

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: P641529

Luminaire Tested: ML5612LSVWFL7597FS1E - 693WB - 900LM - 4000K

Issue Date: 2/17/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P641529  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-86)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 2/17/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML5612LSVWFL7597FS1E - 693WB - 900LM - 4000K  
Description: ML56 RR, 75D TIR OPTIC, 6" WHITE BAFFLE TRIM  
Light Source: (1) HCL SELECTABLE LUMEN LED 90CRI / 4000K CCT  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1348.2 lumens  
Efficiency: N/A  
Efficacy: 101.4 lumens/watt  
Spacing Criteria (0/90/45): 1.18 / 1.18 / 1.09  
Luminous Opening: Circular (Dia: 0.5' x H: 0')  
CIE Type: Direct

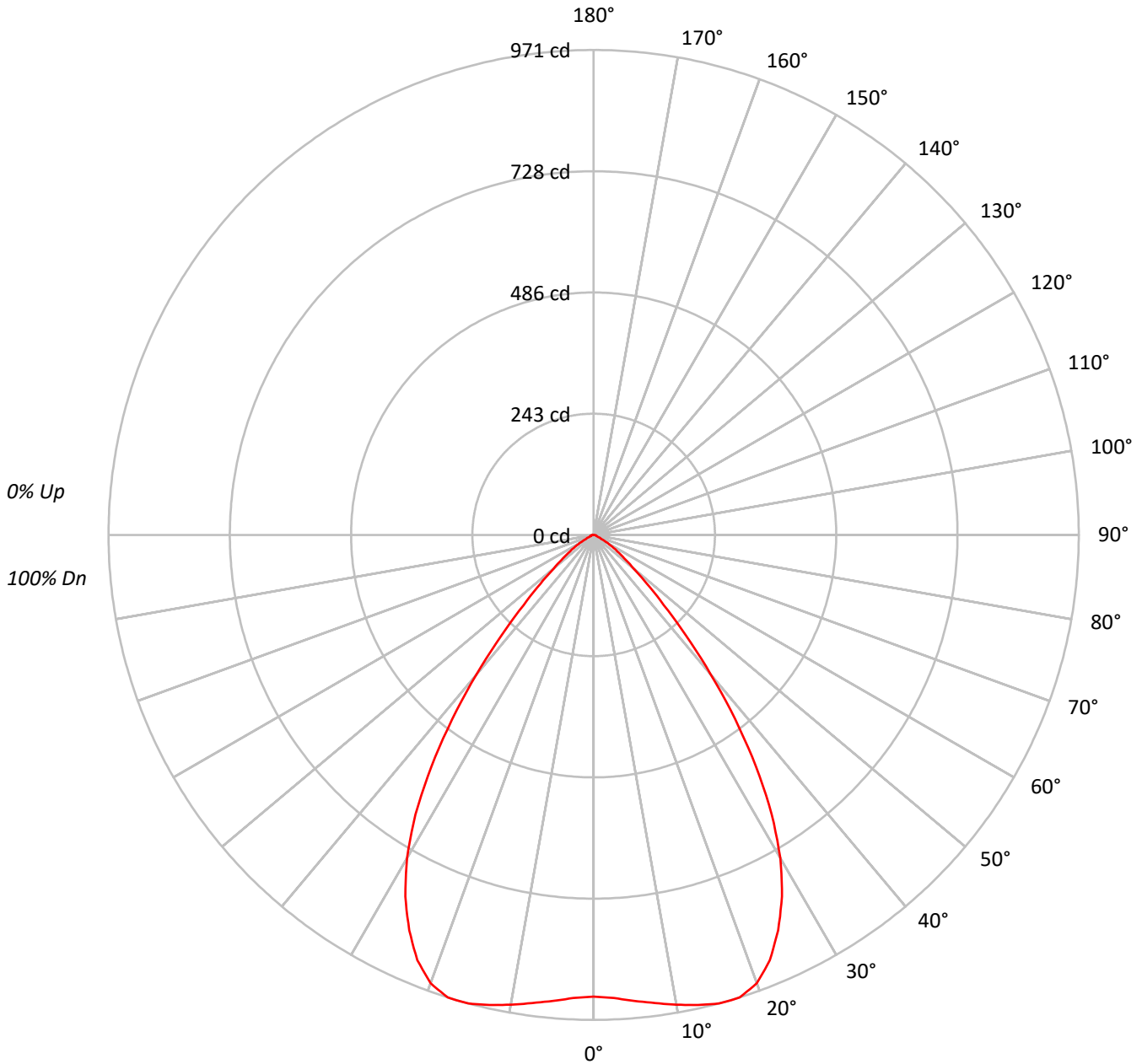
Input Watts (W): 13.3  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Luminous Intensity Polar Plot





