

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: P1314138

Luminaire Tested: P3SQAS05R709735DE010 E3SQCA451MB

Issue Date: 1/29/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1314138  
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: P3SQAS05R709735DE010 E3SQCA451MB  
Description: 3in Adjustable LED luminaire with, R70 optic, 3500K CCT AND, 97CRI , E3SQCA451MB TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

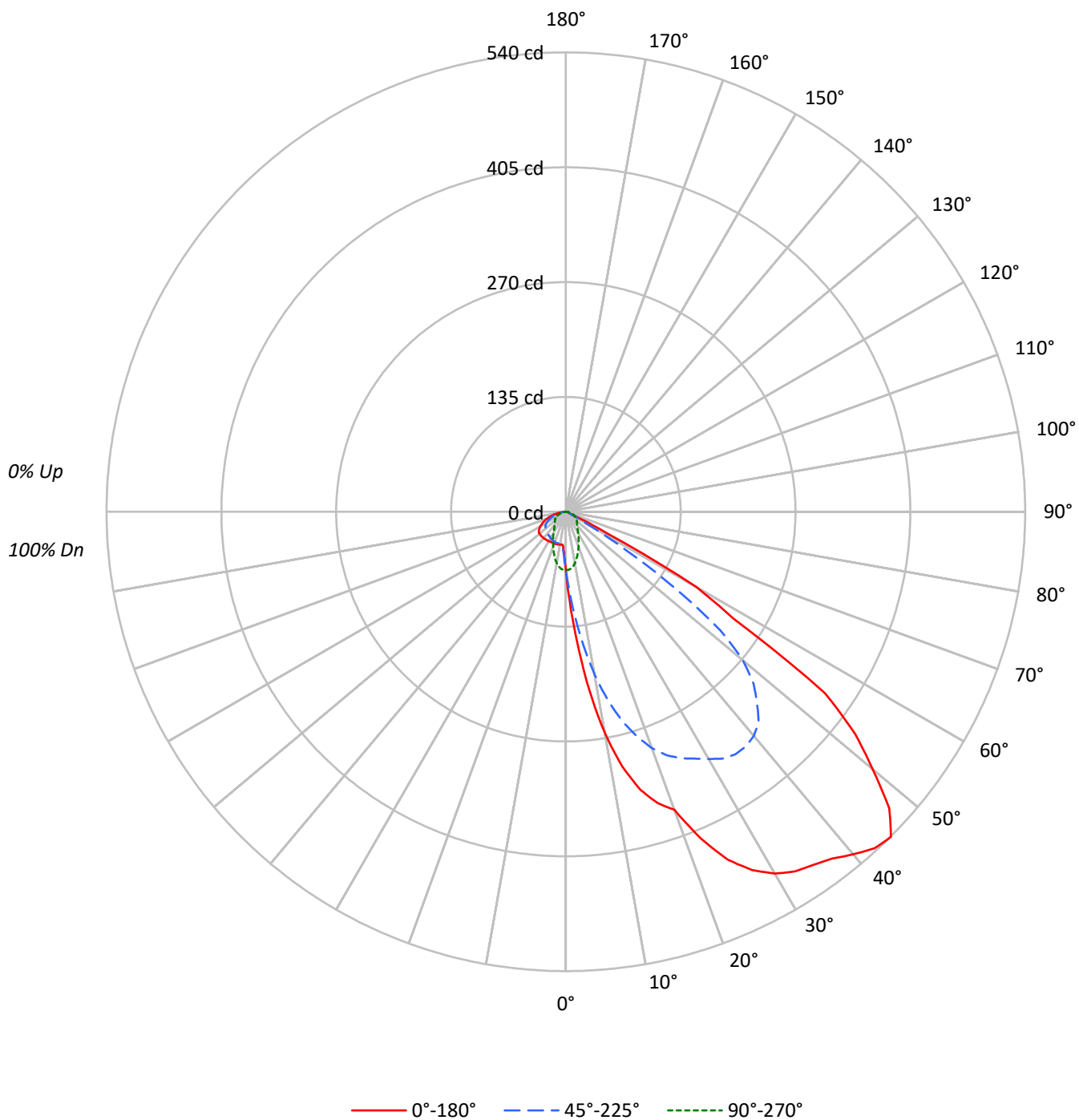
Lumens per Lamp: N/A  
Luminaire Lumens: 467.0 lumens  
Efficiency: N/A  
Efficacy: 64.9 lumens/watt  
Spacing Criteria (0/90/45): 2.92 / 0.77 / 2.03  
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')  
CIE Type: Direct

Input Watts (W): 7.2  
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°  | 11711  | 11711 | 11711 | 11711 | 11711 |
| 5°  | 26658  | 21351 | 11600 | 7330  | 6846  |
| 10° | 46203  | 33892 | 10755 | 6680  | 6838  |
| 15° | 60318  | 45270 | 9378  | 6811  | 7061  |
| 20° | 68307  | 54140 | 8027  | 6909  | 7349  |
| 25° | 85797  | 60733 | 6727  | 6993  | 7525  |
| 30° | 97663  | 66719 | 5747  | 7139  | 7975  |
| 35° | 106573 | 73165 | 5004  | 7253  | 8431  |
| 40° | 118166 | 77316 | 4609  | 7531  | 9105  |
| 45° | 131644 | 77403 | 4530  | 7940  | 9864  |
| 50° | 126088 | 72770 | 4501  | 8359  | 10744 |
| 55° | 111637 | 47141 | 4624  | 8828  | 11620 |
| 60° | 61139  | 10127 | 4650  | 8990  | 12021 |
| 65° | 4360   | 2486  | 4564  | 8925  | 12144 |
| 70° | 2115   | 2367  | 4230  | 8460  | 11733 |
| 75° | 1863   | 2462  | 4059  | 8052  | 10846 |
| 80° | 1884   | 2281  | 3670  | 7438  | 10215 |
| 85° | 1778   | 2766  | 3754  | 6521  | 9287  |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 131644 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 8.9    | 1.9       |
| 10°-20°   | 37.9   | 8.1       |
| 20°-30°   | 72.8   | 15.6      |
| 30°-40°   | 103.0  | 22.1      |
| 40°-50°   | 116.5  | 24.9      |
