

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: P886105

Luminaire Tested: ML204LSFL95FS1E-TIR1D25NFL-TL2SDMBB-468LM-2700K

Issue Date: 6/20/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P886105  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2402-314-94)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 6/20/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML204LSFL95FS1E-TIR1D25NFL-TL2SDMBB-468LM-2700K  
Description: 2IN SQUARE ML FLEX, SELECTABLE CCT, WITH 25D TIR, MATTE BLACK BAFFLED TRIM  
Light Source: (1) HCL SELECTABLE LUMEN LED 95CRI / 2700K CCT  
Ballast/Driver: -

**Summary**

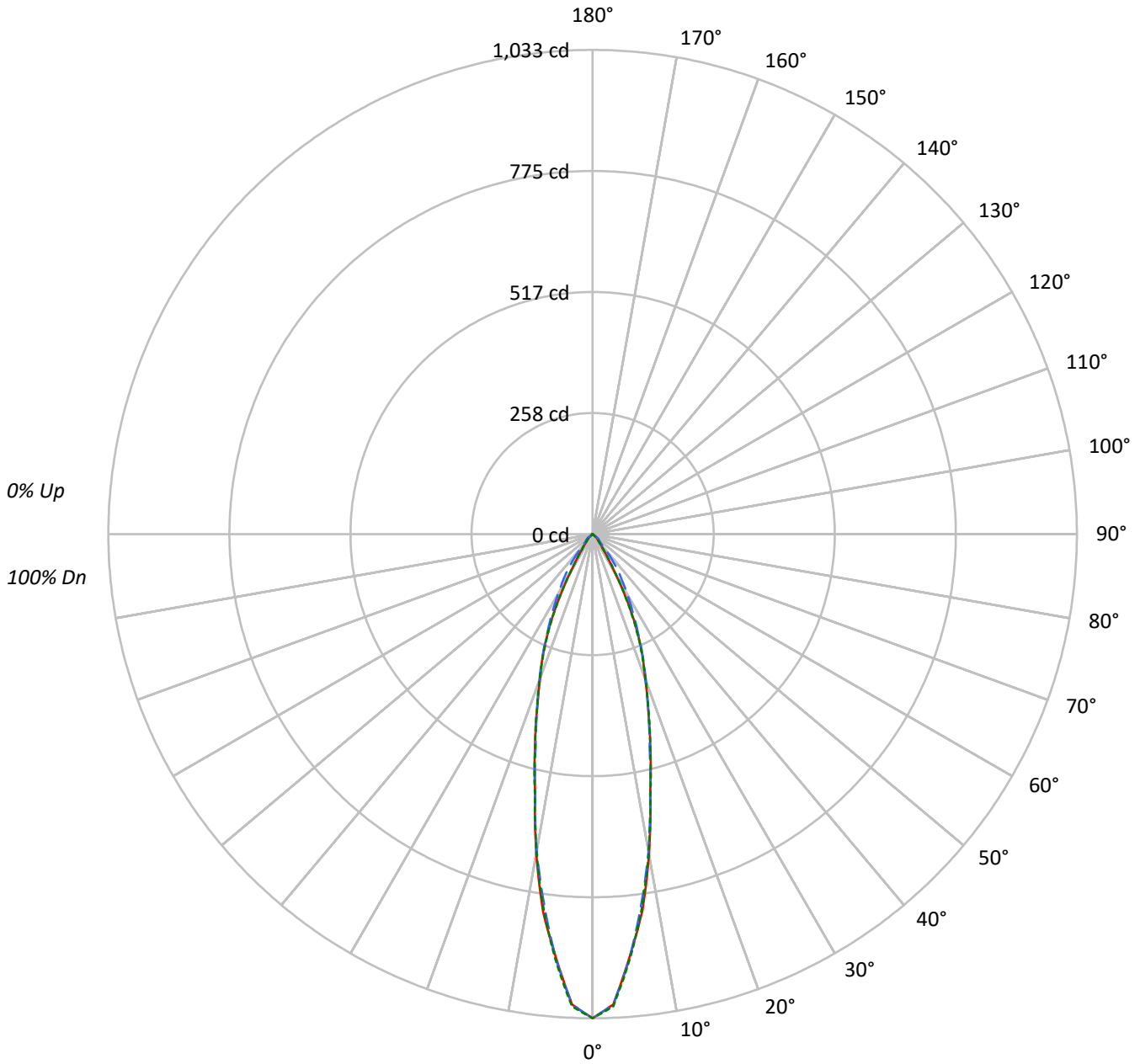
Lumens per Lamp: N/A  
Luminaire Lumens: 366.6 lumens  
Efficiency: N/A  
Efficacy: 45.8 lumens/watt  
Spacing Criteria (0/90/45): 0.45 / 0.45 / 0.54  
Luminous Opening: Rectangular (W 0.17' x L: 0.17' x H: 0')  
CIE Type: Direct

