

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: P1312285

Luminaire Tested: LDSQA3D05R459050DE010 3LSQCA45R 1MW

Issue Date: 1/29/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1312285  
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: LDSQA3D05R459050DE010 3LSQCA45R 1MW  
Description: 3in Adjustable LED luminaire with, R45 optic, 5000K CCT AND, 90CRI , 3LSQCA45R 1MW TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

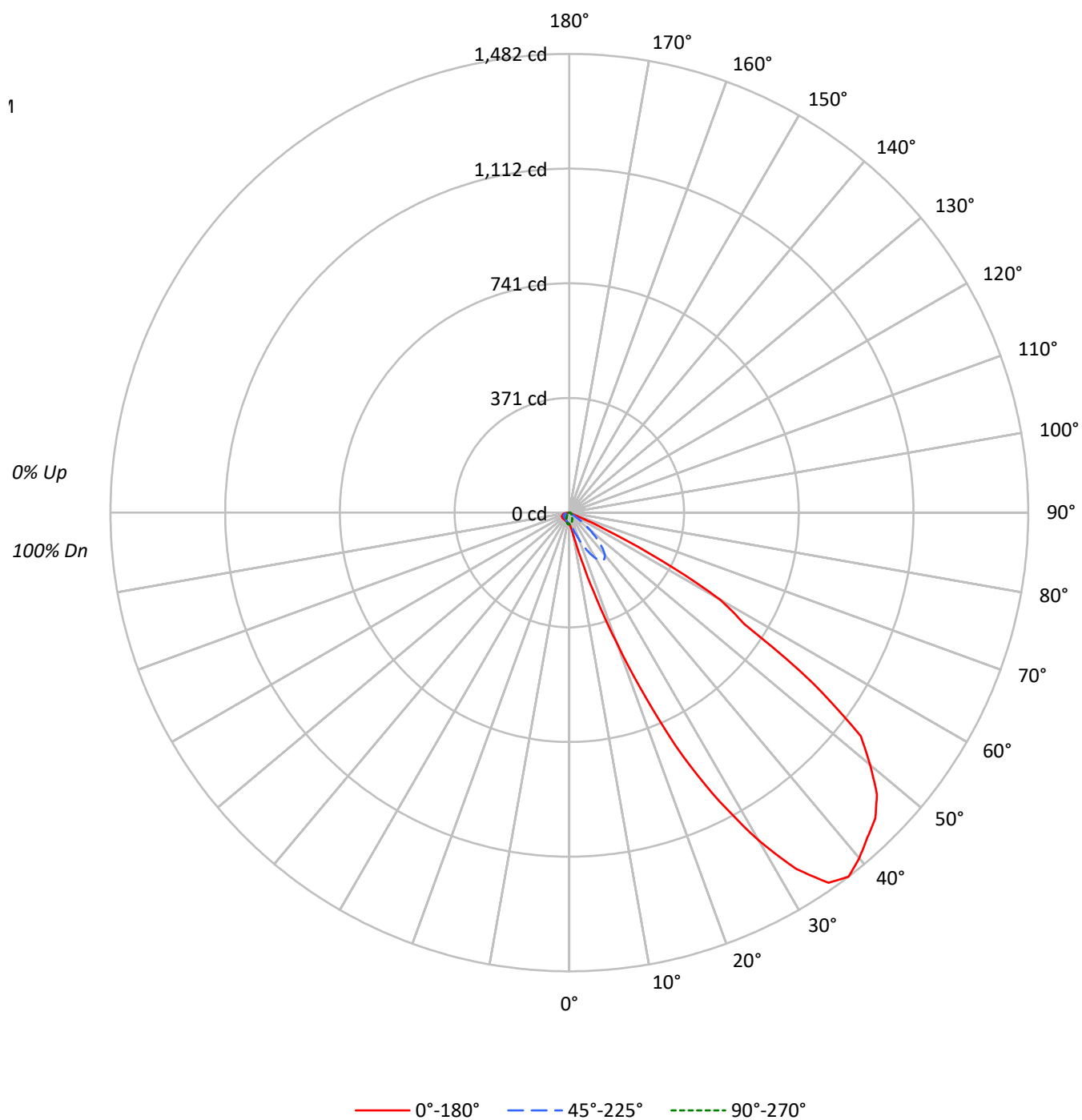
Lumens per Lamp: N/A  
Luminaire Lumens: 662.0 lumens  
Efficiency: N/A  
Efficacy: 91.9 lumens/watt  
Spacing Criteria (0/90/45): 3.81 / 0.82 / 1.83  
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')  
CIE Type: Direct

