

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: P1311520

Luminaire Tested: LDSQA3D13R459040DE010 3LSQCA45R 1MB

Issue Date: 1/29/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1311520  
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: LDSQA3D13R459040DE010 3LSQCA45R 1MB  
Description: 3in Adjustable LED luminaire with, R45 optic, 4000K CCT AND, 90CRI , 3LSQCA45R 1MB TRIM  
Light Source: -  
Ballast/Driver: -

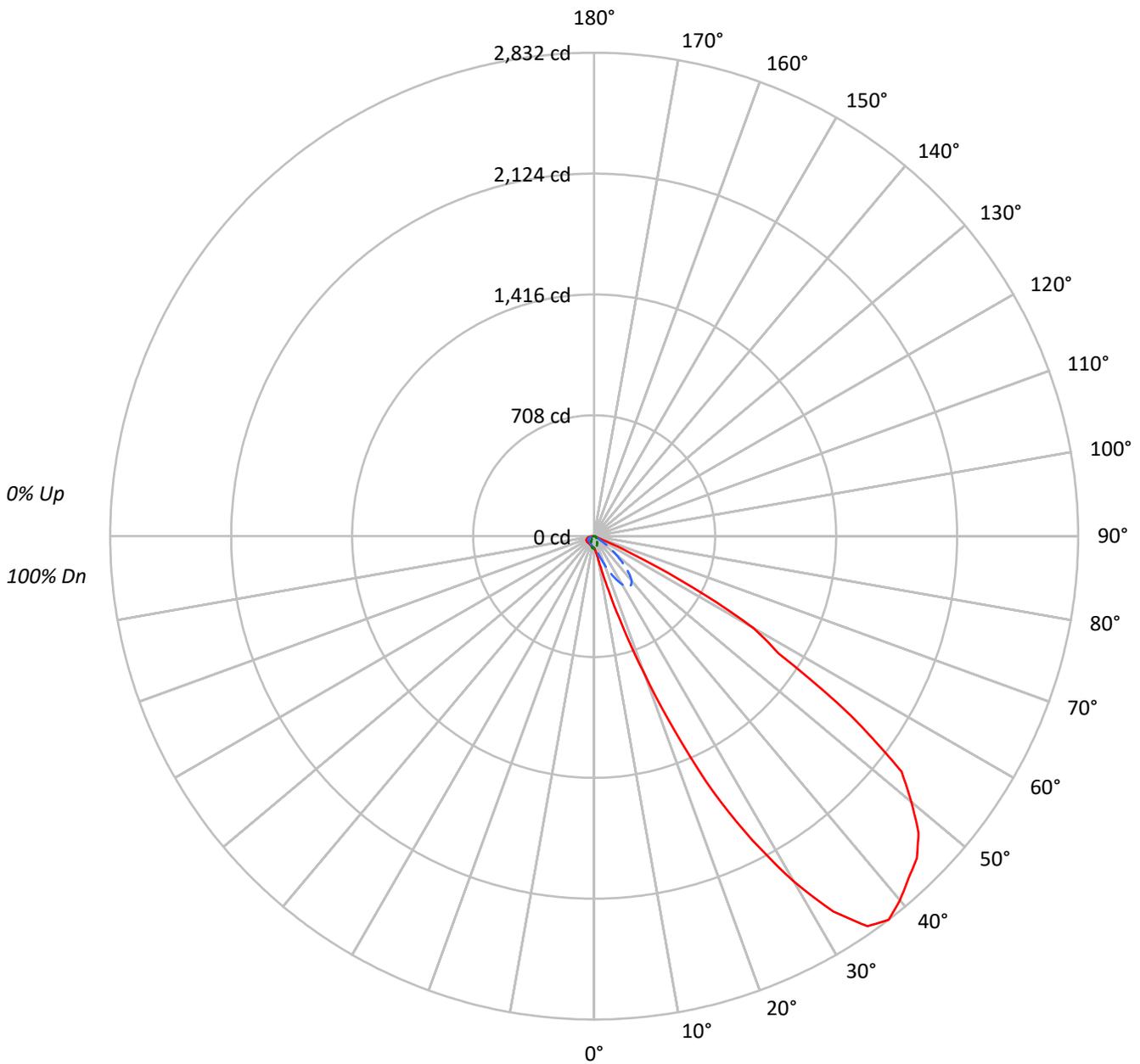
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1265.0 lumens  
Efficiency: N/A  
Efficacy: 86.6 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): 14.6  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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

