

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: P1311556

Luminaire Tested: LDSQA3D13R659040DE010 3LSQCA45R 1MW

Issue Date: 1/29/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1311556  
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: LDSQA3D13R659040DE010 3LSQCA45R 1MW  
Description: 3in Adjustable LED luminaire with, R65 optic, 4000K CCT AND, 90CRI , 3LSQCA45R 1MW TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

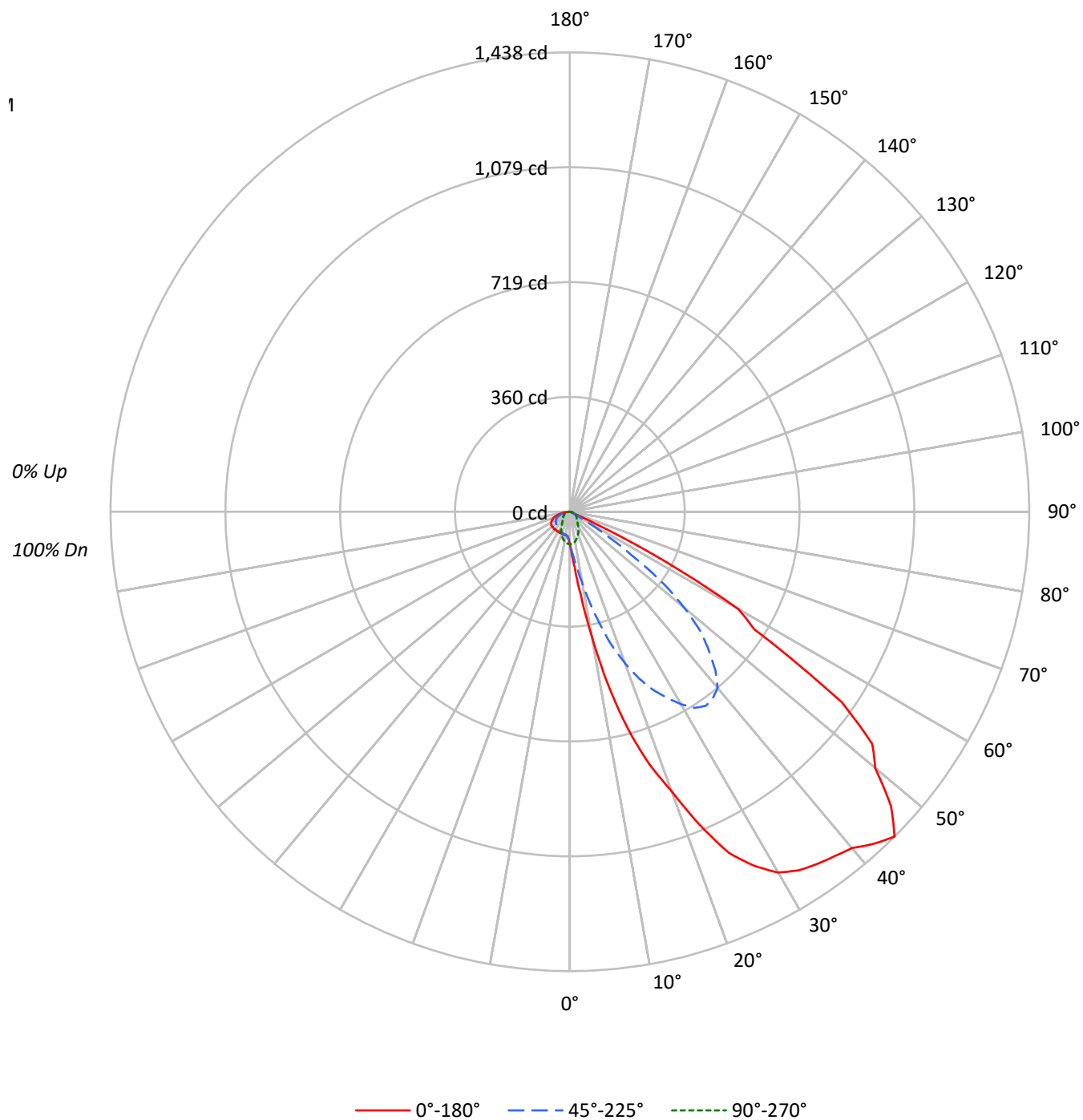
Lumens per Lamp: N/A  
Luminaire Lumens: 1043.0 lumens  
Efficiency: N/A  
Efficacy: 71.4 lumens/watt  
Spacing Criteria (0/90/45): 3.28 / 0.89 / 2.04  
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')  
CIE Type: Direct

