

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: P1326776

Luminaire Tested: LDSQA3D09R45W2N902750DE010 3LSQCA45R 1MW\_5000K

Issue Date: 1/29/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1326776  
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: LDSQA3D09R45W2N902750DE010 3LSQCA45R 1MW\_5000K  
Description: 3in Adjustable Tunable White LED luminaire with, R45 optic, 5000K CCT AND, 90CRI ,  
3LSQCA45R 1MW TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

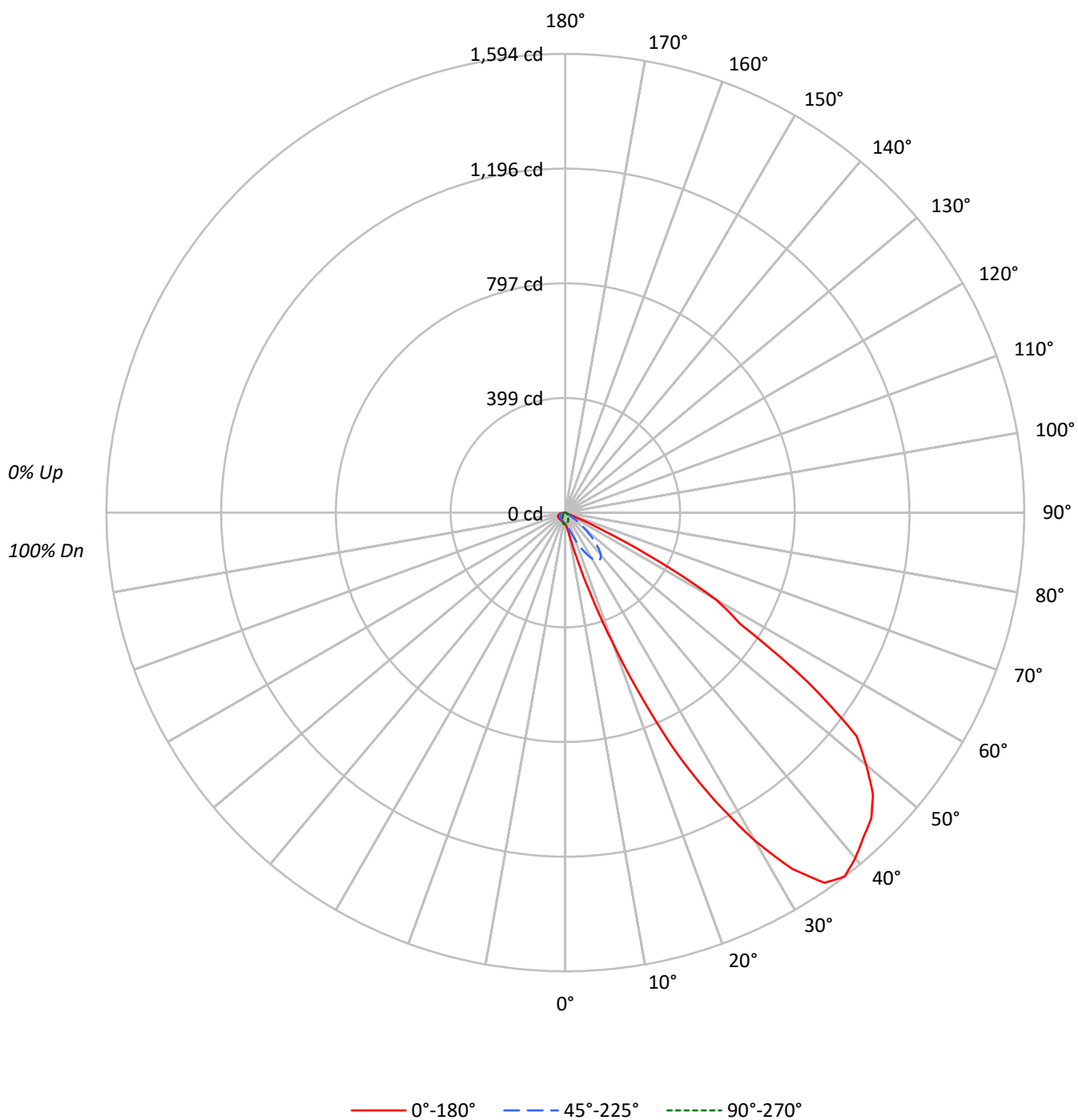
Lumens per Lamp: N/A  
Luminaire Lumens: 712.0 lumens  
Efficiency: N/A  
Efficacy: 79.1 lumens/watt  
Spacing Criteria (0/90/45): 3.81 / 0.82 / 1.83  
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')  
CIE Type: Direct