TEST NUMBER: P1311520  
CATALOG NUMBER: LDSQA3D13R459040DE010 3LSQCA45R 1MB

### Luminous Intensity Polar Plot



— 0°-180°    - - 45°-225°    - - - 90°-270°



TEST NUMBER: P1311520

CATALOG NUMBER: LDSQA3D13R459040DE010 3LSQCA45R 1MB

**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  | 0   |
| RCR |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 0   | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 |
| 1   | 110 | 106 | 102 | 99  | 107 | 104 | 100 | 97  | 99  | 97  | 94  | 96  | 93  | 91  | 92  | 90  | 88  | 86  |
| 2   | 100 | 93  | 86  | 81  | 98  | 91  | 85  | 80  | 87  | 83  | 78  | 84  | 80  | 77  | 81  | 78  | 75  | 73  |
| 3   | 91  | 81  | 73  | 67  | 89  | 80  | 72  | 66  | 77  | 70  | 65  | 74  | 69  | 64  | 71  | 67  | 63  | 61  |
| 4   | 83  | 71  | 62  | 56  | 81  | 70  | 62  | 55  | 67  | 60  | 55  | 65  | 59  | 54  | 63  | 58  | 53  | 51  |
| 5   | 76  | 63  | 53  | 47  | 73  | 61  | 53  | 46  | 59  | 52  | 46  | 57  | 51  | 45  | 55  | 50  | 45  | 43  |
| 6   | 69  | 55  | 46  | 39  | 67  | 54  | 46  | 39  | 52  | 45  | 39  | 51  | 44  | 39  | 49  | 43  | 38  | 36  |
| 7   | 63  | 49  | 40  | 34  | 61  | 48  | 40  | 33  | 47  | 39  | 33  | 45  | 38  | 33  | 44  | 37  | 33  | 31  |
| 8   | 58  | 44  | 35  | 29  | 56  | 43  | 35  | 29  | 42  | 34  | 29  | 40  | 33  | 28  | 39  | 33  | 28  | 26  |
| 9   | 53  | 39  | 31  | 25  | 52  | 39  | 30  | 25  | 38  | 30  | 25  | 36  | 29  | 25  | 35  | 29  | 24  | 22  |
| 10  | 49  | 36  | 27  | 22  | 48  | 35  | 27  | 22  | 34  | 27  | 21  | 33  | 26  | 21  | 32  | 26  | 21  | 19  |

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

|     | 0°     | 45°   | 90°   | 135°  | 180°  |
|-----|--------|-------|-------|-------|-------|
| 0°  | 12607  | 12607 | 12607 | 12607 | 12607 |
| 5°  | 15006  | 13917 | 12465 | 11566 | 11566 |
| 10° | 23941  | 16264 | 11699 | 10965 | 10965 |
| 15° | 59641  | 21806 | 10627 | 10252 | 10627 |
| 20° | 157085 | 32568 | 9200  | 9769  | 10337 |
| 25° | 315406 | 48267 | 7943  | 9140  | 10128 |
| 30° | 464987 | 64651 | 6443  | 8929  | 10401 |
| 35° | 586521 | 75814 | 5487  | 8788  | 10765 |
| 40° | 625788 | 76596 | 4946  | 9173  | 11511 |
| 45° | 650182 | 63910 | 4579  | 9937  | 12470 |
| 50° | 649170 | 44530 | 4474  | 10637 | 14013 |
| 55° | 551730 | 19787 | 4714  | 11920 | 15373 |
| 60° | 370830 | 3961  | 4684  | 13330 | 17636 |
| 65° | 98415  | 1712  | 4686  | 14467 | 20009 |
| 70° | 2618   | 2115  | 4733  | 15811 | 22609 |
| 75° | 2063   | 2063  | 4858  | 16702 | 25752 |
| 80° | 2083   | 3075  | 5157  | 17654 | 29059 |
| 85° | 1976   | 4150  | 8299  | 18575 | 28850 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 10°  
 Vertical Angle: 47.5°  
 Luminance: 666926 cd/sqm



