

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: P1316301

Luminaire Tested: P3SQAS13R559827DE010 E3SQCA451MMS

Issue Date: 1/29/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1316301  
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: P3SQAS13R559827DE010 E3SQCA451MMS  
Description: 3in Adjustable LED luminaire with, R55 optic, 2700K CCT AND, 98CRI , E3SQCA451MMS TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

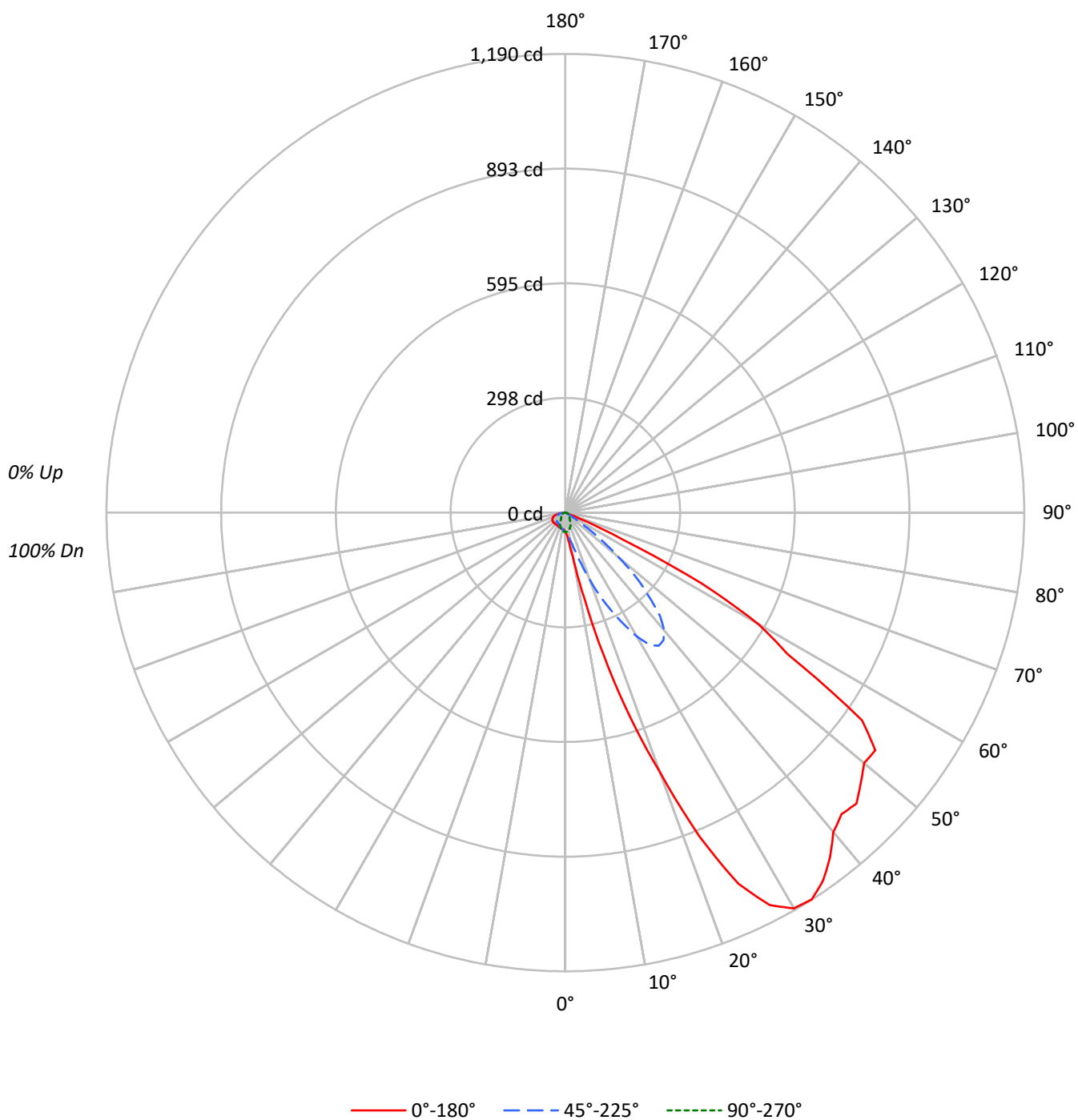
Lumens per Lamp: N/A  
Luminaire Lumens: 765.0 lumens  
Efficiency: N/A  
Efficacy: 52.8 lumens/watt  
Spacing Criteria (0/90/45): 3.76 / 0.91 / 1.95  
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')  
CIE Type: Direct

