

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: PORTFOLIO

Report Number: P1319166

Luminaire Tested: LDSQA3D09R709835DE010 3LSQCA45R 1MW

Issue Date: 1/29/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1319166  
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: PORTFOLIO  
Catalog Number: LDSQA3D09R709835DE010 3LSQCA45R 1MW  
Description: 3in Adjustable LED luminaire with, R70 optic, 3500K CCT AND, 98CRI , 3LSQCA45R 1MW TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

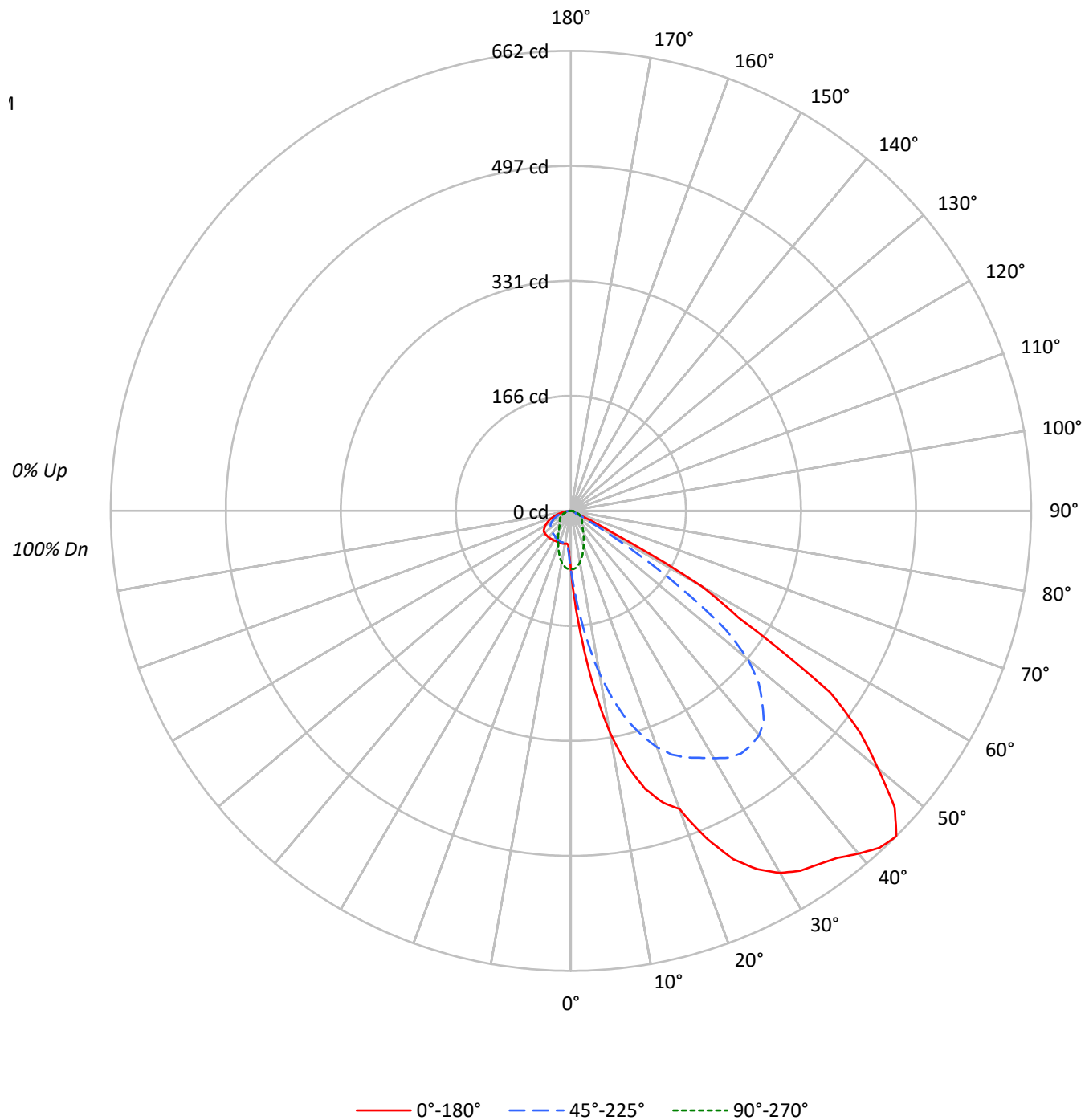
Lumens per Lamp: N/A  
Luminaire Lumens: 572.0 lumens  
Efficiency: N/A  
Efficacy: 52.0 lumens/watt  
Spacing Criteria (0/90/45): 2.92 / 0.77 / 2.03  
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')  
CIE Type: Direct

