

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



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: P642816

Luminaire Tested: ML5615LSNFL259FS1E - 593WB - 900LM - 2700K

Issue Date: 2/17/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P642816  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-5)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 2/17/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML5615LSNFL259FS1E - 593WB - 900LM - 2700K  
Description: ML56 RR, 25D TIR OPTIC, 5" WHITE BAFFLE TRIM  
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 2700K CCT  
Ballast/Driver: -

**Summary**

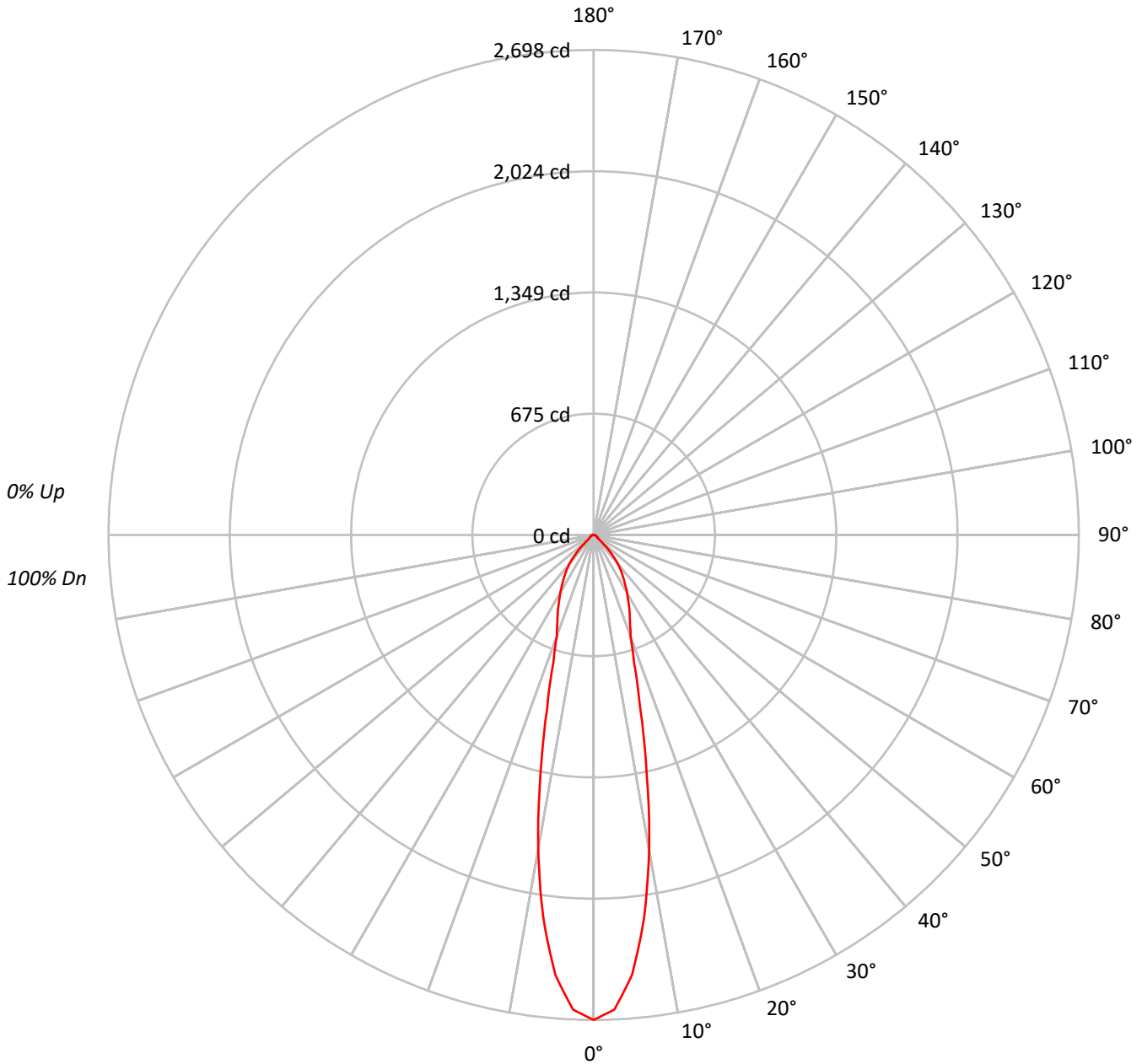
Lumens per Lamp: N/A  
Luminaire Lumens: 1044.0 lumens  
Efficiency: N/A  
Efficacy: 99.4 lumens/watt  
Spacing Criteria (0/90/45): 0.43 / 0.43 / 0.44  
Luminous Opening: Circular (Dia: 0.42' x H: 0')  
CIE Type: Direct

