

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: P702016

Luminaire Tested: 340-4C-20-D010 / 340-EU4C-1020-9727-4LBW1LI-FF

Issue Date: 8/30/2023

Test Information

Test Method: LM-79-2019
Report Number: P702016
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1705-068-2)
Test Lab: INNOVATION CENTER
Issue Date: 8/30/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: SHAPER
Catalog Number: 340-4C-20-D010 / 340-EU4C-1020-9727-4LBW1LI-FF
Description: FARALLON 4" LED GLASS DOWNLIGHT. FLARED FROSTED GLASS KIT.
Light Source: 2700K CCT, 97 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

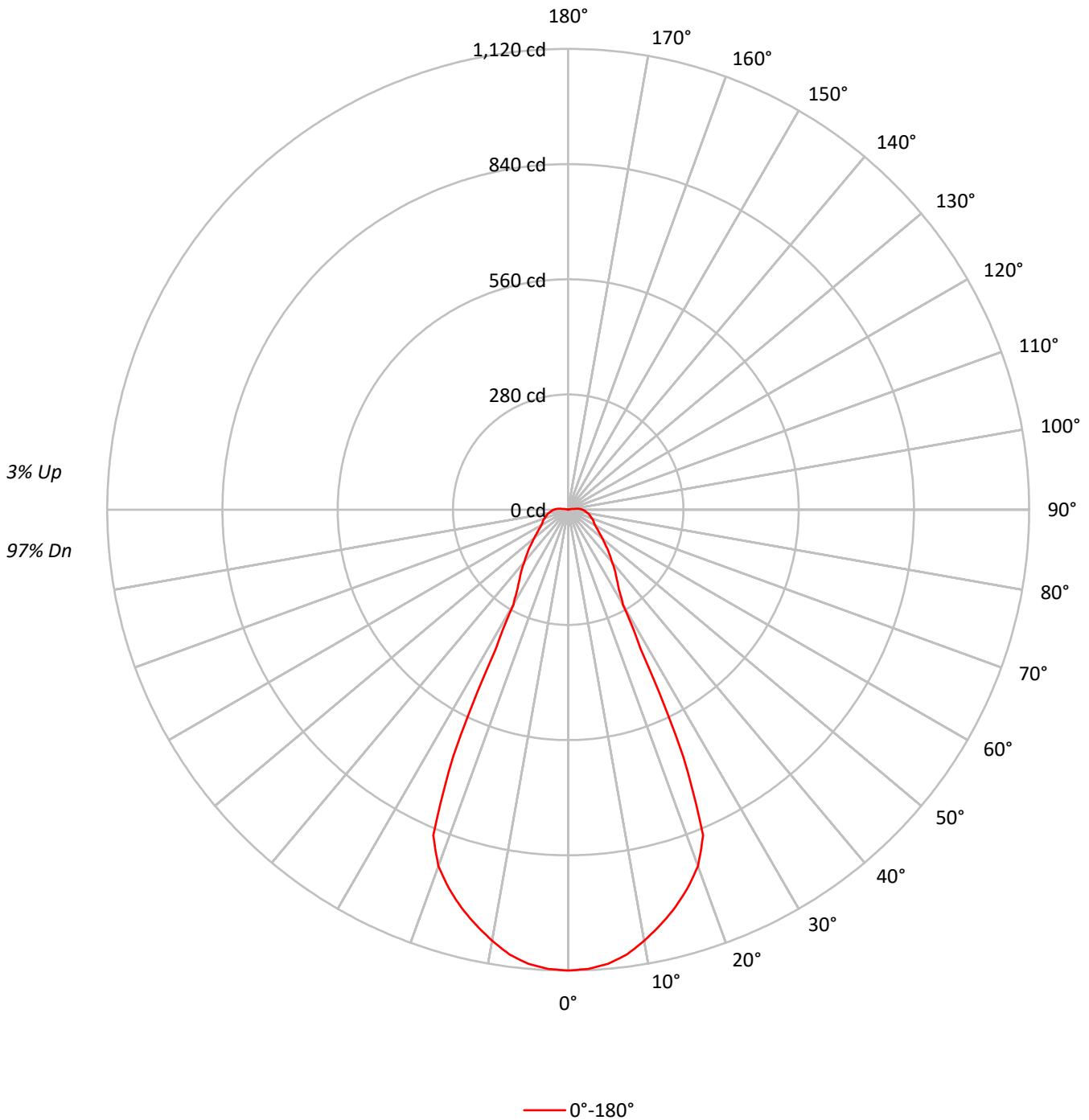
Lumens per Lamp: N/A
Luminaire Lumens: 1179.3 lumens
Efficiency: N/A
Efficacy: 54.1 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 0.89 / 0.73
Luminous Opening: Vertical Cylinder (Dia: 0.34' x H: 0.46')
CIE Type: Direct

