

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: P702228

Luminaire Tested: 340-4C-40-D010 / 340-EU4C-3040-9040-4LBW1LI-GFC

Issue Date: 8/30/2023

Test Information

Test Method: LM-79-2019
Report Number: P702228
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-3040-9040-4LBW1LI-GFC
Description: FARALLON 4" LED GLASS DOWNLIGHT. GLASS-IN-A-GLASS, FROSTED INSIDE, CLEAR OUTSIDE C
KIT.
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

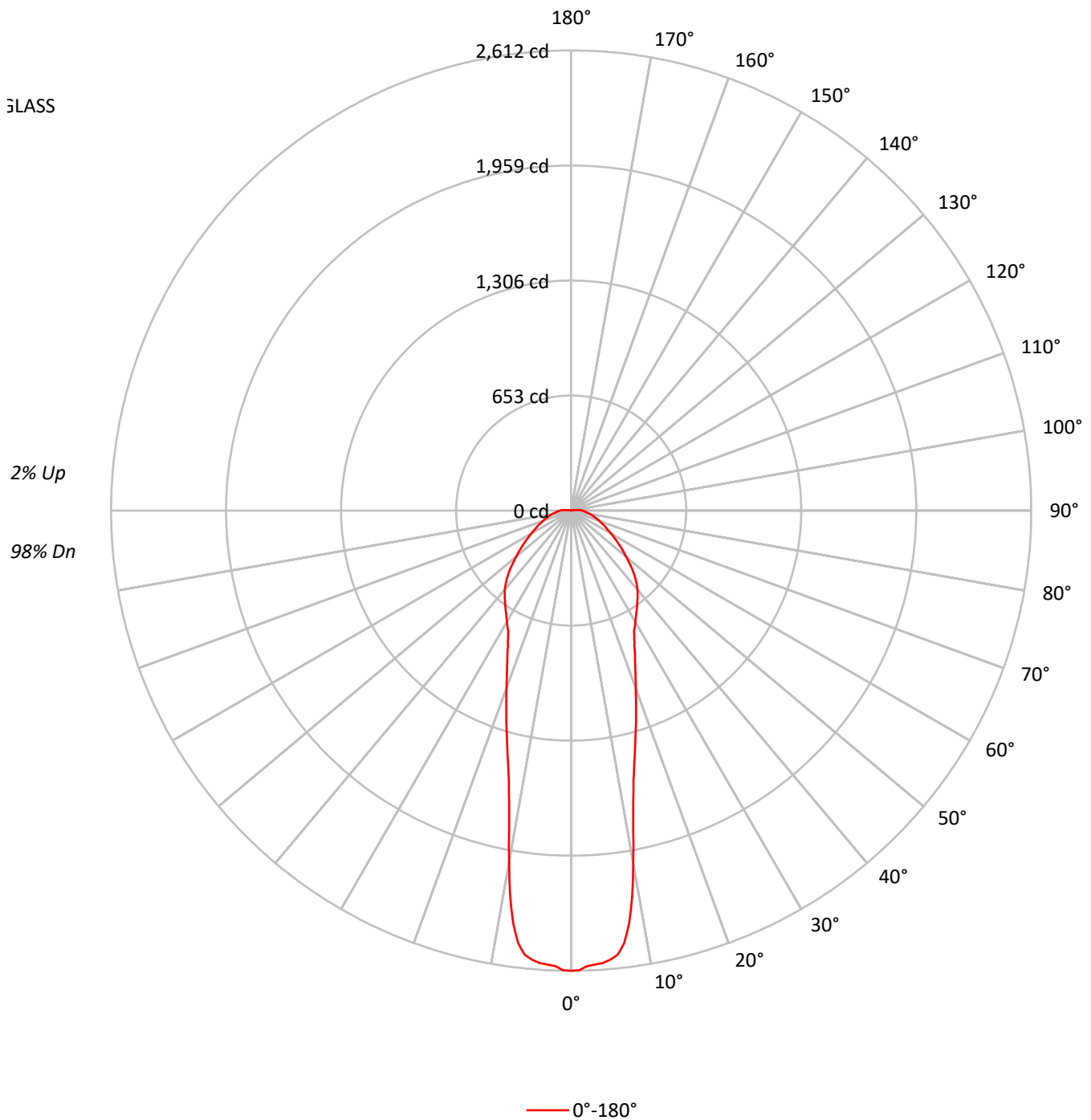
Lumens per Lamp: N/A
Luminaire Lumens: 2602.4 lumens
Efficiency: N/A
Efficacy: 55.4 lumens/watt
Spacing Criteria (0/90/45): 0.52 / 0.52 / 0.65
Luminous Opening: Vertical Cylinder (Dia: 0.34' x H: 0.46')
CIE Type: Direct

