

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: P643722

Luminaire Tested: ML5615LSVWFL9FS1E - 696WB - 1200LM - 3000K

Issue Date: 2/17/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P643722  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-115)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 2/17/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML5615LSVWFL9FS1E - 696WB - 1200LM - 3000K  
Description: ML56 RR, MILKY OPTIC, 6" SHALLOW WHITE BAFFLE TRIM  
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 3000K CCT  
Ballast/Driver: -

**Summary**

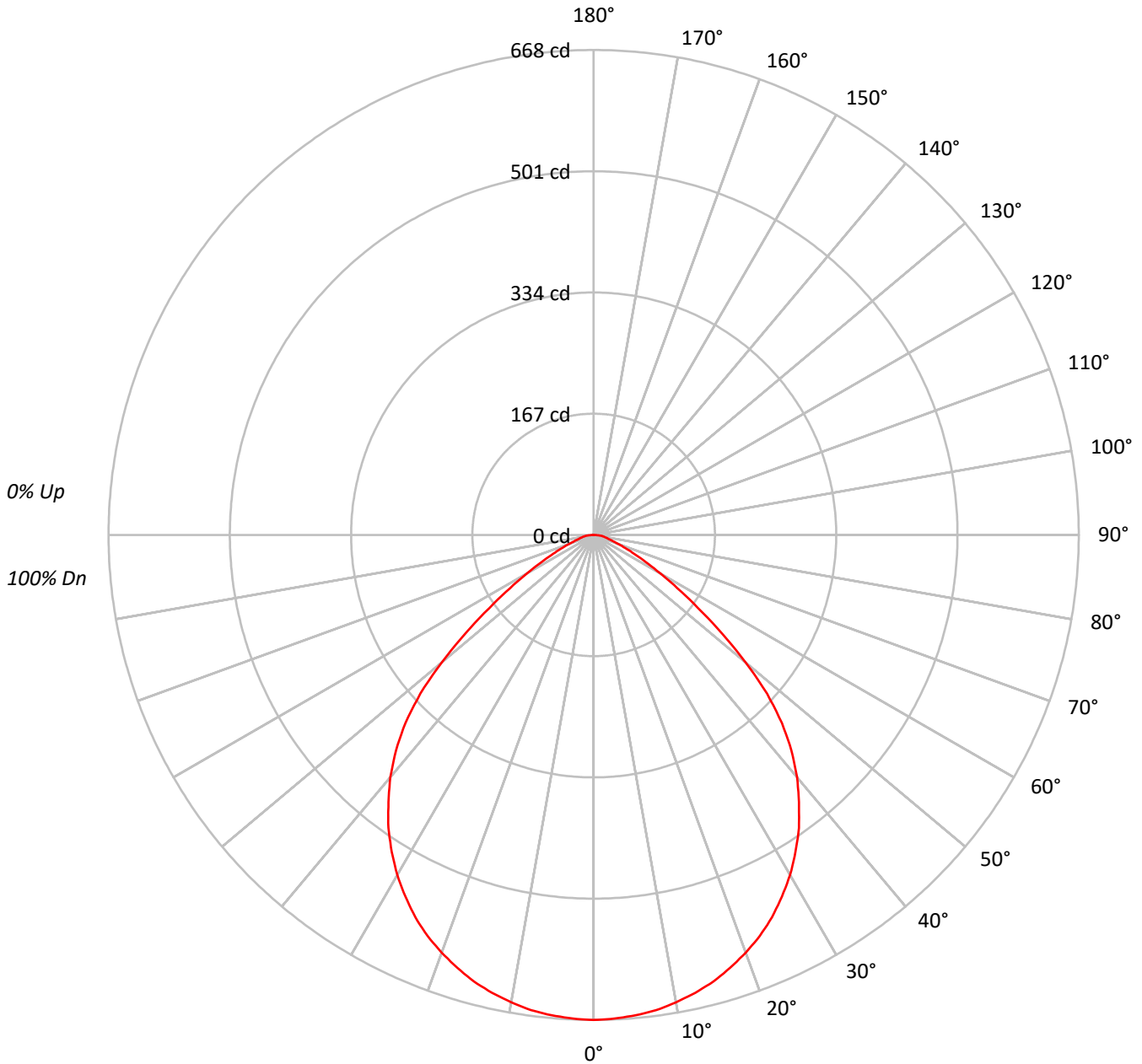
Lumens per Lamp: N/A  
Luminaire Lumens: 1351.7 lumens  
Efficiency: N/A  
Efficacy: 100.9 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.2 / 1.28  
Luminous Opening: Circular (Dia: 0.5' x H: 0')  
CIE Type: Direct

