

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: P643483

Luminaire Tested: ML5615LSVWFL9FS1E - 593TBZB - 1200LM - 3500K

Issue Date: 2/17/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P643483  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-100)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 2/17/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML5615LSVWFL9FS1E - 593TBZB - 1200LM - 3500K  
Description: ML56 RR, MILKY OPTIC, 5" TUSCON BRONZE BAFFLE TRIM  
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 3500K CCT  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 980.8 lumens  
Efficiency: N/A  
Efficacy: 73.2 lumens/watt  
Spacing Criteria (0/90/45): 1.15 / 1.15 / 1.12  
Luminous Opening: Circular (Dia: 0.42' x H: 0')  
CIE Type: Direct

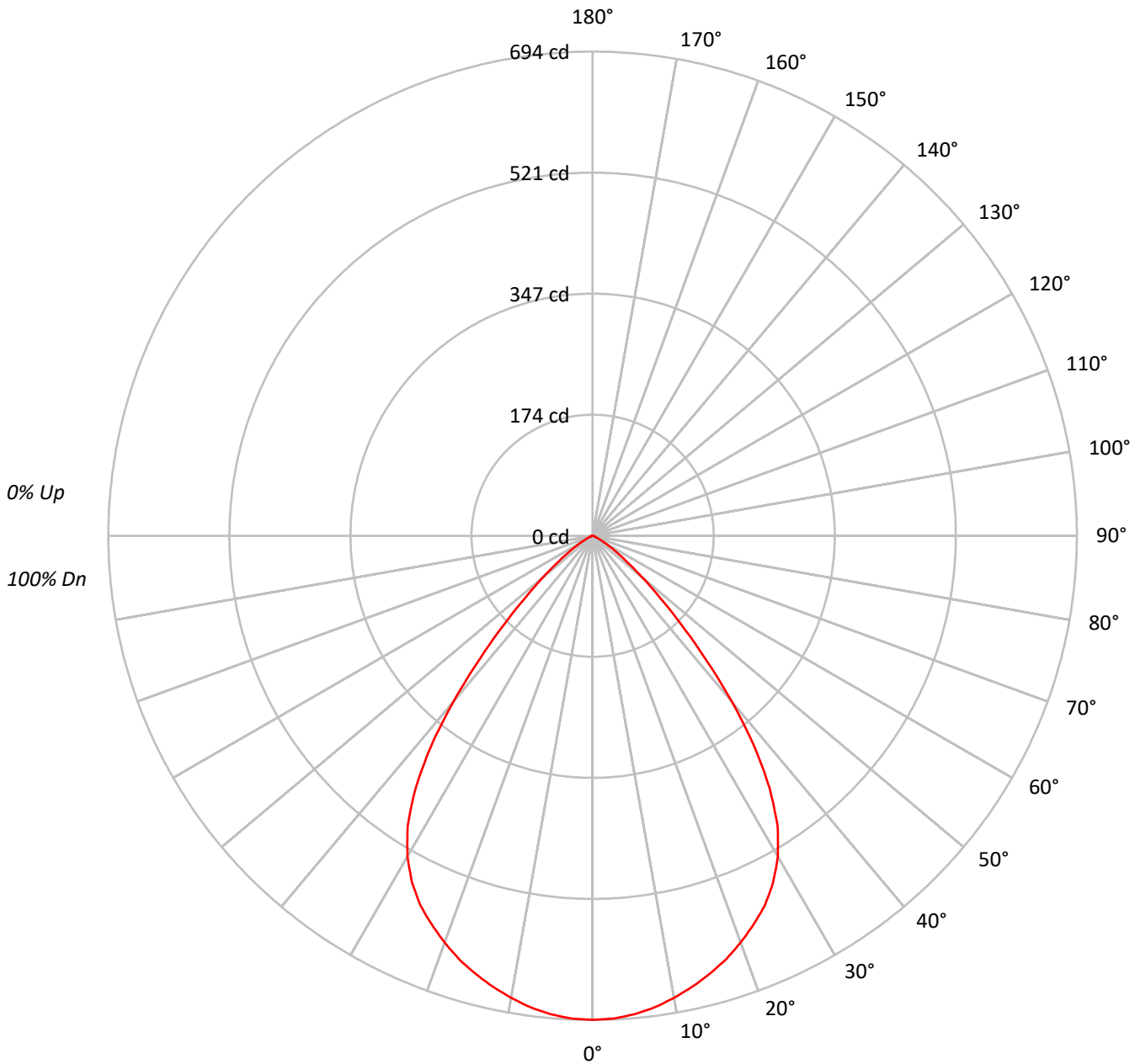
Input Watts (W): 13.4  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Luminous Intensity Polar Plot





