

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: P1318068

Luminaire Tested: P3SQAS13R659835DE010 E3SQCA451MB

Issue Date: 1/29/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1318068  
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: P3SQAS13R659835DE010 E3SQCA451MB  
Description: 3in Adjustable LED luminaire with, R65 optic, 3500K CCT AND, 98CRI , E3SQCA451MB TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

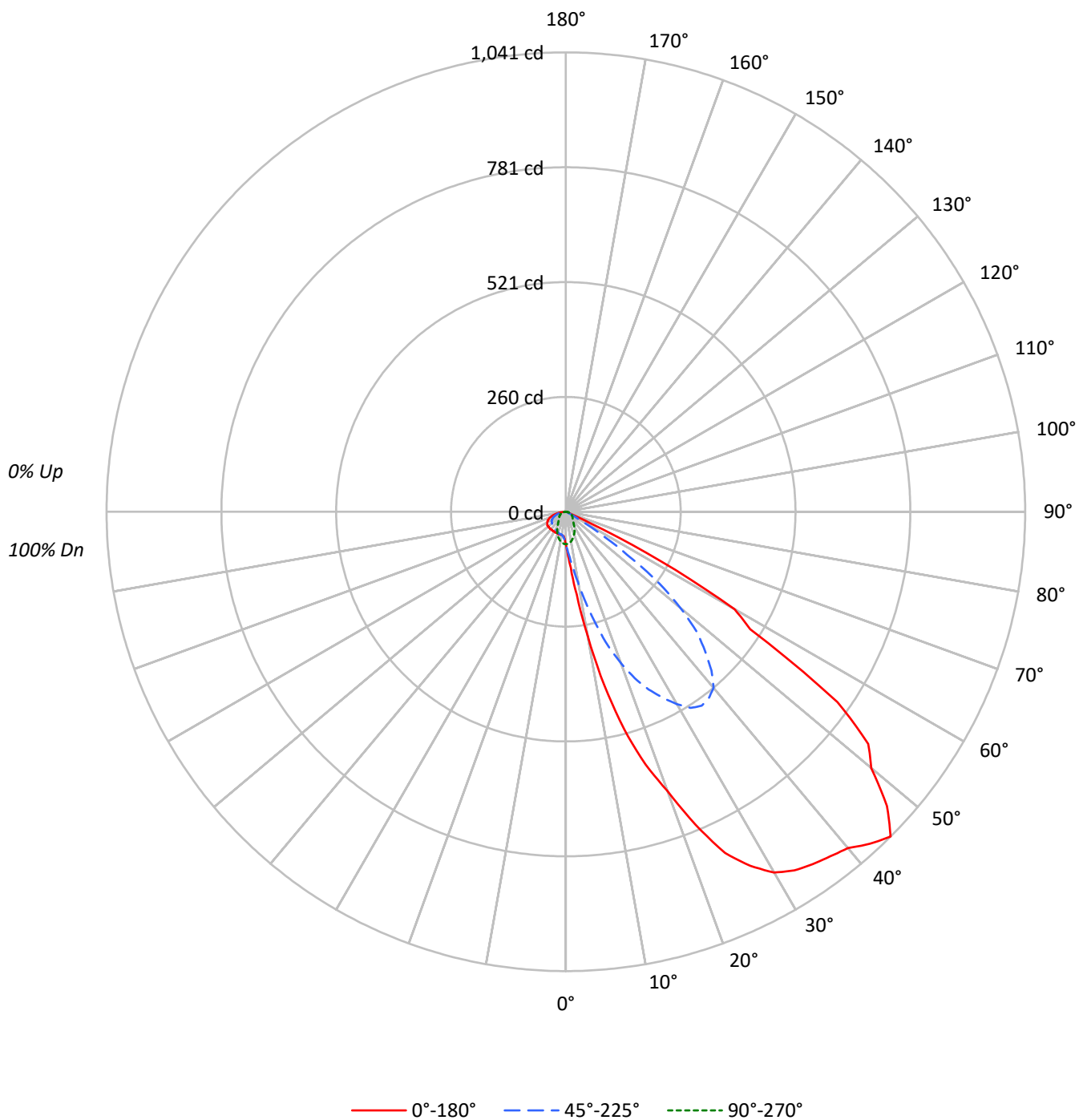
Lumens per Lamp: N/A  
Luminaire Lumens: 755.0 lumens  
Efficiency: N/A  
Efficacy: 52.1 lumens/watt  
Spacing Criteria (0/90/45): 3.28 / 0.89 / 2.04  
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')  
CIE Type: Direct

