

Signify Classified - Internal  
Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269



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: P643640

Luminaire Tested: ML5615LSVWFL9FS1E - 693BB - 1500LM - 5000K

Issue Date: 2/17/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P643640  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-110)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 2/17/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML5615LSVWFL9FS1E - 693BB - 1500LM - 5000K  
Description: ML56 RR, MILKY OPTIC, 6" BLACK BAFFLE TRIM  
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 5000K CCT  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1370.8 lumens  
Efficiency: N/A  
Efficacy: 80.2 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.19 / 1.21  
Luminous Opening: Circular (Dia: 0.5' x H: 0')  
CIE Type: Direct

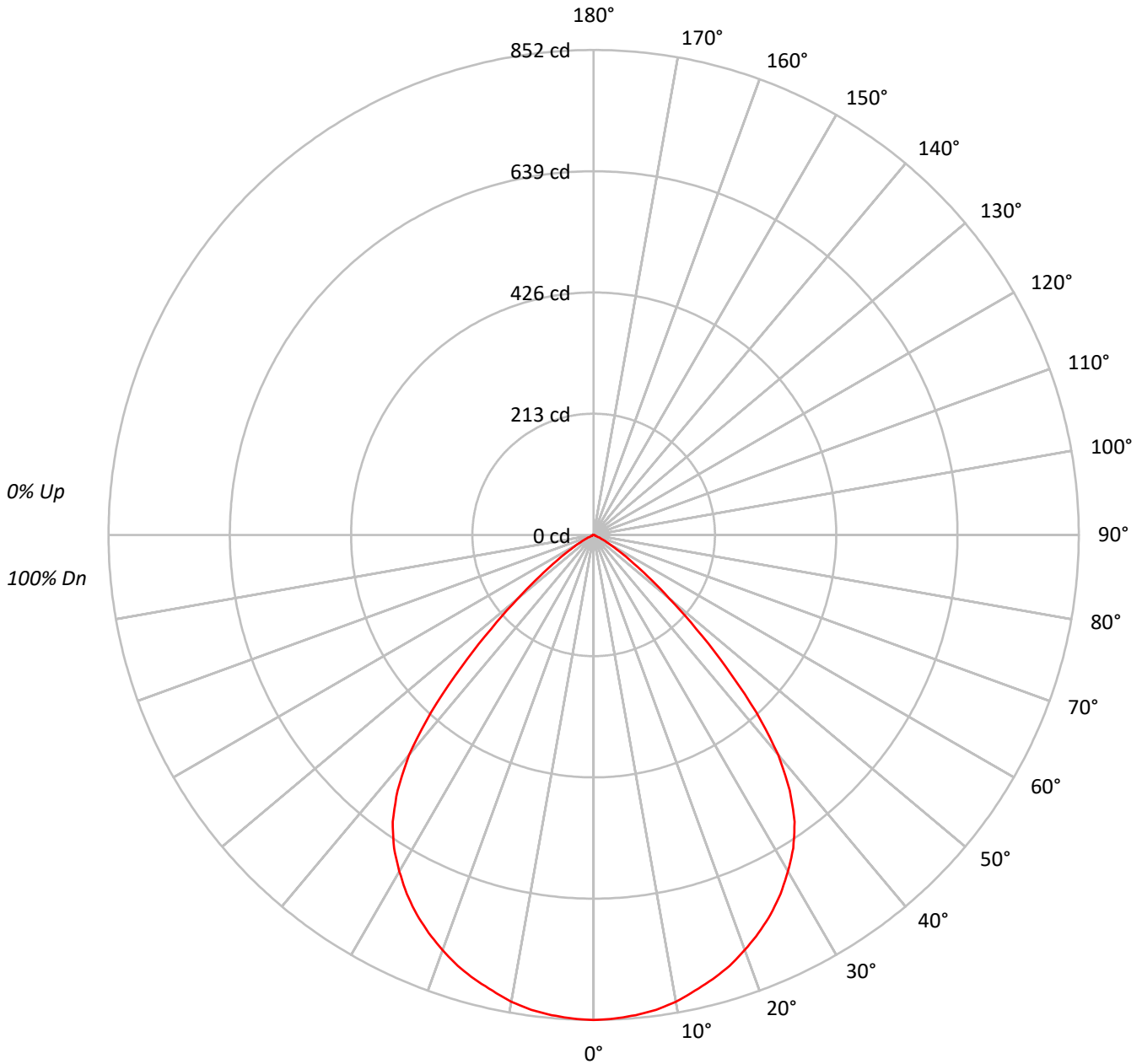
Input Watts (W): 17.1  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Luminous Intensity Polar Plot





