

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: P744788

Luminaire Tested: LD4D20D010-EU4DR7020359050-4LBDP1MW

Issue Date: 2/5/2024

Test Information

Test Method: LM-79-2019
Report Number: P744788
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2307-078-73)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 2/5/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: PORTFOLIO
Catalog Number: LD4D20D010-EU4DR7020359050-4LBDP1MW
Description: 4 INCH ROUND DEEP 45° CUTOFF MATTE WHITE TRIM, WITH 70° OPTIC
Light Source: (1) HIGH LUMEN LED 90CRI / 5000K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1558.7 lumens
Efficiency: N/A
Efficacy: 67.5 lumens/watt
Spacing Criteria (0/90/45): 0.88 / 0.88 / 0.82
Luminous Opening: Circular (Dia: 0.35' x H: 0')
CIE Type: Direct

Input Watts (W): 23.1
Input Voltage (V): NR
Input Current (Ain): 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



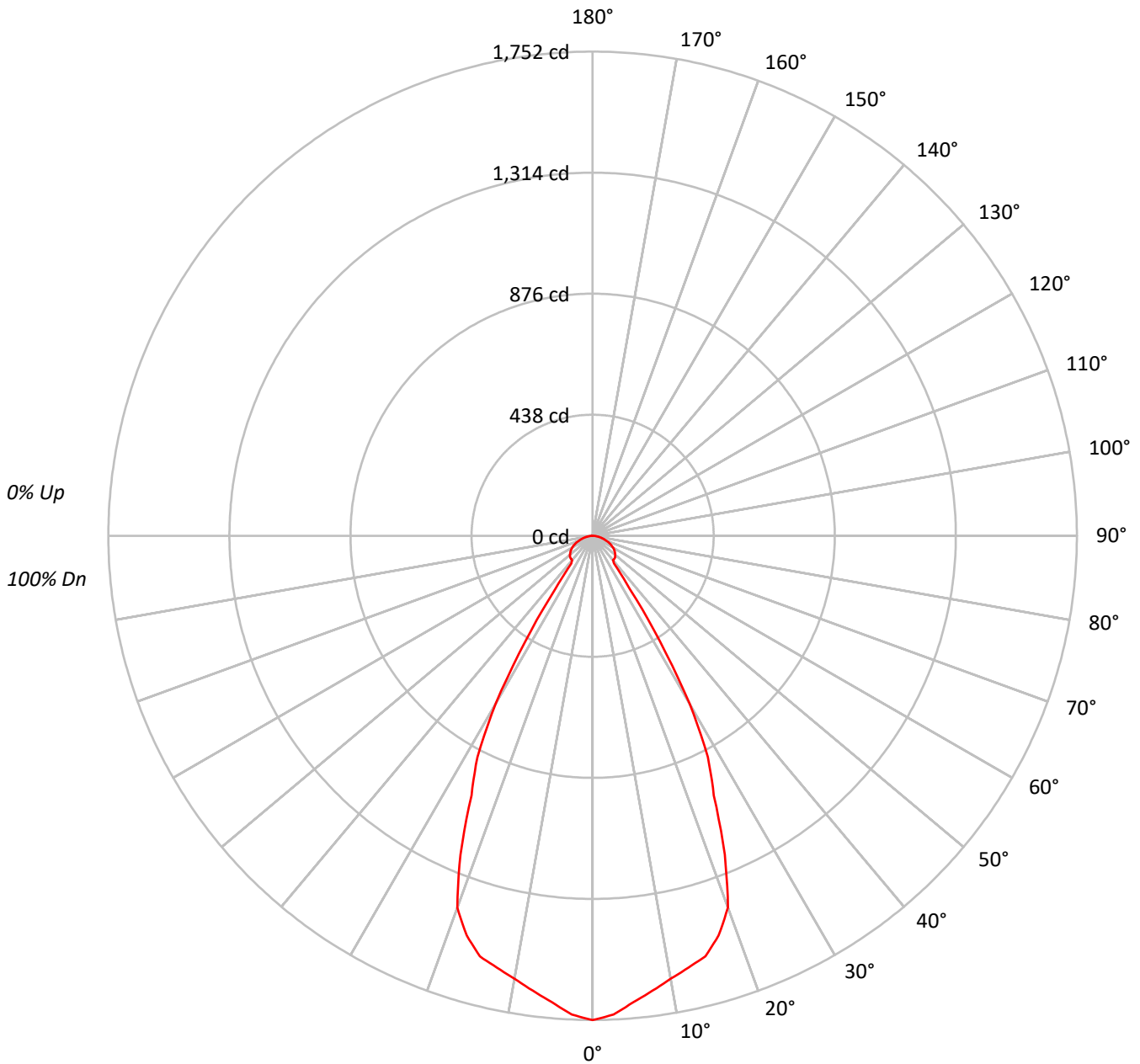
Downlight



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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 | | | 100 |
| 1 | 112 | 109 | 106 | 103 | 110 | 107 | 104 | 102 | 103 | 101 | 99 | 99 | 97 | 96 | 95 | 94 | 93 | 91 | | | 91 |
| 2 | 106 | 100 | 95 | 91 | 103 | 98 | 94 | 90 | 95 | 91 | 88 | 92 | 89 | 86 | 89 | 87 | 85 | 83 | | | 83 |
| 3 | 100 | 92 | 87 | 82 | 98 | 91 | 86 | 81 | 88 | 84 | 80 | 86 | 82 | 79 | 83 | 80 | 78 | 76 | | | 76 |
| 4 | 94 | 86 | 80 | 75 | 92 | 85 | 79 | 74 | 82 | 77 | 73 | 80 | 76 | 73 | 78 | 75 | 72 | 70 | | | 70 |
| 5 | 89 | 80 | 74 | 69 | 87 | 79 | 73 | 69 | 77 | 72 | 68 | 75 | 71 | 67 | 74 | 70 | 67 | 65 | | | 65 |
| 6 | 85 | 75 | 68 | 64 | 83 | 74 | 68 | 64 | 73 | 67 | 63 | 71 | 66 | 63 | 70 | 66 | 62 | 61 | | | 61 |
| 7 | 80 | 70 | 64 | 59 | 79 | 70 | 64 | 59 | 68 | 63 | 59 | 67 | 62 | 59 | 66 | 62 | 58 | 57 | | | 57 |
| 8 | 77 | 66 | 60 | 56 | 75 | 66 | 60 | 56 | 65 | 59 | 55 | 64 | 59 | 55 | 63 | 58 | 55 | 53 | | | 53 |
| 9 | 73 | 63 | 57 | 52 | 72 | 62 | 56 | 52 | 61 | 56 | 52 | 60 | 55 | 52 | 60 | 55 | 52 | 50 | | | 50 |
