

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: P1310150

Luminaire Tested: P3SQAS09R659040DE010 E3SQCA451MB

Issue Date: 1/29/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1310150  
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: P3SQAS09R659040DE010 E3SQCA451MB  
Description: 3in Adjustable LED luminaire with, R65 optic, 4000K CCT AND, 90CRI , E3SQCA451MB TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

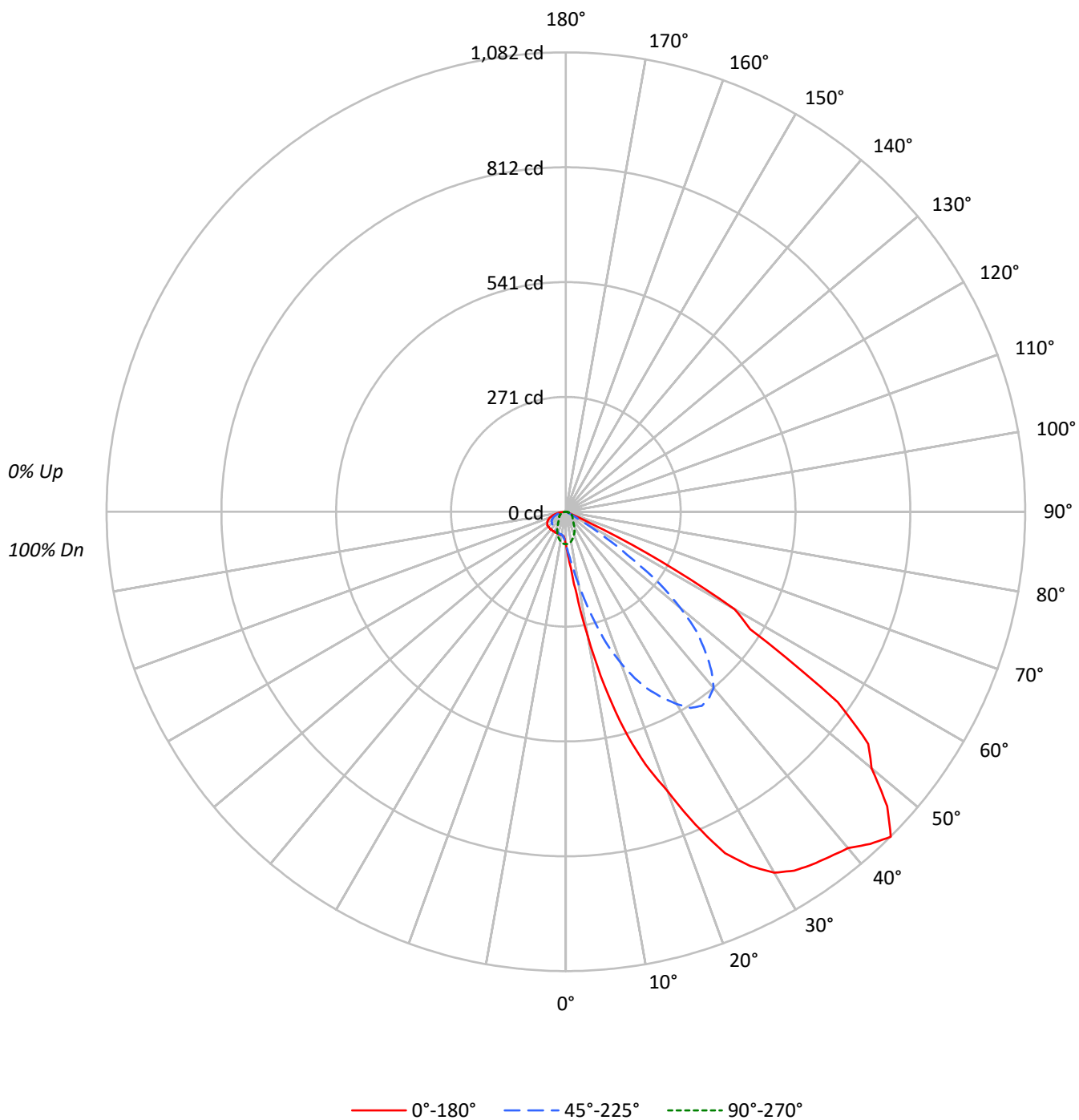
Lumens per Lamp: N/A  
Luminaire Lumens: 785.0 lumens  
Efficiency: N/A  
Efficacy: 70.7 lumens/watt  
Spacing Criteria (0/90/45): 3.28 / 0.89 / 2.04  
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')  
CIE Type: Direct

