

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: P748776

Luminaire Tested: LD4D45BD010-EU4DR6040509024-4LBDP1B

Issue Date: 2/5/2024

Test Information

Test Method: LM-79-2019
Report Number: P748776
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2307-078-57)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 2/5/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: PORTFOLIO
Catalog Number: LD4D45BD010-EU4DR6040509024-4LBDP1B
Description: 4 INCH ROUND DEEP 45° CUTOFF SPECULAR BLACK TRIM, WITH 60° OPTIC
Light Source: (1) HIGH LUMEN LED 90CRI / 2400K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2788.5 lumens
Efficiency: N/A
Efficacy: 72.1 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 0.91 / 0.83
Luminous Opening: Circular (Dia: 0.35' x H: 0')
CIE Type: Direct

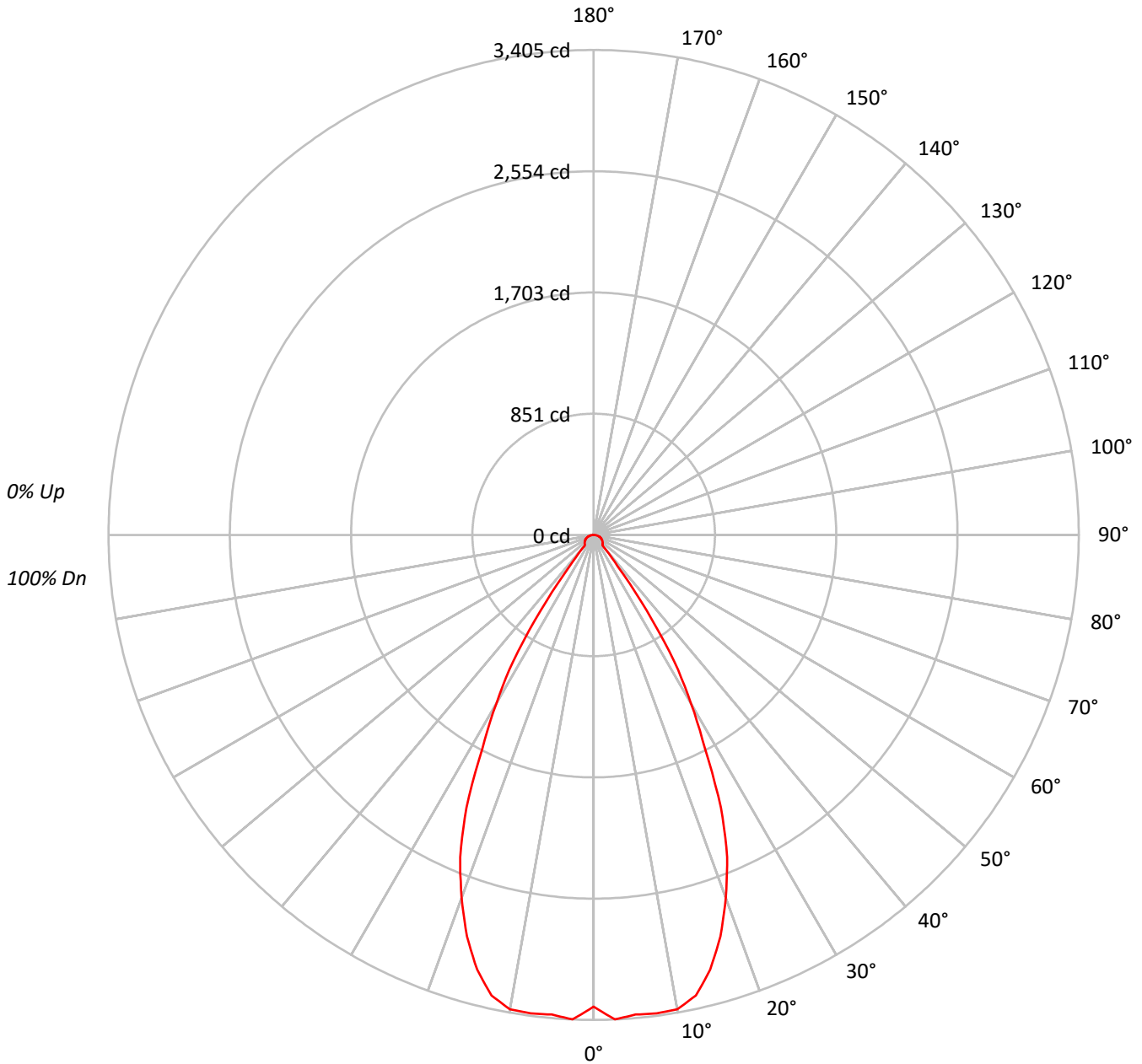
Input Watts (W): 38.7
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



