92  | 16  | 39   | 50   | 986  |
| 65° | 206  | 5   | 11  | 34   | 47   | 278  |
| 75° | 4    | 4   | 6   | 24   | 37   | 4    |
| 85° | 1    | 2   | 3   | 8    | 13   | 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°    | 63.6   | 63.6   | 63.6   | 63.6   | 63.6   | 63.6   | 63.6  | 63.6  | 63.6 | 63.6   | 63.6 |
| 2.5°  | 69.7   | 69.7   | 69.7   | 69.7   | 69.7   | 69.7   | 68.8  | 66.2  | 64.5 | 61.9   | 61.0 |
| 5°    | 81.0   | 81.0   | 81.0   | 80.1   | 80.1   | 78.4   | 74.1  | 68.0  | 63.6 | 60.1   | 59.2 |
| 7.5°  | 104.5  | 103.7  | 101.9  | 101.1  | 98.4   | 97.6   | 81.9  | 69.7  | 62.7 | 58.4   | 57.5 |
| 10°   | 162.9  | 161.2  | 158.6  | 149.0  | 140.3  | 134.2  | 93.2  | 70.6  | 61.0 | 56.6   | 55.8 |
| 12.5° | 293.6  | 290.1  | 277.0  | 257.0  | 232.6  | 220.4  | 111.5 | 71.4  | 58.4 | 54.9   | 54.9 |
| 15°   | 490.5  | 486.1  | 461.7  | 433.9  | 389.4  | 365.0  | 140.3 | 70.6  | 55.8 | 52.3   | 53.1 |
| 17.5° | 708.3  | 696.1  | 670.8  | 634.2  | 574.1  | 545.4  | 182.9 | 68.8  | 52.3 | 50.5   | 52.3 |
| 20°   | 922.6  | 919.1  | 877.3  | 827.6  | 753.6  | 715.2  | 238.7 | 66.2  | 48.8 | 47.9   | 50.5 |
| 22.5° | 1173.5 | 1158.7 | 1114.3 | 1061.1 | 959.2  | 908.7  | 298.8 | 62.7  | 45.3 | 45.3   | 48.8 |
| 25°   | 1369.5 | 1352.1 | 1317.2 | 1255.4 | 1158.7 | 1104.7 | 358.1 | 58.4  | 40.9 | 42.7   | 47.0 |
| 27.5° | 1479.3 | 1459.2 | 1433.1 | 1380.0 | 1305.0 | 1257.1 | 417.3 | 53.1  | 36.6 | 40.1   | 45.3 |
| 30°   | 1528.1 | 1522.8 | 1503.7 | 1464.5 | 1395.6 | 1353.0 | 478.3 | 47.0  | 32.2 | 37.5   | 44.4 |
| 32.5° | 1533.3 | 1535.9 | 1528.1 | 1502.8 | 1450.5 | 1413.9 | 523.6 | 41.8  | 28.7 | 35.7   | 42.7 |
| 35°   | 1501.9 | 1511.5 | 1516.7 | 1506.3 | 1472.3 | 1442.7 | 543.6 | 35.7  | 25.3 | 34.0   | 41.8 |
| 37.5° | 1453.1 | 1470.6 | 1488.0 | 1490.6 | 1469.7 | 1450.5 | 538.4 | 30.5  | 23.5 | 33.1   | 41.8 |
| 40°   | 1393.9 | 1409.6 | 1445.3 | 1468.0 | 1461.0 | 1447.0 | 513.1 | 25.3  | 21.8 | 31.4   | 40.9 |
| 42.5° | 1366.9 | 1370.4 | 1408.7 | 1447.0 | 1445.3 | 1434.0 | 468.7 | 20.0  | 20.0 | 31.4   | 40.9 |
| 45°   | 1375.6 | 1359.9 | 1385.2 | 1429.6 | 1427.0 | 1412.2 | 392.0 | 15.7  | 19.2 | 30.5   | 40.9 |
| 47.5° | 1339.0 | 1317.2 | 1359.9 | 1412.2 | 1402.6 | 1380.8 | 324.1 | 11.3  | 18.3 | 29.6   | 40.1 |
| 50°   | 1303.3 | 1299.8 | 1332.9 | 1359.1 | 1346.0 | 1333.8 | 235.2 | 8.7   | 17.4 | 28.7   | 40.1 |
| 52.5° | 1305.9 | 1299.8 | 1303.3 | 1302.4 | 1276.3 | 1263.2 | 161.2 | 7.0   | 16.6 | 27.9   | 40.1 |
