

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: P886237

Luminaire Tested: ML204LSFL95FS1E-TIR1D55WFL-TL2SDMWB-468LM-3500K

Issue Date: 6/20/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P886237  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2402-314-104)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 6/20/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML204LSFL95FS1E-TIR1D55WFL-TL2SDMWB-468LM-3500K  
Description: 2IN SQUARE ML FLEX, SELECTABLE CCT, WITH 55D TIR, MATTE WHITE BAFFLED TRIM  
Light Source: (1) HCL SELECTABLE LUMEN LED 95CRI / 3500K CCT  
Ballast/Driver: -

**Summary**

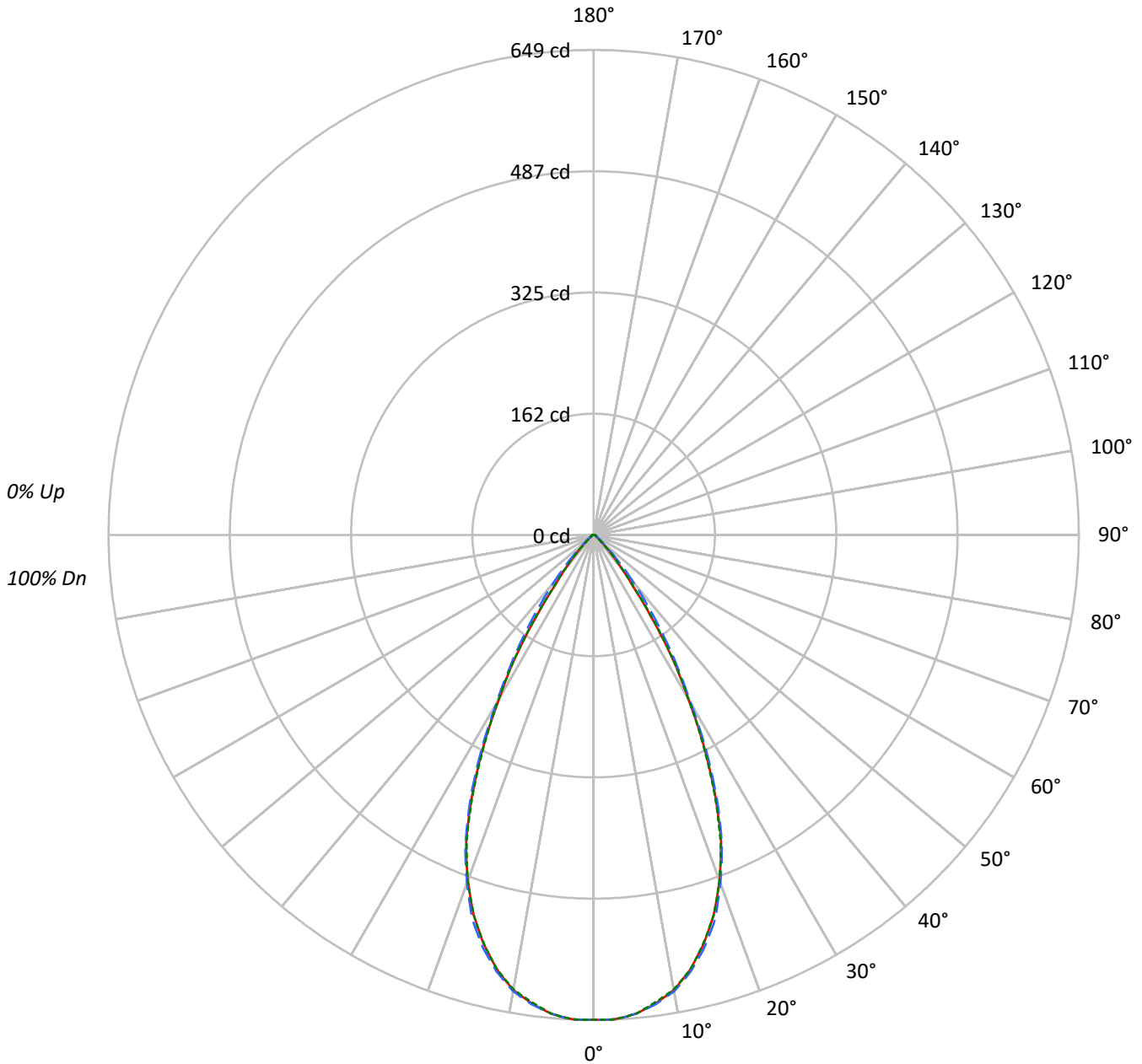
Lumens per Lamp: N/A  
Luminaire Lumens: 523.9 lumens  
Efficiency: N/A  
Efficacy: 65.5 lumens/watt  
Spacing Criteria (0/90/45): 0.87 / 0.87 / 0.83  
Luminous Opening: Rectangular (W 0.17' x L: 0.17' x H: 0')  
CIE Type: Direct