TEST NUMBER: P1311520

CATALOG NUMBER: LDSQA3D13R459040DE010 3LSQCA45R 1MB

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 7.3    | 0.6       |
| 10°-20°   | 35.7   | 2.8       |
| 20°-30°   | 147.2  | 11.6      |
| 30°-40°   | 310.1  | 24.5      |
| 40°-50°   | 382.6  | 30.2      |
| 50°-60°   | 286.8  | 22.7      |
| 60°-70°   | 73.8   | 5.8       |
| 70°-80°   | 15.3   | 1.2       |
| 80°-90°   | 6.2    | 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°    | 190.1  | 15.0      |
| 0°-40°    | 500.3  | 39.5      |
| 0°-60°    | 1169.7 | 92.5      |
| 0°-90°    | 1265.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 1265.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 45° | 90° | 135° | 180° | Flux |
|-----|------|-----|-----|------|------|------|
| 0°  | 73   | 73  | 73  | 73   | 73   |      |
| 5°  | 87   | 80  | 72  | 67   | 67   | 10   |
| 15° | 334  | 122 | 60  | 58   | 60   | 122  |
| 25° | 1660 | 254 | 42  | 48   | 53   | 773  |
| 35° | 2790 | 361 | 26  | 42   | 51   | 1700 |
| 45° | 2670 | 262 | 19  | 41   | 51   | 2043 |
| 55° | 1838 | 66  | 16  | 40   | 51   | 1587 |
| 65° | 242  | 4   | 12  | 36   | 49   | 348  |
| 75° | 3    | 3   | 7   | 25   | 39   | 4    |
| 85° | 1    | 2   | 4   | 9    | 15   | 1    |
| 90° | 0    | 0   | 0   | 0    | 0    |      |