Input Watts (W): 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  |
| 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°  | 6596   | 6596  | 6596 | 6596 | 6596  |
| 5°  | 7849   | 7278  | 6518 | 6051 | 6051  |
| 10° | 12539  | 8517  | 6121 | 5736 | 5736  |
| 15° | 31202  | 11411 | 5563 | 5367 | 5563  |
| 20° | 82199  | 17045 | 4820 | 5113 | 5407  |
| 25° | 165057 | 25255 | 4162 | 4789 | 5302  |
| 30° | 243332 | 33827 | 3381 | 4673 | 5429  |
| 35° | 306937 | 39673 | 2880 | 4604 | 5635  |
| 40° | 327474 | 40086 | 2585 | 4789 | 6025  |
| 45° | 340253 | 33441 | 2387 | 5188 | 6527  |
| 50° | 339710 | 23310 | 2358 | 5573 | 7315  |
| 55° | 288731 | 10359 | 2462 | 6245 | 8047  |
| 60° | 194060 | 2067  | 2446 | 6958 | 9231  |
| 65° | 51510  | 897   | 2445 | 7580 | 10473 |
| 70° | 1360   | 1108  | 2467 | 8258 | 11833 |
| 75° | 1065   | 1065  | 2529 | 8717 | 13441 |
| 80° | 1091   | 1587  | 2678 | 9224 | 15174 |
| 85° | 988    | 2174  | 4347 | 9683 | 15215 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 10°