Input Watts (W): 9  
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  |     |     |     | 0   |
| 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°  | 7096   | 7096  | 7096 | 7096  | 7096  |
| 5°  | 8437   | 7831  | 7019 | 6518  | 6518  |
| 10° | 13483  | 9164  | 6593 | 6173  | 6173  |
| 15° | 33574  | 12267 | 5973 | 5777  | 5973  |
| 20° | 88412  | 18328 | 5168 | 5498  | 5828  |
| 25° | 177523 | 27174 | 4466 | 5150  | 5701  |
| 30° | 261707 | 36392 | 3619 | 5031  | 5847  |
| 35° | 330127 | 42680 | 3091 | 4941  | 6055  |
| 40° | 352227 | 43121 | 2788 | 5148  | 6475  |
| 45° | 365948 | 35974 | 2582 | 5578  | 7015  |
| 50° | 365377 | 25052 | 2519 | 6002  | 7877  |
| 55° | 310530 | 11140 | 2642 | 6726  | 8648  |
| 60° | 208734 | 2239  | 2618 | 7509  | 9920  |
| 65° | 55381  | 978   | 2649 | 8150  | 11288 |
| 70° | 1460   | 1209  | 2669 | 8862  | 12740 |
| 75° | 1198   | 1198  | 2728 | 9382  | 14506 |
| 80° | 1190   | 1785  | 2876 | 9918  | 16365 |
| 85° | 1186   | 2371  | 4742 | 10473 | 16203 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 10°

