

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: P702214

Luminaire Tested: 340-4C-40-D010 / 340-EU4C-3040-9030-4LBW1LI-GFC

Issue Date: 8/30/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P702214  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1705-068-7)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/30/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: SHAPER  
Catalog Number: 340-4C-40-D010 / 340-EU4C-3040-9030-4LBW1LI-GFC  
Description: FARALLON 4" LED GLASS DOWNLIGHT. GLASS-IN-A-GLASS, FROSTED INSIDE, CLEAR OUTSIDE C  
KIT.  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

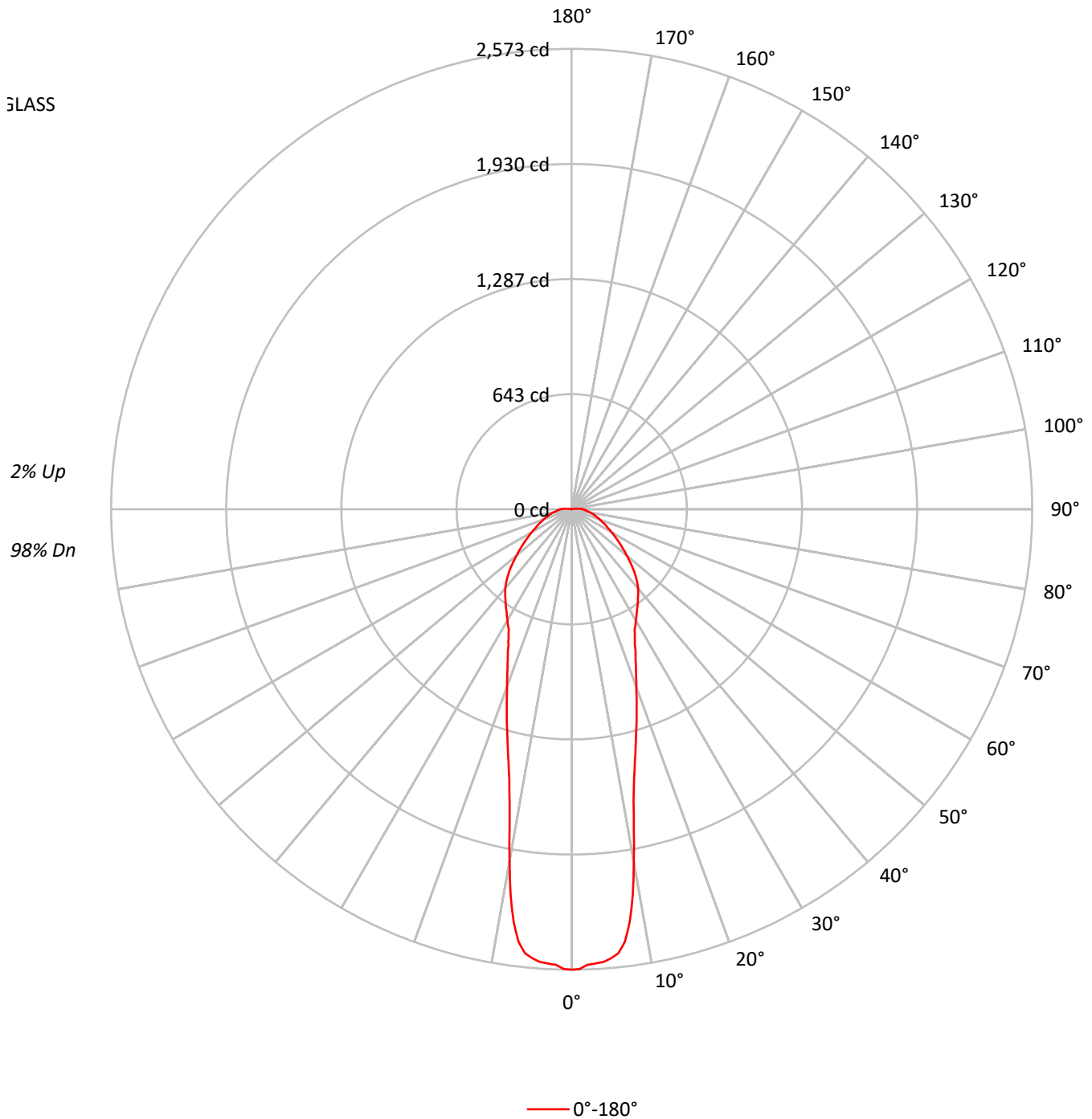
Lumens per Lamp: N/A  
Luminaire Lumens: 2562.8 lumens  
Efficiency: N/A  
Efficacy: 54.5 lumens/watt  
Spacing Criteria (0/90/45): 0.52 / 0.52 / 0.65  
Luminous Opening: Vertical Cylinder (Dia: 0.34' x H: 0.46')  
CIE Type: Direct

