

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: P1308517

Luminaire Tested: P3SQAS24R559030D010 E3SQCA451MW

Issue Date: 1/29/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1308517  
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: P3SQAS24R559030D010 E3SQCA451MW  
Description: 3in Adjustable LED luminaire with, R55 optic, 3000K CCT AND, 90CRI , E3SQCA451MW TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

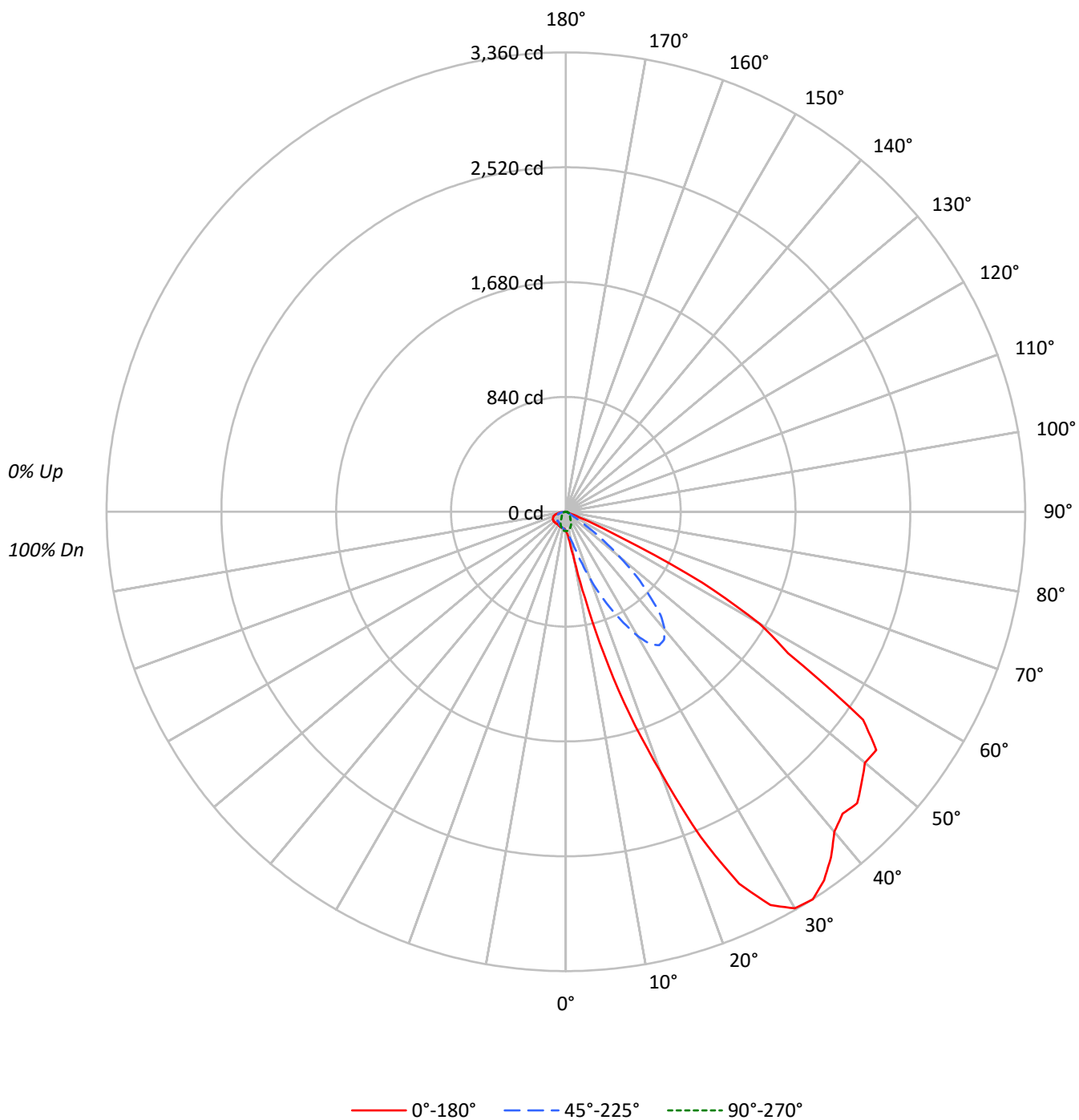
Lumens per Lamp: N/A  
Luminaire Lumens: 2161.0 lumens  
Efficiency: N/A  
Efficacy: 75.0 lumens/watt  
Spacing Criteria (0/90/45): 3.76 / 0.91 / 1.95  
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')  
CIE Type: Direct