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  |     |     |     |     |     |     |     |     | 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 | 98  | 95  | 91  | 96  | 93  | 90  | 94  | 91  | 89  | 91  | 89  | 87  | 86  |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 4   | 101 | 95  | 90  | 86  | 99  | 94  | 89  | 86  | 91  | 88  | 85  | 90  | 86  | 84  | 88  | 85  | 83  | 82  |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 5   | 97  | 90  | 85  | 81  | 95  | 89  | 84  | 81  | 87  | 83  | 80  | 86  | 82  | 80  | 84  | 81  | 79  | 78  |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 6   | 93  | 86  | 81  | 77  | 92  | 85  | 80  | 77  | 84  | 79  | 76  | 82  | 79  | 76  | 81  | 78  | 75  | 74  |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 7   | 90  | 82  | 77  | 73  | 88  | 81  | 76  | 73  | 80  | 76  | 73  | 79  | 75  | 72  | 78  | 74  | 72  | 71  |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 8   | 86  | 78  | 73  | 70  | 85  | 78  | 73  | 70  | 77  | 72  | 69  | 76  | 72  | 69  | 75  | 71  | 69  | 68  |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 9   | 83  | 75  | 70  | 67  | 82  | 75  | 70  | 67  | 74  | 69  | 66  | 73  | 69  | 66  | 72  | 69  | 66  | 65  |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 10  | 80  | 72  | 67  | 64  | 79  | 72  | 67  | 64  | 71  | 67  | 64  | 70  | 66  | 63  | 69  | 66  | 63  | 62  |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |

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

|     | 0°     | 45°    | 90°    |
|-----|--------|--------|--------|
| 0°  | 400248 | 400248 | 400248 |
| 5°  | 351871 | 352843 | 354127 |
| 10° | 272404 | 270083 | 271066 |
| 15° | 190876 | 188188 | 190194 |
| 20° | 134597 | 136659 | 135999 |
| 25° | 93293  | 96158  | 91497  |
| 30° | 43179  | 65327  | 43536  |
| 35° | 17881  | 43662  | 18638  |
| 40° | 10167  | 17806  | 10623  |
| 45° | 6412   | 11015  | 6905   |
| 50° | 482    | 9103   | 482    |
| 55° | 540    | 2297   | 540    |
| 60° | 0      | 0      | 0      |
| 65° | 0      | 0      | 0      |
| 70° | 0      | 0      | 0      |
| 75° | 0      | 0      | 0      |
| 80° | 0      | 0      | 0      |
| 85° | 0      | 0      | 0      |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 45°  
 Luminance: 11015 cd/sqm



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 79.8   | 21.8      |
| 10°-20°   | 132.9  | 36.3      |
| 20°-30°   | 101.1  | 27.6      |
| 30°-40°   | 39.4   | 10.7      |
| 40°-50°   | 11.7   | 3.2       |
| 50°-60°   | 1.7    | 0.5       |
| 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°    | 313.8  | 85.6      |
| 0°-40°    | 353.2  | 96.4      |
| 0°-60°    | 366.6  | 100.0     |
| 0°-90°    | 366.6  | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 366.6  | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 1033 | 1033  | 1033 | 1033  | 1033 |      |
| 5°  | 905  | 910   | 907  | 905   | 910  | 80   |
| 15° | 476  | 472   | 469  | 476   | 474  | 133  |
| 25° | 218  | 227   | 225  | 225   | 214  | 97   |
| 35° | 38   | 50    | 92   | 52    | 39   | 28   |
| 45° | 12   | 15    | 20   | 15    | 13   | 8    |
| 55° | 1    | 1     | 3    | 1     | 1    | 0    |
| 65° | 0    | 0     | 0    | 0     | 0    | 0    |
| 75° | 0    | 0     | 0    | 0     | 0    | 0    |
| 85° | 0    | 0     | 0    | 0     | 0    | 0    |
| 90° | 0    | 0     | 0    | 0     | 0    |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 1032.9 | 1032.9 | 1032.9 | 1032.9 | 1032.9 |
| 2.5°  | 1004.4 | 1005.2 | 1004.4 | 1008.6 | 1008.6 |
| 5°    | 904.6  | 909.6  | 907.1  | 905.4  | 910.4  |
| 7.5°  | 811.4  | 800.5  | 795.5  | 798.8  | 804.7  |
| 10°   | 692.3  | 688.9  | 686.4  | 689.7  | 688.9  |
| 12.5° | 567.2  | 569.8  | 567.2  | 571.4  | 568.9  |
| 15°   | 475.8  | 472.4  | 469.1  | 475.8  | 474.1  |
| 17.5° | 394.4  | 397.7  | 394.4  | 396.1  | 396.1  |
| 20°   | 326.4  | 332.3  | 331.4  | 332.3  | 329.8  |
| 22.5° | 276.1  | 275.2  | 276.9  | 276.1  | 273.5  |
| 25°   | 218.2  | 226.6  | 224.9  | 224.9  | 214.0  |
| 27.5° | 156.1  | 173.7  | 182.9  | 176.2  | 154.4  |
| 30°   | 96.5   | 125.9  | 146.0  | 121.7  | 97.3   |
| 32.5° | 61.3   | 80.6   | 116.6  | 78.9   | 62.1   |
| 35°   | 37.8   | 50.3   | 92.3   | 52.0   | 39.4   |
| 37.5° | 26.9   | 36.1   | 63.8   | 36.1   | 26.9   |
| 40°   | 20.1   | 25.2   | 35.2   | 25.2   | 21.0   |
| 42.5° | 15.9   | 19.3   | 23.5   | 19.3   | 16.8   |
| 45°   | 11.7   | 15.1   | 20.1   | 15.1   | 12.6   |
| 47.5° | 3.4    | 10.1   | 17.6   | 10.1   | 5.0    |
| 50°   | 0.8    | 1.7    | 15.1   | 3.4    | 0.8    |
| 52.5° | 0.8    | 0.8    | 10.9   | 0.8    | 0.8    |
| 55°   | 0.8    | 0.8    | 3.4    | 0.8    | 0.8    |
| 57.5° | 0.0    | 0.0    | 0.8    | 0.0    | 0.0    |
| 60°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 62.5° | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 65°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 67.5° | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 70°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 72.5° | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 75°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 77.5° | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 80°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 82.5° | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 85°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 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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Scaled Data Report



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