

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: P1313547

Luminaire Tested: LDSQA3D09R459727DE010 3LSQCA45R 1MB

Issue Date: 1/29/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1313547  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-84)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/29/2026  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: PORTFOLIO  
Catalog Number: LDSQA3D09R459727DE010 3LSQCA45R 1MB  
Description: 3in Adjustable LED luminaire with, R45 optic, 2700K CCT AND, 97CRI , 3LSQCA45R 1MB TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

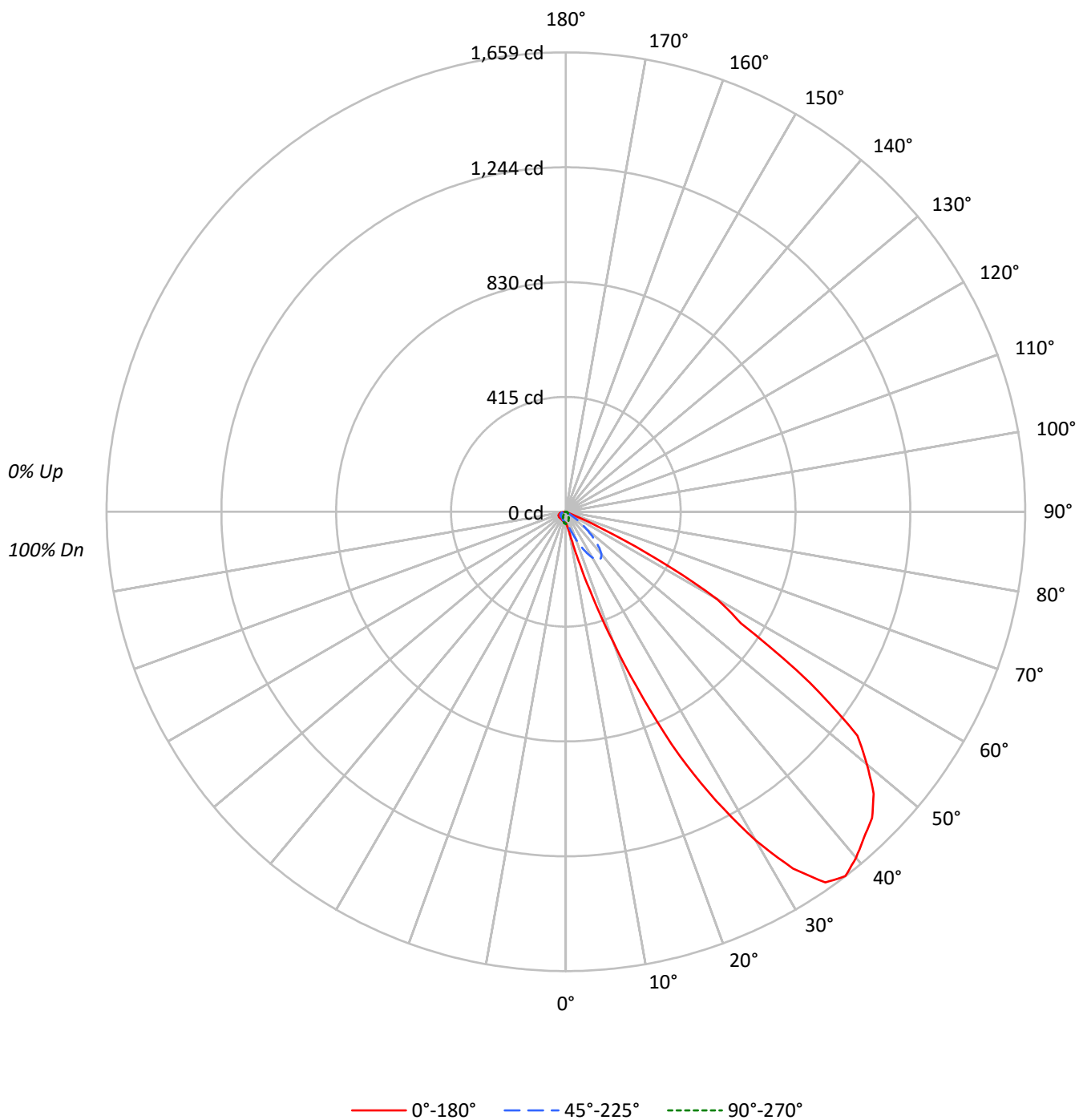
Lumens per Lamp: N/A  
Luminaire Lumens: 741.0 lumens  
Efficiency: N/A  
Efficacy: 66.8 lumens/watt  
Spacing Criteria (0/90/45): 3.81 / 0.82 / 1.83  
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')  
CIE Type: Direct

