

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: P746769

Luminaire Tested: LD4D35BD010-EU4DR3020359027-4LBSQW1B

Issue Date: 1/30/2024

Test Information

Test Method: LM-79-2019
Report Number: P746769
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2307-078-16)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/30/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: PORTFOLIO
Catalog Number: LD4D35BD010-EU4DR3020359027-4LBSQW1B
Description: 4 INCH SQAURE DEEP 45° CUTOFF SPECULAR BLACK TRIM, WITH 30° OPTIC
Light Source: (1) HIGH LUMEN LED 90CRI / 2700K CCT
Ballast/Driver: -

Summary

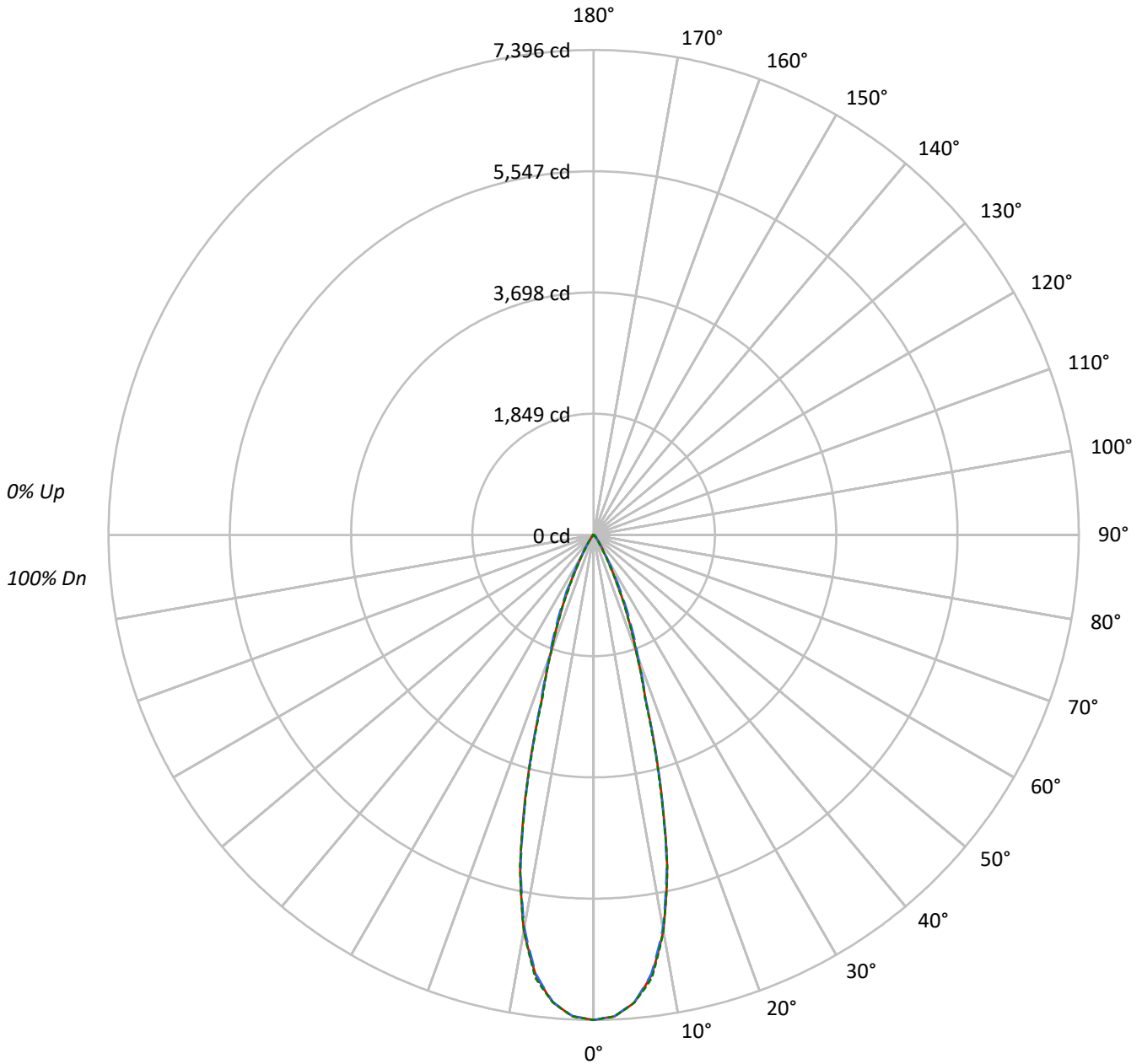
Lumens per Lamp: N/A
Luminaire Lumens: 2300.3 lumens
Efficiency: N/A
Efficacy: 74.7 lumens/watt
Spacing Criteria (0/90/45): 0.52 / 0.52 / 0.49
Luminous Opening: Rectangular (W 0.38' x L: 0.38' x H: 0')
CIE Type: Direct

