

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: P1312329

Luminaire Tested: P3SQAS09R559727DE010 E3SQCA451MB

Issue Date: 1/29/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1312329  
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: P3SQAS09R559727DE010 E3SQCA451MB  
Description: 3in Adjustable LED luminaire with, R55 optic, 2700K CCT AND, 97CRI , E3SQCA451MB TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

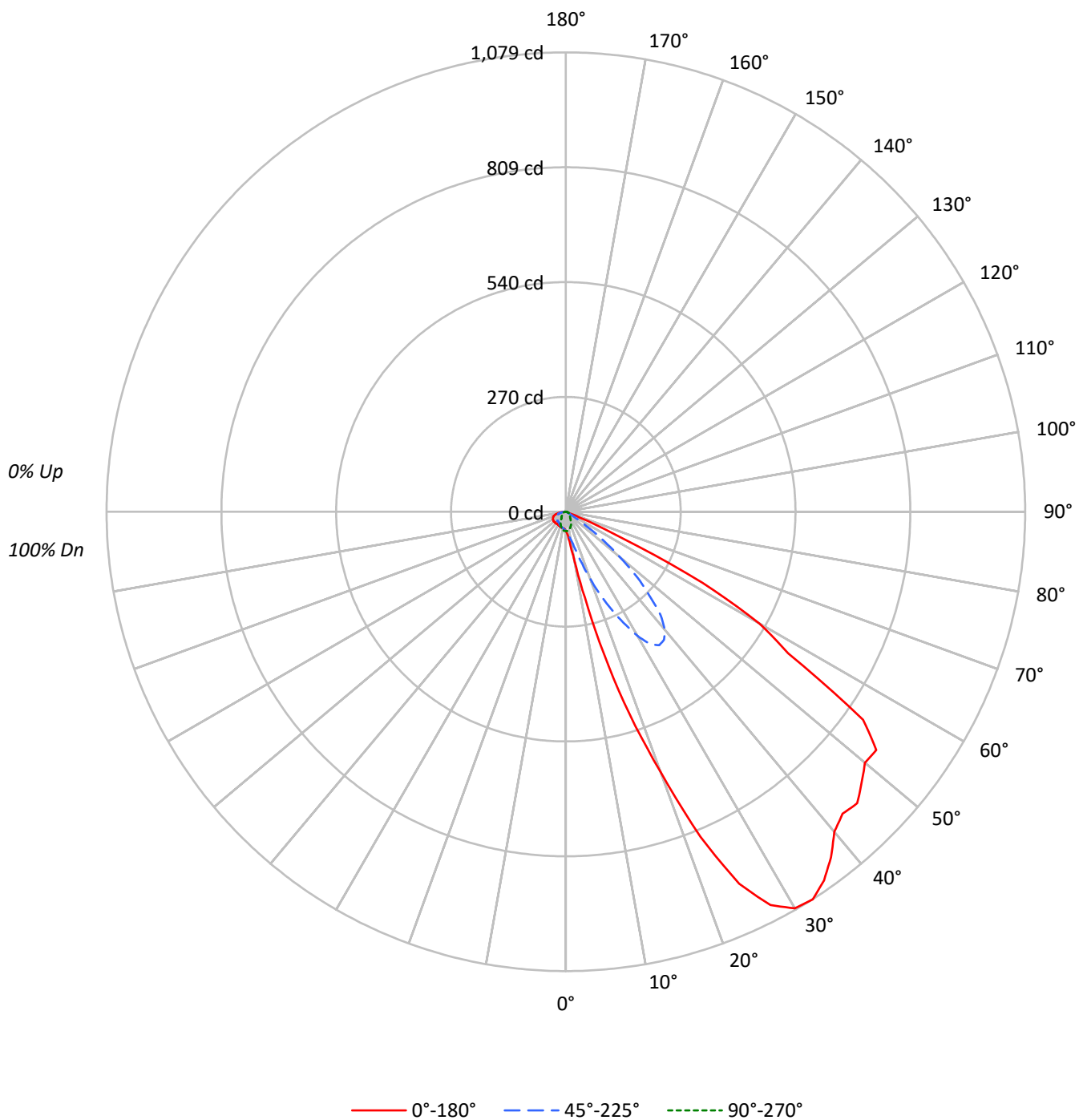
Lumens per Lamp: N/A  
Luminaire Lumens: 694.0 lumens  
Efficiency: N/A  
Efficacy: 62.5 lumens/watt  
Spacing Criteria (0/90/45): 3.76 / 0.9 / 1.95  
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')  
CIE Type: Direct

