

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: P886245

Luminaire Tested: ML204LSFL95FS1E-TIR1D55WFL-TL2SDSLB-468LM-2700K

Issue Date: 6/20/2024

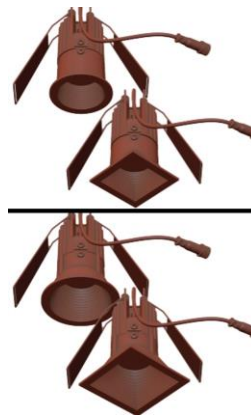
**Test Information**

Test Method: LM-79-2019  
Report Number: P886245  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2402-314-105)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 6/20/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML204LSFL95FS1E-TIR1D55WFL-TL2SDSLB-468LM-2700K  
Description: 2IN SQUARE ML FLEX, SELECTABLE CCT, WITH 55D TIR, METALLIC SILVER BAFFLED TRIM  
Light Source: (1) HCL SELECTABLE LUMEN LED 95CRI / 2700K CCT  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 480.8 lumens  
Efficiency: N/A  
Efficacy: 60.1 lumens/watt  
Spacing Criteria (0/90/45): 0.85 / 0.86 / 0.82  
Luminous Opening: Rectangular (W 0.17' x L: 0.17' x H: 0')  
CIE Type: Direct

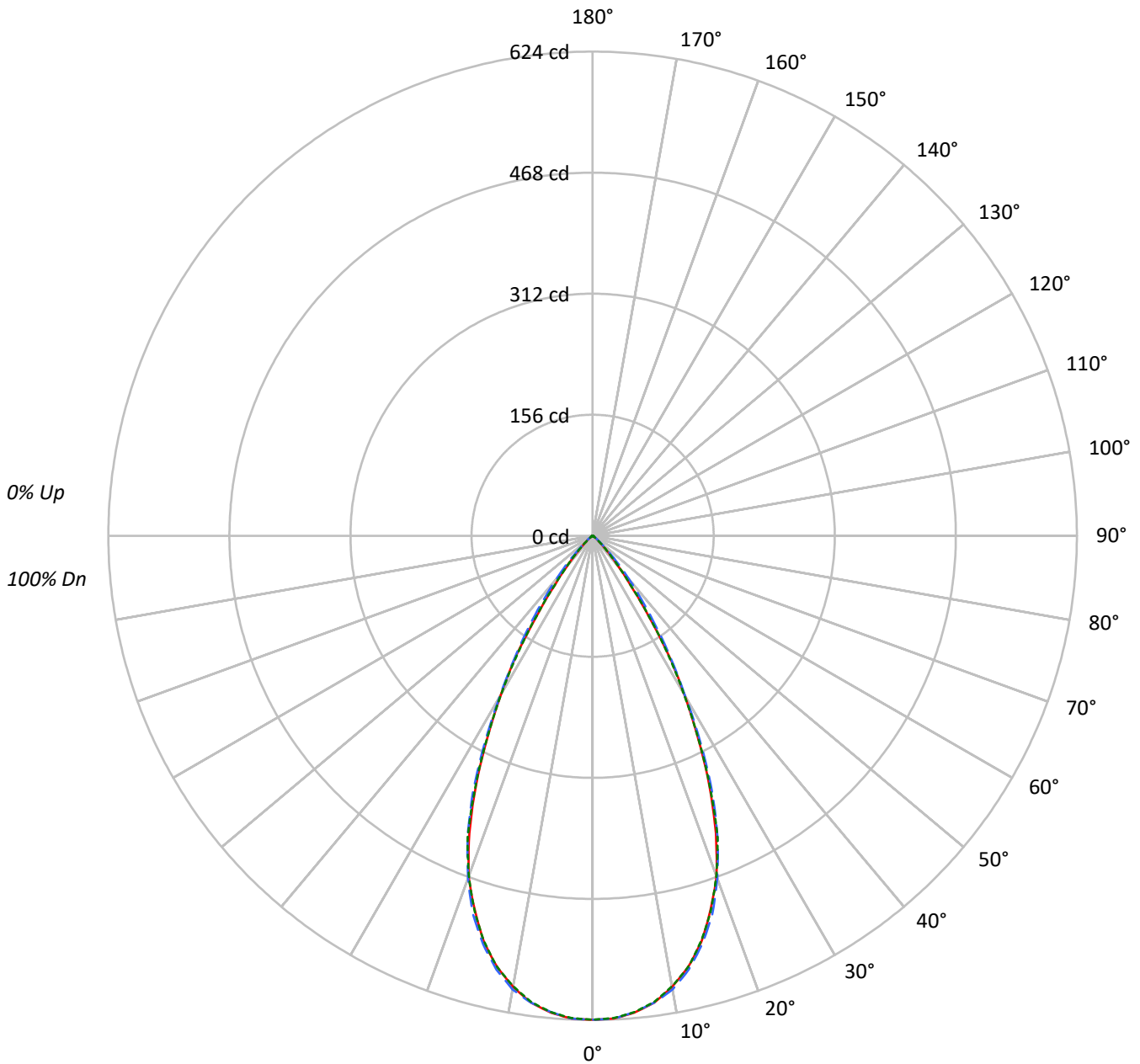
Input Watts (W): 8  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



