

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: HALO

Report Number: P885683

Luminaire Tested: ML104LSFL95FS1E-TIR1D40FL-TL1RDMBB-340LM-2700K

Issue Date: 6/19/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P885683  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2402-314-129)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 6/19/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML104LSFL95FS1E-TIR1D40FL-TL1RDMBB-340LM-2700K  
Description: 1IN ROUND ML FLEX, SELECTABLE CCT, WITH 40D TIR, MATTE BLACK BAFFLED TRIM  
Light Source: (1) HCL SELECTABLE LUMEN LED 95CRI / 2700K CCT  
Ballast/Driver: -

**Summary**

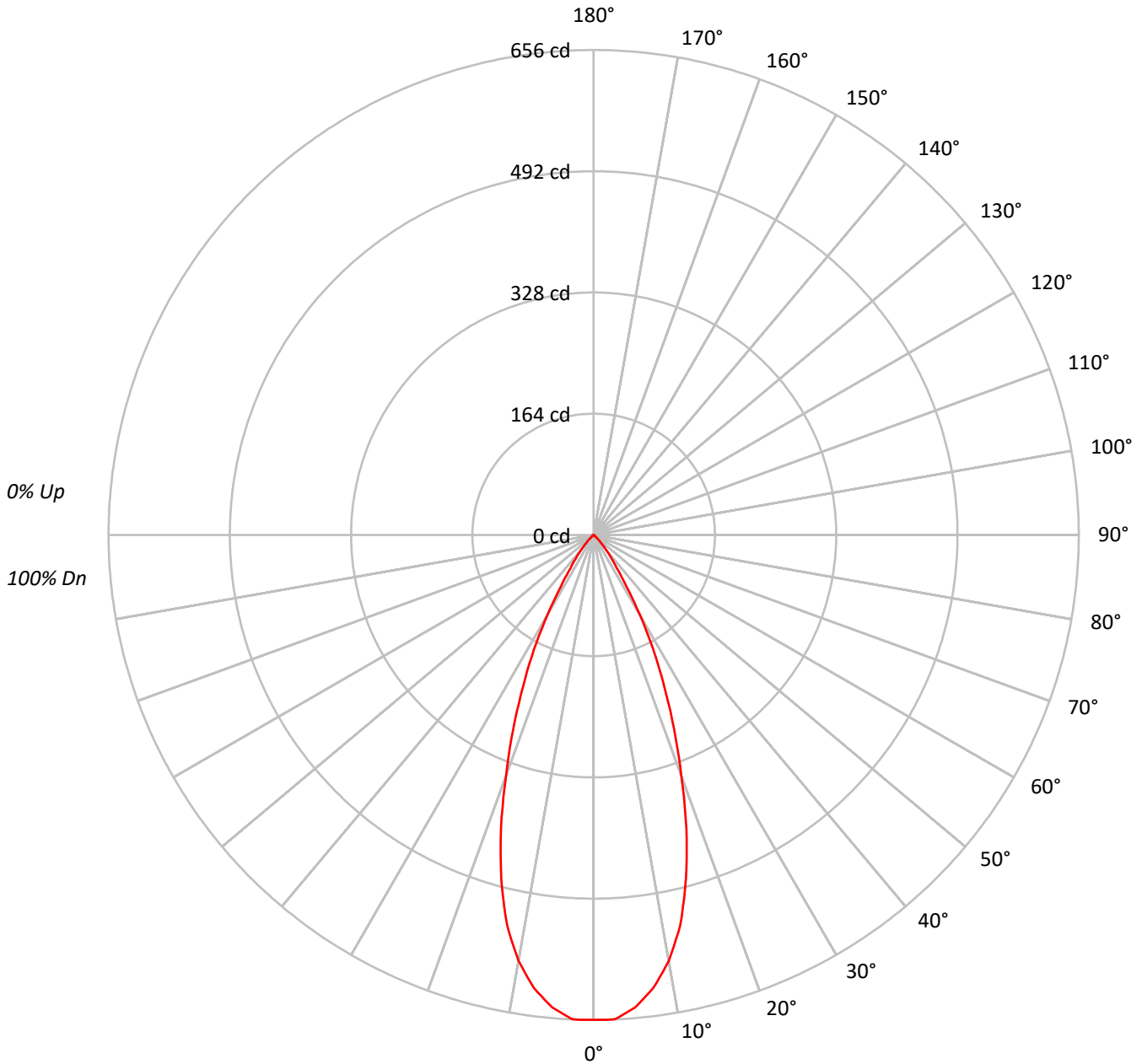
Lumens per Lamp: N/A  
Luminaire Lumens: 341.2 lumens  
Efficiency: N/A  
Efficacy: 55.9 lumens/watt  
Spacing Criteria (0/90/45): 0.67 / 0.67 / 0.66  
Luminous Opening: Circular (Dia: 0.08' x H: 0')  
CIE Type: Direct

Input Watts (W): 6.1  
Input Voltage (V): NR  
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