Input Watts (W): 10.5  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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  |     |     |     | 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 | 0   |
| RCR |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |    |     |
| 0   | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 |    |    | 100 |
| 1   | 113 | 110 | 108 | 106 | 111 | 108 | 106 | 104 | 104 | 102 | 101 | 100 | 99  | 98  | 97  | 96  | 95  | 93  |    |    | 93  |
| 2   | 108 | 103 | 99  | 95  | 105 | 101 | 97  | 94  | 98  | 95  | 92  | 95  | 92  | 90  | 92  | 90  | 88  | 86  |    |    | 86  |
| 3   | 102 | 96  | 91  | 87  | 100 | 94  | 90  | 86  | 92  | 88  | 85  | 89  | 86  | 83  | 87  | 84  | 82  | 81  |    |    | 81  |
| 4   | 97  | 90  | 84  | 80  | 96  | 89  | 84  | 80  | 87  | 82  | 79  | 85  | 81  | 78  | 83  | 80  | 77  | 75  |    |    | 75  |
| 5   | 93  | 85  | 79  | 75  | 91  | 84  | 78  | 74  | 82  | 77  | 74  | 80  | 76  | 73  | 79  | 75  | 72  | 71  |    |    | 71  |
| 6   | 89  | 80  | 74  | 70  | 87  | 79  | 74  | 70  | 78  | 73  | 69  | 76  | 72  | 69  | 75  | 71  | 68  | 67  |    |    | 67  |
| 7   | 85  | 76  | 70  | 66  | 83  | 75  | 69  | 66  | 74  | 69  | 65  | 72  | 68  | 65  | 71  | 67  | 64  | 63  |    |    | 63  |
| 8   | 81  | 72  | 66  | 62  | 80  | 71  | 66  | 62  | 70  | 65  | 62  | 69  | 65  | 61  | 68  | 64  | 61  | 60  |    |    | 60  |
| 9   | 78  | 68  | 63  | 59  | 77  | 68  | 62  | 59  | 67  | 62  | 59  | 66  | 62  | 58  | 65  | 61  | 58  | 57  |    |    | 57  |
| 10  | 74  | 65  | 60  | 56  | 74  | 65  | 60  | 56  | 64  | 59  | 56  | 63  | 59  | 56  | 63  | 58  | 56  | 54  |    |    | 54  |

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

|     |        |
|-----|--------|
|     | 0°     |
| 0°  | 212967 |
| 5°  | 194588 |
| 10° | 142538 |
| 15° | 81783  |
| 20° | 50438  |
| 25° | 41051  |
| 30° | 33745  |
| 35° | 27484  |
| 40° | 21651  |
| 45° | 13296  |
| 50° | 4912   |
| 55° | 3716   |
| 60° | 3473   |
| 65° | 3175   |
| 70° | 3231   |
| 75° | 3355   |
| 80° | 3182   |
| 85° | 3623   |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 13296 cd/sqm



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 212.2  | 20.3      |
| 10°-20°   | 287.5  | 27.5      |
| 20°-30°   | 217.0  | 20.8      |
| 30°-40°   | 178.6  | 17.1      |
| 40°-50°   | 91.0   | 8.7       |
| 50°-60°   | 25.4   | 2.4       |
| 60°-70°   | 17.3   | 1.7       |
| 70°-80°   | 11.2   | 1.1       |
| 80°-90°   | 3.7    | 0.4       |
| 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°    | 716.7  | 68.7      |
| 0°-40°    | 895.4  | 85.8      |
| 0°-60°    | 1011.8 | 96.9      |
| 0°-90°    | 1044.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 1044.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | Flux |
|-----|------|------|
| 0°  | 2698 |      |
| 5°  | 2456 | 212  |
| 15° | 1001 | 288  |
| 25° | 471  | 217  |
| 35° | 285  | 179  |
| 45° | 119  | 91   |
| 55° | 27   | 25   |
| 65° | 17   | 17   |
| 75° | 11   | 11   |
| 85° | 4    | 4    |
| 90° | 0    |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     |
|-------|--------|
| 0°    | 2697.8 |
| 2.5°  | 2642.7 |
| 5°    | 2455.6 |
| 7.5°  | 2148.4 |
| 10°   | 1778.2 |
| 12.5° | 1366.9 |
| 15°   | 1000.7 |
| 17.5° | 745.5  |
| 20°   | 600.4  |
| 22.5° | 526.3  |
| 25°   | 471.3  |
| 27.5° | 418.3  |
| 30°   | 370.2  |
| 32.5° | 325.2  |
| 35°   | 285.2  |
| 37.5° | 249.2  |
| 40°   | 210.1  |
| 42.5° | 162.1  |
| 45°   | 119.1  |
| 47.5° | 73.0   |
| 50°   | 40.0   |
| 52.5° | 31.0   |
| 55°   | 27.0   |
| 57.5° | 25.0   |
| 60°   | 22.0   |
| 62.5° | 20.0   |
| 65°   | 17.0   |
| 67.5° | 15.0   |
| 70°   | 14.0   |
| 72.5° | 12.0   |
| 75°   | 11.0   |
| 77.5° | 9.0    |
| 80°   | 7.0    |
| 82.5° | 5.0    |
| 85°   | 4.0    |
| 87.5° | 1.0    |
| 90°   | 0.0    |

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Scaled Data Report



Report Generated By 670245859 / DESKTOP-T8S5UU9

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— 0°-180°

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