Input Watts (W): 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  |     |    | 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°  | 8491   | 8491  | 8491 | 8491  | 8491  |
| 5°  | 10874  | 9941  | 8523 | 7953  | 7710  |
| 10° | 22105  | 12644 | 8272 | 7572  | 7572  |
| 15° | 67842  | 19399 | 7720 | 7346  | 7595  |
| 20° | 131189 | 33943 | 6946 | 7184  | 7551  |
| 25° | 201922 | 52789 | 6043 | 6936  | 7582  |
| 30° | 235775 | 73799 | 4972 | 6861  | 7796  |
| 35° | 244999 | 88681 | 4121 | 6812  | 8094  |
| 40° | 243144 | 89501 | 3799 | 7149  | 8813  |
| 45° | 259951 | 74091 | 3629 | 7745  | 9548  |
| 50° | 270932 | 48897 | 3617 | 8333  | 10690 |
| 55° | 282095 | 21319 | 3663 | 9128  | 11770 |
| 60° | 199296 | 4891  | 3720 | 10023 | 13261 |
| 65° | 64998  | 1671  | 3586 | 10758 | 14874 |
| 70° | 2065   | 1712  | 3726 | 11582 | 17020 |
| 75° | 1797   | 1797  | 3127 | 12111 | 18898 |
| 80° | 1389   | 1984  | 3372 | 12100 | 20133 |
| 85° | 1383   | 2766  | 3952 | 12054 | 19958 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 52.5°

Luminance: 286641 cd/sqm

TEST NUMBER: P1316301

CATALOG NUMBER: P3SQAS13R559827DE010 E3SQCA451MMS

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 5.2    | 0.7       |
| 10°-20°   | 32.5   | 4.2       |
| 20°-30°   | 108.9  | 14.2      |
| 30°-40°   | 178.8  | 23.4      |
| 40°-50°   | 199.4  | 26.1      |
| 50°-60°   | 167.9  | 21.9      |
| 60°-70°   | 57.0   | 7.4       |
| 70°-80°   | 11.1   | 1.5       |
| 80°-90°   | 4.2    | 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°    | 146.6  | 19.2      |
| 0°-40°    | 325.4  | 42.5      |
| 0°-60°    | 692.7  | 90.6      |
| 0°-90°    | 765.0  | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 765.0  | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 45° | 90° | 135° | 180° | Flux |
|-----|------|-----|-----|------|------|------|
| 0°  | 49   | 49  | 49  | 49   | 49   |      |
| 5°  | 63   | 58  | 49  | 46   | 45   | 8    |
| 15° | 380  | 109 | 43  | 41   | 43   | 121  |
| 25° | 1063 | 278 | 32  | 36   | 40   | 478  |
| 35° | 1165 | 422 | 20  | 32   | 38   | 724  |
| 45° | 1067 | 304 | 15  | 32   | 39   | 815  |
| 55° | 940  | 71  | 12  | 30   | 39   | 765  |
| 65° | 160  | 4   | 9   | 26   | 36   | 216  |
| 75° | 3    | 3   | 5   | 18   | 28   | 3    |
| 85° | 1    | 1   | 2   | 6    | 10   | 1    |
| 90° | 0    | 0   | 0   | 0    | 0    |      |