TEST NUMBER: P885683

CATALOG NUMBER: ML104LSFL95FS1E-TIR1D40FL-TL1RDMMB-340LM-2700K

**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  | 50  | 30 | 10 |
| RCR |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |    |
| 0   | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 |    |    |
| 1   | 114 | 112 | 110 | 108 | 112 | 110 | 108 | 106 | 106 | 104 | 103 | 102 | 101 | 100 | 99  | 98  | 97  | 95  |    |    |
| 2   | 110 | 105 | 102 | 99  | 107 | 104 | 100 | 98  | 100 | 98  | 96  | 97  | 95  | 94  | 95  | 93  | 92  | 90  |    |    |
| 3   | 105 | 99  | 95  | 92  | 103 | 98  | 94  | 91  | 95  | 92  | 89  | 93  | 90  | 88  | 91  | 89  | 87  | 85  |    |    |
| 4   | 101 | 94  | 89  | 86  | 99  | 93  | 89  | 85  | 91  | 87  | 84  | 89  | 86  | 83  | 87  | 85  | 82  | 81  |    |    |
| 5   | 96  | 89  | 84  | 81  | 95  | 88  | 84  | 80  | 87  | 83  | 80  | 85  | 82  | 79  | 84  | 81  | 78  | 77  |    |    |
| 6   | 93  | 85  | 80  | 76  | 91  | 84  | 79  | 76  | 83  | 78  | 75  | 81  | 78  | 75  | 80  | 77  | 74  | 73  |    |    |
| 7   | 89  | 81  | 76  | 72  | 88  | 80  | 75  | 72  | 79  | 75  | 72  | 78  | 74  | 71  | 77  | 73  | 71  | 70  |    |    |
| 8   | 85  | 77  | 72  | 68  | 84  | 77  | 72  | 68  | 76  | 71  | 68  | 75  | 71  | 68  | 74  | 70  | 68  | 66  |    |    |
| 9   | 82  | 74  | 69  | 65  | 81  | 73  | 68  | 65  | 72  | 68  | 65  | 72  | 68  | 65  | 71  | 67  | 65  | 63  |    |    |
| 10  | 79  | 71  | 66  | 62  | 78  | 70  | 65  | 62  | 69  | 65  | 62  | 69  | 65  | 62  | 68  | 64  | 62  | 61  |    |    |

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

|     |         |
|-----|---------|
|     | 0°      |
| 0°  | 1294643 |
| 5°  | 1271061 |
| 10° | 1172132 |
| 15° | 985621  |
| 20° | 727719  |
| 25° | 489952  |
| 30° | 283033  |
| 35° | 130099  |
| 40° | 67241   |
| 45° | 22607   |
| 50° | 8290    |
| 55° | 3097    |
| 60° | 0       |
| 65° | 0       |
| 70° | 0       |
| 75° | 0       |
| 80° | 0       |
| 85° | 0       |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 22607 cd/sqm



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 59.4   | 17.4      |
| 10°-20°   | 131.6  | 38.6      |
| 20°-30°   | 103.3  | 30.3      |
| 30°-40°   | 38.1   | 11.2      |
| 40°-50°   | 7.9    | 2.3       |
| 50°-60°   | 0.9    | 0.3       |
| 60°-70°   | 0.0    | 0.0       |
| 70°-80°   | 0.0    | 0.0       |
| 80°-90°   | 0.0    | 0.0       |
| 90°-100°  | 0.0    | 0.0       |
| 100°-110° | 0.0    | 0.0       |
| 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°    | 294.3  | 86.3      |
| 0°-40°    | 332.4  | 97.4      |
| 0°-60°    | 341.2  | 100.0     |
| 0°-90°    | 341.2  | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 341.2  | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°  | Flux |
|-----|-----|------|
| 0°  | 656 |      |
| 5°  | 642 | 59   |
| 15° | 482 | 132  |
| 25° | 225 | 103  |
| 35° | 54  | 38   |
| 45° | 8   | 8    |
| 55° | 1   | 1    |
| 65° | 0   | 0    |
| 75° | 0   | 0    |
| 85° | 0   | 0    |
| 90° | 0   |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°    |
|-------|-------|
| 0°    | 656.0 |
| 2.5°  | 656.0 |
| 5°    | 641.6 |
| 7.5°  | 618.2 |
| 10°   | 584.9 |
| 12.5° | 540.9 |
| 15°   | 482.4 |
| 17.5° | 416.7 |
| 20°   | 346.5 |
| 22.5° | 283.5 |
| 25°   | 225.0 |
| 27.5° | 174.6 |
| 30°   | 124.2 |
| 32.5° | 81.9  |
| 35°   | 54.0  |
| 37.5° | 38.7  |
| 40°   | 26.1  |
| 42.5° | 15.3  |
| 45°   | 8.1   |
| 47.5° | 4.5   |
| 50°   | 2.7   |
| 52.5° | 1.8   |
| 55°   | 0.9   |
| 57.5° | 0.0   |
| 60°   | 0.0   |
| 62.5° | 0.0   |
| 65°   | 0.0   |
| 67.5° | 0.0   |
| 70°   | 0.0   |
| 72.5° | 0.0   |
| 75°   | 0.0   |
| 77.5° | 0.0   |
| 80°   | 0.0   |
| 82.5° | 0.0   |
| 85°   | 0.0   |
| 87.5° | 0.0   |
| 90°   | 0.0   |

Signify Classified - Internal  
Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269

Scaled Data Report



Report Generated By 670245859 / DESKTOP-T8S5UU9

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Scaled Data Report





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Scaled Data Report



— 0°-180°

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Scaled Data Report



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