Vertical Angle: 47.5°

Luminance: 349013 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 3.8    | 0.6       |
| 10°-20°   | 18.7   | 2.8       |
| 20°-30°   | 77.0   | 11.6      |
| 30°-40°   | 162.3  | 24.5      |
| 40°-50°   | 200.2  | 30.2      |
| 50°-60°   | 150.1  | 22.7      |
| 60°-70°   | 38.6   | 5.8       |
| 70°-80°   | 8.0    | 1.2       |
| 80°-90°   | 3.2    | 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°    | 99.5   | 15.0      |
| 0°-40°    | 261.8  | 39.5      |
| 0°-60°    | 612.1  | 92.5      |
| 0°-90°    | 662.0  | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 662.0  | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 45° | 90° | 135° | 180° | Flux |
|-----|------|-----|-----|------|------|------|
| 0°  | 38   | 38  | 38  | 38   | 38   |      |
| 5°  | 45   | 42  | 38  | 35   | 35   | 5    |
| 15° | 175  | 64  | 31  | 30   | 31   | 64   |
| 25° | 869  | 133 | 22  | 25   | 28   | 405  |
| 35° | 1460 | 189 | 14  | 22   | 27   | 890  |
| 45° | 1397 | 137 | 10  | 21   | 27   | 1069 |
| 55° | 962  | 34  | 8   | 21   | 27   | 830  |
| 65° | 126  | 2   | 6   | 19   | 26   | 182  |
| 75° | 2    | 2   | 4   | 13   | 20   | 2    |
| 85° | 0    | 1   | 2   | 5    | 8    | 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°    | 38.3   | 38.3   | 38.3   | 38.3   | 38.3   | 38.3  | 38.3  | 38.3  | 38.3  | 38.3 | 38.3   |
| 2.5°  | 40.5   | 40.5   | 40.5   | 40.5   | 40.5   | 40.5  | 40.5  | 39.9  | 39.4  | 38.3 | 37.2   |
| 5°    | 45.4   | 44.9   | 44.9   | 44.9   | 44.3   | 43.8  | 43.8  | 42.1  | 39.9  | 37.7 | 36.1   |
| 7.5°  | 53.6   | 53.6   | 53.1   | 52.0   | 51.4   | 50.3  | 49.2  | 44.9  | 39.9  | 36.6 | 34.5   |
| 10°   | 71.7   | 70.6   | 68.9   | 67.8   | 65.1   | 61.3  | 58.5  | 48.7  | 39.4  | 35.0 | 33.4   |
| 12.5° | 107.2  | 109.4  | 103.9  | 98.5   | 90.8   | 83.7  | 74.9  | 55.2  | 39.4  | 33.4 | 31.7   |
| 15°   | 175.0  | 178.9  | 168.5  | 157.5  | 138.9  | 121.4 | 105.0 | 64.0  | 38.3  | 31.2 | 29.5   |
| 17.5° | 286.1  | 291.0  | 273.5  | 247.8  | 218.8  | 183.8 | 153.7 | 76.0  | 37.2  | 29.0 | 27.9   |
| 20°   | 448.5  | 448.0  | 414.1  | 381.8  | 326.0  | 274.6 | 218.3 | 93.0  | 35.6  | 26.3 | 26.3   |
| 22.5° | 648.2  | 650.4  | 608.8  | 550.8  | 471.5  | 388.9 | 299.2 | 112.7 | 33.4  | 24.1 | 24.6   |
| 25°   | 868.6  | 850.0  | 800.8  | 730.2  | 629.0  | 514.7 | 396.6 | 132.9 | 31.2  | 21.9 | 23.0   |
| 27.5° | 1052.4 | 1034.4 | 978.0  | 894.3  | 785.5  | 649.8 | 495.6 | 153.2 | 28.4  | 19.7 | 21.3   |
| 30°   | 1223.6 | 1200.7 | 1132.8 | 1038.2 | 908.6  | 762.0 | 588.6 | 170.1 | 25.2  | 17.0 | 19.7   |
| 32.5° | 1364.8 | 1344.0 | 1266.8 | 1156.9 | 1015.8 | 858.2 | 667.3 | 183.2 | 21.9  | 15.3 | 18.6   |
| 35°   | 1459.9 | 1438.6 | 1367.5 | 1246.6 | 1092.9 | 928.2 | 731.3 | 188.7 | 19.1  | 13.7 | 18.1   |
| 37.5° | 1481.8 | 1470.3 | 1419.5 | 1306.2 | 1146.0 | 973.1 | 772.4 | 187.1 | 15.9  | 12.6 | 17.0   |
| 40°   | 1456.6 | 1459.4 | 1435.3 | 1341.2 | 1174.4 | 992.2 | 789.3 | 178.3 | 13.1  | 11.5 | 16.4   |
| 42.5° | 1424.4 | 1431.5 | 1429.8 | 1355.5 | 1186.4 | 993.3 | 782.2 | 160.8 | 10.4  | 10.4 | 15.9   |
