

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: P1309621

Luminaire Tested: LDSQA3D20R659030D010 3LSQCA45R 1MB

Issue Date: 1/29/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1309621  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-82)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/29/2026  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: PORTFOLIO  
Catalog Number: LDSQA3D20R659030D010 3LSQCA45R 1MB  
Description: 3in Adjustable LED luminaire with, R65 optic, 3000K CCT AND, 90CRI , 3LSQCA45R 1MB TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

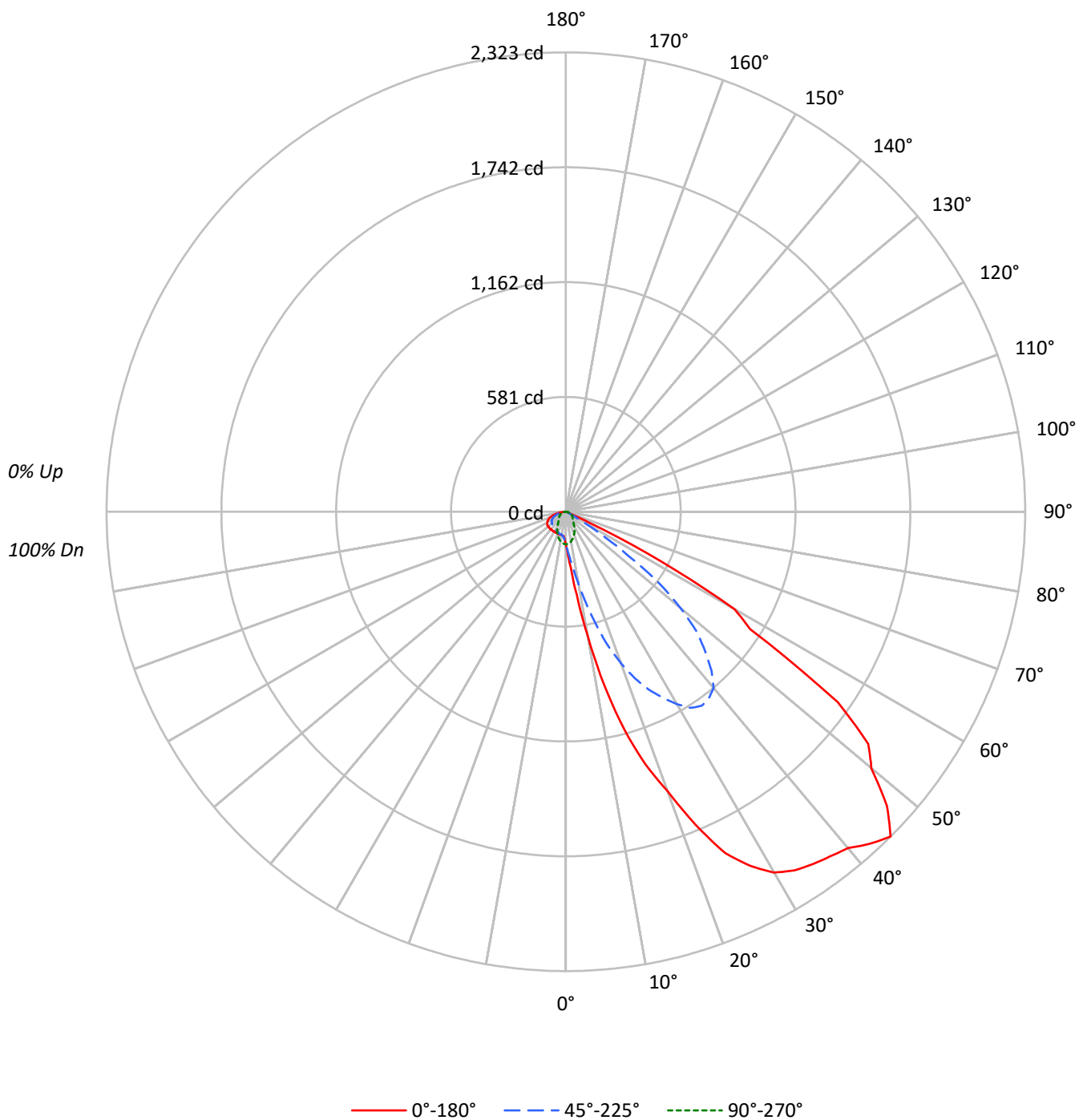
Lumens per Lamp: N/A  
Luminaire Lumens: 1685.0 lumens  
Efficiency: N/A  
Efficacy: 58.5 lumens/watt  
Spacing Criteria (0/90/45): 3.28 / 0.89 / 2.04  
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')  
CIE Type: Direct

