

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: P743820

Luminaire Tested: LD4D20D010-EU4DR1015209035-4LBCSSQMB

Issue Date: 2/2/2024

Test Information

Test Method: LM-79-2019
Report Number: P743820
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2310-195-4)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 2/2/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: PORTFOLIO
Catalog Number: LD4D20D010-EU4DR1015209035-4LBCSSQMB
Description: 4 INCH SQAURE SHALLOW CAST MATTE BLACK TRIM, WITH 10° OPTIC
Light Source: (1) HIGH LUMEN LED 90CRI / 3500K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1819.3 lumens
Efficiency: N/A
Efficacy: 78.8 lumens/watt
Spacing Criteria (0/90/45): 0.17 / 0.17 / 0.18
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

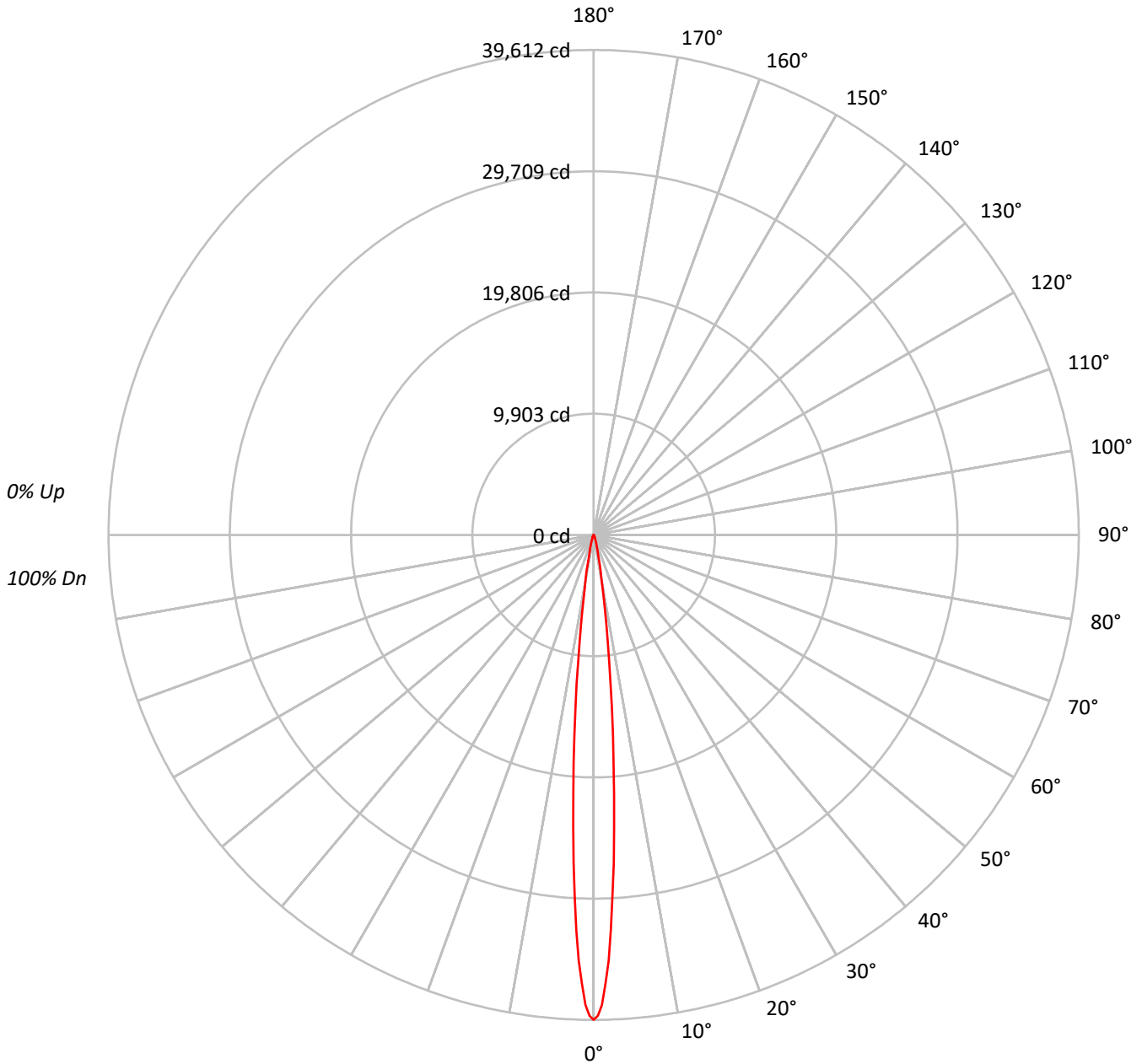


Downlight



TEST NUMBER: P743820
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Luminous Intensity Polar Plot





