

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: P642153

Luminaire Tested: ML5612LSWFL5597FS1E - 692W - 600LM - 3500K

Issue Date: 2/17/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P642153  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-62)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 2/17/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML5612LSWFL5597FS1E - 692W - 600LM - 3500K  
Description: ML56 RR, 55D TIR OPTIC, 6" WHITE TRIM  
Light Source: (1) HCL SELECTABLE LUMEN LED 90CRI / 3500K CCT  
Ballast/Driver: -

**Summary**

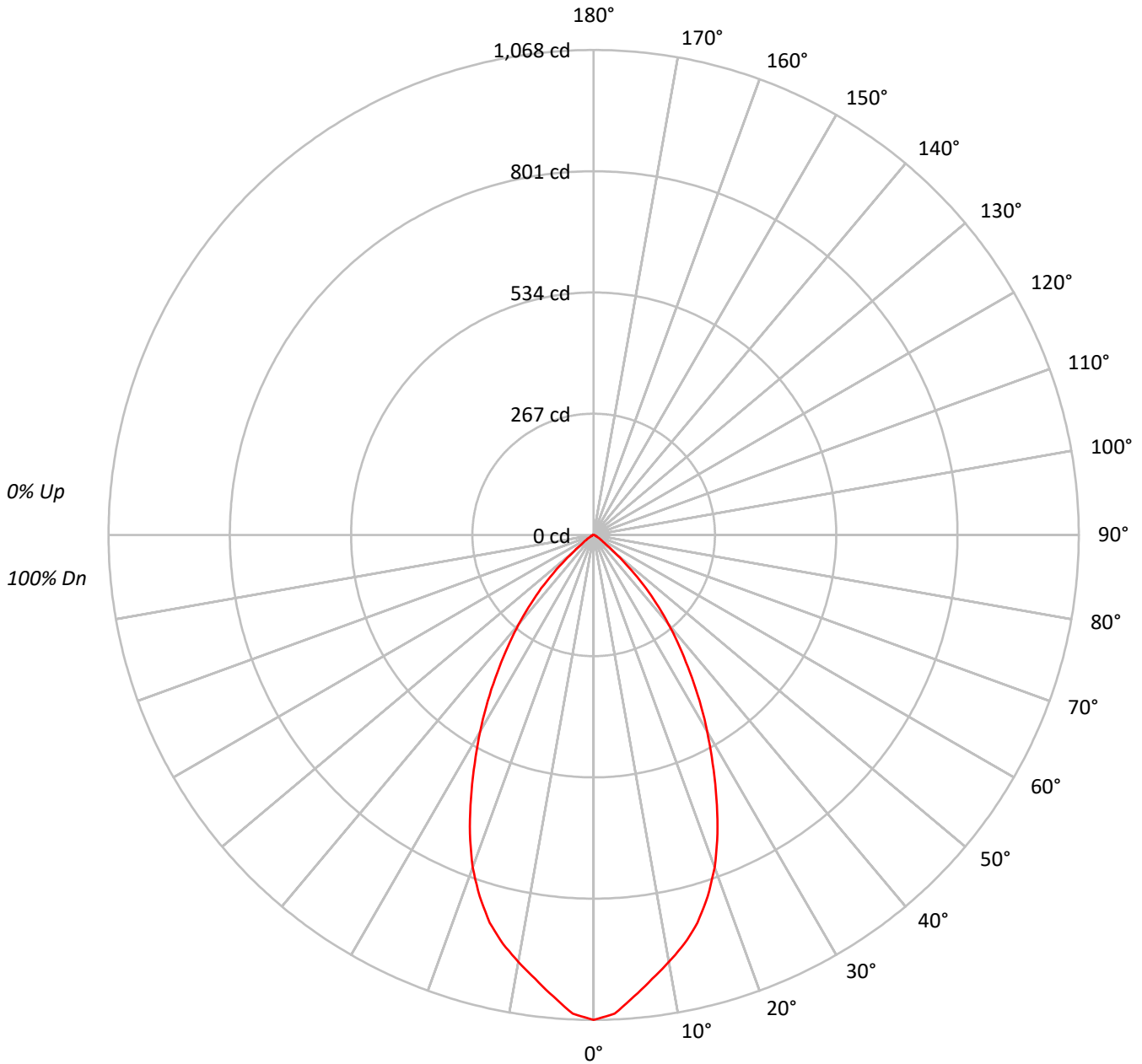
Lumens per Lamp: N/A  
Luminaire Lumens: 1015.3 lumens  
Efficiency: N/A  
Efficacy: 98.6 lumens/watt  
Spacing Criteria (0/90/45): 0.86 / 0.86 / 0.89  
Luminous Opening: Circular (Dia: 0.5' x H: 0')  
CIE Type: Direct

