

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: P744377

Luminaire Tested: LD4D20D010-EU4DR4520359035-4LBSQW1B

Issue Date: 1/30/2024

Test Information

Test Method: LM-79-2019
Report Number: P744377
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: LD4D20D010-EU4DR4520359035-4LBSQW1B
Description: 4 INCH SQAURE DEEP 45° CUTOFF SPECULAR BLACK TRIM, WITH 45° OPTIC
Light Source: (1) HIGH LUMEN LED 90CRI / 3500K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1733.4 lumens
Efficiency: N/A
Efficacy: 75.0 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): 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



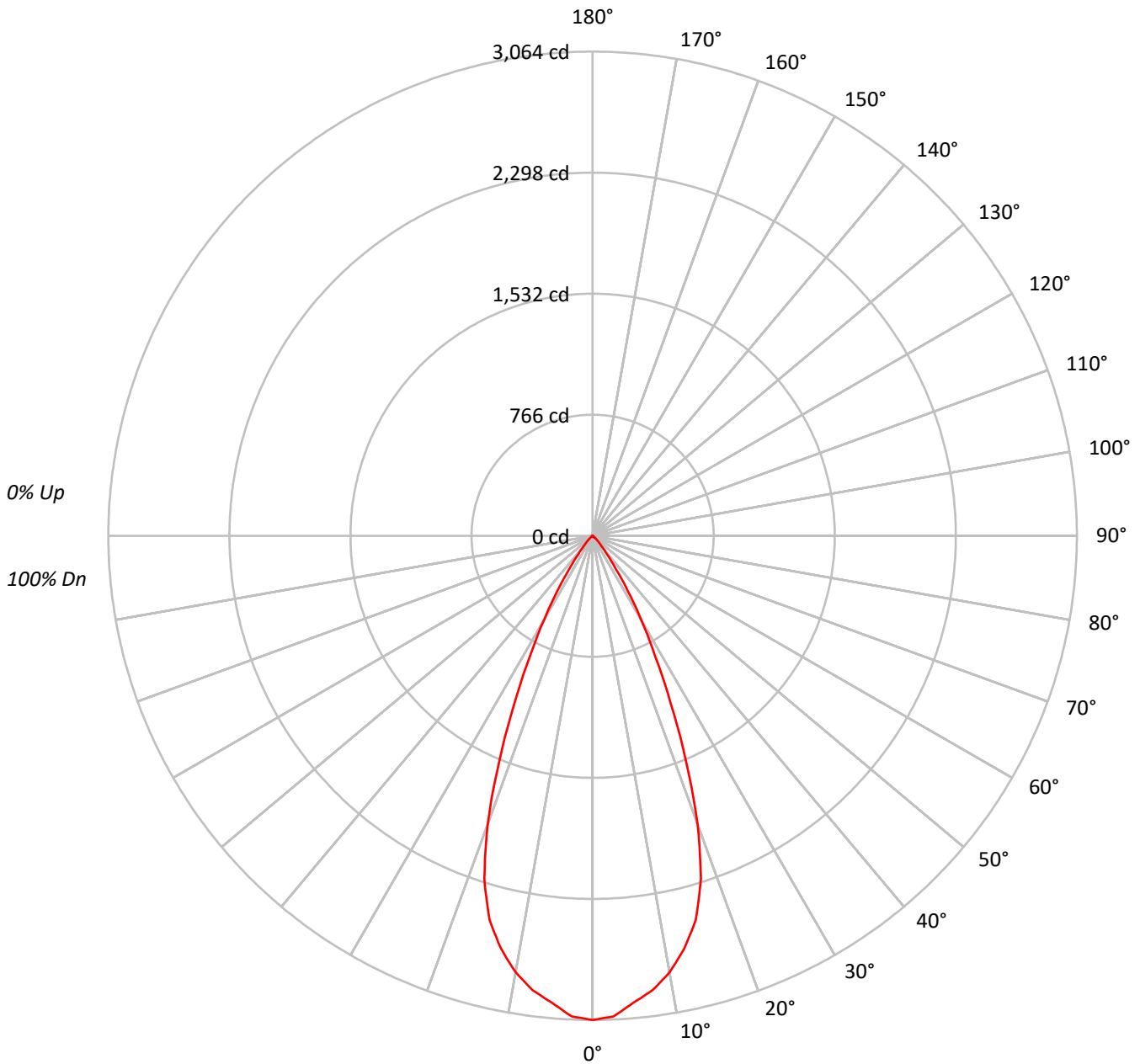
Downlight



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

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|--------|
| | 0° |
| 0° | 334764 |
| 5° | 325239 |
| 10° | 311160 |
| 15° | 284778 |
| 20° | 225930 |
| 25° | 141050 |
| 30° | 77742 |
| 35° | 34906 |
| 40° | 13750 |
| 45° | 6474 |
| 50° | 3060 |
| 55° | 1600 |
| 60° | 787 |
| 65° | 181 |
| 70° | 64 |
| 75° | 0 |
| 80° | 0 |
| 85° | 0 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 6474 cd/sqm



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 278.6 | 16.1 |
| 10°-20° | 685.7 | 39.6 |
| 20°-30° | 543.0 | 31.3 |
| 30°-40° | 180.8 | 10.4 |
| 40°-50° | 35.9 | 2.1 |
| 50°-60° | 8.1 | 0.5 |
| 60°-70° | 1.1 | 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° | 1507.4 | 87.0 |
| 0°-40° | 1688.2 | 97.4 |
| 0°-60° | 1732.2 | 99.9 |
| 0°-90° | 1733.4 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1733.4 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|------|------|
| 0° | 3064 | |
| 5° | 2965 | 279 |
| 15° | 2518 | 686 |
| 25° | 1170 | 543 |
| 35° | 262 | 181 |
| 45° | 42 | 36 |
| 55° | 8 | 8 |
| 65° | 1 | 1 |
| 75° | 0 | 0 |
| 85° | 0 | 0 |
| 90° | 0 | |



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CANDELA DISTRIBUTION (FULL):

| 0° | |
|-------|--------|
| 0° | 3063.9 |
| 2.5° | 3043.9 |
| 5° | 2965.4 |
| 7.5° | 2900.5 |
| 10° | 2804.6 |
| 12.5° | 2676.9 |
| 15° | 2517.6 |
| 17.5° | 2278.1 |
| 20° | 1943.1 |
| 22.5° | 1544.0 |
| 25° | 1170.0 |
| 27.5° | 856.7 |
| 30° | 616.2 |
| 32.5° | 419.1 |
| 35° | 261.7 |
| 37.5° | 155.2 |
| 40° | 96.4 |
| 42.5° | 63.4 |
| 45° | 41.9 |
| 47.5° | 27.0 |
| 50° | 18.0 |
| 52.5° | 12.0 |
| 55° | 8.4 |
| 57.5° | 5.6 |
| 60° | 3.6 |
| 62.5° | 1.9 |
| 65° | 0.7 |
| 67.5° | 0.2 |
| 70° | 0.2 |
| 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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