

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: P702166

Luminaire Tested: 340-4C-35-D010 / 340-EU4C-3040-9035-4LBW1LI-GFF

Issue Date: 8/30/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P702166  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1705-068-6)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/30/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: SHAPER  
Catalog Number: 340-4C-35-D010 / 340-EU4C-3040-9035-4LBW1LI-GFF  
Description: FARALLON 4" LED GLASS DOWNLIGHT. GLASS-IN-A-GLASS, FROSTED INSIDE, FROSTED OUTSIDE KIT.  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

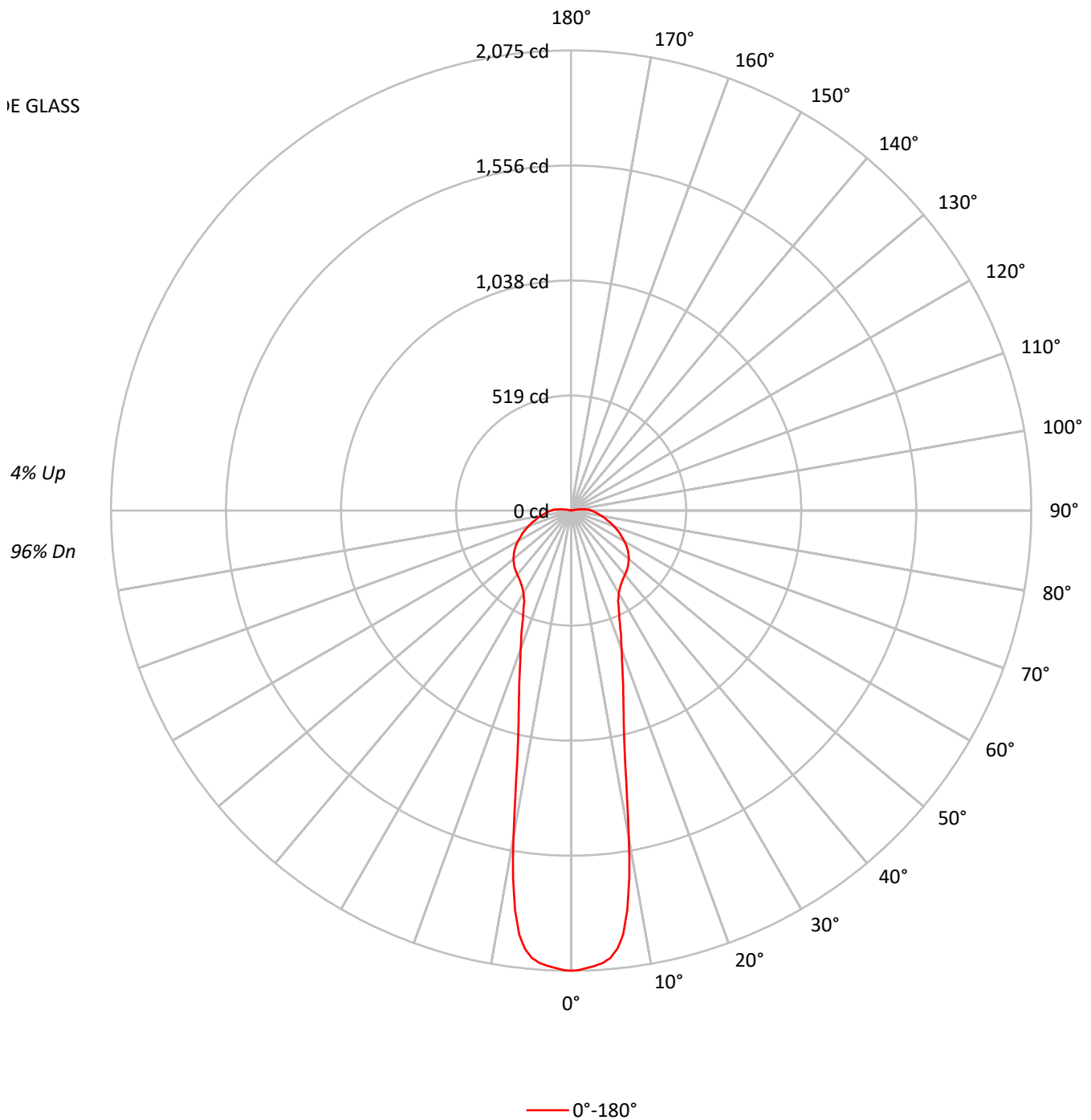
Lumens per Lamp: N/A  
Luminaire Lumens: 2103.0 lumens  
Efficiency: N/A  
Efficacy: 52.1 lumens/watt  
Spacing Criteria (0/90/45): 0.44 / 0.44 / 0.54  
Luminous Opening: Vertical Cylinder (Dia: 0.34' x H: 0.46')  
CIE Type: Direct