Downlight

TEST NUMBER: P748776
CATALOG NUMBER: LD4D45BD010-EU4DR6040509024-4LBDP1B

Luminous Intensity Polar Plot





TEST NUMBER: P748776

CATALOG NUMBER: LD4D45BD010-EU4DR6040509024-4LBDP1B

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 | 113 | 110 | 108 | 105 | 111 | 108 | 106 | 104 | 104 | 102 | 100 | 100 | 99 | 97 | 97 | 96 | 95 | 93 | | | |
| 2 | 107 | 102 | 98 | 95 | 105 | 101 | 97 | 94 | 97 | 94 | 92 | 94 | 92 | 90 | 92 | 90 | 88 | 86 | | | |
| 3 | 102 | 96 | 90 | 86 | 100 | 94 | 89 | 86 | 91 | 88 | 84 | 89 | 86 | 83 | 87 | 84 | 82 | 80 | | | |
| 4 | 97 | 89 | 84 | 80 | 95 | 88 | 83 | 79 | 86 | 82 | 78 | 84 | 80 | 77 | 82 | 79 | 76 | 75 | | | |
| 5 | 92 | 84 | 78 | 74 | 91 | 83 | 78 | 74 | 81 | 77 | 73 | 80 | 76 | 72 | 78 | 75 | 72 | 70 | | | |
| 6 | 88 | 79 | 73 | 69 | 87 | 78 | 73 | 69 | 77 | 72 | 68 | 75 | 71 | 68 | 74 | 70 | 67 | 66 | | | |
| 7 | 84 | 75 | 69 | 65 | 83 | 74 | 68 | 64 | 73 | 68 | 64 | 72 | 67 | 64 | 71 | 67 | 63 | 62 | | | |
| 8 | 80 | 71 | 65 | 61 | 79 | 70 | 65 | 61 | 69 | 64 | 60 | 68 | 64 | 60 | 67 | 63 | 60 | 59 | | | |
| 9 | 77 | 67 | 61 | 57 | 75 | 67 | 61 | 57 | 66 | 61 | 57 | 65 | 60 | 57 | 64 | 60 | 57 | 55 | | | |
| 10 | 73 | 64 | 58 | 54 | 72 | 63 | 58 | 54 | 62 | 58 | 54 | 62 | 57 | 54 | 61 | 57 | 54 | 53 | | | |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|--------|
| | 0° |
| 0° | 361839 |
| 5° | 370734 |
| 10° | 375209 |
| 15° | 357444 |
| 20° | 315158 |
| 25° | 254903 |
| 30° | 172428 |
| 35° | 86405 |
| 40° | 14021 |
| 45° | 13721 |
| 50° | 13989 |
| 55° | 14211 |
| 60° | 14597 |
| 65° | 14943 |
| 70° | 15270 |
| 75° | 15451 |
| 80° | 14912 |
| 85° | 12411 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 75°
 Luminance: 15451 cd/sqm



TEST NUMBER: P748776

CATALOG NUMBER: LD4D45BD010-EU4DR6040509024-4LBDP1B

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 323.1 | 11.6 |
| 10°-20° | 874.1 | 31.3 |
| 20°-30° | 940.4 | 33.7 |
| 30°-40° | 408.8 | 14.7 |
| 40°-50° | 68.7 | 2.5 |
| 50°-60° | 66.8 | 2.4 |
| 60°-70° | 57.1 | 2.0 |
| 70°-80° | 38.2 | 1.4 |
| 80°-90° | 11.4 | 0.4 |
| 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° | 2137.6 | 76.7 |
| 0°-40° | 2546.4 | 91.3 |
| 0°-60° | 2681.8 | 96.2 |
| 0°-90° | 2788.5 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 2788.5 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|------|------|
| 0° | 3312 | |
| 5° | 3380 | 323 |
| 15° | 3160 | 874 |
| 25° | 2114 | 940 |
| 35° | 648 | 409 |
| 45° | 89 | 69 |
| 55° | 75 | 67 |
| 65° | 58 | 57 |
| 75° | 37 | 38 |
| 85° | 10 | 11 |
| 90° | 0 | |



TEST NUMBER: P748776

CATALOG NUMBER: LD4D45BD010-EU4DR6040509024-4LBDP1B

CANDELA DISTRIBUTION (FULL):

| | 0° |
|-------|--------|
| 0° | 3311.7 |
| 2.5° | 3404.8 |
| 5° | 3380.2 |
| 7.5° | 3388.0 |
| 10° | 3381.9 |
| 12.5° | 3312.1 |
| 15° | 3160.0 |
| 17.5° | 2955.7 |
| 20° | 2710.5 |
| 22.5° | 2448.0 |
| 25° | 2114.4 |
| 27.5° | 1691.2 |
| 30° | 1366.7 |
| 32.5° | 1053.3 |
| 35° | 647.8 |
| 37.5° | 277.1 |
| 40° | 98.3 |
| 42.5° | 90.5 |
| 45° | 88.8 |
| 47.5° | 85.8 |
| 50° | 82.3 |
| 52.5° | 78.4 |
| 55° | 74.6 |
| 57.5° | 70.7 |
| 60° | 66.8 |
| 62.5° | 62.5 |
| 65° | 57.8 |
| 67.5° | 53.0 |
| 70° | 47.8 |
| 72.5° | 42.2 |
| 75° | 36.6 |
| 77.5° | 30.2 |
| 80° | 23.7 |
| 82.5° | 16.8 |
| 85° | 9.9 |
| 87.5° | 3.4 |
| 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

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

Scaled Data Report



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

Scaled Data Report



— 0°-180°

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

Scaled Data Report



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

Scaled Data Report



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

Scaled Data Report



(END OF REPORT)