Input Watts (W): 11.1  
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

TEST NUMBER: P1310150

CATALOG NUMBER: P3SQAS09R659040DE010 E3SQCA451MB

### Luminous Intensity Polar Plot



TEST NUMBER: P1310150

CATALOG NUMBER: P3SQAS09R659040DE010 E3SQCA451MB

**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°  | 13141  | 13141  | 13141 | 13141 | 13141 |
| 5°  | 22993  | 18775  | 12931 | 10477 | 10062 |
| 10° | 52027  | 30289  | 12381 | 9636  | 9776  |
| 15° | 94587  | 48693  | 11500 | 9682  | 9967  |
| 20° | 128238 | 69535  | 10392 | 9659  | 10098 |
| 25° | 168573 | 87792  | 9121  | 9425  | 10318 |
| 30° | 195187 | 104086 | 7835  | 9386  | 10798 |
| 35° | 213146 | 117317 | 6623  | 9608  | 11416 |
| 40° | 232510 | 121740 | 5845  | 10094 | 12208 |
| 45° | 263605 | 112914 | 5553  | 10741 | 13225 |
| 50° | 251801 | 94258  | 5493  | 11387 | 14549 |
| 55° | 234684 | 52936  | 5675  | 12281 | 16064 |
| 60° | 158066 | 11401  | 5683  | 13020 | 17360 |
| 65° | 24369  | 2893   | 5461  | 13489 | 18909 |
| 70° | 2769   | 2769   | 5136  | 13847 | 20192 |
| 75° | 2595   | 2595   | 4724  | 13641 | 20428 |
| 80° | 2380   | 3075   | 4661  | 12497 | 20332 |
| 85° | 1581   | 3162   | 4742  | 12449 | 18575 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 263605 cd/sqm

TEST NUMBER: P1310150

CATALOG NUMBER: P3SQAS09R659040DE010 E3SQCA451MB

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 9.2    | 1.2       |
| 10°-20°   | 49.9   | 6.4       |
| 20°-30°   | 117.3  | 14.9      |
| 30°-40°   | 177.2  | 22.6      |
| 40°-50°   | 203.7  | 25.9      |
| 50°-60°   | 161.7  | 20.6      |
| 60°-70°   | 48.4   | 6.2       |
| 70°-80°   | 13.2   | 1.7       |
| 80°-90°   | 4.4    | 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°    | 176.4  | 22.5      |
| 0°-40°    | 353.6  | 45.0      |
| 0°-60°    | 719.0  | 91.6      |
| 0°-90°    | 785.0  | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 785.0  | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 45° | 90° | 135° | 180° | Flux |
|-----|------|-----|-----|------|------|------|
| 0°  | 76   | 76  | 76  | 76   | 76   |      |
| 5°  | 133  | 109 | 75  | 61   | 58   | 18   |
| 15° | 530  | 273 | 64  | 54   | 56   | 153  |
| 25° | 887  | 462 | 48  | 50   | 54   | 405  |
| 35° | 1014 | 558 | 32  | 46   | 54   | 636  |
| 45° | 1082 | 464 | 23  | 44   | 54   | 804  |
| 55° | 782  | 176 | 19  | 41   | 54   | 644  |
| 65° | 60   | 7   | 13  | 33   | 46   | 134  |
| 75° | 4    | 4   | 7   | 20   | 31   | 4    |
| 85° | 1    | 2   | 2   | 6    | 9    | 1    |
| 90° | 0    | 0   | 0   | 0    | 0    |      |

