

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: P886589

Luminaire Tested: ML310LSFL95FS1E-TIR4D40FL-TL3RDMW-850LM-3500K

Issue Date: 7/5/2024

Test Information

Test Method: LM-79-2019
Report Number: P886589
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2402-314-4)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 7/5/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML310LSFL95FS1E-TIR4D40FL-TL3RDMW-850LM-3500K
Description: 3IN ROUND ML FLEX, SELECTABLE CCT, WITH 40D TIR, MATTE WHITE TRIM
Light Source: (1) HCL SELECTABLE LUMEN LED 95CRI / 3500K CCT
Ballast/Driver: -

Summary

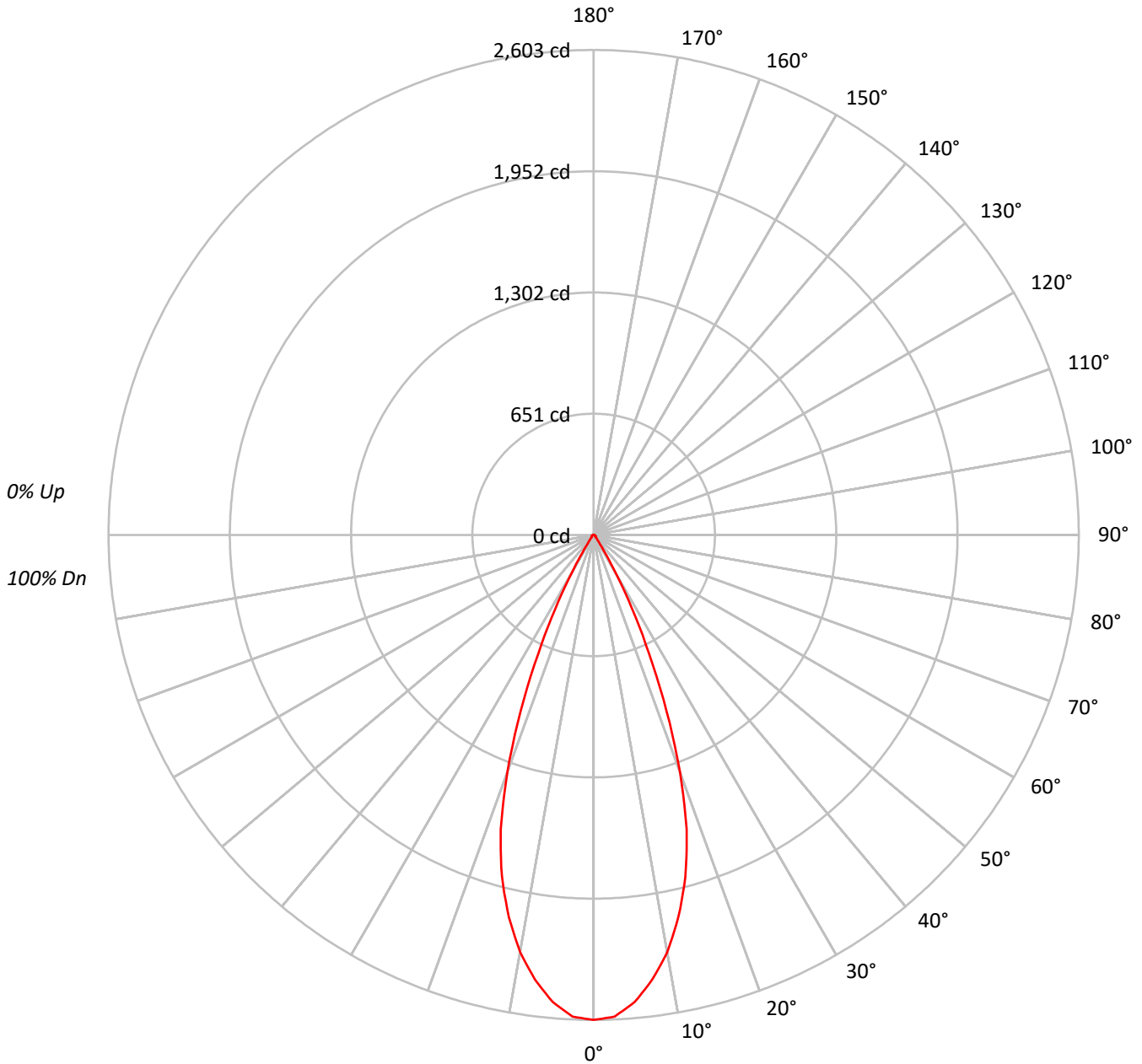
Lumens per Lamp: N/A
Luminaire Lumens: 1165.1 lumens
Efficiency: N/A
Efficacy: 85.7 lumens/watt
Spacing Criteria (0/90/45): 0.67 / 0.67 / 0.62
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 13.6
Input Voltage (V): NR
Input Current (A_{in}): 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: P886589
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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|---|--|--|--|--|--|--|----|--|--|--|--|--|--|--|--|---|
| RF | 20 | | | | | | | | | 20 | | | | | | | | | 20 | | | | | | | | | 20 | | | | | | | | | |
| RC | 80 | | | | | | | | | 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 | | | | | | | | | | | | | | | | | | | |
| 1 | 114 | 112 | 110 | 108 | 112 | 110 | 108 | 106 | 106 | 104 | 103 | 102 | 101 | 100 | 99 | 98 | 97 | 95 | | | | | | | | | | | | | | | | | | | |
| 2 | 110 | 105 | 102 | 99 | 108 | 104 | 101 | 98 | 101 | 98 | 96 | 98 | 96 | 94 | 95 | 93 | 92 | 90 | | | | | | | | | | | | | | | | | | | |
| 3 | 105 | 100 | 96 | 92 | 103 | 99 | 95 | 92 | 96 | 93 | 90 | 94 | 91 | 89 | 92 | 89 | 87 | 86 | | | | | | | | | | | | | | | | | | | |
| 4 | 101 | 95 | 90 | 87 | 100 | 94 | 90 | 86 | 92 | 88 | 85 | 90 | 87 | 84 | 88 | 86 | 83 | 82 | | | | | | | | | | | | | | | | | | | |
| 5 | 97 | 91 | 86 | 82 | 96 | 90 | 85 | 82 | 88 | 84 | 81 | 86 | 83 | 80 | 85 | 82 | 80 | 79 | | | | | | | | | | | | | | | | | | | |
| 6 | 94 | 87 | 82 | 78 | 93 | 86 | 81 | 78 | 84 | 80 | 77 | 83 | 80 | 77 | 82 | 79 | 76 | 75 | | | | | | | | | | | | | | | | | | | |
| 7 | 91 | 83 | 78 | 75 | 89 | 82 | 78 | 74 | 81 | 77 | 74 | 80 | 76 | 74 | 79 | 76 | 73 | 72 | | | | | | | | | | | | | | | | | | | |
| 8 | 87 | 80 | 75 | 71 | 86 | 79 | 74 | 71 | 78 | 74 | 71 | 77 | 73 | 71 | 76 | 73 | 70 | 69 | | | | | | | | | | | | | | | | | | | |
| 9 | 84 | 76 | 72 | 68 | 83 | 76 | 71 | 68 | 75 | 71 | 68 | 74 | 71 | 68 | 74 | 70 | 68 | 67 | | | | | | | | | | | | | | | | | | | |
| 10 | 81 | 74 | 69 | 66 | 81 | 73 | 69 | 66 | 72 | 68 | 65 | 72 | 68 | 65 | 71 | 68 | 65 | 64 | | | | | | | | | | | | | | | | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|--------|
| | 0° |
| 0° | 570810 |
| 5° | 553972 |
| 10° | 506270 |
| 15° | 431694 |
| 20° | 315401 |
| 25° | 169510 |
| 30° | 59047 |
| 35° | 14054 |
| 40° | 6670 |
| 45° | 4528 |
| 50° | 4298 |
| 55° | 4817 |
| 60° | 4693 |
| 65° | 5033 |
| 70° | 5001 |
| 75° | 4914 |
| 80° | 4925 |
| 85° | 4780 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 62.5°
 Luminance: 5081 cd/sqm