Input Watts (W): 14.6  
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 | 100 | 100 |
| 1   | 110 | 106 | 102 | 99  | 108 | 104 | 100 | 97  | 100 | 97  | 94  | 96  | 94  | 91  | 92  | 90  | 89  | 87  | 87  | 87  |
| 2   | 101 | 93  | 87  | 82  | 98  | 92  | 86  | 81  | 88  | 83  | 79  | 85  | 81  | 77  | 82  | 79  | 76  | 74  | 74  | 74  |
| 3   | 92  | 82  | 75  | 69  | 90  | 81  | 74  | 68  | 78  | 72  | 67  | 75  | 70  | 66  | 73  | 68  | 65  | 62  | 62  | 62  |
| 4   | 84  | 73  | 64  | 58  | 82  | 71  | 63  | 57  | 69  | 62  | 57  | 67  | 61  | 56  | 64  | 59  | 55  | 53  | 53  | 53  |
| 5   | 77  | 64  | 56  | 49  | 75  | 63  | 55  | 49  | 61  | 54  | 48  | 59  | 53  | 48  | 57  | 52  | 47  | 45  | 45  | 45  |
| 6   | 71  | 57  | 49  | 42  | 69  | 57  | 48  | 42  | 55  | 47  | 42  | 53  | 46  | 41  | 51  | 46  | 41  | 39  | 39  | 39  |
| 7   | 65  | 52  | 43  | 37  | 63  | 51  | 42  | 36  | 49  | 42  | 36  | 48  | 41  | 36  | 46  | 40  | 36  | 34  | 34  | 34  |
| 8   | 60  | 46  | 38  | 32  | 58  | 46  | 38  | 32  | 44  | 37  | 32  | 43  | 36  | 31  | 42  | 36  | 31  | 29  | 29  | 29  |
| 9   | 56  | 42  | 34  | 28  | 54  | 41  | 33  | 28  | 40  | 33  | 28  | 39  | 33  | 28  | 38  | 32  | 28  | 26  | 26  | 26  |
| 10  | 52  | 38  | 30  | 25  | 50  | 38  | 30  | 25  | 37  | 30  | 25  | 36  | 29  | 25  | 35  | 29  | 24  | 23  | 23  | 23  |