Input Watts (W): 11  
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 | 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°  | 14346  | 14346 | 14346 | 14346 | 14346 |
| 5°  | 32657  | 26140 | 14211 | 8972  | 8385  |
| 10° | 56591  | 41516 | 13168 | 8184  | 8377  |
| 15° | 73869  | 55451 | 11500 | 8344  | 8647  |
| 20° | 83665  | 66309 | 9824  | 8467  | 8999  |
| 25° | 105085 | 74395 | 8247  | 8570  | 9216  |
| 30° | 119618 | 81714 | 7040  | 8730  | 9764  |
| 35° | 130541 | 89627 | 6118  | 8872  | 10323 |
| 40° | 144717 | 94694 | 5643  | 9240  | 11151 |
| 45° | 161236 | 94793 | 5553  | 9718  | 12081 |
| 50° | 154435 | 89141 | 5493  | 10235 | 13155 |
| 55° | 136739 | 57740 | 5645  | 10809 | 14232 |
| 60° | 74882  | 12400 | 5683  | 11022 | 14742 |
| 65° | 5338   | 3016  | 5583  | 10921 | 14874 |
| 70° | 2568   | 2870  | 5187  | 10323 | 14351 |
| 75° | 2262   | 3061  | 4924  | 9848  | 13308 |
| 80° | 2281   | 2876  | 4562  | 9025  | 12497 |
| 85° | 2174   | 3359  | 4545  | 7904  | 11263 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 161236 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 10.9   | 1.9       |
| 10°-20°   | 46.5   | 8.1       |
| 20°-30°   | 89.2   | 15.6      |
| 30°-40°   | 126.1  | 22.0      |
| 40°-50°   | 142.7  | 24.9      |
| 50°-60°   | 113.0  | 19.8      |
| 60°-70°   | 30.5   | 5.3       |
| 70°-80°   | 10.1   | 1.8       |
| 80°-90°   | 3.1    | 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°    | 146.5  | 25.6      |
| 0°-40°    | 272.7  | 47.7      |
| 0°-60°    | 528.3  | 92.4      |
| 0°-90°    | 572.0  | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 572.0  | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°  | 45° | 90° | 135° | 180° | Flux |
|-----|-----|-----|-----|------|------|------|
| 0°  | 83  | 83  | 83  | 83   | 83   |      |
| 5°  | 189 | 151 | 82  | 52   | 48   | 22   |
| 15° | 414 | 311 | 64  | 47   | 48   | 117  |
| 25° | 553 | 392 | 43  | 45   | 48   | 253  |
| 35° | 621 | 426 | 29  | 42   | 49   | 391  |
| 45° | 662 | 389 | 23  | 40   | 50   | 495  |
| 55° | 455 | 192 | 19  | 36   | 47   | 370  |
| 65° | 13  | 7   | 14  | 27   | 36   | 47   |
| 75° | 3   | 5   | 7   | 15   | 20   | 4    |
| 85° | 1   | 2   | 2   | 4    | 6    | 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°    | 83.3  | 83.3  | 83.3  | 83.3  | 83.3  | 83.3  | 83.3  | 83.3  | 83.3  | 83.3 | 83.3   |