Input Watts (W): 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: P1312329

CATALOG NUMBER: P3SQAS09R559727DE010 E3SQCA451MB

### Luminous Intensity Polar Plot



TEST NUMBER: P1312329

CATALOG NUMBER: P3SQAS09R559727DE010 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  |
| RCR |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 0   | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 |
| 1   | 110 | 106 | 102 | 99  | 107 | 104 | 100 | 97  | 99  | 97  | 94  | 95  | 93  | 91  | 92  | 90  | 88  |
| 2   | 100 | 93  | 86  | 81  | 98  | 91  | 85  | 80  | 87  | 83  | 78  | 84  | 80  | 77  | 81  | 78  | 75  |
| 3   | 91  | 81  | 73  | 67  | 89  | 80  | 72  | 67  | 77  | 71  | 65  | 74  | 69  | 64  | 72  | 67  | 63  |
| 4   | 83  | 71  | 63  | 56  | 81  | 70  | 62  | 56  | 68  | 61  | 55  | 65  | 59  | 54  | 63  | 58  | 54  |
| 5   | 76  | 63  | 54  | 47  | 74  | 62  | 53  | 47  | 60  | 52  | 47  | 58  | 51  | 46  | 56  | 50  | 46  |
| 6   | 69  | 56  | 47  | 40  | 68  | 55  | 46  | 40  | 53  | 46  | 40  | 51  | 45  | 39  | 50  | 44  | 39  |
| 7   | 64  | 50  | 41  | 35  | 62  | 49  | 41  | 35  | 48  | 40  | 34  | 46  | 39  | 34  | 45  | 38  | 34  |
| 8   | 59  | 45  | 36  | 30  | 57  | 44  | 36  | 30  | 43  | 35  | 30  | 41  | 35  | 29  | 40  | 34  | 29  |
| 9   | 54  | 40  | 32  | 26  | 53  | 40  | 32  | 26  | 39  | 31  | 26  | 38  | 31  | 26  | 36  | 30  | 26  |
| 10  | 50  | 37  | 28  | 23  | 49  | 36  | 28  | 23  | 35  | 28  | 23  | 34  | 27  | 23  | 33  | 27  | 23  |

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

|     | 0°     | 45°   | 90°  | 135°  | 180°  |
|-----|--------|-------|------|-------|-------|
| 0°  | 7716   | 7716  | 7716 | 7716  | 7716  |
| 5°  | 9854   | 9007  | 7745 | 7209  | 7002  |
| 10° | 20059  | 11472 | 7502 | 6855  | 6855  |
| 15° | 61548  | 17598 | 6989 | 6668  | 6882  |
| 20° | 119019 | 30790 | 6286 | 6525  | 6855  |
| 25° | 183167 | 47887 | 5473 | 6290  | 6879  |
| 30° | 213880 | 66938 | 4514 | 6224  | 7080  |
| 35° | 222250 | 80440 | 3742 | 6181  | 7359  |
| 40° | 220572 | 81205 | 3440 | 6475  | 8004  |
| 45° | 235814 | 67198 | 3288 | 7015  | 8671  |
| 50° | 245773 | 44369 | 3296 | 7556  | 9699  |
| 55° | 255912 | 19337 | 3303 | 8287  | 10689 |
| 60° | 180799 | 4443  | 3376 | 9093  | 12056 |
| 65° | 58967  | 1508  | 3260 | 9740  | 13489 |
| 70° | 1863   | 1561  | 3374 | 10474 | 15459 |
| 75° | 1664   | 1664  | 2861 | 11046 | 17168 |
| 80° | 1190   | 1785  | 3075 | 10910 | 18249 |
| 85° | 1186   | 2371  | 3557 | 10868 | 18180 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 52.5°

Luminance: 260048 cd/sqm

TEST NUMBER: P1312329

CATALOG NUMBER: P3SQAS09R559727DE010 E3SQCA451MB

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 4.8    | 0.7       |
| 10°-20°   | 29.5   | 4.2       |
| 20°-30°   | 98.8   | 14.2      |
| 30°-40°   | 162.2  | 23.4      |
| 40°-50°   | 180.9  | 26.1      |
| 50°-60°   | 152.3  | 21.9      |
| 60°-70°   | 51.7   | 7.4       |
| 70°-80°   | 10.1   | 1.5       |
| 80°-90°   | 3.8    | 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°    | 133.0  | 19.2      |
| 0°-40°    | 295.2  | 42.5      |
| 0°-60°    | 628.4  | 90.6      |
| 0°-90°    | 694.0  | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 694.0  | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 45° | 90° | 135° | 180° | Flux |
|-----|------|-----|-----|------|------|------|
| 0°  | 45   | 45  | 45  | 45   | 45   |      |
| 5°  | 57   | 52  | 45  | 42   | 40   | 7    |
| 15° | 345  | 99  | 39  | 37   | 39   | 110  |
| 25° | 964  | 252 | 29  | 33   | 36   | 433  |
| 35° | 1057 | 383 | 18  | 29   | 35   | 656  |
| 45° | 968  | 276 | 14  | 29   | 36   | 739  |
| 55° | 852  | 64  | 11  | 28   | 36   | 694  |
| 65° | 145  | 4   | 8   | 24   | 33   | 196  |
| 75° | 2    | 2   | 4   | 17   | 26   | 3    |
| 85° | 1    | 1   | 2   | 6    | 9    | 1    |
| 90° | 0    | 0   | 0   | 0    | 0    |      |