| 50°-60°   | 92.3   | 19.8      |
| 60°-70°   | 24.9   | 5.3       |
| 70°-80°   | 8.3    | 1.8       |
| 80°-90°   | 2.5    | 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°    | 119.6  | 25.6      |
| 0°-40°    | 222.6  | 47.7      |
| 0°-60°    | 431.3  | 92.4      |
| 0°-90°    | 467.0  | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 467.0  | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°  | 45° | 90° | 135° | 180° | Flux |
|-----|-----|-----|-----|------|------|------|
| 0°  | 68  | 68  | 68  | 68   | 68   |      |
| 5°  | 154 | 124 | 67  | 42   | 40   | 18   |
| 15° | 338 | 254 | 53  | 38   | 40   | 95   |
| 25° | 452 | 320 | 35  | 37   | 40   | 207  |
| 35° | 507 | 348 | 24  | 34   | 40   | 319  |
| 45° | 540 | 318 | 19  | 33   | 40   | 404  |
| 55° | 372 | 157 | 15  | 29   | 39   | 302  |
| 65° | 11  | 6   | 11  | 22   | 30   | 39   |
| 75° | 3   | 4   | 6   | 12   | 16   | 3    |
| 85° | 1   | 1   | 2   | 3    | 5    | 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°    | 68.0  | 68.0  | 68.0  | 68.0  | 68.0  | 68.0  | 68.0  | 68.0  | 68.0  | 68.0 | 68.0   |
| 2.5°  | 105.8 | 105.8 | 105.3 | 103.4 | 102.5 | 100.2 | 98.3  | 93.2  | 80.6  | 68.5 | 58.7   |
| 5°    | 154.2 | 156.6 | 153.3 | 152.8 | 150.0 | 145.8 | 143.0 | 123.5 | 93.2  | 67.1 | 50.3   |
| 7.5°  | 211.5 | 212.5 | 211.5 | 206.9 | 202.7 | 195.7 | 189.2 | 158.4 | 105.8 | 64.8 | 44.3   |
| 10°   | 264.2 | 262.8 | 260.0 | 256.7 | 250.7 | 243.2 | 232.0 | 193.8 | 117.9 | 61.5 | 40.5   |
| 12.5° | 307.0 | 306.6 | 303.3 | 300.1 | 292.6 | 282.8 | 271.6 | 226.0 | 128.1 | 57.3 | 38.7   |
| 15°   | 338.3 | 338.3 | 335.0 | 331.3 | 324.3 | 316.4 | 303.8 | 253.9 | 136.5 | 52.6 | 36.8   |
| 17.5° | 359.2 | 358.3 | 356.0 | 353.2 | 347.6 | 339.7 | 329.9 | 276.3 | 142.1 | 48.0 | 36.3   |
| 20°   | 372.7 | 372.3 | 370.4 | 366.2 | 361.6 | 355.5 | 346.6 | 295.4 | 144.4 | 43.8 | 35.9   |
| 22.5° | 416.1 | 412.3 | 405.4 | 396.5 | 385.3 | 370.9 | 358.8 | 309.8 | 143.5 | 39.1 | 34.9   |
