

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: SHAPER

Report Number: P701832

Luminaire Tested: 340-4C-08-D010 / 340-EU4C-1020-9040-4LBW1LI-CF

Issue Date: 8/30/2023

Test Information

Test Method: LM-79-2019
Report Number: P701832
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1705-068-4)
Test Lab: INNOVATION CENTER
Issue Date: 8/30/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: SHAPER
Catalog Number: 340-4C-08-D010 / 340-EU4C-1020-9040-4LBW1LI-CF
Description: FARALLON 4" LED GLASS DOWNLIGHT. CYLINDRICAL FROSTED GLASS KIT.
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

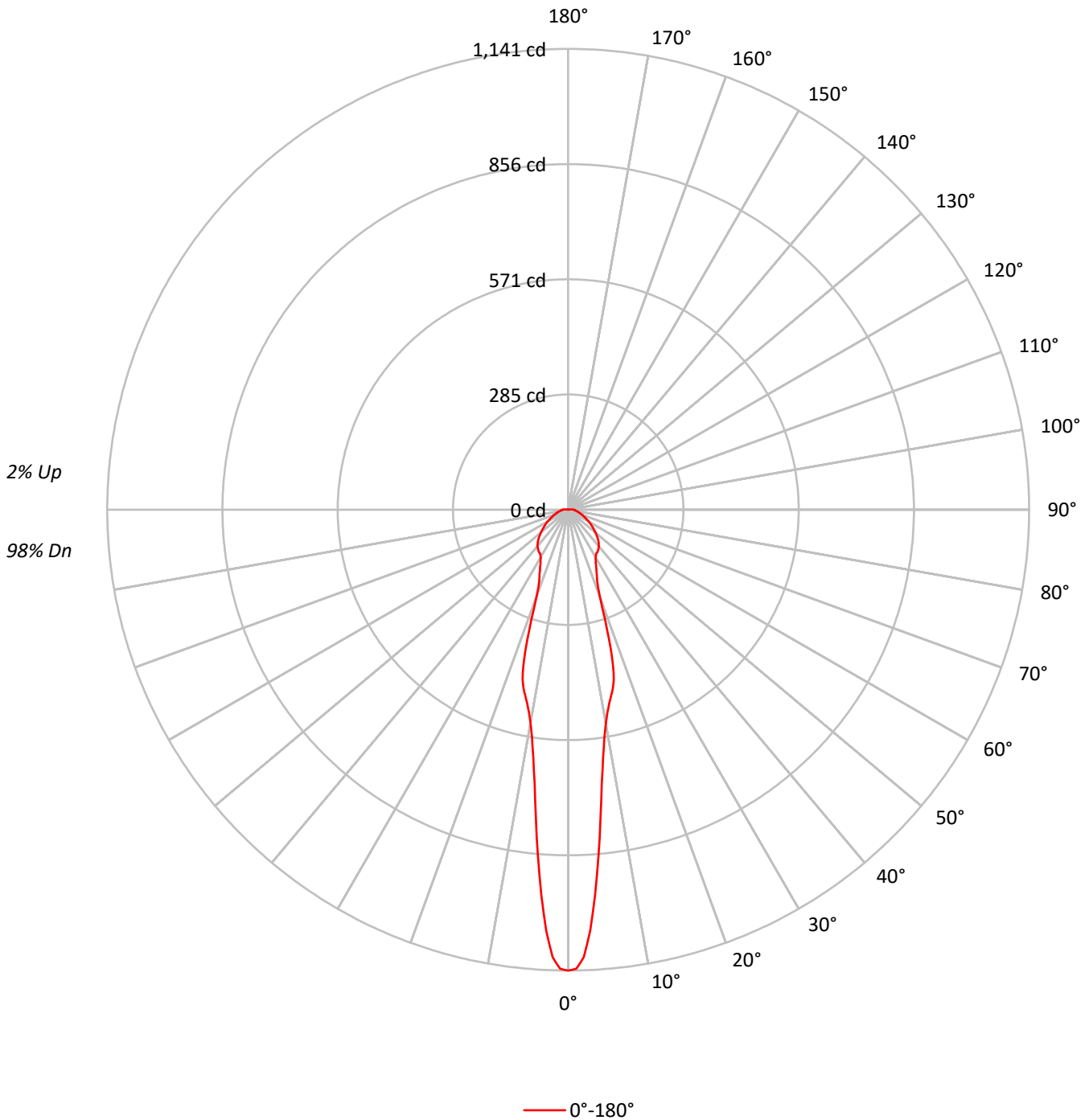
Lumens per Lamp: N/A
Luminaire Lumens: 590.7 lumens
Efficiency: N/A
Efficacy: 59.7 lumens/watt
Spacing Criteria (0/90/45): 0.3 / 0.3 / 0.45
Luminous Opening: Vertical Cylinder (Dia: 0.34' x H: 0.46')
CIE Type: Direct