| 55°   | 1211.0 | 1191.8 | 1173.5 | 1178.7 | 1180.5 | 1171.8 | 91.5  | 6.1   | 15.7 | 27.9   | 39.2 |
| 57.5° | 879.9  | 874.7  | 894.7  | 951.3  | 995.8  | 1001.0 | 44.4  | 6.1   | 14.8 | 27.0   | 38.3 |
| 60°   | 745.7  | 742.3  | 743.1  | 759.7  | 783.2  | 768.4  | 18.3  | 6.1   | 13.9 | 26.1   | 37.5 |
| 62.5° | 514.0  | 548.0  | 561.9  | 600.2  | 584.6  | 563.7  | 7.0   | 7.0   | 13.1 | 24.4   | 36.6 |
| 65°   | 205.6  | 204.7  | 223.9  | 242.2  | 237.0  | 221.3  | 5.2   | 6.1   | 11.3 | 22.7   | 34.0 |
| 67.5° | 47.9   | 43.6   | 37.5   | 32.2   | 27.0   | 21.8   | 5.2   | 6.1   | 10.5 | 20.9   | 32.2 |
| 70°   | 5.2    | 5.2    | 5.2    | 5.2    | 5.2    | 4.4    | 4.4   | 6.1   | 9.6  | 19.2   | 29.6 |
| 72.5° | 4.4    | 4.4    | 4.4    | 4.4    | 4.4    | 4.4    | 4.4   | 5.2   | 7.8  | 16.6   | 27.0 |
| 75°   | 3.5    | 3.5    | 3.5    | 3.5    | 3.5    | 3.5    | 3.5   | 4.4   | 6.1  | 13.9   | 23.5 |
| 77.5° | 2.6    | 2.6    | 2.6    | 3.5    | 2.6    | 3.5    | 3.5   | 4.4   | 5.2  | 11.3   | 20.0 |
| 80°   | 1.7    | 1.7    | 2.6    | 2.6    | 2.6    | 2.6    | 2.6   | 3.5   | 4.4  | 9.6    | 15.7 |
| 82.5° | 1.7    | 1.7    | 1.7    | 1.7    | 1.7    | 1.7    | 2.6   | 2.6   | 3.5  | 7.0    | 11.3 |
| 85°   | 0.9    | 0.9    | 0.9    | 0.9    | 0.9    | 1.7    | 1.7   | 2.6   | 2.6  | 5.2    | 7.8  |
| 87.5° | 0.9    | 0.9    | 0.9    | 0.9    | 0.9    | 0.9    | 1.7   | 1.7   | 2.6  | 2.6    | 3.5  |
| 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):**

|       | 157.5° | 180° |
|-------|--------|------|
| 0°    | 63.6   | 63.6 |
| 2.5°  | 60.1   | 60.1 |
| 5°    | 58.4   | 57.5 |
| 7.5°  | 56.6   | 56.6 |
| 10°   | 55.8   | 55.8 |
| 12.5° | 54.9   | 55.8 |
| 15°   | 54.9   | 54.9 |
| 17.5° | 53.1   | 54.0 |
| 20°   | 52.3   | 53.1 |
| 22.5° | 51.4   | 52.3 |
| 25°   | 50.5   | 51.4 |
| 27.5° | 49.7   | 50.5 |
| 30°   | 48.8   | 50.5 |
| 32.5° | 47.9   | 49.7 |
| 35°   | 47.9   | 49.7 |
| 37.5° | 47.9   | 50.5 |
| 40°   | 47.9   | 50.5 |
| 42.5° | 47.9   | 50.5 |
| 45°   | 47.9   | 50.5 |
| 47.5° | 47.9   | 50.5 |
| 50°   | 47.9   | 51.4 |
| 52.5° | 47.9   | 51.4 |
| 55°   | 47.9   | 50.5 |
| 57.5° | 47.0   | 50.5 |
| 60°   | 47.0   | 49.7 |
| 62.5° | 46.2   | 48.8 |
| 65°   | 44.4   | 47.0 |
| 67.5° | 42.7   | 46.2 |
| 70°   | 40.1   | 43.6 |
| 72.5° | 37.5   | 40.1 |
| 75°   | 34.0   | 36.6 |
| 77.5° | 29.6   | 31.4 |
| 80°   | 23.5   | 26.1 |
| 82.5° | 18.3   | 20.0 |
| 85°   | 12.2   | 13.1 |
| 87.5° | 5.2    | 6.1  |
| 90°   | 0.0    | 0.0  |

(END OF REPORT)