TEST NUMBER: P886245

CATALOG NUMBER: ML204LSFL95FS1E-TIR1D55WFL-TL2SDSLB-468LM-2700K

### Luminous Intensity Polar Plot





TEST NUMBER: P886245

CATALOG NUMBER: ML204LSFL95FS1E-TIR1D55WFL-TL2SDSLB-468LM-2700K

**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| RF  | 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  | 0   |
| RCR |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 0   | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 |
| 1   | 114 | 111 | 109 | 107 | 111 | 109 | 107 | 105 | 105 | 103 | 102 | 101 | 100 | 99  | 98  | 97  | 96  | 94  |
| 2   | 109 | 104 | 100 | 97  | 106 | 102 | 99  | 96  | 99  | 96  | 94  | 96  | 94  | 92  | 93  | 91  | 90  | 88  |
| 3   | 103 | 97  | 93  | 89  | 101 | 96  | 92  | 88  | 93  | 90  | 87  | 91  | 88  | 85  | 89  | 86  | 84  | 82  |
| 4   | 98  | 91  | 86  | 82  | 97  | 90  | 85  | 82  | 88  | 84  | 81  | 86  | 83  | 80  | 84  | 81  | 79  | 77  |
| 5   | 94  | 86  | 80  | 76  | 92  | 85  | 80  | 76  | 83  | 79  | 75  | 82  | 78  | 75  | 80  | 77  | 74  | 73  |
| 6   | 89  | 81  | 75  | 71  | 88  | 80  | 75  | 71  | 79  | 74  | 70  | 77  | 73  | 70  | 76  | 72  | 69  | 68  |
| 7   | 85  | 76  | 71  | 67  | 84  | 76  | 70  | 66  | 74  | 70  | 66  | 73  | 69  | 66  | 72  | 68  | 65  | 64  |
| 8   | 81  | 72  | 67  | 63  | 80  | 72  | 66  | 63  | 71  | 66  | 62  | 70  | 65  | 62  | 69  | 65  | 62  | 60  |
| 9   | 78  | 68  | 63  | 59  | 77  | 68  | 63  | 59  | 67  | 62  | 59  | 66  | 62  | 59  | 65  | 61  | 58  | 57  |
| 10  | 74  | 65  | 59  | 56  | 73  | 65  | 59  | 56  | 64  | 59  | 56  | 63  | 59  | 55  | 62  | 58  | 55  | 54  |

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

|     | 0°     | 45°    | 90°    |
|-----|--------|--------|--------|
| 0°  | 241683 | 241683 | 241683 |
| 5°  | 240000 | 239689 | 239689 |
| 10° | 232230 | 233568 | 231915 |
| 15° | 217273 | 218597 | 216912 |
| 20° | 192576 | 193607 | 192205 |
| 25° | 152339 | 155931 | 153066 |
| 30° | 105418 | 106895 | 105016 |
| 35° | 58280  | 67031  | 59510  |
| 40° | 26304  | 36471  | 26709  |
| 45° | 11015  | 14687  | 11508  |
| 50° | 4521   | 5546   | 4521   |
| 55° | 1689   | 2297   | 1689   |
| 60° | 620    | 620    | 620    |
| 65° | 734    | 734    | 734    |
| 70° | 906    | 0      | 906    |
| 75° | 0      | 0      | 0      |
| 80° | 0      | 0      | 0      |
| 85° | 0      | 0      | 0      |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 45°  
 Luminance: 14687 cd/sqm