Input Watts (W): 10.3  
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  |     |     |     | 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 | 108 | 105 | 111 | 108 | 106 | 104 | 104 | 102 | 100 | 100 | 99  | 97  | 97  | 96  | 95  | 93  | 93  | 93  | 93  |
| 2   | 107 | 102 | 98  | 94  | 105 | 100 | 96  | 93  | 97  | 94  | 91  | 94  | 91  | 89  | 91  | 89  | 87  | 85  | 85  | 85  | 85  |
| 3   | 101 | 94  | 89  | 85  | 99  | 93  | 88  | 84  | 90  | 86  | 83  | 88  | 84  | 81  | 85  | 83  | 80  | 79  | 79  | 79  | 79  |
| 4   | 96  | 88  | 82  | 77  | 94  | 86  | 81  | 77  | 84  | 79  | 76  | 82  | 78  | 75  | 80  | 77  | 74  | 72  | 72  | 72  | 72  |
| 5   | 90  | 81  | 75  | 71  | 89  | 80  | 75  | 70  | 79  | 73  | 70  | 77  | 72  | 69  | 75  | 71  | 68  | 67  | 67  | 67  | 67  |
| 6   | 85  | 76  | 70  | 65  | 84  | 75  | 69  | 65  | 74  | 68  | 64  | 72  | 67  | 64  | 71  | 67  | 63  | 62  | 62  | 62  | 62  |
| 7   | 81  | 71  | 65  | 60  | 79  | 70  | 64  | 60  | 69  | 63  | 60  | 68  | 63  | 59  | 67  | 62  | 59  | 57  | 57  | 57  | 57  |
| 8   | 77  | 66  | 60  | 56  | 75  | 66  | 60  | 56  | 65  | 59  | 55  | 64  | 59  | 55  | 63  | 58  | 55  | 53  | 53  | 53  | 53  |
| 9   | 73  | 62  | 56  | 52  | 71  | 62  | 56  | 52  | 61  | 55  | 52  | 60  | 55  | 51  | 59  | 55  | 51  | 50  | 50  | 50  | 50  |
| 10  | 69  | 59  | 53  | 49  | 68  | 58  | 52  | 48  | 57  | 52  | 48  | 57  | 52  | 48  | 56  | 51  | 48  | 47  | 47  | 47  | 47  |

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

|     |       |
|-----|-------|
|     | 0°    |
| 0°  | 58548 |
| 5°  | 56152 |
| 10° | 53150 |
| 15° | 50165 |
| 20° | 45434 |
| 25° | 38682 |
| 30° | 31612 |
| 35° | 24708 |
| 40° | 18320 |
| 45° | 11978 |
| 50° | 5134  |
| 55° | 2150  |
| 60° | 1184  |
| 65° | 700   |
| 70° | 577   |
| 75° | 572   |
| 80° | 568   |
| 85° | 566   |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 11978 cd/sqm



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 95.4   | 9.4       |
| 10°-20°   | 246.0  | 24.2      |
| 20°-30°   | 292.1  | 28.8      |
| 30°-40°   | 231.2  | 22.8      |
| 40°-50°   | 117.5  | 11.6      |
| 50°-60°   | 23.9   | 2.4       |
| 60°-70°   | 5.8    | 0.6       |
| 70°-80°   | 2.6    | 0.3       |
| 80°-90°   | 0.7    | 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°    | 633.5  | 62.4      |
| 0°-40°    | 864.8  | 85.2      |
| 0°-60°    | 1006.2 | 99.1      |
| 0°-90°    | 1015.3 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 1015.3 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | Flux |
|-----|------|------|
| 0°  | 1068 |      |
| 5°  | 1020 | 95   |
| 15° | 884  | 246  |
| 25° | 640  | 292  |
| 35° | 369  | 231  |
| 45° | 154  | 118  |
| 55° | 22   | 24   |
| 65° | 5    | 6    |
| 75° | 3    | 3    |
| 85° | 1    | 1    |
| 90° | 0    |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     |
|-------|--------|
| 0°    | 1068.0 |
| 2.5°  | 1055.4 |
| 5°    | 1020.4 |
| 7.5°  | 986.3  |
| 10°   | 954.8  |
| 12.5° | 922.5  |
| 15°   | 883.9  |
| 17.5° | 834.5  |
| 20°   | 778.8  |
| 22.5° | 712.3  |
| 25°   | 639.5  |
| 27.5° | 566.8  |
| 30°   | 499.4  |
| 32.5° | 433.8  |
| 35°   | 369.2  |
| 37.5° | 310.8  |
| 40°   | 256.0  |
| 42.5° | 203.9  |
| 45°   | 154.5  |
| 47.5° | 101.5  |
| 50°   | 60.2   |
| 52.5° | 34.1   |
| 55°   | 22.5   |
| 57.5° | 16.2   |
| 60°   | 10.8   |
| 62.5° | 7.2    |
| 65°   | 5.4    |
| 67.5° | 3.6    |
| 70°   | 3.6    |
| 72.5° | 2.7    |
| 75°   | 2.7    |
| 77.5° | 1.8    |
| 80°   | 1.8    |
| 82.5° | 0.9    |
| 85°   | 0.9    |
| 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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