TEST NUMBER: P1311520  
 CATALOG NUMBER: LDSQA3D13R459040DE010 3LSQCA45R 1MB

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 10°    | 15°    | 20°    | 25°    | 30°    | 45°   | 67.5° | 90°  | 112.5° |
|-------|--------|--------|--------|--------|--------|--------|--------|-------|-------|------|--------|
| 0°    | 73.2   | 73.2   | 73.2   | 73.2   | 73.2   | 73.2   | 73.2   | 73.2  | 73.2  | 73.2 | 73.2   |
| 2.5°  | 77.3   | 77.3   | 77.3   | 77.3   | 77.3   | 77.3   | 77.3   | 76.3  | 75.3  | 73.2 | 71.1   |
| 5°    | 86.8   | 85.7   | 85.7   | 85.7   | 84.7   | 83.6   | 83.6   | 80.5  | 76.3  | 72.1 | 69.0   |
| 7.5°  | 102.4  | 102.4  | 101.4  | 99.3   | 98.3   | 96.2   | 94.1   | 85.7  | 76.3  | 70.0 | 65.9   |
| 10°   | 136.9  | 134.8  | 131.7  | 129.6  | 124.4  | 117.1  | 111.8  | 93.0  | 75.3  | 66.9 | 63.8   |
| 12.5° | 204.9  | 209.0  | 198.6  | 188.1  | 173.5  | 159.9  | 143.2  | 105.6 | 75.3  | 63.8 | 60.6   |
| 15°   | 334.5  | 341.8  | 321.9  | 301.0  | 265.5  | 232.0  | 200.7  | 122.3 | 73.2  | 59.6 | 56.4   |
| 17.5° | 546.7  | 556.1  | 522.6  | 473.5  | 418.1  | 351.2  | 293.7  | 145.3 | 71.1  | 55.4 | 53.3   |
| 20°   | 857.1  | 856.1  | 791.2  | 729.6  | 623.0  | 524.7  | 417.1  | 177.7 | 67.9  | 50.2 | 50.2   |
| 22.5° | 1238.6 | 1242.8 | 1163.4 | 1052.6 | 901.0  | 743.2  | 571.7  | 215.3 | 63.8  | 46.0 | 47.0   |
| 25°   | 1659.8 | 1624.3 | 1530.2 | 1395.4 | 1202.0 | 983.6  | 757.8  | 254.0 | 59.6  | 41.8 | 43.9   |
| 27.5° | 2011.0 | 1976.5 | 1868.9 | 1709.0 | 1501.0 | 1241.7 | 947.0  | 292.7 | 54.4  | 37.6 | 40.8   |
| 30°   | 2338.2 | 2294.3 | 2164.7 | 1983.9 | 1736.1 | 1456.0 | 1124.7 | 325.1 | 48.1  | 32.4 | 37.6   |
| 32.5° | 2607.9 | 2568.2 | 2420.8 | 2210.7 | 1941.0 | 1640.0 | 1275.2 | 350.2 | 41.8  | 29.3 | 35.5   |
| 35°   | 2789.7 | 2749.0 | 2613.1 | 2382.1 | 2088.4 | 1773.8 | 1397.5 | 360.6 | 36.6  | 26.1 | 34.5   |
| 37.5° | 2831.6 | 2809.6 | 2712.4 | 2496.0 | 2189.8 | 1859.5 | 1475.9 | 357.5 | 30.3  | 24.0 | 32.4   |
| 40°   | 2783.5 | 2788.7 | 2742.7 | 2562.9 | 2244.1 | 1896.1 | 1508.3 | 340.7 | 25.1  | 22.0 | 31.4   |
| 42.5° | 2721.8 | 2735.4 | 2732.3 | 2590.1 | 2267.1 | 1898.2 | 1494.7 | 307.3 | 19.9  | 19.9 | 30.3   |
| 45°   | 2669.5 | 2683.1 | 2701.9 | 2578.6 | 2251.4 | 1871.0 | 1451.8 | 262.4 | 14.6  | 18.8 | 30.3   |
| 47.5° | 2574.4 | 2589.1 | 2616.2 | 2486.6 | 2172.0 | 1800.9 | 1374.5 | 213.2 | 10.5  | 17.8 | 29.3   |
| 50°   | 2422.9 | 2430.2 | 2422.9 | 2277.6 | 2019.4 | 1688.1 | 1249.1 | 166.2 | 7.3   | 16.7 | 29.3   |
| 52.5° | 2267.1 | 2252.5 | 2191.9 | 2007.9 | 1776.9 | 1509.3 | 1091.2 | 118.1 | 5.2   | 15.7 | 28.2   |
| 55°   | 1837.5 | 1814.5 | 1769.6 | 1656.7 | 1525.0 | 1289.8 | 882.2  | 65.9  | 5.2   | 15.7 | 27.2   |
| 57.5° | 1280.4 | 1293.0 | 1308.6 | 1285.6 | 1225.0 | 1016.0 | 670.0  | 29.3  | 5.2   | 14.6 | 27.2   |
| 60°   | 1076.6 | 1066.1 | 1067.2 | 1052.6 | 952.2  | 741.1  | 461.0  | 11.5  | 5.2   | 13.6 | 26.1   |
| 62.5° | 642.8  | 650.1  | 663.7  | 666.9  | 567.6  | 413.9  | 241.5  | 5.2   | 5.2   | 12.5 | 25.1   |
| 65°   | 241.5  | 252.9  | 221.6  | 192.3  | 152.6  | 111.8  | 56.4   | 4.2   | 6.3   | 11.5 | 23.0   |
| 67.5° | 7.3    | 8.4    | 10.5   | 9.4    | 9.4    | 8.4    | 6.3    | 4.2   | 6.3   | 10.5 | 22.0   |
| 70°   | 5.2    | 5.2    | 5.2    | 5.2    | 5.2    | 4.2    | 4.2    | 4.2   | 5.2   | 9.4  | 19.9   |
| 72.5° | 4.2    | 4.2    | 4.2    | 4.2    | 4.2    | 4.2    | 4.2    | 4.2   | 5.2   | 8.4  | 17.8   |
| 75°   | 3.1    | 4.2    | 3.1    | 3.1    | 3.1    | 3.1    | 3.1    | 3.1   | 5.2   | 7.3  | 14.6   |
| 77.5° | 3.1    | 3.1    | 3.1    | 3.1    | 3.1    | 3.1    | 3.1    | 3.1   | 4.2   | 6.3  | 12.5   |
| 80°   | 2.1    | 2.1    | 2.1    | 2.1    | 2.1    | 2.1    | 2.1    | 3.1   | 4.2   | 5.2  | 10.5   |
| 82.5° | 2.1    | 2.1    | 2.1    | 1.0    | 2.1    | 2.1    | 2.1    | 2.1   | 4.2   | 4.2  | 8.4    |
| 85°   | 1.0    | 1.0    | 1.0    | 1.0    | 1.0    | 1.0    | 1.0    | 2.1   | 3.1   | 4.2  | 5.2    |
| 87.5° | 0.0    | 0.0    | 0.0    | 0.0    | 1.0    | 1.0    | 1.0    | 2.1   | 3.1   | 3.1  | 3.1    |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0   | 0.0   | 0.0  | 0.0    |