Input Watts (W): 21.8
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

TEST NUMBER: P702016

CATALOG NUMBER: 340-4C-20-D010 / 340-EU4C-1020-9727-4LBW1LI-FF

Luminous Intensity Polar Plot



TEST NUMBER: P702016

CATALOG NUMBER: 340-4C-20-D010 / 340-EU4C-1020-9727-4LBW1LI-FF

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 | 110 | 110 | 110 | | 104 | 104 | 104 | | 100 | 100 | 100 | 97 |
| 1 | 109 | 105 | 102 | 98 | 107 | 103 | 99 | 96 | 98 | 95 | 93 | | 94 | 92 | 90 | | 90 | 88 | 86 | 84 |
| 2 | 102 | 95 | 89 | 85 | 99 | 93 | 88 | 83 | 89 | 85 | 81 | | 86 | 82 | 79 | | 82 | 80 | 77 | 75 |
| 3 | 95 | 87 | 80 | 75 | 93 | 85 | 79 | 74 | 82 | 77 | 72 | | 79 | 75 | 71 | | 76 | 73 | 69 | 67 |
| 4 | 89 | 80 | 73 | 67 | 87 | 78 | 72 | 67 | 76 | 70 | 65 | | 73 | 68 | 64 | | 71 | 67 | 63 | 61 |
| 5 | 84 | 74 | 66 | 61 | 82 | 73 | 66 | 61 | 70 | 64 | 60 | | 68 | 63 | 59 | | 66 | 62 | 58 | 56 |
| 6 | 79 | 69 | 61 | 56 | 78 | 68 | 61 | 56 | 66 | 60 | 55 | | 64 | 59 | 55 | | 62 | 58 | 54 | 52 |
| 7 | 75 | 64 | 57 | 52 | 73 | 63 | 56 | 52 | 62 | 56 | 51 | | 60 | 55 | 51 | | 59 | 54 | 50 | 49 |
| 8 | 71 | 60 | 53 | 48 | 70 | 59 | 53 | 48 | 58 | 52 | 48 | | 57 | 51 | 47 | | 55 | 51 | 47 | 45 |
| 9 | 68 | 57 | 50 | 45 | 66 | 56 | 50 | 45 | 55 | 49 | 45 | | 54 | 48 | 44 | | 53 | 48 | 44 | 43 |
| 10 | 64 | 53 | 47 | 43 | 63 | 53 | 47 | 42 | 52 | 46 | 42 | | 51 | 46 | 42 | | 50 | 45 | 42 | 40 |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|--------|
| | 0° |
| 0° | 129890 |
| 5° | 112328 |
| 10° | 96414 |
| 15° | 82664 |
| 20° | 70315 |
| 25° | 47236 |
| 30° | 18011 |
| 35° | 13300 |
| 40° | 10348 |
| 45° | 8184 |
| 50° | 6446 |
| 55° | 5243 |
| 60° | 4445 |
| 65° | 4027 |
| 70° | 3634 |
| 75° | 3342 |
| 80° | 3067 |
| 85° | 2700 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 8184 cd/sqm

