

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: P702078

Luminaire Tested: 340-4C-25-D010 / 340-EU4C-3040-9730-4LBW1LI-CQ

Issue Date: 8/30/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P702078  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1705-068-5)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/30/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: SHAPER  
Catalog Number: 340-4C-25-D010 / 340-EU4C-3040-9730-4LBW1LI-CQ  
Description: FARALLON 4" LED GLASS DOWNLIGHT CYLINDRICAL FROSTED, QUADRATE ETCHED GLASS KIT.  
Light Source: 3000K CCT, 97 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

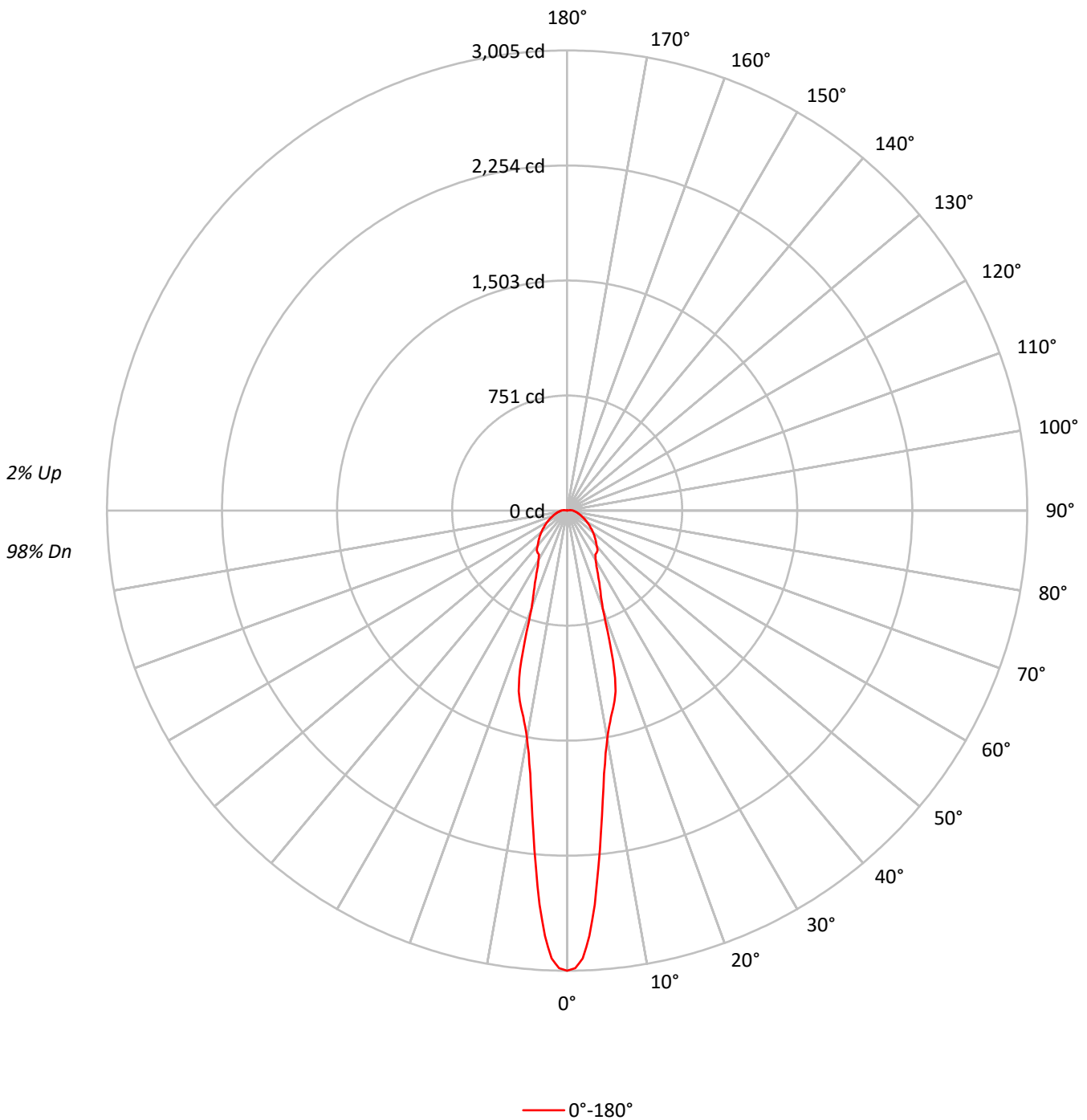
Lumens per Lamp: N/A  
Luminaire Lumens: 1601.2 lumens  
Efficiency: N/A  
Efficacy: 50.8 lumens/watt  
Spacing Criteria (0/90/45): 0.33 / 0.33 / 0.46  
Luminous Opening: Vertical Cylinder (Dia: 0.34' x H: 0.46')  
CIE Type: Direct