Input Watts (W): 28.8  
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  | 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°  | 24008  | 24008  | 24008 | 24008 | 24008 |
| 5°  | 30704  | 28059  | 24100 | 22440 | 21783 |
| 10° | 62449  | 35728  | 23381 | 21370 | 21370 |
| 15° | 191670 | 54809  | 21788 | 20772 | 21449 |
| 20° | 370583 | 95890  | 19592 | 20289 | 21352 |
| 25° | 570365 | 149133 | 17045 | 19592 | 21416 |
| 30° | 666001 | 208451 | 14040 | 19370 | 22014 |
| 35° | 692085 | 250486 | 11648 | 19258 | 22875 |
| 40° | 686827 | 252833 | 10724 | 20166 | 24888 |
| 45° | 734308 | 209266 | 10230 | 21847 | 26962 |
| 50° | 765318 | 138118 | 10235 | 23524 | 30196 |
| 55° | 796893 | 60202  | 10329 | 25792 | 33239 |
| 60° | 562961 | 13812  | 10506 | 28279 | 37476 |
| 65° | 183626 | 4686   | 10106 | 30360 | 42015 |
| 70° | 5791   | 4784   | 10574 | 32680 | 48089 |
| 75° | 5057   | 5057   | 8917  | 34336 | 53366 |
| 80° | 3769   | 5653   | 9422  | 34118 | 56830 |
| 85° | 3754   | 7509   | 11263 | 33988 | 56515 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 52.5°

