

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: P885636

Luminaire Tested: ML104LSFL95FS1E-TIR1D25NFL-TL1RDMWB-340LM-4000K

Issue Date: 7/18/2024

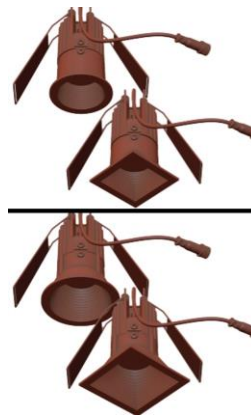
Test Information

Test Method: LM-79-2019
Report Number: P885636
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2402-314-121)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 7/18/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML104LSFL95FS1E-TIR1D25NFL-TL1RDMWB-340LM-4000K
Description: 1IN ROUND ML FLEX, SELECTABLE CCT, WITH 25D TIR, MATTE WHITE BAFFLED TRIM
Light Source: (1) HCL SELECTABLE LUMEN LED 95CRI / 4000K CCT
Ballast/Driver: -

Summary

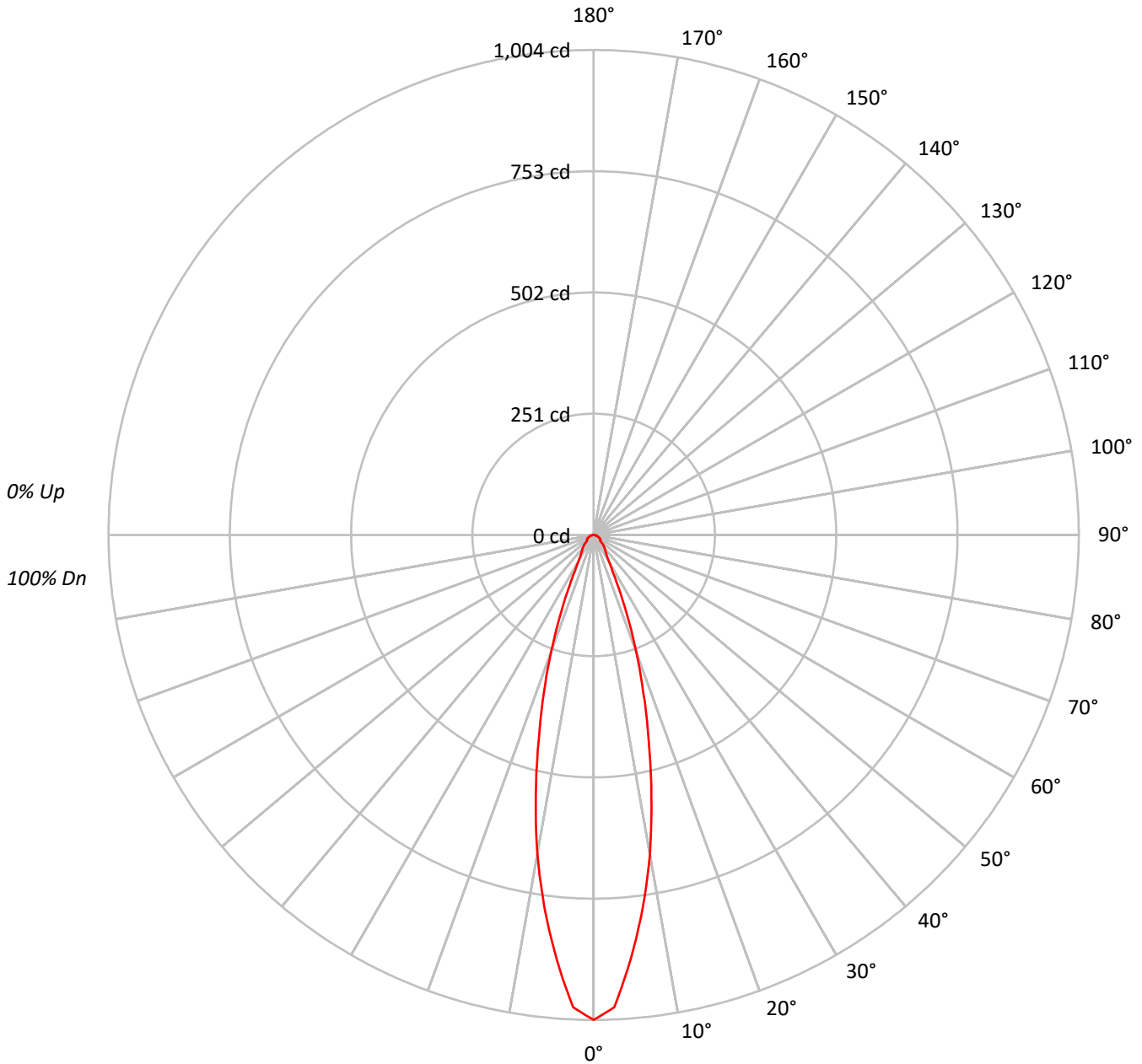
Lumens per Lamp: N/A
Luminaire Lumens: 341.9 lumens
Efficiency: N/A
Efficacy: 56.1 lumens/watt
Spacing Criteria (0/90/45): 0.45 / 0.45 / 0.48
Luminous Opening: Circular (Dia: 0.08' x H: 0')
CIE Type: Direct