Input Watts (W): 40.4  
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   | 118 | 118 | 118 | 118 | 115 | 115 | 115 | 115 | 109 | 109 | 109 |  | 104 | 104 | 104 |  | 99 | 99 | 99 | 96 |
| 1   | 107 | 101 | 96  | 92  | 103 | 98  | 94  | 90  | 94  | 90  | 87  |  | 89  | 86  | 83  |  | 85 | 82 | 80 | 78 |
| 2   | 97  | 88  | 81  | 75  | 94  | 86  | 79  | 74  | 82  | 76  | 72  |  | 78  | 73  | 69  |  | 74 | 71 | 67 | 65 |
| 3   | 89  | 78  | 70  | 63  | 86  | 76  | 69  | 62  | 73  | 66  | 61  |  | 69  | 64  | 59  |  | 66 | 62 | 58 | 55 |
| 4   | 82  | 70  | 61  | 54  | 79  | 68  | 60  | 54  | 65  | 58  | 53  |  | 63  | 57  | 52  |  | 60 | 55 | 51 | 48 |
| 5   | 76  | 63  | 54  | 48  | 74  | 62  | 54  | 47  | 59  | 52  | 47  |  | 57  | 51  | 46  |  | 55 | 49 | 45 | 43 |
| 6   | 71  | 58  | 49  | 43  | 69  | 57  | 48  | 42  | 54  | 47  | 42  |  | 52  | 46  | 41  |  | 51 | 45 | 40 | 38 |
| 7   | 66  | 53  | 45  | 39  | 64  | 52  | 44  | 38  | 50  | 43  | 38  |  | 49  | 42  | 37  |  | 47 | 41 | 37 | 35 |
| 8   | 62  | 49  | 41  | 35  | 60  | 48  | 41  | 35  | 47  | 40  | 35  |  | 45  | 39  | 34  |  | 44 | 38 | 34 | 32 |
| 9   | 59  | 46  | 38  | 33  | 57  | 45  | 38  | 32  | 44  | 37  | 32  |  | 42  | 36  | 32  |  | 41 | 36 | 31 | 30 |
| 10  | 55  | 43  | 35  | 30  | 54  | 42  | 35  | 30  | 41  | 34  | 30  |  | 40  | 34  | 30  |  | 39 | 33 | 29 | 28 |

