

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: P644073

Luminaire Tested: ML5615LSWFL559FS1E - 696WB - 1500LM - 3500K

Issue Date: 2/17/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P644073  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-69)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 2/17/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML5615LSWFL559FS1E - 696WB - 1500LM - 3500K  
Description: ML56 RR, 55D TIR OPTIC, 6" SHALLOW WHITE BAFFLE TRIM  
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 3500K CCT  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1864.6 lumens  
Efficiency: N/A  
Efficacy: 109.0 lumens/watt  
Spacing Criteria (0/90/45): 0.86 / 0.86 / 0.89  
Luminous Opening: Circular (Dia: 0.5' x H: 0')  
CIE Type: Direct

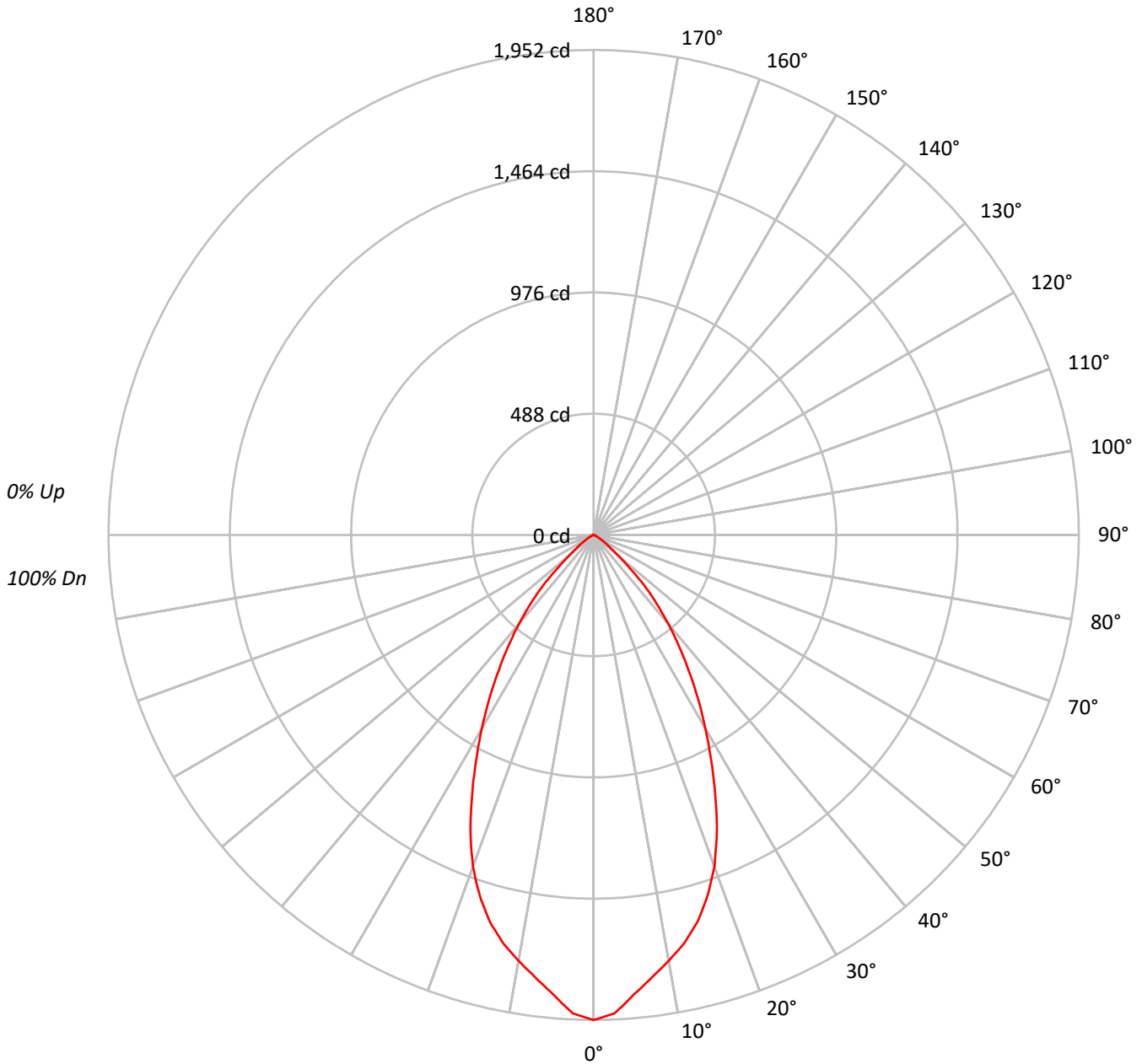
Input Watts (W): 17.1  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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 | 100 | 100 |
| 1   | 113 | 110 | 107 | 105 | 111 | 108 | 106 | 103 | 104 | 102 | 100 | 100 | 99  | 97  | 97  | 96  | 94  | 93  | 93  | 93  | 93  |
| 2   | 107 | 102 | 97  | 94  | 105 | 100 | 96  | 93  | 97  | 93  | 91  | 94  | 91  | 89  | 91  | 89  | 87  | 85  | 85  | 85  | 85  |
| 3   | 101 | 94  | 89  | 84  | 99  | 93  | 88  | 84  | 90  | 86  | 82  | 88  | 84  | 81  | 85  | 82  | 80  | 78  | 78  | 78  | 78  |
| 4   | 95  | 87  | 81  | 77  | 93  | 86  | 81  | 76  | 84  | 79  | 75  | 82  | 78  | 74  | 80  | 76  | 74  | 72  | 72  | 72  | 72  |
| 5   | 90  | 81  | 75  | 70  | 88  | 80  | 74  | 70  | 78  | 73  | 69  | 77  | 72  | 69  | 75  | 71  | 68  | 66  | 66  | 66  | 66  |
| 6   | 85  | 76  | 69  | 65  | 84  | 75  | 69  | 64  | 73  | 68  | 64  | 72  | 67  | 63  | 70  | 66  | 63  | 61  | 61  | 61  | 61  |
| 7   | 80  | 71  | 64  | 60  | 79  | 70  | 64  | 59  | 69  | 63  | 59  | 67  | 62  | 59  | 66  | 62  | 58  | 57  | 57  | 57  | 57  |
| 8   | 76  | 66  | 60  | 55  | 75  | 65  | 59  | 55  | 64  | 59  | 55  | 63  | 58  | 55  | 62  | 58  | 54  | 53  | 53  | 53  | 53  |
| 9   | 72  | 62  | 56  | 52  | 71  | 62  | 56  | 51  | 61  | 55  | 51  | 60  | 55  | 51  | 59  | 54  | 51  | 49  | 49  | 49  | 49  |
| 10  | 69  | 58  | 52  | 48  | 68  | 58  | 52  | 48  | 57  | 52  | 48  | 56  | 51  | 48  | 56  | 51  | 48  | 46  | 46  | 46  | 46  |