TEST NUMBER: P1312329

CATALOG NUMBER: P3SQAS09R559727DE010 E3SQCA451MB

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 10°    | 15°    | 20°    | 22.5°  | 45°   | 67.5° | 90°  | 112.5° | 135° |
|-------|--------|--------|--------|--------|--------|--------|-------|-------|------|--------|------|
| 0°    | 44.8   | 44.8   | 44.8   | 44.8   | 44.8   | 44.8   | 44.8  | 44.8  | 44.8 | 44.8   | 44.8 |
| 2.5°  | 49.1   | 49.1   | 49.1   | 49.1   | 49.1   | 49.1   | 48.4  | 46.6  | 45.4 | 43.5   | 42.9 |
| 5°    | 57.0   | 57.0   | 57.0   | 56.4   | 56.4   | 55.2   | 52.1  | 47.8  | 44.8 | 42.3   | 41.7 |
| 7.5°  | 73.6   | 73.0   | 71.7   | 71.1   | 69.3   | 68.7   | 57.6  | 49.1  | 44.1 | 41.1   | 40.5 |
| 10°   | 114.7  | 113.4  | 111.6  | 104.9  | 98.7   | 94.4   | 65.6  | 49.7  | 42.9 | 39.9   | 39.2 |
| 12.5° | 206.6  | 204.2  | 195.0  | 180.9  | 163.7  | 155.1  | 78.5  | 50.3  | 41.1 | 38.6   | 38.6 |
| 15°   | 345.2  | 342.2  | 325.0  | 305.4  | 274.1  | 256.9  | 98.7  | 49.7  | 39.2 | 36.8   | 37.4 |
| 17.5° | 498.5  | 489.9  | 472.2  | 446.4  | 404.1  | 383.9  | 128.8 | 48.4  | 36.8 | 35.6   | 36.8 |
| 20°   | 649.4  | 646.9  | 617.5  | 582.5  | 530.4  | 503.4  | 168.0 | 46.6  | 34.3 | 33.7   | 35.6 |
| 22.5° | 826.0  | 815.5  | 784.3  | 746.9  | 675.1  | 639.6  | 210.3 | 44.1  | 31.9 | 31.9   | 34.3 |
| 25°   | 963.9  | 951.7  | 927.1  | 883.6  | 815.5  | 777.5  | 252.0 | 41.1  | 28.8 | 30.0   | 33.1 |
| 27.5° | 1041.2 | 1027.1 | 1008.7 | 971.3  | 918.6  | 884.8  | 293.7 | 37.4  | 25.8 | 28.2   | 31.9 |
| 30°   | 1075.5 | 1071.9 | 1058.4 | 1030.8 | 982.3  | 952.3  | 336.6 | 33.1  | 22.7 | 26.4   | 31.3 |
| 32.5° | 1079.2 | 1081.1 | 1075.5 | 1057.8 | 1021.0 | 995.2  | 368.5 | 29.4  | 20.2 | 25.1   | 30.0 |
| 35°   | 1057.1 | 1063.9 | 1067.6 | 1060.2 | 1036.3 | 1015.4 | 382.6 | 25.1  | 17.8 | 23.9   | 29.4 |
| 37.5° | 1022.8 | 1035.1 | 1047.3 | 1049.2 | 1034.5 | 1021.0 | 379.0 | 21.5  | 16.6 | 23.3   | 29.4 |
| 40°   | 981.1  | 992.1  | 1017.3 | 1033.2 | 1028.3 | 1018.5 | 361.2 | 17.8  | 15.3 | 22.1   | 28.8 |
| 42.5° | 962.1  | 964.5  | 991.5  | 1018.5 | 1017.3 | 1009.3 | 329.9 | 14.1  | 14.1 | 22.1   | 28.8 |
| 45°   | 968.2  | 957.2  | 975.0  | 1006.2 | 1004.4 | 994.0  | 275.9 | 11.0  | 13.5 | 21.5   | 28.8 |
| 47.5° | 942.5  | 927.1  | 957.2  | 994.0  | 987.2  | 971.9  | 228.1 | 8.0   | 12.9 | 20.8   | 28.2 |
| 50°   | 917.3  | 914.9  | 938.2  | 956.6  | 947.4  | 938.8  | 165.6 | 6.1   | 12.3 | 20.2   | 28.2 |
| 52.5° | 919.2  | 914.9  | 917.3  | 916.7  | 898.3  | 889.1  | 113.4 | 4.9   | 11.7 | 19.6   | 28.2 |
| 55°   | 852.3  | 838.8  | 826.0  | 829.6  | 830.9  | 824.7  | 64.4  | 4.3   | 11.0 | 19.6   | 27.6 |
| 57.5° | 619.3  | 615.6  | 629.7  | 669.6  | 700.9  | 704.6  | 31.3  | 4.3   | 10.4 | 19.0   | 27.0 |
| 60°   | 524.9  | 522.4  | 523.1  | 534.7  | 551.3  | 540.8  | 12.9  | 4.3   | 9.8  | 18.4   | 26.4 |
| 62.5° | 361.8  | 385.7  | 395.5  | 422.5  | 411.5  | 396.7  | 4.9   | 4.9   | 9.2  | 17.2   | 25.8 |
| 65°   | 144.7  | 144.1  | 157.6  | 170.5  | 166.8  | 155.8  | 3.7   | 4.3   | 8.0  | 15.9   | 23.9 |
| 67.5° | 33.7   | 30.7   | 26.4   | 22.7   | 19.0   | 15.3   | 3.7   | 4.3   | 7.4  | 14.7   | 22.7 |
| 70°   | 3.7    | 3.7    | 3.7    | 3.7    | 3.7    | 3.1    | 3.1   | 4.3   | 6.7  | 13.5   | 20.8 |
| 72.5° | 3.1    | 3.1    | 3.1    | 3.1    | 3.1    | 3.1    | 3.1   | 3.7   | 5.5  | 11.7   | 19.0 |
| 75°   | 2.5    | 2.5    | 2.5    | 2.5    | 2.5    | 2.5    | 2.5   | 3.1   | 4.3  | 9.8    | 16.6 |
| 77.5° | 1.8    | 1.8    | 1.8    | 2.5    | 1.8    | 2.5    | 2.5   | 3.1   | 3.7  | 8.0    | 14.1 |
| 80°   | 1.2    | 1.2    | 1.8    | 1.8    | 1.8    | 1.8    | 1.8   | 2.5   | 3.1  | 6.7    | 11.0 |
| 82.5° | 1.2    | 1.2    | 1.2    | 1.2    | 1.2    | 1.2    | 1.8   | 1.8   | 2.5  | 4.9    | 8.0  |
| 85°   | 0.6    | 0.6    | 0.6    | 0.6    | 0.6    | 1.2    | 1.2   | 1.8   | 1.8  | 3.7    | 5.5  |
| 87.5° | 0.6    | 0.6    | 0.6    | 0.6    | 0.6    | 0.6    | 1.2   | 1.2   | 1.8  | 1.8    | 2.5  |
| 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: P1312329

