

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: P642117

Luminaire Tested: ML5612LSWFL5597FS1E - 692H - 1200LM - 3000K

Issue Date: 2/17/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P642117  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-61)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 2/17/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML5612LSWFL5597FS1E - 692H - 1200LM - 3000K  
Description: ML56 RR, 55D TIR OPTIC, 6" HAZE TRIM  
Light Source: (1) HCL SELECTABLE LUMEN LED 90CRI / 3000K CCT  
Ballast/Driver: -

**Summary**

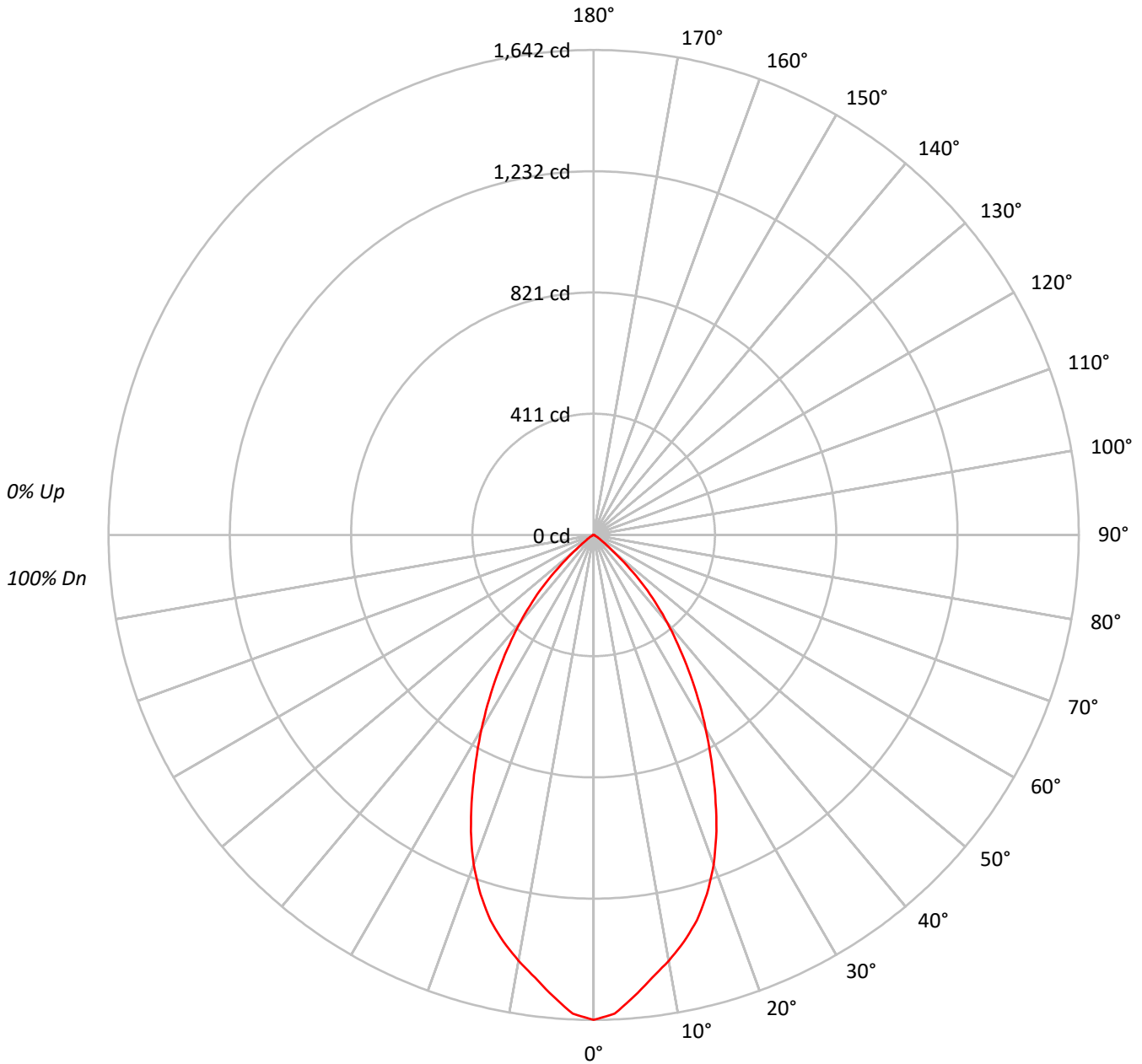
Lumens per Lamp: N/A  
Luminaire Lumens: 1531.1 lumens  
Efficiency: N/A  
Efficacy: 92.8 lumens/watt  
Spacing Criteria (0/90/45): 0.86 / 0.86 / 0.89  
Luminous Opening: Circular (Dia: 0.5' x H: 0')  
CIE Type: Direct

