

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: P748623

Luminaire Tested: LD4D45BD010-EU4DR5040509024-4LBDP1MW

Issue Date: 1/30/2024

Test Information

Test Method: LM-79-2019
Report Number: P748623
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2307-078-44)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/30/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: PORTFOLIO
Catalog Number: LD4D45BD010-EU4DR5040509024-4LBDP1MW
Description: 4 INCH ROUND DEEP 45° CUTOFF MATTE WHITE TRIM, WITH 50° OPTIC
Light Source: (1) HIGH LUMEN LED 90CRI / 2400K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3483.9 lumens
Efficiency: N/A
Efficacy: 90.0 lumens/watt
Spacing Criteria (0/90/45): 0.8 / 0.8 / 0.73
Luminous Opening: Circular (Dia: 0.35' x H: 0')
CIE Type: Direct

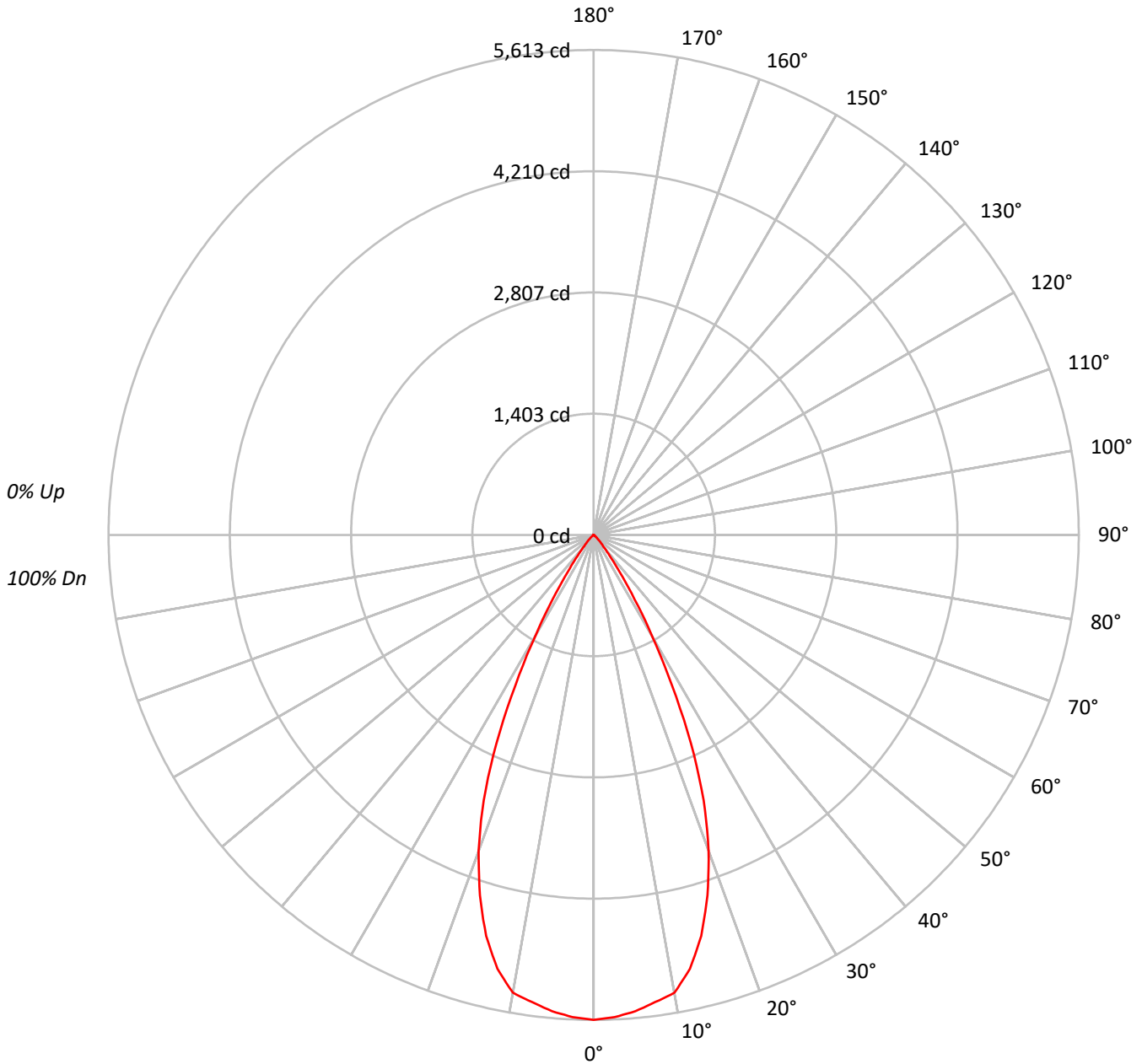
Input Watts (W): 38.7
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



