

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: P748883

Luminaire Tested: LD4D45BD010-EU4DR6540509030-4LBDP1MW

Issue Date: 2/5/2024

Test Information

Test Method: LM-79-2019
Report Number: P748883
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2307-078-59)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 2/5/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: PORTFOLIO
Catalog Number: LD4D45BD010-EU4DR6540509030-4LBDP1MW
Description: 4 INCH ROUND DEEP 45° CUTOFF MATTE WHITE TRIM, WITH 65° OPTIC
Light Source: (1) HIGH LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3115.4 lumens
Efficiency: N/A
Efficacy: 80.5 lumens/watt
Spacing Criteria (0/90/45): 0.98 / 0.98 / 0.92
Luminous Opening: Circular (Dia: 0.35' x H: 0')
CIE Type: Direct

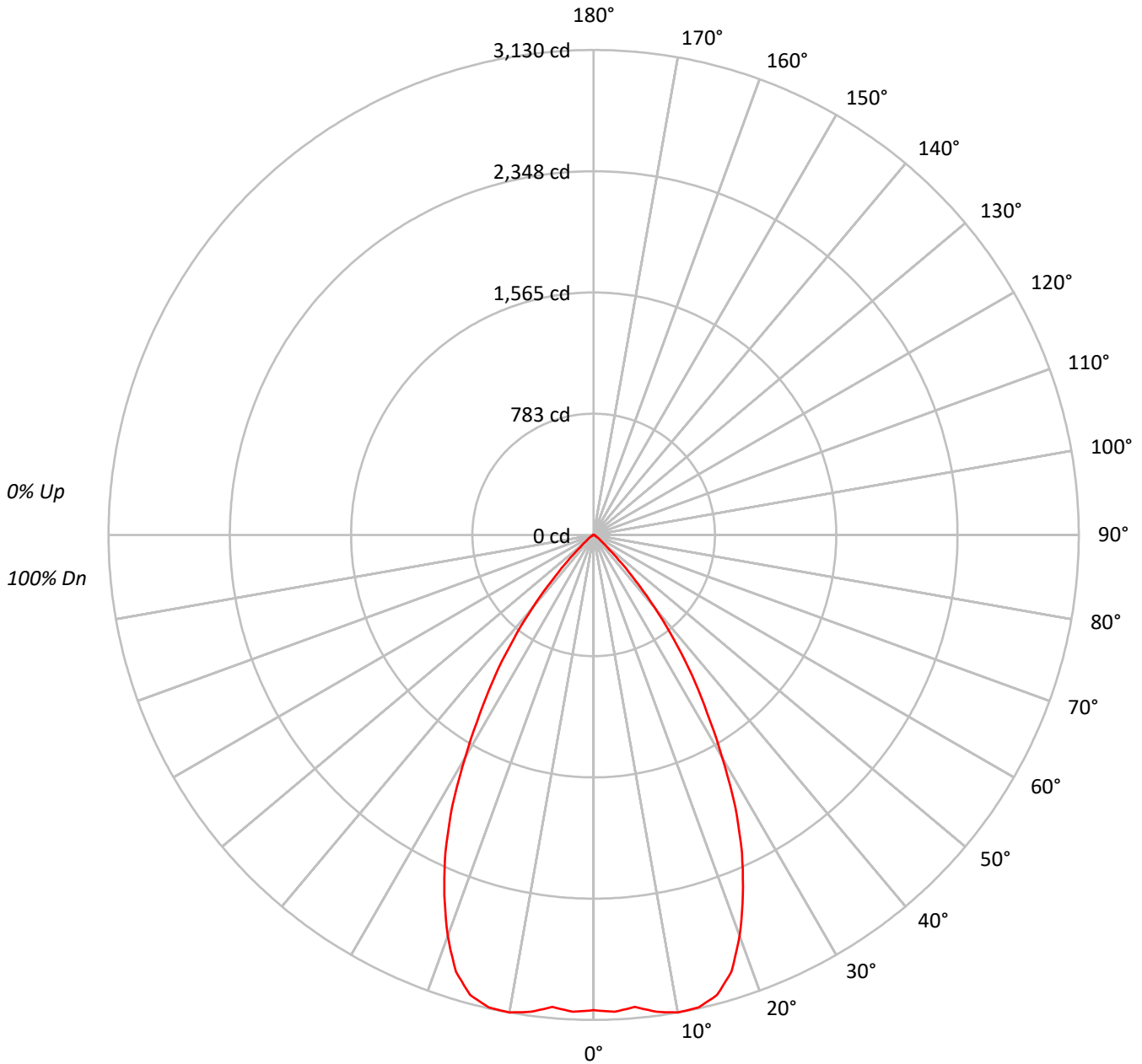
Input Watts (W): 38.7
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



