

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: P1313970

Luminaire Tested: P3SQAS02R709735DE010 E3SQCA451MB

Issue Date: 1/29/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1313970  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-83)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/29/2026  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: IRiS  
Catalog Number: P3SQAS02R709735DE010 E3SQCA451MB  
Description: 3in Adjustable LED luminaire with, R70 optic, 3500K CCT AND, 97CRI , E3SQCA451MB TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

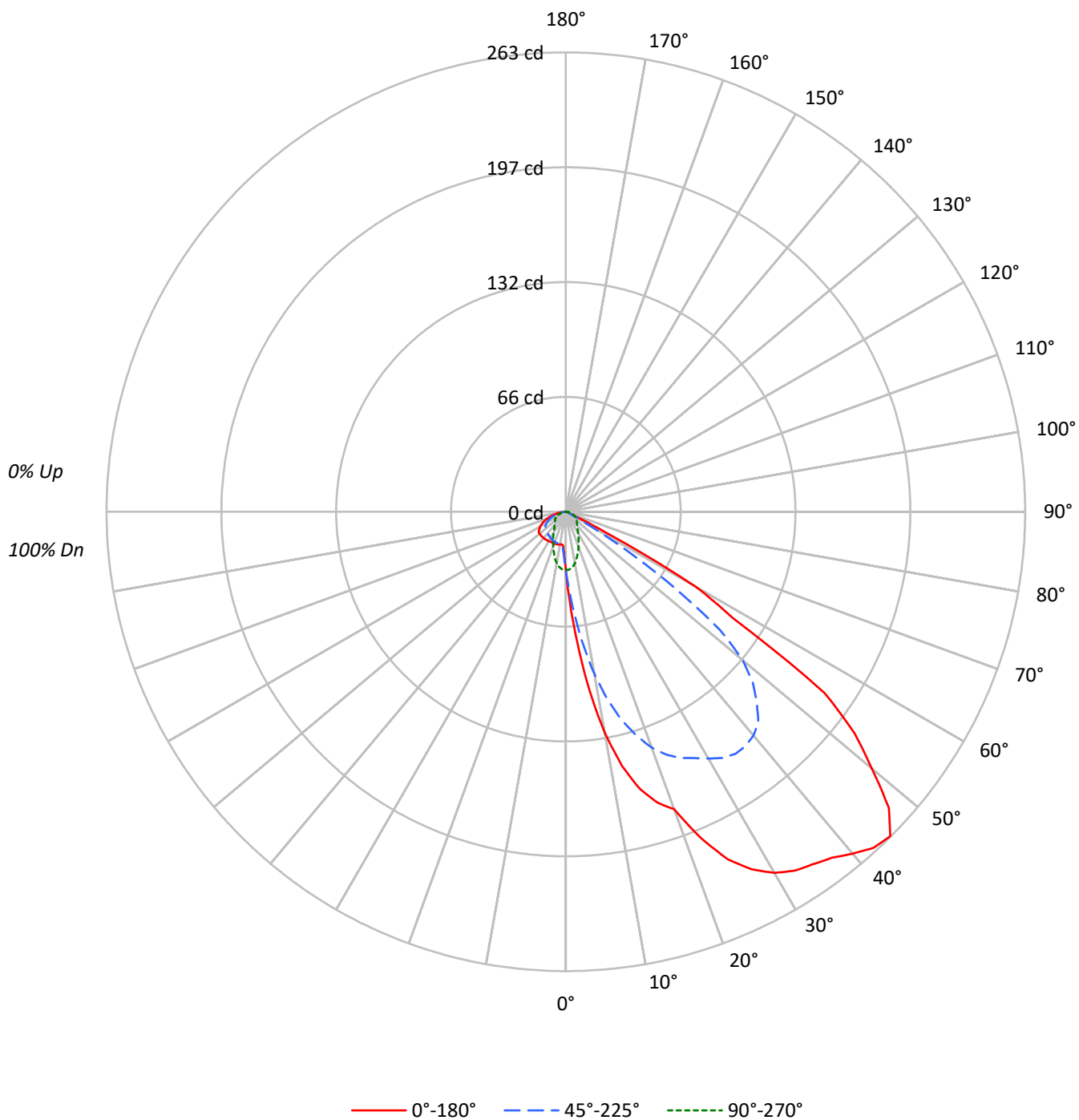
Lumens per Lamp: N/A  
Luminaire Lumens: 227.0 lumens  
Efficiency: N/A  
Efficacy: 63.1 lumens/watt  
Spacing Criteria (0/90/45): 2.92 / 0.77 / 2.03  
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')  
CIE Type: Direct