Input Watts (W): 30.8
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



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|--|--|--|--|---|
| RF | 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 | | | | | | | | |
| 1 | 115 | 113 | 111 | 109 | 112 | 110 | 109 | 107 | 106 | 105 | 104 | 103 | 102 | 101 | 99 | 99 | 98 | 96 | | | | | | | | |
| 2 | 111 | 107 | 104 | 101 | 109 | 105 | 102 | 100 | 102 | 100 | 98 | 99 | 97 | 96 | 97 | 95 | 94 | 92 | | | | | | | | |
| 3 | 107 | 102 | 98 | 95 | 105 | 101 | 97 | 94 | 98 | 95 | 93 | 96 | 93 | 91 | 94 | 92 | 90 | 89 | | | | | | | | |
| 4 | 103 | 98 | 93 | 90 | 102 | 96 | 93 | 90 | 94 | 91 | 89 | 93 | 90 | 88 | 91 | 89 | 87 | 85 | | | | | | | | |
| 5 | 100 | 94 | 89 | 86 | 98 | 93 | 89 | 86 | 91 | 88 | 85 | 90 | 86 | 84 | 88 | 86 | 83 | 82 | | | | | | | | |
| 6 | 97 | 90 | 85 | 82 | 95 | 89 | 85 | 82 | 88 | 84 | 81 | 87 | 83 | 81 | 85 | 83 | 80 | 79 | | | | | | | | |
| 7 | 94 | 87 | 82 | 79 | 92 | 86 | 82 | 79 | 85 | 81 | 78 | 84 | 81 | 78 | 83 | 80 | 78 | 77 | | | | | | | | |
| 8 | 91 | 84 | 79 | 76 | 90 | 83 | 79 | 76 | 82 | 78 | 76 | 81 | 78 | 75 | 80 | 77 | 75 | 74 | | | | | | | | |
| 9 | 88 | 81 | 76 | 73 | 87 | 80 | 76 | 73 | 80 | 76 | 73 | 79 | 75 | 73 | 78 | 75 | 73 | 72 | | | | | | | | |
| 10 | 85 | 78 | 74 | 71 | 85 | 78 | 74 | 71 | 77 | 73 | 71 | 76 | 73 | 71 | 76 | 73 | 70 | 69 | | | | | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|--------|--------|--------|
| 0° | 566146 | 566146 | 566146 |
| 5° | 549898 | 549253 | 549921 |
| 10° | 476294 | 472936 | 476177 |
| 15° | 310754 | 309089 | 307536 |
| 20° | 154522 | 160321 | 154318 |
| 25° | 77835 | 87775 | 76247 |
| 30° | 31164 | 33957 | 27152 |
| 35° | 14456 | 13848 | 11606 |
| 40° | 6245 | 6934 | 5875 |
| 45° | 4406 | 5467 | 4438 |
| 50° | 1512 | 3977 | 1596 |
| 55° | 867 | 1641 | 921 |
| 60° | 612 | 720 | 612 |
| 65° | 398 | 398 | 398 |
| 70° | 246 | 157 | 246 |
| 75° | 0 | 118 | 0 |
| 80° | 0 | 0 | 0 |
| 85° | 0 | 0 | 0 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°