Input Watts (W): 14.5  
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  | 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  | 108 | 104 | 100 | 97  | 100 | 97  | 94  | 96  | 94  | 91  | 92  | 90  | 89  | 87  |    |    |
| 2   | 101 | 93  | 87  | 82  | 98  | 92  | 86  | 81  | 88  | 83  | 79  | 85  | 81  | 77  | 82  | 79  | 76  | 74  |    |    |
| 3   | 92  | 82  | 75  | 69  | 90  | 81  | 74  | 68  | 78  | 72  | 67  | 75  | 70  | 66  | 73  | 68  | 65  | 62  |    |    |
| 4   | 84  | 73  | 64  | 58  | 82  | 71  | 63  | 57  | 69  | 62  | 57  | 67  | 61  | 56  | 64  | 59  | 55  | 53  |    |    |
| 5   | 77  | 64  | 56  | 49  | 75  | 63  | 55  | 49  | 61  | 54  | 48  | 59  | 53  | 48  | 57  | 52  | 47  | 45  |    |    |
| 6   | 71  | 57  | 49  | 42  | 69  | 57  | 48  | 42  | 55  | 47  | 42  | 53  | 46  | 41  | 51  | 46  | 41  | 39  |    |    |
| 7   | 65  | 52  | 43  | 37  | 63  | 51  | 42  | 36  | 49  | 42  | 36  | 48  | 41  | 36  | 46  | 40  | 36  | 34  |    |    |
| 8   | 60  | 46  | 38  | 32  | 58  | 46  | 38  | 32  | 44  | 37  | 32  | 43  | 36  | 31  | 42  | 36  | 31  | 29  |    |    |
| 9   | 56  | 42  | 34  | 28  | 54  | 41  | 33  | 28  | 40  | 33  | 28  | 39  | 33  | 28  | 38  | 32  | 28  | 26  |    |    |
| 10  | 52  | 38  | 30  | 25  | 50  | 38  | 30  | 25  | 37  | 30  | 25  | 36  | 29  | 25  | 35  | 29  | 24  | 23  |    |    |

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

|     | 0°     | 45°    | 90°   | 135°  | 180°  |
|-----|--------|--------|-------|-------|-------|
| 0°  | 12641  | 12641  | 12641 | 12641 | 12641 |
| 5°  | 22111  | 18066  | 12430 | 10079 | 9681  |
| 10° | 50050  | 29117  | 11909 | 9269  | 9391  |
| 15° | 90968  | 46839  | 11072 | 9307  | 9575  |
| 20° | 123344 | 66877  | 9989  | 9292  | 9714  |
| 25° | 162131 | 84448  | 8779  | 9064  | 9919  |
| 30° | 187729 | 100109 | 7537  | 9028  | 10381 |
| 35° | 204989 | 112839 | 6370  | 9230  | 10975 |
| 40° | 223629 | 117087 | 5621  | 9690  | 11736 |
| 45° | 253521 | 108603 | 5358  | 10327 | 12714 |
| 50° | 242183 | 90668  | 5278  | 10958 | 13986 |
| 55° | 225706 | 50924  | 5465  | 11830 | 15463 |
| 60° | 152004 | 10953  | 5477  | 12503 | 16671 |
| 65° | 23432  | 2771   | 5257  | 12959 | 18216 |
| 70° | 2669   | 2669   | 4935  | 13344 | 19437 |
| 75° | 2529   | 2529   | 4525  | 13109 | 19630 |
| 80° | 2281   | 2975   | 4463  | 12001 | 19538 |
| 85° | 1581   | 2964   | 4545  | 12054 | 17982 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 253521 cd/sqm

TEST NUMBER: P1318068

CATALOG NUMBER: P3SQAS13R659835DE010 E3SQCA451MB

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 8.9    | 1.2       |
| 10°-20°   | 48.0   | 6.4       |
| 20°-30°   | 112.8  | 14.9      |
| 30°-40°   | 170.4  | 22.6      |
| 40°-50°   | 195.9  | 25.9      |
| 50°-60°   | 155.5  | 20.6      |
| 60°-70°   | 46.6   | 6.2       |
| 70°-80°   | 12.7   | 1.7       |
| 80°-90°   | 4.3    | 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°    | 169.7  | 22.5      |
| 0°-40°    | 340.1  | 45.0      |
| 0°-60°    | 691.5  | 91.6      |
| 0°-90°    | 755.0  | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 755.0  | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 45° | 90° | 135° | 180° | Flux |
|-----|------|-----|-----|------|------|------|
| 0°  | 73   | 73  | 73  | 73   | 73   |      |
| 5°  | 128  | 104 | 72  | 58   | 56   | 17   |
| 15° | 510  | 263 | 62  | 52   | 54   | 147  |
| 25° | 853  | 444 | 46  | 48   | 52   | 389  |
| 35° | 975  | 537 | 30  | 44   | 52   | 612  |
| 45° | 1041 | 446 | 22  | 42   | 52   | 773  |
| 55° | 752  | 170 | 18  | 39   | 52   | 619  |
| 65° | 58   | 7   | 13  | 32   | 45   | 129  |
| 75° | 4    | 4   | 7   | 20   | 30   | 4    |
| 85° | 1    | 2   | 2   | 6    | 9    | 1    |
| 90° | 0    | 0   | 0   | 0    | 0    |      |