Vertical Angle: 47.5°

Luminance: 375372 cd/sqm

TEST NUMBER: P1326776

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 4.1    | 0.6       |
| 10°-20°   | 20.1   | 2.8       |
| 20°-30°   | 82.8   | 11.6      |
| 30°-40°   | 174.6  | 24.5      |
| 40°-50°   | 215.4  | 30.2      |
| 50°-60°   | 161.4  | 22.7      |
| 60°-70°   | 41.5   | 5.8       |
| 70°-80°   | 8.6    | 1.2       |
| 80°-90°   | 3.5    | 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°    | 107.0  | 15.0      |
| 0°-40°    | 281.6  | 39.5      |
| 0°-60°    | 658.4  | 92.5      |
| 0°-90°    | 712.0  | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 712.0  | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 45° | 90° | 135° | 180° | Flux |
|-----|------|-----|-----|------|------|------|
| 0°  | 41   | 41  | 41  | 41   | 41   |      |
| 5°  | 49   | 45  | 41  | 38   | 38   | 5    |
| 15° | 188  | 69  | 34  | 32   | 34   | 69   |
| 25° | 934  | 143 | 24  | 27   | 30   | 435  |
| 35° | 1570 | 203 | 15  | 24   | 29   | 957  |
| 45° | 1502 | 148 | 11  | 23   | 29   | 1150 |
| 55° | 1034 | 37  | 9   | 22   | 29   | 893  |
| 65° | 136  | 2   | 6   | 20   | 28   | 196  |
| 75° | 2    | 2   | 4   | 14   | 22   | 2    |
| 85° | 1    | 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°    | 41.2   | 41.2   | 41.2   | 41.2   | 41.2   | 41.2   | 41.2  | 41.2  | 41.2  | 41.2 | 41.2   |
| 2.5°  | 43.5   | 43.5   | 43.5   | 43.5   | 43.5   | 43.5   | 43.5  | 42.9  | 42.4  | 41.2 | 40.0   |
| 5°    | 48.8   | 48.2   | 48.2   | 48.2   | 47.7   | 47.1   | 47.1  | 45.3  | 42.9  | 40.6 | 38.8   |
| 7.5°  | 57.7   | 57.7   | 57.1   | 55.9   | 55.3   | 54.1   | 52.9  | 48.2  | 42.9  | 39.4 | 37.1   |
| 10°   | 77.1   | 75.9   | 74.1   | 73.0   | 70.0   | 65.9   | 62.9  | 52.4  | 42.4  | 37.7 | 35.9   |
| 12.5° | 115.3  | 117.7  | 111.8  | 105.9  | 97.7   | 90.0   | 80.6  | 59.4  | 42.4  | 35.9 | 34.1   |
| 15°   | 188.3  | 192.4  | 181.2  | 169.4  | 149.4  | 130.6  | 113.0 | 68.8  | 41.2  | 33.5 | 31.8   |
| 17.5° | 307.7  | 313.0  | 294.2  | 266.5  | 235.3  | 197.7  | 165.3 | 81.8  | 40.0  | 31.2 | 30.0   |
| 20°   | 482.4  | 481.8  | 445.3  | 410.6  | 350.6  | 295.3  | 234.7 | 100.0 | 38.2  | 28.2 | 28.2   |
| 22.5° | 697.1  | 699.5  | 654.8  | 592.4  | 507.1  | 418.3  | 321.8 | 121.2 | 35.9  | 25.9 | 26.5   |
| 25°   | 934.2  | 914.2  | 861.3  | 785.4  | 676.6  | 553.6  | 426.5 | 143.0 | 33.5  | 23.5 | 24.7   |
| 27.5° | 1131.9 | 1112.5 | 1051.9 | 961.9  | 844.8  | 698.9  | 533.0 | 164.7 | 30.6  | 21.2 | 22.9   |
| 30°   | 1316.0 | 1291.3 | 1218.4 | 1116.6 | 977.2  | 819.5  | 633.0 | 183.0 | 27.1  | 18.2 | 21.2   |
| 32.5° | 1467.8 | 1445.5 | 1362.5 | 1244.3 | 1092.5 | 923.1  | 717.7 | 197.1 | 23.5  | 16.5 | 20.0   |
| 35°   | 1570.2 | 1547.3 | 1470.8 | 1340.8 | 1175.4 | 998.4  | 786.6 | 203.0 | 20.6  | 14.7 | 19.4   |
| 37.5° | 1593.7 | 1581.4 | 1526.7 | 1404.9 | 1232.5 | 1046.6 | 830.7 | 201.2 | 17.1  | 13.5 | 18.2   |
| 40°   | 1566.7 | 1569.6 | 1543.7 | 1442.5 | 1263.1 | 1067.2 | 848.9 | 191.8 | 14.1  | 12.4 | 17.6   |
| 42.5° | 1532.0 | 1539.6 | 1537.8 | 1457.8 | 1276.0 | 1068.4 | 841.3 | 173.0 | 11.2  | 11.2 | 17.1   |