Downlight

TEST NUMBER: P748883
CATALOG NUMBER: LD4D45BD010-EU4DR6540509030-4LBDP1MW

Luminous Intensity Polar Plot





TEST NUMBER: P748883

CATALOG NUMBER: LD4D45BD010-EU4DR6540509030-4LBDP1MW

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|---|--|--|--|--|--|--|----|--|--|--|--|--|--|--|--|---|
| RF | 20 | | | | | | | | | 20 | | | | | | | | | 20 | | | | | | | | | 20 | | | | | | | | | |
| RC | 80 | | | | | | | | | 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 | 111 | 108 | 106 | 111 | 108 | 106 | 104 | 104 | 103 | 101 | 101 | 99 | 98 | 97 | 96 | 95 | 93 | | | | | | | | | | | | | | | | | | | |
| 2 | 108 | 103 | 99 | 95 | 106 | 101 | 97 | 94 | 98 | 95 | 92 | 95 | 92 | 90 | 92 | 90 | 88 | 87 | | | | | | | | | | | | | | | | | | | |
| 3 | 102 | 96 | 91 | 87 | 100 | 94 | 90 | 86 | 92 | 88 | 85 | 89 | 86 | 83 | 87 | 84 | 82 | 80 | | | | | | | | | | | | | | | | | | | |
| 4 | 97 | 89 | 84 | 79 | 95 | 88 | 83 | 79 | 86 | 82 | 78 | 84 | 80 | 77 | 82 | 79 | 76 | 75 | | | | | | | | | | | | | | | | | | | |
| 5 | 92 | 83 | 78 | 73 | 90 | 83 | 77 | 73 | 81 | 76 | 72 | 79 | 75 | 72 | 77 | 74 | 71 | 69 | | | | | | | | | | | | | | | | | | | |
| 6 | 87 | 78 | 72 | 68 | 86 | 77 | 72 | 68 | 76 | 71 | 67 | 74 | 70 | 67 | 73 | 69 | 66 | 65 | | | | | | | | | | | | | | | | | | | |
| 7 | 83 | 73 | 67 | 63 | 81 | 73 | 67 | 63 | 71 | 66 | 62 | 70 | 66 | 62 | 69 | 65 | 62 | 60 | | | | | | | | | | | | | | | | | | | |
| 8 | 79 | 69 | 63 | 59 | 77 | 68 | 63 | 59 | 67 | 62 | 58 | 66 | 62 | 58 | 65 | 61 | 58 | 57 | | | | | | | | | | | | | | | | | | | |
| 9 | 75 | 65 | 59 | 55 | 74 | 65 | 59 | 55 | 64 | 58 | 55 | 63 | 58 | 55 | 62 | 58 | 54 | 53 | | | | | | | | | | | | | | | | | | | |
| 10 | 71 | 61 | 56 | 52 | 70 | 61 | 55 | 52 | 60 | 55 | 51 | 59 | 55 | 51 | 59 | 54 | 51 | 50 | | | | | | | | | | | | | | | | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|--------|
| | 0° |
| 0° | 335136 |
| 5° | 335418 |
| 10° | 347229 |
| 15° | 347795 |
| 20° | 320204 |
| 25° | 272830 |
| 30° | 208864 |
| 35° | 147561 |
| 40° | 87104 |
| 45° | 35354 |
| 50° | 12816 |
| 55° | 7143 |
| 60° | 4086 |
| 65° | 2249 |
| 70° | 2364 |
| 75° | 1857 |
| 80° | 1951 |
| 85° | 1630 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 35354 cd/sqm



TEST NUMBER: P748883

CATALOG NUMBER: LD4D45BD010-EU4DR6540509030-4LBDP1MW

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 295.4 | 9.5 |
| 10°-20° | 852.0 | 27.3 |
| 20°-30° | 1022.2 | 32.8 |
| 30°-40° | 687.0 | 22.1 |
| 40°-50° | 205.6 | 6.6 |
| 50°-60° | 36.3 | 1.2 |
| 60°-70° | 10.3 | 0.3 |
| 70°-80° | 5.1 | 0.2 |
| 80°-90° | 1.6 | 0.1 |
| 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° | 2169.5 | 69.6 |
| 0°-40° | 2856.5 | 91.7 |
| 0°-60° | 3098.4 | 99.5 |
| 0°-90° | 3115.4 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 3115.4 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|------|------|
| 0° | 3067 | |
| 5° | 3058 | 295 |
| 15° | 3075 | 852 |
| 25° | 2263 | 1022 |
| 35° | 1106 | 687 |
| 45° | 229 | 206 |
| 55° | 38 | 36 |
| 65° | 9 | 10 |
| 75° | 4 | 5 |
| 85° | 1 | 2 |
| 90° | 0 | |



TEST NUMBER: P748883

CATALOG NUMBER: LD4D45BD010-EU4DR6540509030-4LBDP1MW

CANDELA DISTRIBUTION (FULL):

| | 0° |
|-------|--------|
| 0° | 3067.3 |
| 2.5° | 3080.4 |
| 5° | 3058.2 |
| 7.5° | 3104.4 |
| 10° | 3129.7 |
| 12.5° | 3123.6 |
| 15° | 3074.7 |
| 17.5° | 2955.3 |
| 20° | 2753.9 |
| 22.5° | 2516.8 |
| 25° | 2263.1 |
| 27.5° | 1976.7 |
| 30° | 1655.5 |
| 32.5° | 1364.3 |
| 35° | 1106.3 |
| 37.5° | 851.3 |
| 40° | 610.7 |
| 42.5° | 398.8 |
| 45° | 228.8 |
| 47.5° | 121.2 |
| 50° | 75.4 |
| 52.5° | 52.3 |
| 55° | 37.5 |
| 57.5° | 27.0 |
| 60° | 18.7 |
| 62.5° | 12.2 |
| 65° | 8.7 |
| 67.5° | 7.8 |
| 70° | 7.4 |
| 72.5° | 5.7 |
| 75° | 4.4 |
| 77.5° | 3.9 |
| 80° | 3.1 |
| 82.5° | 2.2 |
| 85° | 1.3 |
| 87.5° | 0.9 |
| 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)