

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: P1312431

Luminaire Tested: LDSQA3D09R459050DE010 3LSQCA45R 1MW

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1312431
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: LDSQA3D09R459050DE010 3LSQCA45R 1MW
Description: 3in Adjustable LED luminaire with, R45 optic, 5000K CCT AND, 90CRI , 3LSQCA45R 1MW TRIM
Light Source: -
Ballast/Driver: -

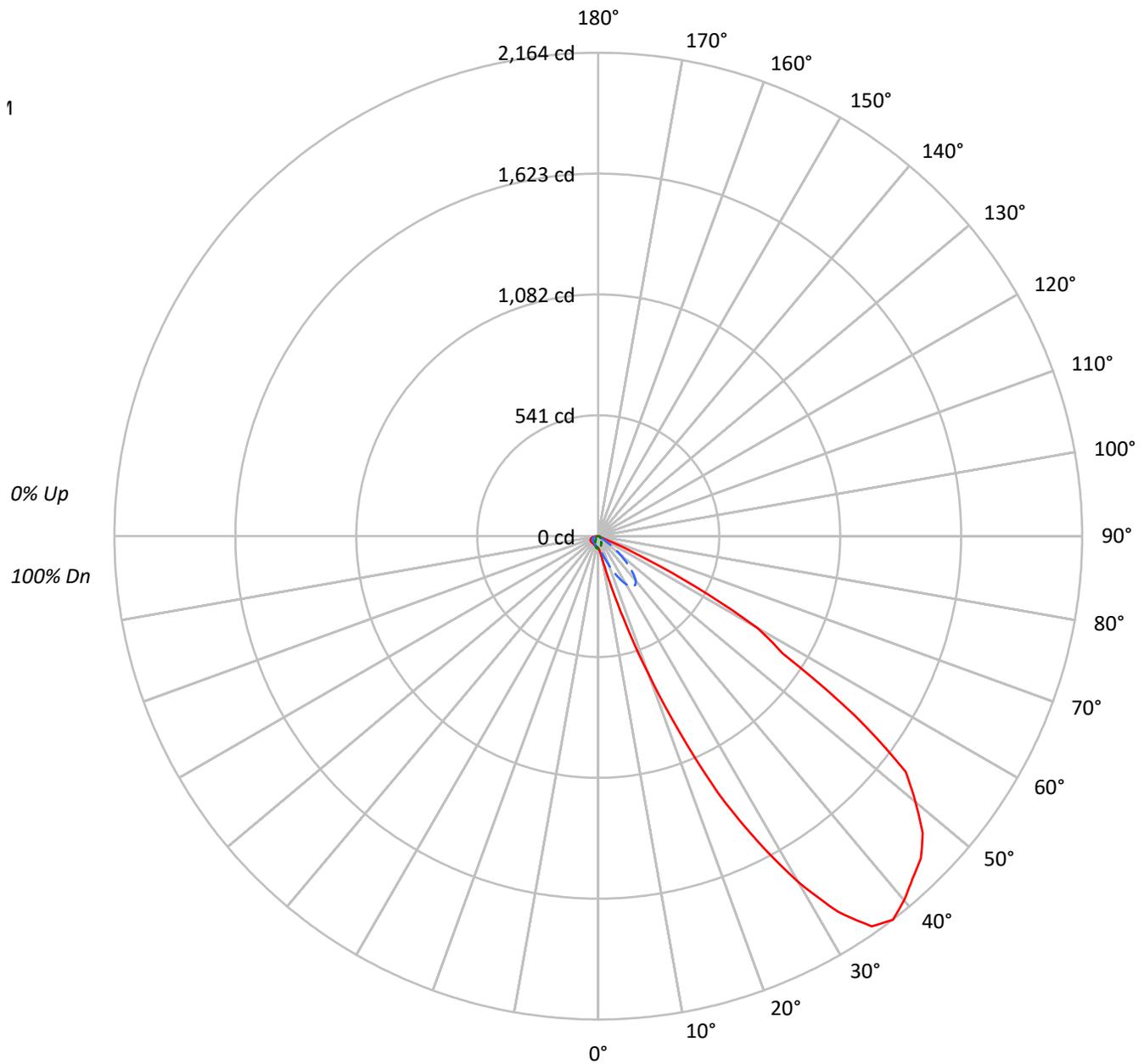
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 967.1 lumens
Efficiency: N/A
Efficacy: 87.1 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): 11.1
Input Voltage (V): NR
Input Current (A_{in}): 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: P1312431
CATALOG NUMBER: LDSQA3D09R459050DE010 3LSQCA45R 1MW