TEST NUMBER: P1310150

CATALOG NUMBER: P3SQAS09R659040DE010 E3SQCA451MB

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 10°    | 15°   | 20°   | 22.5° | 45°   | 67.5° | 90°  | 112.5° | 135° |
|-------|--------|--------|--------|-------|-------|-------|-------|-------|------|--------|------|
| 0°    | 76.3   | 76.3   | 76.3   | 76.3  | 76.3  | 76.3  | 76.3  | 76.3  | 76.3 | 76.3   | 76.3 |
| 2.5°  | 96.8   | 97.6   | 96.8   | 96.8  | 96.0  | 95.2  | 89.7  | 83.4  | 76.3 | 70.8   | 66.9 |
| 5°    | 133.0  | 133.8  | 131.4  | 131.4 | 129.9 | 127.5 | 108.6 | 90.5  | 74.8 | 66.1   | 60.6 |
| 7.5°  | 196.8  | 199.9  | 196.0  | 191.3 | 182.6 | 181.0 | 135.4 | 97.6  | 73.2 | 61.4   | 56.7 |
| 10°   | 297.5  | 295.2  | 291.2  | 281.8 | 266.8 | 259.7 | 173.2 | 104.7 | 70.8 | 58.2   | 55.1 |
| 12.5° | 419.5  | 413.2  | 408.5  | 391.2 | 370.7 | 358.9 | 220.4 | 111.0 | 67.7 | 55.1   | 54.3 |
| 15°   | 530.5  | 525.8  | 514.8  | 498.2 | 473.0 | 463.6 | 273.1 | 114.9 | 64.5 | 52.7   | 54.3 |
| 17.5° | 624.2  | 619.4  | 613.1  | 596.6 | 570.6 | 556.5 | 332.2 | 117.3 | 60.6 | 51.2   | 53.5 |
| 20°   | 699.7  | 696.6  | 687.9  | 674.5 | 648.6 | 635.2 | 379.4 | 117.3 | 56.7 | 49.6   | 52.7 |
| 22.5° | 797.3  | 790.2  | 779.2  | 759.5 | 727.3 | 706.8 | 424.2 | 114.9 | 52.7 | 48.0   | 51.2 |
| 25°   | 887.1  | 882.3  | 868.2  | 844.5 | 809.9 | 789.5 | 462.0 | 110.2 | 48.0 | 45.7   | 49.6 |
| 27.5° | 940.6  | 937.4  | 924.0  | 899.6 | 861.1 | 845.3 | 493.5 | 103.1 | 43.3 | 43.3   | 48.8 |
| 30°   | 981.5  | 975.2  | 961.8  | 938.2 | 898.9 | 880.0 | 523.4 | 94.5  | 39.4 | 40.9   | 47.2 |
| 32.5° | 1002.0 | 999.6  | 987.8  | 967.3 | 928.8 | 907.5 | 547.8 | 83.4  | 34.6 | 39.4   | 46.4 |
| 35°   | 1013.8 | 1011.4 | 1002.0 | 982.3 | 946.1 | 925.6 | 558.0 | 73.2  | 31.5 | 37.8   | 45.7 |
| 37.5° | 1023.2 | 1020.9 | 1009.1 | 989.4 | 953.2 | 931.9 | 553.3 | 62.2  | 28.3 | 36.2   | 44.9 |
| 40°   | 1034.2 | 1025.6 | 1007.5 | 987.8 | 954.7 | 934.3 | 541.5 | 51.9  | 26.0 | 35.4   | 44.9 |
| 42.5° | 1061.0 | 1031.1 | 1002.8 | 984.7 | 953.2 | 929.6 | 507.7 | 40.9  | 23.6 | 33.8   | 44.1 |
| 45°   | 1082.3 | 1029.5 | 993.3  | 979.1 | 946.9 | 920.1 | 463.6 | 29.9  | 22.8 | 33.1   | 44.1 |
| 47.5° | 1026.4 | 994.1  | 977.6  | 969.7 | 935.1 | 905.9 | 417.9 | 20.5  | 22.0 | 32.3   | 43.3 |
| 50°   | 939.8  | 935.9  | 929.6  | 930.3 | 898.9 | 875.2 | 351.8 | 14.2  | 20.5 | 31.5   | 42.5 |
| 52.5° | 898.1  | 893.3  | 882.3  | 874.5 | 843.0 | 822.5 | 278.6 | 11.0  | 19.7 | 30.7   | 41.7 |
| 55°   | 781.6  | 784.7  | 772.9  | 777.6 | 768.2 | 758.0 | 176.3 | 10.2  | 18.9 | 29.1   | 40.9 |
| 57.5° | 514.8  | 530.5  | 558.0  | 591.1 | 621.0 | 641.5 | 95.2  | 10.2  | 17.3 | 28.3   | 39.4 |
| 60°   | 458.9  | 454.9  | 454.2  | 460.4 | 473.8 | 484.8 | 33.1  | 9.4   | 16.5 | 26.0   | 37.8 |
| 62.5° | 251.1  | 249.5  | 273.1  | 313.3 | 336.9 | 339.2 | 9.4   | 9.4   | 15.0 | 24.4   | 35.4 |
| 65°   | 59.8   | 62.2   | 69.3   | 86.6  | 102.3 | 112.6 | 7.1   | 8.7   | 13.4 | 22.8   | 33.1 |
| 67.5° | 9.4    | 10.2   | 10.2   | 12.6  | 14.2  | 14.2  | 6.3   | 7.9   | 11.8 | 20.5   | 30.7 |
| 70°   | 5.5    | 5.5    | 5.5    | 5.5   | 5.5   | 5.5   | 5.5   | 7.1   | 10.2 | 18.1   | 27.5 |
| 72.5° | 4.7    | 4.7    | 4.7    | 4.7   | 4.7   | 4.7   | 5.5   | 6.3   | 8.7  | 15.7   | 23.6 |
| 75°   | 3.9    | 3.9    | 3.9    | 3.9   | 3.9   | 3.9   | 3.9   | 5.5   | 7.1  | 12.6   | 20.5 |
| 77.5° | 3.1    | 3.1    | 3.1    | 3.1   | 3.1   | 3.1   | 3.9   | 4.7   | 6.3  | 10.2   | 16.5 |
| 80°   | 2.4    | 2.4    | 2.4    | 2.4   | 2.4   | 2.4   | 3.1   | 3.9   | 4.7  | 7.9    | 12.6 |
| 82.5° | 1.6    | 1.6    | 1.6    | 1.6   | 1.6   | 1.6   | 2.4   | 3.1   | 3.9  | 6.3    | 9.4  |
| 85°   | 0.8    | 0.8    | 0.8    | 0.8   | 1.6   | 1.6   | 1.6   | 2.4   | 2.4  | 3.9    | 6.3  |
| 87.5° | 0.8    | 0.8    | 0.8    | 0.8   | 0.8   | 0.8   | 1.6   | 1.6   | 1.6  | 2.4    | 3.1  |
| 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: P1310150