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

|     | 0°     | 45°    | 90°   | 135°  | 180°  |
|-----|--------|--------|-------|-------|-------|
| 0°  | 17463  | 17463  | 17463 | 17463 | 17463 |
| 5°  | 30548  | 24947  | 17167 | 13917 | 13381 |
| 10° | 69130  | 40240  | 16456 | 12801 | 12994 |
| 15° | 125682 | 64704  | 15298 | 12873 | 13248 |
| 20° | 170391 | 92389  | 13801 | 12848 | 13416 |
| 25° | 223965 | 116657 | 12124 | 12523 | 13720 |
| 30° | 259341 | 138291 | 10401 | 12469 | 14358 |
| 35° | 283200 | 155897 | 8788  | 12762 | 15180 |
| 40° | 308949 | 161758 | 7756  | 13399 | 16232 |
| 45° | 350214 | 150033 | 7380  | 14273 | 17585 |
| 50° | 334565 | 125258 | 7288  | 15138 | 19345 |
| 55° | 311821 | 70351  | 7537  | 16334 | 21349 |
| 60° | 210008 | 15121  | 7578  | 17291 | 23043 |
| 65° | 32397  | 3831   | 7254  | 17890 | 25144 |
| 70° | 3676   | 3676   | 6848  | 18430 | 26839 |
| 75° | 3460   | 3460   | 6255  | 18099 | 27149 |
| 80° | 3075   | 4166   | 6248  | 16563 | 26977 |
| 85° | 1976   | 4150   | 6126  | 16599 | 24700 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 350214 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 12.3   | 1.2       |
| 10°-20°   | 66.3   | 6.4       |
| 20°-30°   | 155.8  | 14.9      |
| 30°-40°   | 235.4  | 22.6      |
| 40°-50°   | 270.6  | 25.9      |
| 50°-60°   | 214.8  | 20.6      |
| 60°-70°   | 64.4   | 6.2       |
| 70°-80°   | 17.5   | 1.7       |
| 80°-90°   | 5.9    | 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°    | 234.4  | 22.5      |
| 0°-40°    | 469.9  | 45.0      |
| 0°-60°    | 955.3  | 91.6      |
| 0°-90°    | 1043.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 1043.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 45° | 90° | 135° | 180° | Flux |
|-----|------|-----|-----|------|------|------|
| 0°  | 101  | 101 | 101 | 101  | 101  |      |
| 5°  | 177  | 144 | 99  | 80   | 77   | 24   |
| 15° | 705  | 363 | 86  | 72   | 74   | 203  |
| 25° | 1179 | 614 | 64  | 66   | 72   | 538  |
| 35° | 1347 | 742 | 42  | 61   | 72   | 845  |
| 45° | 1438 | 616 | 30  | 59   | 72   | 1068 |
| 55° | 1038 | 234 | 25  | 54   | 71   | 856  |
| 65° | 80   | 9   | 18  | 44   | 62   | 178  |
| 75° | 5    | 5   | 9   | 27   | 41   | 6    |
| 85° | 1    | 2   | 3   | 8    | 12   | 2    |
| 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°    | 101.4  | 101.4  | 101.4  | 101.4  | 101.4  | 101.4  | 101.4 | 101.4 | 101.4 | 101.4  | 101.4 |
| 2.5°  | 128.6  | 129.7  | 128.6  | 128.6  | 127.6  | 126.5  | 119.2 | 110.9 | 101.4 | 94.1   | 88.9  |
| 5°    | 176.7  | 177.8  | 174.6  | 174.6  | 172.6  | 169.4  | 144.3 | 120.3 | 99.3  | 87.8   | 80.5  |
| 7.5°  | 261.4  | 265.6  | 260.4  | 254.1  | 242.6  | 240.5  | 179.9 | 129.7 | 97.3  | 81.6   | 75.3  |
| 10°   | 395.3  | 392.2  | 386.9  | 374.4  | 354.5  | 345.1  | 230.1 | 139.1 | 94.1  | 77.4   | 73.2  |
| 12.5° | 557.4  | 549.0  | 542.8  | 519.8  | 492.6  | 476.9  | 292.8 | 147.5 | 89.9  | 73.2   | 72.2  |
| 15°   | 704.9  | 698.6  | 683.9  | 662.0  | 628.5  | 616.0  | 362.9 | 152.7 | 85.8  | 70.1   | 72.2  |
| 17.5° | 829.3  | 823.0  | 814.7  | 792.7  | 758.2  | 739.4  | 441.3 | 155.8 | 80.5  | 68.0   | 71.1  |
| 20°   | 929.7  | 925.5  | 914.0  | 896.2  | 861.7  | 843.9  | 504.1 | 155.8 | 75.3  | 65.9   | 70.1  |
| 22.5° | 1059.4 | 1050.0 | 1035.3 | 1009.2 | 966.3  | 939.1  | 563.7 | 152.7 | 70.1  | 63.8   | 68.0  |
| 25°   | 1178.6 | 1172.3 | 1153.5 | 1122.1 | 1076.1 | 1048.9 | 613.9 | 146.4 | 63.8  | 60.7   | 65.9  |
| 27.5° | 1249.7 | 1245.5 | 1227.7 | 1195.3 | 1144.1 | 1123.2 | 655.7 | 137.0 | 57.5  | 57.5   | 64.8  |