CATALOG NUMBER: P3SQAS09R559727DE010 E3SQCA451MB

**CANDELA DISTRIBUTION (continued):**

|       | 157.5° | 180° |
|-------|--------|------|
| 0°    | 44.8   | 44.8 |
| 2.5°  | 42.3   | 42.3 |
| 5°    | 41.1   | 40.5 |
| 7.5°  | 39.9   | 39.9 |
| 10°   | 39.2   | 39.2 |
| 12.5° | 38.6   | 39.2 |
| 15°   | 38.6   | 38.6 |
| 17.5° | 37.4   | 38.0 |
| 20°   | 36.8   | 37.4 |
| 22.5° | 36.2   | 36.8 |
| 25°   | 35.6   | 36.2 |
| 27.5° | 35.0   | 35.6 |
| 30°   | 34.3   | 35.6 |
| 32.5° | 33.7   | 35.0 |
| 35°   | 33.7   | 35.0 |
| 37.5° | 33.7   | 35.6 |
| 40°   | 33.7   | 35.6 |
| 42.5° | 33.7   | 35.6 |
| 45°   | 33.7   | 35.6 |
| 47.5° | 33.7   | 35.6 |
| 50°   | 33.7   | 36.2 |
| 52.5° | 33.7   | 36.2 |
| 55°   | 33.7   | 35.6 |
| 57.5° | 33.1   | 35.6 |
| 60°   | 33.1   | 35.0 |
| 62.5° | 32.5   | 34.3 |
| 65°   | 31.3   | 33.1 |
| 67.5° | 30.0   | 32.5 |
| 70°   | 28.2   | 30.7 |
| 72.5° | 26.4   | 28.2 |
| 75°   | 23.9   | 25.8 |
| 77.5° | 20.8   | 22.1 |
| 80°   | 16.6   | 18.4 |
| 82.5° | 12.9   | 14.1 |
| 85°   | 8.6    | 9.2  |
| 87.5° | 3.7    | 4.3  |
| 90°   | 0.0    | 0.0  |

(END OF REPORT)