

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: P642745

Luminaire Tested: ML5615LSNFL259FS1E - 592SC - 900LM - 5000K

Issue Date: 2/17/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P642745  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-2)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 2/17/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML5615LSNFL259FS1E - 592SC - 900LM - 5000K  
Description: ML56 RR, 25D TIR OPTIC, 5" SPECULAR CLEAR TRIM  
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 5000K CCT  
Ballast/Driver: -

**Summary**

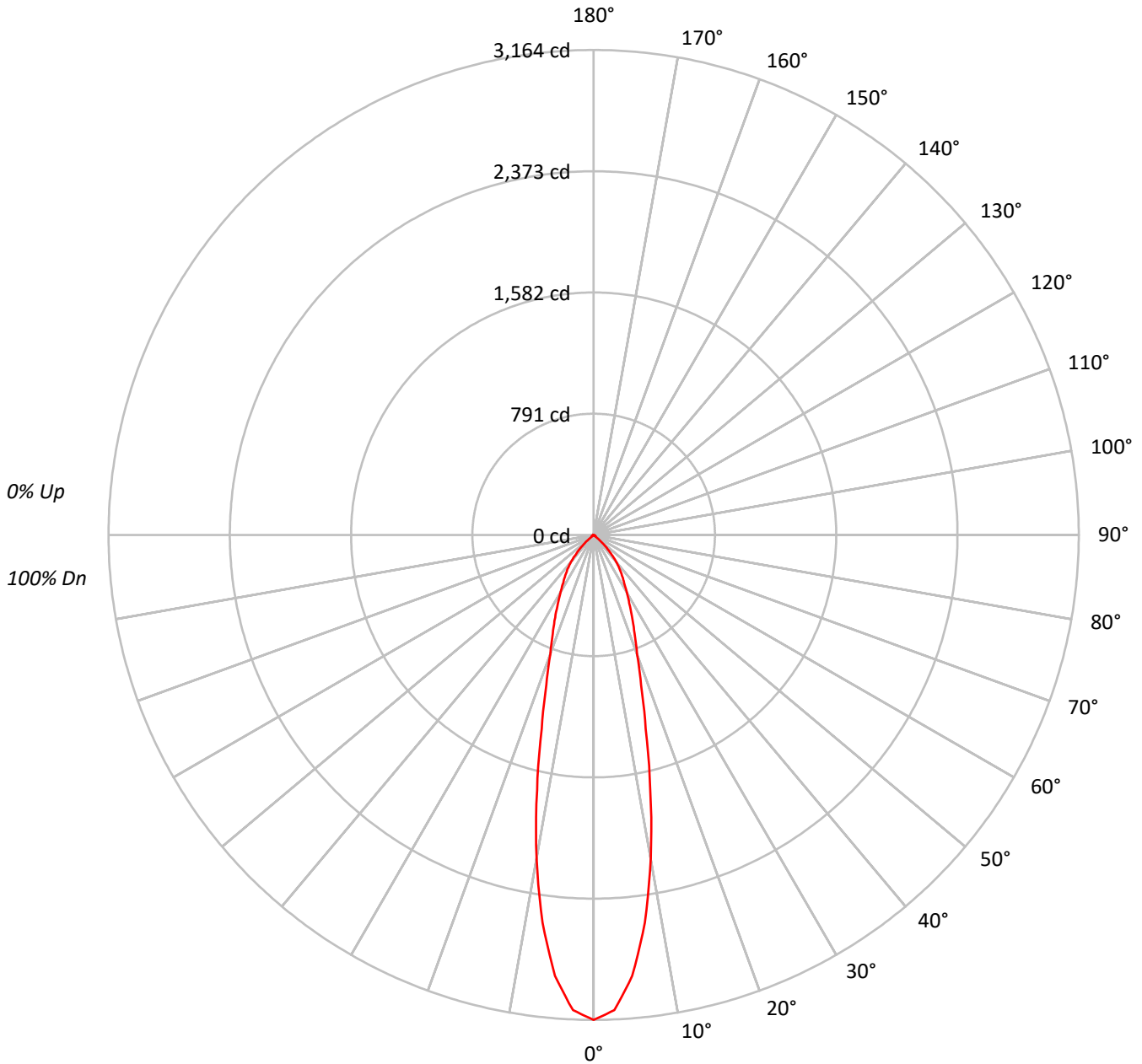
Lumens per Lamp: N/A  
Luminaire Lumens: 1210.0 lumens  
Efficiency: N/A  
Efficacy: 115.2 lumens/watt  
Spacing Criteria (0/90/45): 0.44 / 0.44 / 0.48  
Luminous Opening: Circular (Dia: 0.42' x H: 0')  
CIE Type: Direct