Input Watts (W): 3.6  
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 | 103 | 99  | 108 | 104 | 101 | 98  | 100 | 97  | 95  | 96  | 94  | 92  | 93  | 91  | 89  | 87  |    |    |
| 2   | 101 | 94  | 88  | 83  | 99  | 92  | 87  | 82  | 89  | 84  | 80  | 86  | 82  | 78  | 83  | 79  | 77  | 75  |    |    |
| 3   | 93  | 83  | 76  | 70  | 90  | 82  | 75  | 69  | 79  | 73  | 68  | 76  | 71  | 67  | 74  | 69  | 66  | 64  |    |    |
| 4   | 85  | 74  | 66  | 59  | 83  | 72  | 65  | 59  | 70  | 63  | 58  | 68  | 62  | 57  | 66  | 61  | 57  | 54  |    |    |
| 5   | 78  | 66  | 57  | 51  | 76  | 65  | 57  | 51  | 63  | 55  | 50  | 61  | 54  | 49  | 59  | 53  | 49  | 47  |    |    |
| 6   | 72  | 59  | 50  | 44  | 70  | 58  | 50  | 44  | 56  | 49  | 43  | 54  | 48  | 43  | 53  | 47  | 43  | 41  |    |    |
| 7   | 66  | 53  | 44  | 38  | 65  | 52  | 44  | 38  | 51  | 43  | 38  | 49  | 43  | 38  | 48  | 42  | 37  | 35  |    |    |
| 8   | 61  | 48  | 40  | 34  | 60  | 47  | 39  | 34  | 46  | 39  | 33  | 45  | 38  | 33  | 44  | 38  | 33  | 31  |    |    |
| 9   | 57  | 44  | 35  | 30  | 56  | 43  | 35  | 30  | 42  | 35  | 30  | 41  | 34  | 30  | 40  | 34  | 29  | 28  |    |    |
| 10  | 53  | 40  | 32  | 27  | 52  | 39  | 32  | 27  | 38  | 31  | 27  | 37  | 31  | 26  | 37  | 31  | 26  | 25  |    |    |

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

|     | 0°    | 45°   | 90°  | 135° | 180° |
|-----|-------|-------|------|------|------|
| 0°  | 5701  | 5701  | 5701 | 5701 | 5701 |
| 5°  | 12966 | 10373 | 5636 | 3561 | 3337 |
| 10° | 22455 | 16474 | 5229 | 3253 | 3323 |
| 15° | 29312 | 22002 | 4564 | 3316 | 3441 |
| 20° | 33210 | 26318 | 3904 | 3354 | 3574 |
| 25° | 41711 | 29530 | 3268 | 3401 | 3668 |
| 30° | 47469 | 32435 | 2784 | 3460 | 3878 |
| 35° | 51804 | 35573 | 2439 | 3532 | 4100 |
| 40° | 57442 | 37568 | 2248 | 3665 | 4429 |
| 45° | 63983 | 37630 | 2216 | 3873 | 4798 |
| 50° | 61276 | 35367 | 2197 | 4073 | 5225 |
| 55° | 54257 | 22910 | 2252 | 4294 | 5645 |
| 60° | 29726 | 4926  | 2273 | 4374 | 5856 |
| 65° | 2119  | 1182  | 2201 | 4320 | 5909 |
| 70° | 1007  | 1158  | 2065 | 4129 | 5690 |
| 75° | 932   | 1198  | 1930 | 3926 | 5257 |
| 80° | 893   | 1091  | 1785 | 3570 | 4959 |
| 85° | 988   | 1383  | 1778 | 3162 | 4545 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 63983 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 4.3    | 1.9       |
| 10°-20°   | 18.4   | 8.1       |
| 20°-30°   | 35.4   | 15.6      |
| 30°-40°   | 50.1   | 22.0      |
| 40°-50°   | 56.6   | 24.9      |
| 50°-60°   | 44.8   | 19.8      |
| 60°-70°   | 12.1   | 5.3       |
| 70°-80°   | 4.0    | 1.8       |
| 80°-90°   | 1.2    | 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°    | 58.2   | 25.6      |
| 0°-40°    | 108.2  | 47.7      |
| 0°-60°    | 209.7  | 92.4      |
| 0°-90°    | 227.0  | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 227.0  | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°  | 45° | 90° | 135° | 180° | Flux |
|-----|-----|-----|-----|------|------|------|
| 0°  | 33  | 33  | 33  | 33   | 33   |      |
| 5°  | 75  | 60  | 33  | 21   | 19   | 9    |
| 15° | 164 | 123 | 26  | 19   | 19   | 46   |
| 25° | 220 | 155 | 17  | 18   | 19   | 101  |
| 35° | 246 | 169 | 12  | 17   | 20   | 155  |
| 45° | 263 | 154 | 9   | 16   | 20   | 197  |
| 55° | 181 | 76  | 8   | 14   | 19   | 147  |
| 65° | 5   | 3   | 5   | 11   | 14   | 19   |
| 75° | 1   | 2   | 3   | 6    | 8    | 1    |
| 85° | 0   | 1   | 1   | 2    | 2    | 1    |
| 90° | 0   | 0   | 0   | 0    | 0    |      |