TEST NUMBER: P702016

CATALOG NUMBER: 340-4C-20-D010 / 340-EU4C-1020-9727-4LBW1LI-FF

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 104.4 | 8.8 |
| 10°-20° | 280.9 | 23.8 |
| 20°-30° | 277.9 | 23.6 |
| 30°-40° | 130.3 | 11.1 |
| 40°-50° | 104.1 | 8.8 |
| 50°-60° | 80.4 | 6.8 |
| 60°-70° | 67.5 | 5.7 |
| 70°-80° | 57.9 | 4.9 |
| 80°-90° | 45.2 | 3.8 |
| 90°-100° | 26.1 | 2.2 |
| 100°-110° | 4.8 | 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° | 663.2 | 56.2 |
| 0°-40° | 793.5 | 67.3 |
| 0°-60° | 978.0 | 82.9 |
| 0°-90° | 1148.5 | 97.4 |
| 90°-120° | 30.8 | 2.6 |
| 90°-150° | 30.8 | 2.6 |
| 90°-180° | 31.0 | 2.6 |
| 0°-180° | 1179.3 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|------|------|------|
| 0° | 1120 | |
| 5° | 1108 | 104 |
| 15° | 1002 | 281 |
| 25° | 661 | 278 |
| 35° | 206 | 130 |
| 45° | 135 | 104 |
| 55° | 89 | 80 |
| 65° | 68 | 67 |
| 75° | 55 | 58 |
| 85° | 41 | 35 |
| 90° | 34 | 19 |
| 95° | 25 | 17 |
| 105° | 3 | 5 |
| 115° | 0 | 0 |
| 125° | 0 | 0 |
| 135° | 0 | 0 |
| 145° | 0 | 0 |
| 155° | 0 | 0 |
| 165° | 0 | 0 |
| 175° | 0 | 0 |
| 180° | 0 | |

TEST NUMBER: P702016

CATALOG NUMBER: 340-4C-20-D010 / 340-EU4C-1020-9727-4LBW1LI-FF

CANDELA DISTRIBUTION (FULL):

| 0° | |
|--------|--------|
| 0° | 1119.9 |
| 2.5° | 1117.0 |
| 5° | 1108.1 |
| 7.5° | 1090.3 |
| 10° | 1063.7 |
| 12.5° | 1034.1 |
| 15° | 1001.6 |
| 17.5° | 964.6 |
| 20° | 921.7 |
| 22.5° | 856.6 |
| 25° | 661.3 |
| 27.5° | 380.2 |
| 30° | 266.3 |
| 32.5° | 229.3 |
| 35° | 205.6 |
| 37.5° | 186.4 |
| 40° | 165.7 |
| 42.5° | 149.4 |
| 45° | 134.6 |
| 47.5° | 119.8 |
| 50° | 108.0 |
| 52.5° | 97.6 |
| 55° | 88.8 |
| 57.5° | 81.4 |
| 60° | 75.5 |
| 62.5° | 71.0 |
| 65° | 68.1 |
| 67.5° | 65.1 |
| 70° | 60.7 |
| 72.5° | 57.7 |
| 75° | 54.7 |
| 77.5° | 51.8 |
| 80° | 48.8 |
| 82.5° | 44.4 |
| 85° | 41.4 |
| 87.5° | 38.5 |
| 90° | 34.0 |
| 92.5° | 31.1 |
| 95° | 25.2 |
| 97.5° | 16.3 |
| 100° | 11.8 |
| 102.5° | 7.4 |
| 105° | 3.0 |
| 107.5° | 1.5 |
| 110° | 0.0 |

TEST NUMBER: P702016

CATALOG NUMBER: 340-4C-20-D010 / 340-EU4C-1020-9727-4LBW1LI-FF

CANDELA DISTRIBUTION (continued):

| | 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)