TEST NUMBER: P1316301

CATALOG NUMBER: P3SQAS13R559827DE010 E3SQCA451MMS

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 10°    | 15°    | 20°    | 22.5°  | 45°   | 67.5° | 90°  | 112.5° | 135° |
|-------|--------|--------|--------|--------|--------|--------|-------|-------|------|--------|------|
| 0°    | 49.3   | 49.3   | 49.3   | 49.3   | 49.3   | 49.3   | 49.3  | 49.3  | 49.3 | 49.3   | 49.3 |
| 2.5°  | 54.1   | 54.1   | 54.1   | 54.1   | 54.1   | 54.1   | 53.4  | 51.4  | 50.0 | 48.0   | 47.3 |
| 5°    | 62.9   | 62.9   | 62.9   | 62.2   | 62.2   | 60.8   | 57.5  | 52.7  | 49.3 | 46.6   | 46.0 |
| 7.5°  | 81.1   | 80.4   | 79.1   | 78.4   | 76.4   | 75.7   | 63.5  | 54.1  | 48.7 | 45.3   | 44.6 |
| 10°   | 126.4  | 125.0  | 123.0  | 115.6  | 108.8  | 104.1  | 72.3  | 54.7  | 47.3 | 43.9   | 43.3 |
| 12.5° | 227.8  | 225.1  | 214.9  | 199.4  | 180.5  | 171.0  | 86.5  | 55.4  | 45.3 | 42.6   | 42.6 |
| 15°   | 380.5  | 377.2  | 358.2  | 336.6  | 302.1  | 283.2  | 108.8 | 54.7  | 43.3 | 40.6   | 41.2 |
| 17.5° | 549.5  | 540.1  | 520.5  | 492.1  | 445.4  | 423.1  | 141.9 | 53.4  | 40.6 | 39.2   | 40.6 |
| 20°   | 715.8  | 713.1  | 680.7  | 642.1  | 584.7  | 554.9  | 185.2 | 51.4  | 37.9 | 37.2   | 39.2 |
| 22.5° | 910.5  | 899.0  | 864.5  | 823.3  | 744.2  | 705.0  | 231.8 | 48.7  | 35.1 | 35.1   | 37.9 |
| 25°   | 1062.6 | 1049.0 | 1022.0 | 974.0  | 899.0  | 857.1  | 277.8 | 45.3  | 31.8 | 33.1   | 36.5 |
| 27.5° | 1147.7 | 1132.2 | 1111.9 | 1070.7 | 1012.5 | 975.4  | 323.8 | 41.2  | 28.4 | 31.1   | 35.1 |
| 30°   | 1185.6 | 1181.5 | 1166.6 | 1136.2 | 1082.8 | 1049.7 | 371.1 | 36.5  | 25.0 | 29.1   | 34.5 |
| 32.5° | 1189.6 | 1191.7 | 1185.6 | 1166.0 | 1125.4 | 1097.0 | 406.2 | 32.4  | 22.3 | 27.7   | 33.1 |
| 35°   | 1165.3 | 1172.7 | 1176.8 | 1168.7 | 1142.3 | 1119.3 | 421.8 | 27.7  | 19.6 | 26.4   | 32.4 |
| 37.5° | 1127.4 | 1141.0 | 1154.5 | 1156.5 | 1140.3 | 1125.4 | 417.7 | 23.7  | 18.2 | 25.7   | 32.4 |
| 40°   | 1081.5 | 1093.6 | 1121.4 | 1138.9 | 1133.5 | 1122.7 | 398.1 | 19.6  | 16.9 | 24.3   | 31.8 |
| 42.5° | 1060.5 | 1063.2 | 1093.0 | 1122.7 | 1121.4 | 1112.6 | 363.6 | 15.5  | 15.5 | 24.3   | 31.8 |
| 45°   | 1067.3 | 1055.1 | 1074.7 | 1109.2 | 1107.2 | 1095.7 | 304.2 | 12.2  | 14.9 | 23.7   | 31.8 |
| 47.5° | 1038.9 | 1022.0 | 1055.1 | 1095.7 | 1088.2 | 1071.3 | 251.4 | 8.8   | 14.2 | 23.0   | 31.1 |
| 50°   | 1011.2 | 1008.5 | 1034.2 | 1054.4 | 1044.3 | 1034.8 | 182.5 | 6.8   | 13.5 | 22.3   | 31.1 |
| 52.5° | 1013.2 | 1008.5 | 1011.2 | 1010.5 | 990.2  | 980.1  | 125.0 | 5.4   | 12.8 | 21.6   | 31.1 |
| 55°   | 939.5  | 924.7  | 910.5  | 914.5  | 915.9  | 909.1  | 71.0  | 4.7   | 12.2 | 21.6   | 30.4 |
| 57.5° | 682.7  | 678.6  | 694.2  | 738.1  | 772.6  | 776.6  | 34.5  | 4.7   | 11.5 | 21.0   | 29.7 |
| 60°   | 578.6  | 575.9  | 576.6  | 589.4  | 607.7  | 596.2  | 14.2  | 4.7   | 10.8 | 20.3   | 29.1 |
| 62.5° | 398.8  | 425.2  | 436.0  | 465.7  | 453.5  | 437.3  | 5.4   | 5.4   | 10.1 | 18.9   | 28.4 |
| 65°   | 159.5  | 158.8  | 173.7  | 187.9  | 183.9  | 171.7  | 4.1   | 4.7   | 8.8  | 17.6   | 26.4 |
| 67.5° | 37.2   | 33.8   | 29.1   | 25.0   | 21.0   | 16.9   | 4.1   | 4.7   | 8.1  | 16.2   | 25.0 |
| 70°   | 4.1    | 4.1    | 4.1    | 4.1    | 4.1    | 3.4    | 3.4   | 4.7   | 7.4  | 14.9   | 23.0 |
| 72.5° | 3.4    | 3.4    | 3.4    | 3.4    | 3.4    | 3.4    | 3.4   | 4.1   | 6.1  | 12.8   | 21.0 |
| 75°   | 2.7    | 2.7    | 2.7    | 2.7    | 2.7    | 2.7    | 2.7   | 3.4   | 4.7  | 10.8   | 18.2 |
| 77.5° | 2.0    | 2.0    | 2.0    | 2.7    | 2.0    | 2.7    | 2.7   | 3.4   | 4.1  | 8.8    | 15.5 |
| 80°   | 1.4    | 1.4    | 2.0    | 2.0    | 2.0    | 2.0    | 2.0   | 2.7   | 3.4  | 7.4    | 12.2 |
| 82.5° | 1.4    | 1.4    | 1.4    | 1.4    | 1.4    | 1.4    | 2.0   | 2.0   | 2.7  | 5.4    | 8.8  |
| 85°   | 0.7    | 0.7    | 0.7    | 0.7    | 0.7    | 1.4    | 1.4   | 2.0   | 2.0  | 4.1    | 6.1  |
| 87.5° | 0.7    | 0.7    | 0.7    | 0.7    | 0.7    | 0.7    | 1.4   | 1.4   | 2.0  | 2.0    | 2.7  |
| 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: P1316301