| 45°   | 1502.5 | 1510.2 | 1520.8 | 1451.4 | 1267.2 | 1053.1 | 817.2 | 147.7 | 8.2   | 10.6 | 17.1   |
| 47.5° | 1449.0 | 1457.2 | 1472.5 | 1399.6 | 1222.5 | 1013.7 | 773.6 | 120.0 | 5.9   | 10.0 | 16.5   |
| 50°   | 1363.7 | 1367.8 | 1363.7 | 1281.9 | 1136.6 | 950.1  | 703.0 | 93.5  | 4.1   | 9.4  | 16.5   |
| 52.5° | 1276.0 | 1267.8 | 1233.7 | 1130.1 | 1000.1 | 849.5  | 614.2 | 66.5  | 2.9   | 8.8  | 15.9   |
| 55°   | 1034.2 | 1021.3 | 996.0  | 932.5  | 858.3  | 726.0  | 496.5 | 37.1  | 2.9   | 8.8  | 15.3   |
| 57.5° | 720.7  | 727.7  | 736.6  | 723.6  | 689.5  | 571.8  | 377.1 | 16.5  | 2.9   | 8.2  | 15.3   |
| 60°   | 606.0  | 600.1  | 600.7  | 592.4  | 535.9  | 417.1  | 259.4 | 6.5   | 2.9   | 7.6  | 14.7   |
| 62.5° | 361.8  | 365.9  | 373.6  | 375.3  | 319.5  | 233.0  | 135.9 | 2.9   | 2.9   | 7.1  | 14.1   |
| 65°   | 135.9  | 142.4  | 124.7  | 108.2  | 85.9   | 62.9   | 31.8  | 2.4   | 3.5   | 6.5  | 12.9   |
| 67.5° | 4.1    | 4.7    | 5.9    | 5.3    | 5.3    | 4.7    | 3.5   | 2.4   | 3.5   | 5.9  | 12.4   |
| 70°   | 2.9    | 2.9    | 2.9    | 2.9    | 2.9    | 2.4    | 2.4   | 2.4   | 2.9   | 5.3  | 11.2   |
| 72.5° | 2.4    | 2.4    | 2.4    | 2.4    | 2.4    | 2.4    | 2.4   | 2.4   | 2.9   | 4.7  | 10.0   |
| 75°   | 1.8    | 2.4    | 1.8    | 1.8    | 1.8    | 1.8    | 1.8   | 1.8   | 2.9   | 4.1  | 8.2    |
| 77.5° | 1.8    | 1.8    | 1.8    | 1.8    | 1.8    | 1.8    | 1.8   | 1.8   | 2.4   | 3.5  | 7.1    |
| 80°   | 1.2    | 1.2    | 1.2    | 1.2    | 1.2    | 1.2    | 1.2   | 1.8   | 2.4   | 2.9  | 5.9    |
| 82.5° | 1.2    | 1.2    | 1.2    | 0.6    | 1.2    | 1.2    | 1.2   | 1.2   | 2.4   | 2.4  | 4.7    |
| 85°   | 0.6    | 0.6    | 0.6    | 0.6    | 0.6    | 0.6    | 0.6   | 1.2   | 1.8   | 2.4  | 2.9    |
| 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°    | 41.2 | 41.2   | 41.2 |
| 2.5°  | 38.8 | 38.8   | 38.8 |
| 5°    | 37.7 | 37.7   | 37.7 |
| 7.5°  | 36.5 | 36.5   | 36.5 |
| 10°   | 35.3 | 35.3   | 35.3 |
| 12.5° | 34.1 | 34.1   | 34.7 |
| 15°   | 32.4 | 33.5   | 33.5 |
| 17.5° | 31.2 | 32.4   | 32.9 |
| 20°   | 30.0 | 31.2   | 31.8 |
| 22.5° | 28.2 | 30.0   | 31.2 |
| 25°   | 27.1 | 29.4   | 30.0 |
| 27.5° | 25.9 | 28.8   | 30.0 |
| 30°   | 25.3 | 28.2   | 29.4 |
| 32.5° | 24.1 | 27.7   | 28.8 |
| 35°   | 23.5 | 27.7   | 28.8 |
| 37.5° | 23.5 | 27.1   | 28.8 |
| 40°   | 22.9 | 27.1   | 28.8 |
| 42.5° | 22.9 | 27.1   | 28.8 |
| 45°   | 22.9 | 27.1   | 28.8 |
| 47.5° | 22.4 | 27.1   | 29.4 |
| 50°   | 22.4 | 27.7   | 29.4 |
| 52.5° | 22.4 | 27.7   | 29.4 |
| 55°   | 22.4 | 27.7   | 28.8 |
| 57.5° | 21.8 | 27.1   | 28.8 |
| 60°   | 21.8 | 27.1   | 28.8 |
| 62.5° | 20.6 | 26.5   | 28.2 |
| 65°   | 20.0 | 25.9   | 27.7 |
| 67.5° | 18.8 | 25.3   | 26.5 |
| 70°   | 17.6 | 23.5   | 25.3 |
| 72.5° | 15.9 | 22.4   | 24.1 |
| 75°   | 14.1 | 20.6   | 21.8 |
| 77.5° | 12.4 | 18.2   | 19.4 |
| 80°   | 10.0 | 15.3   | 16.5 |
| 82.5° | 7.6  | 11.8   | 12.4 |
| 85°   | 5.3  | 7.6    | 8.2  |
| 87.5° | 2.4  | 3.5    | 4.1  |
| 90°   | 0.0  | 0.0    | 0.0  |

(END OF REPORT)