

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: P755618

Luminaire Tested: LD4D90BD010-EU4DR4570959040-4LBS1B

Issue Date: 1/30/2024

Test Information

Test Method: LM-79-2019
Report Number: P755618
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2307-078-36)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/30/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: PORTFOLIO
Catalog Number: LD4D90BD010-EU4DR4570959040-4LBS1B
Description: 4 INCH ROUND SHALLOW SPECULAR BLACK TRIM, WITH 45° OPTIC
Light Source: (1) HIGH LUMEN LED 90CRI / 4000K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9179.5 lumens
Efficiency: N/A
Efficacy: 92.8 lumens/watt
Spacing Criteria (0/90/45): 0.75 / 0.75 / 0.69
Luminous Opening: Circular (Dia: 0.35' x H: 0')
CIE Type: Direct

Input Watts (W): 98.9
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

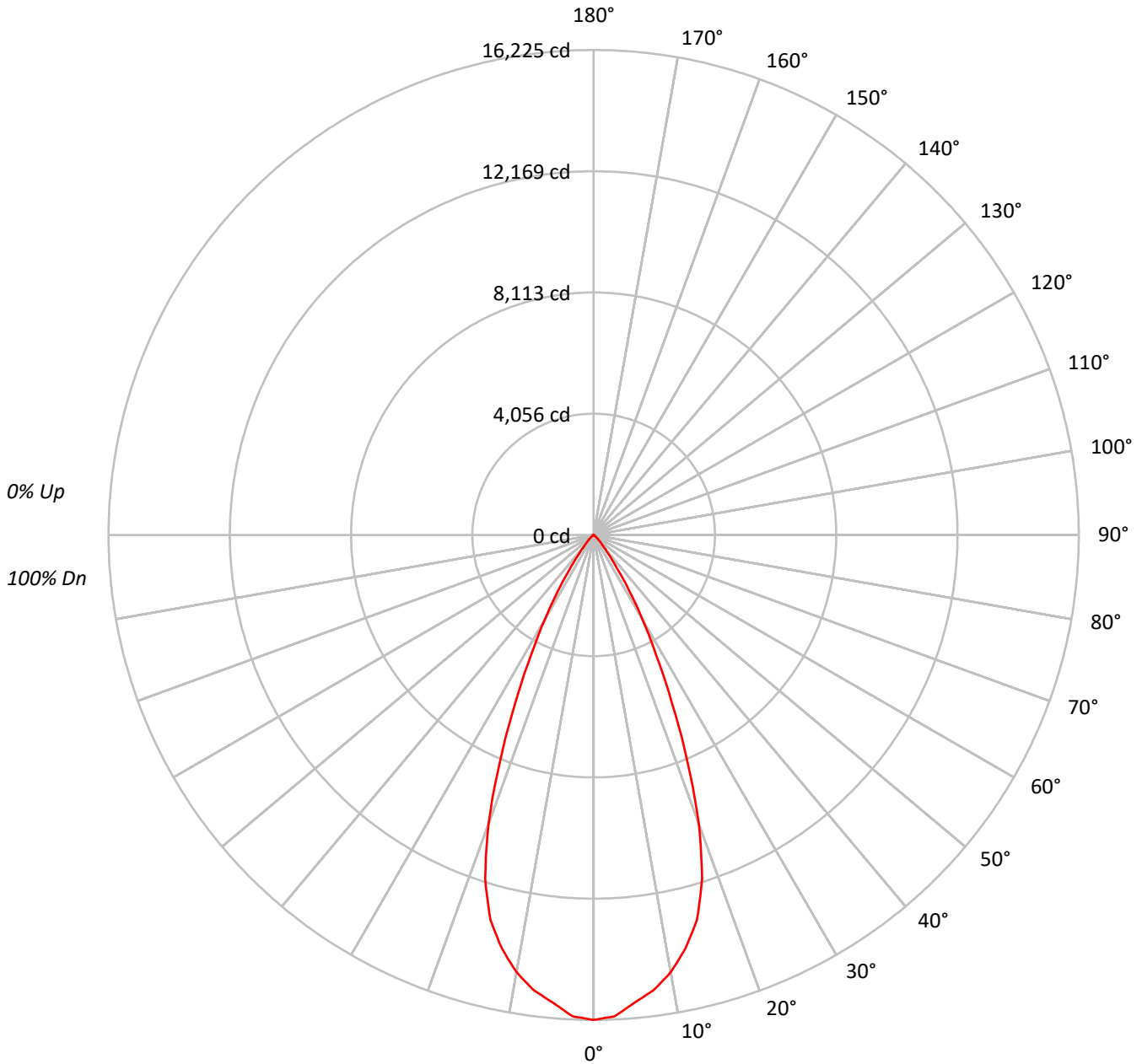


Downlight

TEST NUMBER: P755618

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

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|---------|
| | 0° |
| 0° | 1772745 |
| 5° | 1722275 |
| 10° | 1647752 |
| 15° | 1508039 |
| 20° | 1196401 |
| 25° | 746928 |
| 30° | 411684 |
| 35° | 184855 |
| 40° | 72813 |
| 45° | 34303 |
| 50° | 16267 |
| 55° | 8515 |
| 60° | 4174 |
| 65° | 982 |
| 70° | 415 |
| 75° | 0 |
| 80° | 0 |
| 85° | 0 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 34303 cd/sqm



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 1475.4 | 16.1 |
| 10°-20° | 3631.2 | 39.6 |
| 20°-30° | 2875.6 | 31.3 |
| 30°-40° | 957.6 | 10.4 |
| 40°-50° | 190.0 | 2.1 |
| 50°-60° | 43.2 | 0.5 |
| 60°-70° | 6.2 | 0.1 |
| 70°-80° | 0.2 | 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° | 7982.3 | 87.0 |
| 0°-40° | 8939.9 | 97.4 |
| 0°-60° | 9173.1 | 99.9 |
| 0°-90° | 9179.5 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 9179.5 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|-------|------|
| 0° | 16225 | |
| 5° | 15703 | ### |
| 15° | 13332 | 3631 |
| 25° | 6196 | 2876 |
| 35° | 1386 | 958 |
| 45° | 222 | 190 |
| 55° | 45 | 43 |
| 65° | 4 | 6 |
| 75° | 0 | 0 |
| 85° | 0 | 0 |
| 90° | 0 | |



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CANDELA DISTRIBUTION (FULL):

| | 0° |
|-------|---------|
| 0° | 16224.9 |
| 2.5° | 16119.0 |
| 5° | 15703.0 |
| 7.5° | 15359.7 |
| 10° | 14851.8 |
| 12.5° | 14175.4 |
| 15° | 13331.9 |
| 17.5° | 12063.4 |
| 20° | 10289.6 |
| 22.5° | 8176.3 |
| 25° | 6195.7 |
| 27.5° | 4536.7 |
| 30° | 3263.1 |
| 32.5° | 2219.2 |
| 35° | 1385.9 |
| 37.5° | 821.8 |
| 40° | 510.5 |
| 42.5° | 335.6 |
| 45° | 222.0 |
| 47.5° | 142.9 |
| 50° | 95.7 |
| 52.5° | 63.8 |
| 55° | 44.7 |
| 57.5° | 29.4 |
| 60° | 19.1 |
| 62.5° | 10.2 |
| 65° | 3.8 |
| 67.5° | 1.3 |
| 70° | 1.3 |
| 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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