Input Watts (W): 13.4  
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  |     |    |    | 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   | 111 | 107 | 104 | 101 | 109 | 105 | 102 | 99  | 101 | 99  | 96  | 97  | 95  | 93  | 94  | 92  | 91  | 89  |    |    | 89  |
| 2   | 103 | 96  | 91  | 86  | 101 | 95  | 89  | 85  | 91  | 87  | 83  | 88  | 84  | 81  | 85  | 82  | 80  | 78  |    |    | 78  |
| 3   | 95  | 87  | 80  | 74  | 93  | 85  | 79  | 74  | 82  | 77  | 72  | 80  | 75  | 71  | 77  | 73  | 70  | 68  |    |    | 68  |
| 4   | 88  | 78  | 71  | 65  | 86  | 77  | 70  | 64  | 75  | 68  | 64  | 72  | 67  | 63  | 70  | 66  | 62  | 60  |    |    | 60  |
| 5   | 82  | 71  | 63  | 57  | 80  | 70  | 62  | 57  | 68  | 61  | 56  | 66  | 60  | 56  | 64  | 59  | 55  | 53  |    |    | 53  |
| 6   | 76  | 64  | 57  | 51  | 75  | 64  | 56  | 51  | 62  | 55  | 50  | 60  | 54  | 50  | 59  | 54  | 49  | 48  |    |    | 48  |
| 7   | 71  | 59  | 51  | 46  | 69  | 58  | 51  | 45  | 57  | 50  | 45  | 55  | 49  | 45  | 54  | 49  | 45  | 43  |    |    | 43  |
| 8   | 66  | 54  | 46  | 41  | 65  | 54  | 46  | 41  | 52  | 46  | 41  | 51  | 45  | 41  | 50  | 44  | 40  | 39  |    |    | 39  |
| 9   | 62  | 50  | 42  | 37  | 61  | 49  | 42  | 37  | 48  | 42  | 37  | 47  | 41  | 37  | 46  | 41  | 37  | 35  |    |    | 35  |
| 10  | 59  | 46  | 39  | 34  | 57  | 46  | 39  | 34  | 45  | 38  | 34  | 44  | 38  | 34  | 43  | 38  | 34  | 32  |    |    | 32  |

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

|     |       |
|-----|-------|
|     | 0°    |
| 0°  | 36625 |
| 5°  | 36551 |
| 10° | 36394 |
| 15° | 36147 |
| 20° | 35715 |
| 25° | 35143 |
| 30° | 34233 |
| 35° | 32973 |
| 40° | 31166 |
| 45° | 28422 |
| 50° | 23283 |
| 55° | 16774 |
| 60° | 11545 |
| 65° | 7926  |
| 70° | 5626  |
| 75° | 4406  |
| 80° | 4514  |
| 85° | 4906  |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 28422 cd/sqm



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 63.1   | 4.7       |
| 10°-20°   | 179.5  | 13.3      |
| 20°-30°   | 267.1  | 19.8      |
| 30°-40°   | 306.9  | 22.7      |
| 40°-50°   | 278.6  | 20.6      |
| 50°-60°   | 160.8  | 11.9      |
| 60°-70°   | 63.8   | 4.7       |
| 70°-80°   | 24.0   | 1.8       |
| 80°-90°   | 8.0    | 0.6       |
| 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°    | 509.7  | 37.7      |
| 0°-40°    | 816.6  | 60.4      |
| 0°-60°    | 1256.0 | 92.9      |
| 0°-90°    | 1351.7 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 1351.7 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°  | Flux |
|-----|-----|------|
| 0°  | 668 |      |
| 5°  | 664 | 63   |
| 15° | 637 | 179  |
| 25° | 581 | 267  |
| 35° | 493 | 307  |
| 45° | 367 | 279  |
| 55° | 176 | 161  |
| 65° | 61  | 64   |
| 75° | 21  | 24   |
| 85° | 8   | 8    |
| 90° | 0   |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°    |
|-------|-------|
| 0°    | 668.1 |
| 2.5°  | 666.8 |
| 5°    | 664.2 |
| 7.5°  | 660.3 |
| 10°   | 653.8 |
| 12.5° | 646.0 |
| 15°   | 636.9 |
| 17.5° | 625.2 |
| 20°   | 612.2 |
| 22.5° | 597.9 |
| 25°   | 581.0 |
| 27.5° | 561.5 |
| 30°   | 540.8 |
| 32.5° | 517.4 |
| 35°   | 492.7 |
| 37.5° | 464.1 |
| 40°   | 435.5 |
| 42.5° | 403.0 |
| 45°   | 366.6 |
| 47.5° | 323.7 |
| 50°   | 273.0 |
| 52.5° | 222.3 |
| 55°   | 175.5 |
| 57.5° | 136.5 |
| 60°   | 105.3 |
| 62.5° | 80.6  |
| 65°   | 61.1  |
| 67.5° | 46.8  |
| 70°   | 35.1  |
| 72.5° | 27.3  |
| 75°   | 20.8  |
| 77.5° | 18.2  |
| 80°   | 14.3  |
| 82.5° | 11.7  |
| 85°   | 7.8   |
| 87.5° | 2.6   |
| 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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