| 25°   | 451.5 | 450.1 | 442.6 | 431.9 | 417.0 | 398.4 | 378.3 | 319.6 | 138.8 | 35.4 | 34.0   |
| 27.5° | 474.8 | 472.4 | 465.5 | 453.8 | 438.0 | 419.8 | 401.2 | 327.1 | 132.3 | 32.1 | 32.6   |
| 30°   | 491.1 | 489.7 | 482.7 | 469.7 | 453.3 | 433.3 | 414.2 | 335.5 | 123.5 | 28.9 | 31.2   |
| 32.5° | 501.3 | 499.9 | 493.0 | 481.3 | 465.5 | 444.5 | 422.6 | 343.9 | 112.8 | 26.1 | 29.8   |
| 35°   | 506.9 | 505.5 | 497.6 | 487.4 | 472.4 | 451.9 | 428.7 | 348.0 | 99.7  | 23.8 | 28.4   |
| 37.5° | 513.9 | 511.1 | 500.4 | 487.8 | 472.9 | 453.8 | 430.5 | 347.6 | 86.7  | 21.9 | 27.5   |
| 40°   | 525.6 | 518.1 | 502.7 | 486.0 | 470.6 | 451.5 | 429.1 | 343.9 | 72.2  | 20.5 | 26.6   |
| 42.5° | 536.7 | 526.0 | 503.2 | 483.2 | 465.9 | 447.3 | 424.0 | 335.5 | 56.4  | 19.6 | 26.1   |
| 45°   | 540.5 | 524.6 | 496.7 | 476.6 | 460.3 | 441.2 | 417.0 | 317.8 | 38.2  | 18.6 | 25.2   |
| 47.5° | 515.8 | 504.1 | 480.8 | 465.9 | 450.6 | 431.9 | 406.8 | 299.1 | 21.9  | 17.7 | 24.2   |
| 50°   | 470.6 | 463.1 | 450.1 | 440.8 | 432.4 | 419.3 | 394.6 | 271.6 | 13.0  | 16.8 | 23.3   |
| 52.5° | 428.7 | 426.3 | 417.0 | 409.5 | 404.9 | 398.8 | 376.5 | 229.2 | 10.7  | 16.3 | 22.4   |
| 55°   | 371.8 | 364.4 | 362.0 | 359.2 | 369.0 | 368.5 | 338.3 | 157.0 | 10.3  | 15.4 | 21.4   |
| 57.5° | 233.4 | 236.7 | 248.8 | 271.2 | 297.7 | 313.1 | 312.2 | 83.9  | 9.8   | 14.4 | 20.0   |
| 60°   | 177.5 | 177.1 | 180.8 | 190.1 | 209.7 | 231.6 | 252.1 | 29.4  | 9.3   | 13.5 | 19.1   |
| 62.5° | 53.1  | 54.5  | 65.7  | 96.4  | 115.5 | 142.6 | 130.0 | 7.0   | 8.9   | 12.1 | 17.2   |
| 65°   | 10.7  | 11.2  | 11.2  | 12.6  | 15.4  | 23.3  | 28.4  | 6.1   | 8.4   | 11.2 | 15.8   |
| 67.5° | 4.7   | 4.7   | 4.7   | 5.1   | 5.1   | 6.1   | 5.1   | 5.6   | 7.5   | 9.8  | 14.0   |
| 70°   | 4.2   | 4.2   | 4.2   | 4.2   | 4.2   | 4.2   | 4.7   | 4.7   | 6.5   | 8.4  | 12.1   |