| 2.5°  | 129.5 | 129.5 | 129.0 | 126.7 | 125.6 | 122.7 | 120.4 | 114.1 | 98.7  | 83.9 | 71.9   |
| 5°    | 188.9 | 191.8 | 187.8 | 187.2 | 183.8 | 178.6 | 175.2 | 151.2 | 114.1 | 82.2 | 61.6   |
| 7.5°  | 259.1 | 260.2 | 259.1 | 253.4 | 248.2 | 239.7 | 231.7 | 194.0 | 129.5 | 79.3 | 54.2   |
| 10°   | 323.6 | 321.9 | 318.4 | 314.4 | 307.0 | 297.9 | 284.2 | 237.4 | 144.4 | 75.3 | 49.6   |
| 12.5° | 376.1 | 375.5 | 371.5 | 367.5 | 358.4 | 346.4 | 332.7 | 276.8 | 156.9 | 70.2 | 47.4   |
| 15°   | 414.3 | 414.3 | 410.3 | 405.8 | 397.2 | 387.5 | 372.1 | 311.0 | 167.2 | 64.5 | 45.1   |
| 17.5° | 440.0 | 438.9 | 436.0 | 432.6 | 425.7 | 416.0 | 404.0 | 338.4 | 174.1 | 58.8 | 44.5   |
| 20°   | 456.5 | 456.0 | 453.7 | 448.6 | 442.9 | 435.4 | 424.6 | 361.8 | 176.9 | 53.6 | 43.9   |
| 22.5° | 509.6 | 505.1 | 496.5 | 485.7 | 472.0 | 454.3 | 439.4 | 379.5 | 175.8 | 47.9 | 42.8   |
| 25°   | 553.0 | 551.3 | 542.2 | 529.0 | 510.8 | 487.9 | 463.4 | 391.5 | 170.1 | 43.4 | 41.7   |
| 27.5° | 581.5 | 578.7 | 570.1 | 555.8 | 536.4 | 514.2 | 491.4 | 400.6 | 162.1 | 39.4 | 39.9   |
| 30°   | 601.5 | 599.8 | 591.2 | 575.3 | 555.3 | 530.7 | 507.3 | 410.9 | 151.2 | 35.4 | 38.2   |
| 32.5° | 614.1 | 612.3 | 603.8 | 589.5 | 570.1 | 544.4 | 517.6 | 421.2 | 138.1 | 32.0 | 36.5   |
| 35°   | 620.9 | 619.2 | 609.5 | 596.9 | 578.7 | 553.6 | 525.0 | 426.3 | 122.1 | 29.1 | 34.8   |
| 37.5° | 629.5 | 626.0 | 612.9 | 597.5 | 579.2 | 555.8 | 527.3 | 425.7 | 106.1 | 26.8 | 33.7   |
| 40°   | 643.7 | 634.6 | 615.8 | 595.2 | 576.4 | 553.0 | 525.6 | 421.2 | 88.5  | 25.1 | 32.5   |
| 42.5° | 657.4 | 644.3 | 616.3 | 591.8 | 570.7 | 547.9 | 519.3 | 410.9 | 69.1  | 24.0 | 32.0   |
| 45°   | 662.0 | 642.6 | 608.4 | 583.8 | 563.8 | 540.4 | 510.8 | 389.2 | 46.8  | 22.8 | 30.8   |
| 47.5° | 631.7 | 617.5 | 588.9 | 570.7 | 551.9 | 529.0 | 498.2 | 366.4 | 26.8  | 21.7 | 29.7   |
| 50°   | 576.4 | 567.3 | 551.3 | 539.9 | 529.6 | 513.6 | 483.4 | 332.7 | 16.0  | 20.5 | 28.5   |
| 52.5° | 525.0 | 522.2 | 510.8 | 501.6 | 495.9 | 488.5 | 461.1 | 280.8 | 13.1  | 20.0 | 27.4   |
| 55°   | 455.4 | 446.3 | 443.4 | 440.0 | 452.0 | 451.4 | 414.3 | 192.3 | 12.6  | 18.8 | 26.3   |
| 57.5° | 285.9 | 289.9 | 304.7 | 332.1 | 364.7 | 383.5 | 382.4 | 102.7 | 12.0  | 17.7 | 24.5   |
| 60°   | 217.4 | 216.9 | 221.4 | 232.8 | 256.8 | 283.6 | 308.7 | 36.0  | 11.4  | 16.5 | 23.4   |