CATALOG NUMBER: P3SQAS09R659040DE010 E3SQCA451MB

**CANDELA DISTRIBUTION (continued):**

|       | 157.5° | 180° |
|-------|--------|------|
| 0°    | 76.3   | 76.3 |
| 2.5°  | 64.5   | 63.8 |
| 5°    | 58.2   | 58.2 |
| 7.5°  | 55.9   | 55.9 |
| 10°   | 55.1   | 55.9 |
| 12.5° | 55.1   | 55.9 |
| 15°   | 55.1   | 55.9 |
| 17.5° | 55.1   | 55.9 |
| 20°   | 54.3   | 55.1 |
| 22.5° | 53.5   | 54.3 |
| 25°   | 52.7   | 54.3 |
| 27.5° | 51.9   | 54.3 |
| 30°   | 51.9   | 54.3 |
| 32.5° | 51.9   | 54.3 |
| 35°   | 51.2   | 54.3 |
| 37.5° | 51.2   | 54.3 |
| 40°   | 51.2   | 54.3 |
| 42.5° | 51.2   | 54.3 |
| 45°   | 51.2   | 54.3 |
| 47.5° | 51.2   | 54.3 |
| 50°   | 51.2   | 54.3 |
| 52.5° | 50.4   | 54.3 |
| 55°   | 50.4   | 53.5 |
| 57.5° | 48.8   | 51.9 |
| 60°   | 47.2   | 50.4 |
| 62.5° | 45.7   | 48.8 |
| 65°   | 43.3   | 46.4 |
| 67.5° | 40.9   | 43.3 |
| 70°   | 37.0   | 40.1 |
| 72.5° | 33.1   | 35.4 |
| 75°   | 28.3   | 30.7 |
| 77.5° | 23.6   | 26.0 |
| 80°   | 18.9   | 20.5 |
| 82.5° | 13.4   | 15.0 |
| 85°   | 8.7    | 9.4  |
| 87.5° | 3.9    | 3.9  |
| 90°   | 0.0    | 0.0  |

(END OF REPORT)