| 10 | 70 | 59 | 53 | 49 | 69 | 59 | 53 | 49 | 58 | 53 | 49 | 57 | 52 | 49 | 57 | 52 | 49 | 48 | | | 48 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° |
|-----|--------|
| 0° | 191469 |
| 5° | 185773 |
| 10° | 180598 |
| 15° | 178224 |
| 20° | 166421 |
| 25° | 125029 |
| 30° | 88377 |
| 35° | 31305 |
| 40° | 16459 |
| 45° | 17538 |
| 50° | 18154 |
| 55° | 18497 |
| 60° | 18618 |
| 65° | 18227 |
| 70° | 17187 |
| 75° | 15957 |
| 80° | 14157 |
| 85° | 11533 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 57.5°
 Luminance: 18627 cd/sqm



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 159.8 | 10.2 |
| 10°-20° | 438.2 | 28.1 |
| 20°-30° | 482.6 | 31.0 |
| 30°-40° | 184.4 | 11.8 |
| 40°-50° | 87.1 | 5.6 |
| 50°-60° | 86.6 | 5.6 |
| 60°-70° | 69.3 | 4.4 |
| 70°-80° | 39.9 | 2.6 |
| 80°-90° | 10.8 | 0.7 |
| 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° | 1080.6 | 69.3 |
| 0°-40° | 1265.0 | 81.2 |
| 0°-60° | 1438.7 | 92.3 |
| 0°-90° | 1558.7 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1558.7 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|------|------|
| 0° | 1752 | |
| 5° | 1694 | 160 |
| 15° | 1576 | 438 |
| 25° | 1037 | 483 |
| 35° | 235 | 184 |
| 45° | 114 | 87 |
| 55° | 97 | 87 |
| 65° | 70 | 69 |
| 75° | 38 | 40 |
| 85° | 9 | 11 |
| 90° | 0 | |



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CANDELA DISTRIBUTION (FULL):

| 0° | |
|-------|--------|
| 0° | 1752.4 |
| 2.5° | 1734.0 |
| 5° | 1693.8 |
| 7.5° | 1660.2 |
| 10° | 1627.8 |
| 12.5° | 1600.3 |
| 15° | 1575.6 |
| 17.5° | 1516.0 |
| 20° | 1431.3 |
| 22.5° | 1248.8 |
| 25° | 1037.1 |
| 27.5° | 902.8 |
| 30° | 700.5 |
| 32.5° | 452.5 |
| 35° | 234.7 |
| 37.5° | 126.8 |
| 40° | 115.4 |
| 42.5° | 114.6 |
| 45° | 113.5 |
| 47.5° | 111.0 |
| 50° | 106.8 |
| 52.5° | 102.1 |
| 55° | 97.1 |
| 57.5° | 91.6 |
| 60° | 85.2 |
| 62.5° | 78.0 |
| 65° | 70.5 |
| 67.5° | 62.2 |
| 70° | 53.8 |
| 72.5° | 45.5 |
| 75° | 37.8 |
| 77.5° | 29.7 |
| 80° | 22.5 |
| 82.5° | 15.8 |
| 85° | 9.2 |
| 87.5° | 3.6 |
| 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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