TEST NUMBER: P886245

CATALOG NUMBER: ML204LSFL95FS1E-TIR1D55WFL-TL2SDSLB-468LM-2700K

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 58.1   | 12.1      |
| 10°-20°   | 150.6  | 31.3      |
| 20°-30°   | 162.4  | 33.8      |
| 30°-40°   | 85.5   | 17.8      |
| 40°-50°   | 20.4   | 4.2       |
| 50°-60°   | 3.1    | 0.6       |
| 60°-70°   | 0.7    | 0.1       |
| 70°-80°   | 0.1    | 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°    | 371.1  | 77.2      |
| 0°-40°    | 456.6  | 95.0      |
| 0°-60°    | 480.0  | 99.8      |
| 0°-90°    | 480.8  | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 480.8  | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°  | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0°  | 624 | 624   | 624 | 624   | 624 |      |
| 5°  | 617 | 617   | 616 | 616   | 616 | 58   |
| 15° | 542 | 542   | 545 | 542   | 541 | 150  |
| 25° | 356 | 360   | 365 | 360   | 358 | 161  |
| 35° | 123 | 135   | 142 | 134   | 126 | 81   |
| 45° | 20  | 22    | 27  | 22    | 21  | 18   |
| 55° | 2   | 2     | 3   | 2     | 2   | 3    |
| 65° | 1   | 1     | 1   | 1     | 1   | 1    |
| 75° | 0   | 0     | 0   | 0     | 0   | 0    |
| 85° | 0   | 0     | 0   | 0     | 0   | 0    |
| 90° | 0   | 0     | 0   | 0     | 0   |      |



TEST NUMBER: P886245

CATALOG NUMBER: ML204LSFL95FS1E-TIR1D55WFL-TL2SDSLB-468LM-2700K

**CANDELA DISTRIBUTION (FULL):**

|       | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|-------|-------|-------|-------|-------|-------|
| 0°    | 623.7 | 623.7 | 623.7 | 623.7 | 623.7 |
| 2.5°  | 622.9 | 622.9 | 622.9 | 622.1 | 622.1 |
| 5°    | 617.0 | 617.0 | 616.2 | 616.2 | 616.2 |
| 7.5°  | 607.0 | 607.8 | 607.0 | 606.1 | 606.1 |
| 10°   | 590.2 | 591.9 | 593.6 | 592.7 | 589.4 |
| 12.5° | 569.2 | 569.2 | 572.6 | 569.2 | 569.2 |
| 15°   | 541.6 | 541.6 | 544.9 | 541.6 | 540.7 |
| 17.5° | 505.5 | 508.0 | 512.2 | 508.0 | 506.4 |
| 20°   | 467.0 | 467.0 | 469.5 | 469.5 | 466.1 |
| 22.5° | 415.0 | 418.3 | 420.9 | 420.0 | 420.9 |
| 25°   | 356.3 | 359.7 | 364.7 | 360.5 | 358.0 |
| 27.5° | 293.4 | 296.8 | 301.0 | 300.1 | 295.1 |
| 30°   | 235.6 | 239.8 | 238.9 | 238.1 | 234.7 |
| 32.5° | 182.8 | 186.1 | 187.0 | 185.3 | 180.2 |
| 35°   | 123.2 | 135.0 | 141.7 | 134.1 | 125.8 |
| 37.5° | 79.6  | 89.7  | 103.1 | 90.5  | 80.5  |
| 40°   | 52.0  | 55.3  | 72.1  | 58.7  | 52.8  |
| 42.5° | 32.7  | 36.0  | 47.8  | 36.0  | 33.5  |
| 45°   | 20.1  | 21.8  | 26.8  | 21.8  | 21.0  |
| 47.5° | 11.7  | 12.6  | 15.9  | 12.6  | 12.6  |
| 50°   | 7.5   | 7.5   | 9.2   | 7.5   | 7.5   |
| 52.5° | 4.2   | 5.0   | 5.9   | 5.0   | 5.0   |
| 55°   | 2.5   | 2.5   | 3.4   | 2.5   | 2.5   |
| 57.5° | 1.7   | 1.7   | 1.7   | 1.7   | 1.7   |
| 60°   | 0.8   | 0.8   | 0.8   | 0.8   | 0.8   |
| 62.5° | 0.8   | 0.8   | 0.8   | 0.8   | 0.8   |
| 65°   | 0.8   | 0.8   | 0.8   | 0.8   | 0.8   |
| 67.5° | 0.8   | 0.8   | 0.8   | 0.8   | 0.8   |
| 70°   | 0.8   | 0.0   | 0.0   | 0.0   | 0.8   |
| 72.5° | 0.8   | 0.0   | 0.0   | 0.0   | 0.8   |
| 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

Signify Classified - Internal  
Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269

Scaled Data Report







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

Signify Classified - Internal  
Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269

Scaled Data Report



Signify Classified - Internal  
Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269

Scaled Data Report



Signify Classified - Internal  
Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269

Scaled Data Report



(END OF REPORT)