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

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|---|--|--|--|--|--|--|----|--|--|--|--|--|--|--|--|---|
| RF  | 20  |     |     |     |     |     |     |     |     | 20  |     |     |     |     |     |     |     |     | 20 |    |   |  |  |  |  |  |  | 20 |  |  |  |  |  |  |  |  |   |
| 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 |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 1   | 112 | 109 | 106 | 104 | 110 | 107 | 105 | 102 | 103 | 101 | 99  | 99  | 98  | 96  | 96  | 94  | 93  | 91  |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 2   | 106 | 100 | 95  | 91  | 103 | 98  | 94  | 90  | 95  | 91  | 88  | 92  | 89  | 86  | 89  | 86  | 84  | 83  |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 3   | 99  | 91  | 85  | 81  | 97  | 90  | 84  | 80  | 87  | 82  | 79  | 84  | 81  | 77  | 82  | 79  | 76  | 74  |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 4   | 92  | 83  | 77  | 72  | 90  | 82  | 76  | 71  | 80  | 75  | 70  | 78  | 73  | 70  | 76  | 72  | 69  | 67  |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 5   | 86  | 77  | 70  | 64  | 85  | 76  | 69  | 64  | 74  | 68  | 63  | 72  | 67  | 63  | 70  | 66  | 62  | 61  |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 6   | 81  | 70  | 63  | 58  | 79  | 70  | 63  | 58  | 68  | 62  | 57  | 66  | 61  | 57  | 65  | 60  | 57  | 55  |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 7   | 76  | 65  | 58  | 53  | 74  | 64  | 57  | 53  | 63  | 57  | 52  | 61  | 56  | 52  | 60  | 55  | 52  | 50  |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 8   | 71  | 60  | 53  | 48  | 70  | 59  | 53  | 48  | 58  | 52  | 48  | 57  | 52  | 48  | 56  | 51  | 47  | 46  |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 9   | 67  | 56  | 49  | 44  | 66  | 55  | 49  | 44  | 54  | 48  | 44  | 53  | 48  | 44  | 52  | 47  | 43  | 42  |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 10  | 63  | 52  | 45  | 41  | 62  | 51  | 45  | 40  | 50  | 44  | 40  | 50  | 44  | 40  | 49  | 44  | 40  | 39  |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |

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

|     |       |
|-----|-------|
|     | 0°    |
| 0°  | 46718 |
| 5°  | 46605 |
| 10° | 46359 |
| 15° | 45857 |
| 20° | 45282 |
| 25° | 44488 |
| 30° | 43203 |
| 35° | 41178 |
| 40° | 36060 |
| 45° | 25499 |
| 50° | 14780 |
| 55° | 7608  |
| 60° | 3487  |
| 65° | 1141  |
| 70° | 289   |
| 75° | 381   |
| 80° | 0     |
| 85° | 0     |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 25499 cd/sqm



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 80.4   | 5.9       |
| 10°-20°   | 227.9  | 16.6      |
| 20°-30°   | 338.1  | 24.7      |
| 30°-40°   | 379.0  | 27.6      |
| 40°-50°   | 254.7  | 18.6      |
| 50°-60°   | 77.7   | 5.7       |
| 60°-70°   | 11.4   | 0.8       |
| 70°-80°   | 1.7    | 0.1       |
| 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°    | 646.4  | 47.2      |
| 0°-40°    | 1025.3 | 74.8      |
| 0°-60°    | 1357.8 | 99.0      |
| 0°-90°    | 1370.8 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 1370.8 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°  | Flux |
|-----|-----|------|
| 0°  | 852 |      |
| 5°  | 847 | 80   |
| 15° | 808 | 228  |
| 25° | 736 | 338  |
| 35° | 615 | 379  |
| 45° | 329 | 255  |
| 55° | 80  | 78   |
| 65° | 9   | 11   |
| 75° | 2   | 2    |
| 85° | 0   | 0    |
| 90° | 0   |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°    |
|-------|-------|
| 0°    | 852.2 |
| 2.5°  | 850.5 |
| 5°    | 846.9 |
| 7.5°  | 841.6 |
| 10°   | 832.8 |
| 12.5° | 820.4 |
| 15°   | 808.0 |
| 17.5° | 793.9 |
| 20°   | 776.2 |
| 22.5° | 756.8 |
| 25°   | 735.5 |
| 27.5° | 710.8 |
| 30°   | 682.5 |
| 32.5° | 652.4 |
| 35°   | 615.3 |
| 37.5° | 565.8 |
| 40°   | 503.9 |
| 42.5° | 422.6 |
| 45°   | 328.9 |
| 47.5° | 244.0 |
| 50°   | 173.3 |
| 52.5° | 118.5 |
| 55°   | 79.6  |
| 57.5° | 51.3  |
| 60°   | 31.8  |
| 62.5° | 17.7  |
| 65°   | 8.8   |
| 67.5° | 3.5   |
| 70°   | 1.8   |
| 72.5° | 1.8   |
| 75°   | 1.8   |
| 77.5° | 1.8   |
| 80°   | 0.0   |
| 82.5° | 0.0   |
| 85°   | 0.0   |
| 87.5° | 0.0   |
| 90°   | 0.0   |

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Scaled Data Report



Report Generated By 670245859 / DESKTOP-T8S5UU9

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— 0°-180°

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