Input Watts (W): 47  
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

TEST NUMBER: P702214

CATALOG NUMBER: 340-4C-40-D010 / 340-EU4C-3040-9030-4LBW1LI-GFC

### Luminous Intensity Polar Plot



TEST NUMBER: P702214

CATALOG NUMBER: 340-4C-40-D010 / 340-EU4C-3040-9030-4LBW1LI-GFC

**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 | 104 | 100 | 97  | 106 | 102 | 98  | 95  | 97  | 94  | 92  |  | 93  | 91  | 89  |  | 89  | 87  | 86  | 83 |
| 2   | 100 | 93  | 87  | 81  | 98  | 91  | 85  | 80  | 87  | 82  | 78  |  | 84  | 80  | 76  |  | 80  | 77  | 74  | 72 |
| 3   | 93  | 83  | 76  | 70  | 90  | 82  | 75  | 69  | 78  | 73  | 68  |  | 75  | 71  | 66  |  | 73  | 69  | 65  | 63 |
| 4   | 86  | 75  | 67  | 61  | 84  | 74  | 66  | 61  | 71  | 65  | 60  |  | 69  | 63  | 59  |  | 66  | 62  | 58  | 56 |
| 5   | 80  | 69  | 60  | 54  | 78  | 67  | 60  | 54  | 65  | 58  | 53  |  | 63  | 57  | 53  |  | 61  | 56  | 52  | 50 |
| 6   | 75  | 63  | 55  | 49  | 73  | 62  | 54  | 49  | 60  | 53  | 48  |  | 58  | 52  | 48  |  | 57  | 51  | 47  | 45 |
| 7   | 70  | 58  | 50  | 45  | 69  | 57  | 50  | 44  | 56  | 49  | 44  |  | 54  | 48  | 44  |  | 53  | 47  | 43  | 41 |
| 8   | 66  | 54  | 46  | 41  | 65  | 53  | 46  | 41  | 52  | 45  | 40  |  | 50  | 44  | 40  |  | 49  | 44  | 40  | 38 |
| 9   | 62  | 50  | 43  | 38  | 61  | 50  | 43  | 38  | 48  | 42  | 37  |  | 47  | 41  | 37  |  | 46  | 41  | 37  | 35 |
| 10  | 59  | 47  | 40  | 35  | 58  | 47  | 40  | 35  | 45  | 39  | 35  |  | 44  | 39  | 35  |  | 44  | 38  | 34  | 33 |

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

|     |        |
|-----|--------|
|     | 0°     |
| 0°  | 298390 |
| 5°  | 255443 |
| 10° | 181371 |
| 15° | 113861 |
| 20° | 80591  |
| 25° | 59700  |
| 30° | 48541  |
| 35° | 41609  |
| 40° | 36089  |
| 45° | 30037  |
| 50° | 23922  |
| 55° | 19078  |
| 60° | 15182  |
| 65° | 12313  |
| 70° | 10046  |
| 75° | 8161   |
| 80° | 6442   |
| 85° | 5270   |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 30037 cd/sqm