TEST NUMBER: P1318068

CATALOG NUMBER: P3SQAS13R659835DE010 E3SQCA451MB

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°    | 10°   | 15°   | 20°   | 22.5° | 45°   | 67.5° | 90°  | 112.5° | 135° |
|-------|--------|-------|-------|-------|-------|-------|-------|-------|------|--------|------|
| 0°    | 73.4   | 73.4  | 73.4  | 73.4  | 73.4  | 73.4  | 73.4  | 73.4  | 73.4 | 73.4   | 73.4 |
| 2.5°  | 93.1   | 93.9  | 93.1  | 93.1  | 92.4  | 91.6  | 86.3  | 80.2  | 73.4 | 68.1   | 64.3 |
| 5°    | 127.9  | 128.7 | 126.4 | 126.4 | 124.9 | 122.6 | 104.5 | 87.1  | 71.9 | 63.6   | 58.3 |
| 7.5°  | 189.3  | 192.3 | 188.5 | 184.0 | 175.6 | 174.1 | 130.2 | 93.9  | 70.4 | 59.0   | 54.5 |
| 10°   | 286.2  | 283.9 | 280.1 | 271.0 | 256.6 | 249.8 | 166.5 | 100.7 | 68.1 | 56.0   | 53.0 |
| 12.5° | 403.5  | 397.4 | 392.9 | 376.2 | 356.6 | 345.2 | 212.0 | 106.7 | 65.1 | 53.0   | 52.2 |
| 15°   | 510.2  | 505.7 | 495.1 | 479.2 | 455.0 | 445.9 | 262.7 | 110.5 | 62.1 | 50.7   | 52.2 |
| 17.5° | 600.3  | 595.8 | 589.7 | 573.8 | 548.8 | 535.2 | 319.5 | 112.8 | 58.3 | 49.2   | 51.5 |
| 20°   | 673.0  | 670.0 | 661.6 | 648.8 | 623.8 | 610.9 | 364.9 | 112.8 | 54.5 | 47.7   | 50.7 |
| 22.5° | 766.9  | 760.0 | 749.4 | 730.5 | 699.5 | 679.8 | 408.0 | 110.5 | 50.7 | 46.2   | 49.2 |
| 25°   | 853.2  | 848.6 | 835.0 | 812.3 | 779.0 | 759.3 | 444.4 | 106.0 | 46.2 | 43.9   | 47.7 |
| 27.5° | 904.6  | 901.6 | 888.7 | 865.3 | 828.2 | 813.0 | 474.6 | 99.2  | 41.6 | 41.6   | 46.9 |
| 30°   | 944.0  | 937.9 | 925.1 | 902.4 | 864.5 | 846.3 | 503.4 | 90.8  | 37.9 | 39.4   | 45.4 |
| 32.5° | 963.7  | 961.4 | 950.1 | 930.4 | 893.3 | 872.8 | 526.9 | 80.2  | 33.3 | 37.9   | 44.7 |
| 35°   | 975.0  | 972.8 | 963.7 | 944.8 | 909.9 | 890.2 | 536.7 | 70.4  | 30.3 | 36.3   | 43.9 |
| 37.5° | 984.1  | 981.8 | 970.5 | 951.6 | 916.7 | 896.3 | 532.2 | 59.8  | 27.3 | 34.8   | 43.1 |
| 40°   | 994.7  | 986.4 | 969.0 | 950.1 | 918.3 | 898.6 | 520.8 | 50.0  | 25.0 | 34.1   | 43.1 |
| 42.5° | 1020.5 | 991.7 | 964.4 | 947.0 | 916.7 | 894.0 | 488.3 | 39.4  | 22.7 | 32.6   | 42.4 |
| 45°   | 1040.9 | 990.2 | 955.3 | 941.7 | 910.7 | 884.9 | 445.9 | 28.8  | 22.0 | 31.8   | 42.4 |
| 47.5° | 987.1  | 956.1 | 940.2 | 932.6 | 899.3 | 871.3 | 402.0 | 19.7  | 21.2 | 31.0   | 41.6 |
| 50°   | 903.9  | 900.1 | 894.0 | 894.8 | 864.5 | 841.8 | 338.4 | 13.6  | 19.7 | 30.3   | 40.9 |
| 52.5° | 863.8  | 859.2 | 848.6 | 841.0 | 810.8 | 791.1 | 268.0 | 10.6  | 18.9 | 29.5   | 40.1 |
| 55°   | 751.7  | 754.7 | 743.4 | 747.9 | 738.8 | 729.0 | 169.6 | 9.8   | 18.2 | 28.0   | 39.4 |
| 57.5° | 495.1  | 510.2 | 536.7 | 568.5 | 597.3 | 617.0 | 91.6  | 9.8   | 16.7 | 27.3   | 37.9 |
| 60°   | 441.3  | 437.6 | 436.8 | 442.9 | 455.7 | 466.3 | 31.8  | 9.1   | 15.9 | 25.0   | 36.3 |
| 62.5° | 241.5  | 240.0 | 262.7 | 301.3 | 324.0 | 326.3 | 9.1   | 9.1   | 14.4 | 23.5   | 34.1 |
| 65°   | 57.5   | 59.8  | 66.6  | 83.3  | 98.4  | 108.3 | 6.8   | 8.3   | 12.9 | 22.0   | 31.8 |
| 67.5° | 9.1    | 9.8   | 9.8   | 12.1  | 13.6  | 13.6  | 6.1   | 7.6   | 11.4 | 19.7   | 29.5 |
| 70°   | 5.3    | 5.3   | 5.3   | 5.3   | 5.3   | 5.3   | 5.3   | 6.8   | 9.8  | 17.4   | 26.5 |
| 72.5° | 4.5    | 4.5   | 4.5   | 4.5   | 4.5   | 4.5   | 5.3   | 6.1   | 8.3  | 15.1   | 22.7 |
| 75°   | 3.8    | 3.8   | 3.8   | 3.8   | 3.8   | 3.8   | 3.8   | 5.3   | 6.8  | 12.1   | 19.7 |
| 77.5° | 3.0    | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.8   | 4.5   | 6.1  | 9.8    | 15.9 |
| 80°   | 2.3    | 2.3   | 2.3   | 2.3   | 2.3   | 2.3   | 3.0   | 3.8   | 4.5  | 7.6    | 12.1 |
| 82.5° | 1.5    | 1.5   | 1.5   | 1.5   | 1.5   | 1.5   | 2.3   | 3.0   | 3.8  | 6.1    | 9.1  |
| 85°   | 0.8    | 0.8   | 0.8   | 0.8   | 1.5   | 1.5   | 1.5   | 2.3   | 2.3  | 3.8    | 6.1  |
| 87.5° | 0.8    | 0.8   | 0.8   | 0.8   | 0.8   | 0.8   | 1.5   | 1.5   | 1.5  | 2.3    | 3.0  |
| 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: P1318068