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**CANDELA DISTRIBUTION (FULL):**

|       | 0°    | 5°    | 10°   | 15°   | 20°   | 25°   | 30°   | 45°   | 67.5° | 90°  | 112.5° |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|--------|
| 0°    | 33.1  | 33.1  | 33.1  | 33.1  | 33.1  | 33.1  | 33.1  | 33.1  | 33.1  | 33.1 | 33.1   |
| 2.5°  | 51.4  | 51.4  | 51.2  | 50.3  | 49.8  | 48.7  | 47.8  | 45.3  | 39.2  | 33.3 | 28.5   |
| 5°    | 75.0  | 76.1  | 74.5  | 74.3  | 72.9  | 70.9  | 69.5  | 60.0  | 45.3  | 32.6 | 24.5   |
| 7.5°  | 102.8 | 103.3 | 102.8 | 100.6 | 98.5  | 95.1  | 92.0  | 77.0  | 51.4  | 31.5 | 21.5   |
| 10°   | 128.4 | 127.7 | 126.4 | 124.8 | 121.8 | 118.2 | 112.8 | 94.2  | 57.3  | 29.9 | 19.7   |
| 12.5° | 149.2 | 149.0 | 147.4 | 145.9 | 142.2 | 137.5 | 132.0 | 109.8 | 62.3  | 27.9 | 18.8   |
| 15°   | 164.4 | 164.4 | 162.8 | 161.0 | 157.6 | 153.8 | 147.7 | 123.4 | 66.4  | 25.6 | 17.9   |
| 17.5° | 174.6 | 174.2 | 173.0 | 171.7 | 169.0 | 165.1 | 160.3 | 134.3 | 69.1  | 23.3 | 17.7   |
| 20°   | 181.2 | 181.0 | 180.1 | 178.0 | 175.7 | 172.8 | 168.5 | 143.6 | 70.2  | 21.3 | 17.4   |
| 22.5° | 202.2 | 200.4 | 197.0 | 192.7 | 187.3 | 180.3 | 174.4 | 150.6 | 69.8  | 19.0 | 17.0   |
| 25°   | 219.5 | 218.8 | 215.2 | 209.9 | 202.7 | 193.6 | 183.9 | 155.4 | 67.5  | 17.2 | 16.5   |
| 27.5° | 230.8 | 229.6 | 226.3 | 220.6 | 212.9 | 204.1 | 195.0 | 159.0 | 64.3  | 15.6 | 15.9   |
| 30°   | 238.7 | 238.0 | 234.6 | 228.3 | 220.4 | 210.6 | 201.3 | 163.1 | 60.0  | 14.0 | 15.2   |
| 32.5° | 243.7 | 243.0 | 239.6 | 234.0 | 226.3 | 216.1 | 205.4 | 167.1 | 54.8  | 12.7 | 14.5   |
| 35°   | 246.4 | 245.7 | 241.9 | 236.9 | 229.6 | 219.7 | 208.4 | 169.2 | 48.5  | 11.6 | 13.8   |
| 37.5° | 249.8 | 248.4 | 243.2 | 237.1 | 229.9 | 220.6 | 209.3 | 169.0 | 42.1  | 10.6 | 13.4   |
| 40°   | 255.5 | 251.8 | 244.4 | 236.2 | 228.7 | 219.5 | 208.6 | 167.1 | 35.1  | 10.0 | 12.9   |
| 42.5° | 260.9 | 255.7 | 244.6 | 234.9 | 226.5 | 217.4 | 206.1 | 163.1 | 27.4  | 9.5  | 12.7   |
| 45°   | 262.7 | 255.0 | 241.4 | 231.7 | 223.8 | 214.5 | 202.7 | 154.5 | 18.6  | 9.1  | 12.2   |
| 47.5° | 250.7 | 245.0 | 233.7 | 226.5 | 219.0 | 209.9 | 197.7 | 145.4 | 10.6  | 8.6  | 11.8   |
| 50°   | 228.7 | 225.1 | 218.8 | 214.2 | 210.2 | 203.8 | 191.8 | 132.0 | 6.3   | 8.2  | 11.3   |
| 52.5° | 208.4 | 207.2 | 202.7 | 199.1 | 196.8 | 193.9 | 183.0 | 111.4 | 5.2   | 7.9  | 10.9   |
| 55°   | 180.7 | 177.1 | 176.0 | 174.6 | 179.4 | 179.1 | 164.4 | 76.3  | 5.0   | 7.5  | 10.4   |
| 57.5° | 113.5 | 115.1 | 120.9 | 131.8 | 144.7 | 152.2 | 151.7 | 40.8  | 4.8   | 7.0  | 9.7    |
| 60°   | 86.3  | 86.1  | 87.9  | 92.4  | 101.9 | 112.6 | 122.5 | 14.3  | 4.5   | 6.6  | 9.3    |
| 62.5° | 25.8  | 26.5  | 31.9  | 46.9  | 56.2  | 69.3  | 63.2  | 3.4   | 4.3   | 5.9  | 8.4    |
| 65°   | 5.2   | 5.4   | 5.4   | 6.1   | 7.5   | 11.3  | 13.8  | 2.9   | 4.1   | 5.4  | 7.7    |
| 67.5° | 2.3   | 2.3   | 2.3   | 2.5   | 2.5   | 2.9   | 2.5   | 2.7   | 3.6   | 4.8  | 6.8    |
| 70°   | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   | 2.3   | 2.3   | 3.2   | 4.1  | 5.9    |
| 72.5° | 1.6   | 1.6   | 1.6   | 1.8   | 1.8   | 1.8   | 1.8   | 2.0   | 2.7   | 3.4  | 5.0    |
| 75°   | 1.4   | 1.4   | 1.4   | 1.4   | 1.6   | 1.6   | 1.6   | 1.8   | 2.3   | 2.9  | 4.1    |
| 77.5° | 1.1   | 1.1   | 1.1   | 1.1   | 1.1   | 1.4   | 1.4   | 1.4   | 1.8   | 2.3  | 3.4    |
| 80°   | 0.9   | 0.9   | 0.9   | 0.9   | 0.9   | 0.9   | 0.9   | 1.1   | 1.4   | 1.8  | 2.5    |
| 82.5° | 0.7   | 0.7   | 0.7   | 0.7   | 0.7   | 0.7   | 0.7   | 0.9   | 1.1   | 1.4  | 1.8    |
| 85°   | 0.5   | 0.5   | 0.5   | 0.5   | 0.5   | 0.5   | 0.5   | 0.7   | 0.7   | 0.9  | 1.1    |
| 87.5° | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.5   | 0.5   | 0.5  | 0.7    |
| 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):**

