

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: P886585

Luminaire Tested: ML310LSFL95FS1E-TIR4D40FL-TL3RDMB-850LM-4000K

Issue Date: 7/5/2024

Test Information

Test Method: LM-79-2019
Report Number: P886585
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2402-314-6)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 7/5/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML310LSFL95FS1E-TIR4D40FL-TL3RDMB-850LM-4000K
Description: 3IN ROUND ML FLEX, SELECTABLE CCT, WITH 40D TIR, MATTE BLACK TRIM
Light Source: (1) HCL SELECTABLE LUMEN LED 95CRI / 4000K CCT
Ballast/Driver: -

Summary

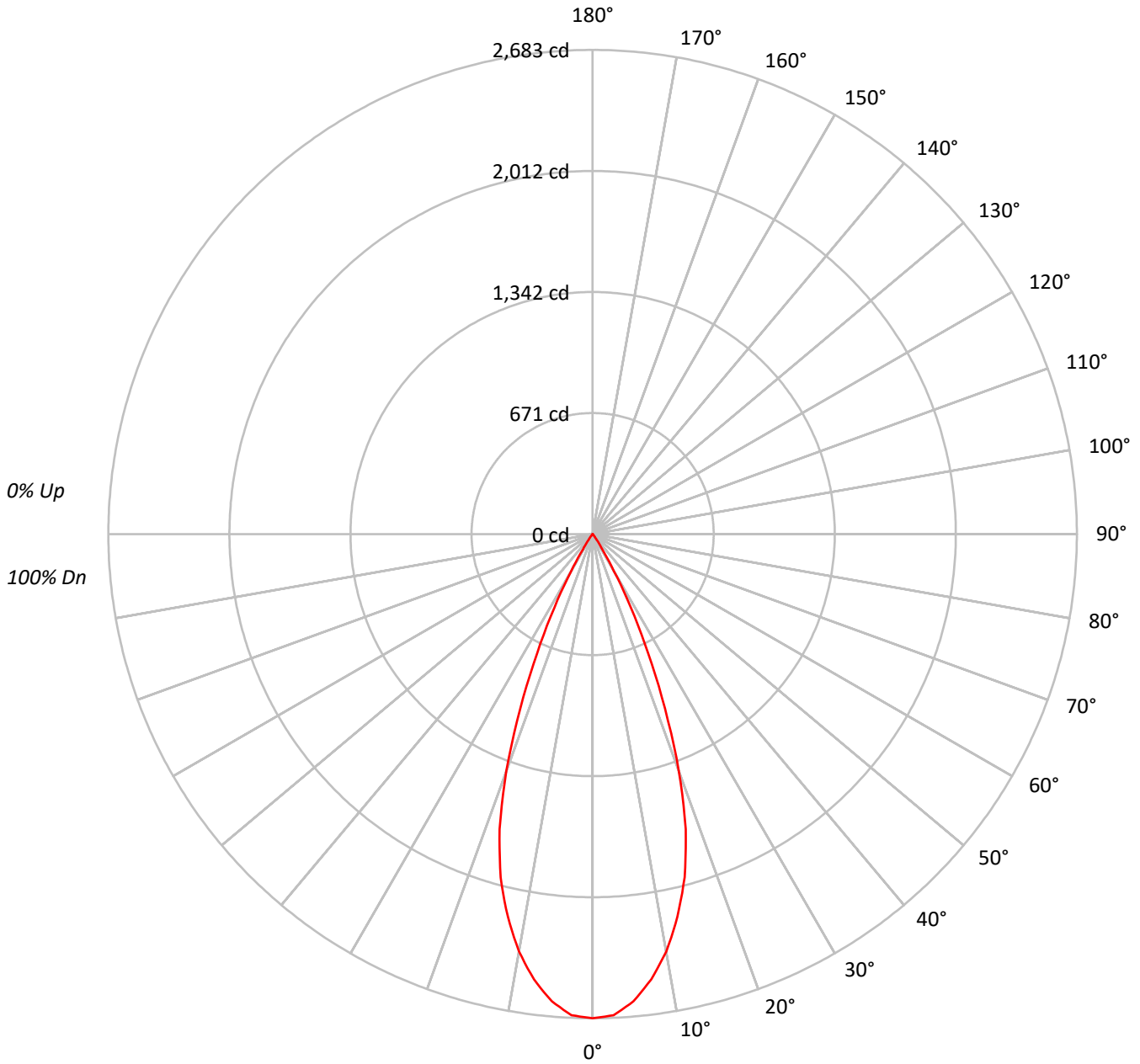
Lumens per Lamp: N/A
Luminaire Lumens: 1155.8 lumens
Efficiency: N/A
Efficacy: 85.0 lumens/watt
Spacing Criteria (0/90/45): 0.67 / 0.67 / 0.62
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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: P886585
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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 | 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 | 115 | 112 | 110 | 108 | 112 | 110 | 108 | 107 | 106 | 105 | 103 | 103 | 101 | 100 | 99 | 98 | 98 | 96 | | | | | | 96 | | | | | | | | | | | | | |
| 2 | 110 | 106 | 103 | 100 | 108 | 105 | 102 | 99 | 102 | 99 | 97 | 99 | 97 | 95 | 96 | 95 | 93 | 92 | | | | | | 92 | | | | | | | | | | | | | |
| 3 | 106 | 101 | 97 | 94 | 105 | 100 | 96 | 93 | 97 | 94 | 92 | 95 | 93 | 91 | 93 | 91 | 89 | 88 | | | | | | 88 | | | | | | | | | | | | | |
| 4 | 102 | 97 | 92 | 89 | 101 | 95 | 91 | 88 | 93 | 90 | 87 | 92 | 89 | 86 | 90 | 87 | 85 | 84 | | | | | | 84 | | | | | | | | | | | | | |
| 5 | 99 | 92 | 88 | 84 | 97 | 91 | 87 | 84 | 90 | 86 | 83 | 88 | 85 | 83 | 87 | 84 | 82 | 81 | | | | | | 81 | | | | | | | | | | | | | |
| 6 | 95 | 88 | 84 | 80 | 94 | 88 | 83 | 80 | 86 | 82 | 80 | 85 | 82 | 79 | 84 | 81 | 79 | 77 | | | | | | 77 | | | | | | | | | | | | | |
| 7 | 92 | 85 | 80 | 77 | 91 | 84 | 80 | 77 | 83 | 79 | 76 | 82 | 78 | 76 | 81 | 78 | 76 | 74 | | | | | | 74 | | | | | | | | | | | | | |
| 8 | 89 | 81 | 77 | 74 | 88 | 81 | 77 | 73 | 80 | 76 | 73 | 79 | 75 | 73 | 78 | 75 | 73 | 72 | | | | | | 72 | | | | | | | | | | | | | |
| 9 | 86 | 78 | 74 | 71 | 85 | 78 | 74 | 71 | 77 | 73 | 70 | 76 | 73 | 70 | 76 | 72 | 70 | 69 | | | | | | 69 | | | | | | | | | | | | | |
| 10 | 83 | 75 | 71 | 68 | 82 | 75 | 71 | 68 | 74 | 70 | 68 | 74 | 70 | 67 | 73 | 70 | 67 | 66 | | | | | | 66 | | | | | | | | | | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|--------|
| | 0° |
| 0° | 588330 |
| 5° | 572021 |
| 10° | 522970 |
| 15° | 447063 |
| 20° | 325808 |
| 25° | 175825 |
| 30° | 59731 |
| 35° | 11297 |
| 40° | 3149 |
| 45° | 620 |
| 50° | 0 |
| 55° | 0 |
| 60° | 0 |
| 65° | 0 |
| 70° | 0 |
| 75° | 0 |
| 80° | 0 |
| 85° | 0 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 620 cd/sqm