Input Watts (W): 9.9
Input Voltage (V): 120
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

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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 | 0 |
| RCR | | | | | | | | | | | | | | | | | | | | |
| 0 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 110 | 110 | 110 | | 105 | 105 | 105 | | 100 | 100 | 100 | 98 |
| 1 | 109 | 105 | 101 | 98 | 106 | 103 | 99 | 96 | 98 | 95 | 92 | | 94 | 91 | 89 | | 90 | 88 | 86 | 84 |
| 2 | 101 | 94 | 88 | 83 | 98 | 92 | 86 | 82 | 88 | 83 | 80 | | 85 | 81 | 77 | | 81 | 78 | 75 | 73 |
| 3 | 94 | 85 | 78 | 72 | 91 | 83 | 76 | 71 | 80 | 74 | 70 | | 77 | 72 | 68 | | 74 | 70 | 67 | 65 |
| 4 | 87 | 77 | 70 | 64 | 85 | 76 | 69 | 63 | 73 | 67 | 62 | | 71 | 65 | 61 | | 68 | 64 | 60 | 58 |
| 5 | 82 | 71 | 63 | 57 | 80 | 70 | 62 | 57 | 67 | 61 | 56 | | 65 | 60 | 55 | | 63 | 59 | 55 | 53 |
| 6 | 77 | 65 | 58 | 52 | 75 | 64 | 57 | 52 | 62 | 56 | 51 | | 61 | 55 | 51 | | 59 | 54 | 50 | 48 |
| 7 | 72 | 61 | 53 | 48 | 71 | 60 | 53 | 48 | 58 | 52 | 47 | | 57 | 51 | 47 | | 55 | 50 | 46 | 45 |
| 8 | 69 | 57 | 49 | 44 | 67 | 56 | 49 | 44 | 55 | 48 | 44 | | 53 | 48 | 43 | | 52 | 47 | 43 | 41 |
| 9 | 65 | 53 | 46 | 41 | 64 | 53 | 46 | 41 | 52 | 45 | 41 | | 50 | 45 | 41 | | 49 | 44 | 40 | 39 |
| 10 | 62 | 50 | 43 | 39 | 61 | 50 | 43 | 39 | 49 | 43 | 39 | | 48 | 42 | 38 | | 47 | 42 | 38 | 37 |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|--------|
| | 0° |
| 0° | 132348 |
| 5° | 87351 |
| 10° | 48583 |
| 15° | 35984 |
| 20° | 17371 |
| 25° | 11829 |
| 30° | 9192 |
| 35° | 8209 |
| 40° | 7369 |
| 45° | 6378 |
| 50° | 5270 |
| 55° | 4275 |
| 60° | 3450 |
| 65° | 2732 |
| 70° | 2149 |
| 75° | 1729 |
| 80° | 1389 |
| 85° | 1122 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 6378 cd/sqm