Downlight

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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 | 0 |
| RCR | | | | | | | | | | | | | | | | | | | | | |
| 0 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 | | | |
| 1 | 114 | 112 | 109 | 107 | 112 | 110 | 108 | 106 | 106 | 104 | 102 | 102 | 101 | 99 | 98 | 97 | 97 | 95 | | | |
| 2 | 109 | 105 | 101 | 98 | 107 | 103 | 100 | 97 | 100 | 98 | 95 | 97 | 95 | 93 | 95 | 93 | 91 | 90 | | | |
| 3 | 105 | 99 | 95 | 91 | 103 | 98 | 94 | 90 | 95 | 92 | 89 | 93 | 90 | 88 | 91 | 88 | 86 | 85 | | | |
| 4 | 100 | 94 | 89 | 85 | 99 | 93 | 88 | 85 | 90 | 87 | 84 | 89 | 85 | 83 | 87 | 84 | 82 | 80 | | | |
| 5 | 96 | 89 | 84 | 80 | 95 | 88 | 83 | 79 | 86 | 82 | 79 | 85 | 81 | 78 | 83 | 80 | 77 | 76 | | | |
| 6 | 92 | 84 | 79 | 75 | 91 | 83 | 79 | 75 | 82 | 78 | 74 | 81 | 77 | 74 | 79 | 76 | 74 | 72 | | | |
| 7 | 88 | 80 | 75 | 71 | 87 | 79 | 74 | 71 | 78 | 74 | 71 | 77 | 73 | 70 | 76 | 73 | 70 | 69 | | | |
| 8 | 85 | 76 | 71 | 67 | 84 | 76 | 71 | 67 | 75 | 70 | 67 | 74 | 70 | 67 | 73 | 69 | 66 | 65 | | | |
| 9 | 81 | 73 | 68 | 64 | 80 | 72 | 67 | 64 | 71 | 67 | 64 | 71 | 67 | 64 | 70 | 66 | 63 | 62 | | | |
| 10 | 78 | 70 | 64 | 61 | 77 | 69 | 64 | 61 | 68 | 64 | 61 | 68 | 64 | 61 | 67 | 63 | 60 | 59 | | | |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|--------|
| | 0° |
| 0° | 613324 |
| 5° | 606893 |
| 10° | 596902 |
| 15° | 543529 |
| 20° | 452278 |
| 25° | 321052 |
| 30° | 169930 |
| 35° | 69252 |
| 40° | 25716 |
| 45° | 11774 |
| 50° | 4827 |
| 55° | 2534 |
| 60° | 1246 |
| 65° | 362 |
| 70° | 0 |
| 75° | 0 |
| 80° | 0 |
| 85° | 0 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 11774 cd/sqm



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 523.0 | 15.0 |
| 10°-20° | 1321.8 | 37.9 |
| 20°-30° | 1187.3 | 34.1 |
| 30°-40° | 371.8 | 10.7 |
| 40°-50° | 65.1 | 1.9 |
| 50°-60° | 13.0 | 0.4 |
| 60°-70° | 2.0 | 0.1 |
| 70°-80° | 0.0 | 0.0 |
| 80°-90° | 0.0 | 0.0 |
| 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° | 3032.1 | 87.0 |
| 0°-40° | 3403.9 | 97.7 |
| 0°-60° | 3482.0 | 99.9 |
| 0°-90° | 3483.9 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 3483.9 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|------|------|
| 0° | 5613 | |
| 5° | 5533 | 523 |
| 15° | 4805 | 1322 |
| 25° | 2663 | 1187 |
| 35° | 519 | 372 |
| 45° | 76 | 65 |
| 55° | 13 | 13 |
| 65° | 1 | 2 |
| 75° | 0 | 0 |
| 85° | 0 | 0 |
| 90° | 0 | |



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CANDELA DISTRIBUTION (FULL):

| 0° | |
|-------|--------|
| 0° | 5613.4 |
| 2.5° | 5585.5 |
| 5° | 5533.4 |
| 7.5° | 5453.9 |
| 10° | 5380.1 |
| 12.5° | 5143.5 |
| 15° | 4805.1 |
| 17.5° | 4375.4 |
| 20° | 3889.8 |
| 22.5° | 3328.0 |
| 25° | 2663.1 |
| 27.5° | 1957.9 |
| 30° | 1346.9 |
| 32.5° | 877.0 |
| 35° | 519.2 |
| 37.5° | 298.2 |
| 40° | 180.3 |
| 42.5° | 117.4 |
| 45° | 76.2 |
| 47.5° | 46.4 |
| 50° | 28.4 |
| 52.5° | 19.4 |
| 55° | 13.3 |
| 57.5° | 9.0 |
| 60° | 5.7 |
| 62.5° | 3.3 |
| 65° | 1.4 |
| 67.5° | 0.5 |
| 70° | 0.0 |
| 72.5° | 0.0 |
| 75° | 0.0 |
| 77.5° | 0.0 |
| 80° | 0.0 |
| 82.5° | 0.0 |
| 85° | 0.0 |
| 87.5° | 0.0 |
| 90° | 0.0 |

Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report



Report Generated By 670245859 / DESKTOP-T8S5UU9

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— 0°-180°

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