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

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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 | 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° | 302983 |
| 5° | 259376 |
| 10° | 184162 |
| 15° | 115611 |
| 20° | 81835 |
| 25° | 60621 |
| 30° | 49292 |
| 35° | 42250 |
| 40° | 36645 |
| 45° | 30499 |
| 50° | 24292 |
| 55° | 19374 |
| 60° | 15418 |
| 65° | 12502 |
| 70° | 10202 |
| 75° | 8290 |
| 80° | 6542 |
| 85° | 5348 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 30499 cd/sqm

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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 229.7 | 8.8 |
| 10°-20° | 396.0 | 15.2 |
| 20°-30° | 396.6 | 15.2 |
| 30°-40° | 409.3 | 15.7 |
| 40°-50° | 385.0 | 14.8 |
| 50°-60° | 295.3 | 11.3 |
| 60°-70° | 210.4 | 8.1 |
| 70°-80° | 143.7 | 5.5 |
| 80°-90° | 89.9 | 3.5 |
| 90°-100° | 42.7 | 1.6 |
| 100°-110° | 3.8 | 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° | 1022.3 | 39.3 |
| 0°-40° | 1431.6 | 55.0 |
| 0°-60° | 2111.9 | 81.2 |
| 0°-90° | 2555.9 | 98.2 |
| 90°-120° | 46.5 | 1.8 |
| 90°-150° | 46.5 | 1.8 |
| 90°-180° | 46.0 | 1.8 |
| 0°-180° | 2602.4 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|------|------|------|
| 0° | 2612 | |
| 5° | 2559 | 230 |
| 15° | 1401 | 396 |
| 25° | 849 | 397 |
| 35° | 653 | 409 |
| 45° | 502 | 385 |
| 55° | 328 | 295 |
| 65° | 211 | 210 |
| 75° | 136 | 144 |
| 85° | 82 | 71 |
| 90° | 63 | 35 |
| 95° | 38 | 27 |
| 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 |

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CANDELA DISTRIBUTION (FULL):

| 0° | |
|-------|--------|
| 0° | 2612.3 |
| 1° | 2609.2 |
| 2° | 2587.1 |
| 3° | 2580.8 |
| 4° | 2574.5 |
| 5° | 2558.7 |
| 6° | 2533.4 |
| 7° | 2473.5 |
| 8° | 2366.2 |
| 9° | 2214.8 |
| 10° | 2031.8 |
| 11° | 1845.7 |
| 12° | 1691.1 |
| 13° | 1571.2 |
| 14° | 1479.7 |
| 15° | 1400.8 |
| 16° | 1325.1 |
| 17° | 1258.8 |
| 18° | 1192.6 |
| 19° | 1129.5 |
| 20° | 1072.7 |
| 21° | 1019.1 |
| 22° | 971.7 |
| 23° | 927.6 |
| 24° | 889.7 |
| 25° | 848.7 |
| 27.5° | 773.0 |
| 30° | 728.8 |
| 32.5° | 687.8 |
| 35° | 653.1 |
| 37.5° | 618.4 |
| 40° | 586.8 |
| 42.5° | 545.8 |
| 45° | 501.6 |
| 47.5° | 454.3 |
| 50° | 407.0 |
| 52.5° | 366.0 |
| 55° | 328.1 |
| 57.5° | 293.4 |
| 60° | 261.9 |
| 62.5° | 233.5 |
| 65° | 211.4 |
| 67.5° | 189.3 |
| 70° | 170.4 |
| 72.5° | 151.4 |

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CANDELA DISTRIBUTION (continued):

| | 0° |
|--------|-------|
| 75° | 135.7 |
| 77.5° | 119.9 |
| 80° | 104.1 |
| 82.5° | 91.5 |
| 85° | 82.0 |
| 87.5° | 72.6 |
| 90° | 63.1 |
| 92.5° | 53.6 |
| 95° | 37.9 |
| 97.5° | 25.2 |
| 100° | 15.8 |
| 102.5° | 6.3 |
| 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)