| 45°   | 1397.0 | 1404.1 | 1414.0 | 1349.4 | 1178.2 | 979.1 | 759.8 | 137.3 | 7.7   | 9.8  | 15.9   |
| 47.5° | 1347.2 | 1354.9 | 1369.1 | 1301.3 | 1136.7 | 942.5 | 719.3 | 111.6 | 5.5   | 9.3  | 15.3   |
| 50°   | 1267.9 | 1271.8 | 1267.9 | 1191.9 | 1056.8 | 883.4 | 653.7 | 87.0  | 3.8   | 8.8  | 15.3   |
| 52.5° | 1186.4 | 1178.8 | 1147.0 | 1050.8 | 929.9  | 789.9 | 571.1 | 61.8  | 2.7   | 8.2  | 14.8   |
| 55°   | 961.6  | 949.6  | 926.1  | 867.0  | 798.1  | 675.0 | 461.7 | 34.5  | 2.7   | 8.2  | 14.2   |
| 57.5° | 670.1  | 676.6  | 684.8  | 672.8  | 641.1  | 531.7 | 350.6 | 15.3  | 2.7   | 7.7  | 14.2   |
| 60°   | 563.4  | 557.9  | 558.5  | 550.8  | 498.3  | 387.8 | 241.2 | 6.0   | 2.7   | 7.1  | 13.7   |
| 62.5° | 336.4  | 340.2  | 347.3  | 349.0  | 297.0  | 216.6 | 126.4 | 2.7   | 2.7   | 6.6  | 13.1   |
| 65°   | 126.4  | 132.4  | 116.0  | 100.6  | 79.9   | 58.5  | 29.5  | 2.2   | 3.3   | 6.0  | 12.0   |
| 67.5° | 3.8    | 4.4    | 5.5    | 4.9    | 4.9    | 4.4   | 3.3   | 2.2   | 3.3   | 5.5  | 11.5   |
| 70°   | 2.7    | 2.7    | 2.7    | 2.7    | 2.7    | 2.2   | 2.2   | 2.2   | 2.7   | 4.9  | 10.4   |
| 72.5° | 2.2    | 2.2    | 2.2    | 2.2    | 2.2    | 2.2   | 2.2   | 2.2   | 2.7   | 4.4  | 9.3    |
| 75°   | 1.6    | 2.2    | 1.6    | 1.6    | 1.6    | 1.6   | 1.6   | 1.6   | 2.7   | 3.8  | 7.7    |
| 77.5° | 1.6    | 1.6    | 1.6    | 1.6    | 1.6    | 1.6   | 1.6   | 1.6   | 2.2   | 3.3  | 6.6    |
| 80°   | 1.1    | 1.1    | 1.1    | 1.1    | 1.1    | 1.1   | 1.1   | 1.6   | 2.2   | 2.7  | 5.5    |
| 82.5° | 1.1    | 1.1    | 1.1    | 0.5    | 1.1    | 1.1   | 1.1   | 1.1   | 2.2   | 2.2  | 4.4    |
| 85°   | 0.5    | 0.5    | 0.5    | 0.5    | 0.5    | 0.5   | 0.5   | 1.1   | 1.6   | 2.2  | 2.7    |
| 87.5° | 0.0    | 0.0    | 0.0    | 0.0    | 0.5    | 0.5   | 0.5   | 1.1   | 1.6   | 1.6  | 1.6    |
| 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°    | 38.3 | 38.3   | 38.3 |
| 2.5°  | 36.1 | 36.1   | 36.1 |
| 5°    | 35.0 | 35.0   | 35.0 |
| 7.5°  | 33.9 | 33.9   | 33.9 |
| 10°   | 32.8 | 32.8   | 32.8 |
| 12.5° | 31.7 | 31.7   | 32.3 |
| 15°   | 30.1 | 31.2   | 31.2 |
| 17.5° | 29.0 | 30.1   | 30.6 |
| 20°   | 27.9 | 29.0   | 29.5 |
| 22.5° | 26.3 | 27.9   | 29.0 |
| 25°   | 25.2 | 27.3   | 27.9 |
| 27.5° | 24.1 | 26.8   | 27.9 |
| 30°   | 23.5 | 26.3   | 27.3 |
| 32.5° | 22.4 | 25.7   | 26.8 |
| 35°   | 21.9 | 25.7   | 26.8 |
| 37.5° | 21.9 | 25.2   | 26.8 |
| 40°   | 21.3 | 25.2   | 26.8 |
| 42.5° | 21.3 | 25.2   | 26.8 |
| 45°   | 21.3 | 25.2   | 26.8 |
| 47.5° | 20.8 | 25.2   | 27.3 |
| 50°   | 20.8 | 25.7   | 27.3 |
| 52.5° | 20.8 | 25.7   | 27.3 |
| 55°   | 20.8 | 25.7   | 26.8 |
| 57.5° | 20.2 | 25.2   | 26.8 |
| 60°   | 20.2 | 25.2   | 26.8 |
| 62.5° | 19.1 | 24.6   | 26.3 |
| 65°   | 18.6 | 24.1   | 25.7 |
| 67.5° | 17.5 | 23.5   | 24.6 |
| 70°   | 16.4 | 21.9   | 23.5 |
| 72.5° | 14.8 | 20.8   | 22.4 |
| 75°   | 13.1 | 19.1   | 20.2 |
| 77.5° | 11.5 | 17.0   | 18.1 |
| 80°   | 9.3  | 14.2   | 15.3 |
| 82.5° | 7.1  | 10.9   | 11.5 |
| 85°   | 4.9  | 7.1    | 7.7  |
| 87.5° | 2.2  | 3.3    | 3.8  |
| 90°   | 0.0  | 0.0    | 0.0  |

(END OF REPORT)