TEST NUMBER: P1311520  
 CATALOG NUMBER: LDSQA3D13R459040DE010 3LSQCA45R 1MB

**CANDELA DISTRIBUTION (continued):**

|       | 135° | 157.5° | 180° |
|-------|------|--------|------|
| 0°    | 73.2 | 73.2   | 73.2 |
| 2.5°  | 69.0 | 69.0   | 69.0 |
| 5°    | 66.9 | 66.9   | 66.9 |
| 7.5°  | 64.8 | 64.8   | 64.8 |
| 10°   | 62.7 | 62.7   | 62.7 |
| 12.5° | 60.6 | 60.6   | 61.7 |
| 15°   | 57.5 | 59.6   | 59.6 |
| 17.5° | 55.4 | 57.5   | 58.5 |
| 20°   | 53.3 | 55.4   | 56.4 |
| 22.5° | 50.2 | 53.3   | 55.4 |
| 25°   | 48.1 | 52.3   | 53.3 |
| 27.5° | 46.0 | 51.2   | 53.3 |
| 30°   | 44.9 | 50.2   | 52.3 |
| 32.5° | 42.9 | 49.1   | 51.2 |
| 35°   | 41.8 | 49.1   | 51.2 |
| 37.5° | 41.8 | 48.1   | 51.2 |
| 40°   | 40.8 | 48.1   | 51.2 |
| 42.5° | 40.8 | 48.1   | 51.2 |
| 45°   | 40.8 | 48.1   | 51.2 |
| 47.5° | 39.7 | 48.1   | 52.3 |
| 50°   | 39.7 | 49.1   | 52.3 |
| 52.5° | 39.7 | 49.1   | 52.3 |
| 55°   | 39.7 | 49.1   | 51.2 |
| 57.5° | 38.7 | 48.1   | 51.2 |
| 60°   | 38.7 | 48.1   | 51.2 |
| 62.5° | 36.6 | 47.0   | 50.2 |
| 65°   | 35.5 | 46.0   | 49.1 |
| 67.5° | 33.4 | 44.9   | 47.0 |
| 70°   | 31.4 | 41.8   | 44.9 |
| 72.5° | 28.2 | 39.7   | 42.9 |
| 75°   | 25.1 | 36.6   | 38.7 |
| 77.5° | 22.0 | 32.4   | 34.5 |
| 80°   | 17.8 | 27.2   | 29.3 |
| 82.5° | 13.6 | 20.9   | 22.0 |
| 85°   | 9.4  | 13.6   | 14.6 |
| 87.5° | 4.2  | 6.3    | 7.3  |
| 90°   | 0.0  | 0.0    | 0.0  |

(END OF REPORT)