TEST NUMBER: P743820
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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 | 100 | 100 |
| 1 | 116 | 114 | 113 | 111 | 114 | 112 | 111 | 109 | 108 | 107 | 106 | 104 | 104 | 103 | 101 | 101 | 100 | 98 | 98 | 98 | 98 |
| 2 | 113 | 110 | 108 | 106 | 111 | 108 | 106 | 104 | 105 | 104 | 102 | 103 | 101 | 100 | 100 | 99 | 98 | 97 | 97 | 97 | 97 |
| 3 | 111 | 107 | 104 | 102 | 109 | 106 | 103 | 101 | 103 | 101 | 99 | 101 | 99 | 98 | 99 | 98 | 96 | 95 | 95 | 95 | 95 |
| 4 | 108 | 104 | 101 | 99 | 107 | 103 | 100 | 98 | 101 | 99 | 97 | 99 | 97 | 96 | 98 | 96 | 95 | 94 | 94 | 94 | 94 |
| 5 | 106 | 102 | 99 | 96 | 105 | 101 | 98 | 96 | 99 | 97 | 95 | 98 | 96 | 94 | 97 | 95 | 94 | 93 | 93 | 93 | 93 |
| 6 | 104 | 100 | 96 | 94 | 103 | 99 | 96 | 94 | 98 | 95 | 93 | 97 | 94 | 93 | 96 | 94 | 92 | 91 | 91 | 91 | 91 |
| 7 | 103 | 98 | 95 | 93 | 102 | 97 | 94 | 92 | 96 | 94 | 92 | 95 | 93 | 92 | 95 | 93 | 91 | 90 | 90 | 90 | 90 |
| 8 | 101 | 96 | 93 | 91 | 100 | 96 | 93 | 91 | 95 | 92 | 91 | 94 | 92 | 90 | 93 | 92 | 90 | 89 | 89 | 89 | 89 |
| 9 | 100 | 95 | 92 | 90 | 99 | 94 | 92 | 90 | 94 | 91 | 90 | 93 | 91 | 89 | 93 | 91 | 89 | 88 | 88 | 88 | 88 |
| 10 | 98 | 94 | 91 | 89 | 98 | 93 | 91 | 89 | 93 | 90 | 88 | 92 | 90 | 88 | 92 | 90 | 88 | 87 | 87 | 87 | 87 |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|---------|
| | 0° |
| 0° | 4328004 |
| 5° | 2052330 |
| 10° | 420908 |
| 15° | 115558 |
| 20° | 46567 |
| 25° | 24955 |
| 30° | 14761 |
| 35° | 9604 |
| 40° | 6418 |
| 45° | 4172 |
| 50° | 2295 |
| 55° | 1714 |
| 60° | 983 |
| 65° | 0 |
| 70° | 0 |
| 75° | 0 |
| 80° | 0 |
| 85° | 0 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4172 cd/sqm



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 1293.6 | 71.1 |
| 10°-20° | 350.1 | 19.2 |
| 20°-30° | 100.2 | 5.5 |
| 30°-40° | 45.8 | 2.5 |
| 40°-50° | 21.0 | 1.2 |
| 50°-60° | 7.0 | 0.4 |
| 60°-70° | 1.6 | 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° | 1743.9 | 95.9 |
| 0°-40° | 1789.6 | 98.4 |
| 0°-60° | 1817.6 | 99.9 |
| 0°-90° | 1819.3 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1819.3 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|-------|------|
| 0° | 39612 | |
| 5° | 18712 | ### |
| 15° | 1022 | 350 |
| 25° | 207 | 100 |
| 35° | 72 | 46 |
| 45° | 27 | 21 |
| 55° | 9 | 7 |
| 65° | 0 | 2 |
| 75° | 0 | 0 |
| 85° | 0 | 0 |
| 90° | 0 | |



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CANDELA DISTRIBUTION (FULL):

| | 0° |
|-------|---------|
| 0° | 39611.7 |
| 0.5° | 39269.7 |
| 1° | 38392.1 |
| 1.5° | 36700.0 |
| 2° | 34805.4 |
| 2.5° | 32303.2 |
| 3° | 29522.0 |
| 3.5° | 26830.8 |
| 4° | 23928.1 |
| 4.5° | 21254.9 |
| 5° | 18712.3 |
| 5.5° | 16408.1 |
| 6° | 14212.0 |
| 6.5° | 12281.3 |
| 7° | 10463.2 |
| 7.5° | 8910.6 |
| 8° | 7533.5 |
| 8.5° | 6327.4 |
| 9° | 5283.4 |
| 9.5° | 4486.8 |
| 10° | 3793.8 |
| 12.5° | 1809.1 |
| 15° | 1021.6 |
| 17.5° | 621.0 |
| 20° | 400.5 |
| 22.5° | 279.0 |
| 25° | 207.0 |
| 27.5° | 153.0 |
| 30° | 117.0 |
| 32.5° | 90.0 |
| 35° | 72.0 |
| 37.5° | 54.0 |
| 40° | 45.0 |
| 42.5° | 36.0 |
| 45° | 27.0 |
| 47.5° | 18.0 |
| 50° | 13.5 |
| 52.5° | 9.0 |
| 55° | 9.0 |
| 57.5° | 4.5 |
| 60° | 4.5 |
| 62.5° | 4.5 |
| 65° | 0.0 |



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CANDELA DISTRIBUTION (continued):

| | 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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Scaled Data Report





— 0°-180°

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Scaled Data Report



| | | |
|-------|--|-----|
| 67.5° | | 0.0 |
| 70° | | 0.0 |

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Peachtree City, GA 30269

Scaled Data Report



(END OF REPORT)