Input Watts (W): 16.5  
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 |    |    |   |
| 1   | 113 | 110 | 108 | 105 | 111 | 108 | 106 | 104 | 104 | 102 | 101 | 100 | 99  | 98  | 97  | 96  | 95  | 93  |    |    |   |
| 2   | 107 | 102 | 98  | 94  | 105 | 100 | 97  | 93  | 97  | 94  | 91  | 94  | 92  | 89  | 91  | 89  | 87  | 86  |    |    |   |
| 3   | 101 | 95  | 89  | 85  | 99  | 93  | 88  | 85  | 91  | 87  | 83  | 88  | 85  | 82  | 86  | 83  | 81  | 79  |    |    |   |
| 4   | 96  | 88  | 82  | 78  | 94  | 87  | 81  | 77  | 85  | 80  | 76  | 83  | 79  | 75  | 81  | 77  | 74  | 73  |    |    |   |
| 5   | 91  | 82  | 76  | 71  | 89  | 81  | 75  | 71  | 79  | 74  | 70  | 77  | 73  | 70  | 76  | 72  | 69  | 67  |    |    |   |
| 6   | 86  | 76  | 70  | 66  | 84  | 76  | 70  | 65  | 74  | 69  | 65  | 73  | 68  | 64  | 71  | 67  | 64  | 62  |    |    |   |
| 7   | 81  | 71  | 65  | 61  | 80  | 71  | 65  | 60  | 69  | 64  | 60  | 68  | 63  | 60  | 67  | 63  | 59  | 58  |    |    |   |
| 8   | 77  | 67  | 61  | 56  | 76  | 66  | 60  | 56  | 65  | 60  | 56  | 64  | 59  | 56  | 63  | 59  | 55  | 54  |    |    |   |
| 9   | 73  | 63  | 57  | 52  | 72  | 62  | 56  | 52  | 61  | 56  | 52  | 60  | 56  | 52  | 60  | 55  | 52  | 50  |    |    |   |
| 10  | 69  | 59  | 53  | 49  | 68  | 59  | 53  | 49  | 58  | 53  | 49  | 57  | 52  | 49  | 56  | 52  | 49  | 47  |    |    |   |

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

|     |       |
|-----|-------|
|     | 0°    |
| 0°  | 90009 |
| 5°  | 86314 |
| 10° | 81484 |
| 15° | 76675 |
| 20° | 69300 |
| 25° | 58866 |
| 30° | 48007 |
| 35° | 37477 |
| 40° | 27723 |
| 45° | 18017 |
| 50° | 7420  |
| 55° | 2858  |
| 60° | 1338  |
| 65° | 350   |
| 70° | 224   |
| 75° | 0     |
| 80° | 0     |
| 85° | 0     |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 18017 cd/sqm



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 146.4  | 9.6       |
| 10°-20°   | 376.1  | 24.6      |
| 20°-30°   | 444.9  | 29.1      |
| 30°-40°   | 350.3  | 22.9      |
| 40°-50°   | 176.4  | 11.5      |
| 50°-60°   | 32.5   | 2.1       |
| 60°-70°   | 4.0    | 0.3       |
| 70°-80°   | 0.5    | 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°    | 967.3  | 63.2      |
| 0°-40°    | 1317.6 | 86.1      |
| 0°-60°    | 1526.5 | 99.7      |
| 0°-90°    | 1531.1 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 1531.1 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | Flux |
|-----|------|------|
| 0°  | 1642 |      |
| 5°  | 1568 | 146  |
| 15° | 1351 | 376  |
| 25° | 973  | 445  |
| 35° | 560  | 350  |
| 45° | 232  | 176  |
| 55° | 30   | 33   |
| 65° | 3    | 4    |
| 75° | 0    | 1    |
| 85° | 0    | 0    |
| 90° | 0    |      |



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**CANDELA DISTRIBUTION (FULL):**

| 0°    |        |
|-------|--------|
| 0°    | 1641.9 |
| 2.5°  | 1622.8 |
| 5°    | 1568.5 |
| 7.5°  | 1512.7 |
| 10°   | 1463.8 |
| 12.5° | 1410.8 |
| 15°   | 1351.0 |
| 17.5° | 1274.9 |
| 20°   | 1187.9 |
| 22.5° | 1086.0 |
| 25°   | 973.2  |
| 27.5° | 863.1  |
| 30°   | 758.4  |
| 32.5° | 657.8  |
| 35°   | 560.0  |
| 37.5° | 468.9  |
| 40°   | 387.4  |
| 42.5° | 307.2  |
| 45°   | 232.4  |
| 47.5° | 150.9  |
| 50°   | 87.0   |
| 52.5° | 47.6   |
| 55°   | 29.9   |
| 57.5° | 20.4   |
| 60°   | 12.2   |
| 62.5° | 5.4    |
| 65°   | 2.7    |
| 67.5° | 1.4    |
| 70°   | 1.4    |
| 72.5° | 1.4    |
| 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



— 0°-180°

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Scaled Data Report



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