| 62.5° | 65.1  | 66.8  | 80.5  | 118.1 | 141.5 | 174.6 | 159.2 | 8.6   | 10.8  | 14.8 | 21.1   |
| 65°   | 13.1  | 13.7  | 13.7  | 15.4  | 18.8  | 28.5  | 34.8  | 7.4   | 10.3  | 13.7 | 19.4   |
| 67.5° | 5.7   | 5.7   | 5.7   | 6.3   | 6.3   | 7.4   | 6.3   | 6.8   | 9.1   | 12.0 | 17.1   |
| 70°   | 5.1   | 5.1   | 5.1   | 5.1   | 5.1   | 5.1   | 5.7   | 5.7   | 8.0   | 10.3 | 14.8   |
| 72.5° | 4.0   | 4.0   | 4.0   | 4.6   | 4.6   | 4.6   | 4.6   | 5.1   | 6.8   | 8.6  | 12.6   |
| 75°   | 3.4   | 3.4   | 3.4   | 3.4   | 4.0   | 4.0   | 4.0   | 4.6   | 5.7   | 7.4  | 10.3   |
| 77.5° | 2.9   | 2.9   | 2.9   | 2.9   | 2.9   | 3.4   | 3.4   | 3.4   | 4.6   | 5.7  | 8.6    |
| 80°   | 2.3   | 2.3   | 2.3   | 2.3   | 2.3   | 2.3   | 2.3   | 2.9   | 3.4   | 4.6  | 6.3    |
| 82.5° | 1.7   | 1.7   | 1.7   | 1.7   | 1.7   | 1.7   | 1.7   | 2.3   | 2.9   | 3.4  | 4.6    |
| 85°   | 1.1   | 1.1   | 1.1   | 1.1   | 1.1   | 1.1   | 1.1   | 1.7   | 1.7   | 2.3  | 2.9    |
| 87.5° | 0.6   | 0.6   | 0.6   | 0.6   | 0.6   | 0.6   | 0.6   | 1.1   | 1.1   | 1.1  | 1.7    |
| 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°    | 83.3 | 83.3   | 83.3 |
| 2.5°  | 63.3 | 59.9   | 58.2 |
| 5°    | 51.9 | 49.1   | 48.5 |
| 7.5°  | 47.9 | 47.4   | 47.4 |
| 10°   | 46.8 | 47.4   | 47.9 |
| 12.5° | 46.8 | 47.9   | 48.5 |
| 15°   | 46.8 | 47.9   | 48.5 |
| 17.5° | 46.8 | 47.9   | 48.5 |
| 20°   | 46.2 | 47.9   | 49.1 |
| 22.5° | 45.7 | 47.9   | 48.5 |
| 25°   | 45.1 | 47.9   | 48.5 |
| 27.5° | 44.5 | 47.4   | 48.5 |
| 30°   | 43.9 | 47.4   | 49.1 |
| 32.5° | 42.8 | 47.4   | 49.1 |
| 35°   | 42.2 | 47.4   | 49.1 |
| 37.5° | 41.7 | 47.4   | 49.6 |
| 40°   | 41.1 | 47.4   | 49.6 |
| 42.5° | 40.5 | 47.4   | 49.6 |
| 45°   | 39.9 | 46.8   | 49.6 |
| 47.5° | 38.8 | 46.8   | 49.6 |
| 50°   | 38.2 | 46.2   | 49.1 |
| 52.5° | 37.1 | 45.7   | 49.1 |
| 55°   | 36.0 | 44.5   | 47.4 |
| 57.5° | 34.2 | 42.8   | 45.1 |
| 60°   | 32.0 | 40.5   | 42.8 |
| 62.5° | 29.1 | 37.7   | 39.4 |
| 65°   | 26.8 | 34.2   | 36.5 |
| 67.5° | 23.4 | 30.2   | 32.5 |
| 70°   | 20.5 | 26.3   | 28.5 |
| 72.5° | 17.7 | 22.3   | 24.5 |
| 75°   | 14.8 | 18.3   | 20.0 |
| 77.5° | 11.4 | 14.8   | 16.0 |
| 80°   | 9.1  | 11.4   | 12.6 |
| 82.5° | 6.3  | 8.0    | 8.6  |
| 85°   | 4.0  | 5.1    | 5.7  |
| 87.5° | 1.7  | 2.3    | 2.3  |
| 90°   | 0.0  | 0.0    | 0.0  |

(END OF REPORT)