Luminance: 809707 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 14.8   | 0.7       |
| 10°-20°   | 91.7   | 4.2       |
| 20°-30°   | 307.6  | 14.2      |
| 30°-40°   | 505.1  | 23.4      |
| 40°-50°   | 563.4  | 26.1      |
| 50°-60°   | 474.2  | 21.9      |
| 60°-70°   | 160.9  | 7.4       |
| 70°-80°   | 31.5   | 1.5       |
| 80°-90°   | 11.8   | 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°    | 414.1  | 19.2      |
| 0°-40°    | 919.2  | 42.5      |
| 0°-60°    | 1956.8 | 90.6      |
| 0°-90°    | 2161.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 2161.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 45°  | 90° | 135° | 180° | Flux |
|-----|------|------|-----|------|------|------|
| 0°  | 139  | 139  | 139 | 139  | 139  |      |
| 5°  | 178  | 162  | 139 | 130  | 126  | 22   |
| 15° | 1075 | 307  | 122 | 116  | 120  | 341  |
| 25° | 3002 | 785  | 90  | 103  | 113  | 1349 |
| 35° | 3292 | 1191 | 55  | 92   | 109  | 2044 |
| 45° | 3015 | 859  | 42  | 90   | 111  | 2302 |
| 55° | 2654 | 200  | 34  | 86   | 111  | 2161 |
| 65° | 451  | 12   | 25  | 74   | 103  | 610  |
| 75° | 8    | 8    | 13  | 52   | 80   | 8    |
| 85° | 2    | 4    | 6   | 17   | 29   | 3    |
| 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°    | 139.4  | 139.4  | 139.4  | 139.4  | 139.4  | 139.4  | 139.4  | 139.4 | 139.4 | 139.4  | 139.4 |
| 2.5°  | 152.7  | 152.7  | 152.7  | 152.7  | 152.7  | 152.7  | 150.8  | 145.1 | 141.3 | 135.6  | 133.7 |
| 5°    | 177.6  | 177.6  | 177.6  | 175.7  | 175.7  | 171.8  | 162.3  | 148.9 | 139.4 | 131.7  | 129.8 |
| 7.5°  | 229.1  | 227.2  | 223.4  | 221.5  | 215.8  | 213.8  | 179.5  | 152.7 | 137.5 | 127.9  | 126.0 |
| 10°   | 357.1  | 353.2  | 347.5  | 326.5  | 307.4  | 294.0  | 204.3  | 154.7 | 133.7 | 124.1  | 122.2 |
| 12.5° | 643.5  | 635.8  | 607.2  | 563.3  | 509.8  | 483.1  | 244.4  | 156.6 | 127.9 | 120.3  | 120.3 |
| 15°   | 1075.0 | 1065.4 | 1012.0 | 950.9  | 853.5  | 800.0  | 307.4  | 154.7 | 122.2 | 114.6  | 116.5 |
| 17.5° | 1552.3 | 1525.6 | 1470.2 | 1390.0 | 1258.3 | 1195.3 | 401.0  | 150.8 | 114.6 | 110.7  | 114.6 |
| 20°   | 2022.0 | 2014.4 | 1922.7 | 1813.9 | 1651.6 | 1567.6 | 523.2  | 145.1 | 106.9 | 105.0  | 110.7 |
| 22.5° | 2571.9 | 2539.5 | 2442.1 | 2325.6 | 2102.2 | 1991.5 | 654.9  | 137.5 | 99.3  | 99.3   | 106.9 |
| 25°   | 3001.5 | 2963.3 | 2887.0 | 2751.4 | 2539.5 | 2421.1 | 784.8  | 127.9 | 89.7  | 93.6   | 103.1 |
| 27.5° | 3242.1 | 3198.2 | 3140.9 | 3024.4 | 2860.2 | 2755.2 | 914.6  | 116.5 | 80.2  | 87.8   | 99.3  |
| 30°   | 3349.0 | 3337.6 | 3295.6 | 3209.7 | 3058.8 | 2965.3 | 1048.2 | 103.1 | 70.6  | 82.1   | 97.4  |
| 32.5° | 3360.5 | 3366.2 | 3349.0 | 3293.7 | 3179.1 | 3098.9 | 1147.5 | 91.6  | 63.0  | 78.3   | 93.6  |
| 35°   | 3291.8 | 3312.8 | 3324.2 | 3301.3 | 3226.8 | 3161.9 | 1191.4 | 78.3  | 55.4  | 74.5   | 91.6  |
| 37.5° | 3184.8 | 3223.0 | 3261.2 | 3266.9 | 3221.1 | 3179.1 | 1180.0 | 66.8  | 51.6  | 72.6   | 91.6  |
| 40°   | 3055.0 | 3089.4 | 3167.6 | 3217.3 | 3202.0 | 3171.5 | 1124.6 | 55.4  | 47.7  | 68.7   | 89.7  |