Input Watts (W): 31.5  
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  | 99  | 92  | 87  | 82  | 88  | 84  | 80  |  | 85  | 81  | 78  |  | 81  | 78  | 76  | 74 |
| 3   | 94  | 85  | 78  | 72  | 92  | 83  | 77  | 72  | 80  | 75  | 70  |  | 77  | 73  | 69  |  | 75  | 71  | 67  | 65 |
| 4   | 88  | 78  | 70  | 64  | 86  | 76  | 69  | 64  | 74  | 68  | 63  |  | 71  | 66  | 62  |  | 69  | 64  | 61  | 59 |
| 5   | 82  | 71  | 64  | 58  | 80  | 70  | 63  | 58  | 68  | 62  | 57  |  | 66  | 60  | 56  |  | 64  | 59  | 55  | 53 |
| 6   | 77  | 66  | 58  | 53  | 76  | 65  | 58  | 53  | 63  | 57  | 52  |  | 61  | 56  | 52  |  | 60  | 55  | 51  | 49 |
| 7   | 73  | 62  | 54  | 49  | 71  | 61  | 54  | 49  | 59  | 53  | 48  |  | 58  | 52  | 48  |  | 56  | 51  | 47  | 45 |
| 8   | 69  | 58  | 50  | 45  | 68  | 57  | 50  | 45  | 55  | 49  | 45  |  | 54  | 49  | 44  |  | 53  | 48  | 44  | 42 |
| 9   | 66  | 54  | 47  | 42  | 64  | 54  | 47  | 42  | 52  | 46  | 42  |  | 51  | 46  | 42  |  | 50  | 45  | 41  | 40 |
| 10  | 63  | 51  | 44  | 40  | 61  | 51  | 44  | 40  | 50  | 44  | 39  |  | 49  | 43  | 39  |  | 48  | 43  | 39  | 37 |

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

|     |        |
|-----|--------|
|     | 0°     |
| 0°  | 348506 |
| 5°  | 237166 |
| 10° | 136703 |
| 15° | 100854 |
| 20° | 51922  |
| 25° | 34529  |
| 30° | 25241  |
| 35° | 21762  |
| 40° | 18716  |
| 45° | 15754  |
| 50° | 13155  |
| 55° | 10847  |
| 60° | 8877   |
| 65° | 7203   |
| 70° | 5789   |
| 75° | 4722   |
| 80° | 3890   |
| 85° | 3150   |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 15754 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 193.7  | 12.1      |
| 10°-20°   | 315.4  | 19.7      |
| 20°-30°   | 225.7  | 14.1      |
| 30°-40°   | 210.0  | 13.1      |
| 40°-50°   | 200.0  | 12.5      |
| 50°-60°   | 164.6  | 10.3      |
| 60°-70°   | 121.0  | 7.6       |
| 70°-80°   | 82.7   | 5.2       |
| 80°-90°   | 53.2   | 3.3       |
| 90°-100°  | 29.3   | 1.8       |
| 100°-110° | 5.4    | 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°    | 734.8  | 45.9      |
| 0°-40°    | 944.8  | 59.0      |
| 0°-60°    | 1309.5 | 81.8      |
| 0°-90°    | 1566.5 | 97.8      |
| 90°-120°  | 34.7   | 2.2       |
| 90°-150°  | 34.7   | 2.2       |
| 90°-180°  | 35.0   | 2.2       |
| 0°-180°   | 1601.2 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | Flux |
|------|------|------|
| 0°   | 3005 |      |
| 5°   | 2340 | 194  |
| 15°  | 1222 | 315  |
| 25°  | 483  | 226  |
| 35°  | 336  | 210  |
| 45°  | 259  | 200  |
| 55°  | 184  | 165  |
| 65°  | 122  | 121  |
| 75°  | 77   | 83   |
| 85°  | 48   | 42   |
| 90°  | 39   | 21   |
| 95°  | 27   | 19   |
| 105° | 4    | 5    |
| 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°    | 3004.8 |
| 1°    | 2989.3 |
| 2°    | 2925.5 |
| 3°    | 2780.5 |
| 4°    | 2579.4 |
| 5°    | 2339.6 |
| 6°    | 2111.5 |
| 7°    | 1906.5 |
| 8°    | 1734.4 |
| 9°    | 1604.9 |
| 10°   | 1508.2 |
| 11°   | 1436.6 |
| 12°   | 1376.7 |
| 13°   | 1328.4 |
| 14°   | 1280.0 |
| 15°   | 1222.0 |
| 16°   | 1136.9 |
| 17°   | 1024.8 |
| 18°   | 893.3  |
| 19°   | 771.5  |
| 20°   | 680.6  |
| 21°   | 624.5  |
| 22°   | 583.9  |
| 23°   | 549.1  |
| 24°   | 516.3  |
| 25°   | 483.4  |
| 27.5° | 415.7  |
| 30°   | 373.2  |
| 32.5° | 342.2  |
| 35°   | 336.4  |
| 37.5° | 326.8  |
| 40°   | 299.7  |
| 42.5° | 278.4  |
| 45°   | 259.1  |
| 47.5° | 239.8  |
| 50°   | 220.4  |
| 52.5° | 201.1  |
| 55°   | 183.7  |
| 57.5° | 166.3  |
| 60°   | 150.8  |
| 62.5° | 135.3  |
| 65°   | 121.8  |
| 67.5° | 108.3  |
| 70°   | 96.7   |
| 72.5° | 87.0   |

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**CANDELA DISTRIBUTION (continued):**

|        | 0°   |
|--------|------|
| 75°    | 77.3 |
| 77.5°  | 69.6 |
| 80°    | 61.9 |
| 82.5°  | 54.1 |
| 85°    | 48.3 |
| 87.5°  | 42.5 |
| 90°    | 38.7 |
| 92.5°  | 34.8 |
| 95°    | 27.1 |
| 97.5°  | 19.3 |
| 100°   | 13.5 |
| 102.5° | 7.7  |
| 105°   | 3.9  |
| 107.5° | 1.9  |
| 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)