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 240.0 | 20.8 |
| 10°-20° | 534.1 | 46.2 |
| 20°-30° | 336.7 | 29.1 |
| 30°-40° | 42.7 | 3.7 |
| 40°-50° | 2.3 | 0.2 |
| 50°-60° | 0.0 | 0.0 |
| 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° | 1110.8 | 96.1 |
| 0°-40° | 1153.5 | 99.8 |
| 0°-60° | 1155.8 | 100.0 |
| 0°-90° | 1155.8 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1155.8 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|------|------|
| 0° | 2683 | |
| 5° | 2599 | 240 |
| 15° | 1969 | 534 |
| 25° | 727 | 337 |
| 35° | 42 | 43 |
| 45° | 2 | 2 |
| 55° | 0 | 0 |
| 65° | 0 | 0 |
| 75° | 0 | 0 |
| 85° | 0 | 0 |
| 90° | 0 | |



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CANDELA DISTRIBUTION (FULL):

| 0° | |
|-------|--------|
| 0° | 2683.0 |
| 2.5° | 2668.9 |
| 5° | 2598.7 |
| 7.5° | 2489.2 |
| 10° | 2348.7 |
| 12.5° | 2171.1 |
| 15° | 1969.3 |
| 17.5° | 1714.4 |
| 20° | 1396.2 |
| 22.5° | 1045.9 |
| 25° | 726.7 |
| 27.5° | 457.7 |
| 30° | 235.9 |
| 32.5° | 99.4 |
| 35° | 42.2 |
| 37.5° | 22.1 |
| 40° | 11.0 |
| 42.5° | 4.0 |
| 45° | 2.0 |
| 47.5° | 1.0 |
| 50° | 0.0 |
| 52.5° | 0.0 |
| 55° | 0.0 |
| 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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— 0°-180°

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Scaled Data Report



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