Input Watts (W): 28.8  
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 | 102 | 99  | 108 | 104 | 100 | 97  | 100 | 97  | 94  | 96  | 94  | 91  | 92  | 90  | 89  | 87  |    |    |
| 2   | 101 | 93  | 87  | 82  | 98  | 92  | 86  | 81  | 88  | 83  | 79  | 85  | 81  | 77  | 82  | 79  | 76  | 74  |    |    |
| 3   | 92  | 82  | 75  | 69  | 90  | 81  | 74  | 68  | 78  | 72  | 67  | 75  | 70  | 66  | 73  | 68  | 65  | 62  |    |    |
| 4   | 84  | 73  | 64  | 58  | 82  | 71  | 63  | 57  | 69  | 62  | 57  | 67  | 61  | 56  | 64  | 59  | 55  | 53  |    |    |
| 5   | 77  | 64  | 56  | 49  | 75  | 63  | 55  | 49  | 61  | 54  | 48  | 59  | 53  | 48  | 57  | 52  | 47  | 45  |    |    |
| 6   | 71  | 57  | 49  | 42  | 69  | 57  | 48  | 42  | 55  | 47  | 42  | 53  | 46  | 41  | 51  | 46  | 41  | 39  |    |    |
| 7   | 65  | 52  | 43  | 37  | 63  | 51  | 42  | 36  | 49  | 42  | 36  | 48  | 41  | 36  | 46  | 40  | 36  | 34  |    |    |
| 8   | 60  | 46  | 38  | 32  | 58  | 46  | 38  | 32  | 44  | 37  | 32  | 43  | 36  | 31  | 42  | 36  | 31  | 29  |    |    |
| 9   | 56  | 42  | 34  | 28  | 54  | 41  | 33  | 28  | 40  | 33  | 28  | 39  | 33  | 28  | 38  | 32  | 28  | 26  |    |    |
| 10  | 52  | 38  | 30  | 25  | 50  | 38  | 30  | 25  | 37  | 30  | 25  | 36  | 29  | 25  | 35  | 29  | 24  | 23  |    |    |

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

|     | 0°     | 45°    | 90°   | 135°  | 180°  |
|-----|--------|--------|-------|-------|-------|
| 0°  | 28227  | 28227  | 28227 | 28227 | 28227 |
| 5°  | 49357  | 40298  | 27747 | 22492 | 21610 |
| 10° | 111678 | 65003  | 26599 | 20688 | 20986 |
| 15° | 203028 | 104536 | 24694 | 20790 | 21396 |
| 20° | 275280 | 149241 | 22286 | 20747 | 21681 |
| 25° | 361830 | 188449 | 19592 | 20219 | 22157 |
| 30° | 418970 | 223425 | 16804 | 20165 | 23188 |
| 35° | 457514 | 251831 | 14213 | 20604 | 24515 |
| 40° | 499102 | 261332 | 12545 | 21650 | 26214 |
| 45° | 565789 | 242366 | 11934 | 23041 | 28399 |
| 50° | 540497 | 202341 | 11762 | 24435 | 31241 |
| 55° | 503748 | 113619 | 12161 | 26393 | 34500 |
| 60° | 339279 | 24456  | 12228 | 27935 | 37235 |
| 65° | 52325  | 6194   | 11696 | 28933 | 40629 |
| 70° | 5942   | 5942   | 11078 | 29760 | 43406 |
| 75° | 5590   | 5590   | 10114 | 29212 | 43851 |
| 80° | 5058   | 6744   | 10017 | 26778 | 43540 |
| 85° | 3359   | 6719   | 10078 | 26676 | 40113 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 565789 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 19.9   | 1.2       |
| 10°-20°   | 107.1  | 6.4       |
| 20°-30°   | 251.7  | 14.9      |
| 30°-40°   | 380.3  | 22.6      |
| 40°-50°   | 437.2  | 25.9      |
| 50°-60°   | 347.1  | 20.6      |
| 60°-70°   | 104.0  | 6.2       |
| 70°-80°   | 28.3   | 1.7       |
| 80°-90°   | 9.5    | 0.6       |
| 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°    | 378.7  | 22.5      |
| 0°-40°    | 759.0  | 45.0      |
| 0°-60°    | 1543.3 | 91.6      |
| 0°-90°    | 1685.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 1685.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 45°  | 90° | 135° | 180° | Flux |
|-----|------|------|-----|------|------|------|
| 0°  | 164  | 164  | 164 | 164  | 164  |      |
| 5°  | 286  | 233  | 160 | 130  | 125  | 38   |
| 15° | 1139 | 586  | 138 | 117  | 120  | 328  |
| 25° | 1904 | 992  | 103 | 106  | 117  | 869  |
| 35° | 2176 | 1198 | 68  | 98   | 117  | 1365 |
| 45° | 2323 | 995  | 49  | 95   | 117  | 1726 |
| 55° | 1678 | 378  | 40  | 88   | 115  | 1382 |
| 65° | 128  | 15   | 29  | 71   | 100  | 288  |
| 75° | 8    | 8    | 15  | 44   | 66   | 9    |
| 85° | 2    | 3    | 5   | 14   | 20   | 3    |
| 90° | 0    | 0    | 0   | 0    | 0    |      |

