

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: P701937

Luminaire Tested: 340-4C-15-D010 / 340-EU4C-1020-9035-4LBW1LI-CF

Issue Date: 8/30/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P701937  
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-15-D010 / 340-EU4C-1020-9035-4LBW1LI-CF  
Description: FARALLON 4" LED GLASS DOWNLIGHT. CYLINDRICAL FROSTED GLASS KIT.  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

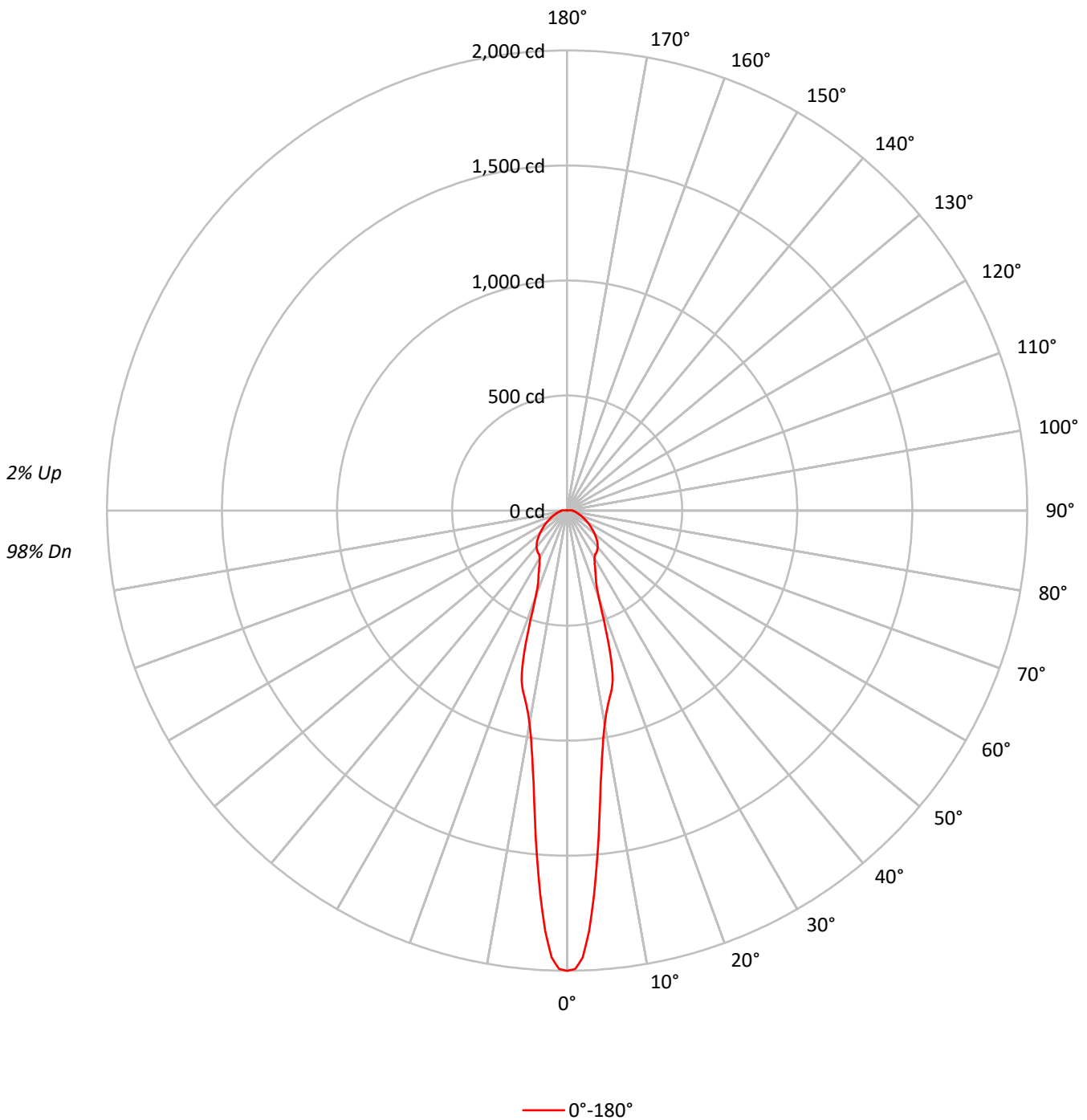
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1035.5 lumens  
Efficiency: N/A  
Efficacy: 65.5 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): 15.8  
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°  | 232001 |
| 5°  | 153120 |
| 10° | 85174  |
| 15° | 63079  |
| 20° | 30447  |
| 25° | 20729  |
| 30° | 16111  |
| 35° | 14394  |
| 40° | 12914  |
| 45° | 11176  |
| 50° | 9239   |
| 55° | 7499   |
| 60° | 6052   |
| 65° | 4790   |
| 70° | 3766   |
| 75° | 3030   |
| 80° | 2432   |
| 85° | 1970   |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 11176 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 123.6  | 11.9      |
| 10°-20°   | 195.0  | 18.8      |
| 20°-30°   | 135.5  | 13.1      |
| 30°-40°   | 138.9  | 13.4      |
| 40°-50°   | 140.7  | 13.6      |
| 50°-60°   | 114.2  | 11.0      |
| 60°-70°   | 80.6   | 7.8       |
| 70°-80°   | 52.7   | 5.1       |
| 80°-90°   | 33.1   | 3.2       |
| 90°-100°  | 17.8   | 1.7       |
| 100°-110° | 3.4    | 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°    | 454.1  | 43.9      |
| 0°-40°    | 593.0  | 57.3      |
| 0°-60°    | 847.9  | 81.9      |
| 0°-90°    | 1014.3 | 98.0      |
| 90°-120°  | 21.2   | 2.0       |
| 90°-150°  | 21.2   | 2.0       |
| 90°-180°  | 21.0   | 2.0       |