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 232.4 | 19.9 |
| 10°-20° | 516.5 | 44.3 |
| 20°-30° | 327.2 | 28.1 |
| 30°-40° | 48.4 | 4.2 |
| 40°-50° | 12.0 | 1.0 |
| 50°-60° | 10.9 | 0.9 |
| 60°-70° | 9.5 | 0.8 |
| 70°-80° | 6.2 | 0.5 |
| 80°-90° | 2.1 | 0.2 |
| 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° | 1076.0 | 92.4 |
| 0°-40° | 1124.5 | 96.5 |
| 0°-60° | 1147.4 | 98.5 |
| 0°-90° | 1165.1 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1165.1 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|------|------|
| 0° | 2603 | |
| 5° | 2517 | 232 |
| 15° | 1902 | 516 |
| 25° | 701 | 327 |
| 35° | 52 | 48 |
| 45° | 15 | 12 |
| 55° | 13 | 11 |
| 65° | 10 | 9 |
| 75° | 6 | 6 |
| 85° | 2 | 2 |
| 90° | 0 | |



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CANDELA DISTRIBUTION (FULL):

| | 0° |
|-------|--------|
| 0° | 2603.1 |
| 2.5° | 2587.6 |
| 5° | 2516.7 |
| 7.5° | 2407.8 |
| 10° | 2273.7 |
| 12.5° | 2100.8 |
| 15° | 1901.6 |
| 17.5° | 1657.7 |
| 20° | 1351.6 |
| 22.5° | 1022.2 |
| 25° | 700.6 |
| 27.5° | 445.0 |
| 30° | 233.2 |
| 32.5° | 106.9 |
| 35° | 52.5 |
| 37.5° | 35.0 |
| 40° | 23.3 |
| 42.5° | 16.5 |
| 45° | 14.6 |
| 47.5° | 13.6 |
| 50° | 12.6 |
| 52.5° | 12.6 |
| 55° | 12.6 |
| 57.5° | 11.7 |
| 60° | 10.7 |
| 62.5° | 10.7 |
| 65° | 9.7 |
| 67.5° | 8.7 |
| 70° | 7.8 |
| 72.5° | 6.8 |
| 75° | 5.8 |
| 77.5° | 4.9 |
| 80° | 3.9 |
| 82.5° | 2.9 |
| 85° | 1.9 |
| 87.5° | 1.0 |
| 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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— 0°-180°

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Scaled Data Report



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