**AVERAGE LUMINANCE (cd/sqm):**

|     |        |
|-----|--------|
|     | 0°     |
| 0°  | 240642 |
| 5°  | 205366 |
| 10° | 135878 |
| 15° | 75311  |
| 20° | 50762  |
| 25° | 36471  |
| 30° | 29022  |
| 35° | 25650  |
| 40° | 23574  |
| 45° | 21962  |
| 50° | 20263  |
| 55° | 18441  |
| 60° | 16307  |
| 65° | 14294  |
| 70° | 12195  |
| 75° | 10287  |
| 80° | 8704   |
| 85° | 7442   |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 21962 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 178.3  | 8.5       |
| 10°-20°   | 261.4  | 12.4      |
| 20°-30°   | 239.1  | 11.4      |
| 30°-40°   | 250.0  | 11.9      |
| 40°-50°   | 278.3  | 13.2      |
| 50°-60°   | 278.1  | 13.2      |
| 60°-70°   | 238.5  | 11.3      |
| 70°-80°   | 180.0  | 8.6       |
| 80°-90°   | 124.4  | 5.9       |
| 90°-100°  | 66.0   | 3.1       |
| 100°-110° | 9.1    | 0.4       |
| 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°    | 678.7  | 32.3      |
| 0°-40°    | 928.7  | 44.2      |
| 0°-60°    | 1485.1 | 70.6      |
| 0°-90°    | 2027.9 | 96.4      |
| 90°-120°  | 75.1   | 3.6       |
| 90°-150°  | 75.1   | 3.6       |
| 90°-180°  | 75.0   | 3.6       |
| 0°-180°   | 2103.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | Flux |
|------|------|------|
| 0°   | 2075 |      |
| 5°   | 2026 | 178  |
| 15°  | 912  | 261  |
| 25°  | 511  | 239  |
| 35°  | 396  | 250  |
| 45°  | 361  | 278  |
| 55°  | 312  | 278  |
| 65°  | 242  | 238  |
| 75°  | 168  | 180  |
| 85°  | 114  | 98   |
| 90°  | 90   | 50   |
| 95°  | 62   | 43   |
| 105° | 5    | 9    |
| 115° | 0    | 0    |
| 125° | 0    | 0    |
| 135° | 0    | 0    |
| 145° | 0    | 0    |
| 155° | 0    | 0    |
| 165° | 0    | 0    |
| 175° | 0    | 0    |
| 180° | 0    | 0    |

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**CANDELA DISTRIBUTION (FULL):**

| 0°    |        |
|-------|--------|
| 0°    | 2074.8 |
| 1°    | 2072.1 |
| 2°    | 2064.0 |
| 3°    | 2055.8 |
| 4°    | 2044.9 |
| 5°    | 2025.9 |
| 6°    | 1987.9 |
| 7°    | 1925.4 |
| 8°    | 1819.5 |
| 9°    | 1675.6 |
| 10°   | 1499.1 |
| 11°   | 1319.8 |
| 12°   | 1170.5 |
| 13°   | 1061.8 |
| 14°   | 977.7  |
| 15°   | 912.5  |
| 16°   | 852.7  |
| 17°   | 798.4  |
| 18°   | 749.5  |
| 19°   | 703.4  |
| 20°   | 665.4  |
| 21°   | 630.0  |
| 22°   | 597.5  |
| 23°   | 564.9  |
| 24°   | 535.0  |
| 25°   | 510.6  |
| 27.5° | 459.0  |
| 30°   | 429.1  |
| 32.5° | 410.1  |
| 35°   | 396.5  |
| 37.5° | 385.6  |
| 40°   | 377.5  |
| 42.5° | 369.3  |
| 45°   | 361.2  |
| 47.5° | 350.3  |
| 50°   | 339.5  |
| 52.5° | 325.9  |
| 55°   | 312.3  |
| 57.5° | 296.0  |
| 60°   | 277.0  |
| 62.5° | 258.0  |
| 65°   | 241.7  |
| 67.5° | 222.7  |
| 70°   | 203.7  |
| 72.5° | 187.4  |

TEST NUMBER: P702166

CATALOG NUMBER: 340-4C-35-D010 / 340-EU4C-3040-9035-4LBW1LI-GFF

**CANDELA DISTRIBUTION (continued):**

|        | 0°    |
|--------|-------|
| 75°    | 168.4 |
| 77.5°  | 154.8 |
| 80°    | 138.5 |
| 82.5°  | 124.9 |
| 85°    | 114.1 |
| 87.5°  | 103.2 |
| 90°    | 89.6  |
| 92.5°  | 81.5  |
| 95°    | 62.5  |
| 97.5°  | 40.7  |
| 100°   | 24.4  |
| 102.5° | 13.6  |
| 105°   | 5.4   |
| 107.5° | 2.7   |
| 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)