CATALOG NUMBER: P3SQAS13R659835DE010 E3SQCA451MB

**CANDELA DISTRIBUTION (continued):**

|       | 157.5° | 180° |
|-------|--------|------|
| 0°    | 73.4   | 73.4 |
| 2.5°  | 62.1   | 61.3 |
| 5°    | 56.0   | 56.0 |
| 7.5°  | 53.7   | 53.7 |
| 10°   | 53.0   | 53.7 |
| 12.5° | 53.0   | 53.7 |
| 15°   | 53.0   | 53.7 |
| 17.5° | 53.0   | 53.7 |
| 20°   | 52.2   | 53.0 |
| 22.5° | 51.5   | 52.2 |
| 25°   | 50.7   | 52.2 |
| 27.5° | 50.0   | 52.2 |
| 30°   | 50.0   | 52.2 |
| 32.5° | 50.0   | 52.2 |
| 35°   | 49.2   | 52.2 |
| 37.5° | 49.2   | 52.2 |
| 40°   | 49.2   | 52.2 |
| 42.5° | 49.2   | 52.2 |
| 45°   | 49.2   | 52.2 |
| 47.5° | 49.2   | 52.2 |
| 50°   | 49.2   | 52.2 |
| 52.5° | 48.4   | 52.2 |
| 55°   | 48.4   | 51.5 |
| 57.5° | 46.9   | 50.0 |
| 60°   | 45.4   | 48.4 |
| 62.5° | 43.9   | 46.9 |
| 65°   | 41.6   | 44.7 |
| 67.5° | 39.4   | 41.6 |
| 70°   | 35.6   | 38.6 |
| 72.5° | 31.8   | 34.1 |
| 75°   | 27.3   | 29.5 |
| 77.5° | 22.7   | 25.0 |
| 80°   | 18.2   | 19.7 |
| 82.5° | 12.9   | 14.4 |
| 85°   | 8.3    | 9.1  |
| 87.5° | 3.8    | 3.8  |
| 90°   | 0.0    | 0.0  |

(END OF REPORT)