CATALOG NUMBER: P3SQAS13R559827DE010 E3SQCA451MMS

**CANDELA DISTRIBUTION (continued):**

|       | 157.5° | 180° |
|-------|--------|------|
| 0°    | 49.3   | 49.3 |
| 2.5°  | 46.6   | 46.6 |
| 5°    | 45.3   | 44.6 |
| 7.5°  | 43.9   | 43.9 |
| 10°   | 43.3   | 43.3 |
| 12.5° | 42.6   | 43.3 |
| 15°   | 42.6   | 42.6 |
| 17.5° | 41.2   | 41.9 |
| 20°   | 40.6   | 41.2 |
| 22.5° | 39.9   | 40.6 |
| 25°   | 39.2   | 39.9 |
| 27.5° | 38.5   | 39.2 |
| 30°   | 37.9   | 39.2 |
| 32.5° | 37.2   | 38.5 |
| 35°   | 37.2   | 38.5 |
| 37.5° | 37.2   | 39.2 |
| 40°   | 37.2   | 39.2 |
| 42.5° | 37.2   | 39.2 |
| 45°   | 37.2   | 39.2 |
| 47.5° | 37.2   | 39.2 |
| 50°   | 37.2   | 39.9 |
| 52.5° | 37.2   | 39.9 |
| 55°   | 37.2   | 39.2 |
| 57.5° | 36.5   | 39.2 |
| 60°   | 36.5   | 38.5 |
| 62.5° | 35.8   | 37.9 |
| 65°   | 34.5   | 36.5 |
| 67.5° | 33.1   | 35.8 |
| 70°   | 31.1   | 33.8 |
| 72.5° | 29.1   | 31.1 |
| 75°   | 26.4   | 28.4 |
| 77.5° | 23.0   | 24.3 |
| 80°   | 18.2   | 20.3 |
| 82.5° | 14.2   | 15.5 |
| 85°   | 9.5    | 10.1 |
| 87.5° | 4.1    | 4.7  |
| 90°   | 0.0    | 0.0  |

(END OF REPORT)