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

|     |        |
|-----|--------|
|     | 0°     |
| 0°  | 107031 |
| 5°  | 102195 |
| 10° | 96881  |
| 15° | 91499  |
| 20° | 82841  |
| 25° | 70081  |
| 30° | 56907  |
| 35° | 44544  |
| 40° | 33398  |
| 45° | 22297  |
| 50° | 10789  |
| 55° | 5658   |
| 60° | 2884   |
| 65° | 1920   |
| 70° | 785    |
| 75° | 699    |
| 80° | 505    |
| 85° | 1006   |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 22297 cd/sqm



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 173.8  | 9.3       |
| 10°-20°   | 448.8  | 24.1      |
| 20°-30°   | 529.4  | 28.4      |
| 30°-40°   | 417.6  | 22.4      |
| 40°-50°   | 218.8  | 11.7      |
| 50°-60°   | 57.2   | 3.1       |
| 60°-70°   | 14.3   | 0.8       |
| 70°-80°   | 3.5    | 0.2       |
| 80°-90°   | 1.1    | 0.1       |
| 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°    | 1152.1 | 61.8      |
| 0°-40°    | 1569.7 | 84.2      |
| 0°-60°    | 1845.7 | 99.0      |
| 0°-90°    | 1864.6 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 1864.6 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | Flux |
|-----|------|------|
| 0°  | 1952 |      |
| 5°  | 1857 | 174  |
| 15° | 1612 | 449  |
| 25° | 1159 | 529  |
| 35° | 666  | 418  |
| 45° | 288  | 219  |
| 55° | 59   | 57   |
| 65° | 15   | 14   |
| 75° | 3    | 3    |
| 85° | 2    | 1    |
| 90° | 0    |      |



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**CANDELA DISTRIBUTION (FULL):**

| 0°    |        |
|-------|--------|
| 0°    | 1952.4 |
| 2.5°  | 1927.8 |
| 5°    | 1857.1 |
| 7.5°  | 1796.3 |
| 10°   | 1740.4 |
| 12.5° | 1682.9 |
| 15°   | 1612.2 |
| 17.5° | 1523.5 |
| 20°   | 1420.0 |
| 22.5° | 1295.1 |
| 25°   | 1158.6 |
| 27.5° | 1023.9 |
| 30°   | 899.0  |
| 32.5° | 780.6  |
| 35°   | 665.6  |
| 37.5° | 563.7  |
| 40°   | 466.7  |
| 42.5° | 374.7  |
| 45°   | 287.6  |
| 47.5° | 190.6  |
| 50°   | 126.5  |
| 52.5° | 85.5   |
| 55°   | 59.2   |
| 57.5° | 37.8   |
| 60°   | 26.3   |
| 62.5° | 19.7   |
| 65°   | 14.8   |
| 67.5° | 8.2    |
| 70°   | 4.9    |
| 72.5° | 3.3    |
| 75°   | 3.3    |
| 77.5° | 3.3    |
| 80°   | 1.6    |
| 82.5° | 1.6    |
| 85°   | 1.6    |
| 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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