Input Watts (W): 8  
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  |     |     |    |    |    |    |    |   |  |   |
| 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 | 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 | 111 | 108 | 106 | 111 | 109 | 106 | 104 | 105 | 103 | 101 | 101 | 99  | 98  | 97  | 96  | 95  | 94  |    |    |    |    |    |   |  |   |
| 2   | 108 | 103 | 99  | 96  | 106 | 101 | 98  | 95  | 98  | 95  | 93  | 95  | 93  | 91  | 93  | 91  | 89  | 87  |    |    |    |    |    |   |  |   |
| 3   | 103 | 96  | 92  | 88  | 101 | 95  | 91  | 87  | 92  | 89  | 86  | 90  | 87  | 84  | 88  | 85  | 83  | 81  |    |    |    |    |    |   |  |   |
| 4   | 98  | 90  | 85  | 81  | 96  | 89  | 84  | 80  | 87  | 83  | 79  | 85  | 81  | 78  | 83  | 80  | 77  | 76  |    |    |    |    |    |   |  |   |
| 5   | 93  | 85  | 79  | 75  | 91  | 84  | 79  | 75  | 82  | 77  | 74  | 80  | 76  | 73  | 79  | 75  | 73  | 71  |    |    |    |    |    |   |  |   |
| 6   | 88  | 80  | 74  | 70  | 87  | 79  | 74  | 70  | 78  | 73  | 69  | 76  | 72  | 69  | 75  | 71  | 68  | 67  |    |    |    |    |    |   |  |   |
| 7   | 84  | 75  | 69  | 65  | 83  | 75  | 69  | 65  | 73  | 68  | 65  | 72  | 68  | 64  | 71  | 67  | 64  | 63  |    |    |    |    |    |   |  |   |
| 8   | 80  | 71  | 65  | 61  | 79  | 71  | 65  | 61  | 69  | 64  | 61  | 68  | 64  | 61  | 67  | 63  | 60  | 59  |    |    |    |    |    |   |  |   |
| 9   | 77  | 67  | 62  | 58  | 76  | 67  | 61  | 58  | 66  | 61  | 57  | 65  | 60  | 57  | 64  | 60  | 57  | 56  |    |    |    |    |    |   |  |   |
| 10  | 73  | 64  | 58  | 54  | 72  | 63  | 58  | 54  | 63  | 58  | 54  | 62  | 57  | 54  | 61  | 57  | 54  | 53  |    |    |    |    |    |   |  |   |

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

|     | 0°     | 45°    | 90°    |
|-----|--------|--------|--------|
| 0°  | 251448 | 251448 | 251448 |
| 5°  | 250308 | 250308 | 250308 |
| 10° | 243326 | 244035 | 243012 |
| 15° | 227623 | 229428 | 227262 |
| 20° | 203009 | 204452 | 203009 |
| 25° | 164567 | 166833 | 163413 |
| 30° | 112935 | 116157 | 113741 |
| 35° | 63105  | 74931  | 66038  |
| 40° | 28985  | 42086  | 29440  |
| 45° | 12769  | 19125  | 12769  |
| 50° | 5908   | 8621   | 5908   |
| 55° | 3648   | 4864   | 3648   |
| 60° | 2790   | 3487   | 2790   |
| 65° | 3301   | 3301   | 3301   |
| 70° | 3059   | 3059   | 3059   |
| 75° | 2695   | 2695   | 2695   |
| 80° | 4017   | 4017   | 4017   |
| 85° | 4001   | 4001   | 4001   |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 45°  
 Luminance: 19125 cd/sqm