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

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |    |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|-----|
| RF  | 20  |     |     |     | 20  |     |     |     | 20  |     |     |     | 20  |     |     |     | 20  |     |    |    |     |
| 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   | 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  | 92  | 90  | 87  | 90  | 87  | 85  | 84  |    |    | 84  |
| 3   | 100 | 92  | 87  | 82  | 98  | 91  | 86  | 81  | 88  | 84  | 80  | 86  | 82  | 79  | 83  | 80  | 78  | 76  |    |    | 76  |
| 4   | 94  | 85  | 79  | 74  | 92  | 84  | 78  | 73  | 81  | 76  | 72  | 79  | 75  | 71  | 77  | 74  | 71  | 69  |    |    | 69  |
| 5   | 88  | 78  | 72  | 67  | 86  | 77  | 71  | 66  | 75  | 70  | 66  | 74  | 69  | 65  | 72  | 68  | 64  | 63  |    |    | 63  |
| 6   | 83  | 72  | 65  | 61  | 81  | 71  | 65  | 60  | 70  | 64  | 60  | 68  | 63  | 59  | 67  | 63  | 59  | 57  |    |    | 57  |
| 7   | 78  | 67  | 60  | 55  | 76  | 66  | 60  | 55  | 65  | 59  | 55  | 64  | 58  | 54  | 62  | 58  | 54  | 53  |    |    | 53  |
| 8   | 73  | 62  | 55  | 51  | 72  | 62  | 55  | 51  | 60  | 55  | 50  | 59  | 54  | 50  | 58  | 53  | 50  | 48  |    |    | 48  |
| 9   | 69  | 58  | 51  | 47  | 68  | 57  | 51  | 47  | 56  | 51  | 46  | 55  | 50  | 46  | 55  | 50  | 46  | 45  |    |    | 45  |
| 10  | 65  | 54  | 48  | 43  | 64  | 54  | 47  | 43  | 53  | 47  | 43  | 52  | 47  | 43  | 51  | 46  | 43  | 41  |    |    | 41  |

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

|     |       |
|-----|-------|
|     | 0°    |
| 0°  | 54769 |
| 5°  | 54558 |
| 10° | 53899 |
| 15° | 53097 |
| 20° | 52110 |
| 25° | 50885 |
| 30° | 48375 |
| 35° | 42643 |
| 40° | 31966 |
| 45° | 19849 |
| 50° | 11323 |
| 55° | 6069  |
| 60° | 2952  |
| 65° | 1251  |
| 70° | 623   |
| 75° | 397   |
| 80° | 0     |
| 85° | 0     |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 19849 cd/sqm



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 65.2   | 6.6       |
| 10°-20°   | 183.1  | 18.7      |
| 20°-30°   | 267.6  | 27.3      |
| 30°-40°   | 270.1  | 27.5      |
| 40°-50°   | 142.5  | 14.5      |
| 50°-60°   | 42.7   | 4.4       |
| 60°-70°   | 8.2    | 0.8       |
| 70°-80°   | 1.4    | 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°    | 515.9  | 52.6      |
| 0°-40°    | 786.0  | 80.1      |
| 0°-60°    | 971.2  | 99.0      |
| 0°-90°    | 980.8  | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 980.8  | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°  | Flux |
|-----|-----|------|
| 0°  | 694 |      |
| 5°  | 688 | 65   |
| 15° | 650 | 183  |
| 25° | 584 | 268  |
| 35° | 442 | 270  |
| 45° | 178 | 143  |
| 55° | 44  | 43   |
| 65° | 7   | 8    |
| 75° | 1   | 1    |
| 85° | 0   | 0    |
| 90° | 0   |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°    |
|-------|-------|
| 0°    | 693.8 |
| 2.5°  | 692.5 |
| 5°    | 688.5 |
| 7.5°  | 681.8 |
| 10°   | 672.4 |
| 12.5° | 661.8 |
| 15°   | 649.7 |
| 17.5° | 636.4 |
| 20°   | 620.3 |
| 22.5° | 602.9 |
| 25°   | 584.2 |
| 27.5° | 560.2 |
| 30°   | 530.7 |
| 32.5° | 493.3 |
| 35°   | 442.5 |
| 37.5° | 381.0 |
| 40°   | 310.2 |
| 42.5° | 239.3 |
| 45°   | 177.8 |
| 47.5° | 129.7 |
| 50°   | 92.2  |
| 52.5° | 64.2  |
| 55°   | 44.1  |
| 57.5° | 29.4  |
| 60°   | 18.7  |
| 62.5° | 12.0  |
| 65°   | 6.7   |
| 67.5° | 4.0   |
| 70°   | 2.7   |
| 72.5° | 1.3   |
| 75°   | 1.3   |
| 77.5° | 1.3   |
| 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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