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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 70.5 | 11.9 |
| 10°-20° | 111.2 | 18.8 |
| 20°-30° | 77.3 | 13.1 |
| 30°-40° | 79.2 | 13.4 |
| 40°-50° | 80.3 | 13.6 |
| 50°-60° | 65.1 | 11.0 |
| 60°-70° | 46.0 | 7.8 |
| 70°-80° | 30.0 | 5.1 |
| 80°-90° | 18.9 | 3.2 |
| 90°-100° | 10.2 | 1.7 |
| 100°-110° | 1.9 | 0.3 |
| 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° | 259.0 | 43.9 |
| 0°-40° | 338.3 | 57.3 |
| 0°-60° | 483.7 | 81.9 |
| 0°-90° | 578.6 | 97.9 |
| 90°-120° | 12.1 | 2.1 |
| 90°-150° | 12.1 | 2.1 |
| 90°-180° | 12.0 | 2.0 |
| 0°-180° | 590.7 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|------|------|------|
| 0° | 1141 | |
| 5° | 862 | 70 |
| 15° | 436 | 111 |
| 25° | 166 | 77 |
| 35° | 127 | 79 |
| 45° | 105 | 80 |
| 55° | 72 | 65 |
| 65° | 46 | 46 |
| 75° | 28 | 30 |
| 85° | 17 | 15 |
| 90° | 13 | 7 |
| 95° | 10 | 7 |
| 105° | 1 | 2 |
| 115° | 0 | 0 |
| 125° | 0 | 0 |
| 135° | 0 | 0 |
| 145° | 0 | 0 |
| 155° | 0 | 0 |
| 165° | 0 | 0 |
| 175° | 0 | 0 |
| 180° | 0 | |

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CANDELA DISTRIBUTION (FULL):

| 0° | |
|-------|--------|
| 0° | 1141.1 |
| 1° | 1136.9 |
| 2° | 1108.7 |
| 3° | 1043.8 |
| 4° | 956.2 |
| 5° | 861.7 |
| 6° | 766.5 |
| 7° | 680.9 |
| 8° | 619.5 |
| 9° | 571.2 |
| 10° | 536.0 |
| 11° | 510.5 |
| 12° | 489.8 |
| 13° | 472.6 |
| 14° | 456.0 |
| 15° | 436.0 |
| 16° | 404.3 |
| 17° | 360.8 |
| 18° | 311.1 |
| 19° | 263.5 |
| 20° | 227.7 |
| 21° | 205.6 |
| 22° | 191.1 |
| 23° | 182.1 |
| 24° | 173.9 |
| 25° | 165.6 |
| 27.5° | 147.6 |
| 30° | 135.9 |
| 32.5° | 129.0 |
| 35° | 126.9 |
| 37.5° | 122.8 |
| 40° | 118.0 |
| 42.5° | 111.8 |
| 45° | 104.9 |
| 47.5° | 96.6 |
| 50° | 88.3 |
| 52.5° | 80.0 |
| 55° | 72.4 |
| 57.5° | 65.5 |
| 60° | 58.6 |
| 62.5° | 51.7 |
| 65° | 46.2 |
| 67.5° | 40.7 |
| 70° | 35.9 |
| 72.5° | 31.7 |

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CANDELA DISTRIBUTION (continued):

| | 0° |
|--------|------|
| 75° | 28.3 |
| 77.5° | 24.8 |
| 80° | 22.1 |
| 82.5° | 19.3 |
| 85° | 17.2 |
| 87.5° | 15.2 |
| 90° | 13.1 |
| 92.5° | 11.7 |
| 95° | 9.7 |
| 97.5° | 6.9 |
| 100° | 4.8 |
| 102.5° | 2.8 |
| 105° | 1.4 |
| 107.5° | 0.7 |
| 110° | 0.0 |
| 112.5° | 0.0 |
| 115° | 0.0 |
| 117.5° | 0.0 |
| 120° | 0.0 |
| 122.5° | 0.0 |
| 125° | 0.0 |
| 127.5° | 0.0 |
| 130° | 0.0 |
| 132.5° | 0.0 |
| 135° | 0.0 |
| 137.5° | 0.0 |
| 140° | 0.0 |
| 142.5° | 0.0 |
| 145° | 0.0 |
| 147.5° | 0.0 |
| 150° | 0.0 |
| 152.5° | 0.0 |
| 155° | 0.0 |
| 157.5° | 0.0 |
| 160° | 0.0 |
| 162.5° | 0.0 |
| 165° | 0.0 |
| 167.5° | 0.0 |
| 170° | 0.0 |
| 172.5° | 0.0 |
| 175° | 0.0 |
| 177.5° | 0.0 |
| 180° | 0.0 |

(END OF REPORT)