Vertical Angle: 45°

Luminance: 5467 cd/sqm



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 650.4 | 28.3 |
| 10°-20° | 1047.5 | 45.5 |
| 20°-30° | 452.6 | 19.7 |
| 30°-40° | 103.2 | 4.5 |
| 40°-50° | 35.4 | 1.5 |
| 50°-60° | 8.6 | 0.4 |
| 60°-70° | 2.3 | 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° | 2150.5 | 93.5 |
| 0°-40° | 2253.7 | 98.0 |
| 0°-60° | 2297.8 | 99.9 |
| 0°-90° | 2300.3 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 2300.3 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 7396 | 7396 | 7396 | 7396 | 7396 | |
| 5° | 7157 | 7150 | 7148 | 7163 | 7157 | 651 |
| 15° | 3922 | 3874 | 3900 | 3888 | 3881 | 1050 |
| 25° | 922 | 956 | 1039 | 932 | 903 | 441 |
| 35° | 155 | 158 | 148 | 147 | 124 | 105 |
| 45° | 41 | 50 | 50 | 50 | 41 | 29 |
| 55° | 6 | 7 | 12 | 7 | 7 | 6 |
| 65° | 2 | 2 | 2 | 2 | 2 | 2 |
| 75° | 0 | 0 | 0 | 0 | 0 | 0 |
| 85° | 0 | 0 | 0 | 0 | 0 | 0 |
| 90° | 0 | 0 | 0 | 0 | 0 | 0 |



TEST NUMBER: P746769

CATALOG NUMBER: LD4D35BD010-EU4DR3020359027-4LBSQW1B

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 7396.4 | 7396.4 | 7396.4 | 7396.4 | 7396.4 |
| 2.5° | 7347.4 | 7342.3 | 7345.2 | 7348.9 | 7350.3 |
| 5° | 7156.8 | 7149.9 | 7148.4 | 7163.3 | 7157.1 |
| 7.5° | 6772.2 | 6762.4 | 6747.5 | 6781.3 | 6812.9 |
| 10° | 6128.0 | 6117.1 | 6084.8 | 6100.7 | 6126.5 |
| 12.5° | 5176.9 | 5141.7 | 5141.0 | 5191.8 | 5184.9 |
| 15° | 3921.5 | 3874.3 | 3900.5 | 3887.8 | 3880.9 |
| 17.5° | 2637.1 | 2619.0 | 2653.8 | 2643.3 | 2597.9 |
| 20° | 1897.0 | 1901.8 | 1968.2 | 1934.8 | 1894.5 |
| 22.5° | 1384.3 | 1401.4 | 1480.2 | 1394.1 | 1362.5 |
| 25° | 921.6 | 956.5 | 1039.3 | 932.2 | 902.8 |
| 27.5° | 566.9 | 582.8 | 666.7 | 559.6 | 543.6 |
| 30° | 352.6 | 344.6 | 384.2 | 329.7 | 307.2 |
| 32.5° | 231.3 | 221.2 | 233.9 | 209.9 | 191.7 |
| 35° | 154.7 | 158.0 | 148.2 | 147.1 | 124.2 |
| 37.5° | 96.6 | 111.1 | 98.0 | 104.6 | 79.9 |
| 40° | 62.5 | 80.6 | 69.4 | 76.6 | 58.8 |
| 42.5° | 51.2 | 62.1 | 57.0 | 60.6 | 52.3 |
| 45° | 40.7 | 50.5 | 50.5 | 50.5 | 41.0 |
| 47.5° | 22.5 | 33.8 | 43.2 | 34.5 | 24.0 |
| 50° | 12.7 | 17.1 | 33.4 | 17.8 | 13.4 |
| 52.5° | 8.7 | 9.8 | 22.9 | 10.2 | 9.1 |
| 55° | 6.5 | 6.9 | 12.3 | 7.3 | 6.9 |
| 57.5° | 5.1 | 5.4 | 6.5 | 5.4 | 5.1 |
| 60° | 4.0 | 4.0 | 4.7 | 4.4 | 4.0 |
| 62.5° | 2.9 | 2.9 | 3.3 | 2.9 | 2.9 |
| 65° | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 |
| 67.5° | 1.1 | 1.5 | 1.5 | 1.5 | 1.5 |
| 70° | 1.1 | 0.7 | 0.7 | 0.7 | 1.1 |
| 72.5° | 0.7 | 0.4 | 0.4 | 0.4 | 0.4 |
| 75° | 0.0 | 0.0 | 0.4 | 0.0 | 0.0 |
| 77.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 80° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 82.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 85° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 87.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 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° - - 45°-225° - - - - 90°-270°

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