Input Watts (W): 10.5  
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 | 111 | 109 | 107 | 112 | 109 | 107 | 105 | 105 | 104 | 102 | 101 | 100 | 99  | 98  | 97  | 96  | 94  |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 2   | 109 | 104 | 101 | 97  | 107 | 103 | 99  | 96  | 99  | 97  | 94  | 96  | 94  | 92  | 94  | 92  | 90  | 89  |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 3   | 104 | 98  | 93  | 90  | 102 | 97  | 92  | 89  | 94  | 91  | 88  | 92  | 89  | 86  | 89  | 87  | 85  | 83  |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 4   | 99  | 92  | 87  | 83  | 97  | 91  | 86  | 83  | 89  | 85  | 82  | 87  | 84  | 81  | 85  | 82  | 80  | 79  |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 5   | 95  | 87  | 82  | 78  | 93  | 86  | 81  | 78  | 85  | 80  | 77  | 83  | 79  | 76  | 81  | 78  | 76  | 74  |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 6   | 91  | 83  | 77  | 73  | 89  | 82  | 77  | 73  | 80  | 76  | 72  | 79  | 75  | 72  | 78  | 74  | 71  | 70  |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 7   | 87  | 78  | 73  | 69  | 86  | 78  | 73  | 69  | 77  | 72  | 69  | 75  | 71  | 68  | 74  | 71  | 68  | 67  |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 8   | 83  | 75  | 69  | 65  | 82  | 74  | 69  | 65  | 73  | 68  | 65  | 72  | 68  | 65  | 71  | 67  | 64  | 63  |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 9   | 80  | 71  | 66  | 62  | 79  | 71  | 66  | 62  | 70  | 65  | 62  | 69  | 65  | 62  | 68  | 64  | 61  | 60  |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 10  | 77  | 68  | 63  | 59  | 76  | 68  | 63  | 59  | 67  | 62  | 59  | 66  | 62  | 59  | 65  | 62  | 59  | 58  |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |

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

|     |        |
|-----|--------|
|     | 0°     |
| 0°  | 249801 |
| 5°  | 228844 |
| 10° | 171924 |
| 15° | 107036 |
| 20° | 69398  |
| 25° | 51834  |
| 30° | 39205  |
| 35° | 31031  |
| 40° | 23681  |
| 45° | 13720  |
| 50° | 3635   |
| 55° | 1569   |
| 60° | 1074   |
| 65° | 430    |
| 70° | 254    |
| 75° | 0      |
| 80° | 0      |
| 85° | 0      |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 13720 cd/sqm



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 251.6  | 20.8      |
| 10°-20°   | 372.5  | 30.8      |
| 20°-30°   | 275.0  | 22.7      |
| 30°-40°   | 201.7  | 16.7      |
| 40°-50°   | 93.9   | 7.8       |
| 50°-60°   | 12.3   | 1.0       |
| 60°-70°   | 2.9    | 0.2       |
| 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°    | 899.0  | 74.3      |
| 0°-40°    | 1100.7 | 91.0      |
| 0°-60°    | 1207.0 | 99.7      |
| 0°-90°    | 1210.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 1210.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | Flux |
|-----|------|------|
| 0°  | 3164 |      |
| 5°  | 2888 | 252  |
| 15° | 1310 | 372  |
| 25° | 595  | 275  |
| 35° | 322  | 202  |
| 45° | 123  | 94   |
| 55° | 11   | 12   |
| 65° | 2    | 3    |
| 75° | 0    | 0    |
| 85° | 0    | 0    |
| 90° | 0    |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     |
|-------|--------|
| 0°    | 3164.4 |
| 2.5°  | 3102.9 |
| 5°    | 2887.9 |
| 7.5°  | 2552.2 |
| 10°   | 2144.8 |
| 12.5° | 1706.8 |
| 15°   | 1309.7 |
| 17.5° | 1026.3 |
| 20°   | 826.1  |
| 22.5° | 696.4  |
| 25°   | 595.1  |
| 27.5° | 502.9  |
| 30°   | 430.1  |
| 32.5° | 369.8  |
| 35°   | 322.0  |
| 37.5° | 277.6  |
| 40°   | 229.8  |
| 42.5° | 174.1  |
| 45°   | 122.9  |
| 47.5° | 69.4   |
| 50°   | 29.6   |
| 52.5° | 17.1   |
| 55°   | 11.4   |
| 57.5° | 9.1    |
| 60°   | 6.8    |
| 62.5° | 4.6    |
| 65°   | 2.3    |
| 67.5° | 1.1    |
| 70°   | 1.1    |
| 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





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Scaled Data Report



— 0°-180°

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