Luminous Intensity Polar Plot



— 0°-180° - - 45°-225° - - - 90°-270°



TEST NUMBER: P1312431

CATALOG NUMBER: LDSQA3D09R459050DE010 3LSQCA45R 1MW

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

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° | 135° | 180° |
|-----|--------|-------|------|-------|-------|
| 0° | 9627 | 9627 | 9627 | 9627 | 9627 |
| 5° | 11462 | 10632 | 9526 | 8834 | 8834 |
| 10° | 18310 | 12434 | 8936 | 8377 | 8377 |
| 15° | 45591 | 16671 | 8113 | 7827 | 8113 |
| 20° | 120082 | 24889 | 7038 | 7459 | 7899 |
| 25° | 241106 | 36903 | 6081 | 6993 | 7734 |
| 30° | 355452 | 49418 | 4932 | 6841 | 7955 |
| 35° | 448369 | 57965 | 4205 | 6728 | 8242 |
| 40° | 478373 | 58566 | 3777 | 7014 | 8813 |
| 45° | 497032 | 48858 | 3507 | 7599 | 9548 |
| 50° | 496235 | 34027 | 3430 | 8145 | 10717 |
| 55° | 421777 | 15103 | 3603 | 9128 | 11770 |
| 60° | 283478 | 3031 | 3582 | 10196 | 13502 |
| 65° | 75227 | 1304 | 3586 | 11084 | 15323 |
| 70° | 2014 | 1611 | 3626 | 12085 | 17322 |
| 75° | 1597 | 1597 | 3726 | 12776 | 19696 |
| 80° | 1587 | 2380 | 3967 | 13488 | 22216 |
| 85° | 1581 | 3162 | 6323 | 14227 | 22132 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 10°
 Vertical Angle: 47.5°
 Luminance: 509818 cd/sqm



TEST NUMBER: P1312431

CATALOG NUMBER: LDSQA3D09R459050DE010 3LSQCA45R 1MW

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 5.6 | 0.6 |
| 10°-20° | 27.3 | 2.8 |
| 20°-30° | 112.5 | 11.6 |
| 30°-40° | 237.1 | 24.5 |
| 40°-50° | 292.5 | 30.2 |
| 50°-60° | 219.3 | 22.7 |
| 60°-70° | 56.4 | 5.8 |
| 70°-80° | 11.7 | 1.2 |
| 80°-90° | 4.8 | 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° | 145.3 | 15.0 |
| 0°-40° | 382.4 | 39.5 |
| 0°-60° | 894.2 | 92.5 |
| 0°-90° | 967.1 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 967.1 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 45° | 90° | 135° | 180° | Flux |
|-----|------|-----|-----|------|------|------|
| 0° | 56 | 56 | 56 | 56 | 56 | |
| 5° | 66 | 62 | 55 | 51 | 51 | 7 |
| 15° | 256 | 94 | 46 | 44 | 46 | 94 |
| 25° | 1269 | 194 | 32 | 37 | 41 | 591 |
| 35° | 2133 | 276 | 20 | 32 | 39 | 1300 |
| 45° | 2041 | 201 | 14 | 31 | 39 | 1562 |
| 55° | 1405 | 50 | 12 | 30 | 39 | 1213 |
| 65° | 185 | 3 | 9 | 27 | 38 | 266 |
| 75° | 2 | 2 | 6 | 19 | 30 | 3 |
| 85° | 1 | 2 | 3 | 7 | 11 | 1 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P1312431