|       | 135° | 157.5° | 180° |
|-------|------|--------|------|
| 0°    | 33.1 | 33.1   | 33.1 |
| 2.5°  | 25.1 | 23.8   | 23.1 |
| 5°    | 20.6 | 19.5   | 19.3 |
| 7.5°  | 19.0 | 18.8   | 18.8 |
| 10°   | 18.6 | 18.8   | 19.0 |
| 12.5° | 18.6 | 19.0   | 19.3 |
| 15°   | 18.6 | 19.0   | 19.3 |
| 17.5° | 18.6 | 19.0   | 19.3 |
| 20°   | 18.3 | 19.0   | 19.5 |
| 22.5° | 18.1 | 19.0   | 19.3 |
| 25°   | 17.9 | 19.0   | 19.3 |
| 27.5° | 17.7 | 18.8   | 19.3 |
| 30°   | 17.4 | 18.8   | 19.5 |
| 32.5° | 17.0 | 18.8   | 19.5 |
| 35°   | 16.8 | 18.8   | 19.5 |
| 37.5° | 16.5 | 18.8   | 19.7 |
| 40°   | 16.3 | 18.8   | 19.7 |
| 42.5° | 16.1 | 18.8   | 19.7 |
| 45°   | 15.9 | 18.6   | 19.7 |
| 47.5° | 15.4 | 18.6   | 19.7 |
| 50°   | 15.2 | 18.3   | 19.5 |
| 52.5° | 14.7 | 18.1   | 19.5 |
| 55°   | 14.3 | 17.7   | 18.8 |
| 57.5° | 13.6 | 17.0   | 17.9 |
| 60°   | 12.7 | 16.1   | 17.0 |
| 62.5° | 11.6 | 14.9   | 15.6 |
| 65°   | 10.6 | 13.6   | 14.5 |
| 67.5° | 9.3  | 12.0   | 12.9 |
| 70°   | 8.2  | 10.4   | 11.3 |
| 72.5° | 7.0  | 8.8    | 9.7  |
| 75°   | 5.9  | 7.2    | 7.9  |
| 77.5° | 4.5  | 5.9    | 6.3  |
| 80°   | 3.6  | 4.5    | 5.0  |
| 82.5° | 2.5  | 3.2    | 3.4  |
| 85°   | 1.6  | 2.0    | 2.3  |
| 87.5° | 0.7  | 0.9    | 0.9  |
| 90°   | 0.0  | 0.0    | 0.0  |

(END OF REPORT)