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

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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  |
| 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  | 96  | 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  | 66  | 77  | 70  | 65  | 74  | 69  | 64  | 71  | 67  | 63  |
| 4   | 83  | 71  | 62  | 56  | 81  | 70  | 62  | 55  | 67  | 60  | 55  | 65  | 59  | 54  | 63  | 58  | 53  |
| 5   | 76  | 63  | 53  | 47  | 73  | 61  | 53  | 46  | 59  | 52  | 46  | 57  | 51  | 45  | 55  | 50  | 45  |
| 6   | 69  | 55  | 46  | 39  | 67  | 54  | 46  | 39  | 52  | 45  | 39  | 51  | 44  | 39  | 49  | 43  | 38  |
| 7   | 63  | 49  | 40  | 34  | 61  | 48  | 40  | 33  | 47  | 39  | 33  | 45  | 38  | 33  | 44  | 37  | 33  |
| 8   | 58  | 44  | 35  | 29  | 56  | 43  | 35  | 29  | 42  | 34  | 29  | 40  | 33  | 28  | 39  | 33  | 28  |
| 9   | 53  | 39  | 31  | 25  | 52  | 39  | 30  | 25  | 38  | 30  | 25  | 36  | 29  | 25  | 35  | 29  | 24  |
| 10  | 49  | 36  | 27  | 22  | 48  | 35  | 27  | 22  | 34  | 27  | 21  | 33  | 26  | 21  | 32  | 26  | 21  |

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

|     | 0°     | 45°   | 90°  | 135°  | 180°  |
|-----|--------|-------|------|-------|-------|
| 0°  | 7388   | 7388  | 7388 | 7388  | 7388  |
| 5°  | 8782   | 8143  | 7296 | 6777  | 6777  |
| 10° | 14025  | 9531  | 6855 | 6418  | 6418  |
| 15° | 34929  | 12766 | 6223 | 6009  | 6223  |
| 20° | 92023  | 19079 | 5388 | 5718  | 6066  |
| 25° | 184763 | 28276 | 4656 | 5359  | 5929  |
| 30° | 272366 | 37864 | 3778 | 5230  | 6085  |
| 35° | 343561 | 44404 | 3217 | 5151  | 6307  |
| 40° | 366570 | 44874 | 2900 | 5373  | 6745  |
| 45° | 380854 | 37435 | 2679 | 5821  | 7307  |
| 50° | 380247 | 26096 | 2626 | 6243  | 8199  |
| 55° | 323201 | 11590 | 2762 | 6996  | 9008  |
| 60° | 217207 | 2308  | 2756 | 7819  | 10333 |
| 65° | 57622  | 978   | 2730 | 8476  | 11736 |
| 70° | 1561   | 1209  | 2769 | 9265  | 13243 |
| 75° | 1198   | 1198  | 2861 | 9782  | 15105 |
| 80° | 1190   | 1785  | 3075 | 10315 | 16960 |
| 85° | 1186   | 2371  | 4742 | 10868 | 16994 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 10°