| 0°-180°   | 1035.5 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | Flux |
|------|------|------|
| 0°   | 2000 |      |
| 5°   | 1510 | 124  |
| 15°  | 764  | 195  |
| 25°  | 290  | 136  |
| 35°  | 222  | 139  |
| 45°  | 184  | 141  |
| 55°  | 127  | 114  |
| 65°  | 81   | 81   |
| 75°  | 50   | 53   |
| 85°  | 30   | 26   |
| 90°  | 23   | 13   |
| 95°  | 17   | 12   |
| 105° | 2    | 3    |
| 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°    | 2000.3 |
| 1°    | 1993.0 |
| 2°    | 1943.4 |
| 3°    | 1829.7 |
| 4°    | 1676.2 |
| 5°    | 1510.5 |
| 6°    | 1343.6 |
| 7°    | 1193.6 |
| 8°    | 1086.0 |
| 9°    | 1001.3 |
| 10°   | 939.7  |
| 11°   | 894.9  |
| 12°   | 858.6  |
| 13°   | 828.4  |
| 14°   | 799.4  |
| 15°   | 764.3  |
| 16°   | 708.7  |
| 17°   | 632.5  |
| 18°   | 545.4  |
| 19°   | 462.0  |
| 20°   | 399.1  |
| 21°   | 360.4  |
| 22°   | 335.0  |
| 23°   | 319.3  |
| 24°   | 304.8  |
| 25°   | 290.2  |
| 27.5° | 258.8  |
| 30°   | 238.2  |
| 32.5° | 226.1  |
| 35°   | 222.5  |
| 37.5° | 215.3  |
| 40°   | 206.8  |
| 42.5° | 195.9  |
| 45°   | 183.8  |
| 47.5° | 169.3  |
| 50°   | 154.8  |
| 52.5° | 140.3  |
| 55°   | 127.0  |
| 57.5° | 114.9  |
| 60°   | 102.8  |
| 62.5° | 90.7   |
| 65°   | 81.0   |
| 67.5° | 71.4   |
| 70°   | 62.9   |
| 72.5° | 55.6   |

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**CANDELA DISTRIBUTION (continued):**

|        | 0°   |
|--------|------|
| 75°    | 49.6 |
| 77.5°  | 43.5 |
| 80°    | 38.7 |
| 82.5°  | 33.9 |
| 85°    | 30.2 |
| 87.5°  | 26.6 |
| 90°    | 23.0 |
| 92.5°  | 20.6 |
| 95°    | 16.9 |
| 97.5°  | 12.1 |
| 100°   | 8.5  |
| 102.5° | 4.8  |
| 105°   | 2.4  |
| 107.5° | 1.2  |
| 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)