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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 10°    | 15°    | 20°    | 22.5°  | 45°    | 67.5° | 90°   | 112.5° | 135°  |
|-------|--------|--------|--------|--------|--------|--------|--------|-------|-------|--------|-------|
| 0°    | 163.9  | 163.9  | 163.9  | 163.9  | 163.9  | 163.9  | 163.9  | 163.9 | 163.9 | 163.9  | 163.9 |
| 2.5°  | 207.8  | 209.5  | 207.8  | 207.8  | 206.1  | 204.4  | 192.6  | 179.1 | 163.9 | 152.1  | 143.6 |
| 5°    | 285.5  | 287.2  | 282.1  | 282.1  | 278.8  | 273.7  | 233.1  | 194.3 | 160.5 | 141.9  | 130.1 |
| 7.5°  | 422.4  | 429.1  | 420.7  | 410.5  | 392.0  | 388.6  | 290.6  | 209.5 | 157.1 | 131.8  | 121.6 |
| 10°   | 638.6  | 633.6  | 625.1  | 604.8  | 572.7  | 557.5  | 371.7  | 224.7 | 152.1 | 125.0  | 118.3 |
| 12.5° | 900.5  | 887.0  | 876.8  | 839.7  | 795.8  | 770.4  | 473.1  | 238.2 | 145.3 | 118.3  | 116.6 |
| 15°   | 1138.7 | 1128.6 | 1104.9 | 1069.4 | 1015.4 | 995.1  | 586.3  | 246.7 | 138.5 | 113.2  | 116.6 |
| 17.5° | 1339.8 | 1329.6 | 1316.1 | 1280.6 | 1224.9 | 1194.5 | 713.0  | 251.7 | 130.1 | 109.8  | 114.9 |
| 20°   | 1502.0 | 1495.2 | 1476.6 | 1447.9 | 1392.1 | 1363.4 | 814.3  | 251.7 | 121.6 | 106.4  | 113.2 |
| 22.5° | 1711.5 | 1696.2 | 1672.6 | 1630.4 | 1561.1 | 1517.2 | 910.6  | 246.7 | 113.2 | 103.1  | 109.8 |
| 25°   | 1904.1 | 1893.9 | 1863.5 | 1812.8 | 1738.5 | 1694.6 | 991.7  | 236.5 | 103.1 | 98.0   | 106.4 |
| 27.5° | 2018.9 | 2012.2 | 1983.5 | 1931.1 | 1848.3 | 1814.5 | 1059.3 | 221.3 | 92.9  | 92.9   | 104.7 |
| 30°   | 2106.8 | 2093.3 | 2064.6 | 2013.9 | 1929.4 | 1888.9 | 1123.5 | 202.7 | 84.5  | 87.9   | 101.4 |
| 32.5° | 2150.7 | 2145.7 | 2120.3 | 2076.4 | 1993.6 | 1948.0 | 1175.9 | 179.1 | 74.3  | 84.5   | 99.7  |
| 35°   | 2176.1 | 2171.0 | 2150.7 | 2108.5 | 2030.8 | 1986.8 | 1197.8 | 157.1 | 67.6  | 81.1   | 98.0  |
| 37.5° | 2196.3 | 2191.3 | 2165.9 | 2123.7 | 2046.0 | 2000.4 | 1187.7 | 133.5 | 60.8  | 77.7   | 96.3  |
| 40°   | 2220.0 | 2201.4 | 2162.5 | 2120.3 | 2049.4 | 2005.4 | 1162.4 | 111.5 | 55.8  | 76.0   | 96.3  |
| 42.5° | 2277.4 | 2213.2 | 2152.4 | 2113.6 | 2046.0 | 1995.3 | 1089.7 | 87.9  | 50.7  | 72.6   | 94.6  |
| 45°   | 2323.0 | 2209.9 | 2132.1 | 2101.7 | 2032.5 | 1975.0 | 995.1  | 64.2  | 49.0  | 71.0   | 94.6  |
| 47.5° | 2203.1 | 2133.8 | 2098.3 | 2081.5 | 2007.1 | 1944.6 | 897.1  | 43.9  | 47.3  | 69.3   | 92.9  |
| 50°   | 2017.3 | 2008.8 | 1995.3 | 1997.0 | 1929.4 | 1878.7 | 755.2  | 30.4  | 43.9  | 67.6   | 91.2  |
| 52.5° | 1927.7 | 1917.6 | 1893.9 | 1877.0 | 1809.4 | 1765.5 | 598.1  | 23.7  | 42.2  | 65.9   | 89.5  |
| 55°   | 1677.7 | 1684.4 | 1659.1 | 1669.2 | 1648.9 | 1627.0 | 378.4  | 22.0  | 40.5  | 62.5   | 87.9  |
| 57.5° | 1104.9 | 1138.7 | 1197.8 | 1268.8 | 1333.0 | 1376.9 | 204.4  | 22.0  | 37.2  | 60.8   | 84.5  |
| 60°   | 985.0  | 976.5  | 974.8  | 988.4  | 1017.1 | 1040.7 | 71.0   | 20.3  | 35.5  | 55.8   | 81.1  |
| 62.5° | 538.9  | 535.6  | 586.3  | 672.4  | 723.1  | 728.2  | 20.3   | 20.3  | 32.1  | 52.4   | 76.0  |
| 65°   | 128.4  | 133.5  | 148.7  | 185.8  | 219.6  | 241.6  | 15.2   | 18.6  | 28.7  | 49.0   | 71.0  |
| 67.5° | 20.3   | 22.0   | 22.0   | 27.0   | 30.4   | 30.4   | 13.5   | 16.9  | 25.3  | 43.9   | 65.9  |
| 70°   | 11.8   | 11.8   | 11.8   | 11.8   | 11.8   | 11.8   | 11.8   | 15.2  | 22.0  | 38.9   | 59.1  |
| 72.5° | 10.1   | 10.1   | 10.1   | 10.1   | 10.1   | 10.1   | 11.8   | 13.5  | 18.6  | 33.8   | 50.7  |
| 75°   | 8.4    | 8.4    | 8.4    | 8.4    | 8.4    | 8.4    | 8.4    | 11.8  | 15.2  | 27.0   | 43.9  |
| 77.5° | 6.8    | 6.8    | 6.8    | 6.8    | 6.8    | 6.8    | 8.4    | 10.1  | 13.5  | 22.0   | 35.5  |
| 80°   | 5.1    | 5.1    | 5.1    | 5.1    | 5.1    | 5.1    | 6.8    | 8.4   | 10.1  | 16.9   | 27.0  |
| 82.5° | 3.4    | 3.4    | 3.4    | 3.4    | 3.4    | 3.4    | 5.1    | 6.8   | 8.4   | 13.5   | 20.3  |
| 85°   | 1.7    | 1.7    | 1.7    | 1.7    | 3.4    | 3.4    | 3.4    | 5.1   | 5.1   | 8.4    | 13.5  |
| 87.5° | 1.7    | 1.7    | 1.7    | 1.7    | 1.7    | 1.7    | 3.4    | 3.4   | 3.4   | 5.1    | 6.8   |
| 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):**