Vertical Angle: 47.5°

Luminance: 390668 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 4.3    | 0.6       |
| 10°-20°   | 20.9   | 2.8       |
| 20°-30°   | 86.2   | 11.6      |
| 30°-40°   | 181.7  | 24.5      |
| 40°-50°   | 224.1  | 30.2      |
| 50°-60°   | 168.0  | 22.7      |
| 60°-70°   | 43.2   | 5.8       |
| 70°-80°   | 8.9    | 1.2       |
| 80°-90°   | 3.6    | 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°    | 111.4  | 15.0      |
| 0°-40°    | 293.0  | 39.5      |
| 0°-60°    | 685.2  | 92.5      |
| 0°-90°    | 741.0  | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 741.0  | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 45° | 90° | 135° | 180° | Flux |
|-----|------|-----|-----|------|------|------|
| 0°  | 43   | 43  | 43  | 43   | 43   |      |
| 5°  | 51   | 47  | 42  | 39   | 39   | 6    |
| 15° | 196  | 72  | 35  | 34   | 35   | 72   |
| 25° | 972  | 149 | 24  | 28   | 31   | 453  |
| 35° | 1634 | 211 | 15  | 24   | 30   | 996  |
| 45° | 1564 | 154 | 11  | 24   | 30   | 1197 |
| 55° | 1076 | 39  | 9   | 23   | 30   | 929  |
| 65° | 141  | 2   | 7   | 21   | 29   | 204  |
| 75° | 2    | 2   | 4   | 15   | 23   | 2    |
| 85° | 1    | 1   | 2   | 6    | 9    | 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°    | 42.9   | 42.9   | 42.9   | 42.9   | 42.9   | 42.9   | 42.9  | 42.9  | 42.9  | 42.9 | 42.9   |
| 2.5°  | 45.3   | 45.3   | 45.3   | 45.3   | 45.3   | 45.3   | 45.3  | 44.7  | 44.1  | 42.9 | 41.6   |
| 5°    | 50.8   | 50.2   | 50.2   | 50.2   | 49.6   | 49.0   | 49.0  | 47.1  | 44.7  | 42.2 | 40.4   |
| 7.5°  | 60.0   | 60.0   | 59.4   | 58.2   | 57.6   | 56.3   | 55.1  | 50.2  | 44.7  | 41.0 | 38.6   |
| 10°   | 80.2   | 79.0   | 77.1   | 75.9   | 72.9   | 68.6   | 65.5  | 54.5  | 44.1  | 39.2 | 37.3   |
| 12.5° | 120.0  | 122.5  | 116.3  | 110.2  | 101.6  | 93.7   | 83.9  | 61.8  | 44.1  | 37.3 | 35.5   |
| 15°   | 195.9  | 200.2  | 188.6  | 176.3  | 155.5  | 135.9  | 117.6 | 71.6  | 42.9  | 34.9 | 33.1   |
| 17.5° | 320.2  | 325.7  | 306.1  | 277.4  | 244.9  | 205.7  | 172.0 | 85.1  | 41.6  | 32.5 | 31.2   |
| 20°   | 502.1  | 501.4  | 463.5  | 427.4  | 364.9  | 307.4  | 244.3 | 104.1 | 39.8  | 29.4 | 29.4   |
| 22.5° | 725.5  | 728.0  | 681.5  | 616.6  | 527.8  | 435.3  | 334.9 | 126.1 | 37.3  | 26.9 | 27.6   |
| 25°   | 972.3  | 951.5  | 896.4  | 817.4  | 704.1  | 576.1  | 443.9 | 148.8 | 34.9  | 24.5 | 25.7   |
| 27.5° | 1178.0 | 1157.8 | 1094.7 | 1001.1 | 879.2  | 727.4  | 554.7 | 171.4 | 31.8  | 22.0 | 23.9   |
| 30°   | 1369.6 | 1343.9 | 1268.0 | 1162.1 | 1017.0 | 852.9  | 658.8 | 190.4 | 28.2  | 19.0 | 22.0   |
| 32.5° | 1527.6 | 1504.3 | 1418.0 | 1295.0 | 1137.0 | 960.7  | 747.0 | 205.1 | 24.5  | 17.1 | 20.8   |
| 35°   | 1634.1 | 1610.3 | 1530.7 | 1395.4 | 1223.3 | 1039.0 | 818.6 | 211.2 | 21.4  | 15.3 | 20.2   |
| 37.5° | 1658.6 | 1645.8 | 1588.8 | 1462.1 | 1282.7 | 1089.2 | 864.5 | 209.4 | 17.8  | 14.1 | 19.0   |
| 40°   | 1630.5 | 1633.5 | 1606.6 | 1501.3 | 1314.5 | 1110.7 | 883.5 | 199.6 | 14.7  | 12.9 | 18.4   |
| 42.5° | 1594.4 | 1602.3 | 1600.5 | 1517.2 | 1328.0 | 1111.9 | 875.5 | 180.0 | 11.6  | 11.6 | 17.8   |