TEST NUMBER: P702214

CATALOG NUMBER: 340-4C-40-D010 / 340-EU4C-3040-9030-4LBW1LI-GFC

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 226.2  | 8.8       |
| 10°-20°   | 390.0  | 15.2      |
| 20°-30°   | 390.6  | 15.2      |
| 30°-40°   | 403.1  | 15.7      |
| 40°-50°   | 379.2  | 14.8      |
| 50°-60°   | 290.8  | 11.3      |
| 60°-70°   | 207.2  | 8.1       |
| 70°-80°   | 141.5  | 5.5       |
| 80°-90°   | 88.5   | 3.5       |
| 90°-100°  | 42.0   | 1.6       |
| 100°-110° | 3.7    | 0.1       |
| 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°    | 1006.8 | 39.3      |
| 0°-40°    | 1409.9 | 55.0      |
| 0°-60°    | 2079.8 | 81.2      |
| 0°-90°    | 2517.1 | 98.2      |
| 90°-120°  | 45.8   | 1.8       |
| 90°-150°  | 45.8   | 1.8       |
| 90°-180°  | 46.0   | 1.8       |
| 0°-180°   | 2562.8 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | Flux |
|------|------|------|
| 0°   | 2573 |      |
| 5°   | 2520 | 226  |
| 15°  | 1380 | 390  |
| 25°  | 836  | 391  |
| 35°  | 643  | 403  |
| 45°  | 494  | 379  |
| 55°  | 323  | 291  |
| 65°  | 208  | 207  |
| 75°  | 134  | 141  |
| 85°  | 81   | 70   |
| 90°  | 62   | 34   |
| 95°  | 37   | 26   |
| 105° | 0    | 4    |
| 115° | 0    | 0    |
| 125° | 0    | 0    |
| 135° | 0    | 0    |
| 145° | 0    | 0    |
| 155° | 0    | 0    |
| 165° | 0    | 0    |
| 175° | 0    | 0    |
| 180° | 0    | 0    |

TEST NUMBER: P702214

CATALOG NUMBER: 340-4C-40-D010 / 340-EU4C-3040-9030-4LBW1LI-GFC

**CANDELA DISTRIBUTION (FULL):**

| 0°    |        |
|-------|--------|
| 0°    | 2572.7 |
| 1°    | 2569.6 |
| 2°    | 2547.8 |
| 3°    | 2541.6 |
| 4°    | 2535.4 |
| 5°    | 2519.9 |
| 6°    | 2495.0 |
| 7°    | 2436.0 |
| 8°    | 2330.3 |
| 9°    | 2181.2 |
| 10°   | 2001.0 |
| 11°   | 1817.7 |
| 12°   | 1665.4 |
| 13°   | 1547.3 |
| 14°   | 1457.2 |
| 15°   | 1379.6 |
| 16°   | 1305.0 |
| 17°   | 1239.7 |
| 18°   | 1174.5 |
| 19°   | 1112.3 |
| 20°   | 1056.4 |
| 21°   | 1003.6 |
| 22°   | 957.0  |
| 23°   | 913.5  |
| 24°   | 876.2  |
| 25°   | 835.8  |
| 27.5° | 761.2  |
| 30°   | 717.7  |
| 32.5° | 677.3  |
| 35°   | 643.2  |
| 37.5° | 609.0  |
| 40°   | 577.9  |
| 42.5° | 537.5  |
| 45°   | 494.0  |
| 47.5° | 447.4  |
| 50°   | 400.8  |
| 52.5° | 360.4  |
| 55°   | 323.1  |
| 57.5° | 289.0  |
| 60°   | 257.9  |
| 62.5° | 229.9  |
| 65°   | 208.2  |
| 67.5° | 186.4  |
| 70°   | 167.8  |
| 72.5° | 149.1  |

TEST NUMBER: P702214

CATALOG NUMBER: 340-4C-40-D010 / 340-EU4C-3040-9030-4LBW1LI-GFC

**CANDELA DISTRIBUTION (continued):**

|        | 0°    |
|--------|-------|
| 75°    | 133.6 |
| 77.5°  | 118.1 |
| 80°    | 102.5 |
| 82.5°  | 90.1  |
| 85°    | 80.8  |
| 87.5°  | 71.5  |
| 90°    | 62.1  |
| 92.5°  | 52.8  |
| 95°    | 37.3  |
| 97.5°  | 24.9  |
| 100°   | 15.5  |
| 102.5° | 6.2   |
| 105°   | 0.0   |
| 107.5° | 0.0   |
| 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)