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 60.6   | 11.6      |
| 10°-20°   | 158.3  | 30.2      |
| 20°-30°   | 173.9  | 33.2      |
| 30°-40°   | 94.1   | 18.0      |
| 40°-50°   | 24.4   | 4.7       |
| 50°-60°   | 6.1    | 1.2       |
| 60°-70°   | 3.5    | 0.7       |
| 70°-80°   | 2.3    | 0.4       |
| 80°-90°   | 0.7    | 0.1       |
| 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°    | 392.9  | 75.0      |
| 0°-40°    | 486.9  | 92.9      |
| 0°-60°    | 517.4  | 98.8      |
| 0°-90°    | 523.9  | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 523.9  | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°  | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0°  | 649 | 649   | 649 | 649   | 649 |      |
| 5°  | 644 | 643   | 644 | 643   | 644 | 61   |
| 15° | 567 | 570   | 572 | 567   | 566 | 158  |
| 25° | 385 | 388   | 390 | 388   | 382 | 173  |
| 35° | 133 | 151   | 158 | 150   | 140 | 87   |
| 45° | 23  | 26    | 35  | 27    | 23  | 21   |
| 55° | 5   | 6     | 7   | 6     | 5   | 5    |
| 65° | 4   | 4     | 4   | 4     | 4   | 3    |
| 75° | 2   | 2     | 2   | 2     | 2   | 2    |
| 85° | 1   | 1     | 1   | 1     | 1   | 1    |
| 90° | 0   | 0     | 0   | 0     | 0   |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|-------|-------|-------|-------|-------|-------|
| 0°    | 648.9 | 648.9 | 648.9 | 648.9 | 648.9 |
| 2.5°  | 648.9 | 648.9 | 648.9 | 648.0 | 648.9 |
| 5°    | 643.5 | 642.6 | 643.5 | 642.6 | 643.5 |
| 7.5°  | 632.8 | 633.7 | 633.7 | 633.7 | 631.0 |
| 10°   | 618.4 | 618.4 | 620.2 | 618.4 | 617.6 |
| 12.5° | 596.1 | 597.9 | 598.8 | 595.2 | 596.1 |
| 15°   | 567.4 | 570.1 | 571.9 | 567.4 | 566.5 |
| 17.5° | 533.4 | 535.2 | 539.7 | 537.0 | 533.4 |
| 20°   | 492.3 | 495.8 | 495.8 | 494.0 | 492.3 |
| 22.5° | 445.7 | 448.4 | 448.4 | 446.6 | 443.9 |
| 25°   | 384.9 | 387.5 | 390.2 | 388.4 | 382.2 |
| 27.5° | 320.4 | 319.5 | 326.7 | 322.2 | 317.7 |
| 30°   | 252.4 | 256.0 | 259.6 | 256.0 | 254.2 |
| 32.5° | 196.9 | 202.3 | 206.7 | 203.2 | 198.7 |
| 35°   | 133.4 | 151.3 | 158.4 | 150.4 | 139.6 |
| 37.5° | 85.9  | 100.2 | 116.4 | 100.2 | 87.7  |
| 40°   | 57.3  | 62.7  | 83.2  | 64.4  | 58.2  |
| 42.5° | 38.5  | 42.1  | 55.5  | 43.0  | 39.4  |
| 45°   | 23.3  | 26.0  | 34.9  | 26.9  | 23.3  |
| 47.5° | 14.3  | 16.1  | 21.5  | 16.1  | 14.3  |
| 50°   | 9.8   | 11.6  | 14.3  | 11.6  | 9.8   |
| 52.5° | 7.2   | 8.1   | 9.8   | 8.1   | 7.2   |
| 55°   | 5.4   | 6.3   | 7.2   | 6.3   | 5.4   |
| 57.5° | 4.5   | 4.5   | 5.4   | 4.5   | 4.5   |
| 60°   | 3.6   | 4.5   | 4.5   | 4.5   | 3.6   |
| 62.5° | 3.6   | 3.6   | 3.6   | 3.6   | 3.6   |
| 65°   | 3.6   | 3.6   | 3.6   | 3.6   | 3.6   |
| 67.5° | 2.7   | 3.6   | 3.6   | 3.6   | 2.7   |
| 70°   | 2.7   | 2.7   | 2.7   | 2.7   | 2.7   |
| 72.5° | 2.7   | 2.7   | 2.7   | 2.7   | 2.7   |
| 75°   | 1.8   | 1.8   | 1.8   | 1.8   | 1.8   |
| 77.5° | 1.8   | 1.8   | 1.8   | 1.8   | 1.8   |
| 80°   | 1.8   | 1.8   | 1.8   | 1.8   | 1.8   |
| 82.5° | 0.9   | 0.9   | 0.9   | 0.9   | 0.9   |
| 85°   | 0.9   | 0.9   | 0.9   | 0.9   | 0.9   |
| 87.5° | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 90°   | 0.0   | 0.0   | 0.0   | 0.0   | 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







— 0°-180°    - - 45°-225°    - - - - 90°-270°

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