| 45°   | 1563.7 | 1571.7 | 1582.7 | 1510.5 | 1318.8 | 1096.0 | 850.4 | 153.7 | 8.6   | 11.0 | 17.8   |
| 47.5° | 1508.0 | 1516.6 | 1532.5 | 1456.6 | 1272.3 | 1054.9 | 805.1 | 124.9 | 6.1   | 10.4 | 17.1   |
| 50°   | 1419.2 | 1423.5 | 1419.2 | 1334.1 | 1182.9 | 988.8  | 731.7 | 97.4  | 4.3   | 9.8  | 17.1   |
| 52.5° | 1328.0 | 1319.4 | 1283.9 | 1176.2 | 1040.9 | 884.1  | 639.2 | 69.2  | 3.1   | 9.2  | 16.5   |
| 55°   | 1076.4 | 1062.9 | 1036.6 | 970.4  | 893.3  | 755.5  | 516.8 | 38.6  | 3.1   | 9.2  | 15.9   |
| 57.5° | 750.0  | 757.4  | 766.6  | 753.1  | 717.6  | 595.1  | 392.5 | 17.1  | 3.1   | 8.6  | 15.9   |
| 60°   | 630.6  | 624.5  | 625.1  | 616.6  | 557.8  | 434.1  | 270.0 | 6.7   | 3.1   | 8.0  | 15.3   |
| 62.5° | 376.5  | 380.8  | 388.8  | 390.6  | 332.5  | 242.5  | 141.4 | 3.1   | 3.1   | 7.3  | 14.7   |
| 65°   | 141.4  | 148.2  | 129.8  | 112.7  | 89.4   | 65.5   | 33.1  | 2.4   | 3.7   | 6.7  | 13.5   |
| 67.5° | 4.3    | 4.9    | 6.1    | 5.5    | 5.5    | 4.9    | 3.7   | 2.4   | 3.7   | 6.1  | 12.9   |
| 70°   | 3.1    | 3.1    | 3.1    | 3.1    | 3.1    | 2.4    | 2.4   | 2.4   | 3.1   | 5.5  | 11.6   |
| 72.5° | 2.4    | 2.4    | 2.4    | 2.4    | 2.4    | 2.4    | 2.4   | 2.4   | 3.1   | 4.9  | 10.4   |
| 75°   | 1.8    | 2.4    | 1.8    | 1.8    | 1.8    | 1.8    | 1.8   | 1.8   | 3.1   | 4.3  | 8.6    |
| 77.5° | 1.8    | 1.8    | 1.8    | 1.8    | 1.8    | 1.8    | 1.8   | 1.8   | 2.4   | 3.7  | 7.3    |
| 80°   | 1.2    | 1.2    | 1.2    | 1.2    | 1.2    | 1.2    | 1.2   | 1.8   | 2.4   | 3.1  | 6.1    |
| 82.5° | 1.2    | 1.2    | 1.2    | 0.6    | 1.2    | 1.2    | 1.2   | 1.2   | 2.4   | 2.4  | 4.9    |
| 85°   | 0.6    | 0.6    | 0.6    | 0.6    | 0.6    | 0.6    | 0.6   | 1.2   | 1.8   | 2.4  | 3.1    |
| 87.5° | 0.0    | 0.0    | 0.0    | 0.0    | 0.6    | 0.6    | 0.6   | 1.2   | 1.8   | 1.8  | 1.8    |
| 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°    | 42.9 | 42.9   | 42.9 |
| 2.5°  | 40.4 | 40.4   | 40.4 |
| 5°    | 39.2 | 39.2   | 39.2 |
| 7.5°  | 38.0 | 38.0   | 38.0 |
| 10°   | 36.7 | 36.7   | 36.7 |
| 12.5° | 35.5 | 35.5   | 36.1 |
| 15°   | 33.7 | 34.9   | 34.9 |
| 17.5° | 32.5 | 33.7   | 34.3 |
| 20°   | 31.2 | 32.5   | 33.1 |
| 22.5° | 29.4 | 31.2   | 32.5 |
| 25°   | 28.2 | 30.6   | 31.2 |
| 27.5° | 26.9 | 30.0   | 31.2 |
| 30°   | 26.3 | 29.4   | 30.6 |
| 32.5° | 25.1 | 28.8   | 30.0 |
| 35°   | 24.5 | 28.8   | 30.0 |
| 37.5° | 24.5 | 28.2   | 30.0 |
| 40°   | 23.9 | 28.2   | 30.0 |
| 42.5° | 23.9 | 28.2   | 30.0 |
| 45°   | 23.9 | 28.2   | 30.0 |
| 47.5° | 23.3 | 28.2   | 30.6 |
| 50°   | 23.3 | 28.8   | 30.6 |
| 52.5° | 23.3 | 28.8   | 30.6 |
| 55°   | 23.3 | 28.8   | 30.0 |
| 57.5° | 22.7 | 28.2   | 30.0 |
| 60°   | 22.7 | 28.2   | 30.0 |
| 62.5° | 21.4 | 27.6   | 29.4 |
| 65°   | 20.8 | 26.9   | 28.8 |
| 67.5° | 19.6 | 26.3   | 27.6 |
| 70°   | 18.4 | 24.5   | 26.3 |
| 72.5° | 16.5 | 23.3   | 25.1 |
| 75°   | 14.7 | 21.4   | 22.7 |
| 77.5° | 12.9 | 19.0   | 20.2 |
| 80°   | 10.4 | 15.9   | 17.1 |
| 82.5° | 8.0  | 12.2   | 12.9 |
| 85°   | 5.5  | 8.0    | 8.6  |
| 87.5° | 2.4  | 3.7    | 4.3  |
| 90°   | 0.0  | 0.0    | 0.0  |

(END OF REPORT)