CATALOG NUMBER: LDSQA3D09R459050DE010 3LSQCA45R 1MW

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 10° | 15° | 20° | 25° | 30° | 45° | 67.5° | 90° | 112.5° |
|-------|--------|--------|--------|--------|--------|--------|--------|-------|-------|------|--------|
| 0° | 55.9 | 55.9 | 55.9 | 55.9 | 55.9 | 55.9 | 55.9 | 55.9 | 55.9 | 55.9 | 55.9 |
| 2.5° | 59.1 | 59.1 | 59.1 | 59.1 | 59.1 | 59.1 | 59.1 | 58.3 | 57.5 | 55.9 | 54.3 |
| 5° | 66.3 | 65.5 | 65.5 | 65.5 | 64.7 | 63.9 | 63.9 | 61.5 | 58.3 | 55.1 | 52.7 |
| 7.5° | 78.3 | 78.3 | 77.5 | 75.9 | 75.1 | 73.5 | 71.9 | 65.5 | 58.3 | 53.5 | 50.3 |
| 10° | 104.7 | 103.1 | 100.7 | 99.1 | 95.1 | 89.5 | 85.5 | 71.1 | 57.5 | 51.1 | 48.7 |
| 12.5° | 156.6 | 159.8 | 151.8 | 143.8 | 132.6 | 122.2 | 109.5 | 80.7 | 57.5 | 48.7 | 46.3 |
| 15° | 255.7 | 261.3 | 246.1 | 230.1 | 202.9 | 177.4 | 153.4 | 93.5 | 55.9 | 45.5 | 43.1 |
| 17.5° | 417.9 | 425.1 | 399.5 | 362.0 | 319.6 | 268.5 | 224.5 | 111.1 | 54.3 | 42.3 | 40.7 |
| 20° | 655.2 | 654.4 | 604.8 | 557.7 | 476.2 | 401.1 | 318.8 | 135.8 | 51.9 | 38.4 | 38.4 |
| 22.5° | 946.8 | 950.0 | 889.3 | 804.6 | 688.7 | 568.1 | 437.1 | 164.6 | 48.7 | 35.2 | 36.0 |
| 25° | 1268.8 | 1241.7 | 1169.7 | 1066.7 | 918.9 | 751.9 | 579.3 | 194.2 | 45.5 | 32.0 | 33.6 |
| 27.5° | 1537.3 | 1510.9 | 1428.6 | 1306.4 | 1147.4 | 949.2 | 723.9 | 223.7 | 41.5 | 28.8 | 31.2 |
| 30° | 1787.4 | 1753.8 | 1654.7 | 1516.5 | 1327.2 | 1113.0 | 859.7 | 248.5 | 36.8 | 24.8 | 28.8 |
| 32.5° | 1993.5 | 1963.2 | 1850.5 | 1689.9 | 1483.8 | 1253.6 | 974.8 | 267.7 | 32.0 | 22.4 | 27.2 |
| 35° | 2132.6 | 2101.4 | 1997.5 | 1820.9 | 1596.4 | 1355.9 | 1068.3 | 275.7 | 28.0 | 20.0 | 26.4 |
| 37.5° | 2164.5 | 2147.7 | 2073.4 | 1908.0 | 1673.9 | 1421.4 | 1128.2 | 273.3 | 23.2 | 18.4 | 24.8 |
| 40° | 2127.8 | 2131.8 | 2096.6 | 1959.2 | 1715.5 | 1449.4 | 1153.0 | 260.5 | 19.2 | 16.8 | 24.0 |
| 42.5° | 2080.6 | 2091.0 | 2088.6 | 1979.9 | 1733.0 | 1451.0 | 1142.6 | 234.9 | 15.2 | 15.2 | 23.2 |
| 45° | 2040.7 | 2051.1 | 2065.4 | 1971.2 | 1721.1 | 1430.2 | 1109.8 | 200.6 | 11.2 | 14.4 | 23.2 |
| 47.5° | 1968.0 | 1979.1 | 1999.9 | 1900.8 | 1660.3 | 1376.7 | 1050.7 | 163.0 | 8.0 | 13.6 | 22.4 |
| 50° | 1852.1 | 1857.7 | 1852.1 | 1741.0 | 1543.7 | 1290.4 | 954.8 | 127.0 | 5.6 | 12.8 | 22.4 |
| 52.5° | 1733.0 | 1721.9 | 1675.5 | 1534.9 | 1358.3 | 1153.8 | 834.2 | 90.3 | 4.0 | 12.0 | 21.6 |
| 55° | 1404.7 | 1387.1 | 1352.7 | 1266.4 | 1165.8 | 986.0 | 674.4 | 50.3 | 4.0 | 12.0 | 20.8 |
| 57.5° | 978.8 | 988.4 | 1000.4 | 982.8 | 936.4 | 776.6 | 512.2 | 22.4 | 4.0 | 11.2 | 20.8 |
| 60° | 823.0 | 815.0 | 815.8 | 804.6 | 727.9 | 566.5 | 352.4 | 8.8 | 4.0 | 10.4 | 20.0 |
| 62.5° | 491.4 | 497.0 | 507.4 | 509.8 | 433.9 | 316.4 | 184.6 | 4.0 | 4.0 | 9.6 | 19.2 |
| 65° | 184.6 | 193.4 | 169.4 | 147.0 | 116.7 | 85.5 | 43.1 | 3.2 | 4.8 | 8.8 | 17.6 |
| 67.5° | 5.6 | 6.4 | 8.0 | 7.2 | 7.2 | 6.4 | 4.8 | 3.2 | 4.8 | 8.0 | 16.8 |
| 70° | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 3.2 | 3.2 | 3.2 | 4.0 | 7.2 | 15.2 |
| 72.5° | 3.2 | 3.2 | 3.2 | 3.2 | 3.2 | 3.2 | 3.2 | 3.2 | 4.0 | 6.4 | 13.6 |
| 75° | 2.4 | 3.2 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 4.0 | 5.6 | 11.2 |
| 77.5° | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 3.2 | 4.8 | 9.6 |
| 80° | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 2.4 | 3.2 | 4.0 | 8.0 |
| 82.5° | 1.6 | 1.6 | 1.6 | 0.8 | 1.6 | 1.6 | 1.6 | 1.6 | 3.2 | 3.2 | 6.4 |
| 85° | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 1.6 | 2.4 | 3.2 | 4.0 |
| 87.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.8 | 0.8 | 0.8 | 1.6 | 2.4 | 2.4 | 2.4 |
| 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: P1312431