| 30°   | 1304.1 | 1295.7 | 1277.9 | 1246.6 | 1194.3 | 1169.2 | 695.4 | 125.5 | 52.3  | 54.4   | 62.7  |
| 32.5° | 1331.3 | 1328.1 | 1312.5 | 1285.3 | 1234.0 | 1205.8 | 727.9 | 110.9 | 46.0  | 52.3   | 61.7  |
| 35°   | 1347.0 | 1343.8 | 1331.3 | 1305.1 | 1257.0 | 1229.8 | 741.5 | 97.3  | 41.8  | 50.2   | 60.7  |
| 37.5° | 1359.5 | 1356.4 | 1340.7 | 1314.5 | 1266.4 | 1238.2 | 735.2 | 82.6  | 37.6  | 48.1   | 59.6  |
| 40°   | 1374.2 | 1362.7 | 1338.6 | 1312.5 | 1268.5 | 1241.3 | 719.5 | 69.0  | 34.5  | 47.1   | 59.6  |
| 42.5° | 1409.7 | 1370.0 | 1332.3 | 1308.3 | 1266.4 | 1235.1 | 674.5 | 54.4  | 31.4  | 45.0   | 58.6  |
| 45°   | 1437.9 | 1367.9 | 1319.8 | 1300.9 | 1258.1 | 1222.5 | 616.0 | 39.7  | 30.3  | 43.9   | 58.6  |
| 47.5° | 1363.7 | 1320.8 | 1298.9 | 1288.4 | 1242.4 | 1203.7 | 555.3 | 27.2  | 29.3  | 42.9   | 57.5  |
| 50°   | 1248.7 | 1243.4 | 1235.1 | 1236.1 | 1194.3 | 1162.9 | 467.5 | 18.8  | 27.2  | 41.8   | 56.5  |
| 52.5° | 1193.2 | 1187.0 | 1172.3 | 1161.9 | 1120.0 | 1092.8 | 370.2 | 14.6  | 26.1  | 40.8   | 55.4  |
| 55°   | 1038.5 | 1042.6 | 1027.0 | 1033.2 | 1020.7 | 1007.1 | 234.3 | 13.6  | 25.1  | 38.7   | 54.4  |
| 57.5° | 683.9  | 704.9  | 741.5  | 785.4  | 825.1  | 852.3  | 126.5 | 13.6  | 23.0  | 37.6   | 52.3  |
| 60°   | 609.7  | 604.5  | 603.4  | 611.8  | 629.6  | 644.2  | 43.9  | 12.5  | 22.0  | 34.5   | 50.2  |
| 62.5° | 333.6  | 331.5  | 362.9  | 416.2  | 447.6  | 450.7  | 12.5  | 12.5  | 19.9  | 32.4   | 47.1  |
| 65°   | 79.5   | 82.6   | 92.0   | 115.0  | 136.0  | 149.5  | 9.4   | 11.5  | 17.8  | 30.3   | 43.9  |
| 67.5° | 12.5   | 13.6   | 13.6   | 16.7   | 18.8   | 18.8   | 8.4   | 10.5  | 15.7  | 27.2   | 40.8  |
| 70°   | 7.3    | 7.3    | 7.3    | 7.3    | 7.3    | 7.3    | 7.3   | 9.4   | 13.6  | 24.1   | 36.6  |
| 72.5° | 6.3    | 6.3    | 6.3    | 6.3    | 6.3    | 6.3    | 7.3   | 8.4   | 11.5  | 20.9   | 31.4  |
| 75°   | 5.2    | 5.2    | 5.2    | 5.2    | 5.2    | 5.2    | 5.2   | 7.3   | 9.4   | 16.7   | 27.2  |
| 77.5° | 4.2    | 4.2    | 4.2    | 4.2    | 4.2    | 4.2    | 5.2   | 6.3   | 8.4   | 13.6   | 22.0  |
| 80°   | 3.1    | 3.1    | 3.1    | 3.1    | 3.1    | 3.1    | 4.2   | 5.2   | 6.3   | 10.5   | 16.7  |
| 82.5° | 2.1    | 2.1    | 2.1    | 2.1    | 2.1    | 2.1    | 3.1   | 4.2   | 5.2   | 8.4    | 12.5  |
| 85°   | 1.0    | 1.0    | 1.0    | 1.0    | 2.1    | 2.1    | 2.1   | 3.1   | 3.1   | 5.2    | 8.4   |
| 87.5° | 1.0    | 1.0    | 1.0    | 1.0    | 1.0    | 1.0    | 2.1   | 2.1   | 2.1   | 3.1    | 4.2   |
| 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°    | 101.4  | 101.4 |
| 2.5°  | 85.8   | 84.7  |
| 5°    | 77.4   | 77.4  |
| 7.5°  | 74.3   | 74.3  |
| 10°   | 73.2   | 74.3  |
| 12.5° | 73.2   | 74.3  |
| 15°   | 73.2   | 74.3  |
| 17.5° | 73.2   | 74.3  |
| 20°   | 72.2   | 73.2  |
| 22.5° | 71.1   | 72.2  |
| 25°   | 70.1   | 72.2  |
| 27.5° | 69.0   | 72.2  |
| 30°   | 69.0   | 72.2  |
| 32.5° | 69.0   | 72.2  |
| 35°   | 68.0   | 72.2  |
| 37.5° | 68.0   | 72.2  |
| 40°   | 68.0   | 72.2  |
| 42.5° | 68.0   | 72.2  |
| 45°   | 68.0   | 72.2  |
| 47.5° | 68.0   | 72.2  |
| 50°   | 68.0   | 72.2  |
| 52.5° | 66.9   | 72.2  |
| 55°   | 66.9   | 71.1  |
| 57.5° | 64.8   | 69.0  |
| 60°   | 62.7   | 66.9  |
| 62.5° | 60.7   | 64.8  |
| 65°   | 57.5   | 61.7  |
| 67.5° | 54.4   | 57.5  |
| 70°   | 49.2   | 53.3  |
| 72.5° | 43.9   | 47.1  |
| 75°   | 37.6   | 40.8  |
| 77.5° | 31.4   | 34.5  |
| 80°   | 25.1   | 27.2  |
| 82.5° | 17.8   | 19.9  |
| 85°   | 11.5   | 12.5  |
| 87.5° | 5.2    | 5.2   |
| 90°   | 0.0    | 0.0   |

(END OF REPORT)