|       | 157.5° | 180°  |
|-------|--------|-------|
| 0°    | 163.9  | 163.9 |
| 2.5°  | 138.5  | 136.8 |
| 5°    | 125.0  | 125.0 |
| 7.5°  | 120.0  | 120.0 |
| 10°   | 118.3  | 120.0 |
| 12.5° | 118.3  | 120.0 |
| 15°   | 118.3  | 120.0 |
| 17.5° | 118.3  | 120.0 |
| 20°   | 116.6  | 118.3 |
| 22.5° | 114.9  | 116.6 |
| 25°   | 113.2  | 116.6 |
| 27.5° | 111.5  | 116.6 |
| 30°   | 111.5  | 116.6 |
| 32.5° | 111.5  | 116.6 |
| 35°   | 109.8  | 116.6 |
| 37.5° | 109.8  | 116.6 |
| 40°   | 109.8  | 116.6 |
| 42.5° | 109.8  | 116.6 |
| 45°   | 109.8  | 116.6 |
| 47.5° | 109.8  | 116.6 |
| 50°   | 109.8  | 116.6 |
| 52.5° | 108.1  | 116.6 |
| 55°   | 108.1  | 114.9 |
| 57.5° | 104.7  | 111.5 |
| 60°   | 101.4  | 108.1 |
| 62.5° | 98.0   | 104.7 |
| 65°   | 92.9   | 99.7  |
| 67.5° | 87.9   | 92.9  |
| 70°   | 79.4   | 86.2  |
| 72.5° | 71.0   | 76.0  |
| 75°   | 60.8   | 65.9  |
| 77.5° | 50.7   | 55.8  |
| 80°   | 40.5   | 43.9  |
| 82.5° | 28.7   | 32.1  |
| 85°   | 18.6   | 20.3  |
| 87.5° | 8.4    | 8.4   |
| 90°   | 0.0    | 0.0   |

(END OF REPORT)