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





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

| | | | | | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|-----|
| RF | 20 | | | | 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 | 0 |
| RCR | | | | | | | | | | | | | | | | | | | | | |
| 0 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 | | | 100 |
| 1 | 113 | 110 | 108 | 105 | 111 | 108 | 106 | 104 | 104 | 102 | 101 | 100 | 99 | 98 | 97 | 96 | 95 | 93 | | | 93 |
| 2 | 108 | 103 | 99 | 95 | 105 | 101 | 97 | 94 | 98 | 95 | 92 | 95 | 92 | 90 | 92 | 90 | 88 | 86 | | | 86 |
| 3 | 103 | 96 | 91 | 87 | 101 | 95 | 90 | 87 | 92 | 88 | 85 | 90 | 86 | 84 | 87 | 85 | 83 | 81 | | | 81 |
| 4 | 98 | 91 | 85 | 81 | 96 | 89 | 84 | 81 | 87 | 83 | 80 | 85 | 82 | 79 | 83 | 80 | 78 | 76 | | | 76 |
| 5 | 94 | 86 | 80 | 76 | 92 | 85 | 79 | 76 | 83 | 78 | 75 | 81 | 77 | 74 | 80 | 76 | 74 | 72 | | | 72 |
| 6 | 90 | 81 | 76 | 72 | 88 | 81 | 75 | 71 | 79 | 74 | 71 | 78 | 74 | 71 | 76 | 73 | 70 | 69 | | | 69 |
| 7 | 86 | 78 | 72 | 68 | 85 | 77 | 72 | 68 | 76 | 71 | 68 | 75 | 70 | 67 | 73 | 70 | 67 | 66 | | | 66 |
| 8 | 83 | 74 | 69 | 65 | 82 | 74 | 68 | 65 | 73 | 68 | 65 | 72 | 67 | 64 | 71 | 67 | 64 | 63 | | | 63 |
| 9 | 80 | 71 | 66 | 62 | 79 | 71 | 66 | 62 | 70 | 65 | 62 | 69 | 65 | 62 | 68 | 64 | 61 | 60 | | | 60 |
| 10 | 77 | 68 | 63 | 60 | 76 | 68 | 63 | 60 | 67 | 63 | 59 | 66 | 62 | 59 | 66 | 62 | 59 | 58 | | | 58 |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|---------|
| | 0° |
| 0° | 1981436 |
| 5° | 1745134 |
| 10° | 1343473 |
| 15° | 896743 |
| 20° | 539331 |
| 25° | 268058 |
| 30° | 141517 |
| 35° | 104080 |
| 40° | 89397 |
| 45° | 73404 |
| 50° | 54958 |
| 55° | 57805 |
| 60° | 58022 |
| 65° | 54170 |
| 70° | 48470 |
| 75° | 48039 |
| 80° | 36369 |
| 85° | 24908 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 73404 cd/sqm



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 77.6 | 22.7 |
| 10°-20° | 121.3 | 35.5 |
| 20°-30° | 60.8 | 17.8 |
| 30°-40° | 28.1 | 8.2 |
| 40°-50° | 19.5 | 5.7 |
| 50°-60° | 15.0 | 4.4 |
| 60°-70° | 11.7 | 3.4 |
| 70°-80° | 6.2 | 1.8 |
| 80°-90° | 1.6 | 0.5 |
| 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° | 259.7 | 76.0 |
| 0°-40° | 287.9 | 84.2 |
| 0°-60° | 322.4 | 94.3 |
| 0°-90° | 341.9 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 341.9 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|------|------|
| 0° | 1004 | |
| 5° | 881 | 78 |
| 15° | 439 | 121 |
| 25° | 123 | 61 |
| 35° | 43 | 28 |
| 45° | 26 | 20 |
| 55° | 17 | 15 |
| 65° | 12 | 12 |
| 75° | 6 | 6 |
| 85° | 1 | 2 |
| 90° | 0 | |



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CANDELA DISTRIBUTION (FULL):

| | 0° |
|-------|--------|
| 0° | 1004.0 |
| 2.5° | 978.8 |
| 5° | 880.9 |
| 7.5° | 778.8 |
| 10° | 670.4 |
| 12.5° | 552.5 |
| 15° | 438.9 |
| 17.5° | 342.0 |
| 20° | 256.8 |
| 22.5° | 183.1 |
| 25° | 123.1 |
| 27.5° | 83.1 |
| 30° | 62.1 |
| 32.5° | 50.5 |
| 35° | 43.2 |
| 37.5° | 38.9 |
| 40° | 34.7 |
| 42.5° | 30.5 |
| 45° | 26.3 |
| 47.5° | 18.9 |
| 50° | 17.9 |
| 52.5° | 17.9 |
| 55° | 16.8 |
| 57.5° | 15.8 |
| 60° | 14.7 |
| 62.5° | 13.7 |
| 65° | 11.6 |
| 67.5° | 10.5 |
| 70° | 8.4 |
| 72.5° | 7.4 |
| 75° | 6.3 |
| 77.5° | 4.2 |
| 80° | 3.2 |
| 82.5° | 2.1 |
| 85° | 1.1 |
| 87.5° | 1.1 |
| 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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— 0°-180°

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Scaled Data Report



(END OF REPORT)