CATALOG NUMBER: LDSQA3D09R459050DE010 3LSQCA45R 1MW

CANDELA DISTRIBUTION (continued):

| | 135° | 157.5° | 180° |
|-------|------|--------|------|
| 0° | 55.9 | 55.9 | 55.9 |
| 2.5° | 52.7 | 52.7 | 52.7 |
| 5° | 51.1 | 51.1 | 51.1 |
| 7.5° | 49.5 | 49.5 | 49.5 |
| 10° | 47.9 | 47.9 | 47.9 |
| 12.5° | 46.3 | 46.3 | 47.1 |
| 15° | 43.9 | 45.5 | 45.5 |
| 17.5° | 42.3 | 43.9 | 44.7 |
| 20° | 40.7 | 42.3 | 43.1 |
| 22.5° | 38.4 | 40.7 | 42.3 |
| 25° | 36.8 | 40.0 | 40.7 |
| 27.5° | 35.2 | 39.2 | 40.7 |
| 30° | 34.4 | 38.4 | 40.0 |
| 32.5° | 32.8 | 37.6 | 39.2 |
| 35° | 32.0 | 37.6 | 39.2 |
| 37.5° | 32.0 | 36.8 | 39.2 |
| 40° | 31.2 | 36.8 | 39.2 |
| 42.5° | 31.2 | 36.8 | 39.2 |
| 45° | 31.2 | 36.8 | 39.2 |
| 47.5° | 30.4 | 36.8 | 40.0 |
| 50° | 30.4 | 37.6 | 40.0 |
| 52.5° | 30.4 | 37.6 | 40.0 |
| 55° | 30.4 | 37.6 | 39.2 |
| 57.5° | 29.6 | 36.8 | 39.2 |
| 60° | 29.6 | 36.8 | 39.2 |
| 62.5° | 28.0 | 36.0 | 38.4 |
| 65° | 27.2 | 35.2 | 37.6 |
| 67.5° | 25.6 | 34.4 | 36.0 |
| 70° | 24.0 | 32.0 | 34.4 |
| 72.5° | 21.6 | 30.4 | 32.8 |
| 75° | 19.2 | 28.0 | 29.6 |
| 77.5° | 16.8 | 24.8 | 26.4 |
| 80° | 13.6 | 20.8 | 22.4 |
| 82.5° | 10.4 | 16.0 | 16.8 |
| 85° | 7.2 | 10.4 | 11.2 |
| 87.5° | 3.2 | 4.8 | 5.6 |
| 90° | 0.0 | 0.0 | 0.0 |

(END OF REPORT)