| 72.5° | 3.3   | 3.3   | 3.3   | 3.7   | 3.7   | 3.7   | 3.7   | 4.2   | 5.6   | 7.0  | 10.3   |
| 75°   | 2.8   | 2.8   | 2.8   | 2.8   | 3.3   | 3.3   | 3.3   | 3.7   | 4.7   | 6.1  | 8.4    |
| 77.5° | 2.3   | 2.3   | 2.3   | 2.3   | 2.3   | 2.8   | 2.8   | 2.8   | 3.7   | 4.7  | 7.0    |
| 80°   | 1.9   | 1.9   | 1.9   | 1.9   | 1.9   | 1.9   | 1.9   | 2.3   | 2.8   | 3.7  | 5.1    |
| 82.5° | 1.4   | 1.4   | 1.4   | 1.4   | 1.4   | 1.4   | 1.4   | 1.9   | 2.3   | 2.8  | 3.7    |
| 85°   | 0.9   | 0.9   | 0.9   | 0.9   | 0.9   | 0.9   | 0.9   | 1.4   | 1.4   | 1.9  | 2.3    |
| 87.5° | 0.5   | 0.5   | 0.5   | 0.5   | 0.5   | 0.5   | 0.5   | 0.9   | 0.9   | 0.9  | 1.4    |
| 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°    | 68.0 | 68.0   | 68.0 |
| 2.5°  | 51.7 | 48.9   | 47.5 |
| 5°    | 42.4 | 40.1   | 39.6 |
| 7.5°  | 39.1 | 38.7   | 38.7 |
| 10°   | 38.2 | 38.7   | 39.1 |
| 12.5° | 38.2 | 39.1   | 39.6 |
| 15°   | 38.2 | 39.1   | 39.6 |
| 17.5° | 38.2 | 39.1   | 39.6 |
| 20°   | 37.7 | 39.1   | 40.1 |
| 22.5° | 37.3 | 39.1   | 39.6 |
| 25°   | 36.8 | 39.1   | 39.6 |
| 27.5° | 36.3 | 38.7   | 39.6 |
| 30°   | 35.9 | 38.7   | 40.1 |
| 32.5° | 34.9 | 38.7   | 40.1 |
| 35°   | 34.5 | 38.7   | 40.1 |
| 37.5° | 34.0 | 38.7   | 40.5 |
| 40°   | 33.5 | 38.7   | 40.5 |
| 42.5° | 33.1 | 38.7   | 40.5 |
| 45°   | 32.6 | 38.2   | 40.5 |
| 47.5° | 31.7 | 38.2   | 40.5 |
| 50°   | 31.2 | 37.7   | 40.1 |
| 52.5° | 30.3 | 37.3   | 40.1 |
| 55°   | 29.4 | 36.3   | 38.7 |
| 57.5° | 28.0 | 34.9   | 36.8 |
| 60°   | 26.1 | 33.1   | 34.9 |
| 62.5° | 23.8 | 30.8   | 32.1 |
| 65°   | 21.9 | 28.0   | 29.8 |
| 67.5° | 19.1 | 24.7   | 26.6 |
| 70°   | 16.8 | 21.4   | 23.3 |
| 72.5° | 14.4 | 18.2   | 20.0 |
| 75°   | 12.1 | 14.9   | 16.3 |
| 77.5° | 9.3  | 12.1   | 13.0 |
| 80°   | 7.5  | 9.3    | 10.3 |
| 82.5° | 5.1  | 6.5    | 7.0  |
| 85°   | 3.3  | 4.2    | 4.7  |
| 87.5° | 1.4  | 1.9    | 1.9  |
| 90°   | 0.0  | 0.0    | 0.0  |

(END OF REPORT)