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

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |    |     |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|-----|--|--|--|--|--|--|----|--|--|--|--|--|--|--|--|---|
| RF  | 20  |     |     |     |     |     |     |     |     | 20  |     |     |     |     |     |     |     |     | 20 |    |     |  |  |  |  |  |  | 20 |  |  |  |  |  |  |  |  |   |
| 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 |    |    | 100 |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 1   | 113 | 110 | 107 | 104 | 110 | 107 | 105 | 103 | 103 | 101 | 100 | 100 | 98  | 97  | 96  | 95  | 94  | 92  |    |    | 92  |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 2   | 106 | 101 | 96  | 92  | 104 | 99  | 95  | 91  | 96  | 92  | 89  | 93  | 90  | 87  | 90  | 88  | 86  | 84  |    |    | 84  |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 3   | 100 | 93  | 87  | 83  | 98  | 91  | 86  | 82  | 89  | 84  | 81  | 86  | 82  | 79  | 84  | 81  | 78  | 76  |    |    | 76  |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 4   | 94  | 85  | 79  | 74  | 92  | 84  | 78  | 74  | 82  | 77  | 73  | 80  | 76  | 72  | 78  | 74  | 71  | 70  |    |    | 70  |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 5   | 88  | 79  | 72  | 67  | 87  | 78  | 72  | 67  | 76  | 71  | 67  | 74  | 70  | 66  | 73  | 69  | 65  | 64  |    |    | 64  |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 6   | 83  | 73  | 66  | 62  | 82  | 72  | 66  | 61  | 71  | 65  | 61  | 69  | 64  | 60  | 68  | 63  | 60  | 58  |    |    | 58  |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 7   | 78  | 68  | 61  | 56  | 77  | 67  | 61  | 56  | 66  | 60  | 56  | 65  | 59  | 56  | 63  | 59  | 55  | 54  |    |    | 54  |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 8   | 74  | 63  | 57  | 52  | 73  | 63  | 56  | 52  | 61  | 56  | 52  | 60  | 55  | 51  | 59  | 55  | 51  | 50  |    |    | 50  |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 9   | 70  | 59  | 52  | 48  | 69  | 59  | 52  | 48  | 58  | 52  | 48  | 57  | 51  | 48  | 56  | 51  | 47  | 46  |    |    | 46  |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 10  | 66  | 55  | 49  | 45  | 65  | 55  | 49  | 44  | 54  | 48  | 44  | 53  | 48  | 44  | 52  | 48  | 44  | 43  |    |    | 43  |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |

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

|     |       |
|-----|-------|
|     | 0°    |
| 0°  | 50665 |
| 5°  | 51541 |
| 10° | 53172 |
| 15° | 55125 |
| 20° | 55725 |
| 25° | 52824 |
| 30° | 47273 |
| 35° | 37939 |
| 40° | 26099 |
| 45° | 15389 |
| 50° | 8887  |
| 55° | 5572  |
| 60° | 3399  |
| 65° | 1608  |
| 70° | 994   |
| 75° | 1059  |
| 80° | 1168  |
| 85° | 755   |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 15389 cd/sqm



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 90.0   | 6.7       |
| 10°-20°   | 273.8  | 20.3      |
| 20°-30°   | 397.8  | 29.5      |
| 30°-40°   | 348.9  | 25.9      |
| 40°-50°   | 161.8  | 12.0      |
| 50°-60°   | 54.9   | 4.1       |
| 60°-70°   | 13.7   | 1.0       |
| 70°-80°   | 5.6    | 0.4       |
| 80°-90°   | 1.8    | 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°    | 761.5  | 56.5      |
| 0°-40°    | 1110.4 | 82.4      |
| 0°-60°    | 1327.1 | 98.4      |
| 0°-90°    | 1348.2 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 1348.2 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°  | Flux |
|-----|-----|------|
| 0°  | 924 |      |
| 5°  | 937 | 90   |
| 15° | 971 | 274  |
| 25° | 873 | 398  |
| 35° | 567 | 349  |
| 45° | 198 | 162  |
| 55° | 58  | 55   |
| 65° | 12  | 14   |
| 75° | 5   | 6    |
| 85° | 1   | 2    |
| 90° | 0   |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°    |
|-------|-------|
| 0°    | 924.2 |
| 2.5°  | 927.9 |
| 5°    | 936.6 |
| 7.5°  | 945.3 |
| 10°   | 955.2 |
| 12.5° | 963.9 |
| 15°   | 971.3 |
| 17.5° | 971.3 |
| 20°   | 955.2 |
| 22.5° | 921.7 |
| 25°   | 873.3 |
| 27.5° | 816.3 |
| 30°   | 746.8 |
| 32.5° | 663.7 |
| 35°   | 566.9 |
| 37.5° | 465.2 |
| 40°   | 364.7 |
| 42.5° | 272.9 |
| 45°   | 198.5 |
| 47.5° | 143.9 |
| 50°   | 104.2 |
| 52.5° | 76.9  |
| 55°   | 58.3  |
| 57.5° | 44.7  |
| 60°   | 31.0  |
| 62.5° | 17.4  |
| 65°   | 12.4  |
| 67.5° | 7.4   |
| 70°   | 6.2   |
| 72.5° | 6.2   |
| 75°   | 5.0   |
| 77.5° | 5.0   |
| 80°   | 3.7   |
| 82.5° | 2.5   |
| 85°   | 1.2   |
| 87.5° | 1.2   |
| 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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— 0°-180°

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Scaled Data Report



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