

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: P886261

Luminaire Tested: ML204LSFL9FS1E-TIR1D25NFL-TL2RDMB-550LM-3000K

Issue Date: 7/18/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P886261  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2402-314-73)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 7/18/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML204LSFL9FS1E-TIR1D25NFL-TL2RDMB-550LM-3000K  
Description: 2IN ROUND ML FLEX, SELECTABLE CCT, WITH 25D TIR, MATTE BLACK TRIM  
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 3000K CCT  
Ballast/Driver: -

**Summary**

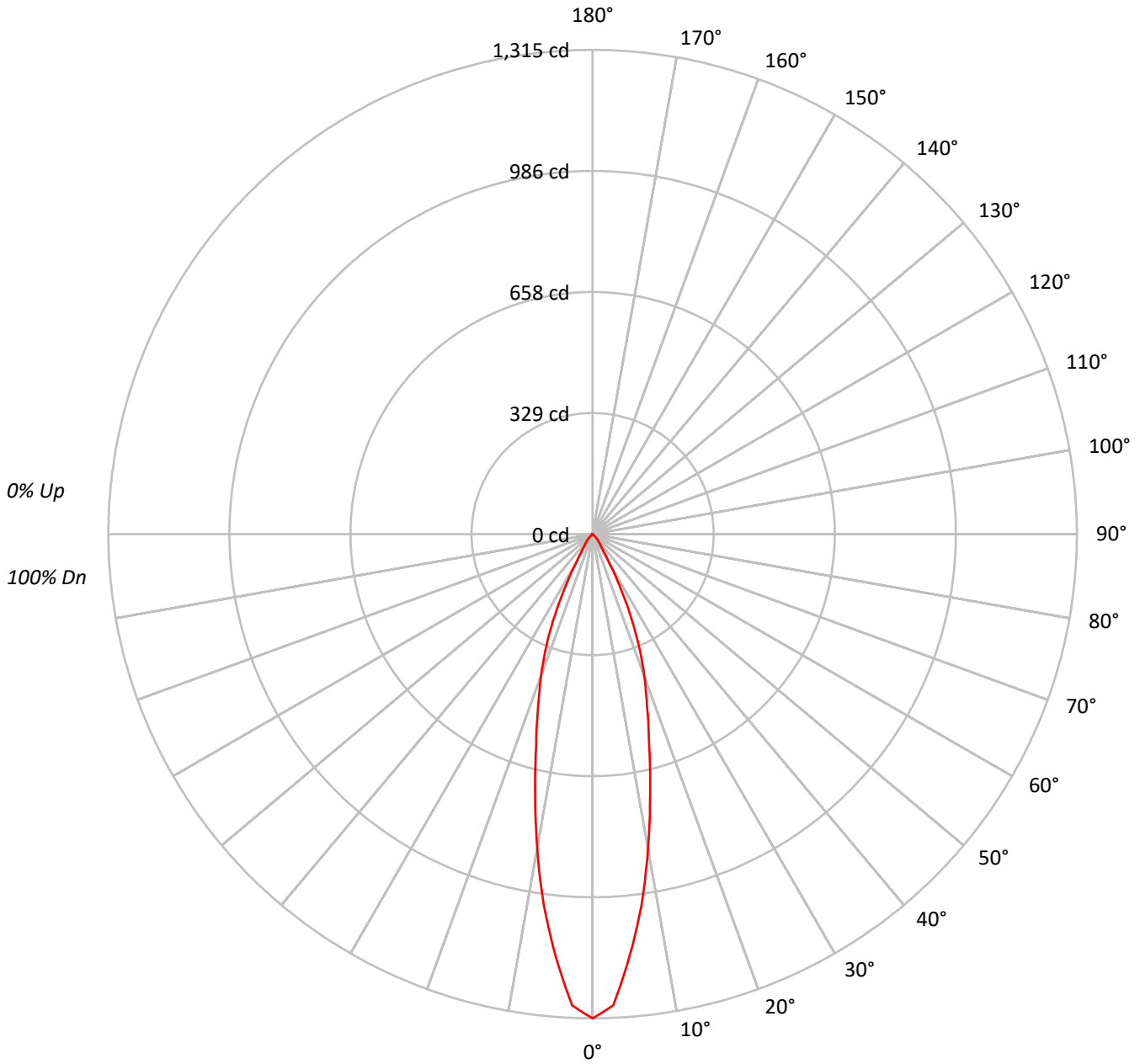
Lumens per Lamp: N/A  
Luminaire Lumens: 413.4 lumens  
Efficiency: N/A  
Efficacy: 52.3 lumens/watt  
Spacing Criteria (0/90/45): 0.45 / 0.45 / 0.52  
Luminous Opening: Circular (Dia: 0.17' x H: 0')  
CIE Type: Direct

Input Watts (W): 7.9  
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





TEST NUMBER: P886261

CATALOG NUMBER: ML204LSFL9FS1E-TIR1D25NFL-TL2RDDB-550LM-3000K

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

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

|     |        |
|-----|--------|
|     | 0°     |
| 0°  | 648942 |
| 5°  | 570000 |
| 10° | 434108 |
| 15° | 302640 |
| 20° | 215005 |
| 25° | 131741 |
| 30° | 52413  |
| 35° | 23671  |
| 40° | 15329  |
| 45° | 7954   |
| 50° | 768    |
| 55° | 860    |
| 60° | 0      |
| 65° | 0      |
| 70° | 0      |
| 75° | 0      |
| 80° | 0      |
| 85° | 0      |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 7954 cd/sqm



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 101.2  | 24.5      |
| 10°-20°   | 166.5  | 40.3      |
| 20°-30°   | 108.7  | 26.3      |
| 30°-40°   | 28.2   | 6.8       |
| 40°-50°   | 8.3    | 2.0       |
| 50°-60°   | 0.5    | 0.1       |
| 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°    | 376.4  | 91.0      |
| 0°-40°    | 404.5  | 97.9      |
| 0°-60°    | 413.4  | 100.0     |
| 0°-90°    | 413.4  | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 413.4  | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | Flux |
|-----|------|------|
| 0°  | 1315 |      |
| 5°  | 1151 | 101  |
| 15° | 592  | 166  |
| 25° | 242  | 109  |
| 35° | 39   | 28   |
| 45° | 11   | 8    |
| 55° | 1    | 1    |
| 65° | 0    | 0    |
| 75° | 0    | 0    |
| 85° | 0    | 0    |
| 90° | 0    |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     |
|-------|--------|
| 0°    | 1315.3 |
| 2.5°  | 1281.2 |
| 5°    | 1150.9 |
| 7.5°  | 1016.5 |
| 10°   | 866.5  |
| 12.5° | 720.7  |
| 15°   | 592.5  |
| 17.5° | 491.2  |
| 20°   | 409.5  |
| 22.5° | 327.8  |
| 25°   | 242.0  |
| 27.5° | 157.2  |
| 30°   | 92.0   |
| 32.5° | 55.8   |
| 35°   | 39.3   |
| 37.5° | 31.0   |
| 40°   | 23.8   |
| 42.5° | 18.6   |
| 45°   | 11.4   |
| 47.5° | 2.1    |
| 50°   | 1.0    |
| 52.5° | 1.0    |
| 55°   | 1.0    |
| 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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Scaled Data Report



— 0°-180°

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Scaled Data Report



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