| 42.5° | 2995.8 | 3003.4 | 3087.5 | 3171.5 | 3167.6 | 3142.8 | 1027.2 | 43.9  | 43.9  | 68.7   | 89.7  |
| 45°   | 3014.9 | 2980.5 | 3035.9 | 3133.3 | 3127.6 | 3095.1 | 859.2  | 34.4  | 42.0  | 66.8   | 89.7  |
| 47.5° | 2934.7 | 2887.0 | 2980.5 | 3095.1 | 3074.1 | 3026.4 | 710.3  | 24.8  | 40.1  | 64.9   | 87.8  |
| 50°   | 2856.4 | 2848.8 | 2921.3 | 2978.6 | 2950.0 | 2923.2 | 515.5  | 19.1  | 38.2  | 63.0   | 87.8  |
| 52.5° | 2862.1 | 2848.8 | 2856.4 | 2854.5 | 2797.2 | 2768.6 | 353.2  | 15.3  | 36.3  | 61.1   | 87.8  |
| 55°   | 2654.0 | 2612.0 | 2571.9 | 2583.4 | 2587.2 | 2568.1 | 200.5  | 13.4  | 34.4  | 61.1   | 85.9  |
| 57.5° | 1928.5 | 1917.0 | 1960.9 | 2085.0 | 2182.4 | 2193.9 | 97.4   | 13.4  | 32.5  | 59.2   | 84.0  |
| 60°   | 1634.4 | 1626.8 | 1628.7 | 1665.0 | 1716.5 | 1684.1 | 40.1   | 13.4  | 30.5  | 57.3   | 82.1  |
| 62.5° | 1126.5 | 1201.0 | 1231.5 | 1315.6 | 1281.2 | 1235.4 | 15.3   | 15.3  | 28.6  | 53.5   | 80.2  |
| 65°   | 450.6  | 448.7  | 490.7  | 530.8  | 519.3  | 485.0  | 11.5   | 13.4  | 24.8  | 49.6   | 74.5  |
| 67.5° | 105.0  | 95.5   | 82.1   | 70.6   | 59.2   | 47.7   | 11.5   | 13.4  | 22.9  | 45.8   | 70.6  |
| 70°   | 11.5   | 11.5   | 11.5   | 11.5   | 11.5   | 9.5    | 9.5    | 13.4  | 21.0  | 42.0   | 64.9  |
| 72.5° | 9.5    | 9.5    | 9.5    | 9.5    | 9.5    | 9.5    | 9.5    | 11.5  | 17.2  | 36.3   | 59.2  |
| 75°   | 7.6    | 7.6    | 7.6    | 7.6    | 7.6    | 7.6    | 7.6    | 9.5   | 13.4  | 30.5   | 51.6  |
| 77.5° | 5.7    | 5.7    | 5.7    | 7.6    | 5.7    | 7.6    | 7.6    | 9.5   | 11.5  | 24.8   | 43.9  |
| 80°   | 3.8    | 3.8    | 5.7    | 5.7    | 5.7    | 5.7    | 5.7    | 7.6   | 9.5   | 21.0   | 34.4  |
| 82.5° | 3.8    | 3.8    | 3.8    | 3.8    | 3.8    | 3.8    | 5.7    | 5.7   | 7.6   | 15.3   | 24.8  |
| 85°   | 1.9    | 1.9    | 1.9    | 1.9    | 1.9    | 3.8    | 3.8    | 5.7   | 5.7   | 11.5   | 17.2  |
| 87.5° | 1.9    | 1.9    | 1.9    | 1.9    | 1.9    | 1.9    | 3.8    | 3.8   | 5.7   | 5.7    | 7.6   |
| 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°    | 139.4  | 139.4 |
| 2.5°  | 131.7  | 131.7 |
| 5°    | 127.9  | 126.0 |
| 7.5°  | 124.1  | 124.1 |
| 10°   | 122.2  | 122.2 |
| 12.5° | 120.3  | 122.2 |
| 15°   | 120.3  | 120.3 |
| 17.5° | 116.5  | 118.4 |
| 20°   | 114.6  | 116.5 |
| 22.5° | 112.7  | 114.6 |
| 25°   | 110.7  | 112.7 |
| 27.5° | 108.8  | 110.7 |
| 30°   | 106.9  | 110.7 |
| 32.5° | 105.0  | 108.8 |
| 35°   | 105.0  | 108.8 |
| 37.5° | 105.0  | 110.7 |
| 40°   | 105.0  | 110.7 |
| 42.5° | 105.0  | 110.7 |
| 45°   | 105.0  | 110.7 |
| 47.5° | 105.0  | 110.7 |
| 50°   | 105.0  | 112.7 |
| 52.5° | 105.0  | 112.7 |
| 55°   | 105.0  | 110.7 |
| 57.5° | 103.1  | 110.7 |
| 60°   | 103.1  | 108.8 |
| 62.5° | 101.2  | 106.9 |
| 65°   | 97.4   | 103.1 |
| 67.5° | 93.6   | 101.2 |
| 70°   | 87.8   | 95.5  |
| 72.5° | 82.1   | 87.8  |
| 75°   | 74.5   | 80.2  |
| 77.5° | 64.9   | 68.7  |
| 80°   | 51.6   | 57.3  |
| 82.5° | 40.1   | 43.9  |
| 85°   | 26.7   | 28.6  |
| 87.5° | 11.5   | 13.4  |
| 90°   | 0.0    | 0.0   |

(END OF REPORT)